APPENDIX 4

Traffic Engineering Report





Final Traffic Engineering Report

IRIS Project No. CSHWY00298

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1.0 INTRODUCTION

1.1 Objectives

The State of Alaska Department of Transportation and Public Facilities (DOT&PF) is completing a Planning and Environmental Linkages (PEL) Study for the Seward Highway Corridor between 20th Avenue and Tudor Road in Midtown Anchorage. The PEL approach has the advantage of evaluating inter-related issues, such as land use, limited ROW, utility conflicts, environmental issues, traffic volumes, movement conflicts, non-motorized connectivity, and aging assets, in advance of the NEPA documentation process.

This traffic engineering report is one element of the PEL study and focuses on traffic conditions, needs, and concepts. Its objective is to identify transportation deficiencies and provide traffic evaluation of the concepts. The evaluation considers feasibility through the 2048 design year in terms of level of service (LOS), multimodal traffic safety and network completeness, geometrics, and resiliency.

1.2 Study Area

The study area is shown in Figure 1. Although the focus of the corridor concepts is on the Seward Highway, changes being considered for the corridor would benefit the entire region, with the most immediate changes occurring on the adjacent roadways. Therefore, the study area extends approximately one mile on either side of the Seward Highway.

The intersections along this section of the Seward Highway have some of the longest delays and highest crash rates in Alaska. Moreover, corridor traffic is expected to roughly double over the next 20 to 30 years due to the combination of regional growth and the planned Seward Highway to Glenn Highway Connection (S2G) project, which would attract traffic to the project corridor due to improved access throughout Anchorage. Without significant improvements, traffic is expected to spill over onto parallel roads and congestion would increase dramatically in Midtown. The Seward Highway also creates challenges for multimodal traffic trying to travel between the residential areas to the east and the commercial areas to the west.

The overarching vision for the corridor is to improve safety and mobility on the Seward Highway, while also enhancing north-south and east-west multimodal connectivity in Midtown Anchorage. To evaluate future operations and determine the appropriate timeframes for necessary improvements, this study considered the following analysis years:

- 2017 Existing Conditions
- 2028 Mid-Year
- 2048 Design Year

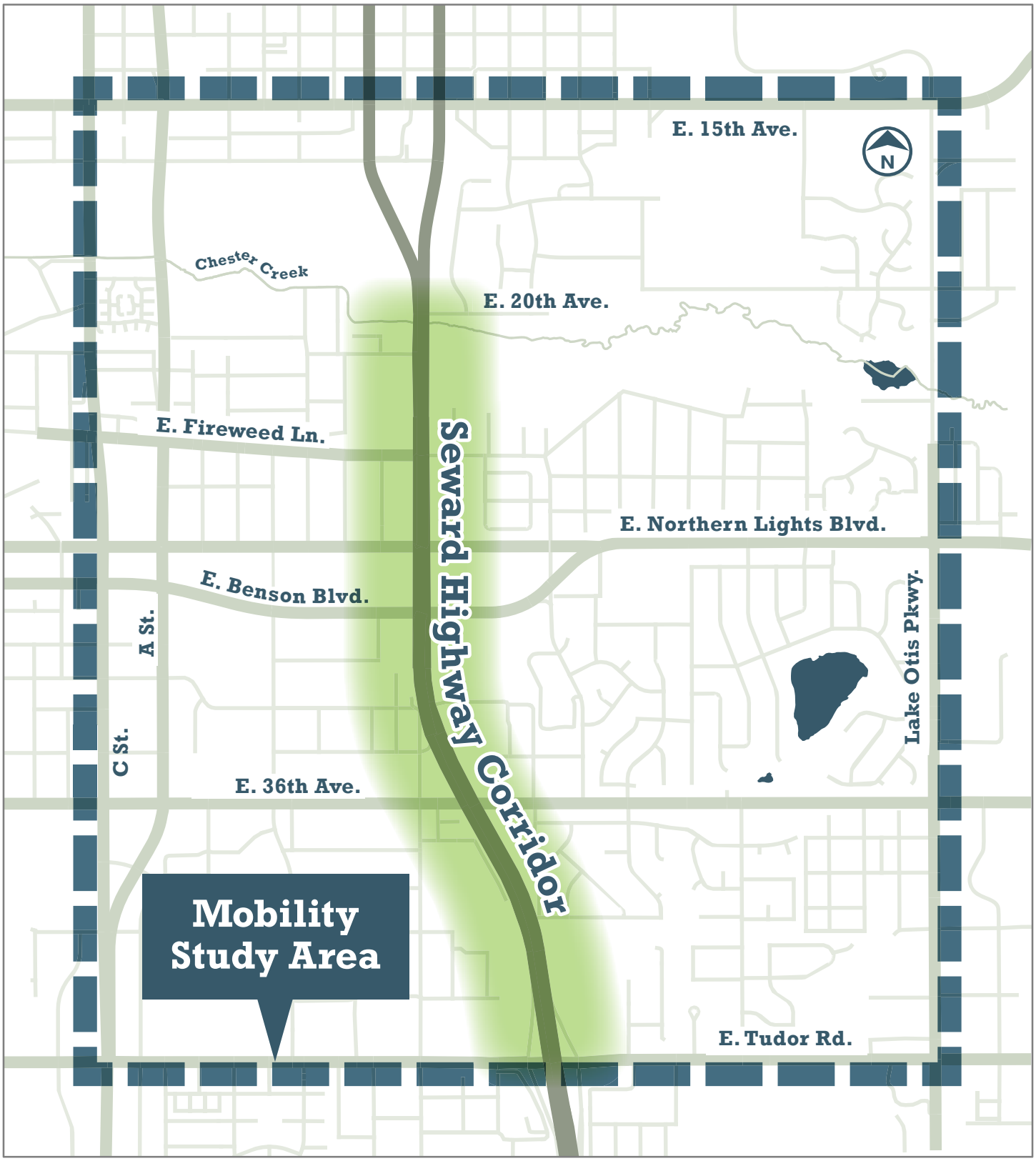


Figure 1: Study Area

1.3 Related Plans and Projects

The following related plans and projects were considered in the development of this traffic analysis.

1.3.1 AMATS 2035 and 2040 MTPs

Anchorage Metropolitan Area Transportation Solutions (AMATS) is the Anchorage Metropolitan Planning Organization (MPO) and is in the process of updating its metropolitan transportation plan (MTP), which identifies the region's transportation needs through the year 2040. It includes performance measures established for AMATS to monitor the success of implementing the plan and achieving its goals, as well as several future short- and long-term projects within the study area. The list of performance measures was considered when performing traffic analysis and developing evaluation criteria.

The 2035 MTP is AMATS' currently adopted long-range transportation plan and is the basis of the travel demand model that was available for this study. Attachment A provides information related to the travel demand model.

1.3.2 Seward Highway to Glenn Highway Connection (S2G)

The S2G project is intended to improve mobility on the roads connecting Glenn Highway and Seward Highway. The study investigates three alternative corridors to connect the Seward and Glenn Highways.

1.3.3 Seward & 36th Improvements

This uncompleted project identified alternative improvements to improve safety and operations at the Seward Highway and 36th Avenue intersection.

1.3.4 Anchorage Bowl 2020 Comprehensive Plan

This Anchorage Bowl Comprehensive Plan, adopted in 2001 and amended in 2002, has been a blueprint for development in the Anchorage Bowl for the past 20 years. Since adoption, the Municipality of Anchorage Planning Department has focused on plan implementation. Major projects include:

- The first rewrite of the land use code (Title 21) in 30 years
- An update to the Comprehensive Plan's Anchorage Bowl Land Use Plan Map
- A new sign code
- Off-street parking standards
- A parks and open space plan

1.3.5 Anchorage 2040 Land Use Plan

The Anchorage 2040 Land Use Plan is a targeted update to the Anchorage Bowl 2020 Comprehensive Plan. It includes updates to population and economic forecasts for city growth and land needs through the year 2040. It also includes updated goals, policies, and strategies for how to achieve that growth while meeting today's challenges. A key component of the plan is the Land Use Plan Map, which provides the blueprint for how Anchorage will accommodate the forecasted growth and serves as a visual guide for future land uses and patterns of development across the Anchorage Bowl, including in Midtown.

2.0 EXISTING CONDITIONS

The existing conditions of the study area have been documented, including roadway ownership, functional classification, roadway characteristics/features, multimodal traffic volumes, intersection operations, and crash history.

2.1 Roadway Ownership

Seward Highway is managed and maintained by DOT&PF, as shown in Figure 2. Other major roadways within the study area (including Northern Lights Blvd, Benson Blvd, Tudor Road, A Street, C Street, and Fireweed Lane west of the Seward Highway) also fall under DOT&PF management and maintenance responsibilities. The Municipality of Anchorage (MOA) manages and maintains the remaining major roadways within the study area.

2.2 Roadway Classifications and Designations

Roadways are assigned classifications and designations that assist agencies with design, maintenance, operations, and management decisions. This section documents roadway functional class, National Highway System (NHS) routes, regional truck routes, and snow clearing priority routes.

2.2.1 Functional Classification

Functional classification is a hierarchical system used by DOT&PF and the MOA to classify each road based on its relative emphasis on mobility versus land access. The intent is to allow drivers to transition between the adjacent levels of the hierarchy (land access to increasing levels of mobility and back down the hierarchy to land access) while traveling between destinations to improve safety and efficiency of travel throughout the network. Figure 3 lists the classifications used by DOT&PF and the MOA and how they correspond with varying levels of access versus mobility.

Freeways, expressways, and interstates provide the greatest mobility but are intended to have limited access (i.e., higher travel speeds primarily serving long-distance travel). Local roads focus on land access and have limited mobility (i.e., lower travel speeds primarily serving adjacent land uses). Arterial and collector roads are intermediate classifications that provide transitions between other roads. Arterial roads focus more on mobility and provide connections between the freeway system and collector roads, while collector roads focus more on land access and provide connections between arterial and local roads.

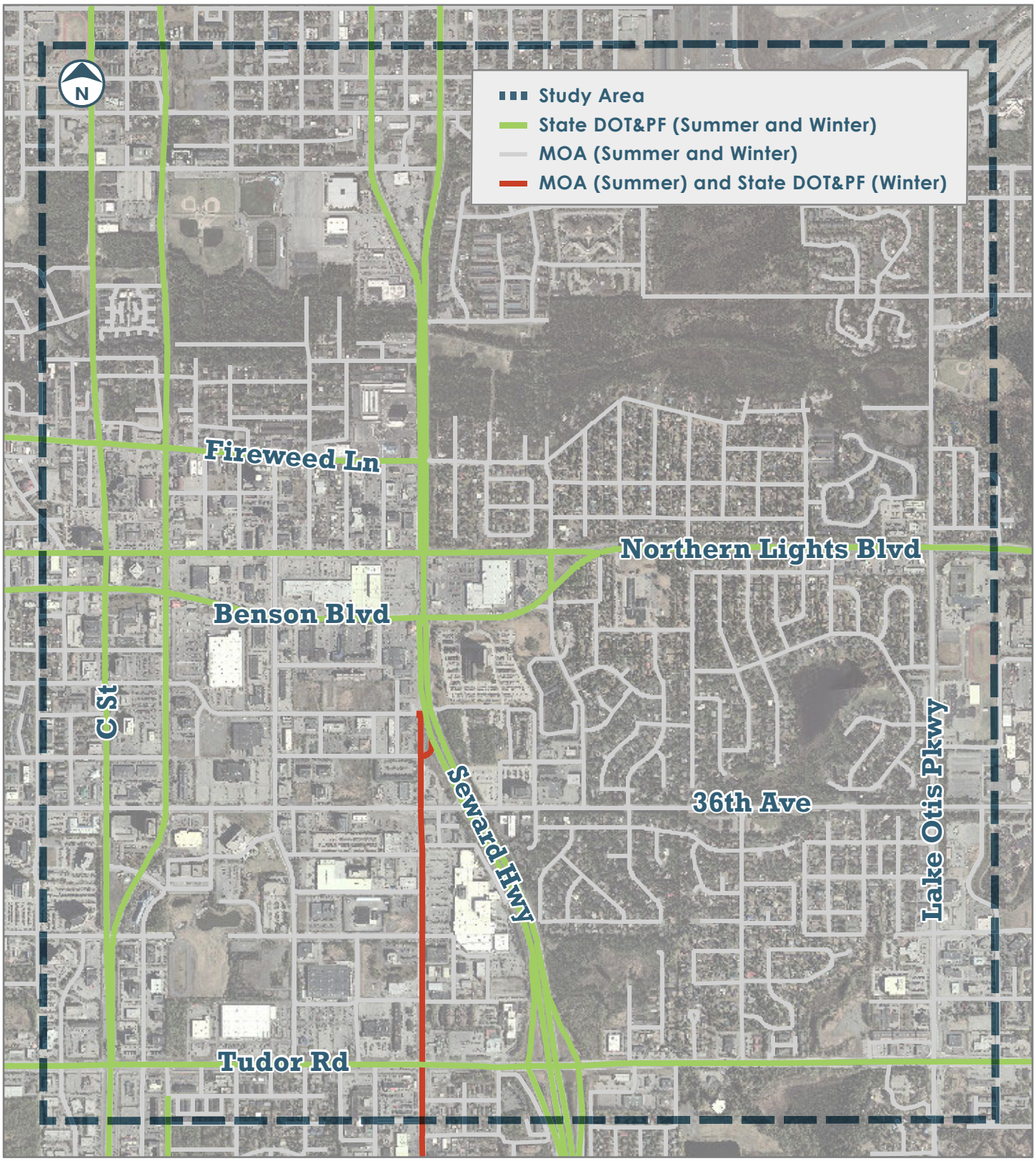


Figure 2: Roadway Management Responsibility

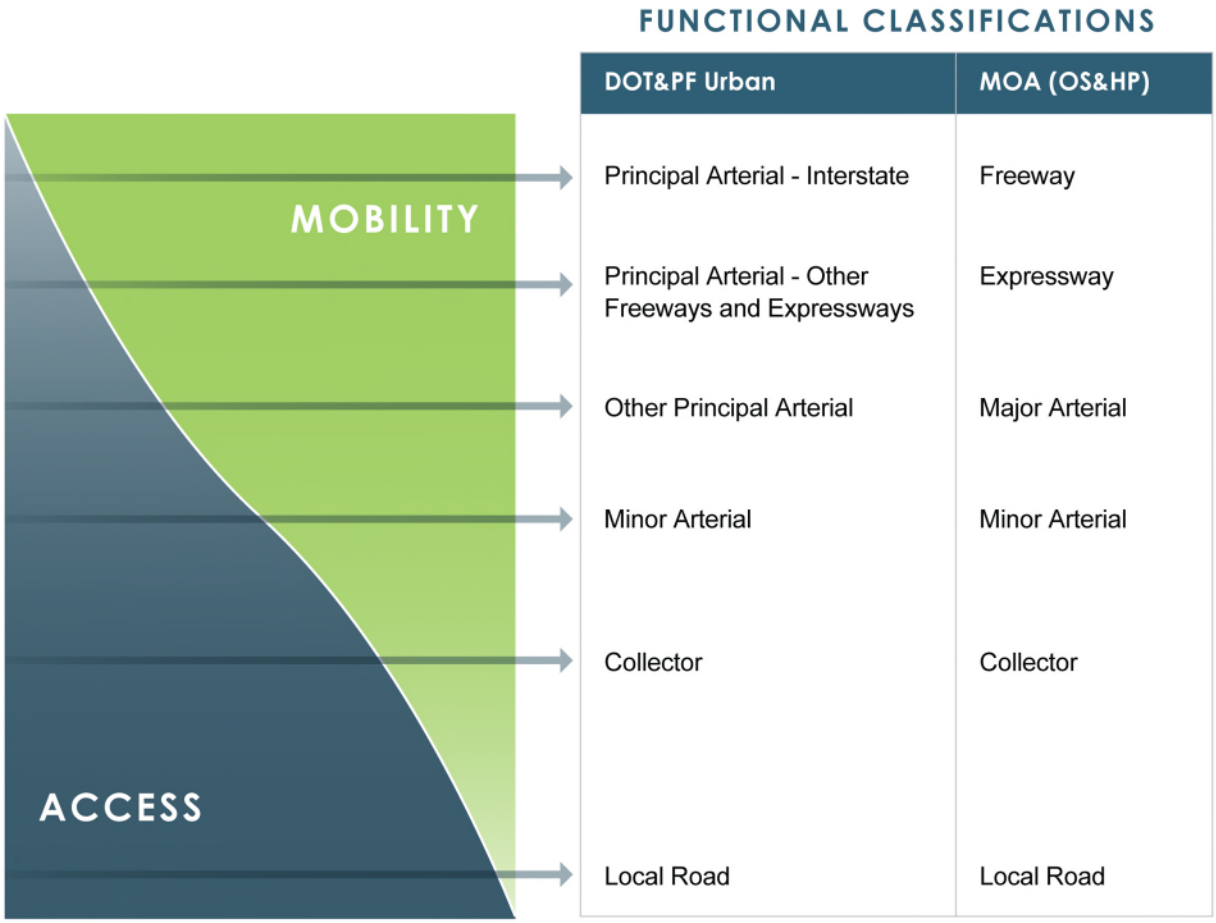


Figure 3: Functional Classification Hierarchy

DOT&PF classifies the Seward Highway as an Interstate roadway and the majority of the crossing roadways are Other Principal Arterial Roads (see Figure 4), while the MOA classifies the Seward Highway as a Freeway and the majority of the crossing roadways are Major Arterial Roads (Figure 5). Details of the MOA's functional classifications are provided in the Anchorage Official Streets and Highways Plan (OS&HP).[1] Both agencies classify the Seward Highway as the highest classification roadway, signifying the intent to focus on mobility and limited access.

[1] *Official Streets and Highways Plan*, Municipality of Anchorage, Adopted as an element of the Comprehensive Plan, June 24, 2014 by Assembly Ordinance 2014-63

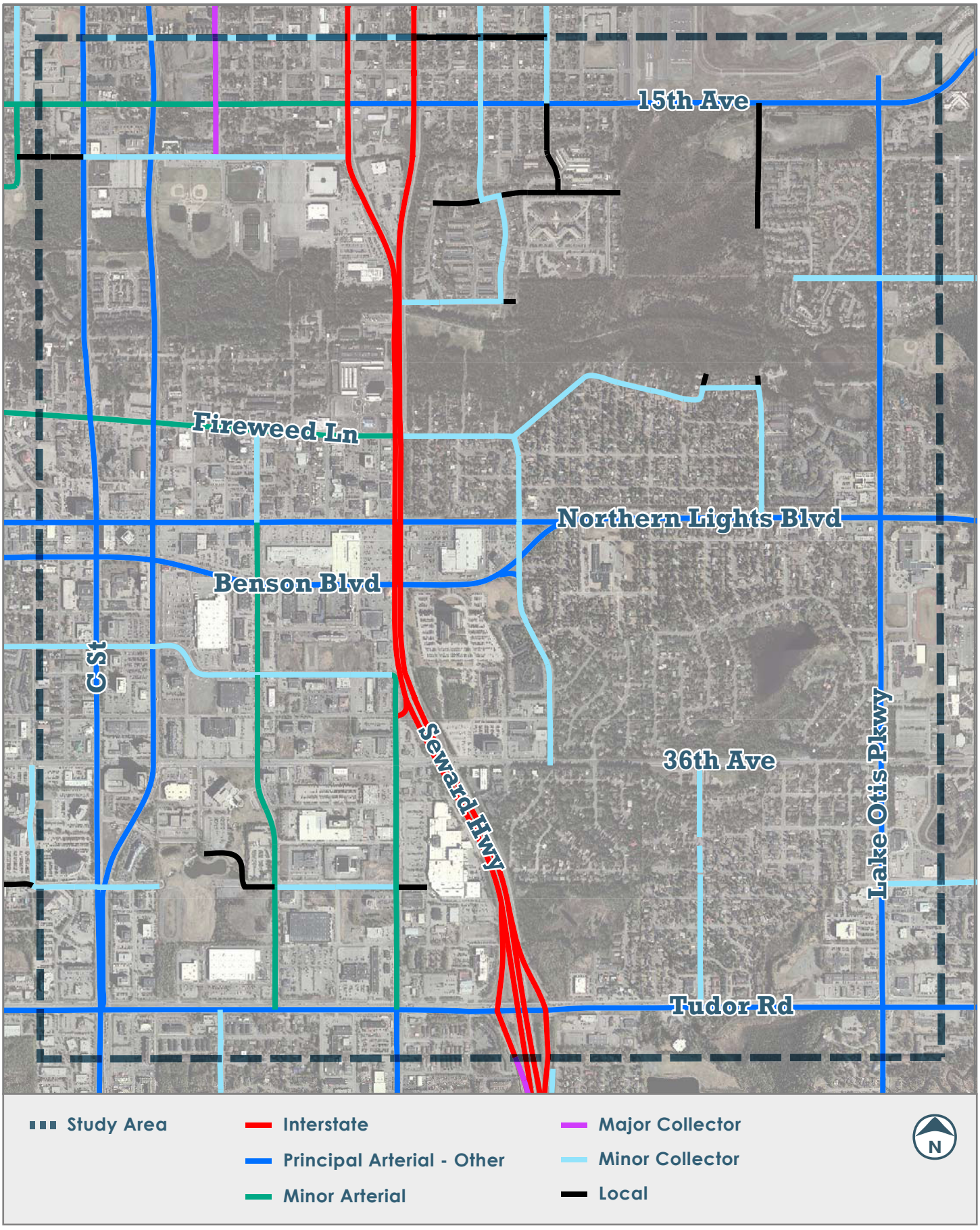


Figure 4: DOT&PF Functional Classifications

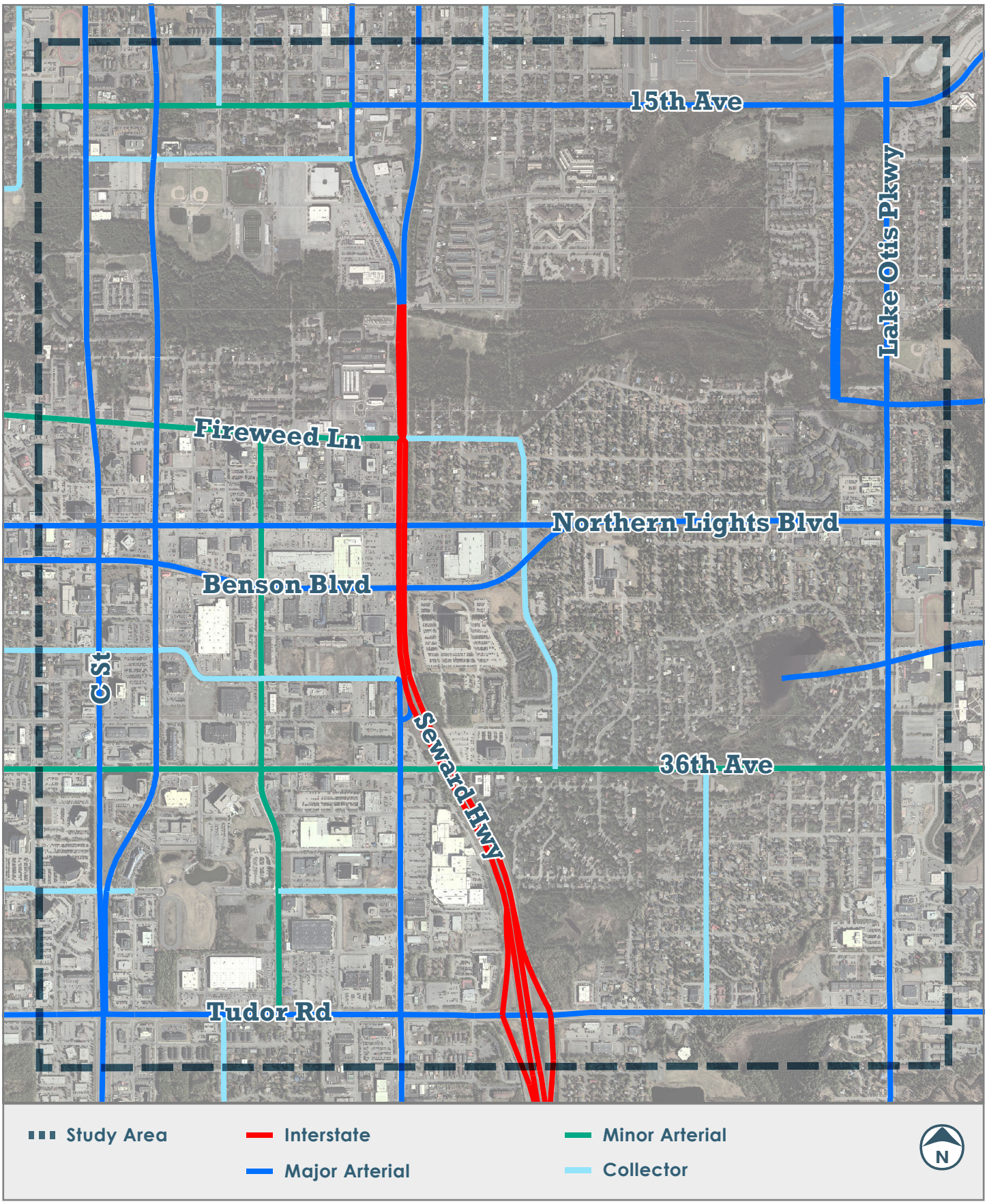


Figure 5: MOA Functional Classifications

2.2.2 NHS Designations

The NHS is a network of strategic highways within the United States that are important to the nation's economy, defense, and mobility. It includes the Interstate Highway System, as well as other roads serving major airports, ports, rail or truck terminals, railway stations, pipeline terminals, and other strategic transport facilities. States are encouraged to focus federal funds on improving the efficiency and safety of this network.

Figure 6 shows the study area roadways that are part of the NHS network. These include the Seward Highway, all the signalized cross roads in the study area (i.e., 15th Avenue east of Gambell Street, Northern Lights Blvd, Benson Blvd, 36th Avenue, and Tudor Road), and the three primary north-south arterials that parallel the Seward Highway (i.e., Lake Otis Parkway, A Street, and C Street).

2.2.3 Regional Truck Routes

A regional truck route network was identified for Anchorage as part of the Freight Mobility Study prepared for AMATS and is shown in Figure 7. The Freight Mobility Study indicates that identifying, signing, and enforcing the truck route network is a means to concentrate heavy duty truck movements on these roadways and protect communities, reduce neighborhood impacts, and alleviate traffic bottlenecks. All proposed concepts must accommodate truck traffic using the regional truck routes.

2.2.4 Snow Maintenance Priorities

One of the primary maintenance needs for study area roadways is snow clearing in the winter. Figure 8 identifies the snow clearing priorities for DOT&PF. These priorities are referenced by the following colors.

- Green – Priority Level 1 (Highest priority) includes high-volume, high-speed highways, expressways, minor highways, and all safety corridors and other major urban and community routes. It may take up to 24 hours to clear these roads after a winter storm. The mainline Seward Highway is designated as Priority Level 1.
- Yellow – Priority Level 2 includes routes of lesser priority based on traffic volume, speeds, and uses. Typically, these are major highways and arterials connecting communities. It may take up to 36 hours to clear these roads after a winter storm. Tudor Road, C Street, A Street, Benson Blvd, Northern Lights Blvd, Fireweed Lane, and the Old Seward Highway are designated as Priority Level 2.
- Orange, Purple, Red – Priority Levels 3, 4, and 5 (respectively) correspond to roads of decreasing priority because they serve less traffic and reach into more outlying areas. Seward Highway interchange ramps at the southern end of the study area south of Tudor Road are designated as Priority Level 3 (orange). No roadways designated as Priority Level 4 or 5 occur within the study area.

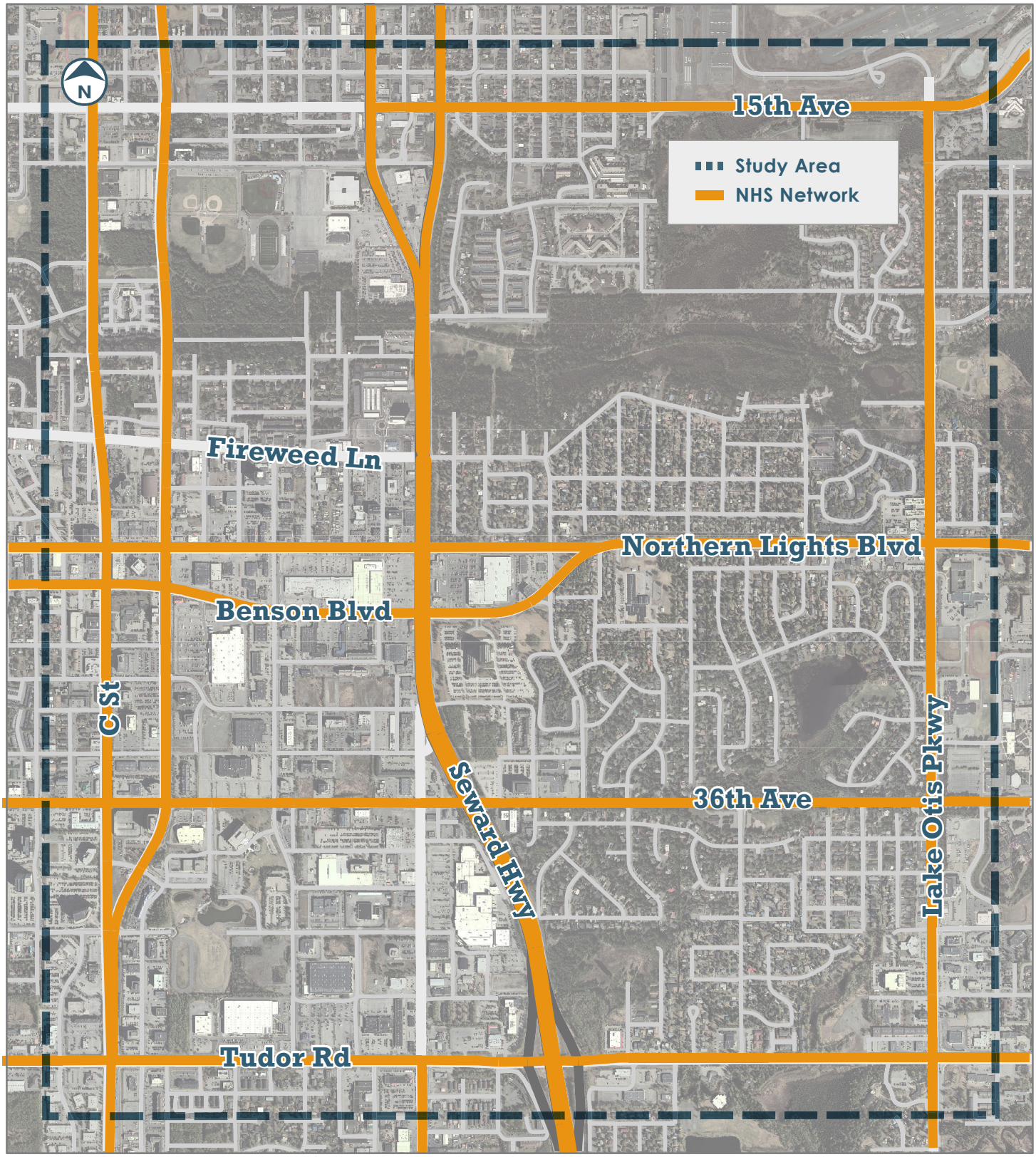


Figure 6: National Highway System (NHS) Network

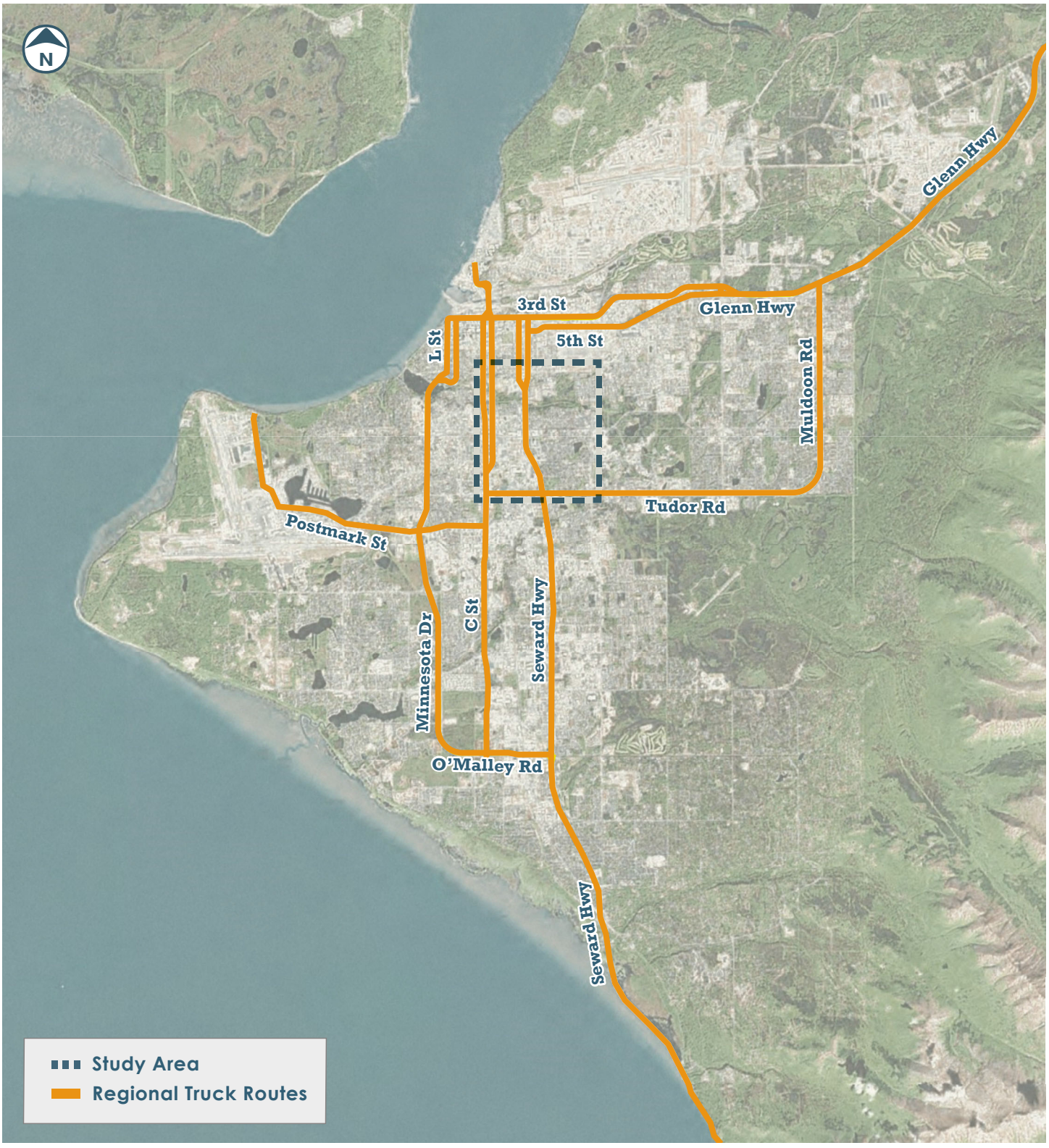


Figure 7: Regional Truck Routes

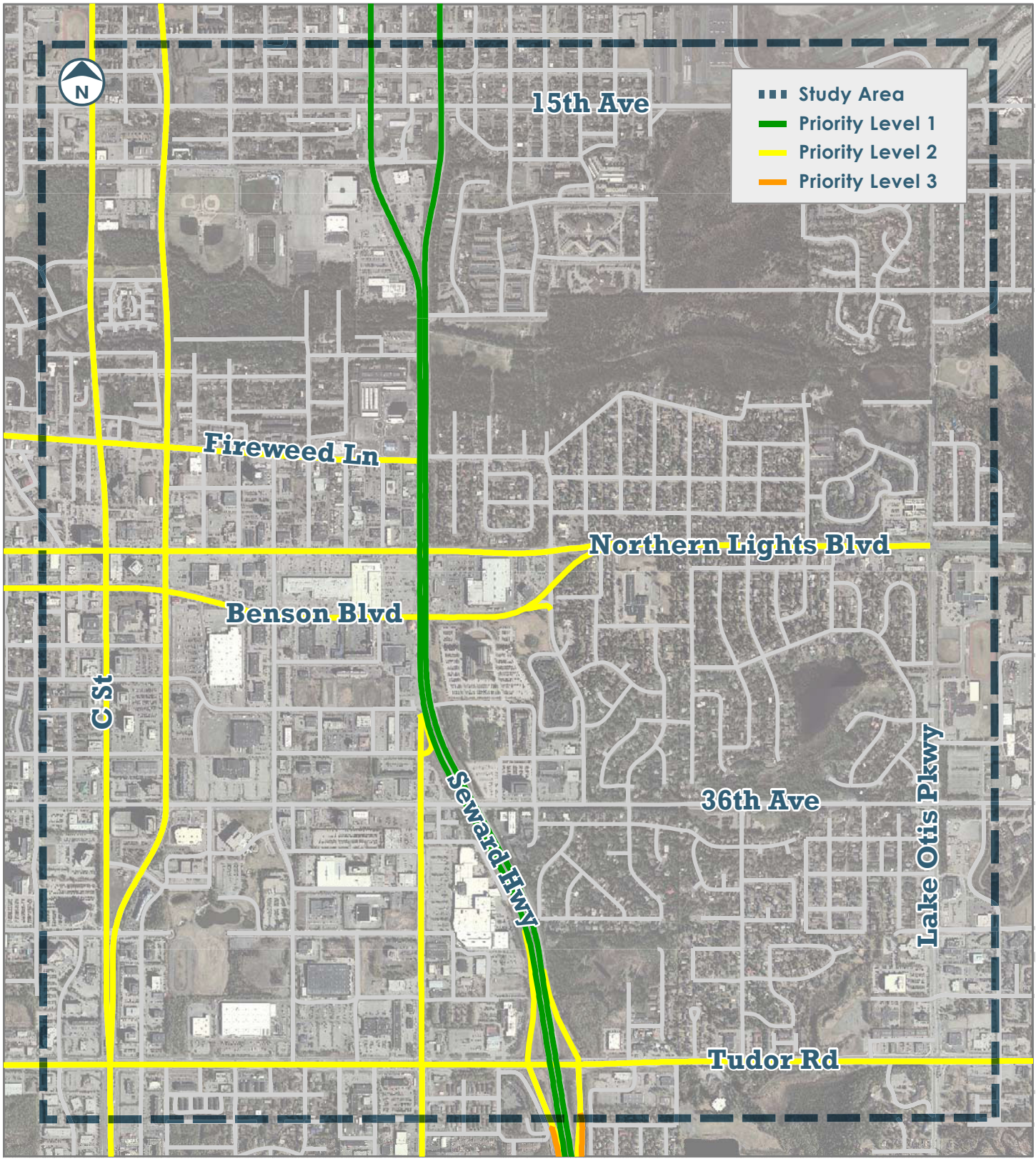


Figure 8: DOT&PF Winter Road Maintenance Priority

2.3 Roadway Characteristics and Features

Roadway characteristics refer to the physical attributes associated with the roadway, such as the typical cross-section, intersection traffic control and lane configuration, driveway locations, speed limits, and horizontal and vertical geometrics.

2.3.1 Cross Section

In its existing cross-section, Seward Highway transitions just north of Tudor Road from a controlled access freeway to a slower speed major arterial. The corridor cross-section is 3 to 4 lanes in each direction, with various right- and left-turn lanes along the corridor. In general, the cross-section extents are as follows:

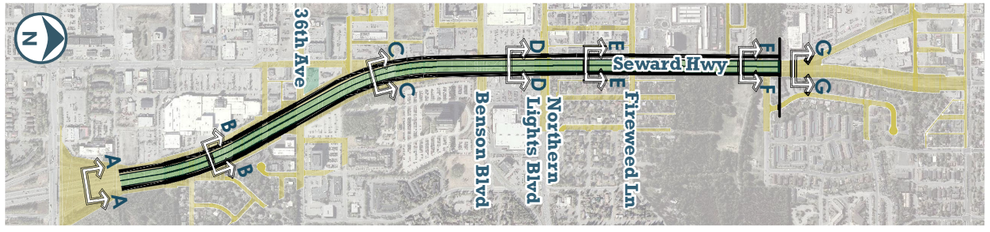
- From Tudor Road to Fireweed Lane: three lanes in each direction (with an additional northbound auxiliary lane between the northbound Tudor Road on-ramp and the 36th Avenue right-turn lane)
- From Fireweed Lane to 15th Avenue: four lanes in each direction (with the 2,000-foot section north of Chester Creek operating as one-way streets as the corridor separates to continue as the Ingra Street and Gambell Street couplet).

Figure 9 shows the typical cross sections on the Seward Highway within the study area.

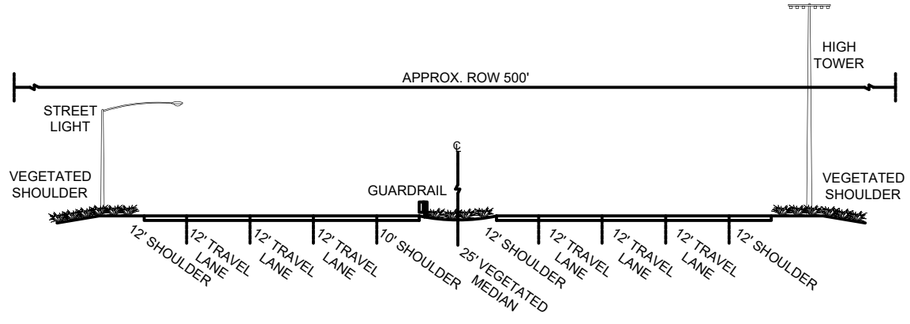
2.3.2 Traffic Control and Intersection Configuration

All intersections along the Seward Highway between the Tudor Road interchange and 15th Avenue are at-grade, and all the major street crossings are multi-lane and signalized. Other streets with access to the Seward Highway are stop-controlled and typically have single approach lanes that are limited to right-in/right-out (RIRO) movements.

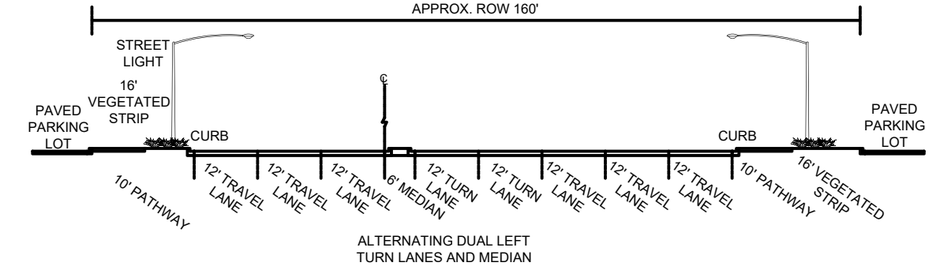
Figure 10 shows the existing lane configurations and traffic control at each of the study intersections both along the Seward Highway and the parallel facilities. These 35 intersections (31 of which are signalized) are the focus of the traffic operations analysis in this report. The signals are coordinated and run either a 160 second cycle length or 80 second half cycle in the AM and PM peak periods.



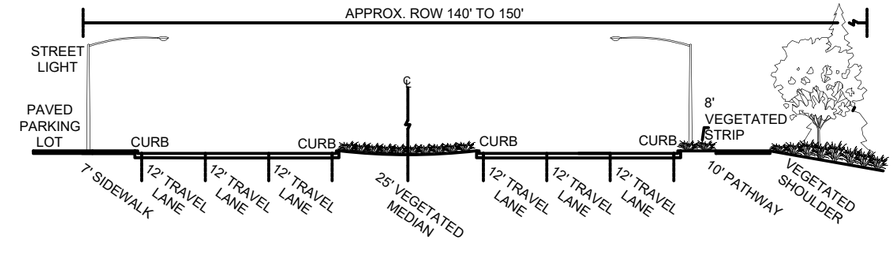
REFERENCE MAP



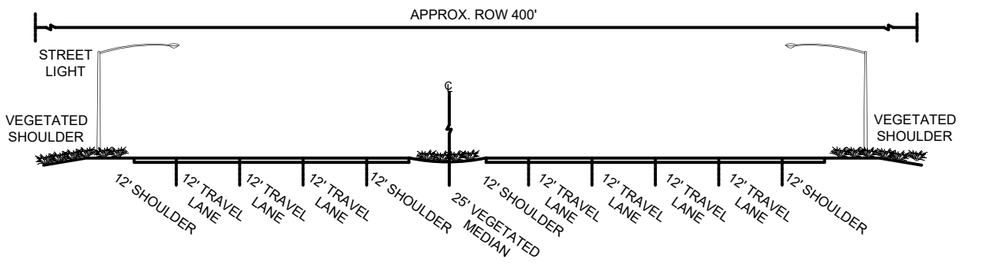
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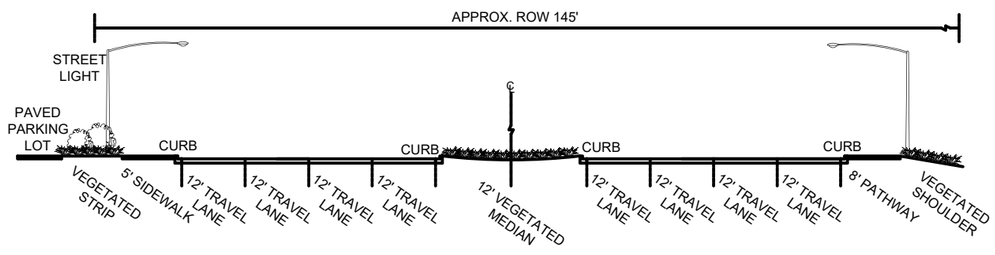
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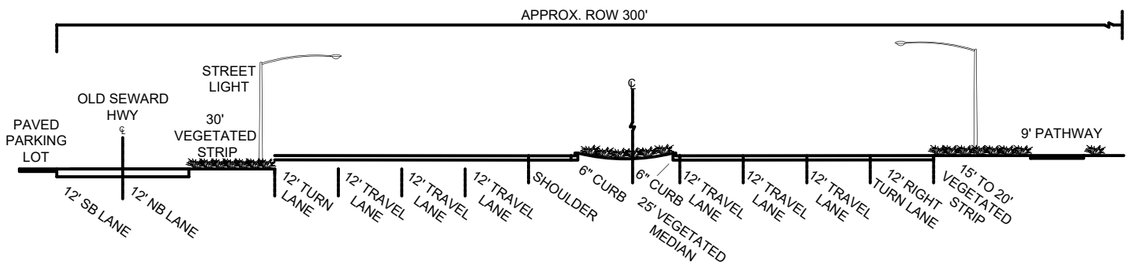
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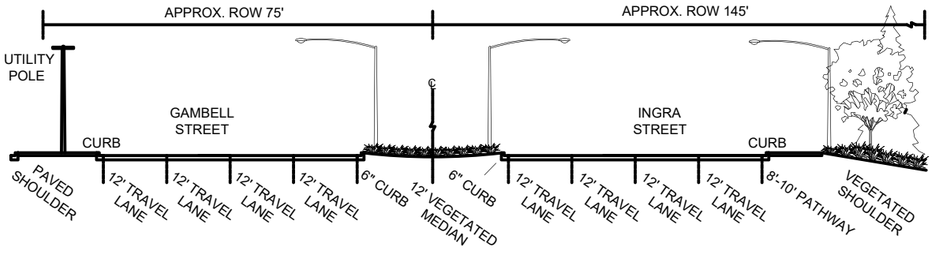
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SECTION F-F

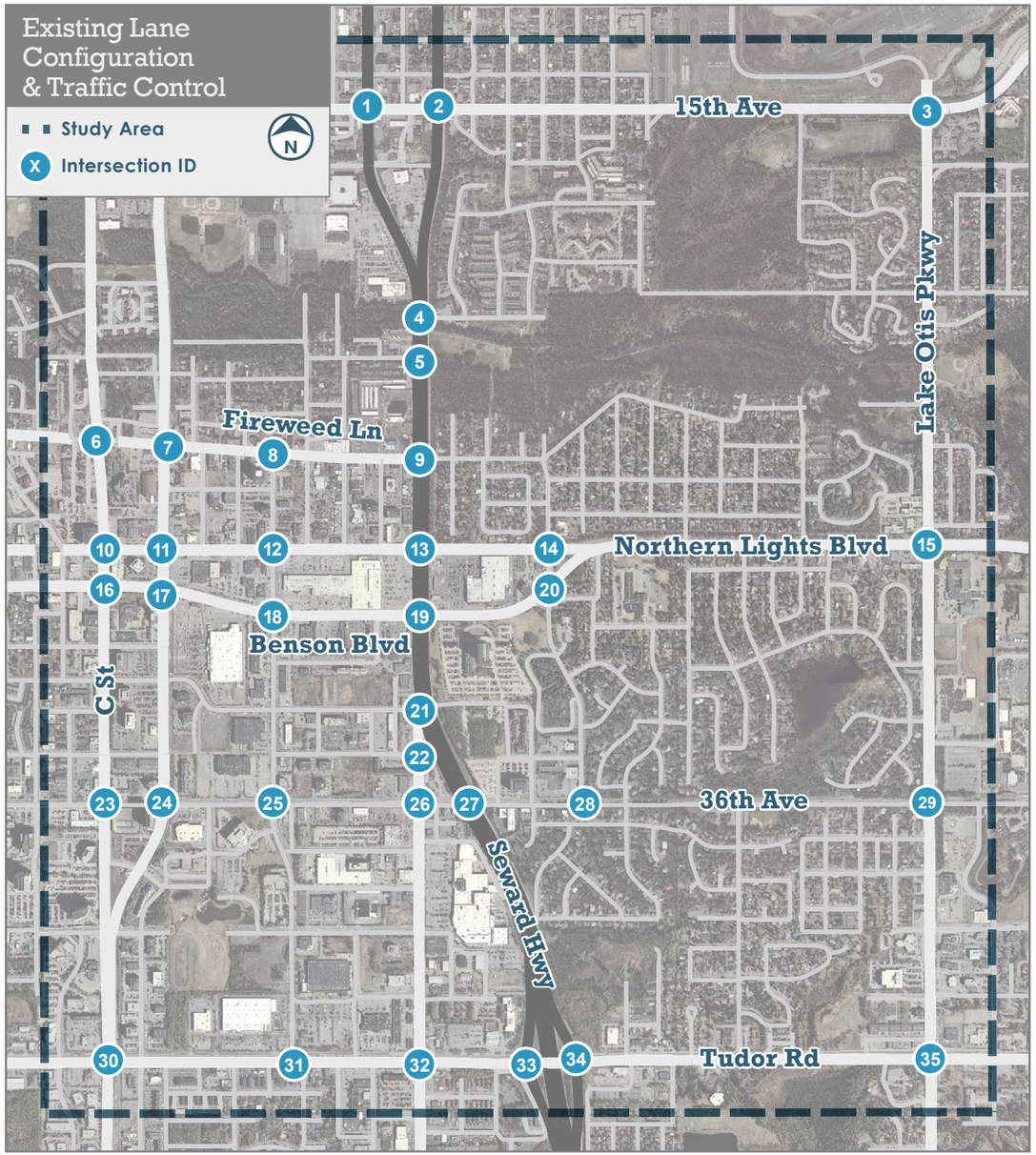


SECTION C-C



SECTION G-G

Figure 9: Existing Roadway Typical Sections



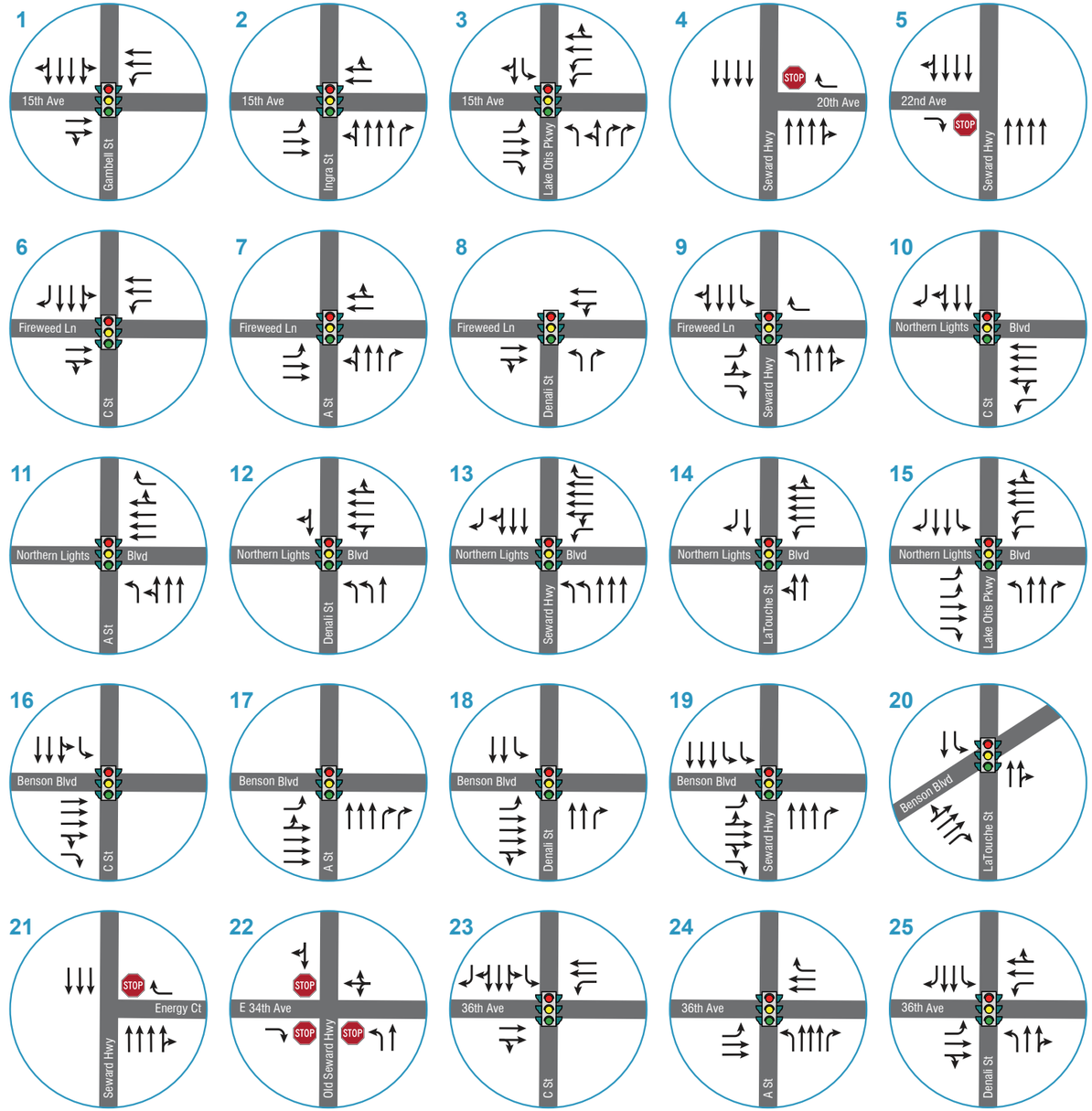


Figure 10. Traffic Control and Intersection Configuration

2.3.3 Driveway Access

Driveway access is limited along much of the Seward Highway, with exceptions on the west side (between 20th and 34th) and on the east side (between Northern Lights Blvd and Benson Blvd), as shown in Figure 11. On the east side of the highway, the only segment with numerous closely spaced driveways is between Northern Lights Blvd and Benson Blvd. On the west, numerous driveways are clustered north of Northern Lights Blvd, south of Benson Blvd, and near 15th Avenue.

2.3.4 Speed Limits

Speed limits for study area roadways are shown in Figure 12. The Seward Highway operates with a 45 mile per hour (mph) speed limit between 15th Avenue and 36th Avenue. South of 36th Avenue, the speed limit increases to 55 mph as the highway transitions to a controlled-access freeway. The signalized cross streets on the southern end of the study area (i.e., Northern Lights Blvd, Benson Blvd, 36th Avenue, and Tudor Road) operate with posted speeds ranging from 35 mph to 45 mph, while the streets on the north (i.e., 15th Avenue and Fireweed Lane) operate with slower posted speeds ranging from 25 mph to 35 mph.

2.3.5 Horizontal and Vertical Geometrics

The Seward Highway is primarily straight and runs north-south but has some horizontal curves north of 20th Avenue and south of 33rd Avenue. To the north, the northbound and southbound directions of the Seward Highway curve away from each other to tie into the Ingra Street and Gambell Street couplet. To the south, the Seward Highway has two curves that result in a slight northwest-southeast direction and shift the highway alignment to the east.

The Seward Highway is relatively flat with few vertical curves, with the exception of the significant drop in elevation near Chester Creek and 20th Avenue that results in slopes that run towards the creek. LiDAR data is available for the entire corridor and was used to determine approximate longitudinal slopes and curve radii of the Seward Highway, which are shown in Figure 13. Various record drawings have also been compiled. From the 1959 Seward Highway record drawing, the longitudinal slope for Seward Highway heading north towards 20th Avenue was a 4.52 percent downward slope with a 5.95 percent upward slope continuing north towards 15th Avenue.

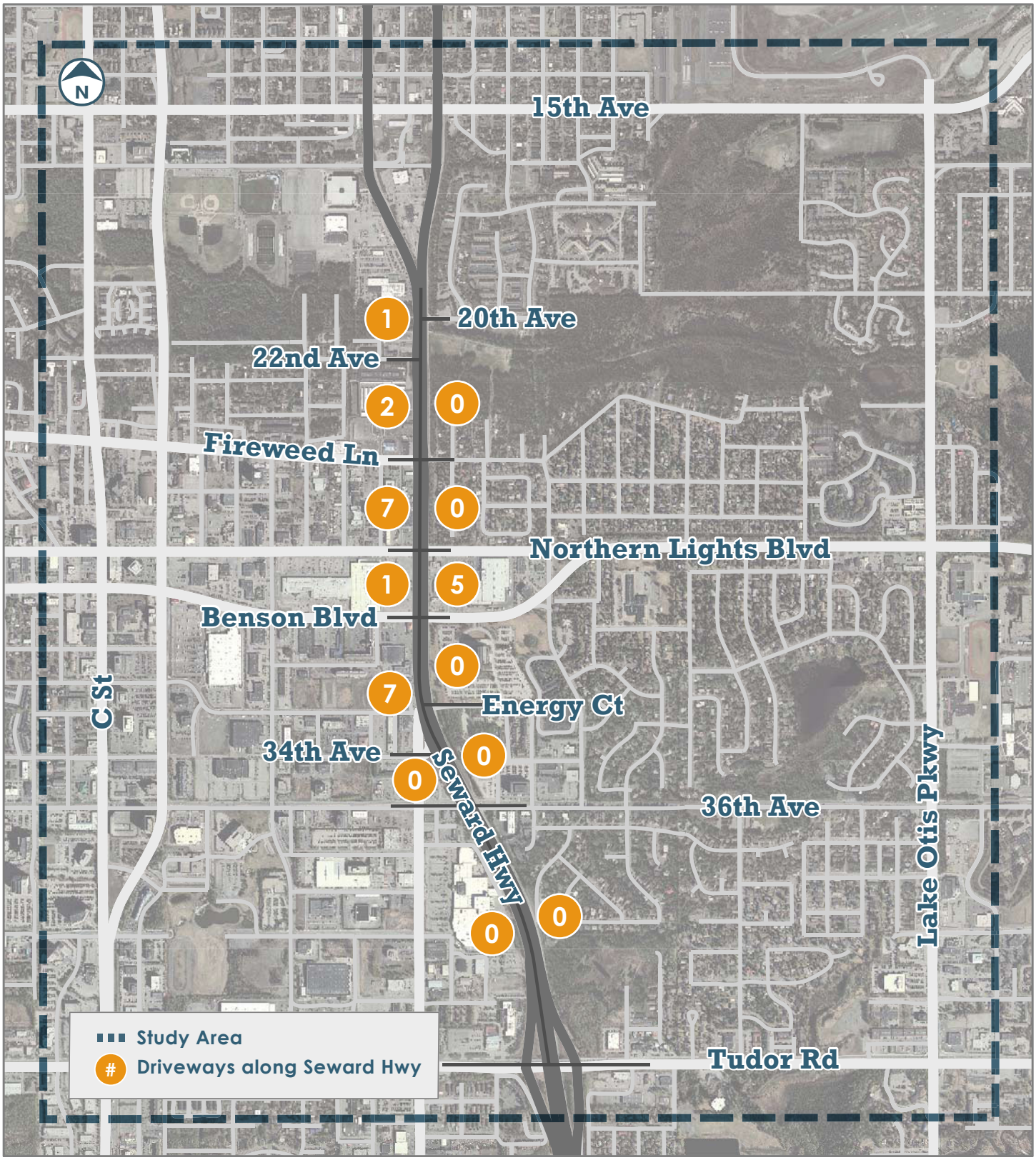


Figure 11: Driveway Locations

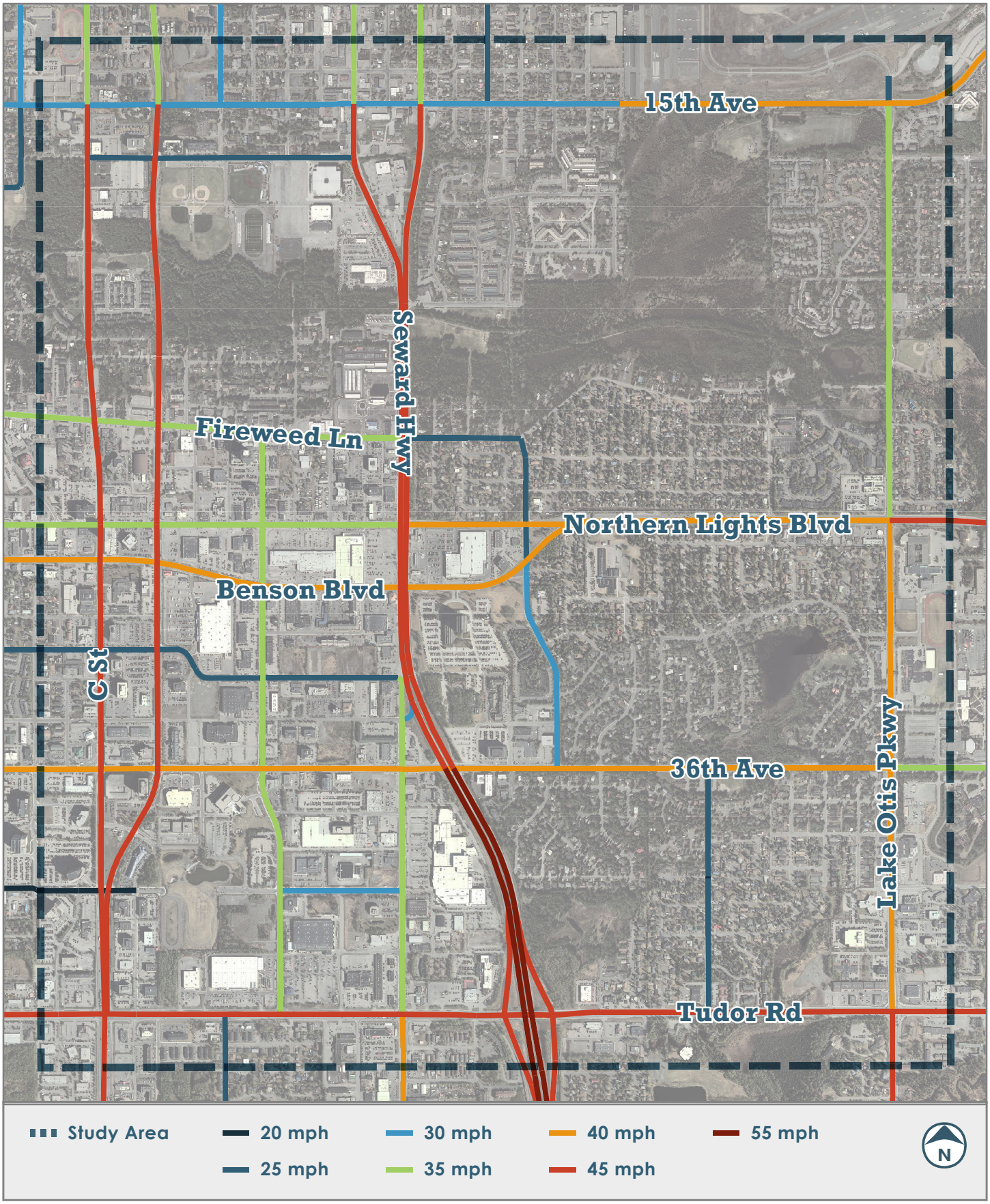
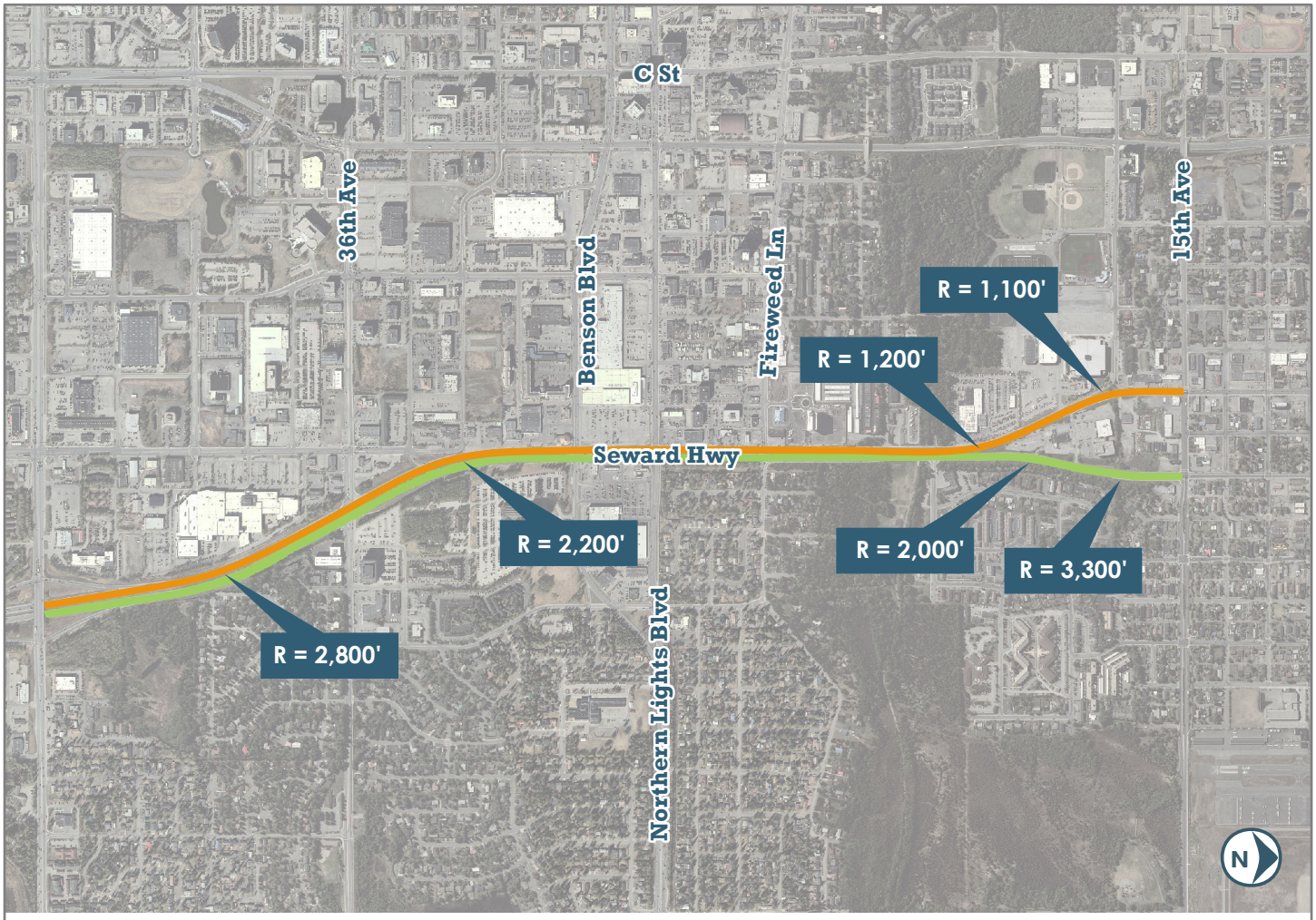
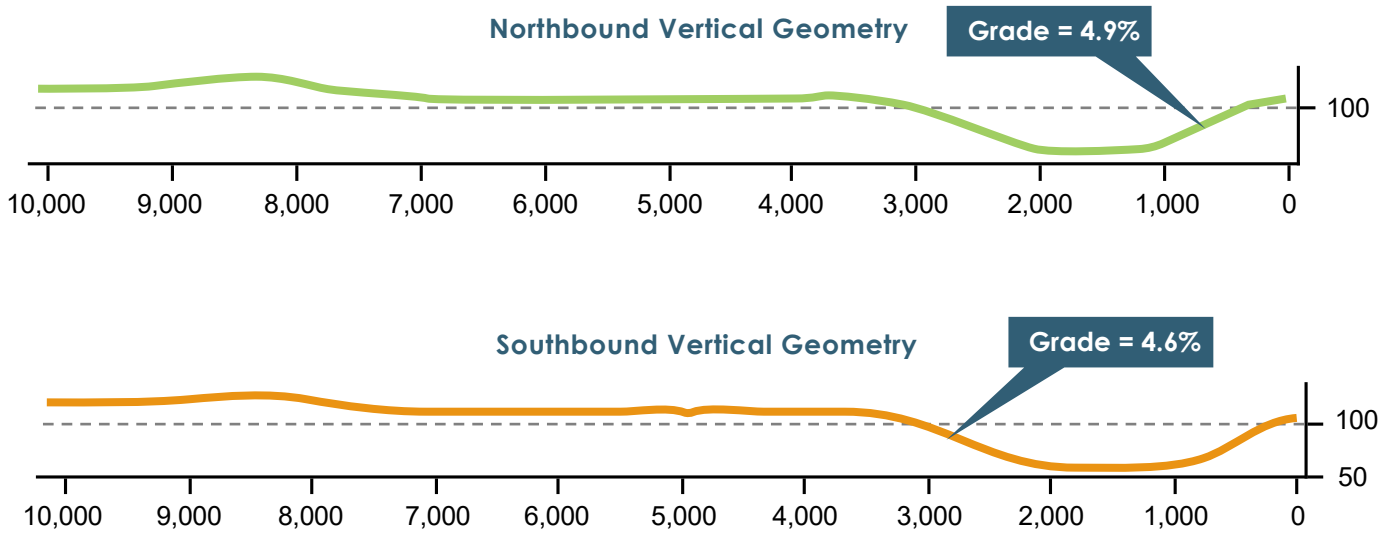


Figure 12: Speed Limits





Notes:
1. All radiuses are approximate
2. 2015 LiDAR from the Municipality of Anchorage was used to create the vertical geometry

Figure 13: Seward Highway Horizontal and Vertical Geometry

2.4 Multimodal Traffic Volumes and Operations

Multimodal traffic volumes reflect demand for travel by different modes within the study area. Travel modes include motor vehicles, pedestrians and bicycles, and transit.

2.4.1 Motor Vehicle Volumes and Performance

Motor vehicle volumes were evaluated for daily traffic volumes, seasonal traffic trends, hourly traffic trends, truck volumes, intersection volumes and performance, and a traffic diversion situation that occurred during the study due to a bridge strike at the Tudor Road interchange overpass.

2.4.1.1 Annual Average Daily Traffic

Annual average daily traffic (AADT) is the estimated number of vehicles traveling over a given road segment during an average 24-hour day. It is usually obtained from sample counts that are seasonally adjusted. DOT&PF provides AADT estimates for the roads shown in Figure 14. In 2015, the Seward Highway experienced bi-directional AADT volumes ranging from 51,500 to 57,100 vehicles between 15th Avenue and 36th Avenue. South of 36th Avenue, the AADT volumes were approximately 53,000 vehicles. AADT volumes on the major crossroads ranged between 15,000 and 39,000 vehicles. Between C Street and the Seward Highway, Fireweed Lane had 7,000 to 10,000 vehicles per day, Northern Lights Blvd had about 22,000 vehicles per day, Benson Blvd had about 25,000 vehicles per day, 36th Avenue had about 15,000 vehicles per day, and Tudor Road had about 29,000 vehicles per day.

2.4.1.2 Seasonal Traffic Trends

DOT&PF maintains permanent traffic recorder (PTR) stations on select roads across its network. PTRs consist of traffic volume counting equipment that automatically count vehicles passing over detectors on an ongoing basis, with the exception of periods of detector failure or construction impacts. The Seward Highway has two PTR stations between 15th Avenue and Tudor Road, as shown on Figure 14. The station between 36th Avenue and Benson Blvd (PTR Station 11313000) is new and only began collecting traffic data in 2017.

Analysis of the seasonal and 24-hour trends at the Seward Highway PTR at Chester Creek (PTR Station 1120545U) was performed for 2015, which was the most recent year of complete data at the start of the PEL study process and corresponds with DOT&PF's AADT estimates shown in Figure 14.[2] Figure 15 shows the average daily traffic (ADT) by week (i.e., average of Sunday through Saturday for each week of the year).

[2] Detector failure occurred between December 17, 2015 and February 2, 2016, which includes two weeks of 2015 and a full month of 2016. In addition, 28 other days of detector failure occurred in 2016, spread over the months of June to October.

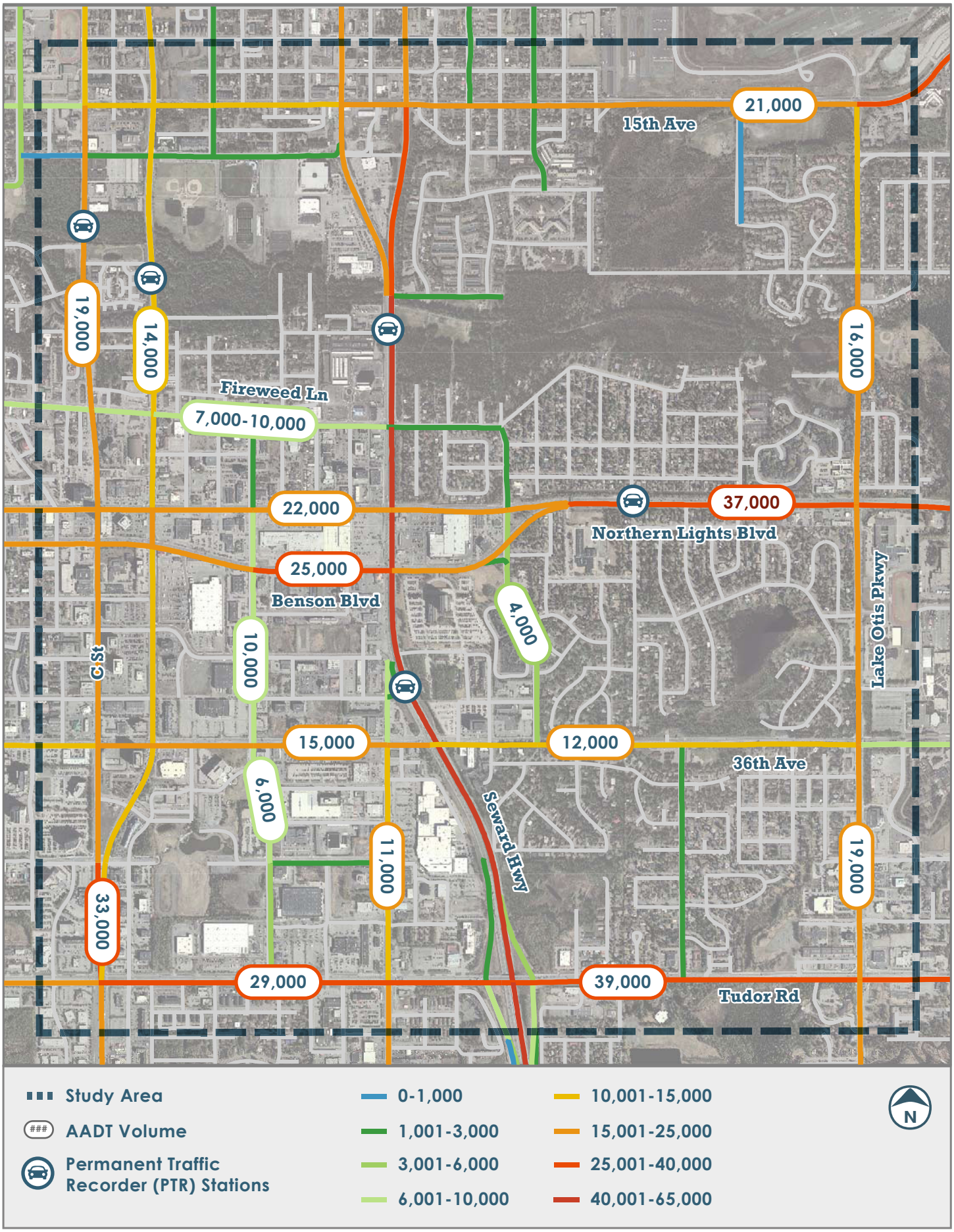


Figure 14: 2015 AADT Volumes

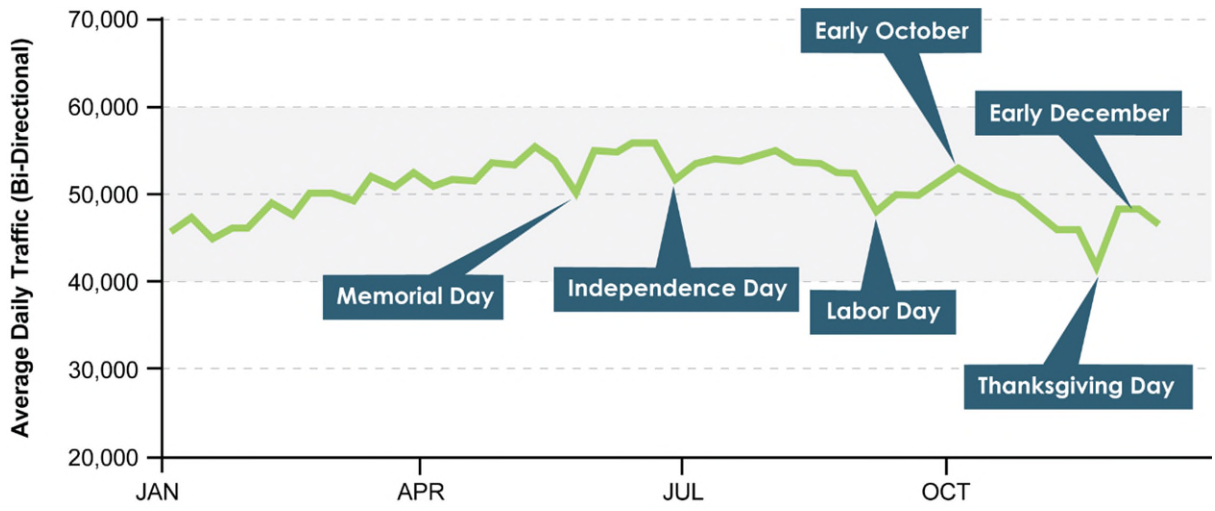


Figure 15: Seward Hwy Average Daily Traffic (2015, Ingra/Gambell at Chester Creek)

ADT volumes generally exhibited a gradual increase from January through June, except for the week of Memorial Day, when volumes dropped before increasing again. Starting in July, volumes began a gradual decline, with the weeks associated with Labor Day and Thanksgiving also exhibiting the greatest drops in traffic volumes. However, these weeks were followed by a few weeks of increases (likely associated with the Permanent Fund Dividend and holiday shopping seasons) before beginning to decline once more through the end of the year.

2.4.1.3 Hourly Traffic Trends

Figure 16 shows the hourly traffic volumes on the Seward Highway at Chester Creek during a typical weekday (Tuesday through Thursday), based on average volumes throughout the year (except for mid-week holidays or days adjacent to holidays) measured by the PTR station. Peaks occur during the morning and evening commuter periods, with the highest volumes between 4 to 5 p.m.

The data also shows that northbound volumes are typically higher than southbound volumes for all hours of the day, with about 55 percent of vehicles traveling north throughout the day. The directional distribution is most unbalanced during the AM peak, where 59 percent of traffic is traveling northbound. Therefore, the p.m. peak hour is the most critical analysis period, but AM peak hour analysis is also beneficial at select intersections where particular turn movement volumes are higher during the morning commute.

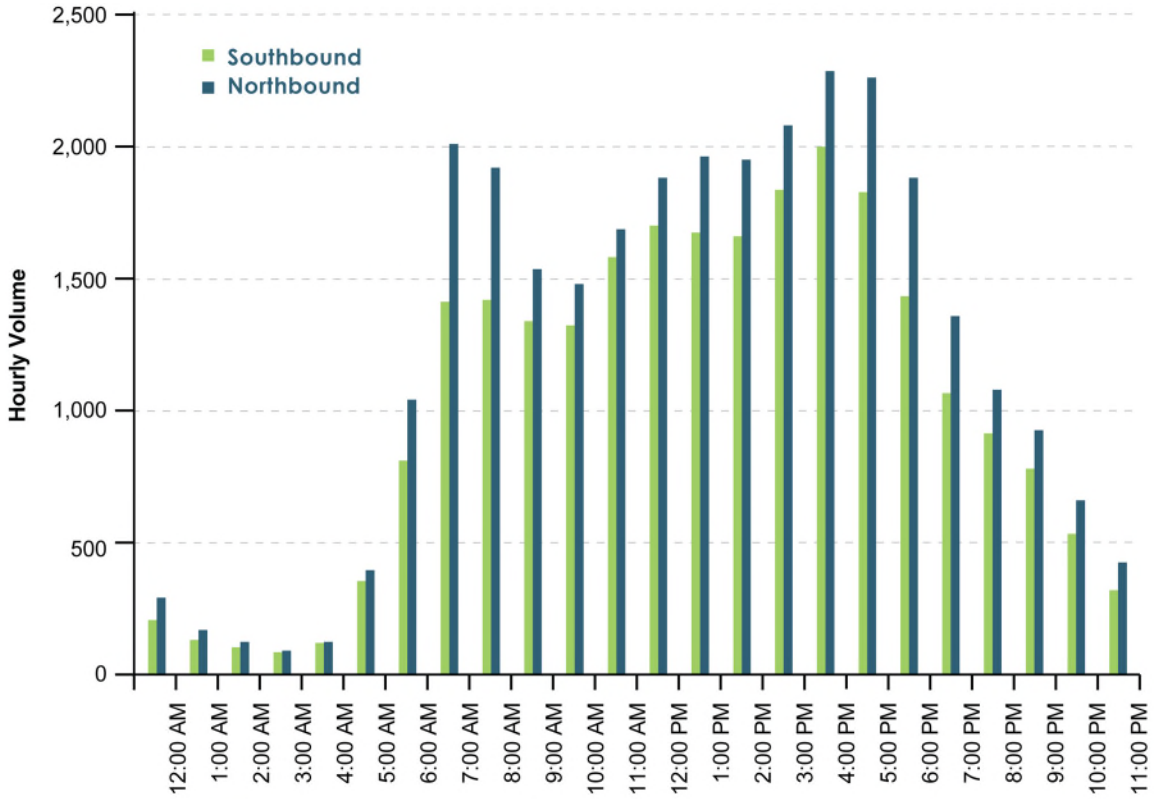


Figure 16: Seward Highway Average Midweek Volumes

Figure 17 shows a sample of the hourly volumes of traffic entering and exiting at each intersection on the Seward Highway in the AM and PM peak hours. These traffic patterns were estimated by placing Bluetooth readers at 13 locations around the study corridor: Seward Highway (north of 15th Avenue and south of Tudor Road), Old Seward Highway (south of Tudor Road), and on Fireweed Lane, Northern Lights Blvd, Benson Blvd, 36th Avenue, and Tudor Road (both east and west of the Seward Highway or all these roadways).

The Bluetooth readers recorded the timestamp and a truncated media access control (MAC) address corresponding to Bluetooth-enabled devices as they passed by. The data was evaluated to track the movement of vehicles throughout the corridor and estimate typical travel times, common routes, and driving patterns between destinations. Specific emphasis was placed on quantifying the number of vehicles using the Seward Highway for through traffic and jogging traffic movements. A jogging traffic movement is defined as primarily east-west vehicle movements that only use the Seward Highway for a short distance. During both peaks, most northbound and southbound traffic is turning off the Seward Highway and into Midtown. In the southbound direction, only 30 percent of traffic passes through the entire corridor in the AM and PM peaks. In the northbound direction, 35 percent of traffic passes through the entire corridor in the AM Peak, with only 15 percent passing through the entire corridor in the PM peak.

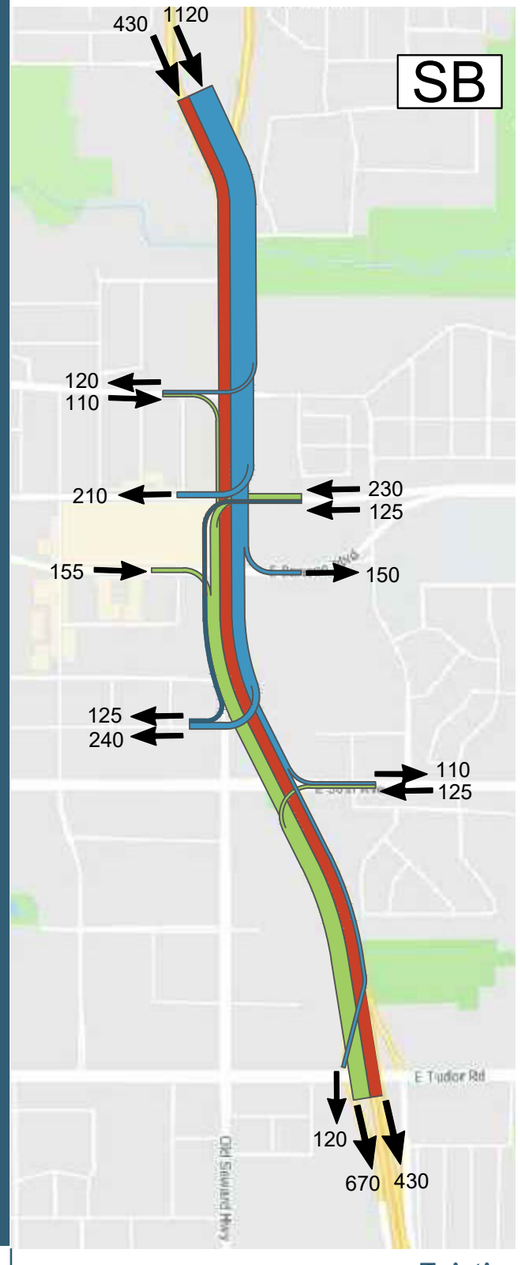
Fireweed Ln

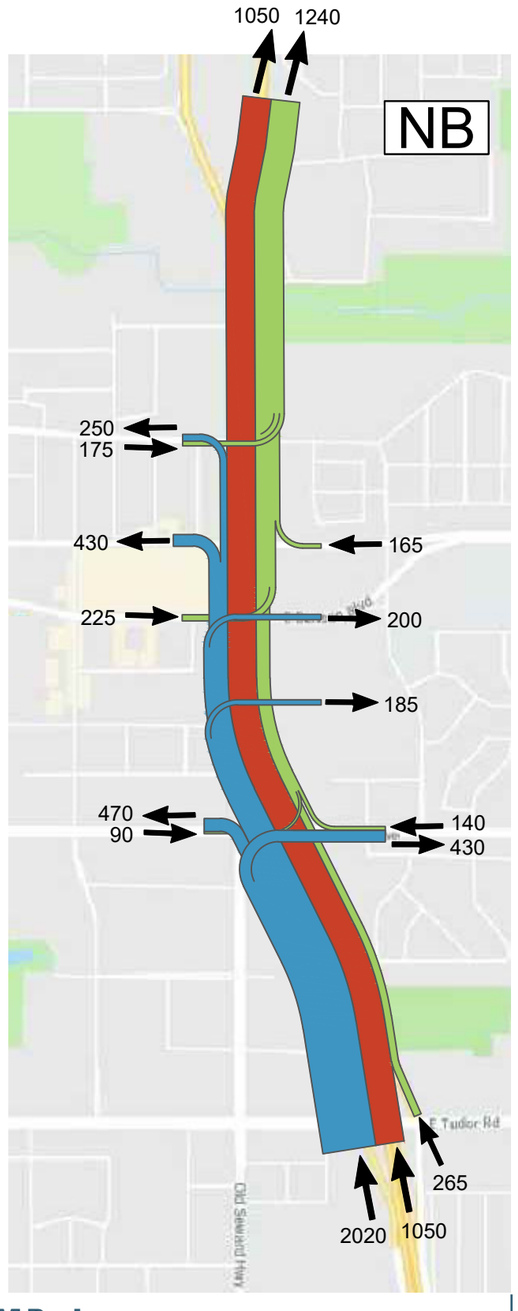
Northern Lights Blvd

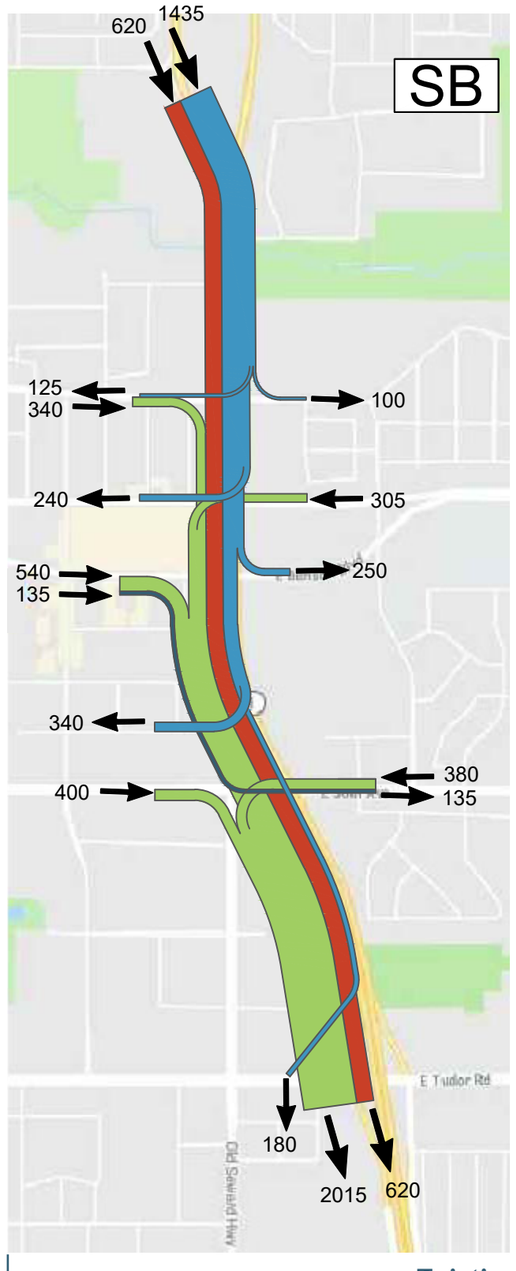
Benson Blvd

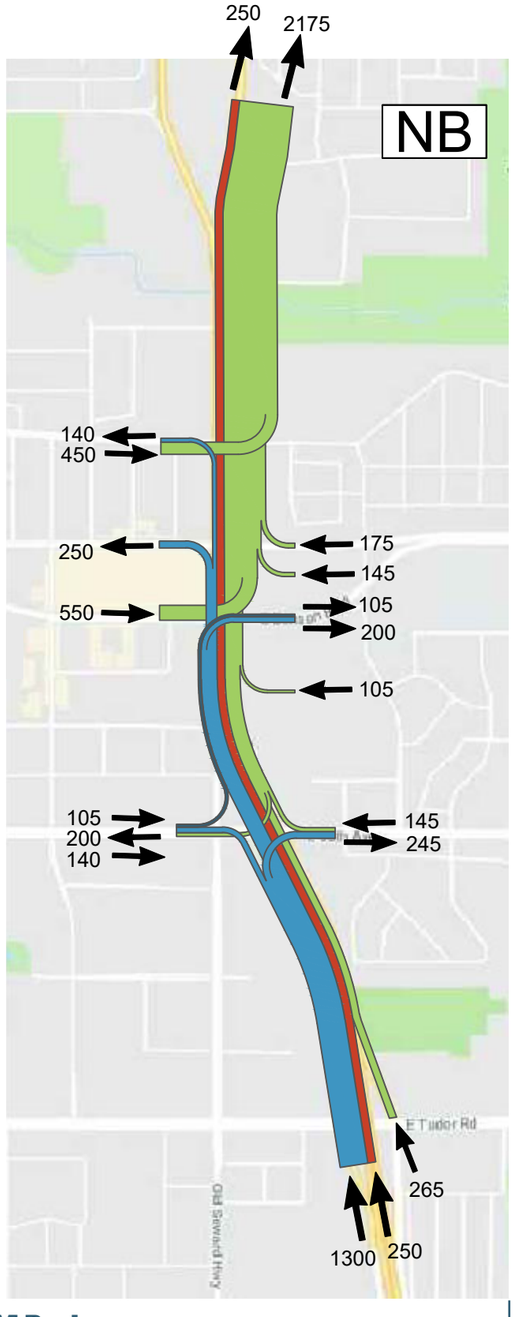
36th Ave

Tudor Rd









Existing AM Peaks

Existing PM Peaks

Figure 17: Traffic Flows - Existing AM and PM Peaks

Through Traffic Staying on Highway

Turning onto Highway

Turning off Highway

Jog Traffic

2.4.1.4 Truck Volumes

DOT&PF collects vehicle classification data at the weigh-in-motion (WIM) station on the Seward Highway south of 76th Avenue. This station is a permanent counter that categorizes vehicles into 13 groups by number and spacing of axles. The 2013 DOT&PF Annual Traffic Volume Report (the most recent data available), indicated that 93 percent of vehicles on the Seward Highway are standard-sized vehicles (passenger cars/SUVs/vans/pick-up trucks), six percent are single-unit trucks and less than one percent are heavy trucks.

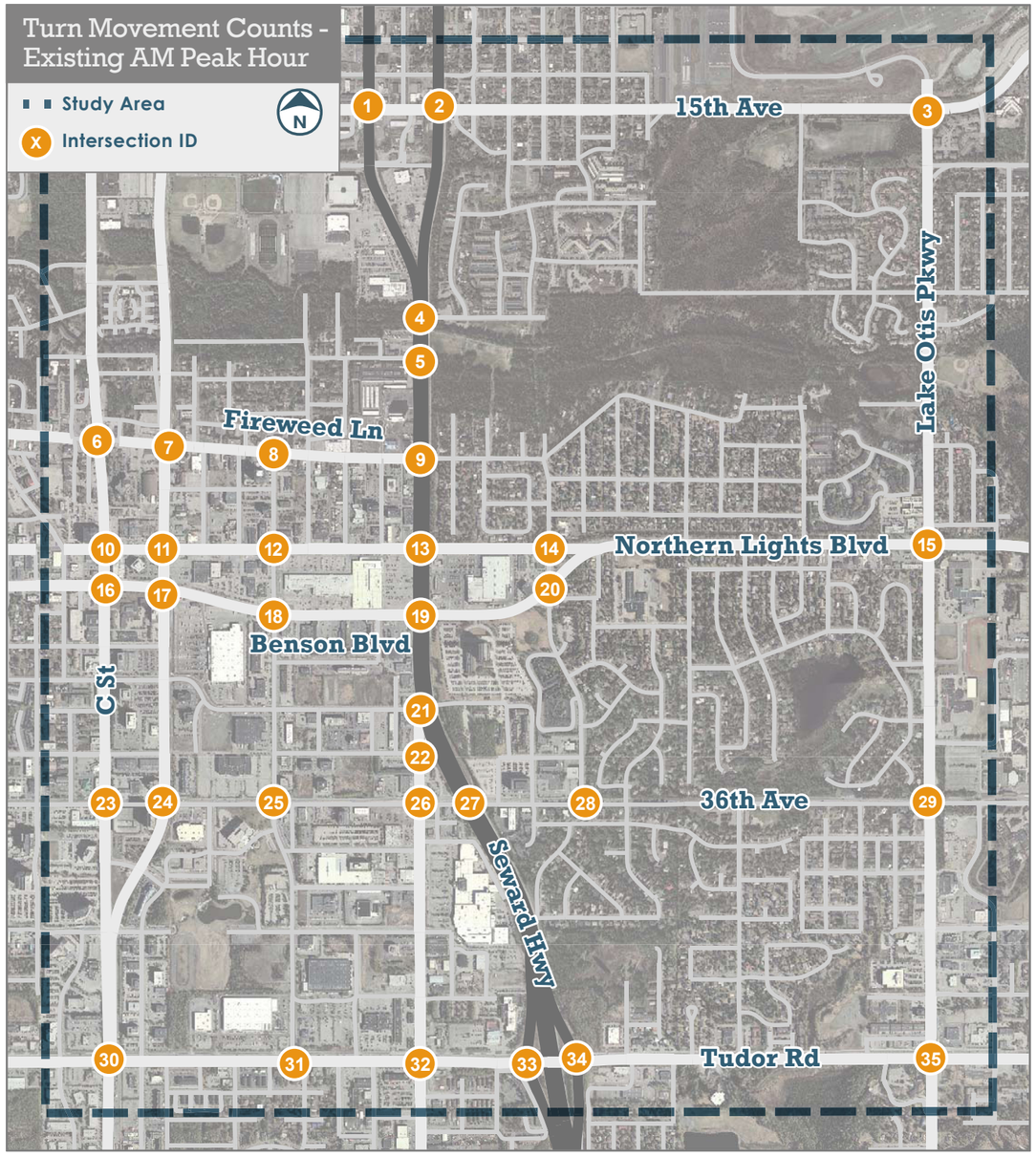
The WIM station also collects speed data for commercial vehicle classes. The average truck speed collected in April 2015 was 62 mph with an 85th percentile truck speed of 69 mph, compared to a posted speed of 65 mph.

2.4.1.5 Intersection Volumes and Performance

Intersection turn movements are important for understanding how drivers travel around the transportation system and are the basis for intersection analysis. Turn movement counts (TMCs) were collected for the study intersections from approximately 7 a.m. to 7 p.m. using video recordings from various days over the course of multiple weeks in October 2017. The highest hourly volumes generally occurred from 7:30 to 8:30 a.m. for the AM peak hour and 4:30 to 5:30 p.m. for the PM peak hour. These volumes were seasonally factored using the PTR trends and then balanced. The detailed counts and factoring assumptions are provided in Attachment B.

Figure 18 and Figure 19 show the resulting AM and PM peak hour turning movements, respectively. These volumes were used to determine the existing intersection performance during the corridor's peak hours. The off-peak LOS was not evaluated for the study intersections, but midday volumes (generally around lunchtime) are approximately equal to the AM peak hour. Throughout the afternoon, the volumes gradually build until they reach the PM peak hour. This suggests that midday and afternoon LOS fall somewhere between the AM and PM peak hour LOS.

Figure 20 and Figure 21 show the existing LOS for each intersection, along with estimated ADTs. Most intersections operate at LOS D or better during the AM and PM peak hours, though a few operate at LOS E or F. Highway Capacity Manual (HCM) 2000 methodology was used to report delay and LOS for signalized intersections because several signalized intersections have lane configurations and phasing that cannot be analyzed using later editions of the HCM. Providing all signalized intersection results using the same HCM methodology allows a more direct comparison of the delay throughout all sections of this report.



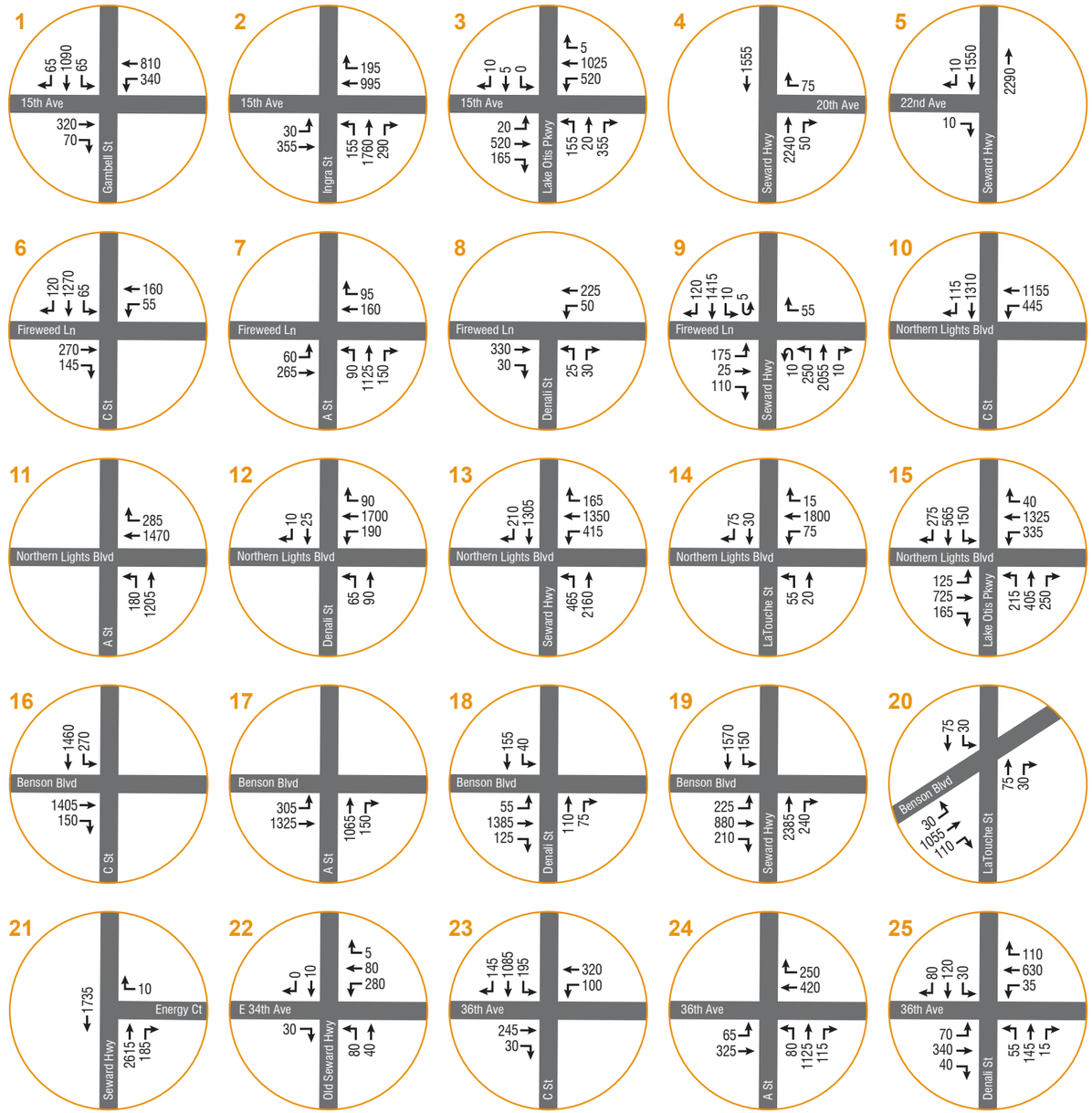
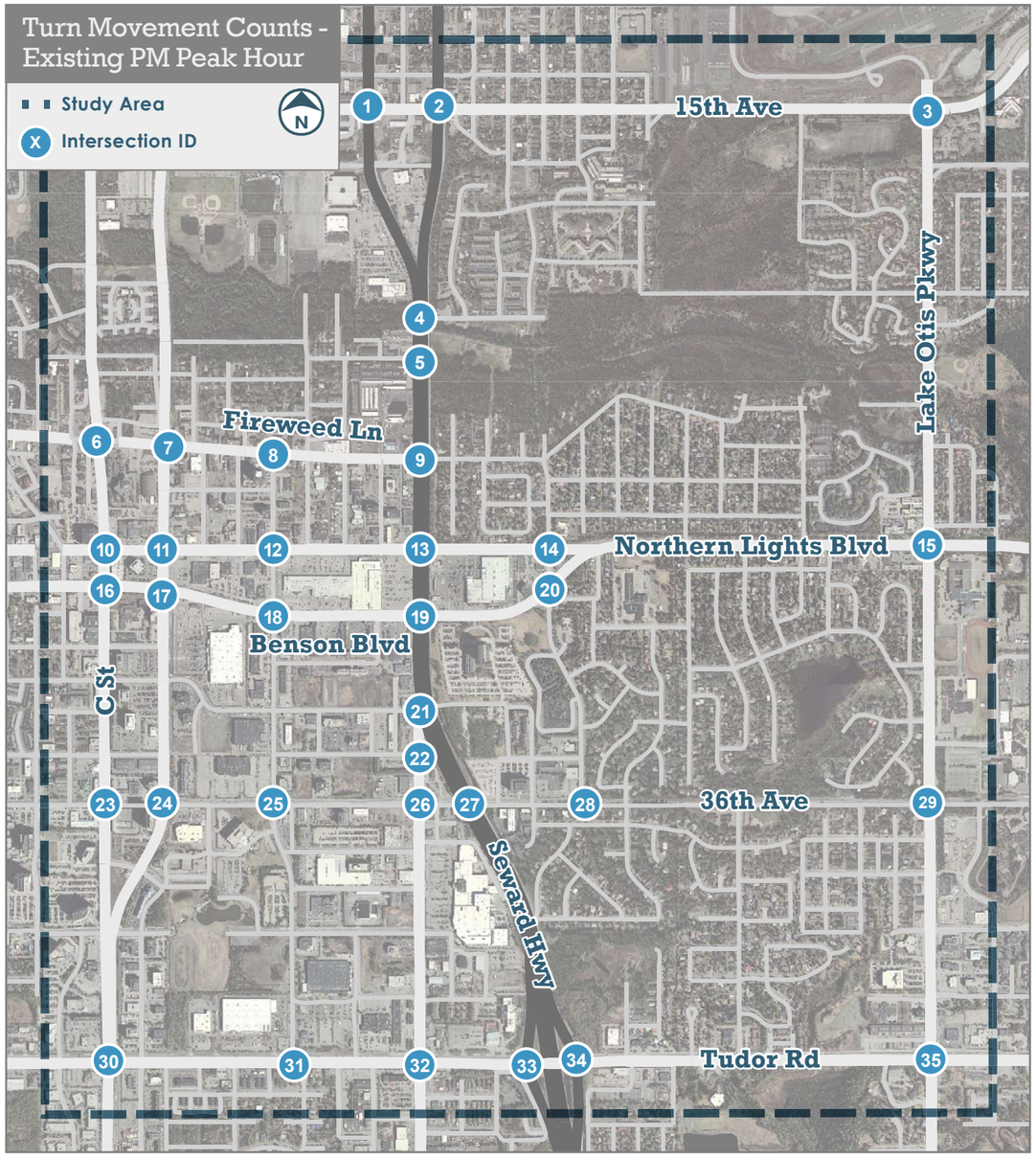


Figure 18. Turn Movements Counts - Existing AM Peak Hour



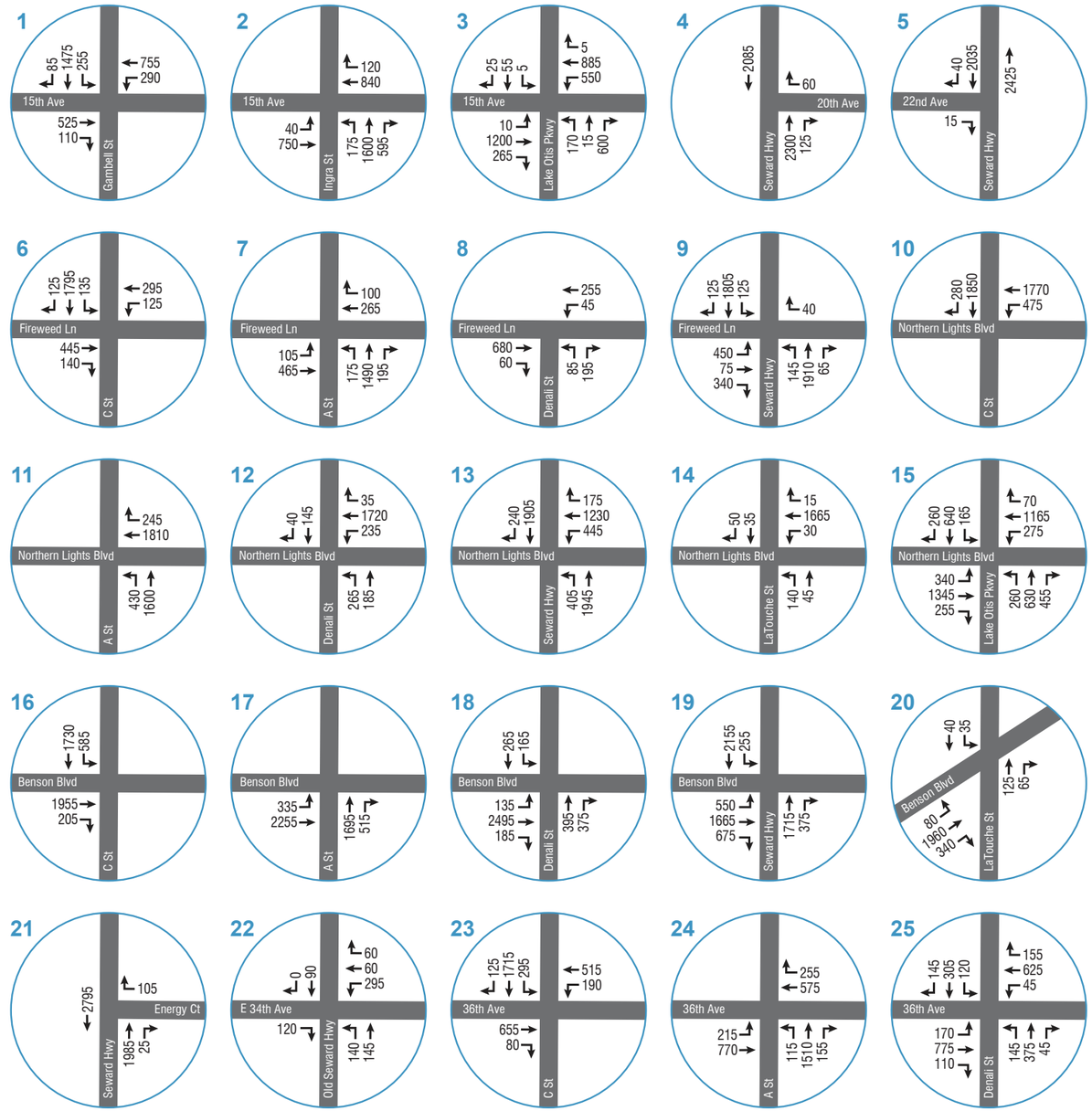


Figure 19. Turn Movements Counts - Existing PM Peak Hour

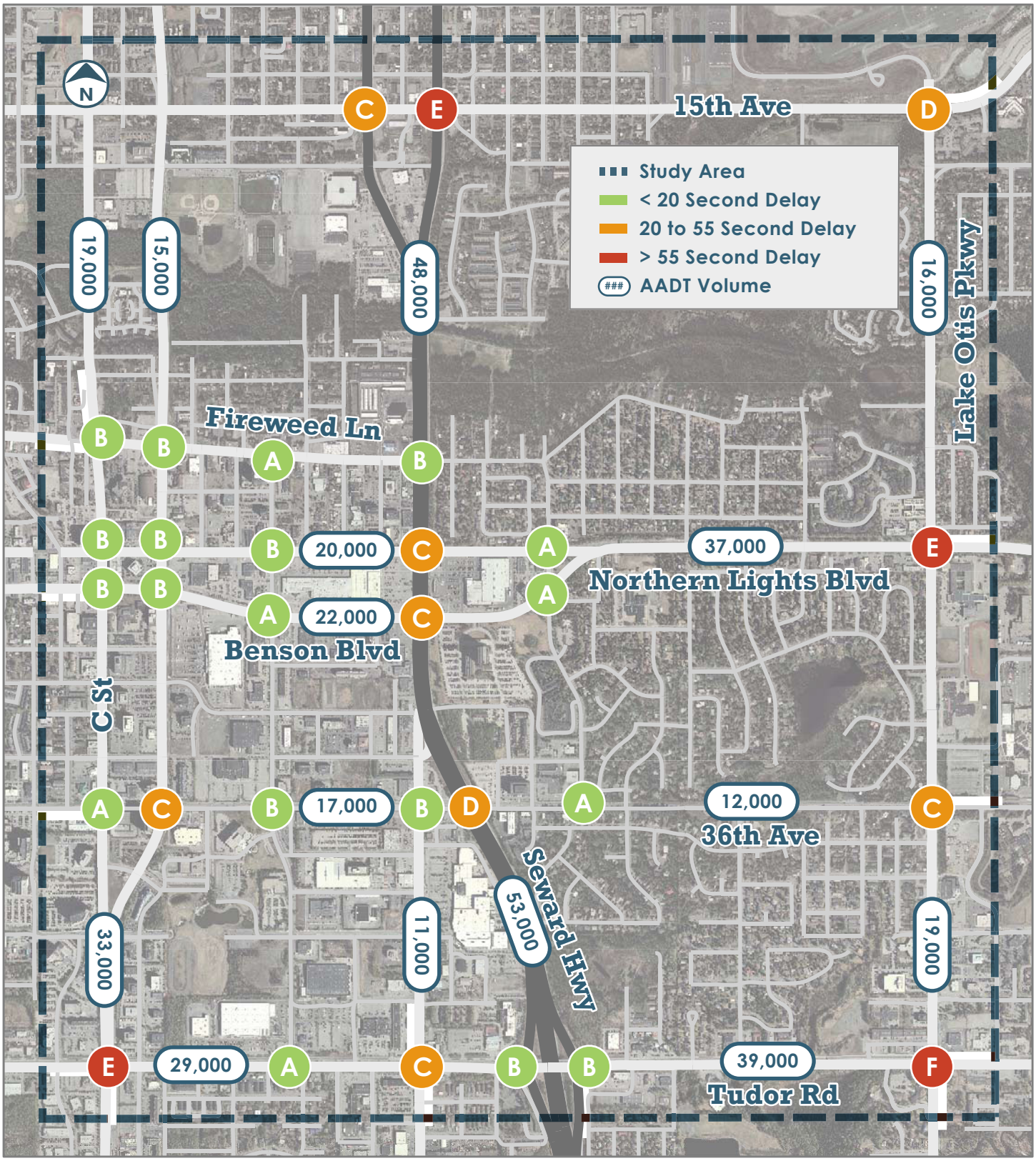


Figure 20: Level of Service - Existing AM Peak Hour

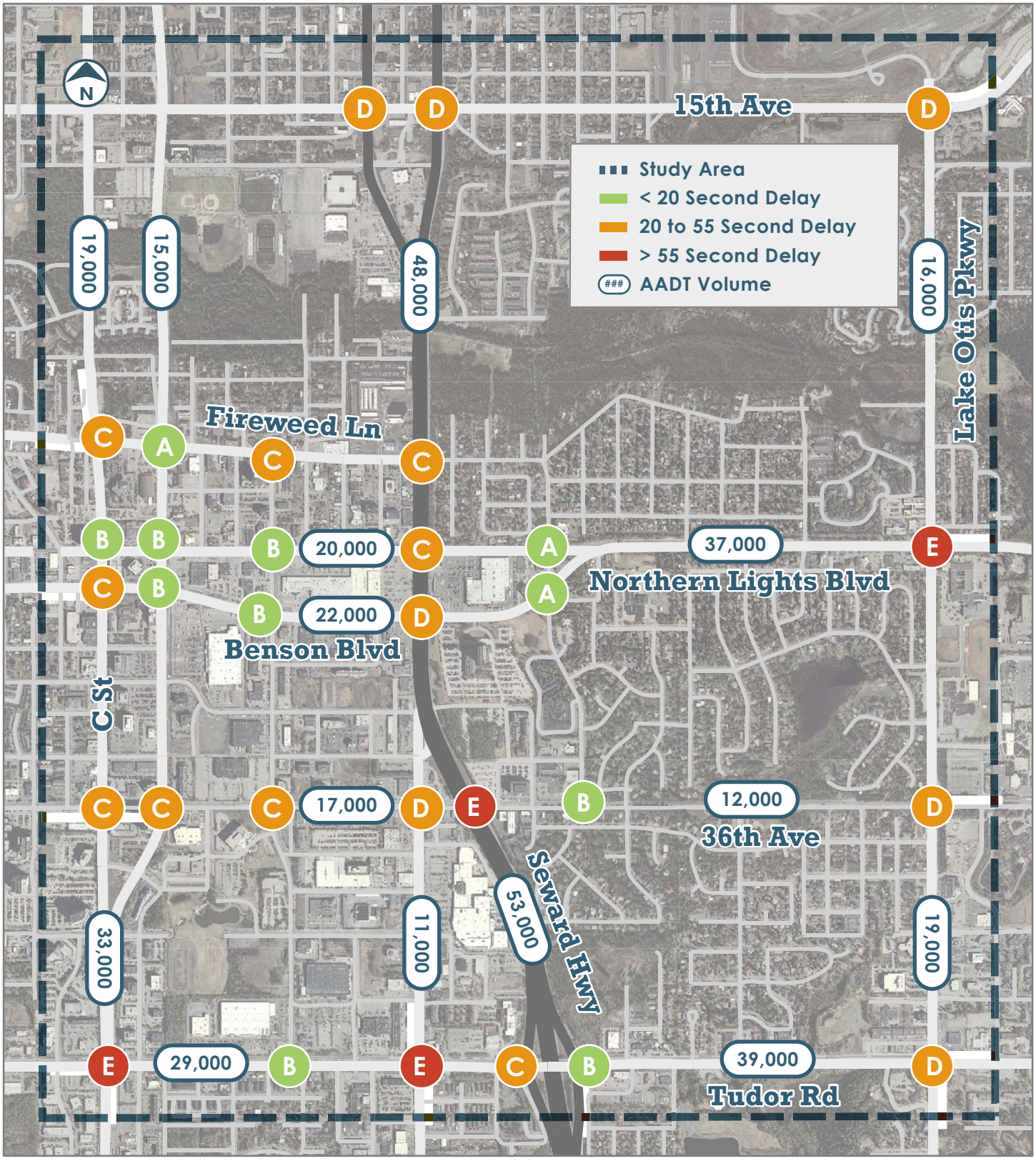


Figure 21: Level of Service - Existing PM Peak Hour

2.4.1.6 Traffic Diversion During Northbound Seward Highway Closure

Northbound Seward Highway was closed at the Tudor Road overpass bridge on Thursday, January 3rd, 2019, due to a dump truck striking the girder. This created an opportunity to analyze traffic behavior and congestion during the closure to better understand how traffic may choose to divert during any Seward Highway construction phases. Cameras were placed at five of the study intersections the night of Monday, January 7th, 2019, with the intent to capture travel patterns while the northbound Seward Highway was closed at Tudor Road. However, northbound Seward Highway reopened during the early morning hours of Tuesday, January 8th. The re-opening was not advertised in advance, so drivers were not initially aware of the re-opening, and many drivers avoided northbound Seward that morning because they assumed it was still closed.

Intersection traffic counts were compared with and without closure. With the closure, northbound traffic at Seward Highway/36th Avenue was reduced by 45 percent (2,400 vehicles) from 7-9am. During this same time, northbound traffic at the C Street/Tudor Road intersection increased by 22 percent (500 vehicles), while northbound traffic at the Old Seward Highway/Tudor Road intersection increased by 30 percent (350 vehicles). These results indicate that parallel north-south routes near Seward Highway (C Street, A Street and Old Seward, and Lake Otis) are likely to accommodate a portion of the traffic when the Seward Highway is under construction; however, Minnesota Drive and other corridors farther away are also likely to experience traffic volume increases when the Seward Highway is under construction.

2.4.2 Pedestrian and Bicycle Facilities and Volumes

Pedestrian and bicycle facilities are provided along and across the Seward Highway, primarily as sidewalks and trails. Figure 22 shows the study area trails. Other paths are provided heading east-west across the Seward Highway. Chester Creek Park provides a network of trails known as the Lanie Fleischer Chester Creek Trail, which crosses under the Seward Highway and accommodates both pedestrians and bicyclists. Tudor Road and Benson Blvd both have paved multiuse trails along the north and south sides of the roadway, while 36th Avenue has one paved trail along the north side. The paved trail paralleling the east side of A Street and connecting to the trails on both sides of C Street south of 36th Avenue provides a continuous north-south multiuse trail through the study area that connects to Downtown Anchorage. The Seward Highway and Lake Otis Parkway also have trails that run alongside portions of the roadways.

Figure 23 shows the total number of pedestrians and bicyclists observed from 7 a.m. to 7 p.m. at each intersection on Seward Highway. The intersections with the highest activity (total number of pedestrian and bicycle crossings on intersection crosswalks) are:

- Seward Highway/Northern Lights Blvd (445 pedestrian and bicycle crossings per day)
- Seward Highway/Benson Blvd (430 pedestrian and bicycle crossings per day)

One of the visions for the corridor is to improve safety and access for pedestrians and bicycles traveling along and across the Seward Highway corridor. More detailed information is provided in the Pedestrian and Bicycle Analysis memorandum included as a separate appendix to the PEL Study.

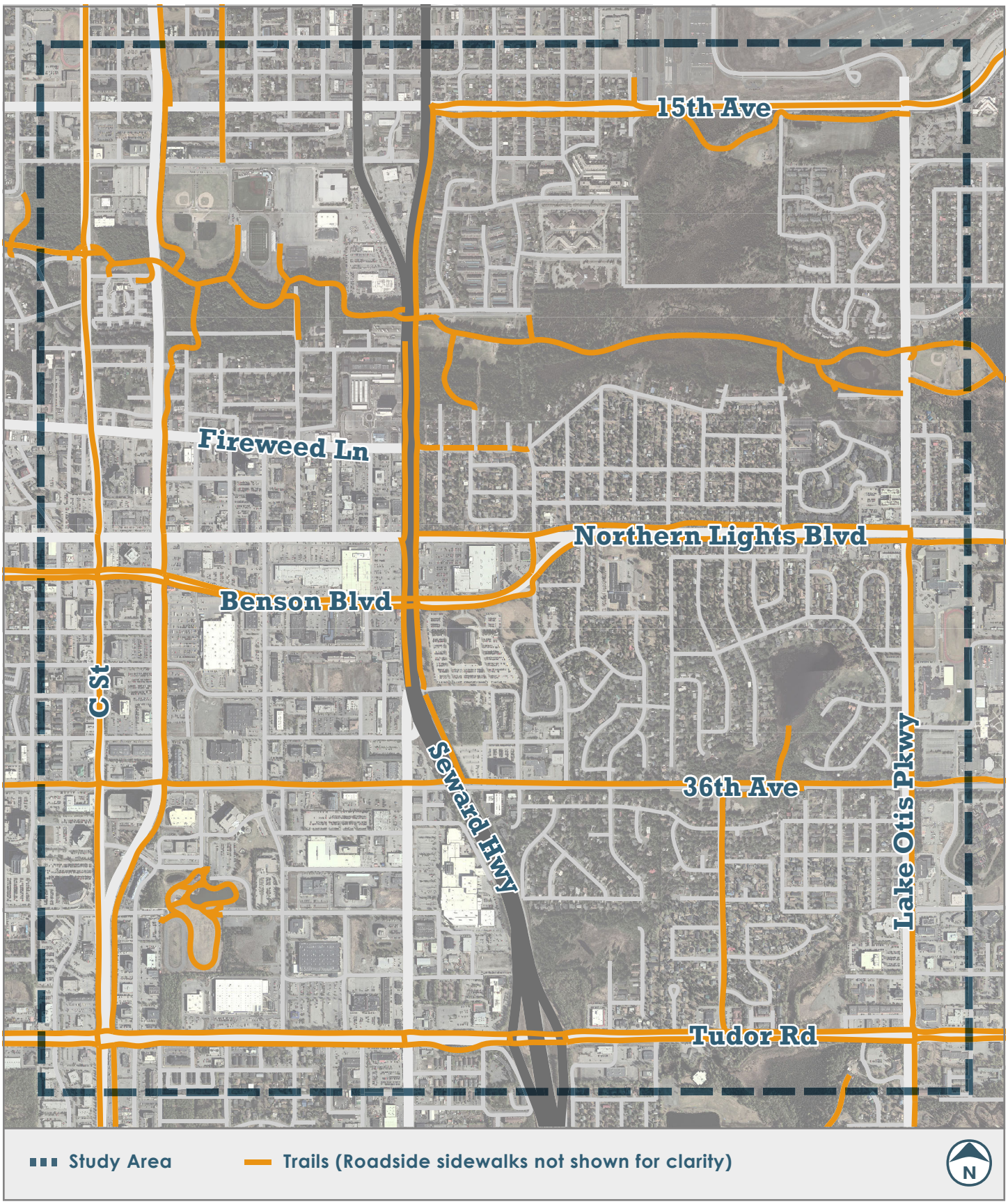


Figure 22: Trails

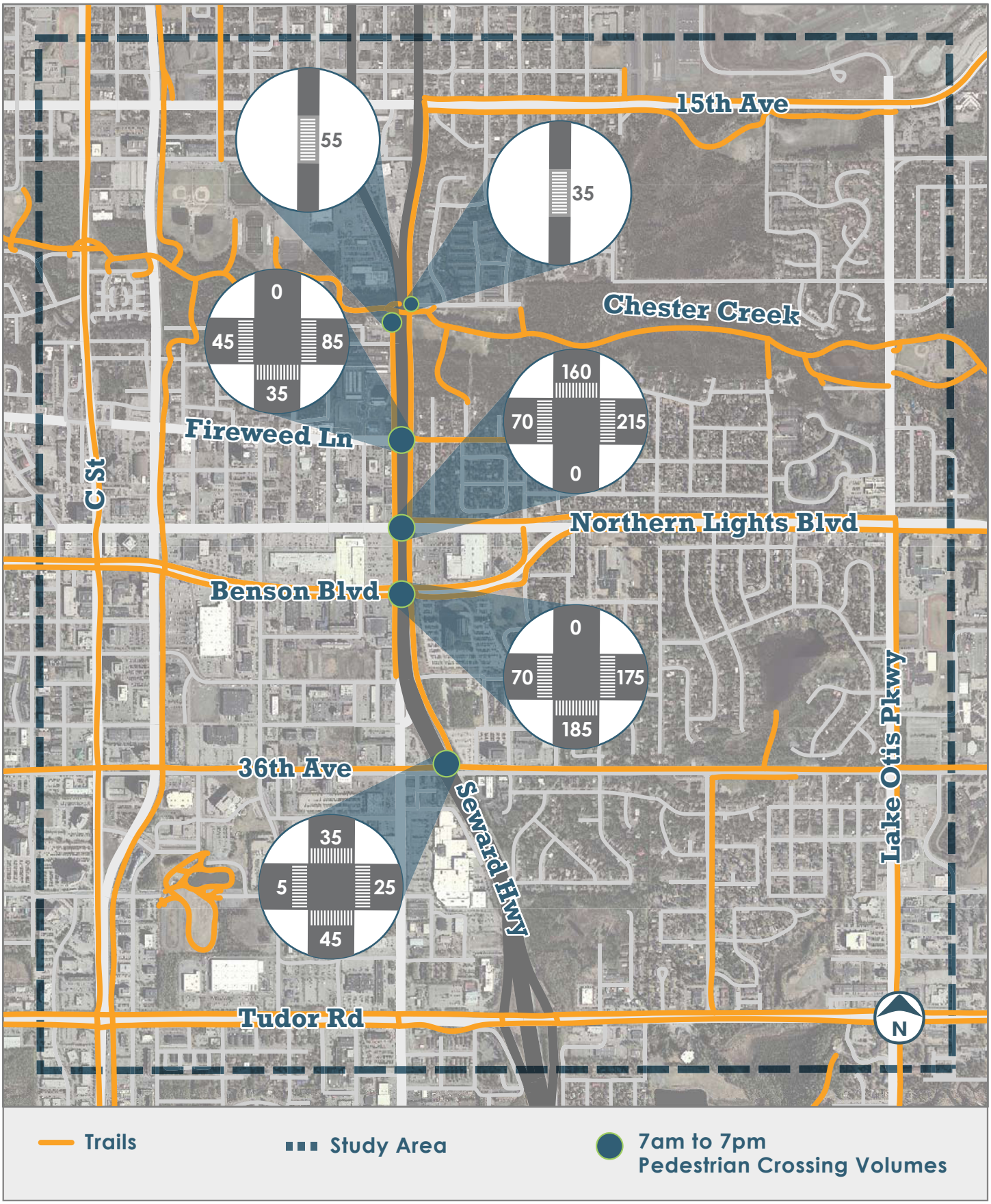


Figure 23: Pedestrian and Bicycle Crossing Volumes

2.4.3 Transit Routes and Ridership

Figure 24 shows the bus stops and routes for MOA's People Mover Bus System. There are five primary transit corridors in the study area, which provide bus service at 15-minute intervals during peak times. These high-service transit corridors include:

- A Street/C Street
- Northern Lights Blvd/Benson Blvd
- 15th Avenue
- Tudor Road
- Lake Otis Parkway (north of 36th Avenue)

The congestion on the Seward Highway currently creates delays and travel time increases for east-west transit routes in the study area (e.g., Tudor Road, Benson Blvd, Northern Lights Blvd, and 15th Avenue). Future congestion is likely to spill over onto parallel north-south routes, which would affect travel time for those transit routes as well.

Figure 25 shows the average weekday ridership in 2016; however, the routes in 2016 differ from current bus routes due to the major system changes in October 2017 and other additional minor changes since then. In 2016, the highest volume bus stops were located on the A Street/C Street couplet and had 80 to 120 boardings/alightings per day.

No transit service currently exists along the Seward Highway. However, as the Seward Highway is classified as an interstate/freeway and intended to provide a high level of mobility, it is not an ideal corridor for providing transit stops because they would increase roadside friction and reduce the overall capacity of the corridor.

2.5 Safety Analysis

To better understand how well the current transportation system is doing, the total crashes, severity of crashes, and frequency of crashes at the study intersections were reviewed for six years of crash data (2009-2014). Attachment C provides a detailed summary of the crash data analysis. Figure 26 shows the intersection crash rate relative to the average. All signalized intersections on Seward Highway have above average crash rates. In general, intersections experiencing high delay also tend to have above average crash rates.

Figure 27 shows the location and type of fatal and major injury crashes occurring between 2009 and 2014. There were 11 fatal crashes in the study area over the ten-year period (5 vehicle occupants, 5 pedestrians, and 1 bicyclist). The fatal and major injury crashes primarily occurred at intersections. The highest concentration of crashes occurred at Seward Hwy/36th Avenue and Seward Hwy/North Lights Blvd.

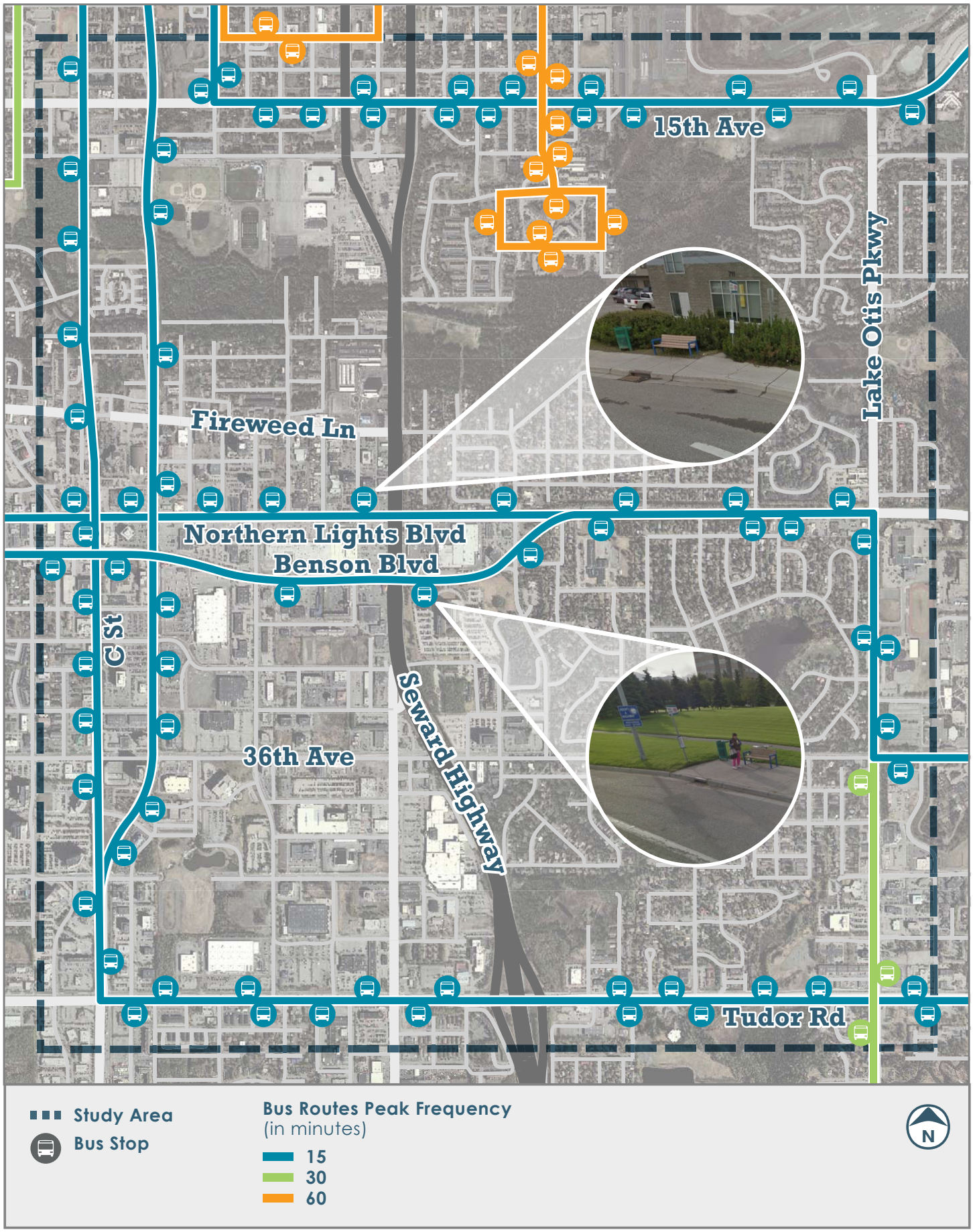


Figure 24: Transit Facilities

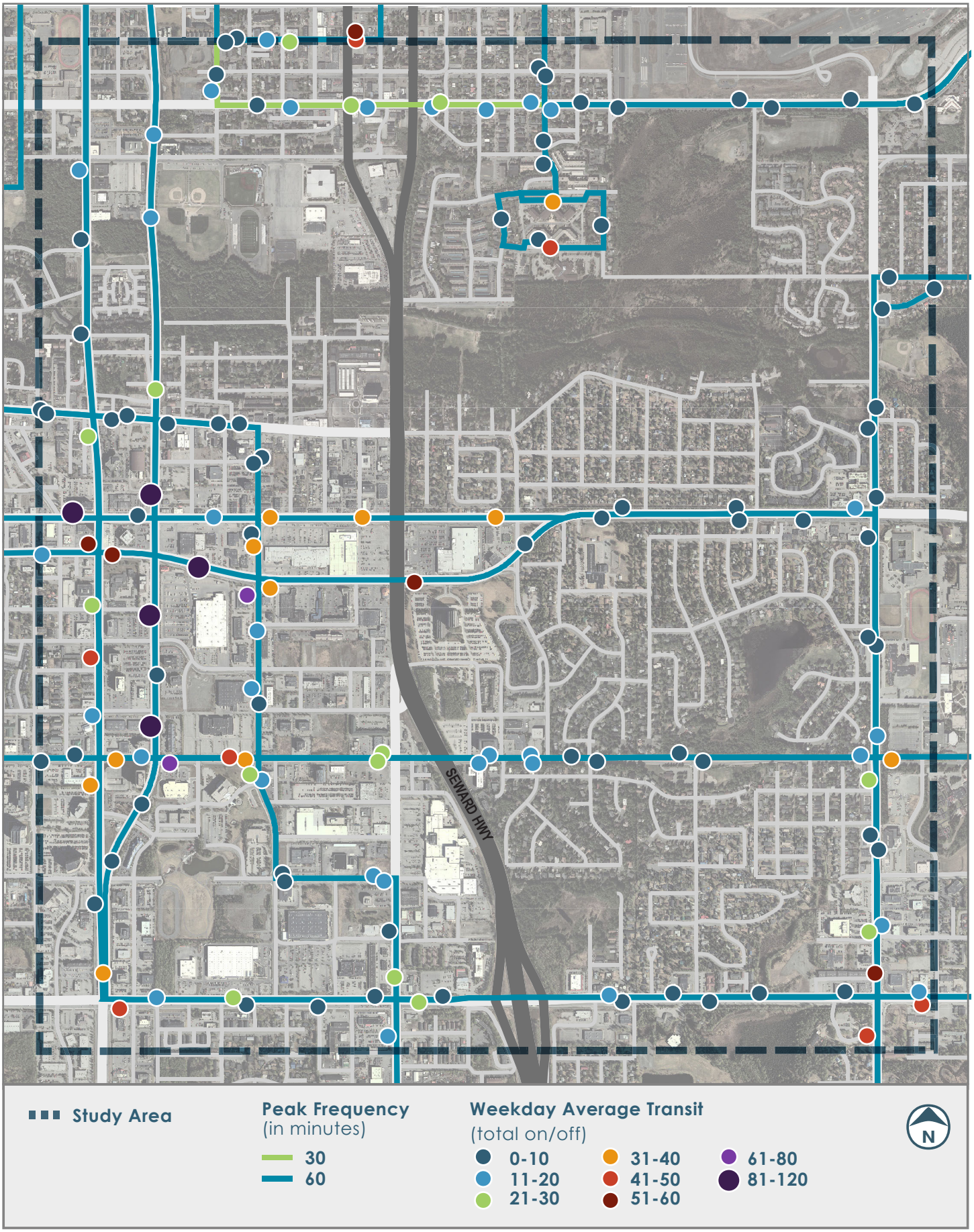


Figure 25: Bus Routes and Ridership in 2016

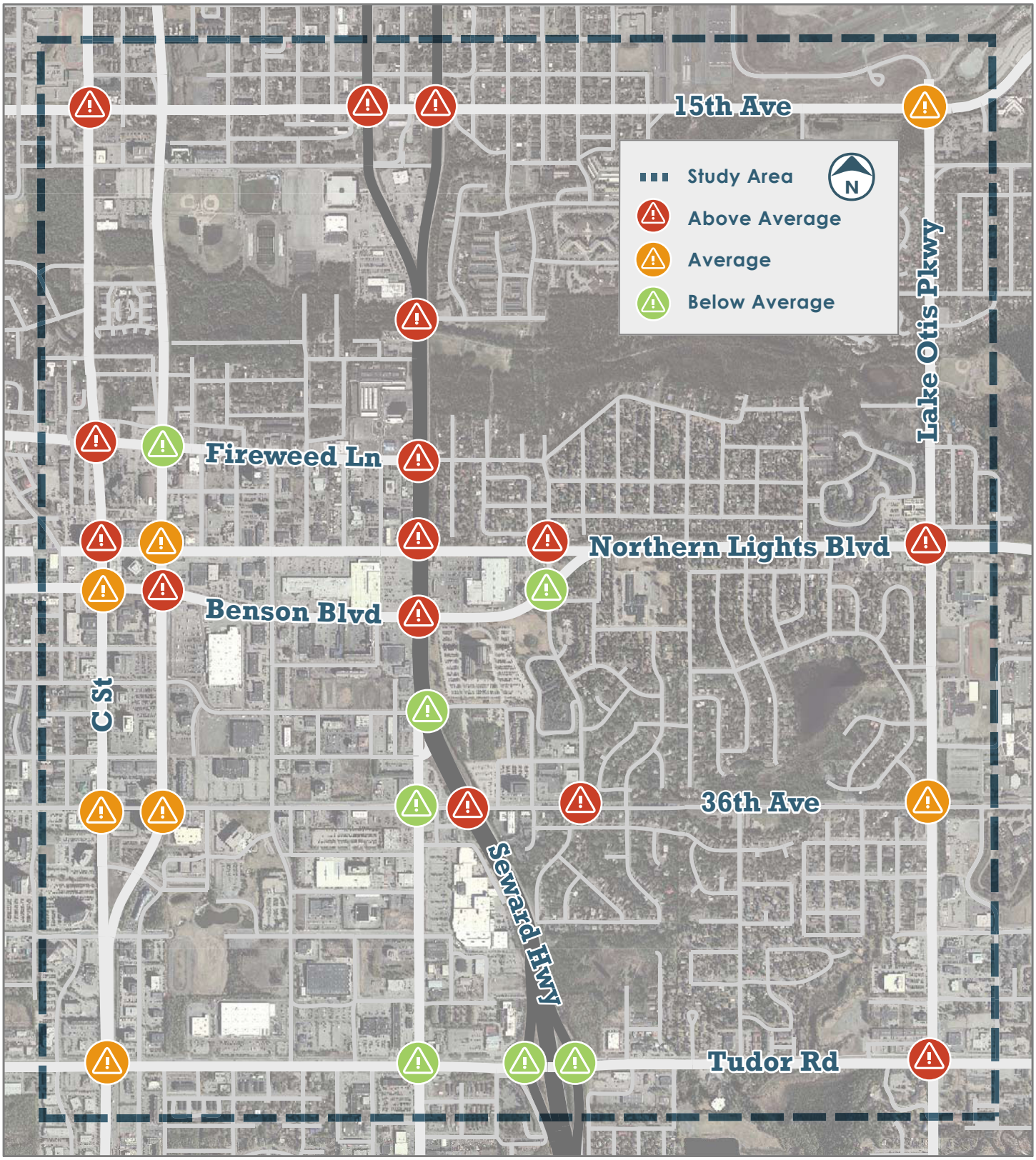


Figure 26: Intersection Crash Rates

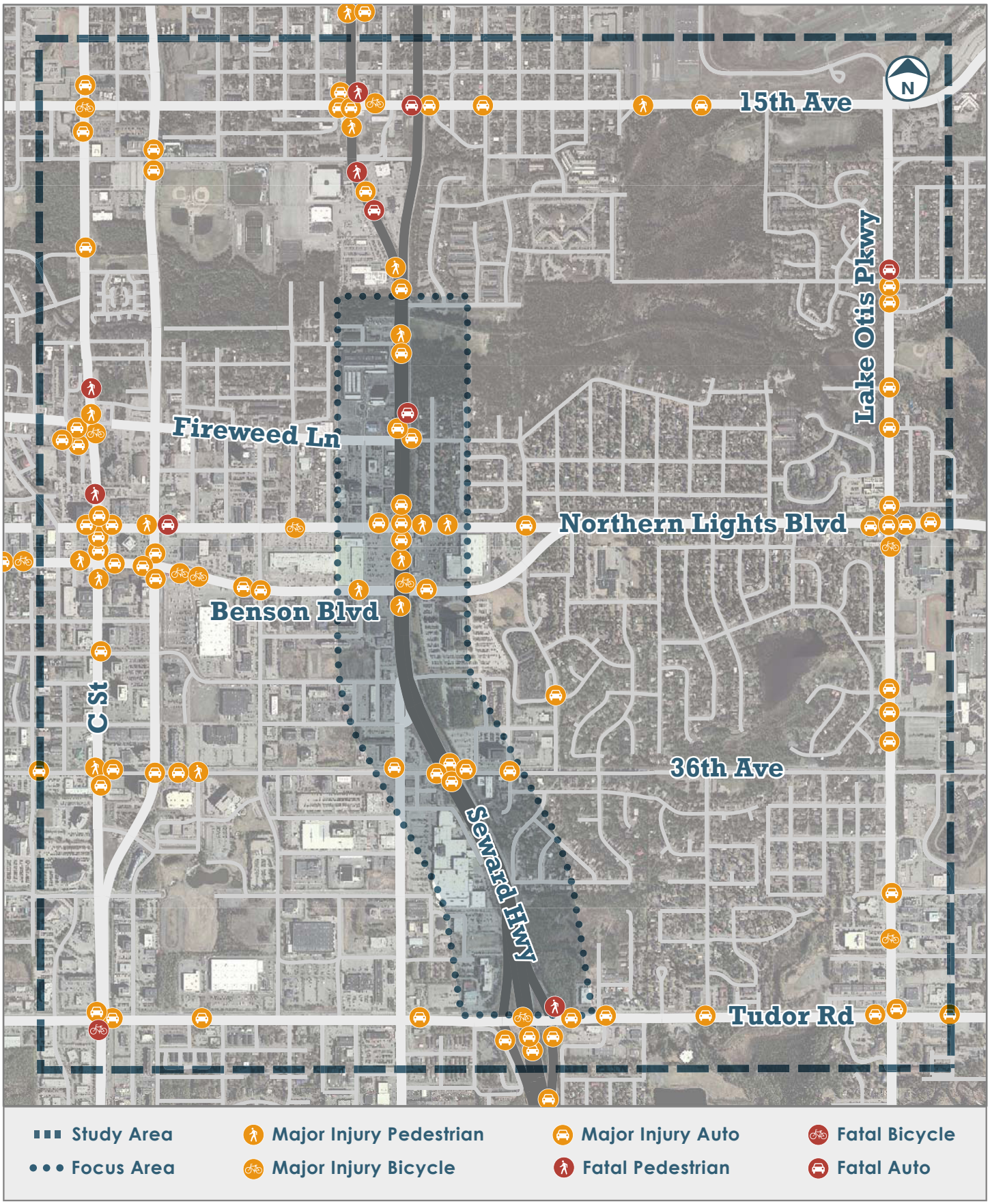


Figure 27: Fatal and Major Injury Crashes

3.0 2048 NO-BUILD CONDITIONS

Regional traffic was modeled using the Anchorage Travel Demand Model to understand future traffic volumes and travel patterns. Year 2040 land use was extrapolated to 2048 to analyze No-Build future conditions. The road network for this scenario is the same as that used in the Interim 2035 MTP Roadway Network (No Knik Arm Crossing, S2G, or Project Build).

3.1 Travel Demand Modeling

3.1.1 Projected Growth

Figure 28 shows the projected growth and change in land use for 2040. The area west of the Seward Highway is expected to see moderate to significant growth, which would increase traffic demands in this area of Midtown. Within the study area, the area east of the Seward Highway is expected to see little growth.

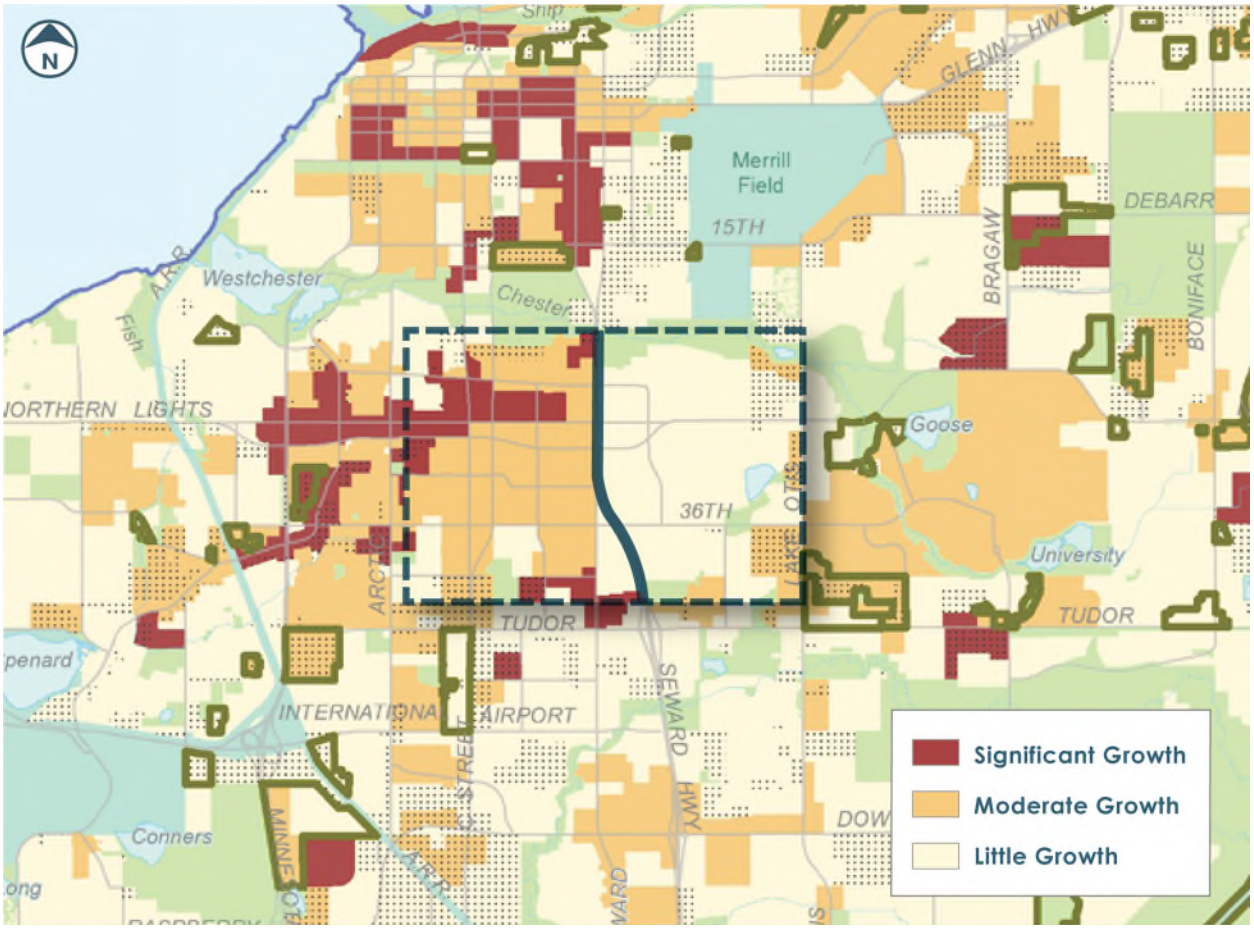


Figure 28: MOA 2040 Projected Areas of Growth and Change

3.1.2 Analysis Methods

The Anchorage Travel Demand Model was run for the years 2013 and 2048. Attachment A provides details regarding the Travel Demand Model output and refinement. Growth rates were calculated for study area roadways based on AADTs and then applied to the existing year counts to determine future year No-Build volumes (see supporting information in Attachment B).

3.1.3 Volume Estimates

The AADT on each roadway in the study area was projected for 2048 No-Build conditions. Table 1 (north-south roads) and Table 2 (east-west roads) show the annual growth rates and predicted AADT. Under No-Build conditions, the Seward Highway corridor would experience very low volume growth, particularly at Benson Blvd and 36th Avenue, due primarily to existing capacity limitations. The primary drawbacks of low volume growth on the Seward Highway are that other study area roads must carry more traffic.

Table 1: 2048 No-Build North-South Traffic Volumes

North-South Roadway	Segment	Existing ADT	Annual Growth Rate	2048 No-Build ADT
Seward Hwy	Between 22nd Ave & 20th Ave Between Benson Blvd & 36th Ave Between Tudor Rd & International Airport Rd	48,000 53,000 55,000	0.4% 0.1% 0.8%	55,000 55,000 71,000
C St	Between 16th Ave & 22nd Ave Between 32nd Ave & 34th Ave Between Tudor Rd & 48th Ave	19,000 17,000 29,000	1.0% 0.7% 1.2%	25,000 22,000 41,000
A St	Between 16th Ave & 22nd Ave Between 32nd Ave & 34th Ave	15,000 17,000	0.7% 0.7%	19,000 21,000
Lake Otis Pkwy	Between 20th Ave & 24th Ave Between Northern Lights Blvd & 36th Ave Between Tudor Rd & Waldron Dr	15,000 20,000 22,000	0.9% 1.2% 0.8%	20,000 28,000 28,000

Table 2: 2048 No-Build East-West Traffic Volumes

East-West Roadway	Segment	Existing ADT	Annual Growth Rate	2048 No-Build ADT
Northern Lights Blvd	Between Arctic Blvd & C St	21,000	0.4%	24,000
	Between Denali St & Seward Hwy	23,000	0.8%	30,000
	Between Seward Hwy & LaTouche St	21,000	0.1%	22,000
	Between UAA Dr & Bragaw St	37,000	-0.1%	36,000
Benson Blvd	Between Arctic Blvd & C St	20,000	0.2%	22,000
	Between Denali St & Seward Hwy	26,000	0.5%	31,000
	Between Seward Hwy & LaTouche St	20,000	0.3%	22,000
36th Ave	Between Arctic Blvd & C St	12,000	0.6%	15,000
	Between Denali St & Old Seward Hwy	16,000	0.7%	20,000
	Between Seward Hwy & LaTouche St	14,000	0.7%	17,000
	Between Lake Otis Pkwy & UAA Dr	17,000	0.5%	20,000
Tudor Rd	Between Arctic Blvd & C St	24,000	0.2%	26,000
	Between Old Seward Hwy & Seward Hwy	37,000	0.6%	44,000
	Between Seward Hwy & MacInnes St	38,000	0.8%	49,000
	Between Lake Otis Pkwy & Piper St	33,000	0.7%	42,000

Figure 29 (AM peak hour) and Figure 30 (PM peak hour) show the turn movement volumes for the 2048 No-Build condition.

3.2 2048 No-Build Traffic Operations

The traffic operations were analyzed for the study intersections in the 2048 No-Build scenario. Figure 31 and Figure 32 show the corresponding estimated levels of service for each intersection and the estimated ADTs. Most intersections are expected to operate at LOS C, D, E, or F. In general, the operations worsen one level of service when compared to the existing condition.

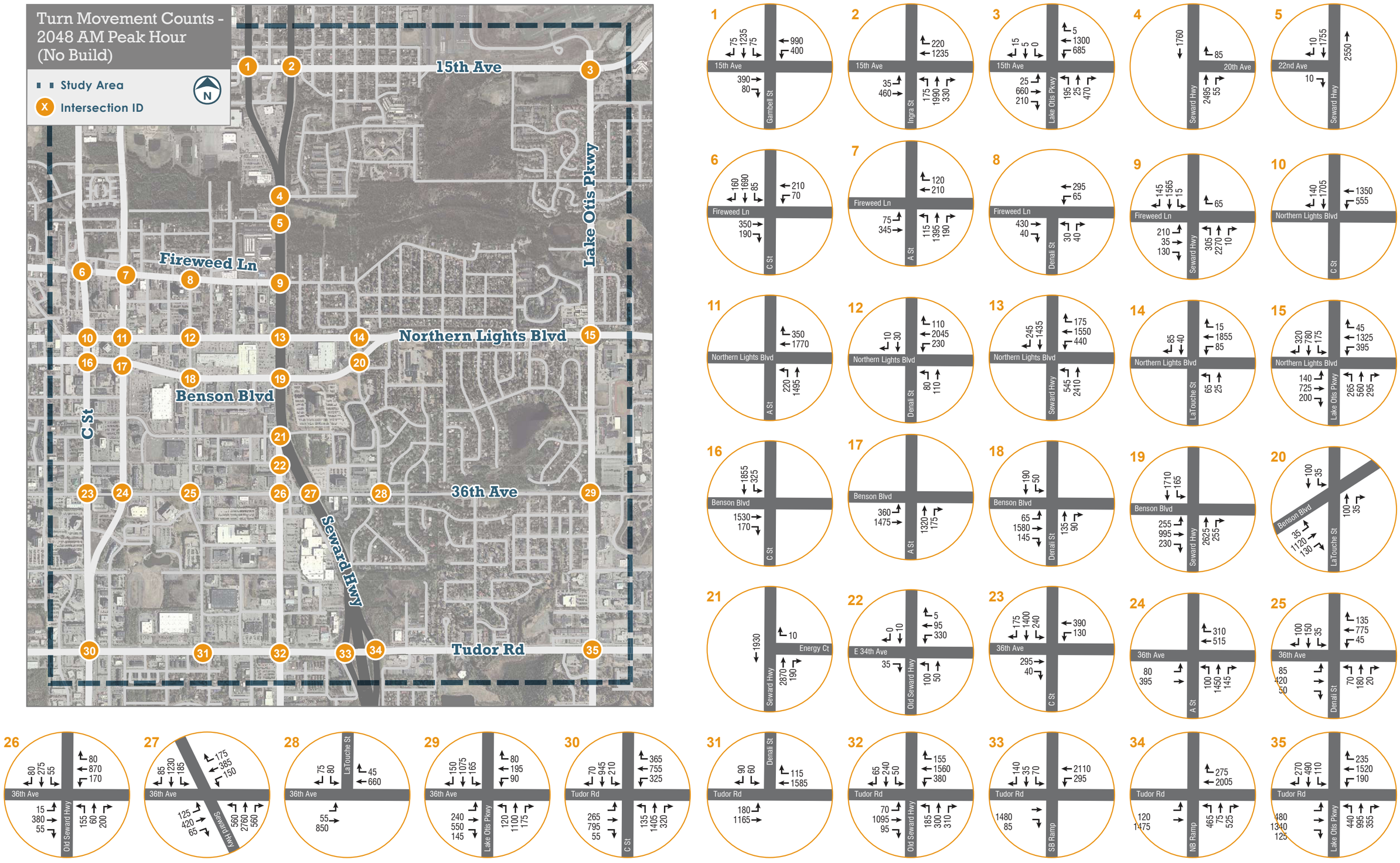
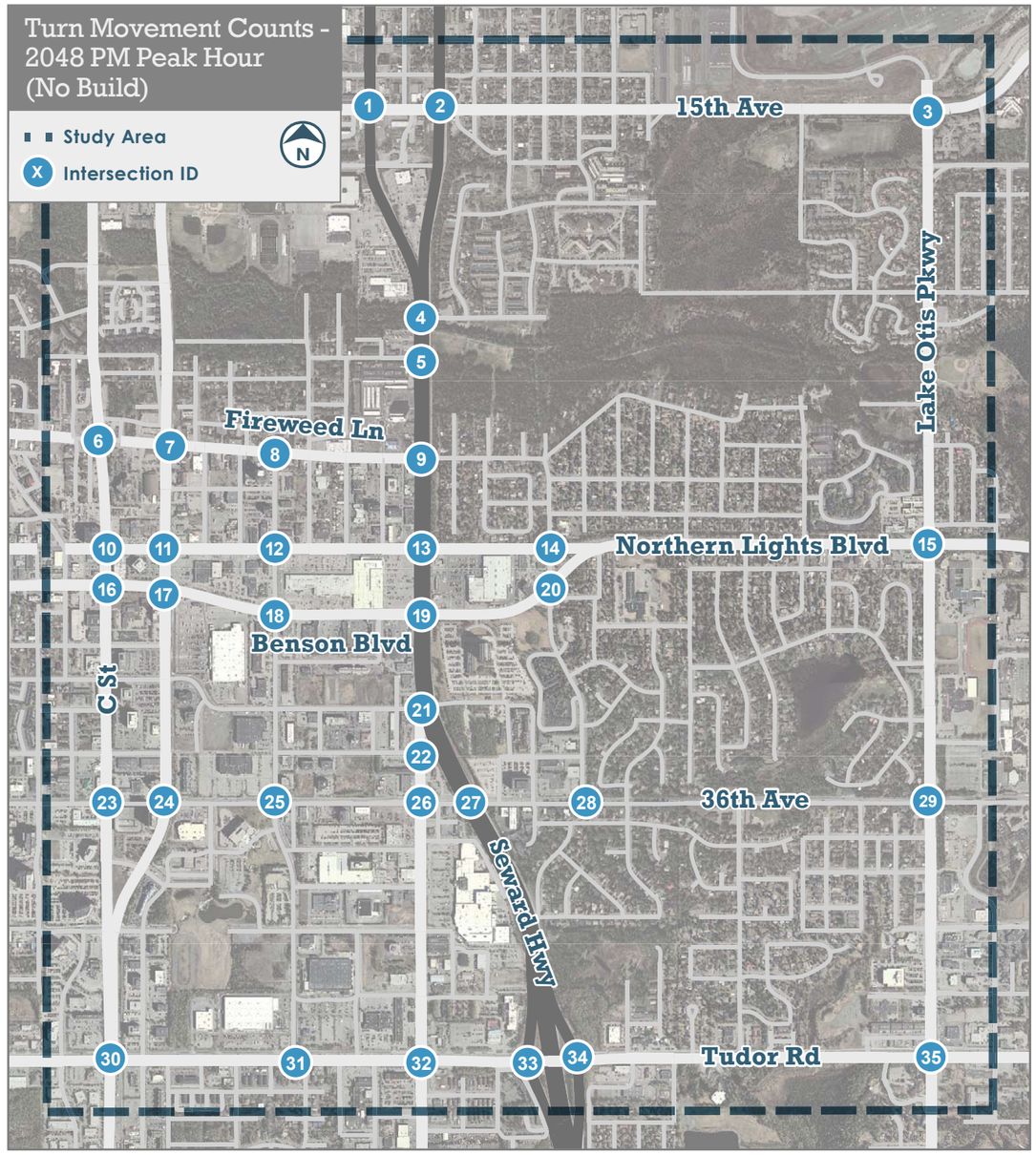


Figure 29. Turn Movements - No-Build AM Peak Hour 2048



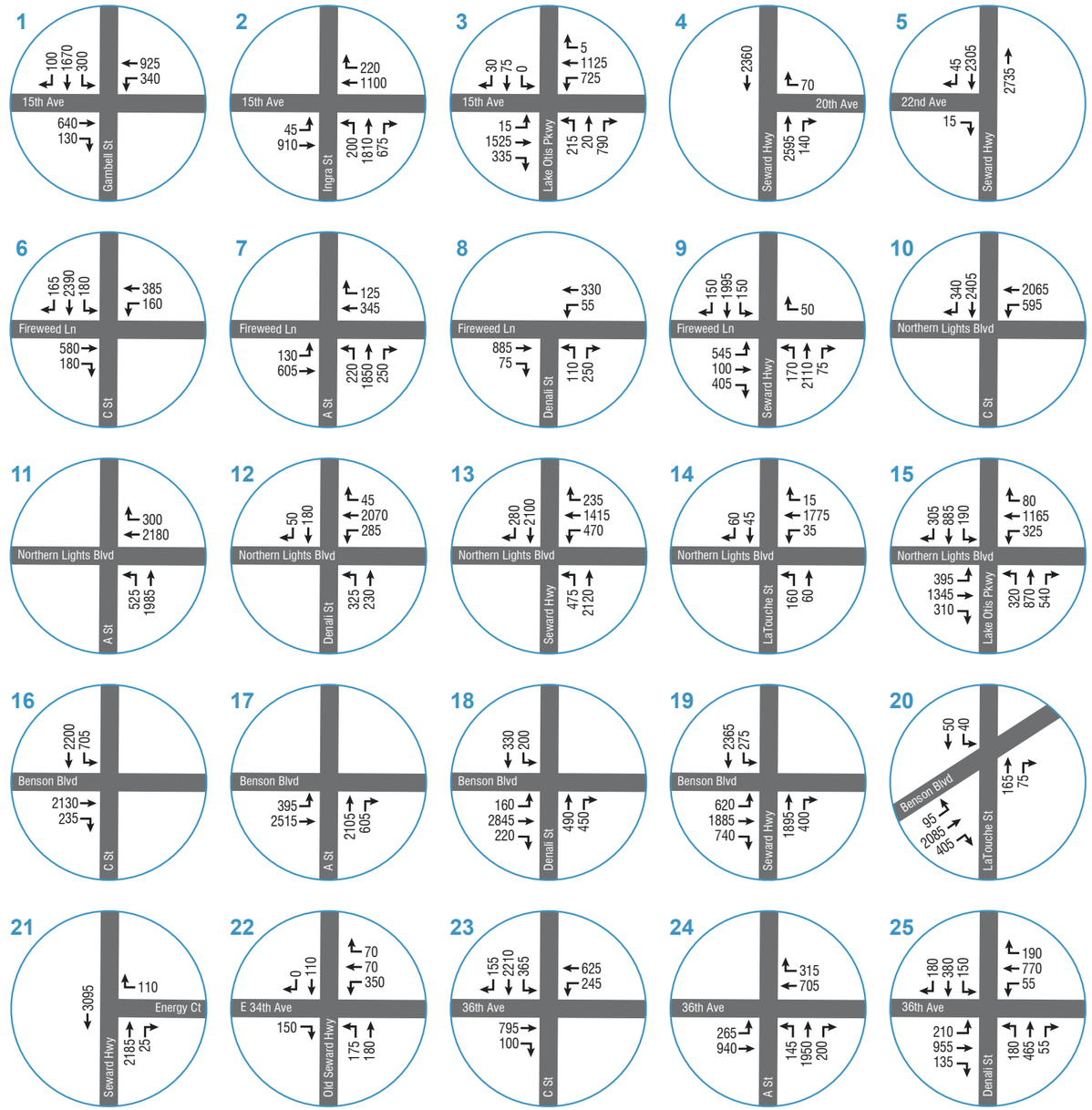


Figure 30. Turn Movements - No-Build PM Peak Hour 2048

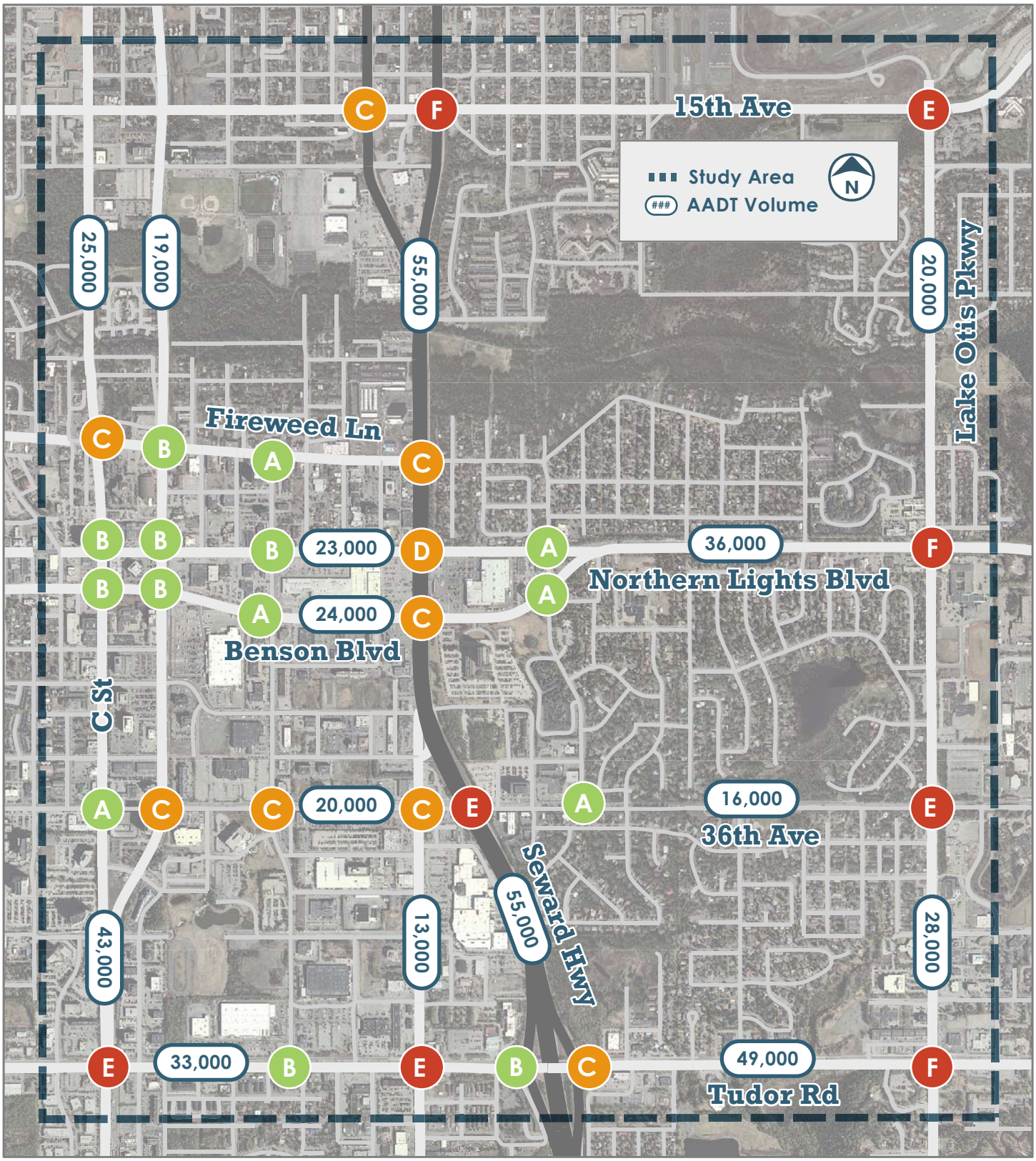


Figure 31: Level of Service - 2048 No Build AM Peak Hour

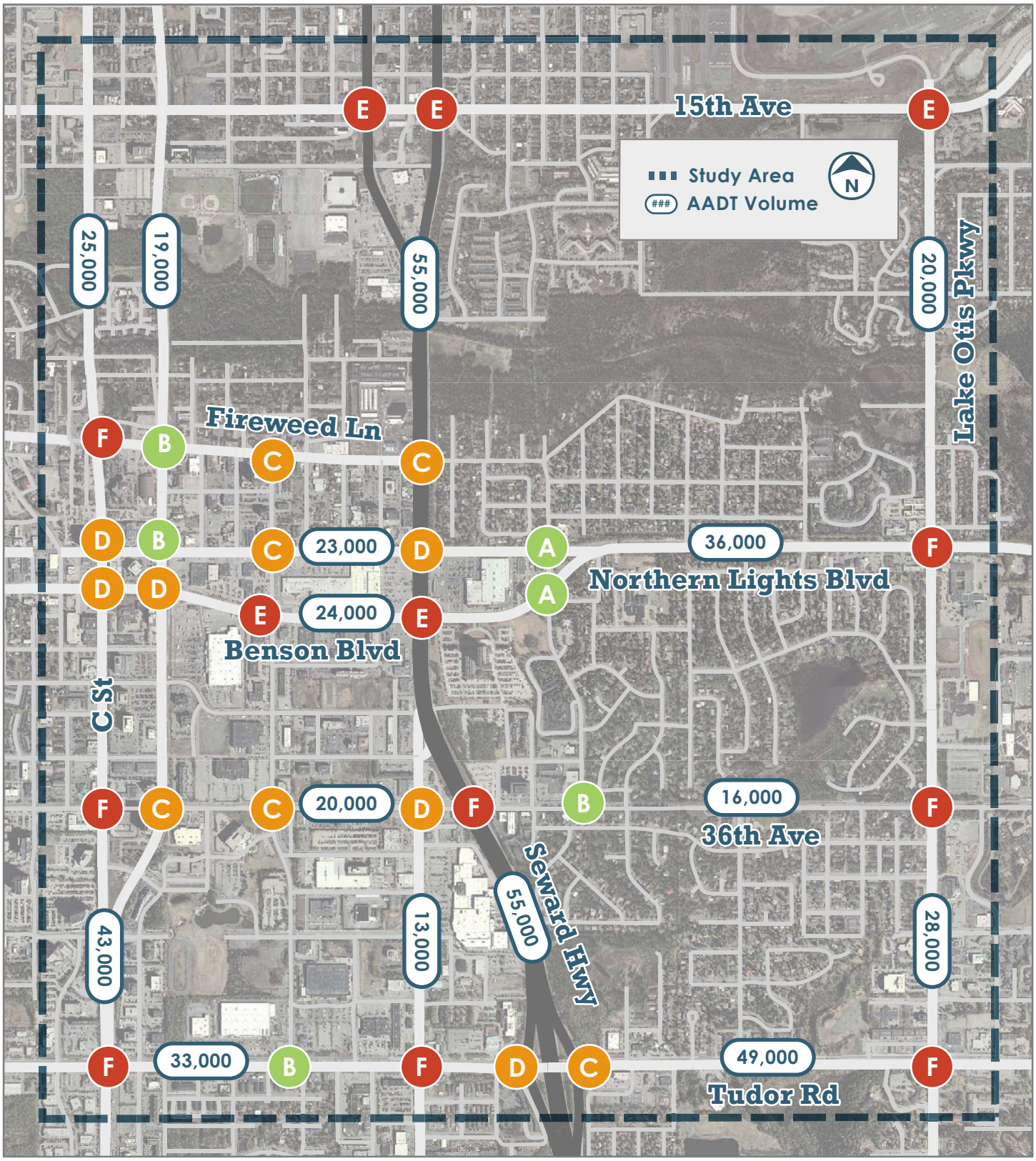


Figure 32: Level of Service - 2048 No Build PM Peak Hour

4.0 CORRIDOR CONCEPTS

Numerous concepts were developed for the study corridor and increasing levels of traffic analysis were performed as the concepts were screened and refined. Figure 33 summarizes the overall concept refinement process, with the letters corresponding to specific concepts.

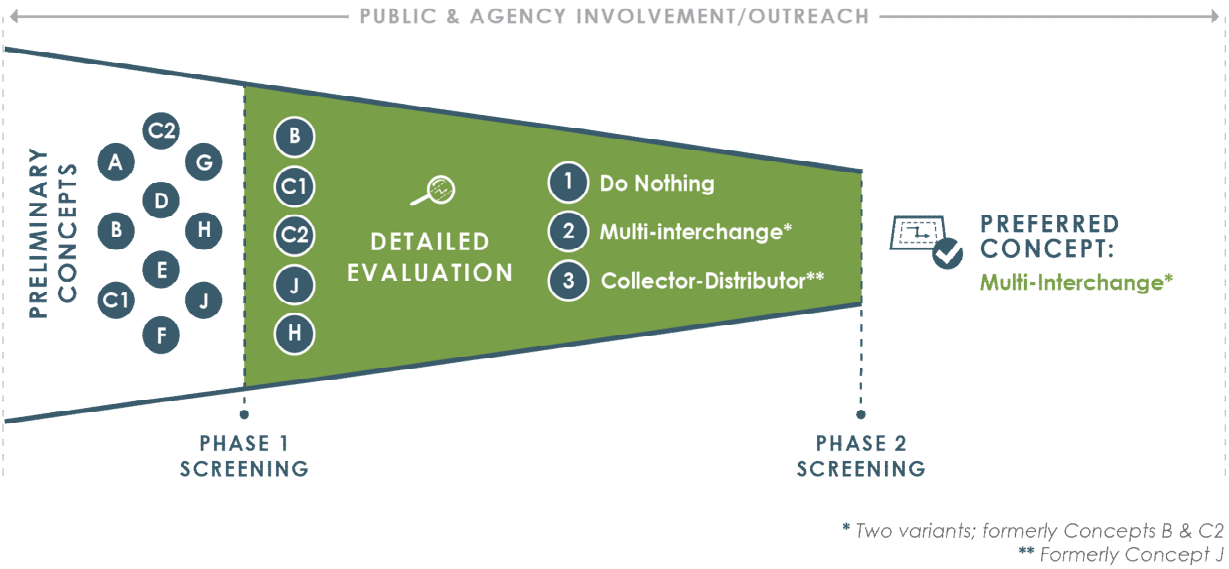


Figure 33: Concept Refinement Process

4.1 Concept Development and Screening

The concept development process began with a stakeholder workshop held in April/May 2018 to brainstorm initial ideas. During this workshop, several concept elements were sketched out and later refined into ten preliminary concepts, which fell into one of three categories:

- Grade-separated mainline with one-way frontage roads (6 concepts)
- Grade-separated mainline with two-way frontage road (3 concepts)
- Interim Condition – One-way Frontage Roads (1 concept)

Table 3 lists the concepts, their defining characteristics, what analysis was performed, and when they were dismissed from consideration. Five of the 10 concepts were advanced for detailed analysis, and four of the concepts were advanced to refined analysis. One of these concepts (Concept H) became an interim solution with minor variations for each of the other three concepts. Attachment D provides detailed figures showing the lane geometries and ramp locations for each of the concepts.

Table 3: Concept Screening Summary

Concept Category (Horizon Year)	Concept Name	Defining Characteristic(s)	Advanced Past Analysis Stage? (With Explanation When Not Advanced)[a]		
			Preliminary Evaluation	*Detailed Analysis*	*Refined Analysis*
One-way Frontage Road (2048)	Concept A	One-way frontage roads with Benson Blvd and Northern Lights Blvd re-designed as two-way roads	Conversion of Northern Lights Blvd and Benson Blvd to two-way streets would result in operational deficiencies and require extensive improvements to the west. Dismissed due to traffic and land use considerations.	Did not advance.	Did not advance.
	Concept B	One-way frontage roads with braided ramps between Tudor Road and 36th Avenue	Yes. Advanced to detailed analysis.	Yes. Advanced to refined analysis.	Formed Variant 1 (Median U-Turn) of Multi-Interchange Concept
	Concept C1	One-way frontage roads with braided ramps between of 36th Avenue and Benson Blvd	Yes. Advanced to detailed analysis.	Dismissed because it does not provide advantages over Concept C2 and does not solve congestion issues on 36th Avenue.	Did not advance.
	Concept C2	One-way frontage roads with braided ramps north of 36th Avenue and loop ramp at Old Seward/36th Avenue.	Yes. Advanced to detailed analysis.	Yes. Advanced to refined analysis.	Formed Variant 2 (Loop Ramp) of Multi-Interchange Concept
	Concept D	One-way frontage roads with lanes reversed using a configuration similar to a diverging diamond interchange layout to facilitate unimpeded left-turns.	Dismissed as fatally flawed prior to preliminary evaluation.	Did not advance.	Did not advance.
	Concept J	One-way frontage roads with ramps north of Fireweed Lane and south of 36th Avenue	Not yet developed.	Developed during Detailed Analysis stage to meet need for simpler concept with fewer ramps. Advanced to refined analysis.	Formed Collector-Distributor Concept
Two-way Frontage Road (2048)	Concept E	Two-way frontage road from Tudor Road to Fireweed Lane	Two-way frontages require multiple signal phases, resulting in either large signalized intersection footprints or increased intersection delay and queueing. Concepts dismissed for these reasons and because they don't provide improvements relative to existing conditions.	Did not advance.	Did not advance.
	Concept F	Two-way frontage road from Benson Blvd to Fireweed Lane		Did not advance.	Did not advance.
	Concept G	Two-way frontage road from 36th Avenue to Fireweed Lane		Did not advance.	Did not advance.
Interim Condition (2028)	Concept H	Interim condition for phased construction of one-way frontage road concepts	Yes. Advanced to detailed analysis.	Yes. Advanced to refined analysis as an interim concept with slight variations for each of the other three concepts.	Selected variation will be dependent upon the preferred concept.

[a] ***Descriptions of Analysis Stages:***

- *Preliminary Evaluation – 2048 traffic volumes (2028 for Concept H) estimated for AM and PM peak hours using AMATS TransCAD model and standard post processing methods. Concepts analyzed in Synchro to estimate the number of lanes needed to meet operational demands.*
- *Detailed Analysis – 2048 AM and PM peak hour traffic volumes (2028 for Concept H) refined to account for traffic returning to parallel facilities to balance corridor delays. Additional Synchro analysis performed based on the revised volumes, and various geometry variations and adjustments were considered, some of which were incorporated into existing concepts or became new concepts.*
- *Refined Analysis – Concept geometry adjustments account for vertical and horizontal geometric needs and right-of-way constraints. Concept H splits into multiple variations so it can serve as an interim project specific to the other concepts, and additional interim projects also developed for each concept based on constructability considerations. Additional traffic volume adjustments made to further refine operations.*

4.2 Volume Forecasts

Traffic volumes were forecasted for the nine 2048 concepts following these steps:

1. Model various representative "build condition" networks developed from the AMATS travel demand model – Because some differences in certain concepts are not expected to be noticeable in the travel demand model, the same model run was used as a starting point in developing volumes for these concepts (for example, Concepts B, C1, and C2).
2. Post process link volumes using the Difference Method – The Difference Method s specified in *NCHRP Report 765: Analytical Travel Forecasting Approaches for Project-Level Planning and Design.* It follows the equation below and uses the existing count, existing model, and future model volumes. For these different volumes to be compared, they were equated to the No-Build network configuration.

$$2048\ Link\ Volume_{Adjusted\ Model\ Volume} = 2018\ Link\ Volume_{Traffic\ Count} + (2048_{Model\ Volume} - 2013_{Model\ Volume}) * (2048 - 2018)/(2048 - 2013)$$

3. Convert link volumes to turn movement volumes – The Directional Iterative Process is specified in NCHRP Report 765 and was used to convert link volumes into turn movement volumes by accounting for the ins and outs for each leg of the intersection. After using this process, balancing was performed between intersections. Then, the volumes were rerouted onto the future build network based on the on/off ramp locations. Finally, the volumes were adjusted for jog movements, which represent vehicles with both an origin and destination located east or west of Seward Highway (Figure 17 shows example jog movements).

For the 2028 interim concepts, 2028 traffic volumes were forecasted by comparing the following three volumes in the vicinity of the Ingra Street/15th Avenue and Gambell Street/15th Avenue intersections:

- Available hourly capacity on Ingra Street and Gambell Street assuming no improvements are made (this capacity will limit the amount of traffic that can access the study corridor)
- AM and PM peak hour and AADT estimates from a 2028 mid-year model developed from the AMATS travel demand model that was available at the time (these estimates provided insight regarding traffic patterns; however, this version of the model was discovered to lack sufficient calibration to be used for specific volume estimates)
- AM and PM peak hour estimates from multiplying 2017 existing turn movement volumes by eleven years of the growth rates documented in Table 1 and Table 2 (the resulting volumes were within the available hourly capacity and had reasonable traffic patterns; therefore, they were used as the basis for the analysis)

After applying the growth rates to individual turn movements, the volumes were balanced between intersections based on the interim concept configuration.

4.3 Refined Concepts

The V1 (MUT), V2 (LR), and C-D Concepts were analyzed in the greatest detail. Each of these concepts also includes a corresponding intermediate project that is an adaptation of Concept H.

4.3.1 Multi-Interchange Concept – Variant 1 (Median U-Turn)

The V1 (MUT) Concept is shown in Figure 34, with 2048 turn movement forecasts provided in Figure 35 (AM peak hour) and Figure 36 (PM peak hour). The concept includes the following features:

- Elevated highway over 36th Avenue and depressed freeway under remaining east-west cross-roads (i.e., Benson Blvd, Northern Lights Blvd, Fireweed Lane)
- One-way frontage road on each side of freeway from Tudor Road to 20th Avenue
- Braided ramps between Tudor Road and 36th Avenue
- Tudor Road relocated south to minimize impacts to the Helen Louse McDowell Sanctuary and to create space for braided ramps.
- Grade separated median U-turns (MUTs) north and south of 36th Avenue to reduce congestion at the 36th Avenue intersections, with the MUT north of 36th Avenue connecting to the Old Seward Highway near 34th Avenue
- V1 (MUT) Alternate includes on-ramps at Fireweed Lane to distribute traffic to east-west crossroads and remove the need for two-lane on/off ramps south of 36th Avenue

An intermediate build-out of V1 (MUT) is shown in Figure 37, with 2028 turn movement forecasts provided in Figure 38 (AM peak hour) and Figure 39 (PM peak hour).

4.3.2 Multi-Interchange Concept – Variant 2 (Loop Ramp)

The V2 (LR) Concept is shown in Figure 40, with 2048 turn movement counts forecasts in Figure 41 (AM peak hour) and Figure 42 (PM peak hour). The concept includes the following features:

- Elevated highway over 36th Avenue and depressed freeway under remaining east-west cross-roads (i.e., Benson Blvd, Northern Lights Blvd, Fireweed Lane)
- One-way frontage road on each side of freeway from Tudor Road to 20th Avenue
- Braided ramps between 36th Avenue and Benson Blvd
- Southbound loop ramp at Old Seward Highway/36th Avenue to reduce number of 36th Avenue intersections

An intermediate build-out of V2 (LR) is shown in Figure 43, with 2028 turn movement forecasts provided in Figure 44 (AM peak hour) and Figure 45 (PM peak hour).

4.3.3 Collector-Distributor Concept

The C-D Concept is shown in Figure 46, with turn movement counts provided in Figure 47 (AM peak hour) and Figure 48 (PM peak hour). The concept includes the following features:

- Elevated highway over 36th Avenue and depressed freeway under remaining east-west cross-roads (i.e., Benson Blvd, Northern Lights Blvd, Fireweed Lane)
- One-way frontage road on each side of freeway from Tudor Road to 20th Avenue
- Southbound loop ramp at Old Seward Highway/36th Avenue to reduce number of 36th Avenue intersections
- Only ramps are north of Fireweed Lane and south of 36th Avenue

An intermediate build-out of the C-D Concept is shown in Figure 49. Because the intersection layout matches the intermediate build-out of V2 (LR), it would have the same 2028 turn movement forecasts, which are provided in Figure 44 (AM peak hour) and Figure 45 (PM peak hour).

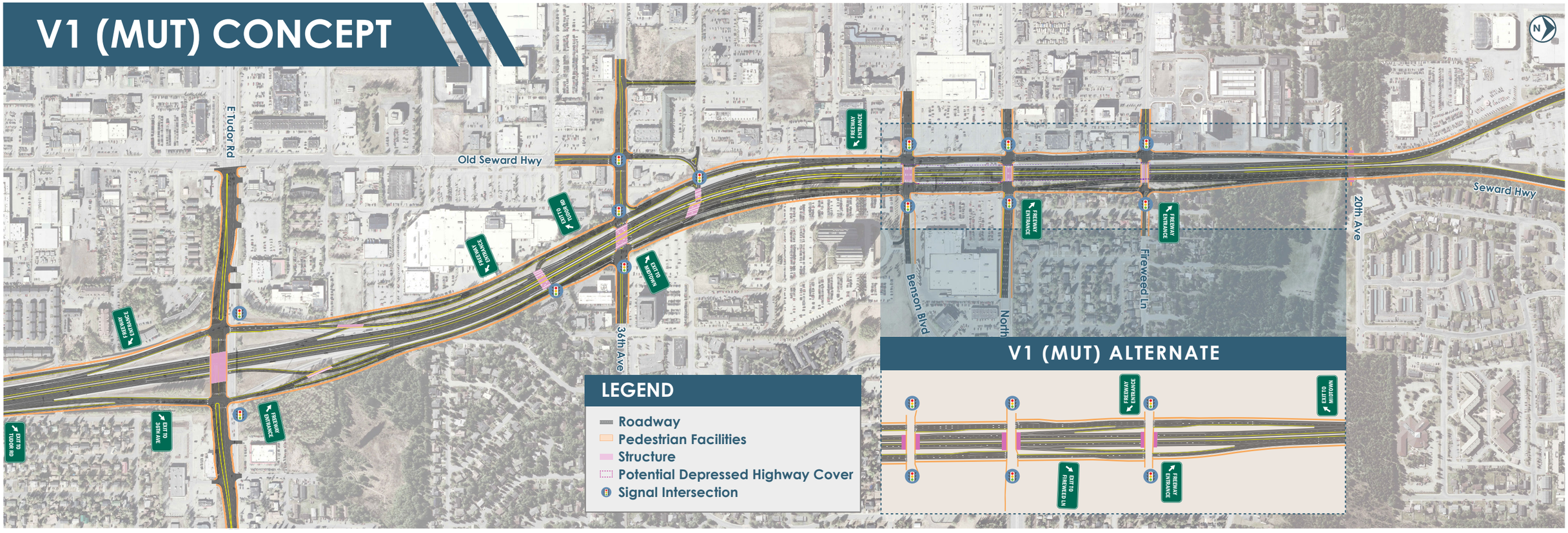
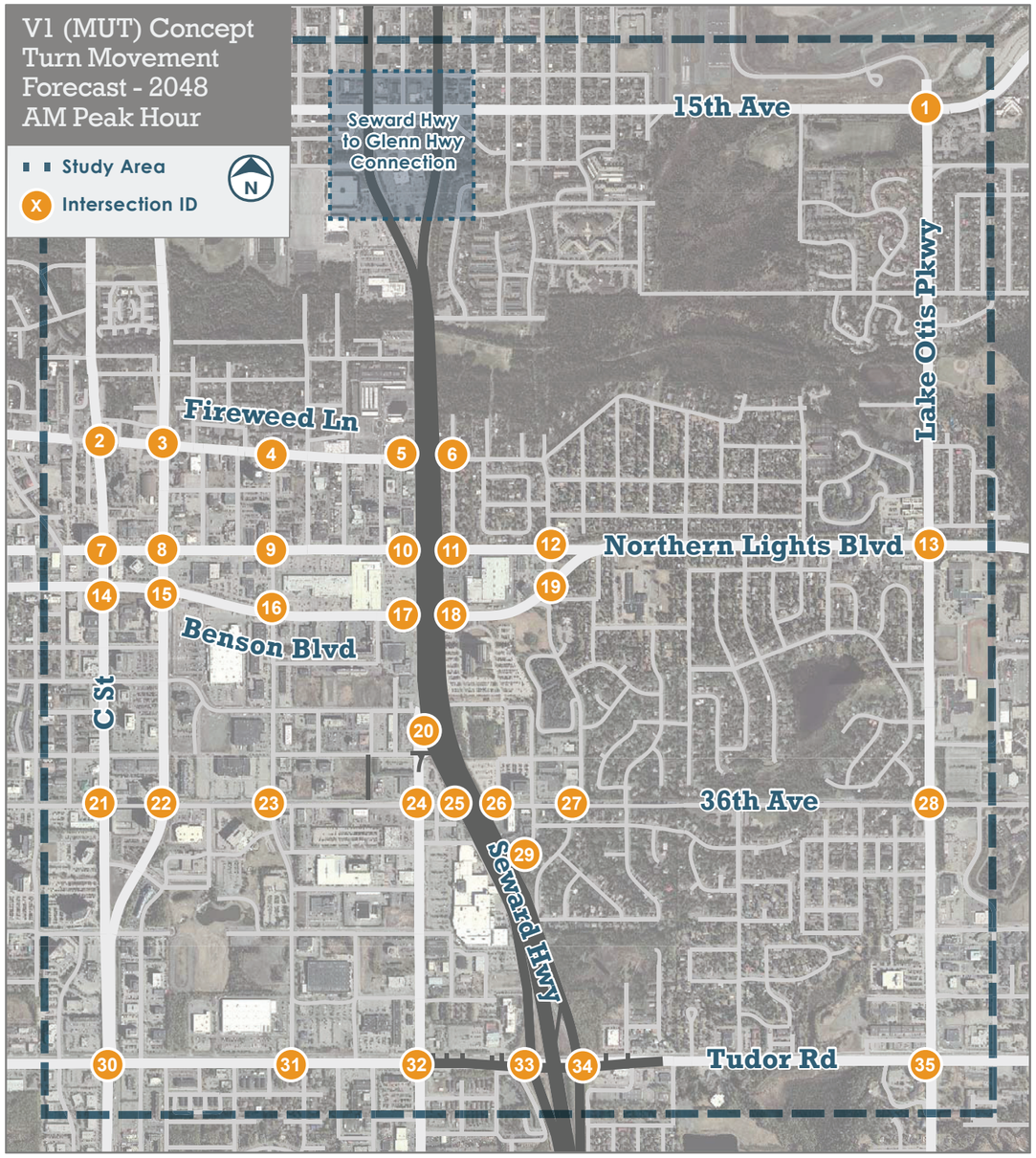


Figure 34: Multi-Interchange Concept Variant 1 (Median U-Turn) Layout



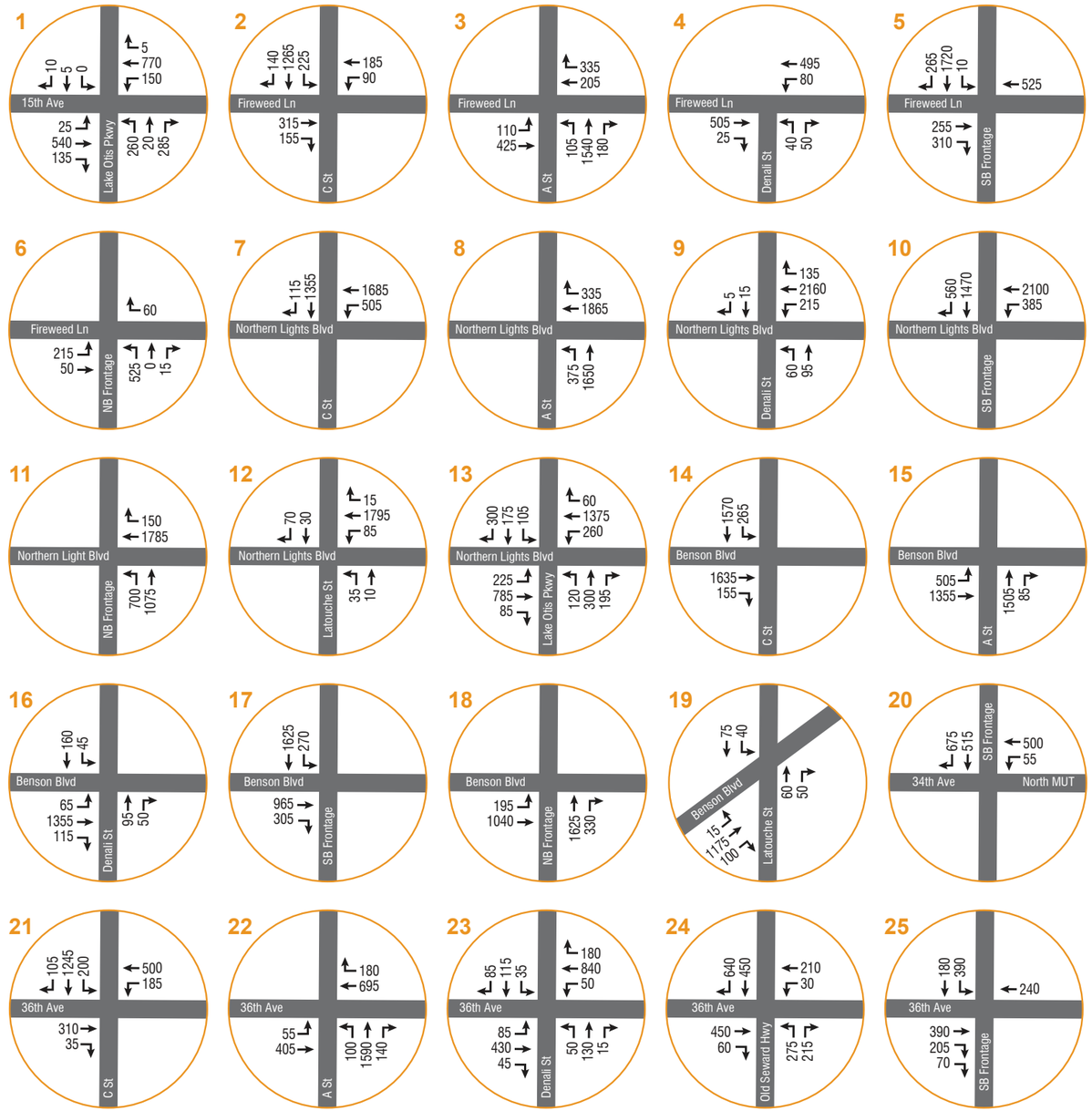
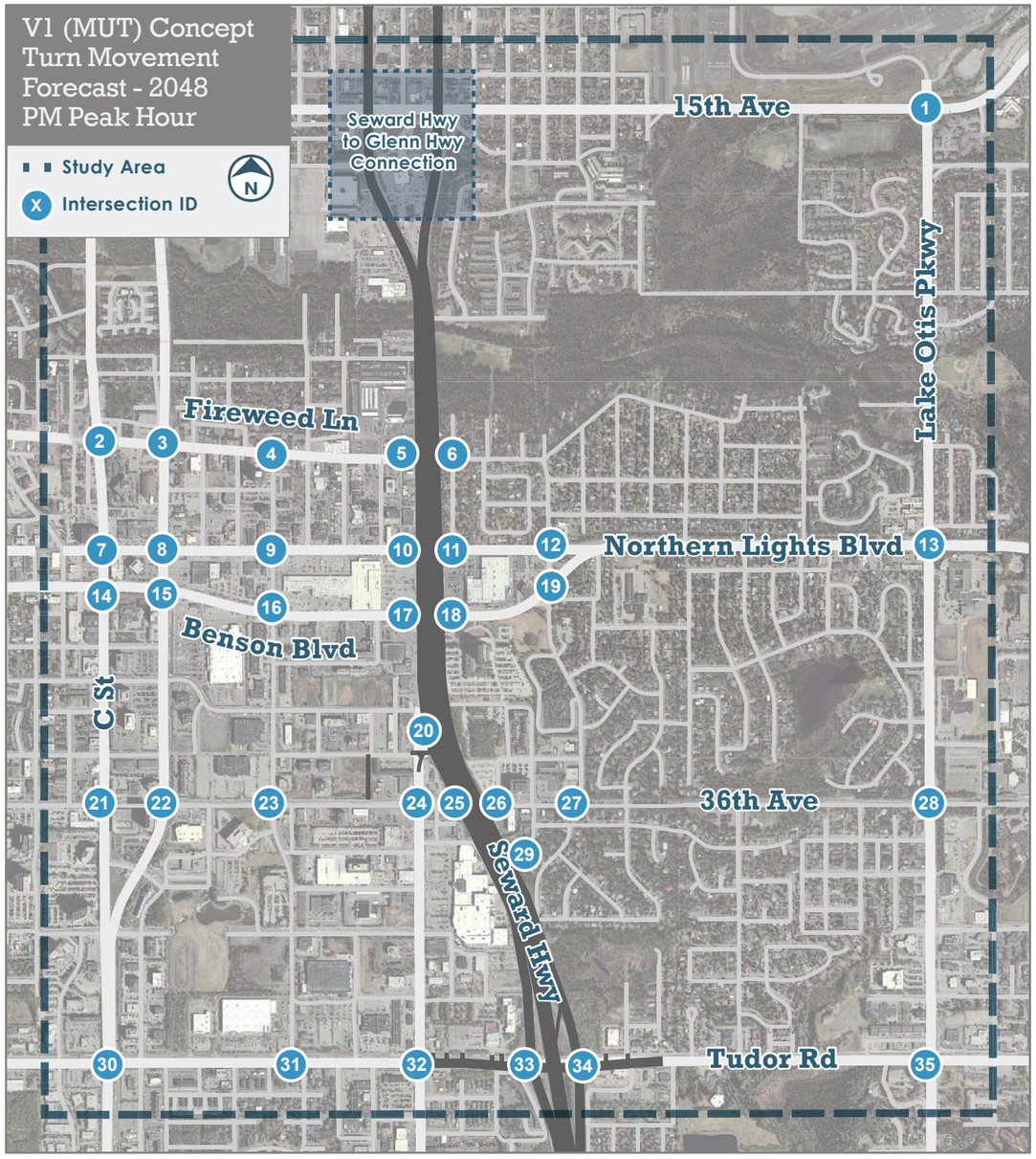


Figure 35: Multi-Interchange Concept Variant 1 (Median U-Turn) - AM Peak Hour 2048



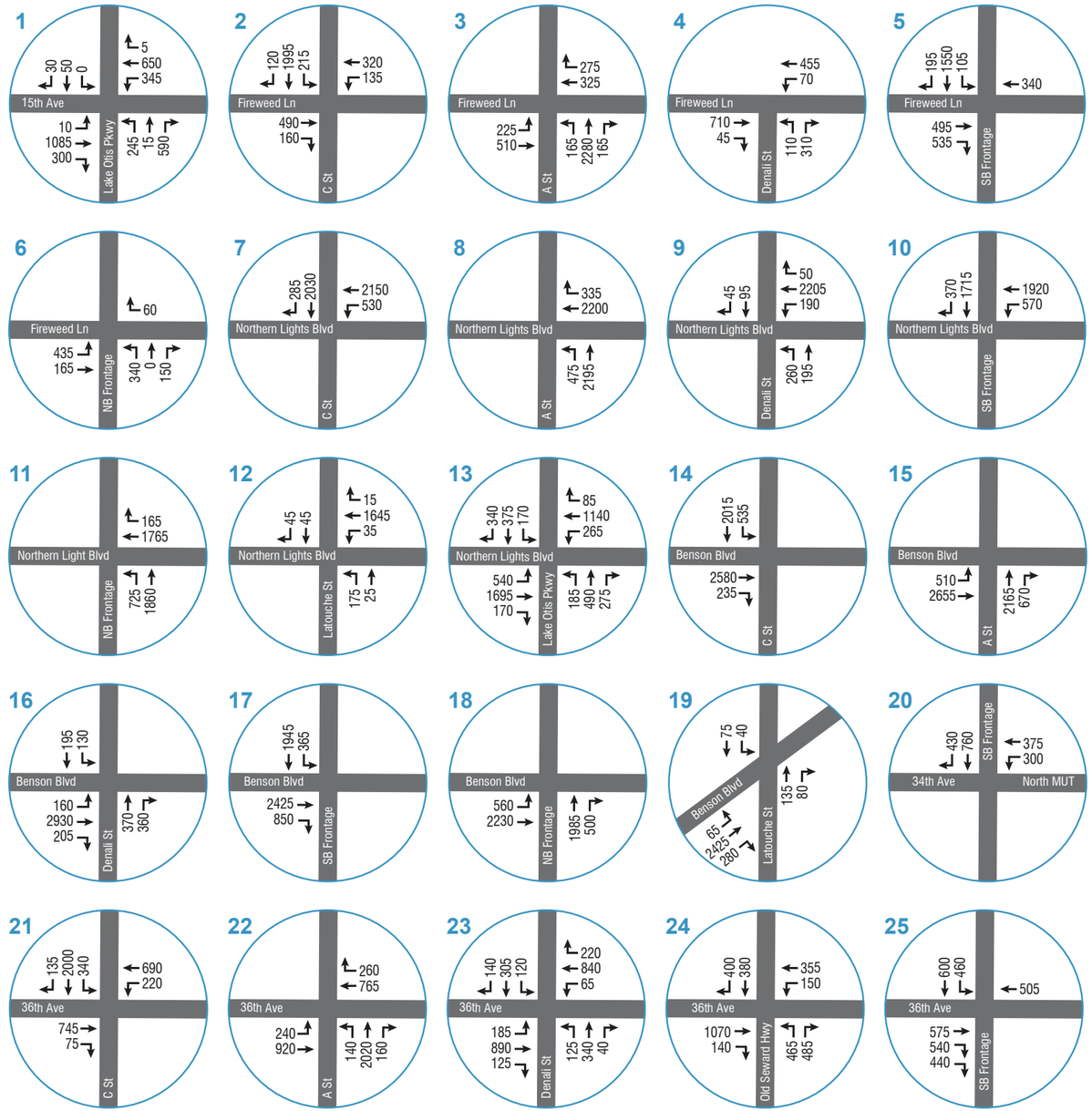


Figure 36: Multi-Interchange Concept Variant 1 (Median U-Turn) - PM Peak Hour 2048

INTERMEDIATE V1 (MUT) CONCEPT

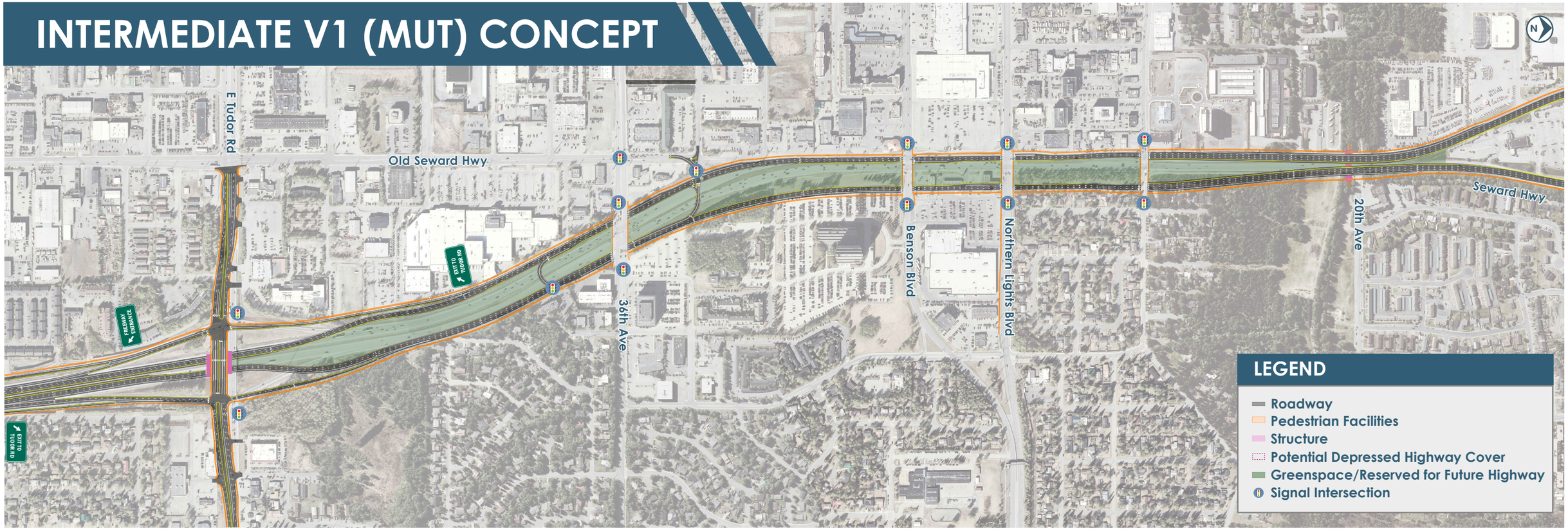


Figure 37: Intermediate V1 (MUT) Concept

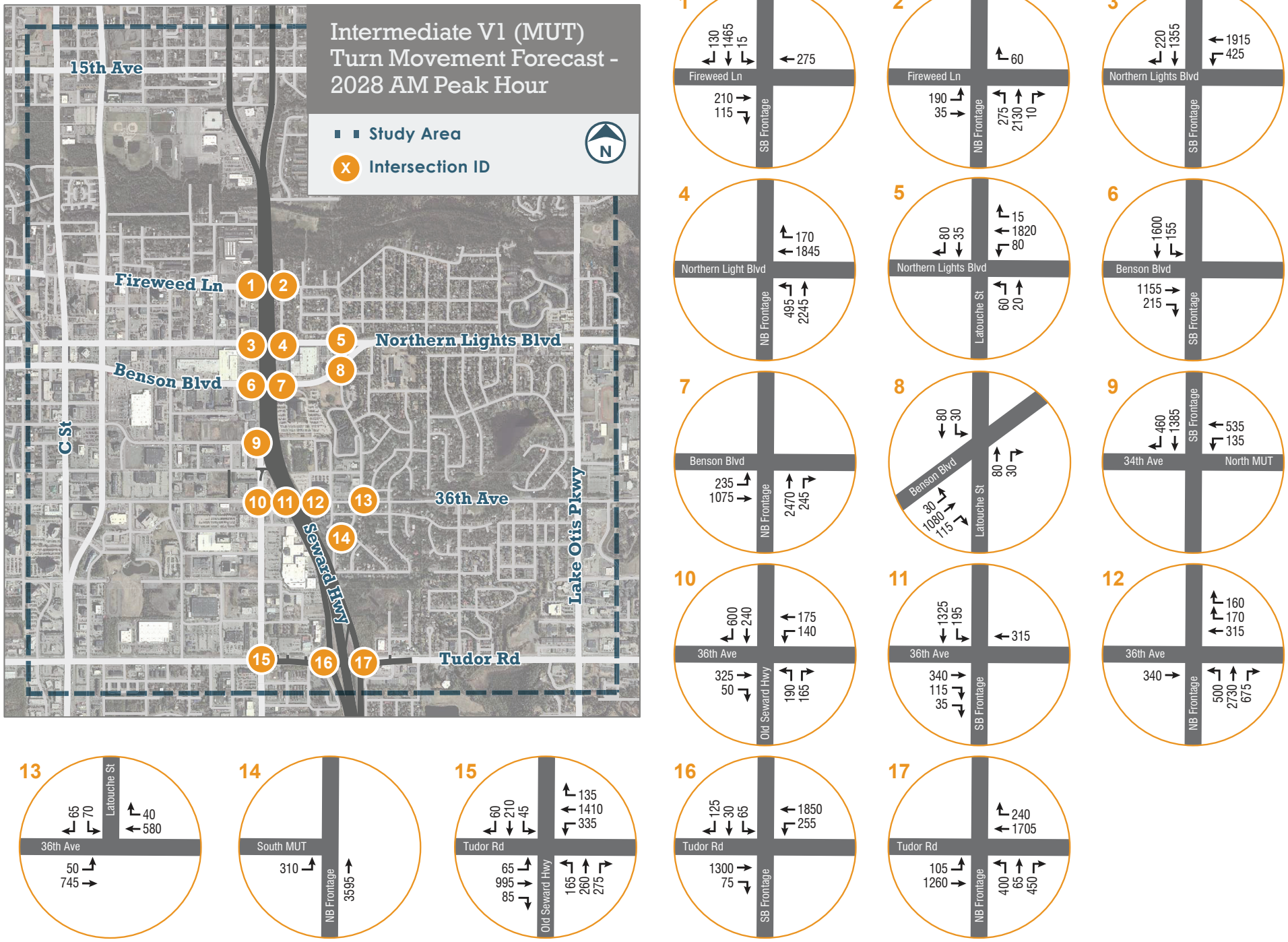


Figure 38: Intermediate V1 (MUT) - AM Peak Hour 2028

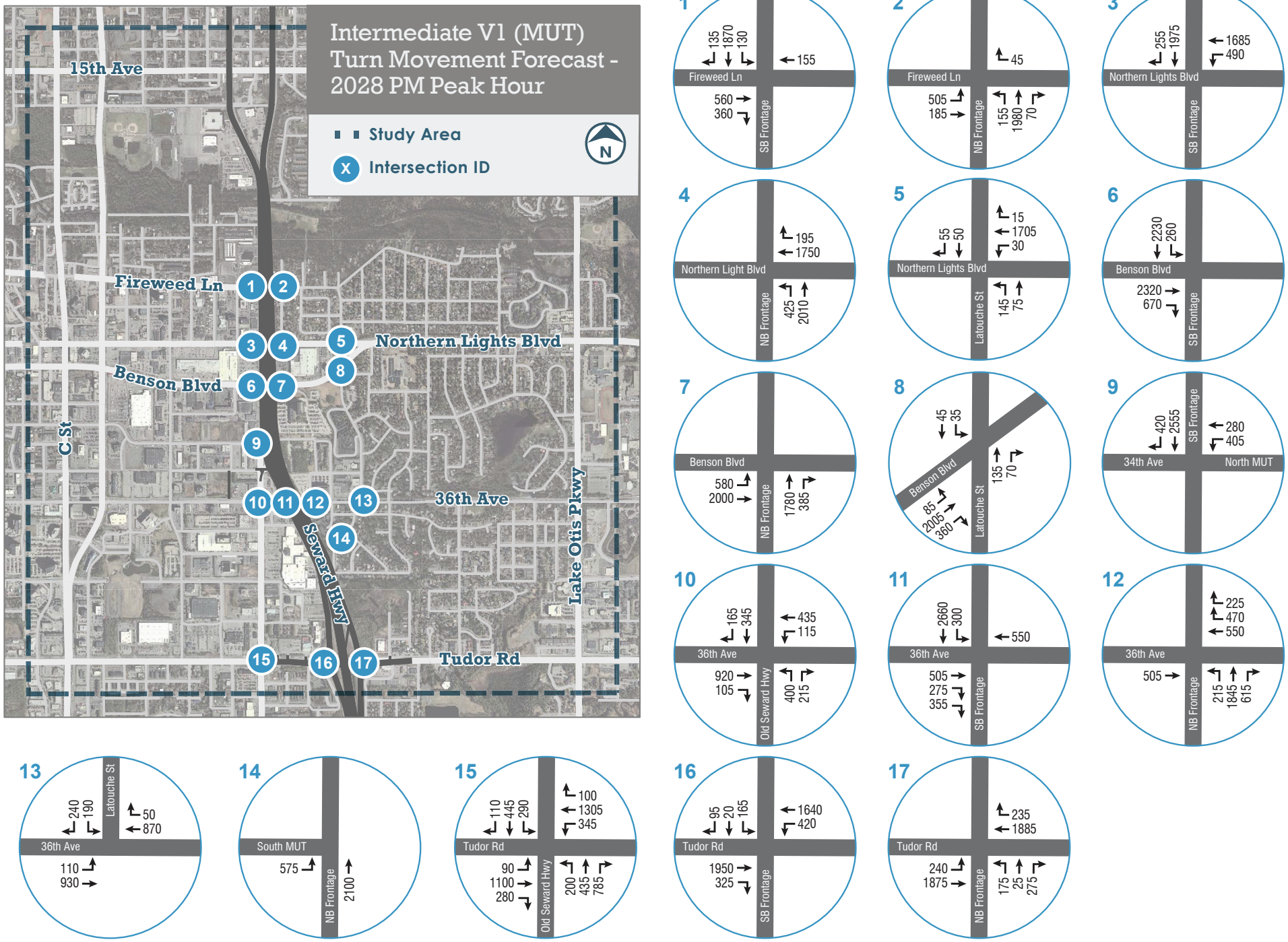


Figure 39: Intermediate V1 (MUT) - PM Peak Hour 2028

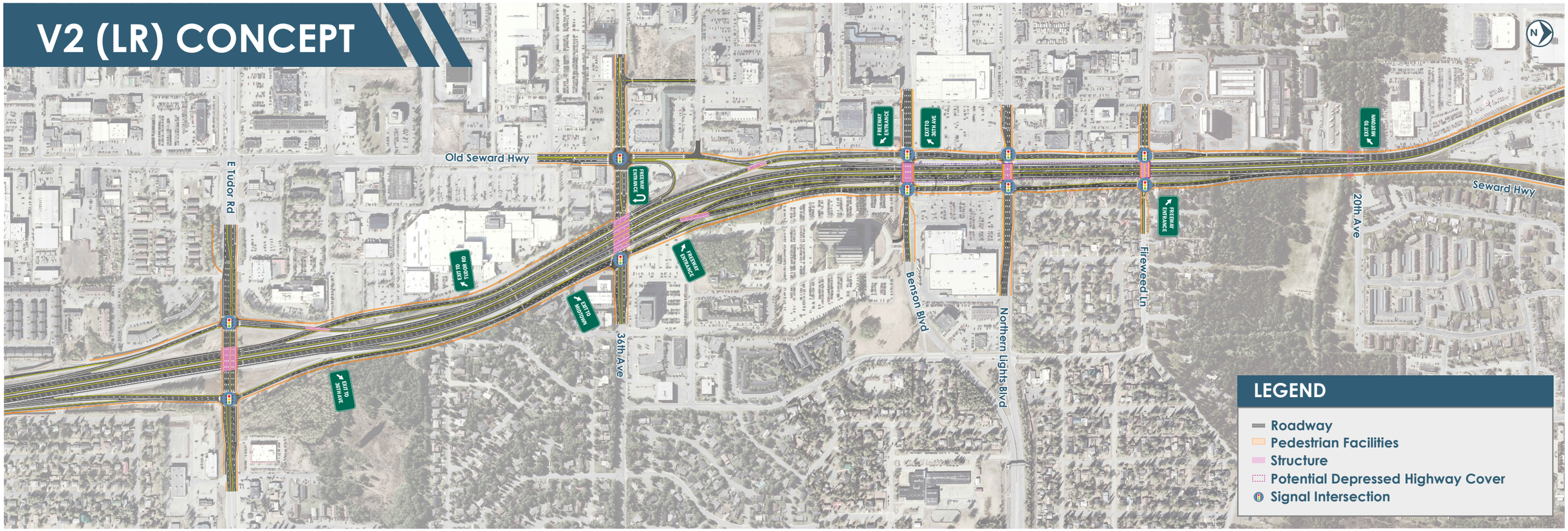
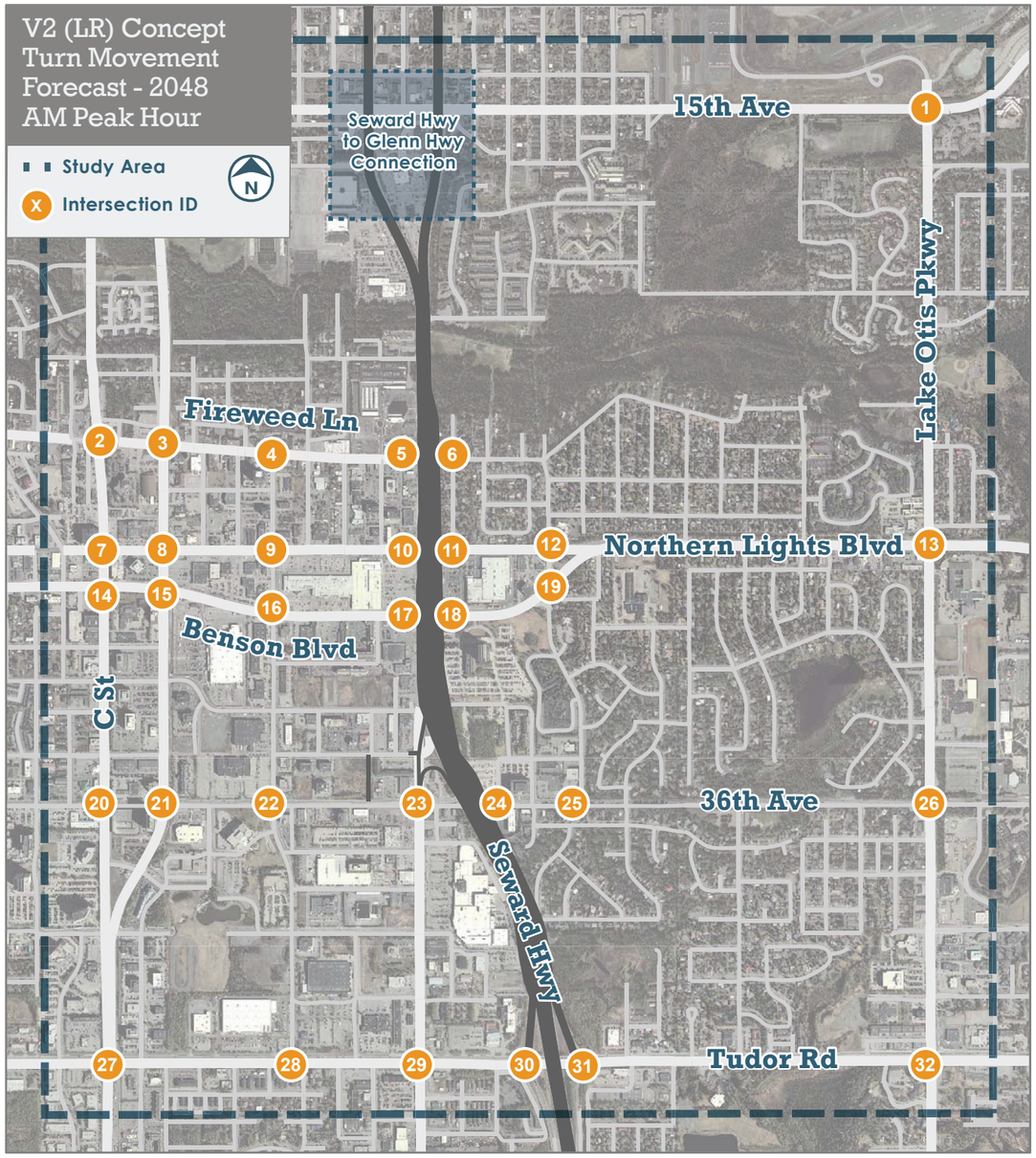


Figure 40: Multi-Interchange Concept Variant 2 (Loop Ramp) Layout



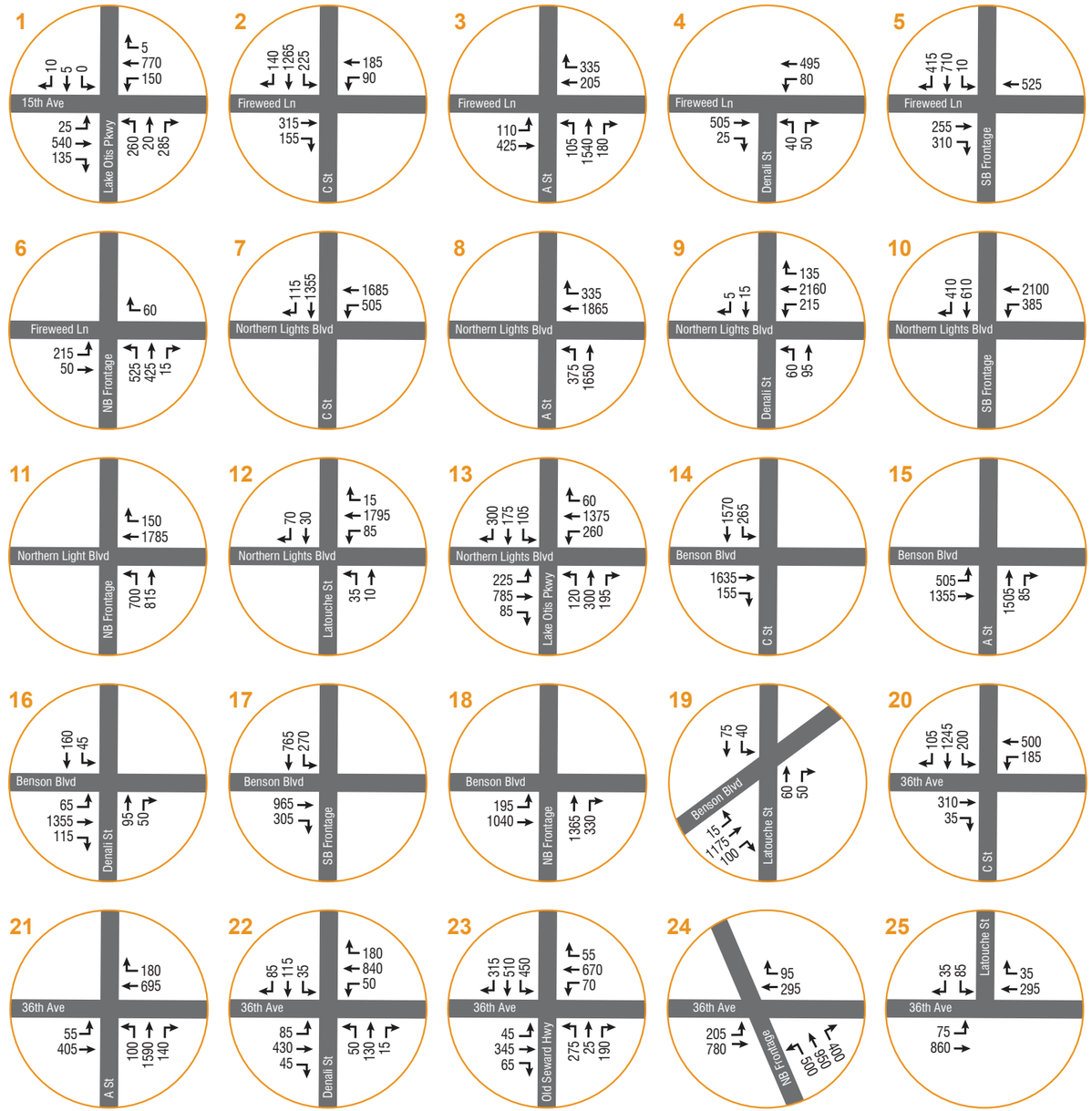
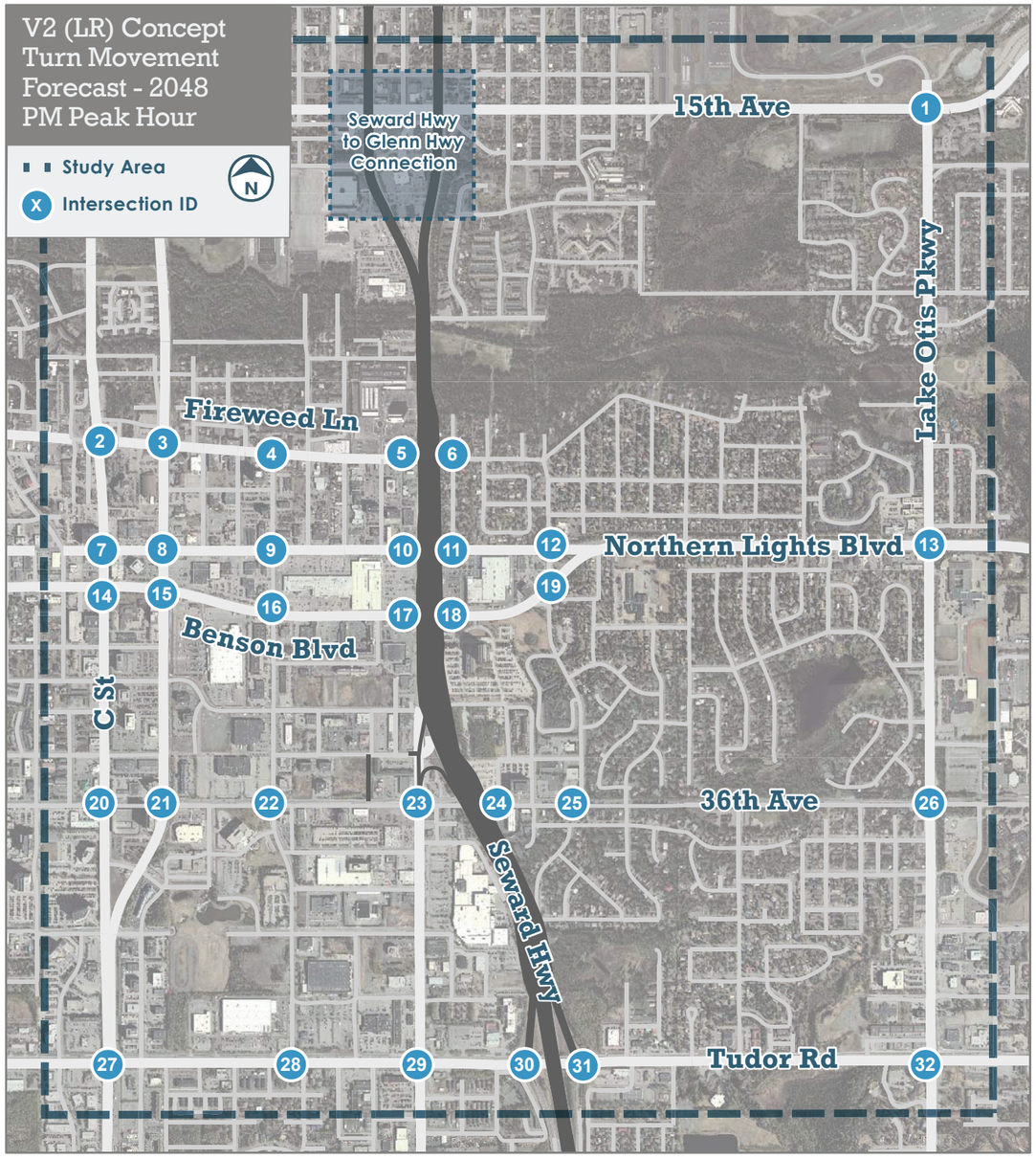


Figure 41: Multi-Interchange Concept Variant 2 (Loop Ramp) - AM Peak Hour 2048



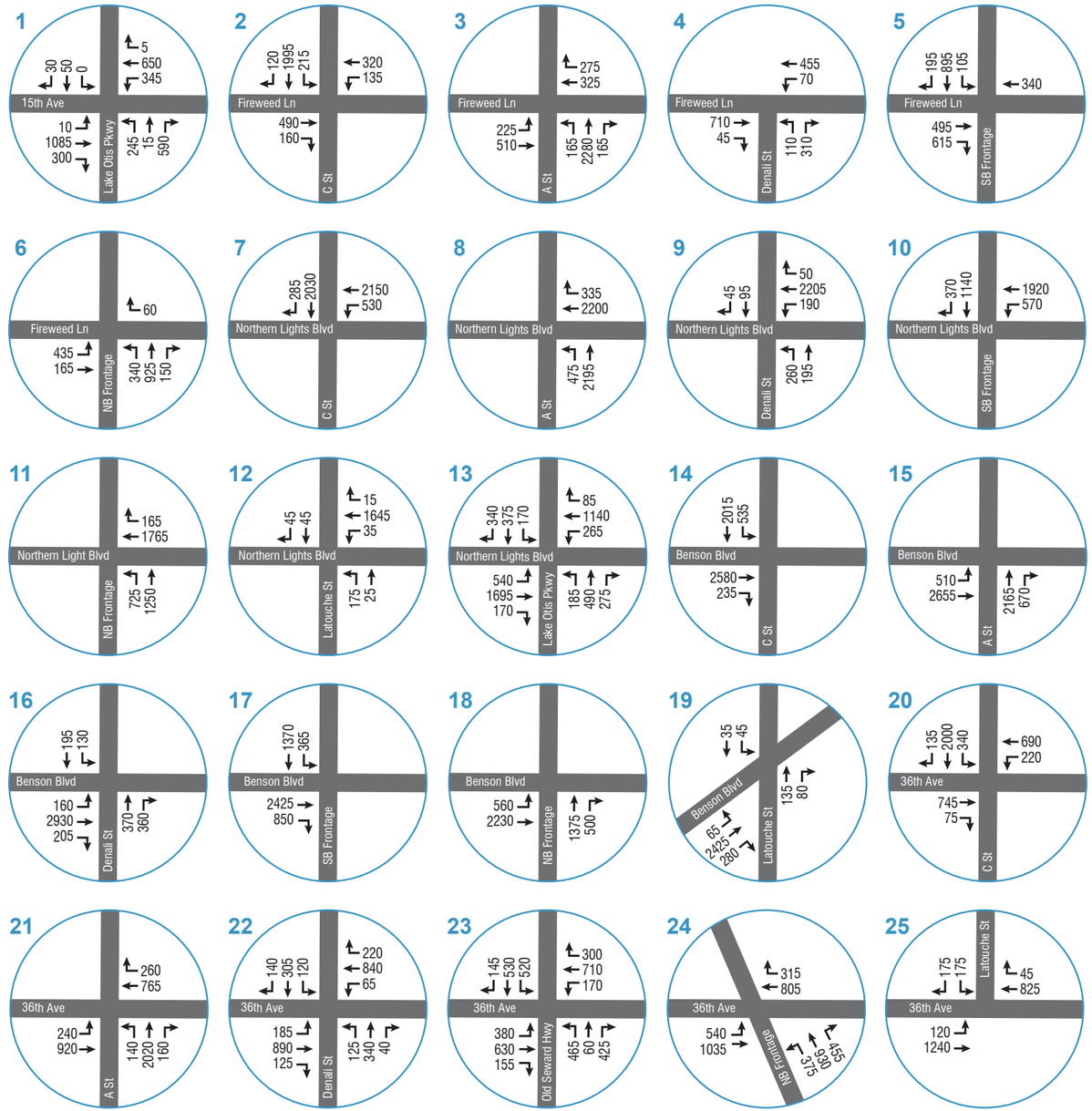


Figure 42: Multi-Interchange Concept Variant 2 (Loop Ramp) - PM Peak Hour 2048

INTERMEDIATE V2 (LR) CONCEPT

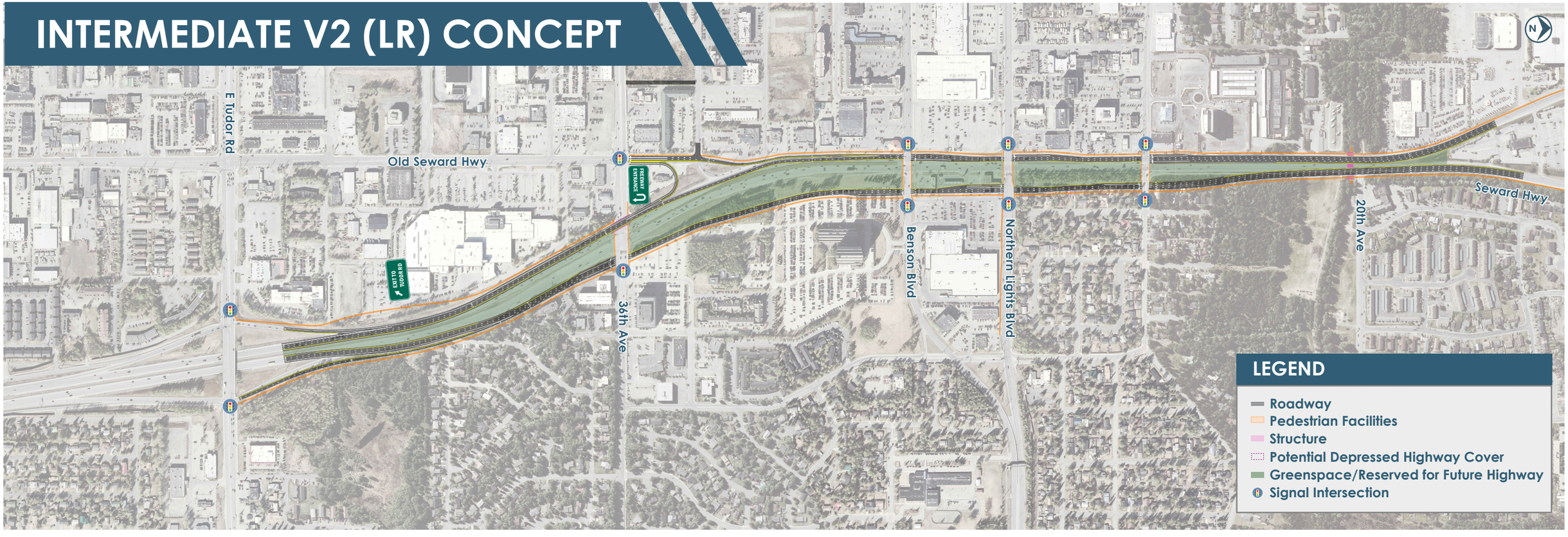


Figure 43: Intermediate V2 (LR) Concept

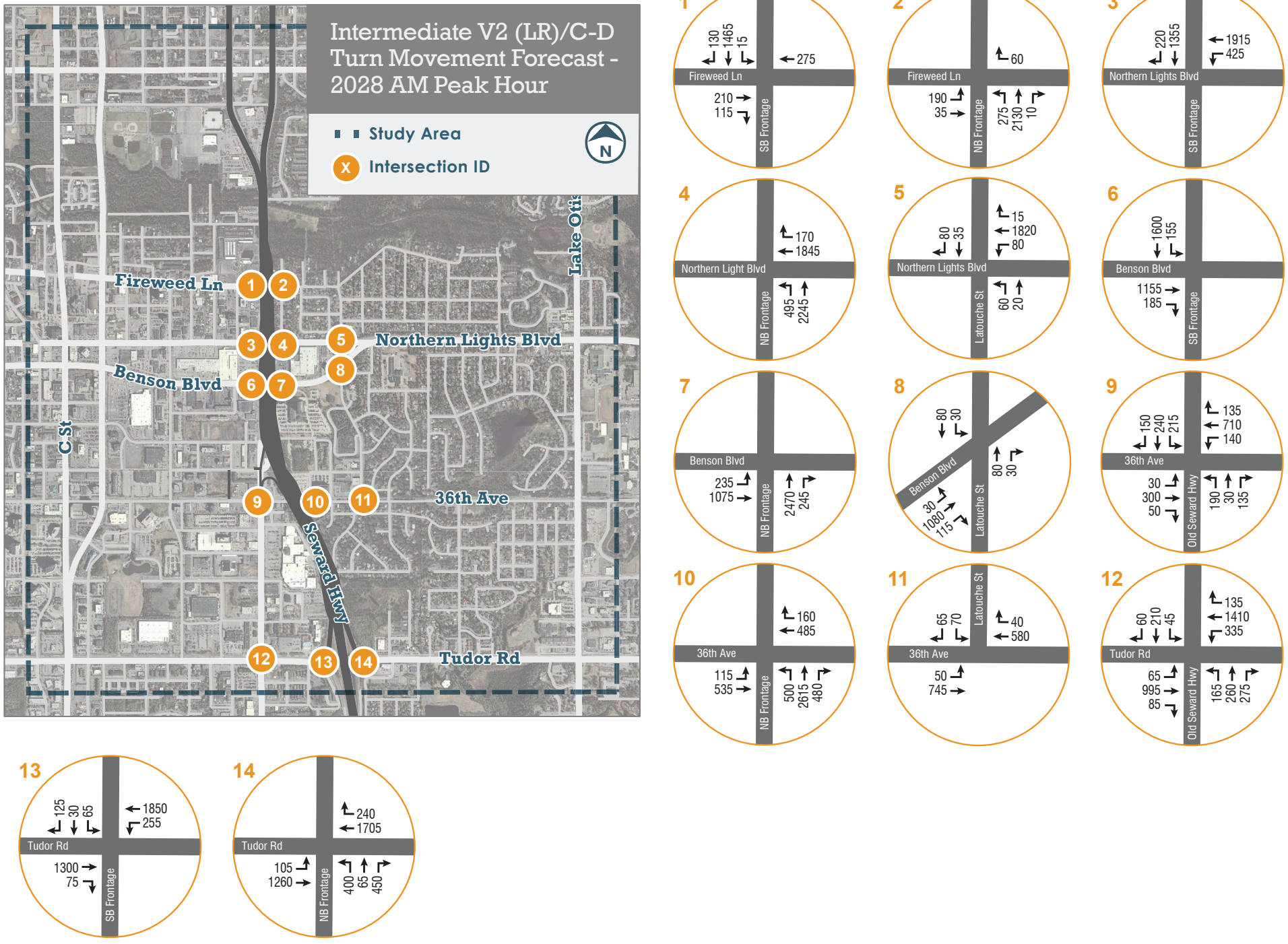


Figure 44: Intermediate V2 (LR) and C-D Concept - AM Peak Hour 2028

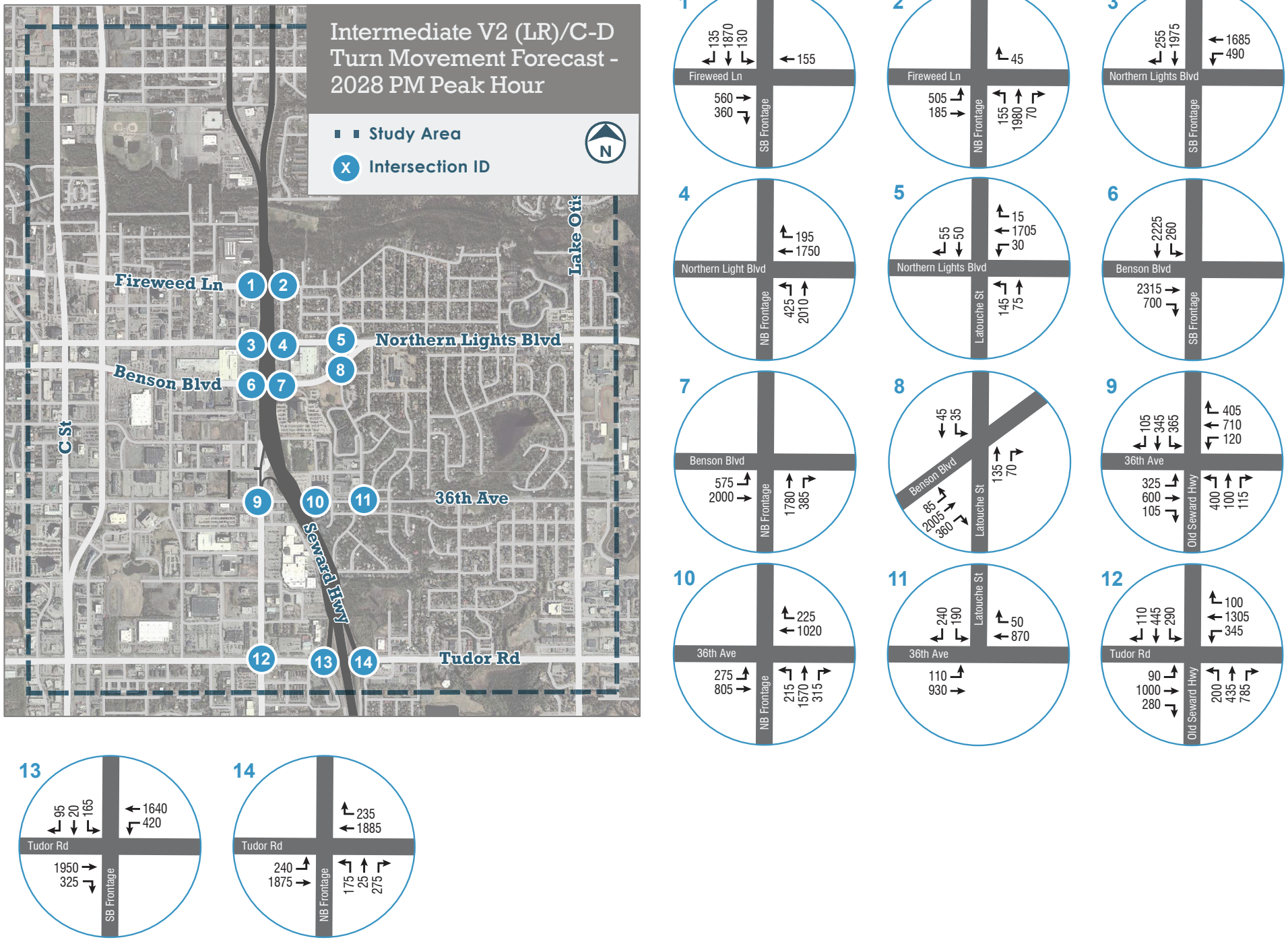


Figure 45: Intermediate V2 (LR) and C-D Concept - PM Peak Hour 2028

C-D CONCEPT

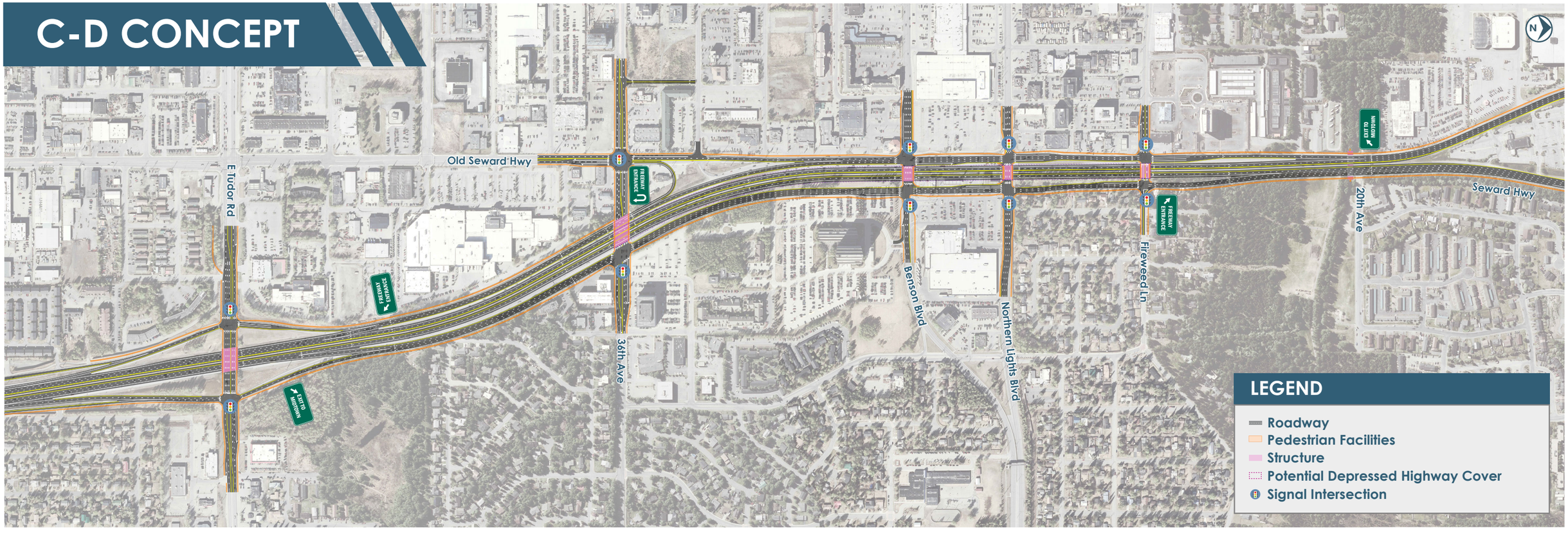
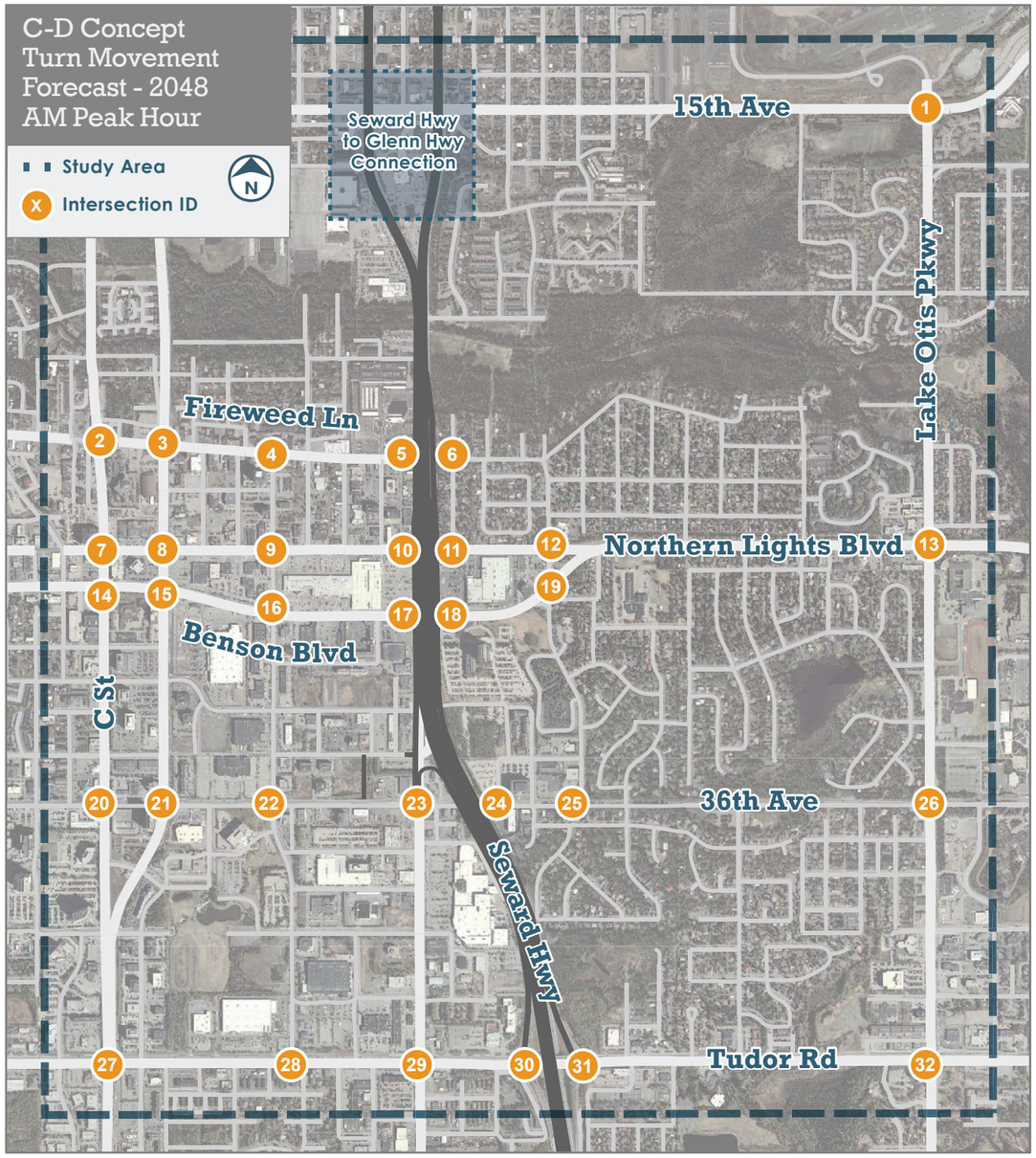


Figure 46: Collector-Distributor Concept



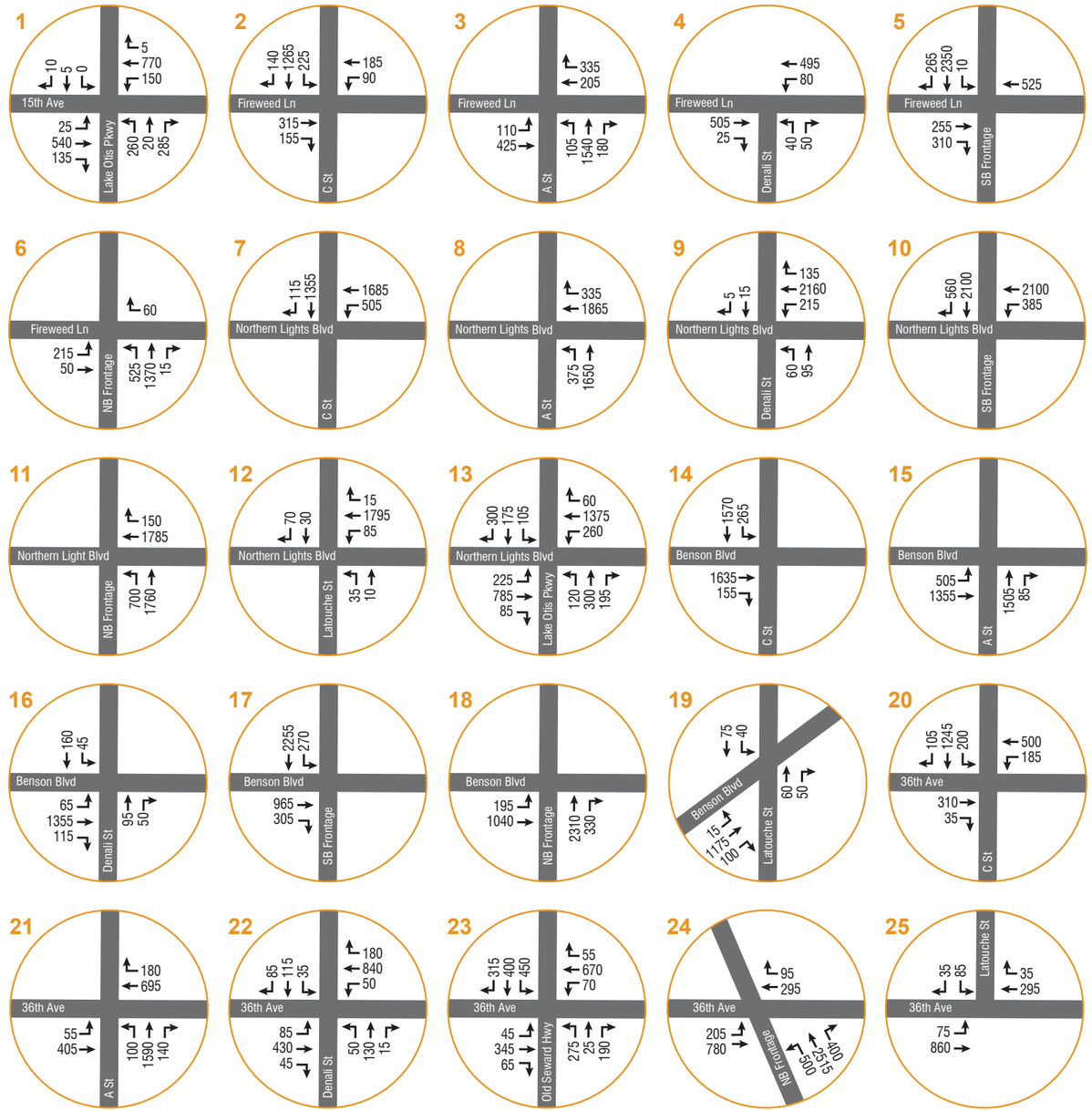
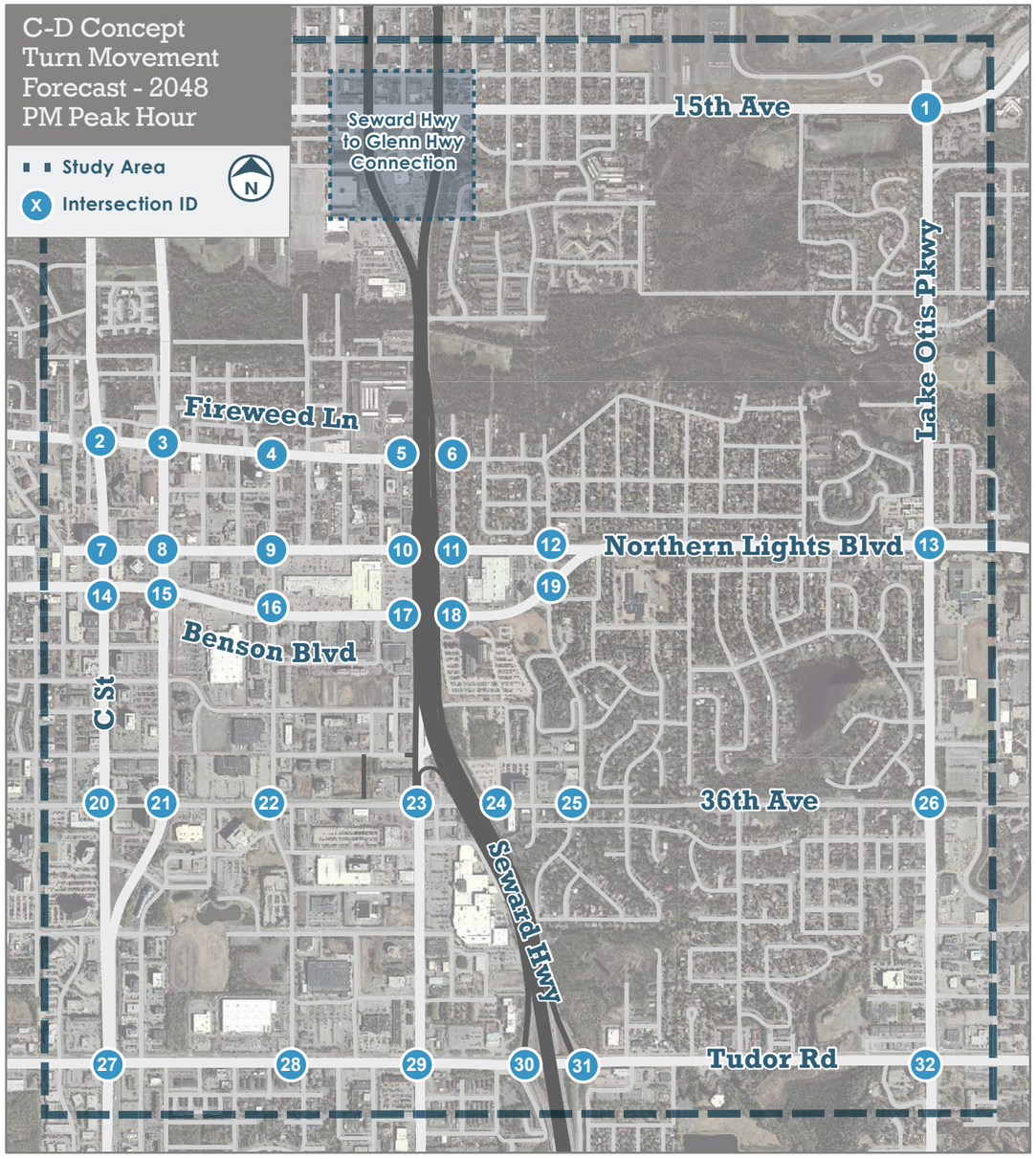


Figure 47: Collector-Distributor Concept - AM Peak Hour 2048



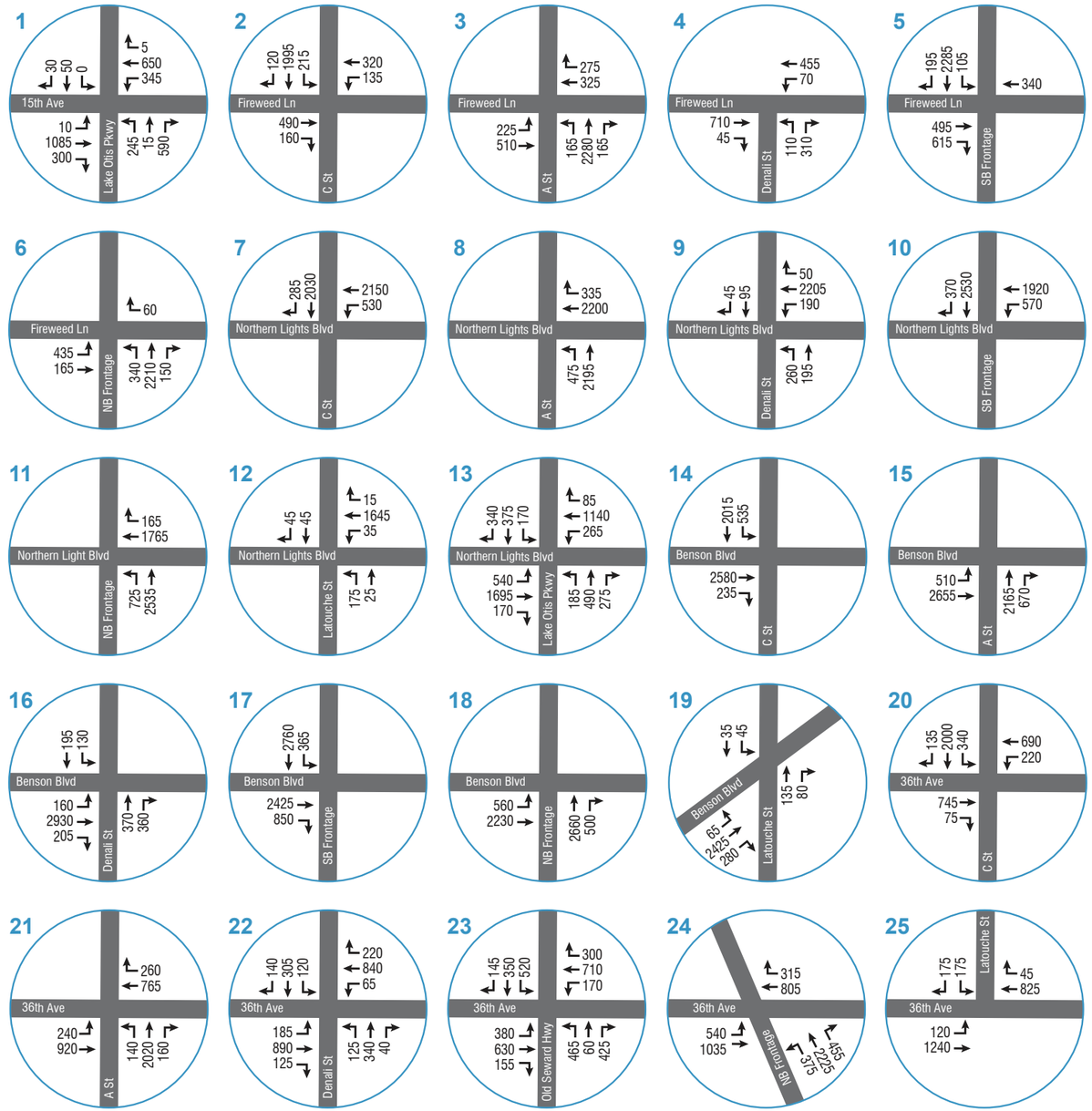


Figure 48: Collector-Distributor Concept - PM Peak Hour 2048

INTERMEDIATE C-D CONCEPT

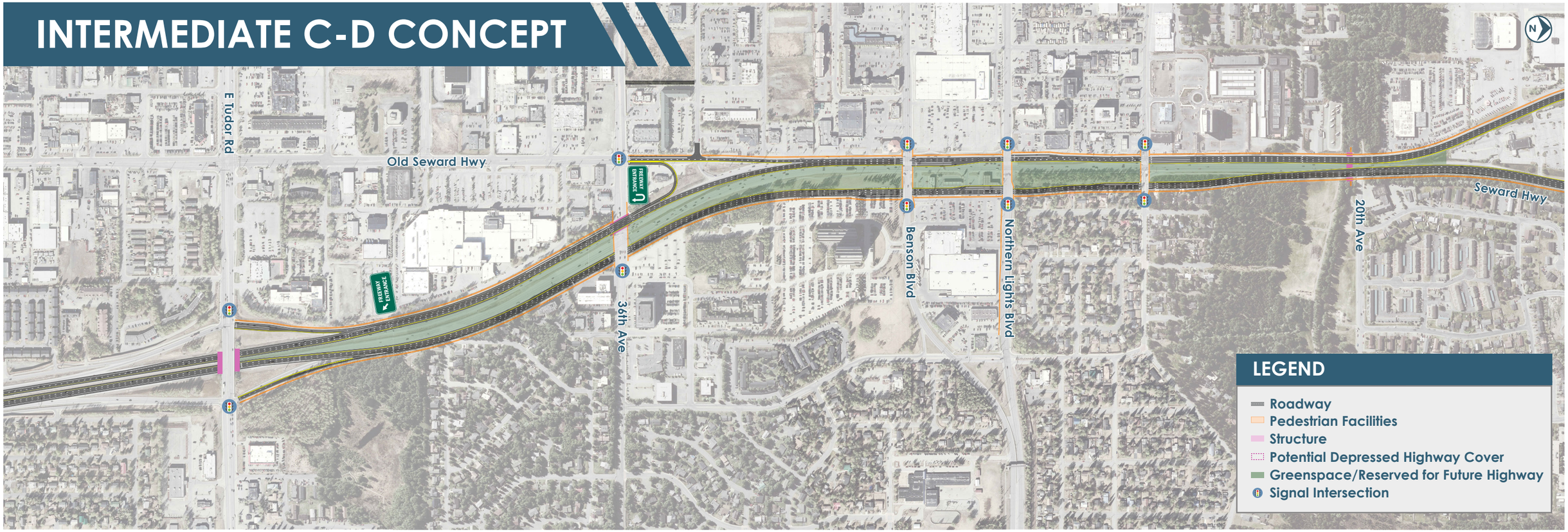


Figure 49: Intermediate C-D Concept

5.0 PERFORMANCE METRICS

Performance measures were developed to compare the impact of the refined concepts under consideration, including how they compare with No-Build conditions. This section compares geometric impacts, pedestrian and bicycle crossing distances, traffic performance, and resiliency for each concept.

5.1 Geometric Comparison

The following bullet points compare the number of bridge structures, access points, and frontage road lanes provided for each of the refined concepts.

- Bridge Structures:
  - The No-Build Concept has two bridge structures that would require maintenance and inspection.
  - V1 (MUT) and V2 (LR) Concepts have 10 bridge structures that would require maintenance and inspection.
  - C-D Concept has 7 bridge structures and has a narrower footprint south of the British Petroleum (BP) campus (i.e., between Benson Blvd and 36th Avenue).
- Frontage Road Access:
  - The No-Build Concept does not have a frontage road system but provides a single route shared by both though-traffic and local access traffic.
  - V1 (MUT) and V2 (LR) Concepts maximize access points between the Seward Highway and the frontage roads. V1 (MUT) provides 7 on/off ramps between the Seward Highway and the frontage roads, whiles V2 (LR) provides 8 on/off ramps.
  - C-D Concept provides less access between the Seward Highway and the frontage roads. This concept provides 5 on/off ramps between the Seward Highway and the frontage roads. Ramps are located north of Fireweed Lane and south of 36th Avenue (resulting in 1.5 mile spacing between access ramps to Midtown).
- Frontage Road Lanes:
  - The No-Build Concept does not have a frontage road system.
  - V1 (MUT) and V2 (LR) Concepts provide 2-3 through lanes on each of the northbound and southbound frontage roads.
  - C-D Concept provides 3-4 through lanes on each of the northbound and southbound frontage roads to serve the higher volumes resulting from its lower access. Even with one additional frontage road lane in each direction, the C-D Concept still won't have as much capacity as the V1 (MUT) and V2 (LR) Concepts.

5.2 Pedestrian and Bicycle Crossing Evaluation

Pedestrian and bicycle crossing distance is an important safety metric that can be quantified for each concept. The longer the crossing distance, the longer time duration pedestrians and bicyclists are exposed to vehicles. Longer crossings also make crossing difficult for disabled pedestrians and senior citizens. In some cases, a collision can occur while one or more vehicles yield to the pedestrian or bicycle and block the view of the pedestrian or bicycle for drivers in other lanes. This metric is helpful for differentiating between the concepts due to differences in roadway crossing widths and the network configuration, particularly near 36th Avenue.

The No-Build Concept has 10 locations where a pedestrian or bicycle must cross six or more lanes, with two of the locations having nine lanes to cross. The V1 (MUT), V2 (LR) and C-D Concepts have four, five, and seven locations, respectively, where a pedestrian or bicycle must cross six or seven lanes. Therefore, the refined concepts have fewer long crossings as compared with the No-Build Concept. Compared to one another, the C-D Concept requires longer crossings, while the V1 (MUT) and V2 (LR) Concepts are similar. However, considering five-lane crossings does provide some differentiation. Namely, the V1 (MUT) Concept has seven five-lane crossings, while the V2 (LR) Concept has only four five-lane crossings. Locations that require a higher number of lane crossings mainly occur at the intersections along 36th Avenue.

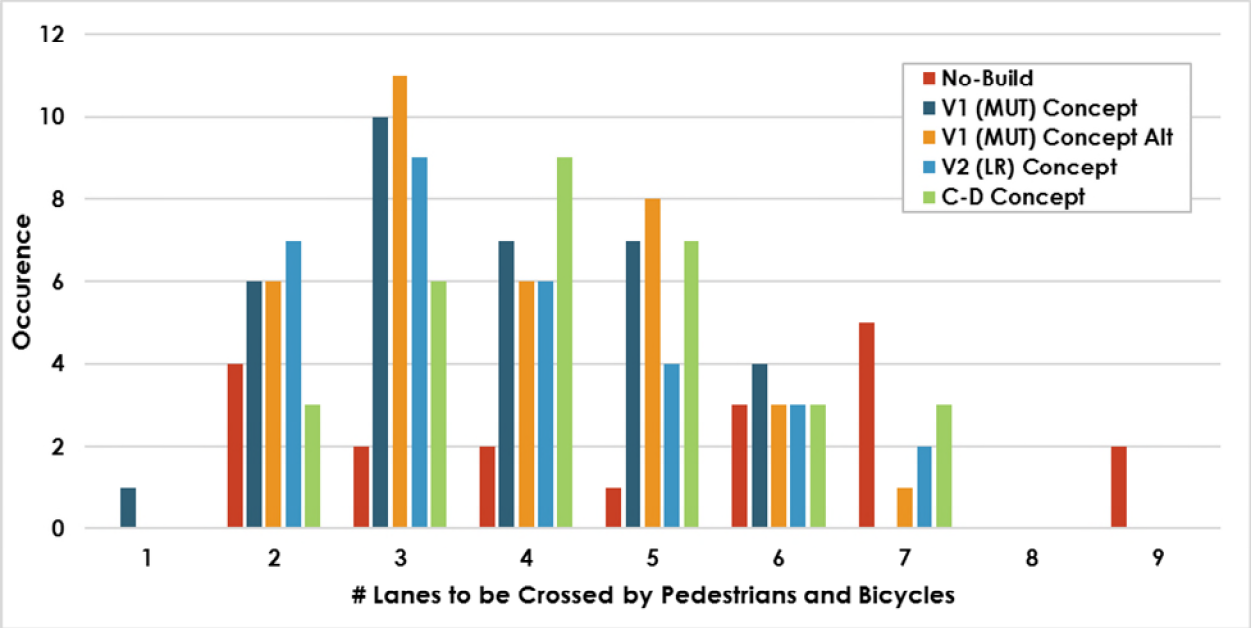


Figure 50: Comparison of Pedestrian and Bicycle Crossing Distances

Additional analysis and comparison between the concepts are provided in the Pedestrian and Bicycle Analysis memorandum included as a separate appendix to the PEL Study.

5.3 Traffic Performance

The traffic performance of the refined concepts was evaluated with regards to the impact to intersection delay and LOS, as well as the impact to LOS for constrained weaving maneuvers.

5.3.1 Traffic Operations for Refined Concepts

Traffic operations analysis was performed for each of the refined concepts. The calculated AM and PM peak hour LOS at the signalized intersections is shown for the V1 (MUT) [Figure 51 and Figure 52], V2 (LR) [Figure 53 and Figure 54], and C-D [Figure 55 and Figure 56] Concepts. These figures also show ADT estimates for study area roads for each refined concept.

Compared to the No-Build condition, the refined concepts improve overall operations in the study area by adding capacity to the Seward Highway and relieving congestion on other study area roadways, particularly the parallel north-south routes. The comparative results include:

- AM Peak Hour: The No-Build condition has five intersections operating at LOS E and three at LOS F. All three refined concepts have two intersections operating at LOS E (Tudor Road/C Street and Tudor Road/Lake Otis Parkway) and none at LOS F. This is a total of six fewer intersections operating at LOS E or F.
- PM Peak Hour: The No-Build condition has five intersections operating at LOS E and eight at LOS F, with significant delays at the Seward Highway/36th Avenue intersection. All three refined concepts have five intersections operating at LOS E and at least three at LOS F. The V2 (LR) and C-D Concepts add a fourth LOS F at the Old Seward Highway/36th Avenue intersection due to the additional traffic demands the concepts would require at this location. Compared with the No-Build condition, the refined concepts have four or five fewer intersections performing at LOS F.

Table 4 lists the detailed intersection delay and LOS at the study intersections along the Seward Highway corridor. For the V2 (LR) and C-D Concepts, the Old Seward Highway/36th Avenue intersection is expected to experience the highest delays and operate at LOS F. The greatest delays are expected to occur for the southbound left-turn movement due to geometric constraints at the adjacent loop ramp that do not allow the provision of dual southbound left-turn lanes. Therefore, more queuing and delay are expected for the V2 (LR) and C-D Concepts versus the V1 (MUT) Concept. Attachment E provides the Synchro intersection delay reports.

One of the other benefits associated with the refined concepts when they are constructed as part of the complete S2G improvements is that the new access-controlled facility can serve greater traffic loads, which means traffic volumes on many roadways throughout the Anchorage Bowl would be much lower as compared to a No-Build Concept. The entire region benefits from the direct access between the Seward and Glenn Highways because traffic traveling to Midtown and other parts of Anchorage can reduce its use of the other arterial streets.

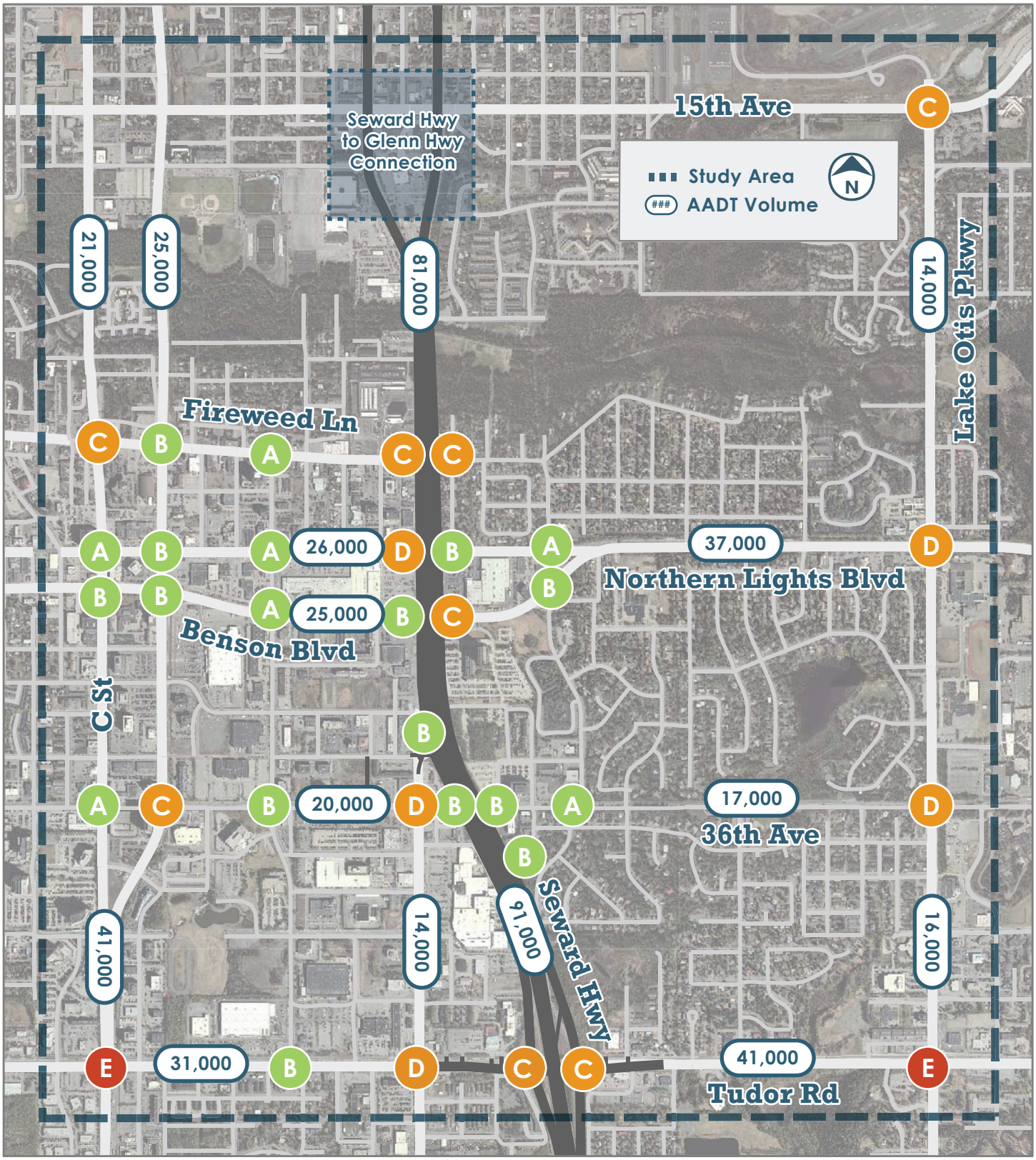


Figure 51: Level of Service – 2048 V1 (MUT) Concept – AM Peak Hour

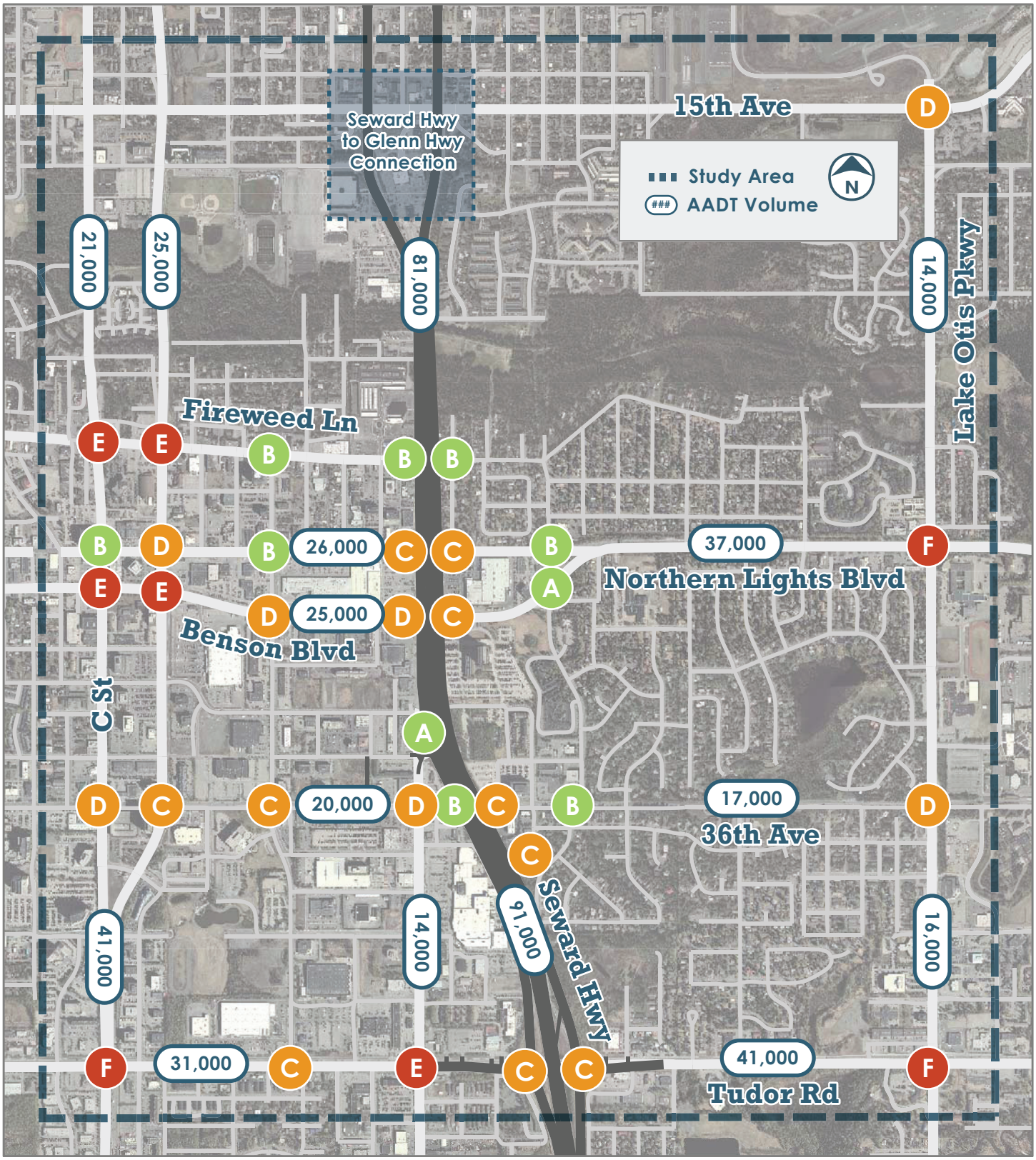


Figure 52: Level of Service – 2048 V1 (MUT) Concept – PM Peak Hour

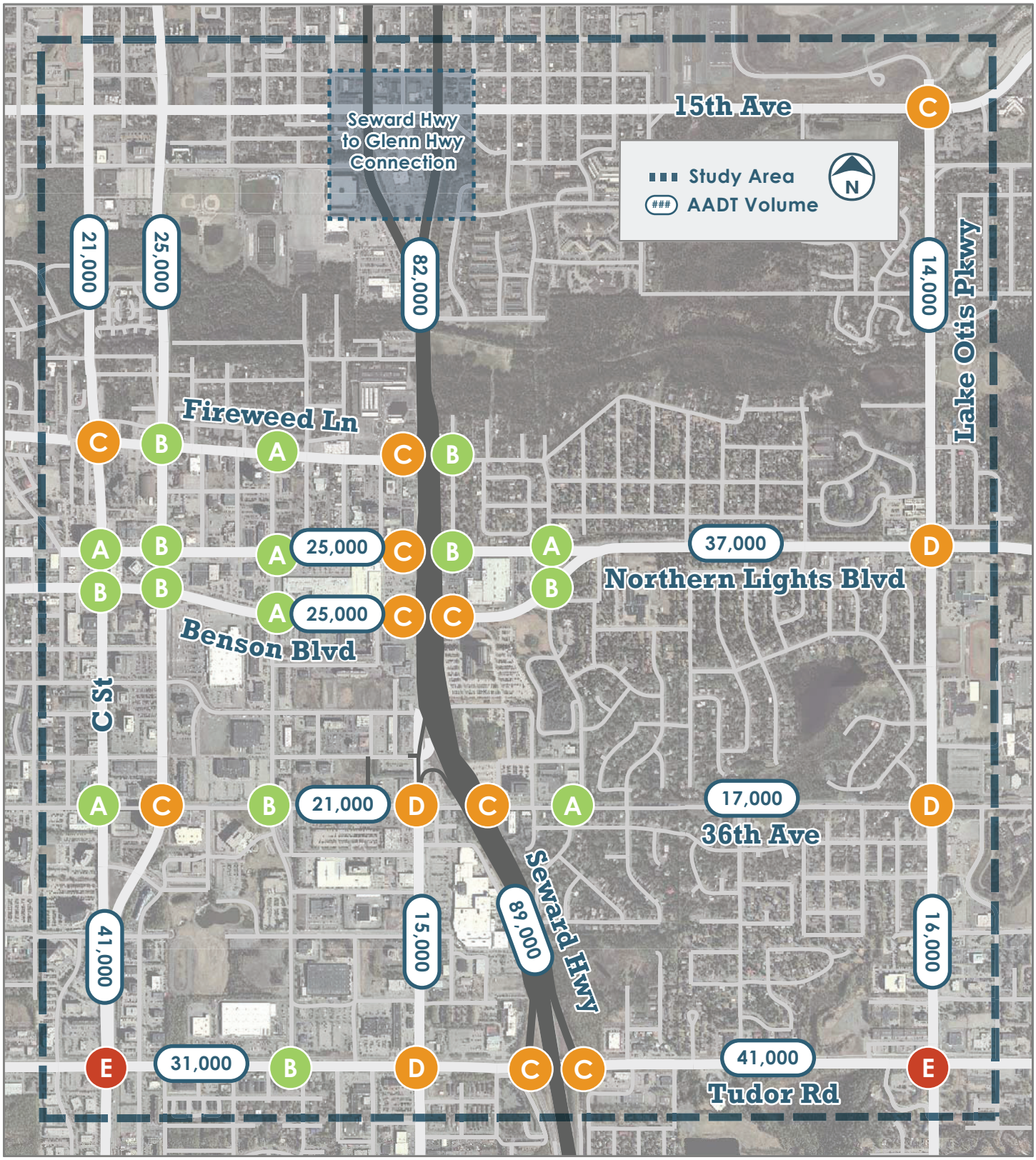


Figure 53: Level of Service – 2048 V2 (LR) Concept – AM Peak Hour

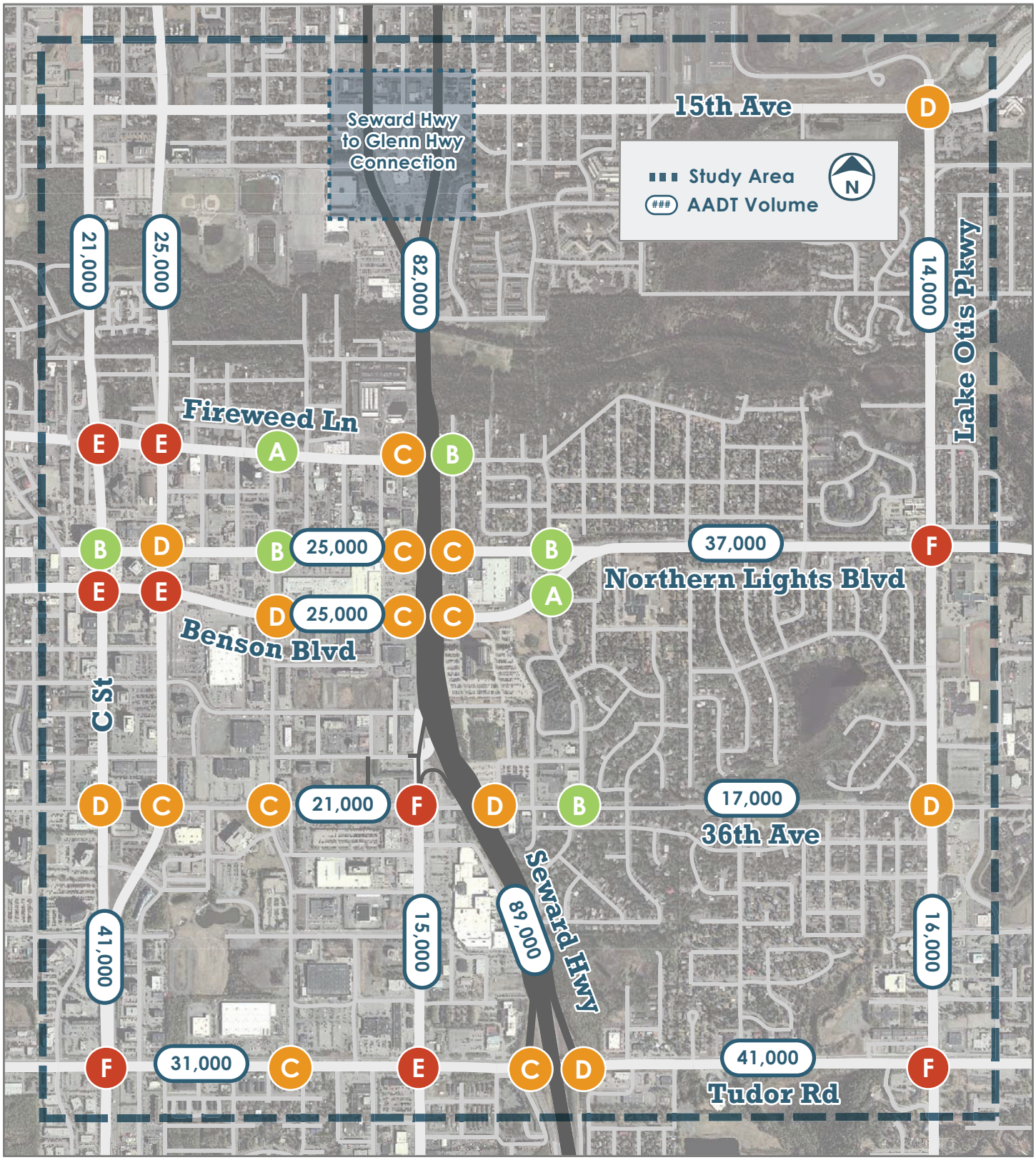


Figure 54: Level of Service – 2048 V2 (LR) Concept – PM Peak Hour

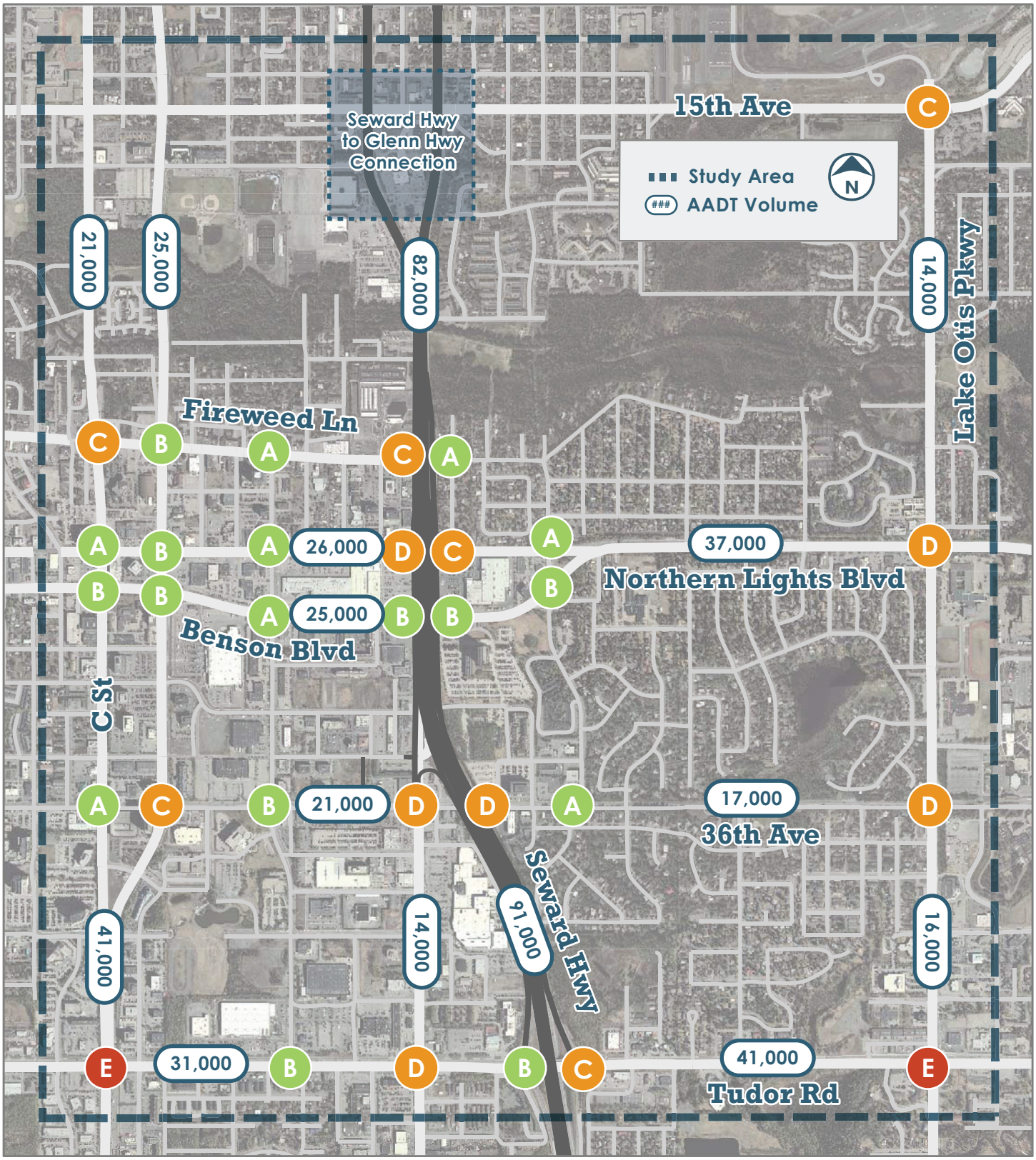


Figure 55: Level of Service – 2048 C-D Concept – AM Peak Hour

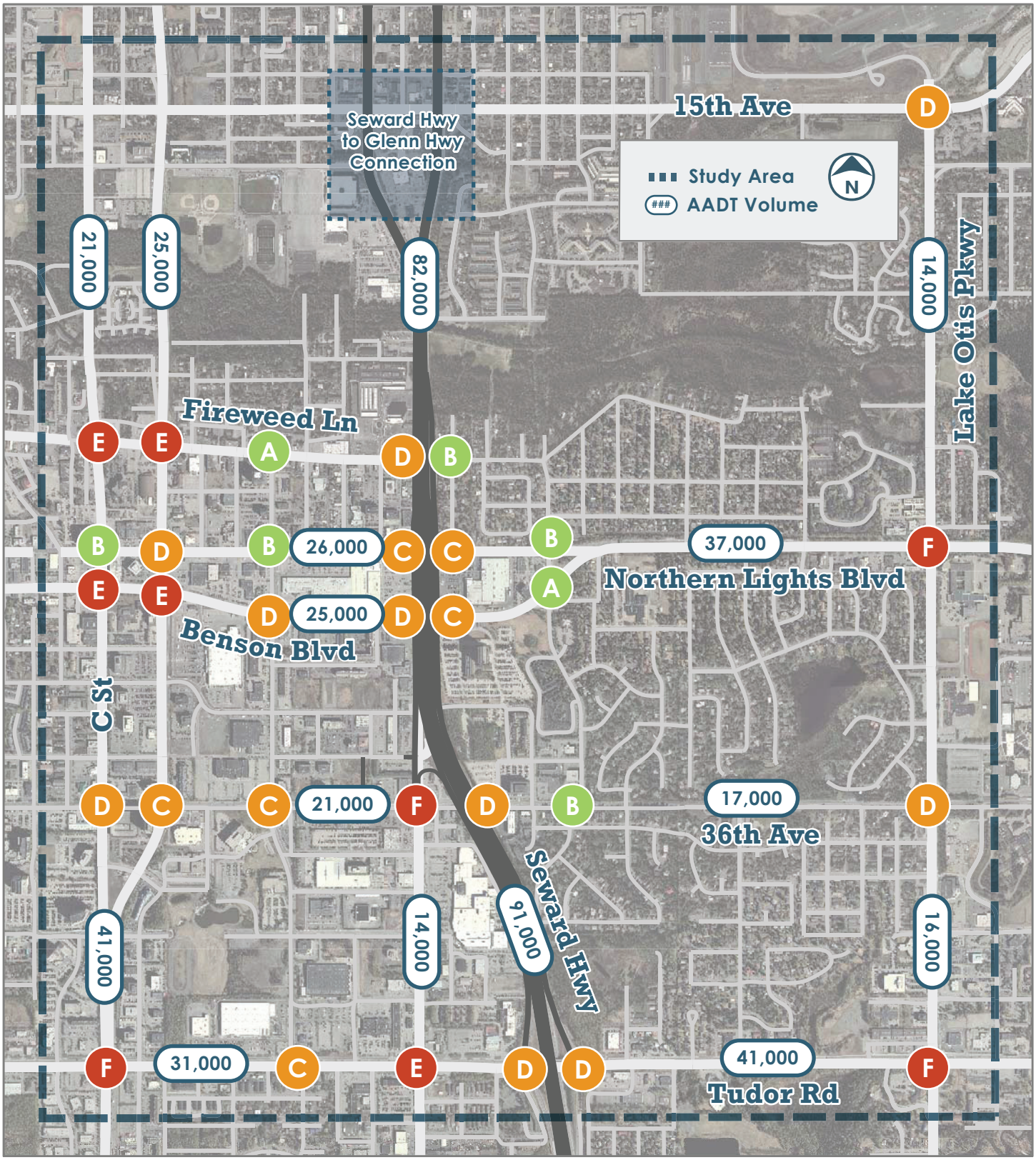


Figure 56: Level of Service – 2048 C-D Concept – PM Peak Hour

Table 4: Seward Highway Corridor Signalized Intersection LOS/Delay (sec/veh) for Refined Concepts in 2048

Intersection Name	No-Build Concept		V1 (MUT) Concept		V1 (MUT) Concept Alternate		V2 (LR) Concept		C-D Concept	
	AM	*PM*	*AM*	*PM*	*AM*	*PM*	*AM*	*PM*	*AM*	*PM*
Fireweed & SB Frontage	C/21	C/34	C/23	B/19	B/15	B/20	C/31	C/29	C/27	D/38
Fireweed & NB Frontage			C/21	B/18	B/17	C/21	B/18	B/20	A/9	B/12
Northern Lights & SB Frontage	D/42	D/38	D/37	C/25	C/34	B/20	C/27	C/26	D/41	C/28
Northern Lights & NB Frontage			B/19	C/28	B/14	C/25	B/18	C/25	C/27	C/23
Northern Lights & LaTouche	A/5	A/8	A/8	B/13	A/8	B/13	A/8	B/13	A/8	B/13
Benson & SB Frontage	C/32	E/74	B/20	D/37	C/20	C/28	C/21	C/27	B/18	D/38
Benson & NB Frontage			C/26	C/28	C/29	C/28	C/33	C/33	B/15	C/25
Benson & LaTouche	A/8	A/8	B/10	A/8	B/11	A/8	B/11	A/10	B/12	A/8
MUT & SB Frontage	-	-	B/19	A/8	C/23	A/3	-	-	-	-
36th & Old Seward	C/21	D/47	D/38	D/40	D/36	D/42	D/52	F/99	D/40	F/87
36th & SB Frontage	E/78	F/107	B/18	B/18	B/17	B/17	-	-	-	-
36th & NB Frontage			B/18	C/27	B/17	C/26	C/31	D/37	D/37	D/48
36th & LaTouche	A/9	B/14	A/9	B/15	A/9	B/15	A/9	B/14	A/8	B/14
MUT & NB Frontage	-	-	B/12	C/24	B/12	C/29	-	-	-	-
Tudor & Old Seward	E/57	F/89	D/38	E/56	D/38	E/58	D/42	E/64	D/38	E/58
Tudor & SB Frontage	B/16	D/52	C/20	C/35	C/22	C/35	C/22	C/32	B/20	D/37
Tudor & NB Frontage	C/25	C/21	C/33	C/34	C/33	D/42	C/29	D/43	C/29	D/43

5.3.2 Weaving Analysis for Refined Concepts

Weaving analysis was conducted for the most constrained weaving movements, which occur with the Concept V1 (MUT) ramp layout. The northbound and southbound mainline weave between Tudor Road and Benson Blvd was analyzed for Concept V1 (MUT) using the Highway Capacity Software (HCS7). This analysis considered the gore-to-gore distance between the on/off ramps, the number of mainline/ramp lanes, and the expected volume of traffic making the weaving maneuver. With year 2048 PM peak hour volumes and the proposed lane geometries and ramp layout, the weaving maneuver would be expected to operate at LOS C in both directions.

5.3.3 Traffic Operations for Interim Condition Concepts

The traffic operations for the intermediate concepts were evaluated for interim year 2028 with one-way frontage roads constructed but no grade-separated freeway in place. The V2 (LR) and C-D Concepts have similar interim condition layouts (both provide a loop ramp at 36th Avenue); the interim condition for the V1 (MUT) Concept differs in that it provides two MUTs.

Table 5 shows the delay and LOS in year 2028 at the signalized intersections for the interim condition concepts. All intersections are expected to operate at LOS D or better.

Table 5: Signalized Intersection LOS/ Delay (sec/veh) for Intermediate Build-Out in 2028

Intersection Name	V1 (MUT) Concept		V2 (LR) Concept		C-D Concept	
	AM	*PM*	*AM*	*PM*	*AM*	*PM*
Fireweed & SB Frontage	B/16	B/20	C/28	C/32	C/28	C/34
Fireweed & NB Frontage	B/13	C/21	B/16	C/22	A/5	B/12
Northern Lights & SB Frontage	C/20	C/23	B/16	B/19	B/16	B/17
Northern Lights & NB Frontage	D/36	C/22	C/27	C/21	C/25	C/21
Northern Lights & LaTouche	A/9	B/13	A/9	B/13	A/9	B/13
Benson & SB Frontage	B/17	D/37	B/17	D/37	B/15	C/28
Benson & NB Frontage	C/23	B/12	B/19	B/12	C/21	B/15
Benson & LaTouche	A/10	A/7	A/10	A/7	A/10	A/7
MUT & SB Frontage	B/18	C/25	-	-	-	-
36th & Old Seward	D/36	D/41	C/34	D/48	D/35	D/49
36th & SB Frontage	B/17	C/26	-	-	-	
36th & NB Frontage	C/26	C/30	C/29	C/31	C/32	C/31
36th & LaTouche	A/9	B/17	A/9	B/19	A/9	B/19
MUT & NB Frontage	B/11	B/19	-	-	-	-
Tudor & Old Seward	D/39	D/52	D/37	D/53	D/36	D/53
Tudor & SB Frontage	B/14	C/21	B/15	C/24	B/15	C/23
Tudor & NB Frontage	C/25	B/19	C/26	C/23	C/27	C/23

5.4 Traffic Safety

The number of expected crashes for each concept in year 2048 was calculated using safety performance functions. Table 6 shows the number of expected crashes based on the number of intersections, traffic volumes, and the number of conflict points at intersections. Attachment F details the analysis of the forecasted safety performance for the refined concepts. The safety performance of the No-Build Concept was not analyzed.

Table 6: Predicted Number of Crashes on Seward Highway Corridor in 2048

Concept	Number of Study Intersections	Relative Total Crashes	
		Total	*Per Intersection*
V1 (MUT)	14	312	22.3
V2 (LR)	11	253	23.0
C-D	11	329	29.9

Concept V2 (LR) has the lowest number of expected crashes as it reduces vehicle conflicts by grade separating 36th Avenue. Concept V1 (MUT) has more expected total crash as it has more intersections on the corridor, although it has the fewest crashes per intersection as the intersections are smaller. The C-D Concept has a relatively high number of expected crashes as it involves larger intersections and higher traffic volumes on the frontage road.

5.5 Resiliency

Transportation resiliency is the ability for the road system to function under unexpected events, such as a natural disaster, human error, or infrastructure failure. In the event of a shutdown, the number and proximity of alternate routes improves the resiliency of the network.

Various Seward Highway closure scenarios were considered to quantify the resiliency of each concept. Table 7 quantifies the distance vehicles would travel to exit the Seward Highway prior to the closure, bypass the closure via the frontage road, then return to the Seward Highway. Table 8 shows the number of signals the re-routed vehicles would pass through during the diversion. Keeping the diversion distance and duration short reduces the overall impact of a closure. While other north-south routes are available in the event of a closure on the Seward Highway, rerouting vehicles to the frontage roads represents the shortest path route.

The refined concepts were compared to determine which concept has the highest resiliency based on this metric. For most closure scenarios, the frontage roads could be used as an alternate road to return to the Seward Highway. From the results, Concepts V1 (MUT) and V2 (LR) have the highest resiliency to recover from a closure on the Seward Highway (shortest diversion distance and fewest number of signals). The diversion routes for the C-D Concept are about 0.5 miles longer and require the driver to pass through more signalized intersections on the diversion route.

Table 7: Distance (Miles) of Frontage Road Diversion Route

Location of Seward Highway Closure	V1 (MUT) Concept		V1 (MUT) Concept Alt		V2 (LR) Concept		C-D Concept	
	NB	*SB*	*NB*	*SB*	*NB*	*SB*	*NB*	*SB*
Tudor Road	0.6	0.7	0.6	0.7	1.2	0.7	1.7	1.8
36th Ave	1.3	1.5	1.5	1.5	0.8	Reroute*	1.4	Reroute*
Benson Blvd	0.6	0.9	0.8	0.9	1.0	1.5	1.4	1.4
Northern Lights Blvd	0.6	0.9	0.8	0.9	1.0	1.5	1.4	1.4
Fireweed Ln	0.9	0.9	0.8	0.9	1.0	1.5	1.4	1.4
Average	**0.9**		**1.0**		**1.1**		**1.5**	

*Due to the network layout, a closure at 36th Avenue southbound does not allow vehicles use the SB frontage road to re-route to Seward Highway and results in vehicles using alternate southbound routes.

Table 8: Number of Traffic Signals on Frontage Road Diversion Route

Location of Seward Highway Closure	V1 (MUT) Concept		V1 (MUT) Concept Alt		V2 (LR) Concept		C-D Concept	
	NB	*SB*	*NB*	*SB*	*NB*	*SB*	*NB*	*SB*
Tudor Road	1	1	1	1	2	1	5	5
36th Ave	3	4	3	4	1	-	4	-
Benson Blvd	2	3	2	3	3	3	4	4
Northern Lights Blvd	2	3	2	3	3	3	4	4
Fireweed Ln	3	3	3	3	3	3	4	4
Average	**2.5**		**2.8**		**2.4**		**4.2**	

6.0 SUMMARY

This traffic engineering report examines existing conditions, year 2048 No-Build conditions, year 2048 traffic operations for alternative concepts, and year 2028 traffic operations for intermediate concepts with the objective to identify transportation deficiencies and assess concept feasibility and performance. Because a large volume of the regional traffic on the Seward Highway between 20th Avenue and Tudor Road is traveling to/from Midtown Anchorage, it is particularly important to accommodate traffic entering and exiting the highway.

Through the concept development process, a total of ten concepts (in addition to the No-Build Concept) were evaluated for the Seward Highway corridor and three one-way frontage concepts (each with an associated intermediate build-out concept) were advanced to refined analysis:

- Multi-Interchange Concept Variant 1 (Median U-Turn)
- Multi-Interchange Concept Variant 2 (Loop Ramp)
- Collector-Distributor Concept

Compared to the No-Build condition, the refined concepts improve overall multimodal operations and safety in the study area. The concepts provide a grade-separated mainline that reduces conflicts between crossing traffic, including pedestrians and bicycles. This grade-separated mainline also adds capacity to the Seward Highway and relieves congestion on other study area roads, particularly on parallel north-south routes. When a concept is constructed as part of the complete S2G improvements, traffic volumes on many roadways throughout the Anchorage Bowl would be much lower as compared to a No-Build Concept. The entire region and all travel modes benefit from the direct access between the Seward and Glenn Highways because traffic traveling to Midtown and other parts of Anchorage can reduce its use of the other arterial streets.

Each of the refined concepts has tradeoffs. The C-D Concept has fewer structures than the V1 (MUT) and V2 (LR) Concepts, which allows it to have a narrower footprint south of the BP campus between Benson Blvd and 36th Avenue. However, the C-D Concept provides fewer access points to Midtown (1.5 miles between access points), which results in higher traffic volumes and more congestion on the frontage road system. More lanes are needed to serve this traffic, which results in larger frontage road intersections and longer pedestrian and bicycle crossing distances. This in turn reduces the comfort for non-motorized users. Even with only one additional frontage road lane in each direction, the C-D Concept still won't have as much capacity as the V1 (MUT) and V2 (LR) Concepts.

This traffic report has been performed as part of the PEL Study for the Seward Highway Corridor between 20th Avenue and Tudor Road in Midtown Anchorage. Selection of a preferred concept considers traffic performance alongside other inter-related issues, such as land use, ROW, utility conflicts, environmental issues, and community and agency feedback.

ATTACHMENT A – TRAVEL DEMAND MODELING MEMOS AND FORECASTED VOLUMES

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TECHNICAL MEMORANDUM

Seward Highway: Midtown Congestion Relief

Travel Demand Model Assumptions

Date:	December 22, 2017	Project #: 21302
To:	Steve Noble, PE, DOWL	
From:	Andrew Ooms, PE, Miao Gao, and Wende Wilber, AICP, PMP	

INTRODUCTION

This memorandum documents the assumptions that will be used for the initial "corridor no build" travel demand modeling effort for the Seward Highway: Midtown Congestion Relief project. This memorandum summarizes the team meeting on these topics held on October 25, 2017, subsequent team meetings, and AMATS MTP modeling developments.

- The AMATS travel demand model is currently being updated for the 2040 Metropolitan Transportation Plan (MTP), but the adopted 2040 MTP model network won't be adopted in time to be incorporated into the analysis of the Planning and Environmental Linkage (PEL) portion of MCR project's timeline.
- The MTP team will be updating and expanding the network to represent the 2040 MTP projects in development. However, the 2030 and 2040 land use assumptions have been updated to correspond with the updated 2040 land use plan and the 2013 base network has been updated to include committed projects.
- The team will use the Seward Highway: O'Malley to Dimond project model with updates from the 2040 MTP process. The Seward Highway: O'Malley to Dimond model includes the following inputs:
    - 2013 base year roadway network and land use.
    - 2035 Interim MTP model network with the O'Malley to Dimond project as proposed and without Knik Arm Crossing.
    - 2040 AMATS land use assumptions adopted during the travel demand update in 2016. This land use input will be replaced by the 2040 land use plan input developed by the MTP team.
- Determined 2028 and 2048 as the two analysis years to be modeled under the following scenarios. These models years meet the requirements of the eventual PEL Implementation phase of the project.

- Three phases of the model will be constructed, though this memorandum focuses on the No Build phase:
    - **No Build:** full MTP project implementation up to analysis year except the Knik Arm Crossing (identified in the Interim 2035 MTP as projects 143 and 217), Highway to Highway (H2H) projects (projects 201A, 201B, and 201C), and without any improvements along the project corridor.
    - **Build**: The No Build model for each analysis year with the addition of the MCR project alternatives.
    - **Build Plus**: The Build model for the 2048 analysis year only with the addition of the Highway to Highway (H2H) projects (projects 201A, 201B, and 201C)

PROPOSED MODEL WORK PLAN

To enact the proposed model runs, the following work will need to be completed:

- Build 2028 network. The 2028 network will include the 2023 short term projects from the Interim 2035 MTP on top of the AMATS MTP committed projects network.
- Build 2048 network. The year 2048 roadway network would include no improvements or allocation of transportation funding past the 2035 horizon of the Interim 2035 MTP.
- Update transit network to current system.
- Refine network connections in study area for better localized results.
- Incorporate updated 2030 and 2040 MTP land use inputs to ensure the project model reflects the most up to date land use planning.
- Develop 2028 land use inputs as interpolation between the 2013 and 2030 land use databases.
- Develop 2048 land use inputs by straight-line extrapolation by TAZ from the 2030 and 2040 AMATS MTP land use inputs.
- The No Build models will be assembled as summarized in the table below as serve as the starting point for assessing corridor needs and developing project concepts. MCR project concepts and then H2H projects will then be added to these models in later stages of the MCR project.

Model Run	Land Use Input	Roadway Network Input	Comments
2028 No Build	2028 year interpolation between 2013 and 2030 AMATS land use	Committed projects and 2023 AMATS Interim MTP Short Term Projects (100-142) except H2H (201), this project (104 and 114), and Knik Arm Crossing (143)	Includes five years of traffic growth without the accompanying network investment.
2048 No Build	2048 year extrapolation beyond 2040 AMATS land use	Committed projects and 2035 AMATS Interim MTP Short and Long Range Projects (100-216) except this project (104 and 114), H2H (201), and Knik Arm Crossing (143 and 217)	Includes eight years of growth beyond the land use plan and 13 years of growth with the accompanying network investment.

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TECHNICAL MEMORANDUM

Seward Highway: Midtown Congestion Relief

Travel Demand Model Summary

Date:	March 23, 2018	Project #: 21302
To:	Steve Noble, PE, DOWL	
From:	Andrew Ooms, PE, Miao Gao, EIT, and Wende Wilber, AICP, PTP	

INTRODUCTION

This memorandum accompanies the 2028 and 2048 No Build model run outputs supporting the Seward Highway: Midtown Congestion Relief (MCR) project. This documentation builds on the travel Demand Model Assumptions memorandum dated December 22, 2017. As documented in that memorandum, the No Build models use the latest 2040 AMATS Metropolitan Transportation Plan (MTP) travel demand model including updates received in December 2017 from the MTP Consultant (the model was validated and calibrated by the MTP Consultant).

2028 AND 2028 MODEL DEVELOPMENT

Kittelson & Associates, Inc. (KAI) staff checked and refined this model for the study area and adapted it for use on the MCR project, including the following:

- Roadway network characteristics, including speed, facility type, and number of lanes.
- Added centroid connectors to more evenly load traffic to roadways, including:
    - Right-in/right-out only access to the Seward Highway at Sears Mall, Fred Meyer, and the BP building.
    - Adding connectors to minor roads assigned zero volume.
- Confirmed unusual travel analysis zones (TAZ) land use inputs.
- Created new land use inputs by interpolating and extrapolating 2013 and 2040 lane uses to 2028 and 2048 analysis years.
- Created new 2028 and 2048 No Build roadway network inputs based on the AMATS Interim 2035 MTP planned project lists except for planned improvements on the study corridor, the Knik Arm Bridge project, and the adjacent Highway to Highway projects.

MODEL REFINEMENT

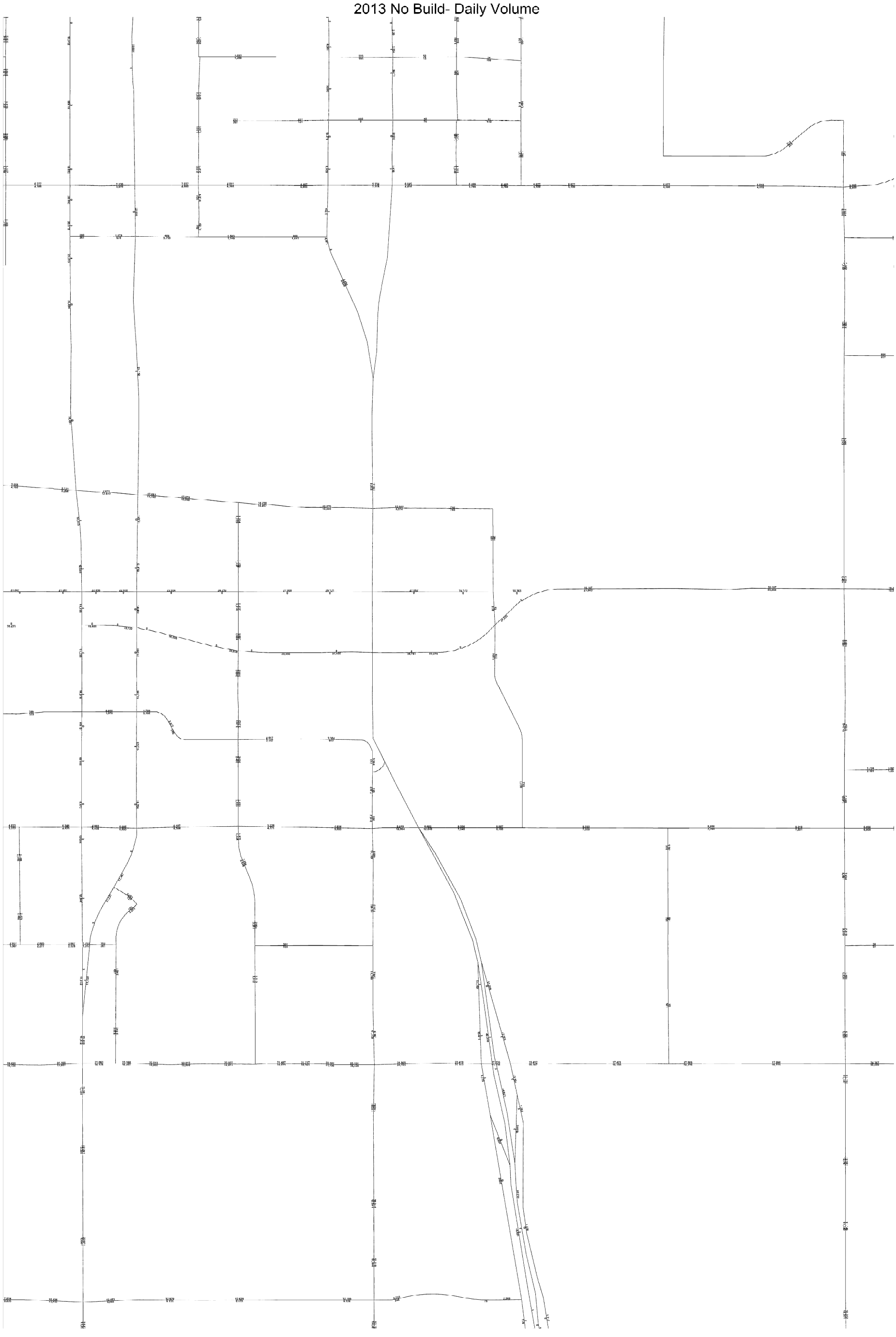
The initial model runs were evaluated and compared to existing traffic counts, expected growth, and overall reasonableness. The identified issues and associated refinements are shown in Table 1.

Table 1 MCR Travel Demand Modeling Evaluation

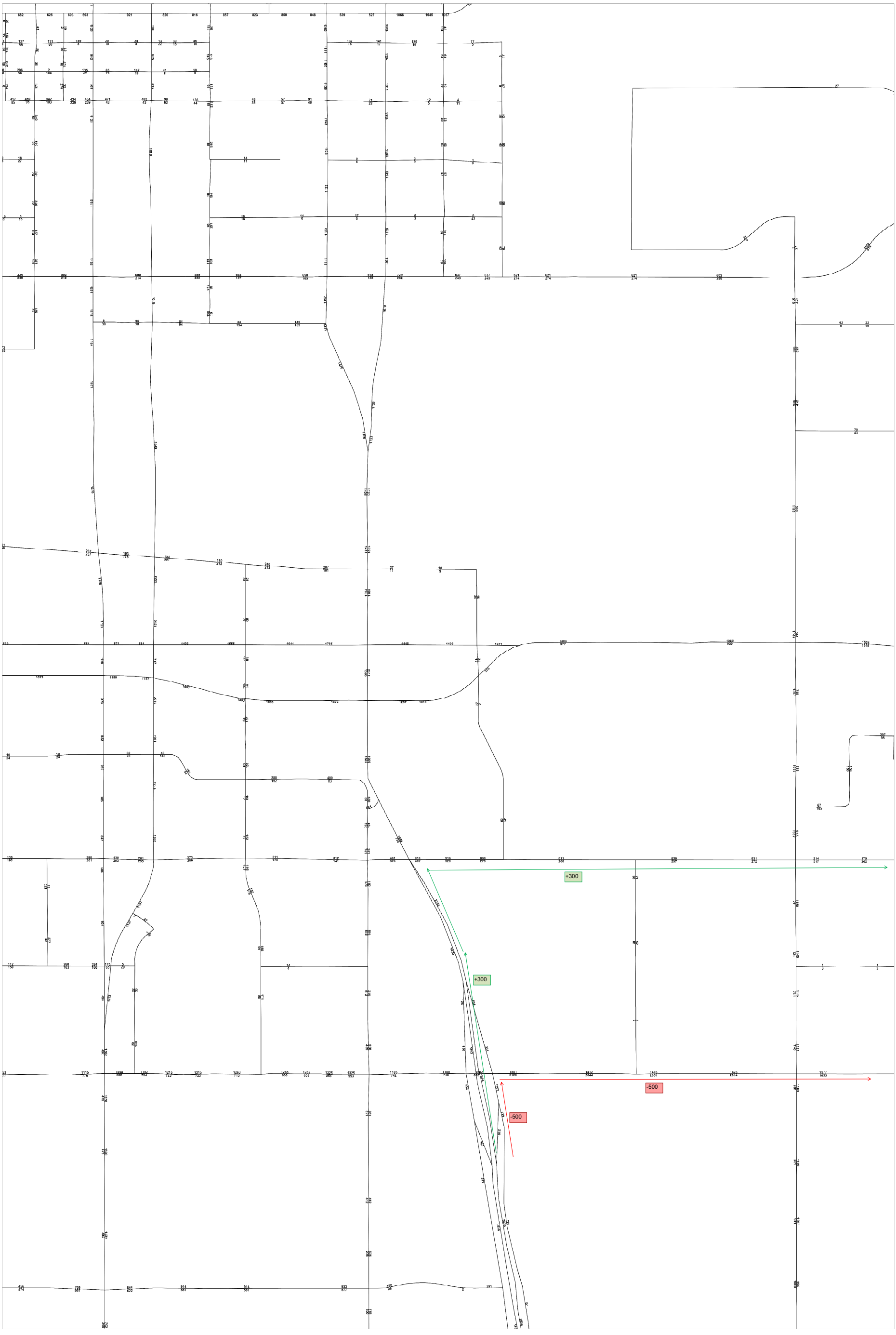
Issue	Action	Result
The southbound Seward Highway to Old Seward ramp volume (near Moose's Tooth) is higher than expected.	• Lowered the link speed from 30 to 10, the posted speed is 25, but since the curve is sharp, it is reasonable to assume people drive through at a lower speed. • Lower the speed of Old Seward south of this connector from 35 to 25. • Lower the speed of Old Seward north of this connector from 30 to 15, since the posted speed is 15MPH.	Assigned volumes were reduced.
36th Avenue volumes west of Old Seward Highway are below existing counts.	• Verified link characteristics • Adjusted 36th Avenue at Seward Highway configuration	Volumes increased but remain lower than expected.
Latouche Street volumes are below existing counts.	• Added centroid connector to distribute traffic.	Adjustments addressed issue.
2028 volumes are higher than 2048 volumes on some low volumes links. 20th Avenue volumes low in 2028.	• Verified centroid loadings.	No changes made. Variation attributable to 2048 roadway projects, outcome of model iteration, and inherent variability in lower volume links.

After these additional refinements, the 2028 and 2048 link volumes are suitable for informing growth rates in the study area and as a basis for planning level alternatives modeling. As with any travel demand model output, it is not recommended to use raw link volumes directly from the model for traffic analysis. Volume adjustment methods, such as those described in NCHRP 765, are recommended.

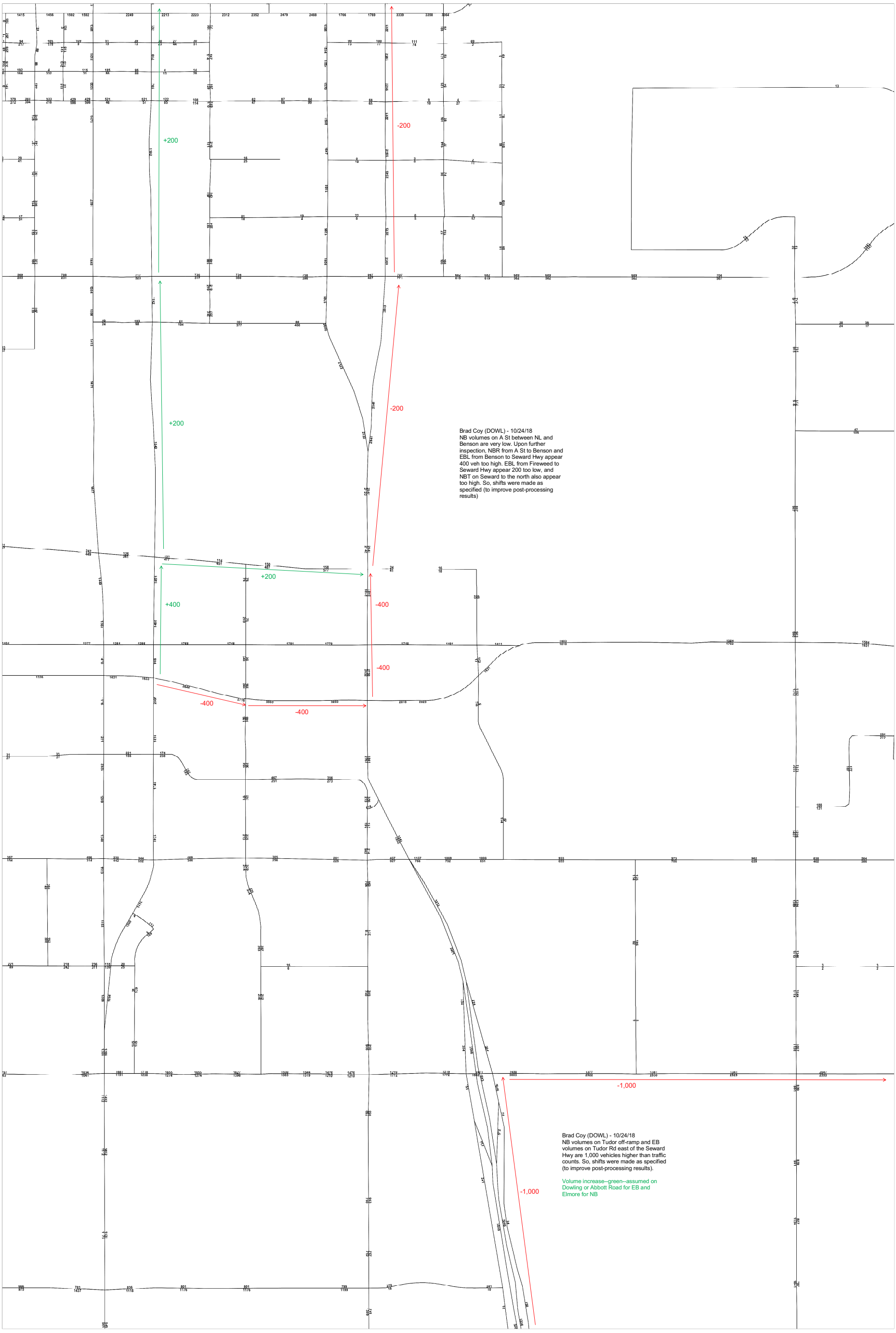
2013 No Build- Daily Volume



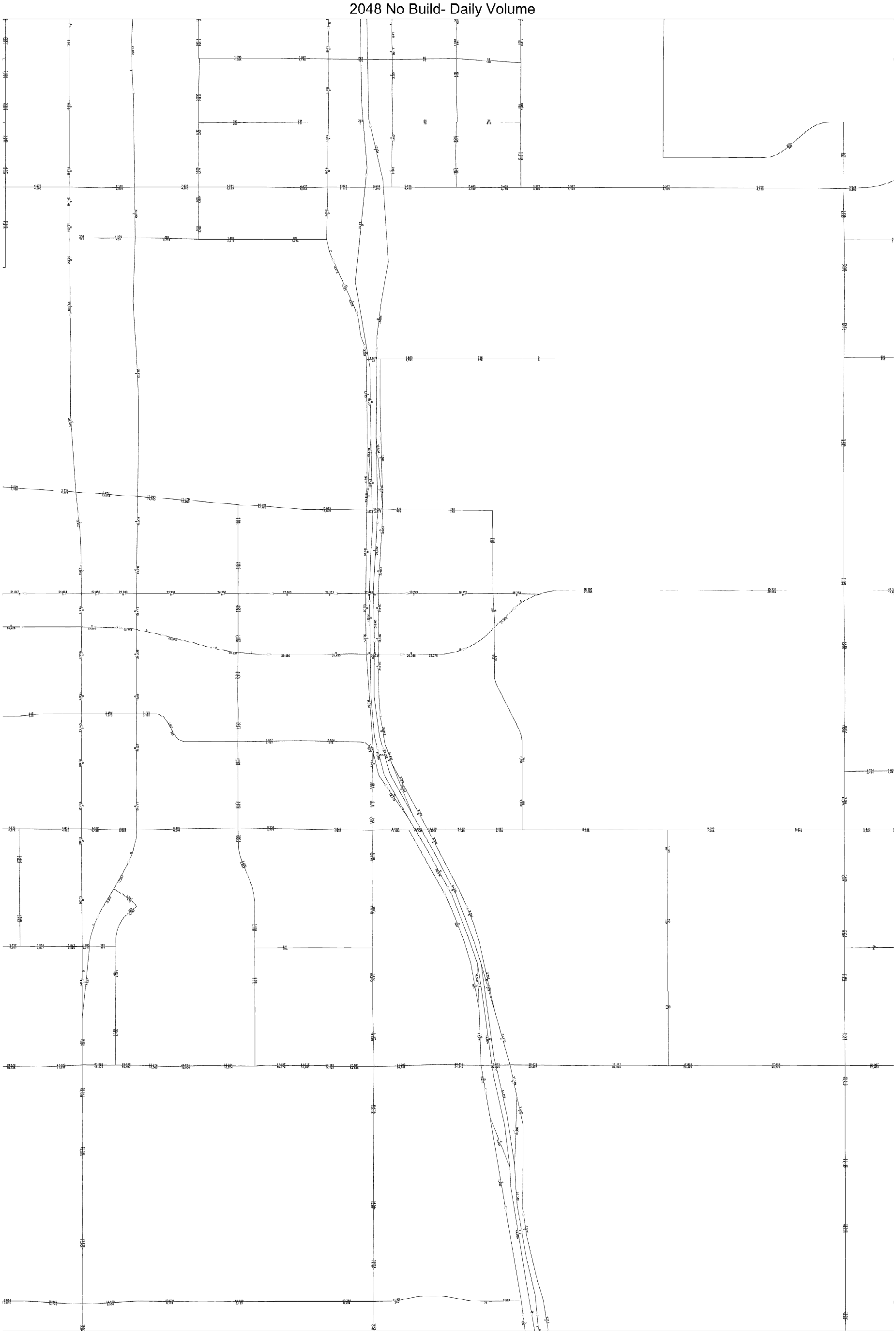
2013 No Build- AM Volume



2013 No Build- PM Volume



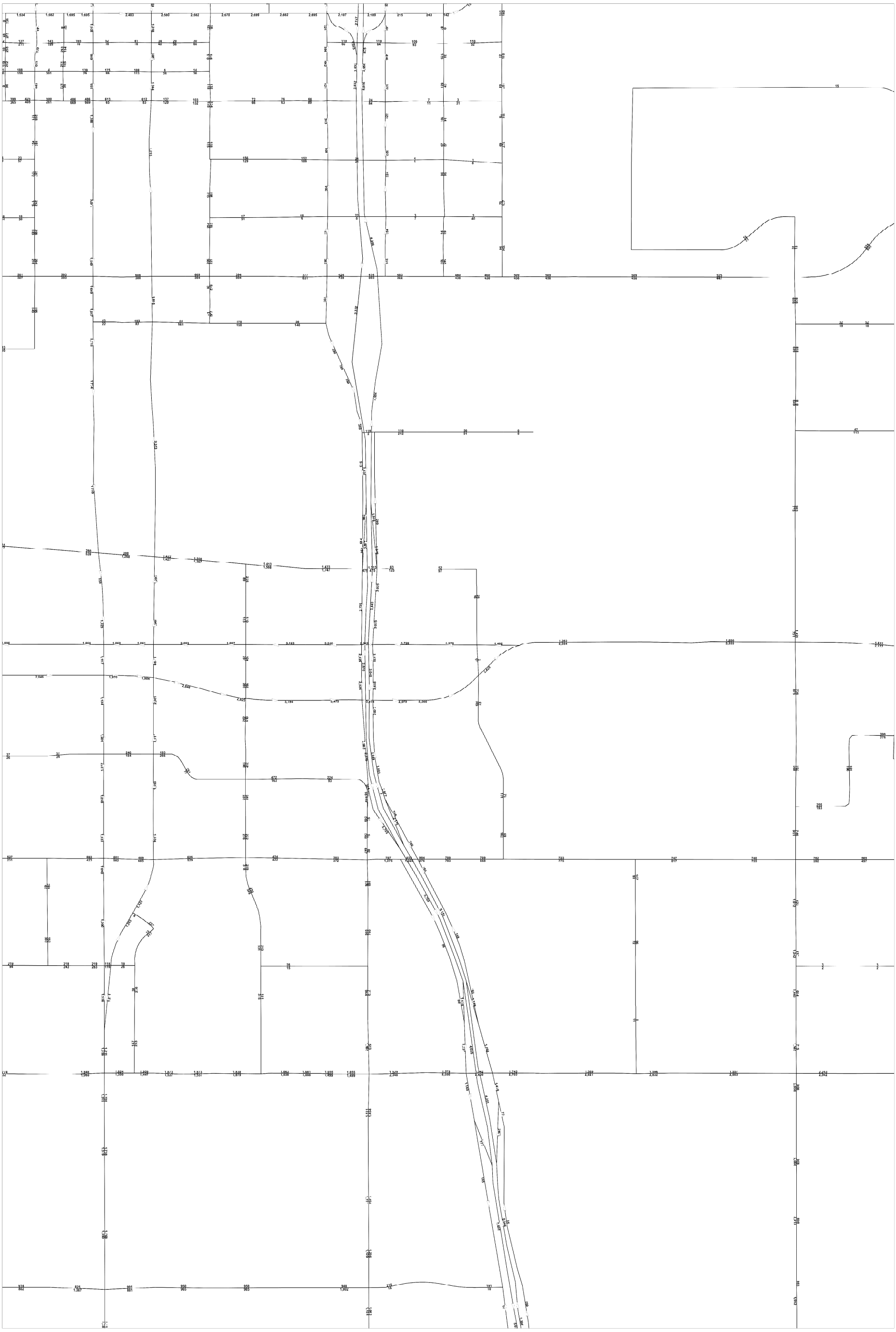
2048 No Build- Daily Volume



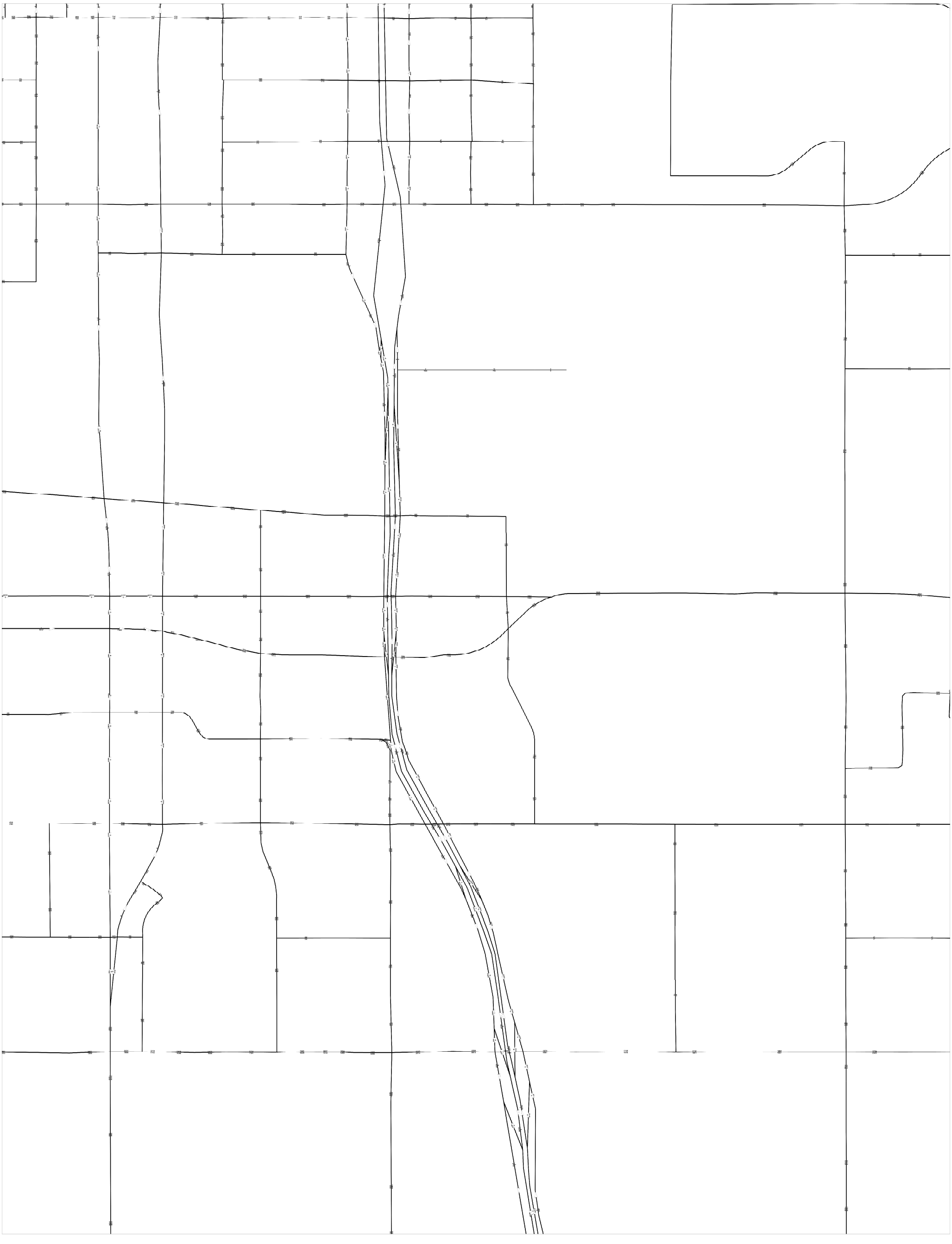
2048 No Build- AM Volume



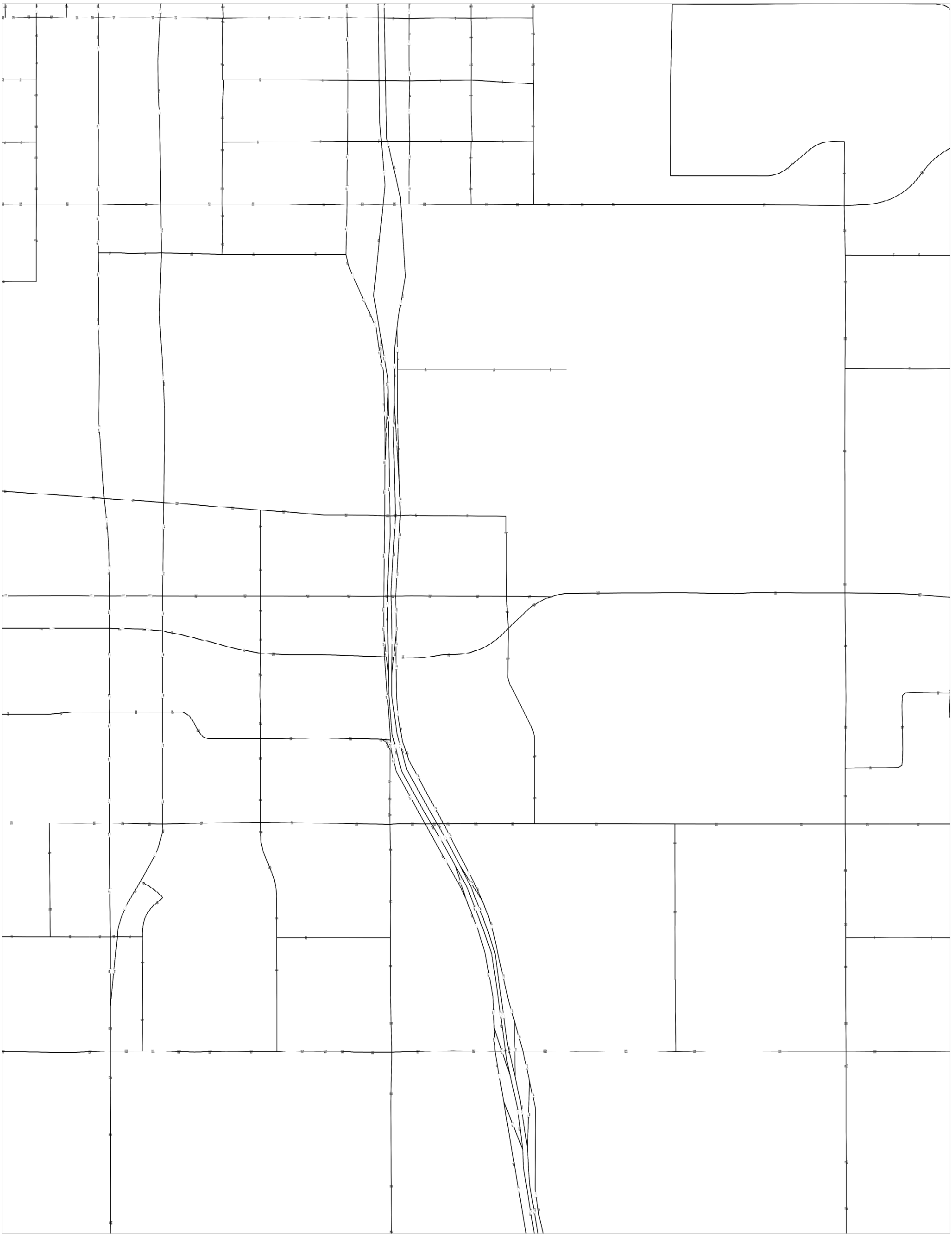
2048 No Build- PM Volume



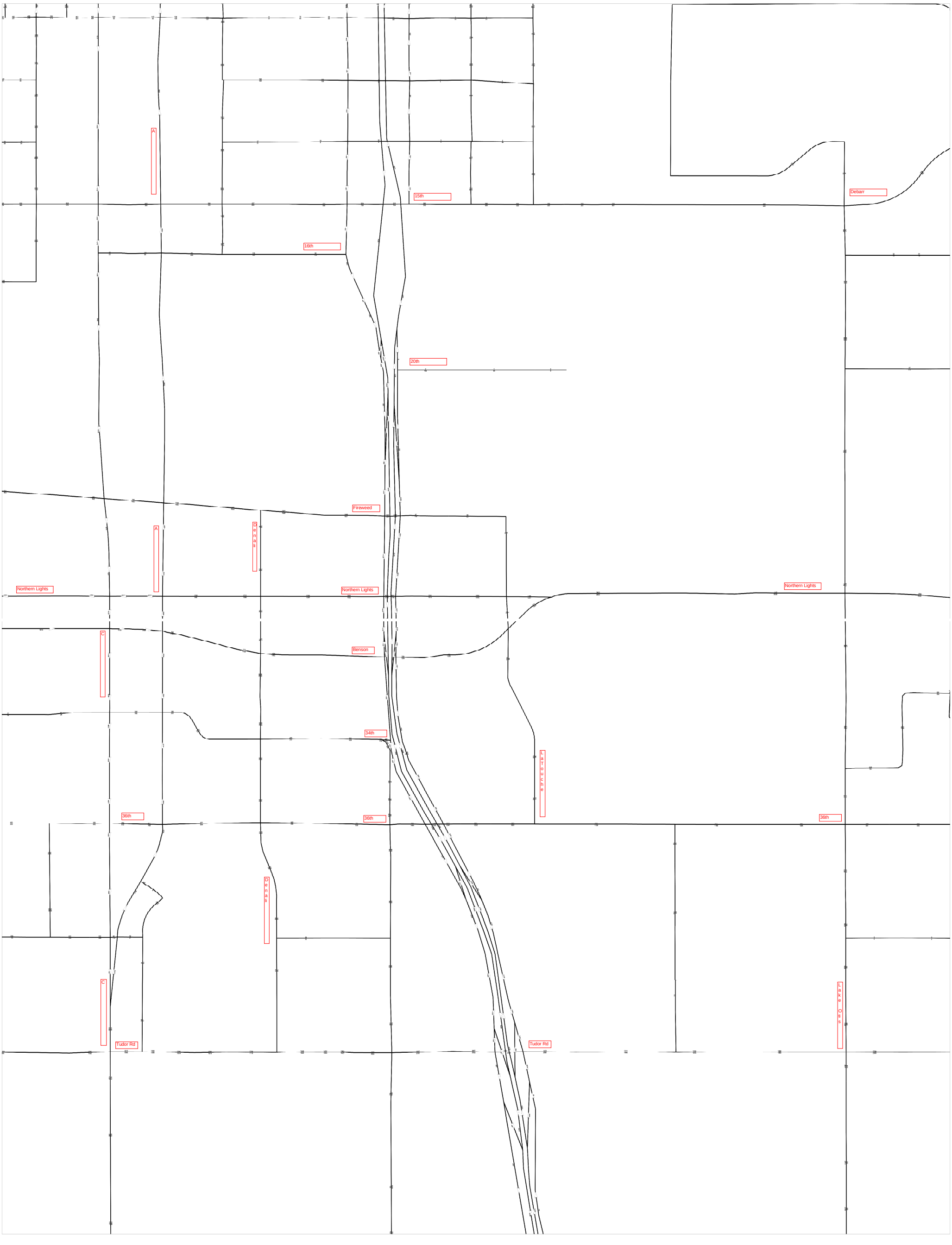
2048 Concept A- Daily Volume



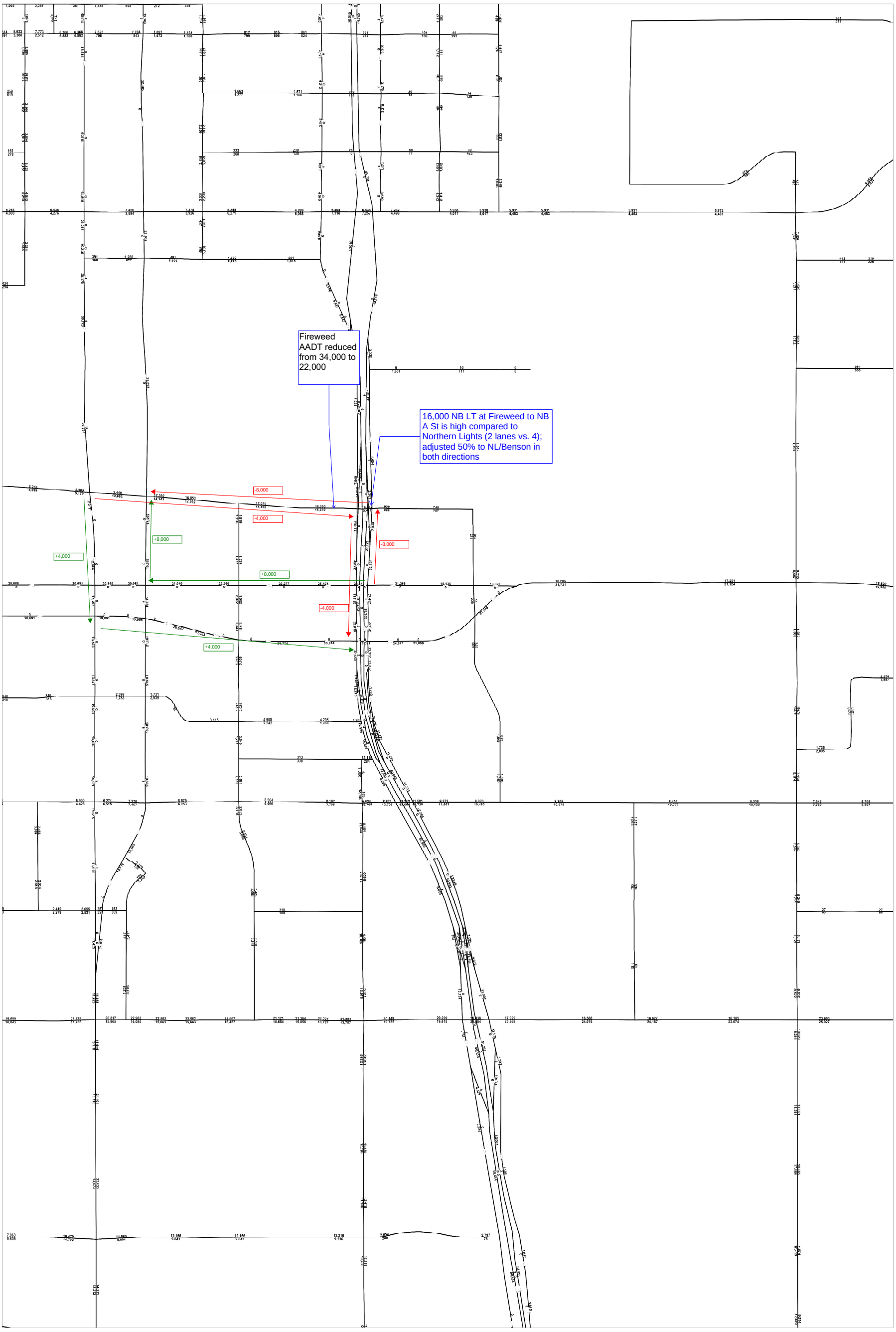
2048 Concept A- AM Volume



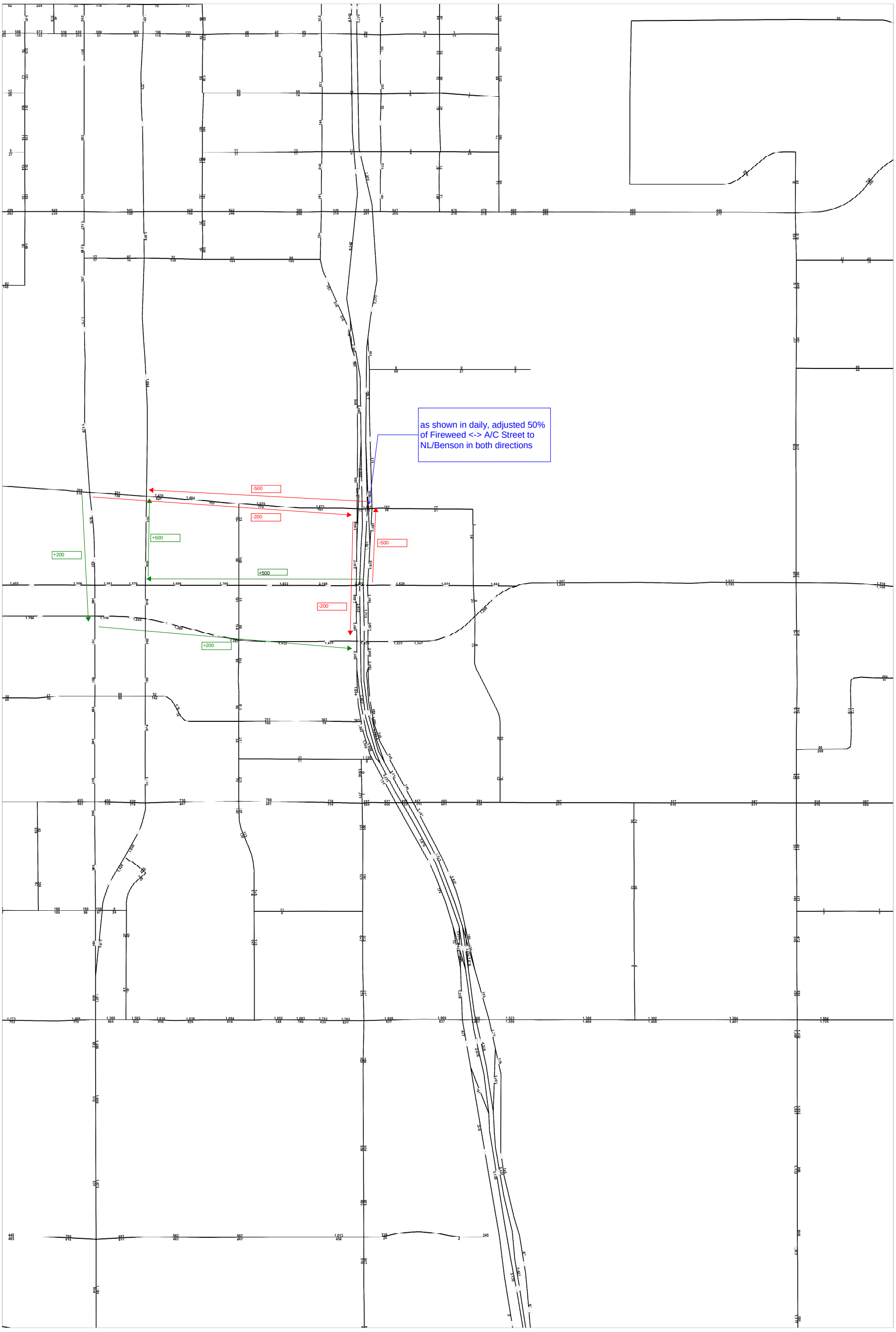
2048 Concept A- PM Volume



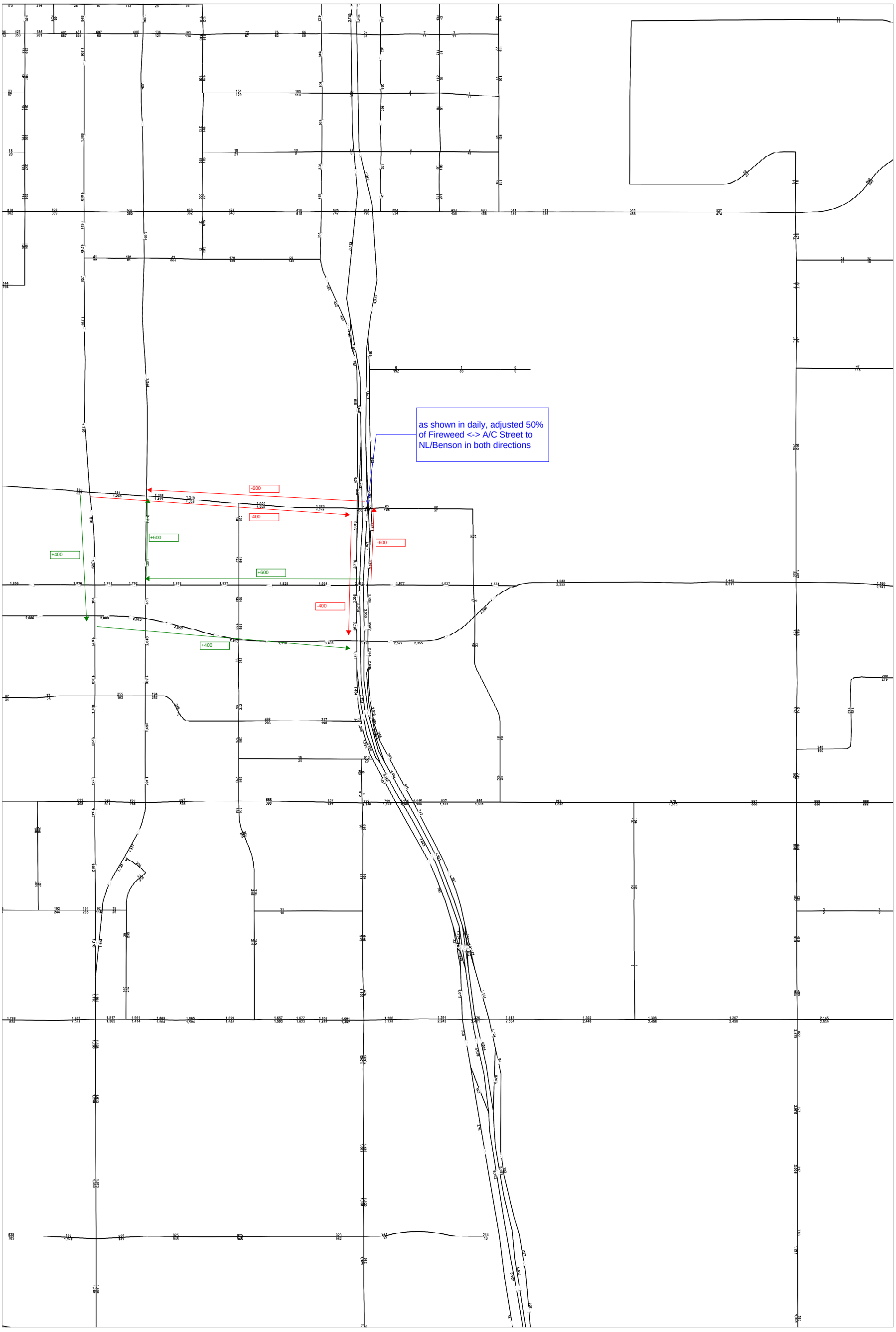
2048 Concept B- Daily Volume



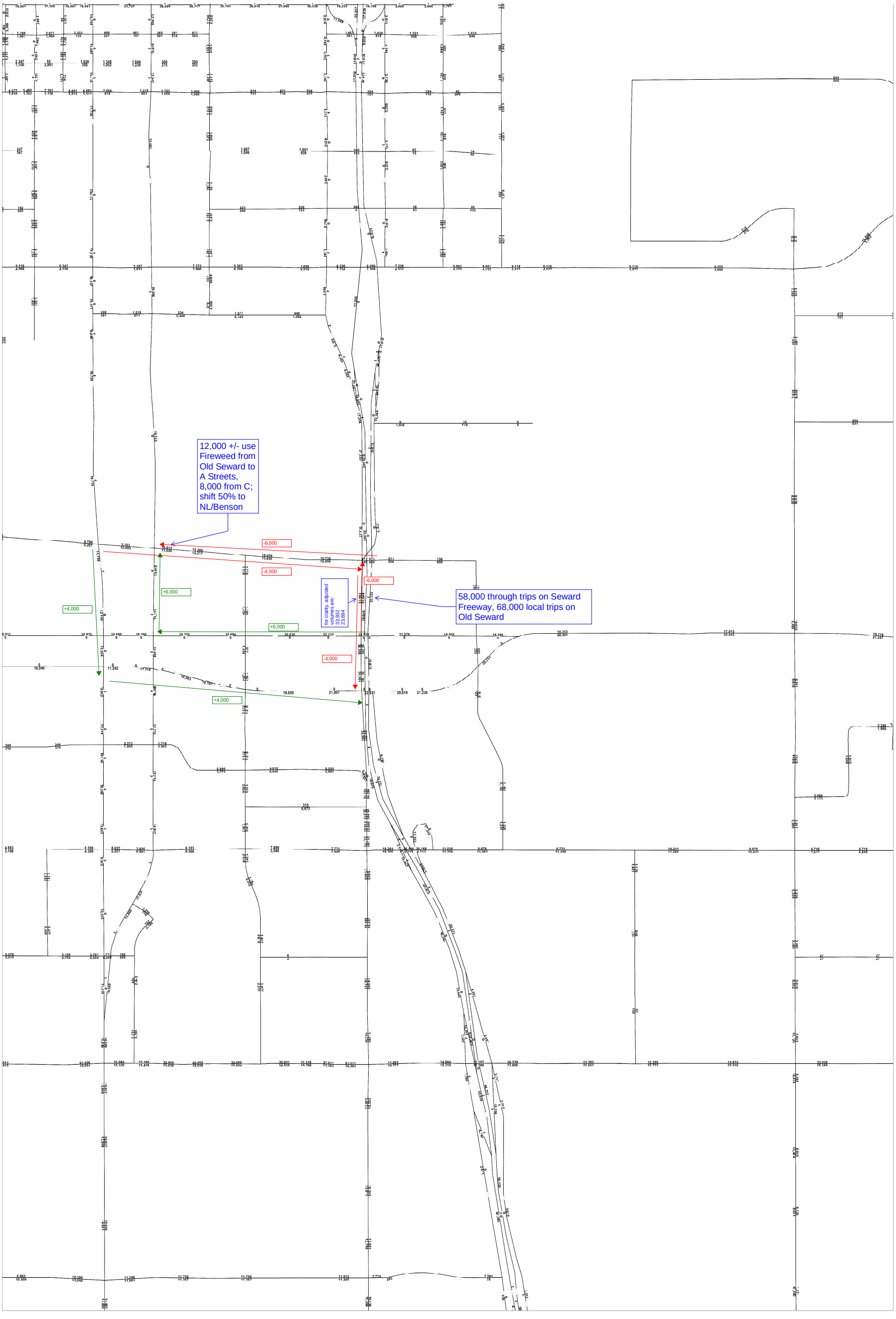
2048 Concept B- AM Volume



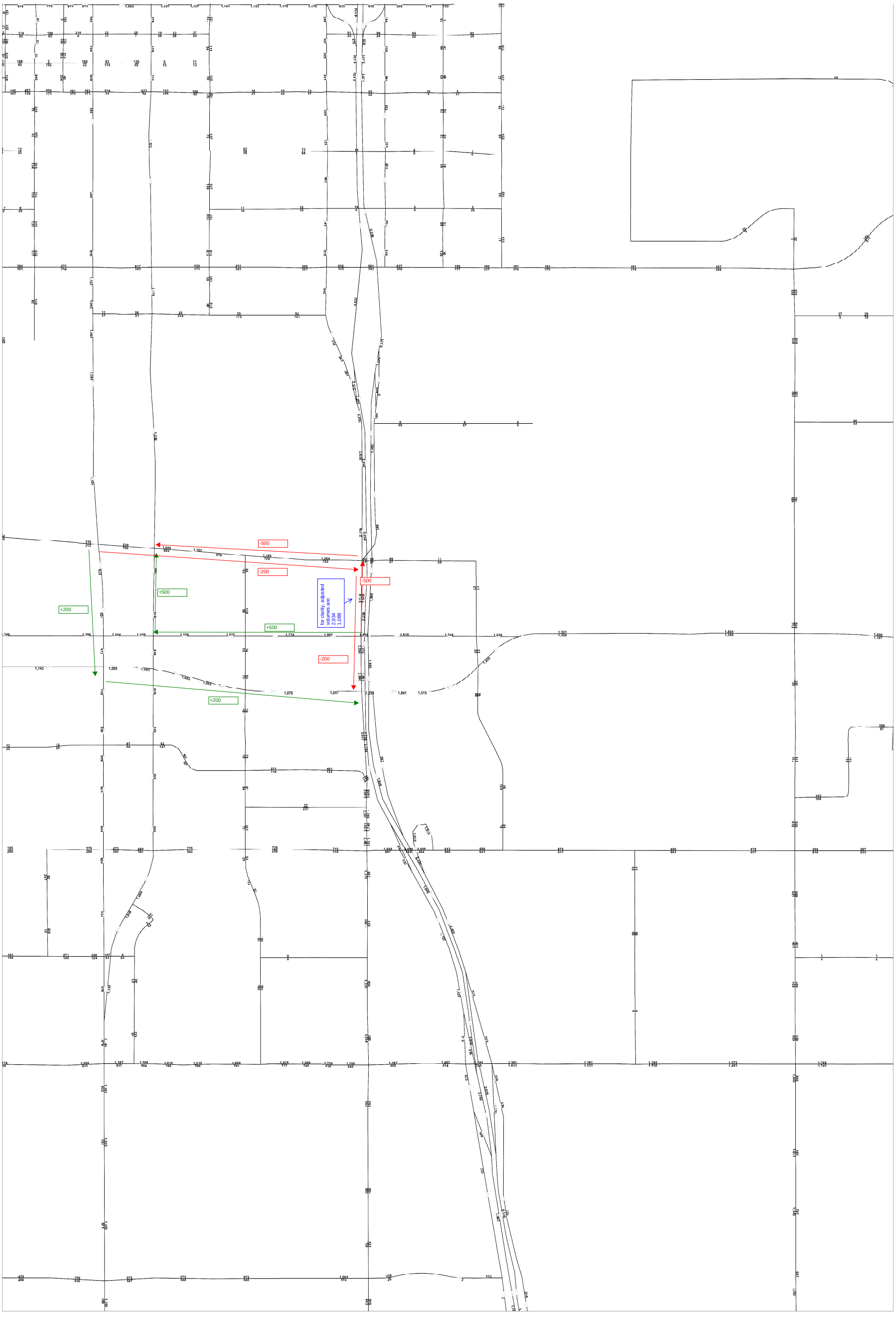
2048 Concept B- PM Volume



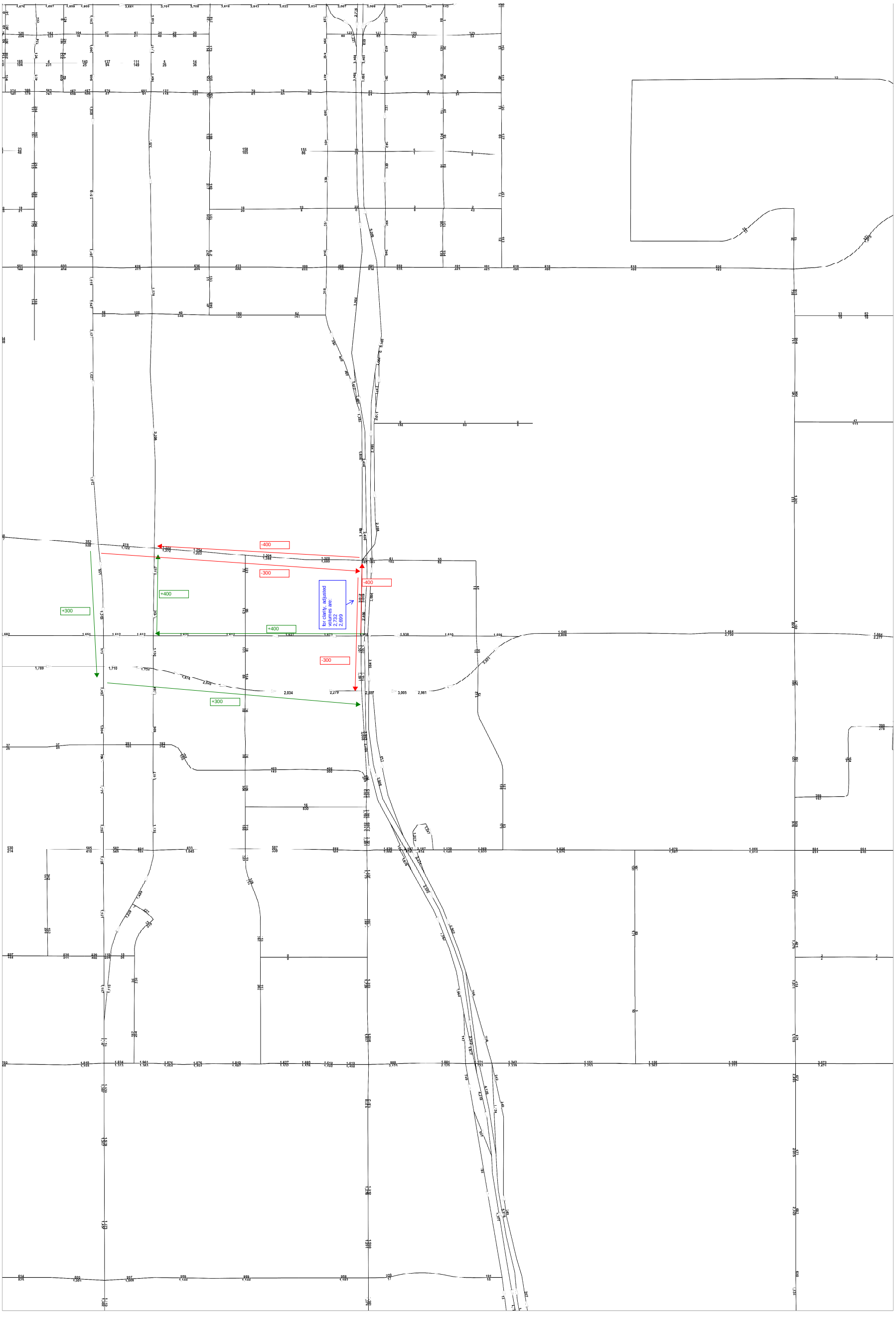
2048 Concept E- Daily Volume



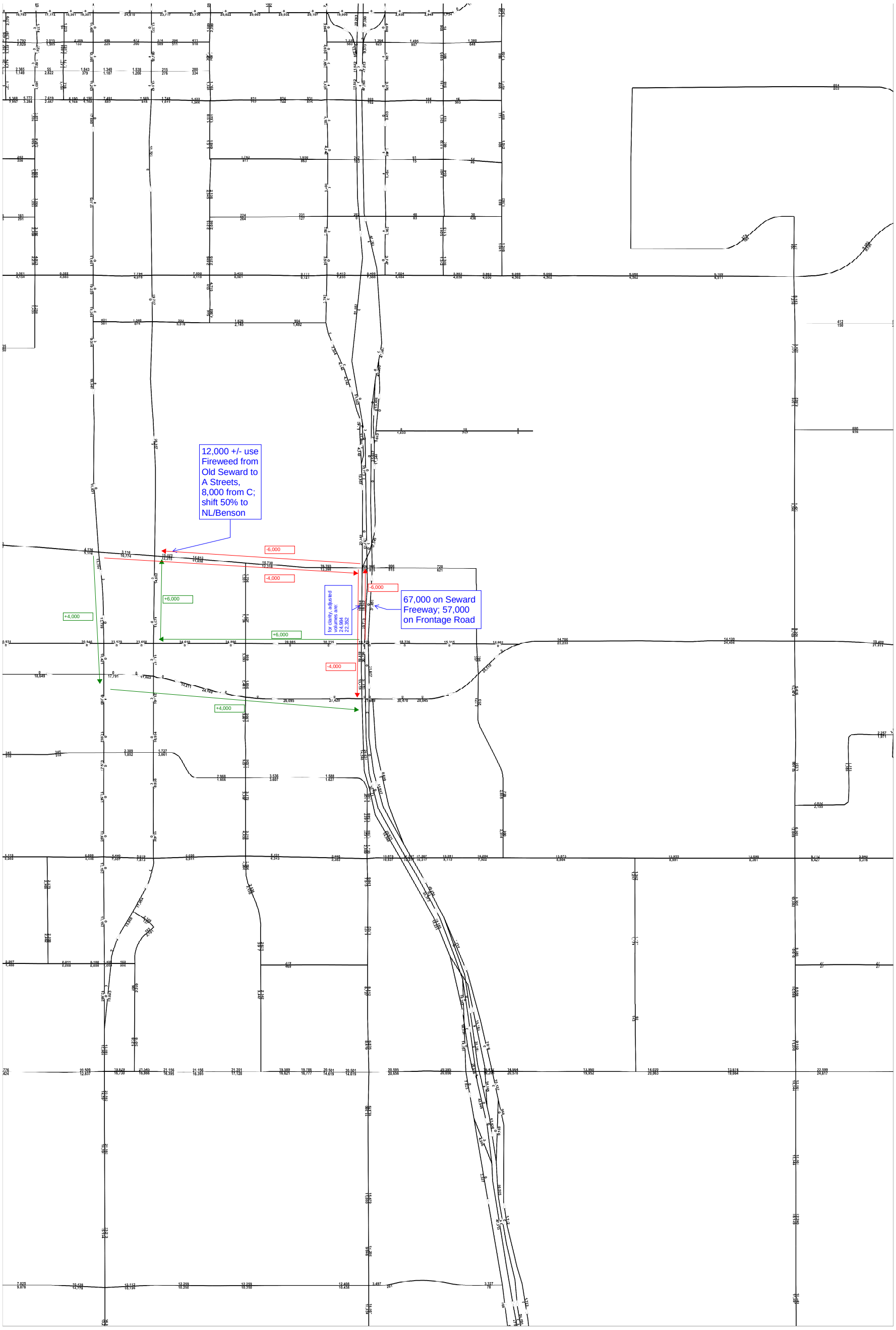
2048 Concept E- AM Volume



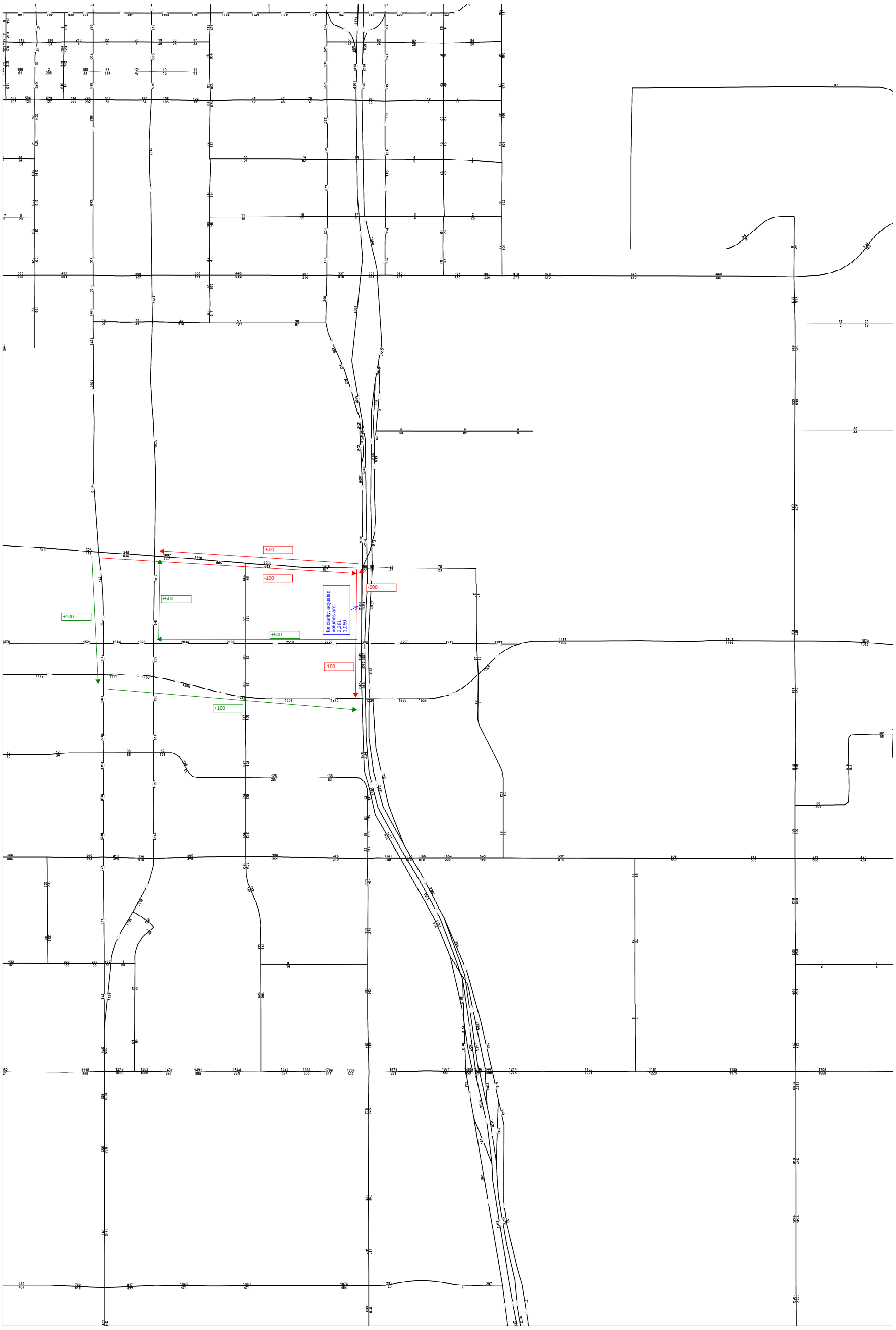
2048 Concept E- PM Volume



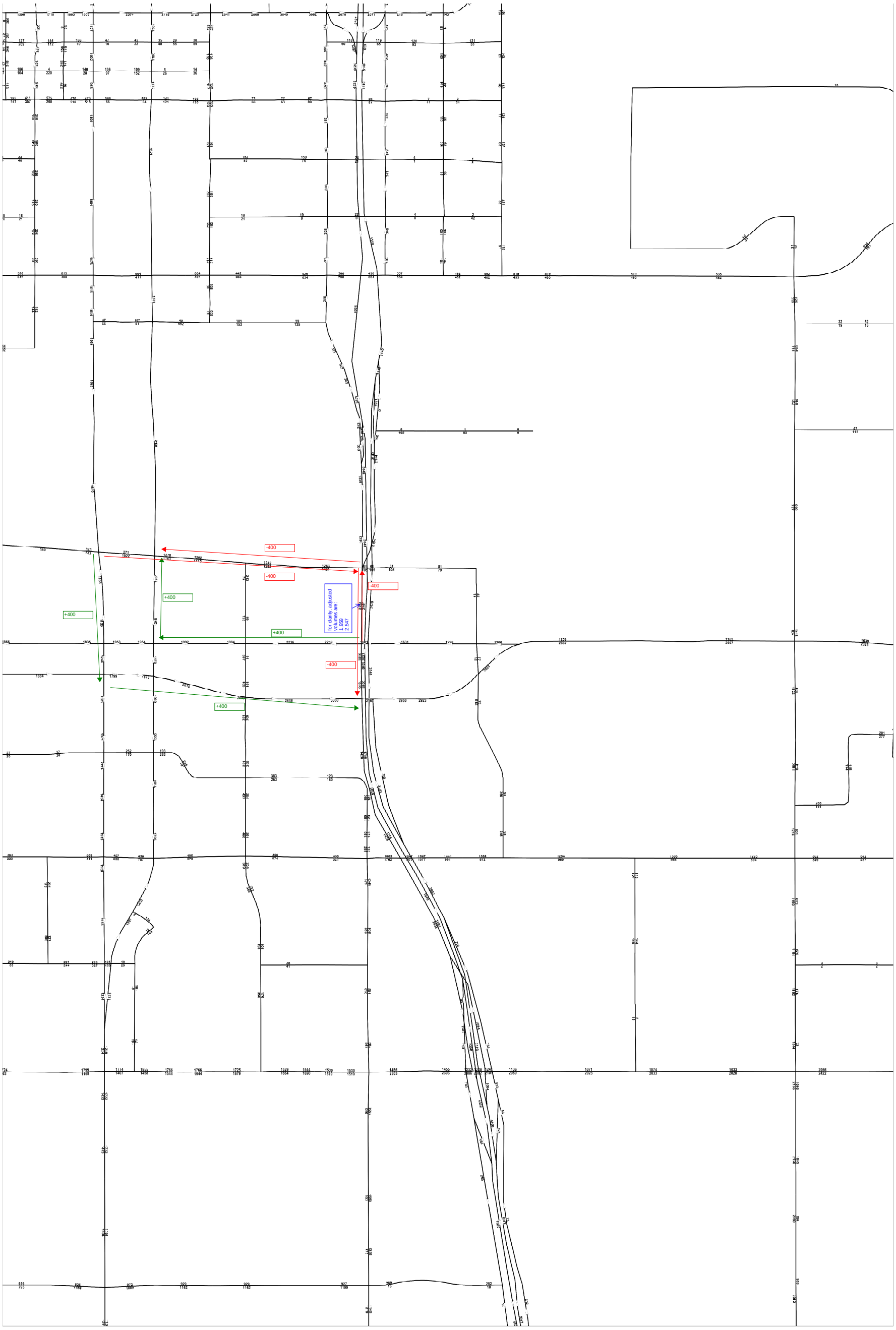
2048 Concept G- Daily Volume



2048 Concept G- AM Volume



2048 Concept G- PM Volume



ATTACHMENT B – VOLUME DEVELOPMENT RESOURCES

Traffic Camera Count and Placement Information

Intersection Name: Gambell St & 15th Ave

Intersection Location	
Northbound Street	N/A
Southbound Street	Gambell St
Eastbound Street	15th Ave
Westbound Street	15th Ave
City, State	Anchorage, AK

Project Information	
Name	Midtown Congestion Relief
Client	AK DOT&PF
Project #	1124.62458.01, Phase 02
PM/Traffic Lead	Steve Noble/Brad Coy

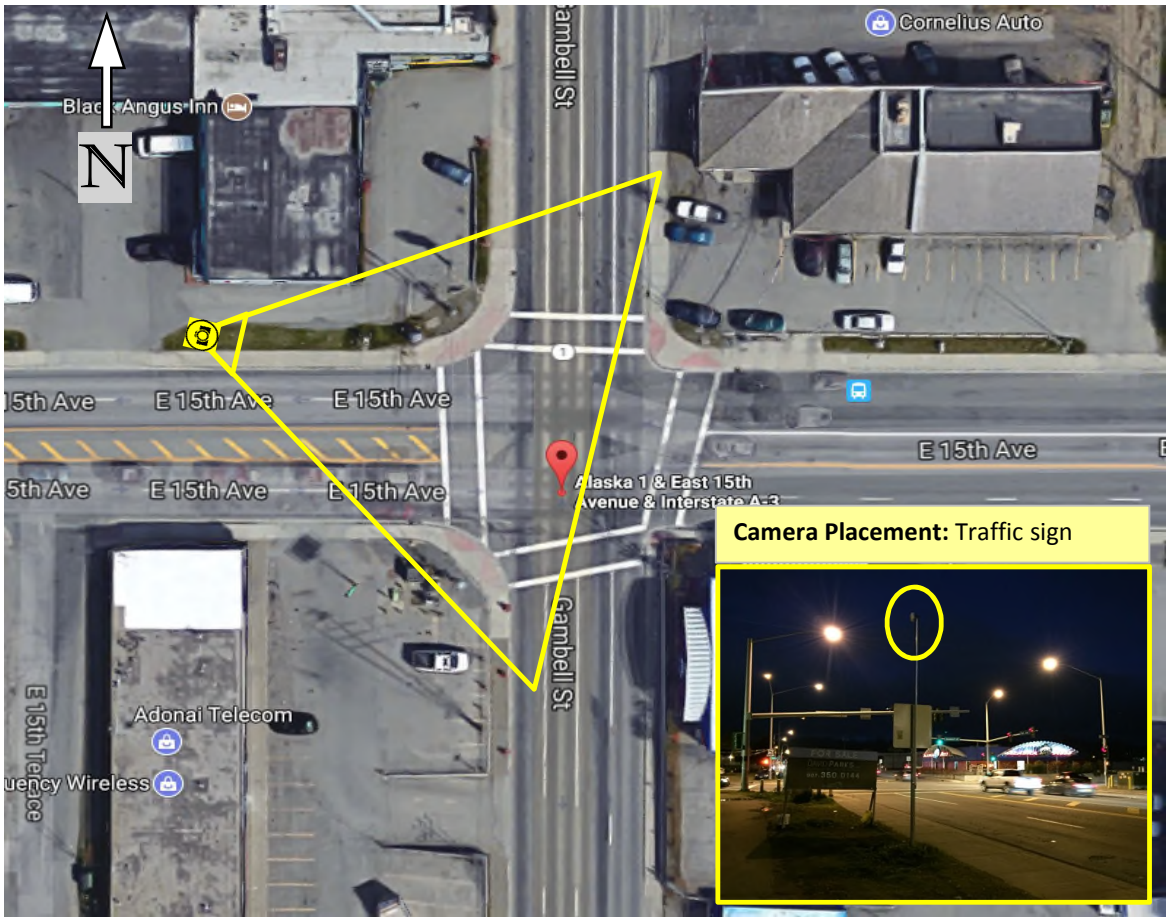
Count Description (e.g., day(s) of week, time periods, other related counts also occuring, etc.)

2 weekdays (Tue, Wed, or Thu) back-to-back; AM/PM peak periods are priority, but midday is also desirable

Camera Setup/Video Footage	
Staff Responsible	Brad Coy
Setup Time	10/10/2017 6:27 AM
Take Down Time	10/11/2017 8:25 PM
Duration (hours)	37.97
Camera # (2-digit)	79

Count Date, Time, Vendor	
Date	10/10/2017 (Tuesday)
Start Time	6:30 AM
End Time	7:30 PM
Duration (hours)	13.00
Count Vendor	CountingCars.com

Camera Placement



Other Notes (Before, During, or After Count)

DOWL

Turning Movement Count

Gambell St & 15th Ave

Total Vehicles (15-Minute Periods)

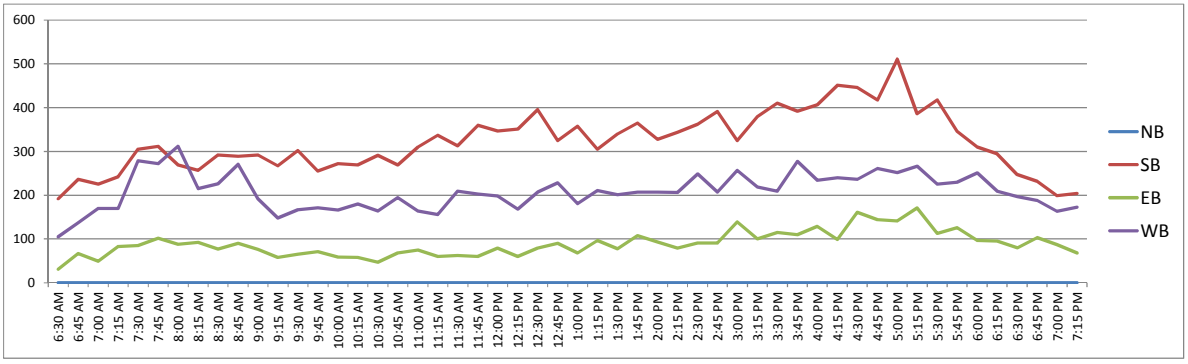
All Data

Tuesday, October 10, 2017

6:30 AM to 7:30 PM

Start Time	N/A (Northbound)					Gambell St (Southbound)					15th Ave (Eastbound)					15th Ave (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
6:30 AM	0	0	0	0	1	0	6	180	6	0	0	0	23	8	1	0	41	64	0	0	328
6:45 AM	0	0	0	0	2	0	9	223	4	3	0	0	55	12	3	0	50	87	0	0	440
7:00 AM	0	0	0	0	0	0	10	208	7	2	0	0	36	13	0	0	51	119	0	1	444
7:15 AM	0	0	0	0	0	0	12	219	11	1	0	0	66	17	2	0	49	121	0	0	495
7:30 AM	0	0	0	0	1	0	15	277	13	0	0	0	75	10	2	0	87	192	0	0	669
7:45 AM	0	0	0	0	1	0	18	276	18	0	0	0	82	20	1	0	79	193	0	0	686
8:00 AM	0	0	0	0	1	0	18	233	18	0	0	0	66	22	3	0	87	225	0	0	669
8:15 AM	0	0	0	0	0	0	9	234	14	1	0	0	78	14	1	0	65	150	0	0	564
8:30 AM	0	0	0	0	0	0	15	259	18	0	0	0	59	18	3	0	53	173	0	0	595
8:45 AM	0	0	0	0	1	0	19	261	9	0	0	0	65	25	2	0	75	196	0	0	650
9:00 AM	0	0	0	0	0	0	20	262	10	0	0	0	58	18	2	0	58	134	0	0	560
9:15 AM	0	0	0	0	0	0	14	237	16	0	0	0	40	18	3	0	50	98	0	0	473
9:30 AM	0	0	0	0	0	0	26	263	13	0	0	0	49	16	0	0	54	113	0	0	534
9:45 AM	0	0	0	0	0	0	14	228	13	1	0	0	56	15	5	0	57	114	0	0	497
10:00 AM	0	0	0	0	0	0	24	233	15	1	0	0	46	13	0	0	54	112	0	1	497
10:15 AM	0	0	0	0	2	0	14	241	14	1	0	0	51	7	4	0	68	112	0	1	507
10:30 AM	0	0	0	0	1	0	15	256	20	0	0	0	35	12	6	0	64	100	0	0	502
10:45 AM	0	0	0	0	0	0	10	241	18	0	0	0	52	16	2	0	79	116	0	0	532
11:00 AM	0	0	0	0	0	0	23	270	17	0	0	0	59	16	1	0	75	89	0	0	549
11:15 AM	0	0	0	0	0	0	31	288	18	0	0	0	54	6	6	0	54	102	0	0	553
11:30 AM	0	0	0	0	0	0	25	267	21	0	0	0	48	14	0	0	79	130	0	0	584
11:45 AM	0	0	0	0	1	0	29	310	21	1	0	0	47	13	1	0	66	137	0	2	623
12:00 PM	0	0	0	0	0	0	29	300	18	1	0	0	64	15	3	0	71	127	0	0	624
12:15 PM	0	0	0	0	0	0	32	291	28	2	0	0	45	15	3	0	69	99	0	0	579
12:30 PM	0	0	0	0	4	0	40	341	15	0	0	0	57	22	2	0	61	146	0	0	682
12:45 PM	0	0	0	0	1	0	21	280	24	0	0	0	66	24	2	0	70	158	0	0	643
1:00 PM	0	0	0	0	0	0	33	297	28	1	0	0	56	12	4	0	67	114	0	2	607
1:15 PM	0	0	0	0	0	0	34	253	18	0	0	0	83	14	2	0	68	143	0	0	613
1:30 PM	0	0	0	0	3	0	36	288	16	0	0	0	60	18	2	0	73	128	0	1	619
1:45 PM	0	0	0	0	0	0	32	308	25	0	0	0	83	25	1	0	66	141	0	0	680
2:00 PM	0	0	0	0	0	0	38	273	17	1	0	0	69	24	3	0	74	133	0	1	628
2:15 PM	0	0	0	0	3	0	25	297	22	2	0	0	72	7	1	0	79	127	0	1	629
2:30 PM	0	0	0	0	1	0	34	308	20	1	0	0	74	17	1	0	70	179	0	3	702
2:45 PM	0	0	0	0	0	0	42	329	20	0	0	0	67	24	0	0	53	154	0	0	689
3:00 PM	0	0	0	0	4	0	31	270	24	0	0	0	107	32	4	0	79	178	0	2	721
3:15 PM	0	0	0	0	1	0	46	319	15	1	0	0	85	15	5	0	60	159	0	0	699
3:30 PM	0	0	0	0	0	0	55	334	21	4	0	0	91	24	1	0	66	143	0	1	734
3:45 PM	0	0	0	0	0	0	38	336	18	1	0	0	90	20	2	0	94	183	0	3	779
4:00 PM	0	0	0	0	1	0	35	356	16	3	0	0	100	29	3	0	74	160	0	1	770
4:15 PM	0	0	0	0	1	0	43	379	29	3	0	0	86	13	3	0	60	180	0	4	790
4:30 PM	0	0	0	0	0	0	65	360	21	0	0	0	132	29	2	0	64	172	0	0	843
4:45 PM	0	0	0	0	0	0	40	364	14	0	0	0	119	25	2	0	93	168	0	0	823
5:00 PM	0	0	0	0	1	0	92	392	27	1	0	0	111	30	3	0	54	198	0	2	904
5:15 PM	0	0	0	0	0	0	51	314	21	0	0	0	147	24	1	0	71	195	0	1	823
5:30 PM	0	0	0	0	1	0	66	325	27	1	0	0	91	22	4	0	79	146	0	1	756
5:45 PM	0	0	0	0	1	0	50	284	12	2	0	0	103	23	2	0	64	166	0	0	702
6:00 PM	0	0	0	0	1	0	24	266	20	2	0	0	79	18	2	0	72	179	0	1	658
6:15 PM	0	0	0	0	0	0	29	240	26	0	0	0	82	13	6	0	71	138	0	0	599
6:30 PM	0	0	0	0	3	0	28	203	16	0	0	0	69	11	0	0	68	129	0	0	524
6:45 PM	0	0	0	0	0	0	17	200	15	1	0	0	82	21	3	0	69	119	0	1	523
7:00 PM	0	0	0	0	0	0	15	175	9	1	0	0	68	19	4	0	63	100	0	0	449
7:15 PM	0	0	0	0	2	0	12	180	12	2	0	0	54	14	7	0	66	107	0	0	445
Total	0	0	0	0	39	0	1,509	14,328	908	41	0	0	3,692	922	126	0	3,483	7,346	0	30	32,188

*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total" or graph below)





Turning Movement Count

Gambell St & 15th Ave

Heavy Vehicles (15-Minute Periods)

All Data

Tuesday, October 10, 2017

6:30 AM to 7:30 PM

Start Time	N/A (Northbound)				Gambell St (Southbound)				15th Ave (Eastbound)				15th Ave (Westbound)				Period Total (Veh)
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	
6:30 AM	0	0	0	0	0	0	3	1	0	0	1	0	0	1	2	0	8
6:45 AM	0	0	0	0	0	0	6	0	0	0	0	1	0	1	2	0	10
7:00 AM	0	0	0	0	0	1	4	1	0	0	2	0	0	2	4	0	14
7:15 AM	0	0	0	0	0	1	5	0	0	0	1	0	0	0	2	0	9
7:30 AM	0	0	0	0	0	0	4	0	0	0	1	0	0	2	1	0	8
7:45 AM	0	0	0	0	0	1	5	0	0	0	1	0	0	0	3	0	10
8:00 AM	0	0	0	0	0	1	13	0	0	0	1	0	0	1	5	0	21
8:15 AM	0	0	0	0	0	0	10	1	0	0	1	0	0	2	4	0	18
8:30 AM	0	0	0	0	0	0	17	0	0	0	1	2	0	2	2	0	24
8:45 AM	0	0	0	0	0	0	23	0	0	0	0	1	0	1	1	0	26
9:00 AM	0	0	0	0	0	1	16	0	0	0	2	0	0	1	0	0	20
9:15 AM	0	0	0	0	0	0	11	1	0	0	1	0	0	1	2	0	16
9:30 AM	0	0	0	0	0	1	11	1	0	0	1	0	0	3	4	0	21
9:45 AM	0	0	0	0	0	1	13	1	0	0	1	0	0	0	6	0	22
10:00 AM	0	0	0	0	0	0	9	0	0	0	1	0	0	4	3	0	17
10:15 AM	0	0	0	0	0	1	14	0	0	0	2	0	0	1	5	0	23
10:30 AM	0	0	0	0	0	1	13	1	0	0	1	0	0	3	4	0	23
10:45 AM	0	0	0	0	0	2	19	0	0	0	1	0	0	5	5	0	32
11:00 AM	0	0	0	0	0	0	13	0	0	0	3	0	0	2	4	0	22
11:15 AM	0	0	0	0	0	0	13	0	0	0	1	0	0	2	1	0	17
11:30 AM	0	0	0	0	0	1	11	0	0	0	1	0	0	5	4	0	22
11:45 AM	0	0	0	0	0	1	12	2	0	0	1	0	0	1	4	0	21
12:00 PM	0	0	0	0	0	0	16	1	0	0	1	0	0	1	2	0	21
12:15 PM	0	0	0	0	0	3	17	0	0	0	0	0	0	4	3	0	27
12:30 PM	0	0	0	0	0	2	13	0	0	0	0	1	0	3	4	0	23
12:45 PM	0	0	0	0	0	1	12	1	0	0	1	0	0	1	5	0	21
1:00 PM	0	0	0	0	0	1	14	3	0	0	1	0	0	1	5	0	25
1:15 PM	0	0	0	0	0	0	10	0	0	0	2	0	0	2	2	0	16
1:30 PM	0	0	0	0	0	0	21	0	0	0	2	0	0	1	4	0	28
1:45 PM	0	0	0	0	0	1	14	0	0	0	1	0	0	2	0	0	18
2:00 PM	0	0	0	0	0	1	16	0	0	0	0	0	0	3	4	0	24
2:15 PM	0	0	0	0	0	0	11	0	0	0	2	0	0	2	4	0	19
2:30 PM	0	0	0	0	0	1	15	0	0	0	1	1	0	4	8	0	30
2:45 PM	0	0	0	0	0	3	26	0	0	0	1	1	0	0	0	0	31
3:00 PM	0	0	0	0	0	1	12	2	0	0	1	0	0	0	5	0	21
3:15 PM	0	0	0	0	0	0	15	0	0	0	1	0	0	2	5	0	23
3:30 PM	0	0	0	0	0	0	15	0	0	0	1	0	0	2	4	0	22
3:45 PM	0	0	0	0	0	0	18	0	0	0	4	0	0	3	2	0	27
4:00 PM	0	0	0	0	0	0	14	0	0	0	1	1	0	2	3	0	21
4:15 PM	0	0	0	0	0	3	15	1	0	0	0	0	0	2	0	0	21
4:30 PM	0	0	0	0	0	0	8	0	0	0	0	1	0	0	2	0	11
4:45 PM	0	0	0	0	0	0	10	0	0	0	1	0	0	2	3	0	16
5:00 PM	0	0	0	0	0	0	6	0	0	0	0	0	0	1	1	0	8
5:15 PM	0	0	0	0	0	0	8	0	0	0	2	0	0	0	3	0	13
5:30 PM	0	0	0	0	0	0	1	1	0	0	1	0	0	1	1	0	5
5:45 PM	0	0	0	0	0	0	7	0	0	0	1	0	0	1	3	0	12
6:00 PM	0	0	0	0	0	0	2	0	0	0	0	0	0	1	2	0	5
6:15 PM	0	0	0	0	0	0	3	1	0	0	2	0	0	0	0	0	6
6:30 PM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	2	0	4
6:45 PM	0	0	0	0	0	0	2	0	0	0	0	0	0	2	1	0	5
7:00 PM	0	0	0	0	0	0	8	0	0	0	0	0	0	3	2	0	13
7:15 PM	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	2
Total	0	0	0	0	0	30	577	19	0	0	53	9	0	86	148	0	922

Turning Movement Count

Gambell St & 15th Ave

Total Vehicles (15-Minute Periods)

AM Peak Hour

Tuesday, October 10, 2017

7:00 AM to 9:00 AM

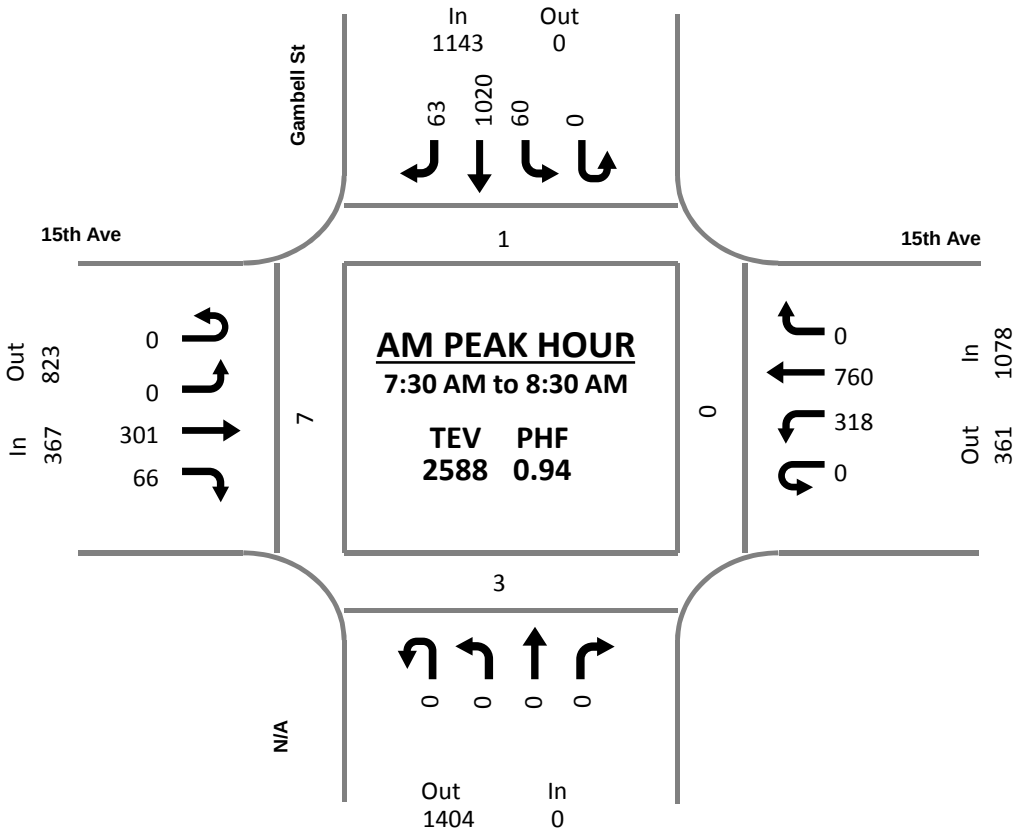
Start Time	N/A (Northbound)					Gambell St (Southbound)					15th Ave (Eastbound)					15th Ave (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
7:00 AM	0	0	0	0	0	0	10	208	7	2	0	0	36	13	0	0	51	119	0	1	444
7:15 AM	0	0	0	0	0	0	12	219	11	1	0	0	66	17	2	0	49	121	0	0	495
7:30 AM	0	0	0	0	1	0	15	277	13	0	0	0	75	10	2	0	87	192	0	0	669
7:45 AM	0	0	0	0	1	0	18	276	18	0	0	0	82	20	1	0	79	193	0	0	686
8:00 AM	0	0	0	0	1	0	18	233	18	0	0	0	66	22	3	0	87	225	0	0	669
8:15 AM	0	0	0	0	0	0	9	234	14	1	0	0	78	14	1	0	65	150	0	0	564
8:30 AM	0	0	0	0	0	0	15	259	18	0	0	0	59	18	3	0	53	173	0	0	595
8:45 AM	0	0	0	0	1	0	19	261	9	0	0	0	65	25	2	0	75	196	0	0	650
Total	0	0	0	0	4	0	116	1,967	108	4	0	0	527	139	14	0	546	1,369	0	1	4,772

*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total")

Peak Hour Summary

7:30 AM to 8:30 AM

Data Type	N/A (Northbound)					Gambell St (Southbound)					15th Ave (Eastbound)					15th Ave (Westbound)					Peak Hour Total
	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	
Volume	0	0	0	0	3	0	60	1020	63	1	0	0	301	66	7	0	318	760	0	0	2588
%HV	0.0%	0.0%	0.0%	0.0%		0.0%	3.3%	3.1%	1.6%		0.0%	0.0%	1.3%	0.0%		0.0%	1.6%	1.7%	0.0%		2.2%
PHF	0.00	0.00	0.00	0.00	0.75	0.00	0.83	0.92	0.88	0.25	0.00	0.00	0.92	0.75	0.58	0.00	0.91	0.84	0.00	0.00	0.94
Volume			0					1143					367					1078			2588
%HV			0.0%					3.1%					1.1%					1.7%			2.2%
PHF			0.00					0.92					0.90					0.86			0.94



Turning Movement Count

Gambell St & 15th Ave

Total Vehicles (15-Minute Periods)

PM Peak Hour

Tuesday, October 10, 2017

4:00 PM to 6:00 PM

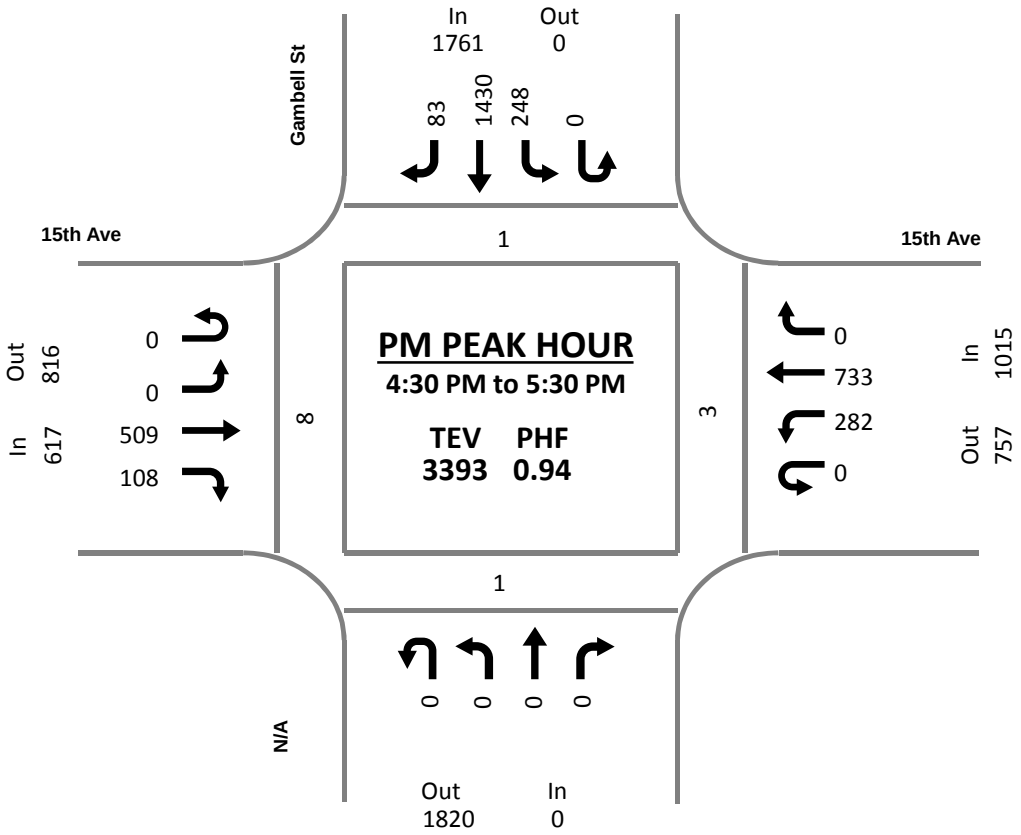
Start Time	N/A (Northbound)					Gambell St (Southbound)					15th Ave (Eastbound)					15th Ave (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
4:00 PM	0	0	0	0	1	0	35	356	16	3	0	0	100	29	3	0	74	160	0	1	770
4:15 PM	0	0	0	0	1	0	43	379	29	3	0	0	86	13	3	0	60	180	0	4	790
4:30 PM	0	0	0	0	0	0	65	360	21	0	0	0	132	29	2	0	64	172	0	0	843
4:45 PM	0	0	0	0	0	0	40	364	14	0	0	0	119	25	2	0	93	168	0	0	823
5:00 PM	0	0	0	0	1	0	92	392	27	1	0	0	111	30	3	0	54	198	0	2	904
5:15 PM	0	0	0	0	0	0	51	314	21	0	0	0	147	24	1	0	71	195	0	1	823
5:30 PM	0	0	0	0	1	0	66	325	27	1	0	0	91	22	4	0	79	146	0	1	756
5:45 PM	0	0	0	0	1	0	50	284	12	2	0	0	103	23	2	0	64	166	0	0	702
Total	0	0	0	0	5	0	442	2,774	167	10	0	0	889	195	20	0	559	1,385	0	9	6,411

*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total")

Peak Hour Summary

4:30 PM to 5:30 PM

Data Type	N/A (Northbound)					Gambell St (Southbound)					15th Ave (Eastbound)					15th Ave (Westbound)					Peak Hour Total
	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	
Volume	0	0	0	0	1	0	248	1430	83	1	0	0	509	108	8	0	282	733	0	3	3393
%HV	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	2.2%	0.0%		0.0%	0.0%	0.6%	0.9%		0.0%	1.1%	1.2%	0.0%		1.4%
PHF	0.00	0.00	0.00	0.00	0.25	0.00	0.67	0.91	0.77	0.25	0.00	0.00	0.87	0.90	0.67	0.00	0.76	0.93	0.00	0.38	0.94
Volume			0					1761					617					1015			3393
%HV			0.0%					1.8%					0.6%					1.2%			1.4%
PHF			0.00					0.86					0.90					0.95			0.94



Traffic Camera Count and Placement Information

Intersection Name: Gambell St & 15th Ave

Intersection Location	
Northbound Street	N/A
Southbound Street	Gambell St
Eastbound Street	15th Ave
Westbound Street	15th Ave
City, State	Anchorage, AK

Project Information	
Name	Midtown Congestion Relief
Client	AK DOT&PF
Project #	1124.62458.01, Phase 02
PM/Traffic Lead	Steve Noble/Brad Coy

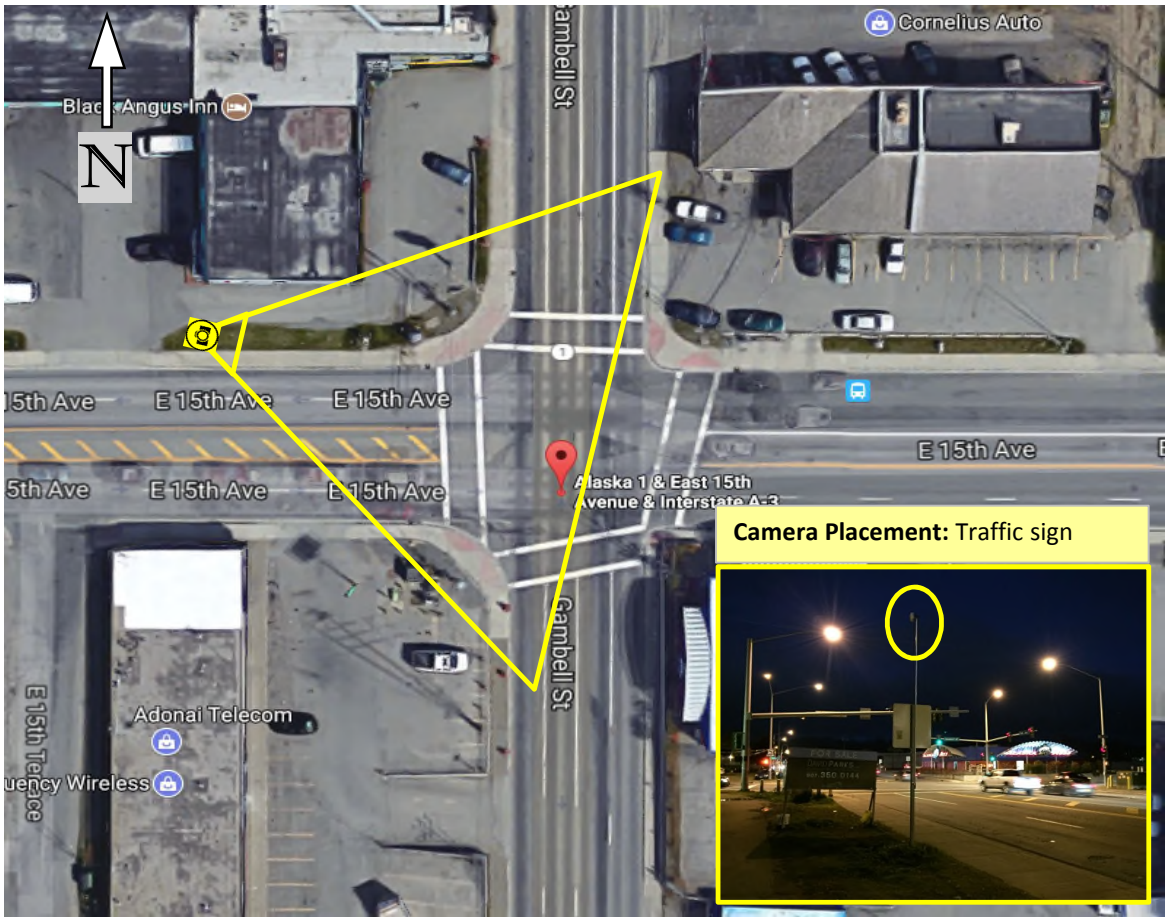
Count Description (e.g., day(s) of week, time periods, other related counts also occuring, etc.)

2 weekdays (Tue, Wed, or Thu) back-to-back; AM/PM peak periods are priority, but midday is also desirable

Camera Setup/Video Footage	
Staff Responsible	Brad Coy
Setup Time	10/10/2017 6:27 AM
Take Down Time	10/11/2017 8:25 PM
Duration (hours)	37.97
Camera # (2-digit)	79

Count Date, Time, Vendor	
Date	10/11/2017 (Wednesday)
Start Time	6:00 AM
End Time	7:00 PM
Duration (hours)	13.00
Count Vendor	CountingCars.com

Camera Placement



Other Notes (Before, During, or After Count)

DOWL

Turning Movement Count

Gambell St & 15th Ave

Total Vehicles (15-Minute Periods)

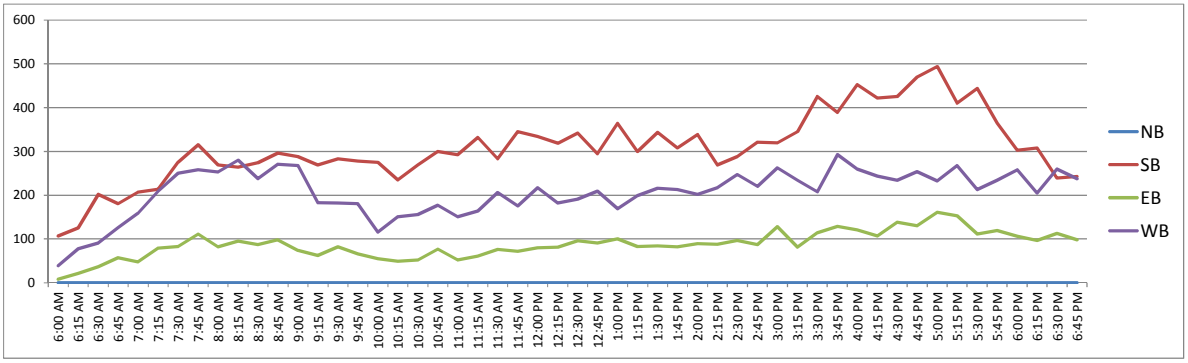
All Data

Wednesday, October 11, 2017

6:00 AM to 7:00 PM

Start Time	N/A (Northbound)					Gambell St (Southbound)					15th Ave (Eastbound)					15th Ave (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
6:00 AM	0	0	0	0	0	0	3	100	4	0	0	0	7	1	1	0	9	30	0	0	154
6:15 AM	0	0	0	0	0	0	4	118	3	2	0	0	16	5	0	0	25	53	0	1	224
6:30 AM	0	0	0	0	1	0	6	194	2	0	0	0	30	7	0	0	37	54	0	0	330
6:45 AM	0	0	0	0	3	0	6	173	2	0	0	0	42	15	3	0	41	85	0	0	364
7:00 AM	0	0	0	0	0	0	5	196	6	0	0	0	40	8	2	0	45	114	0	0	414
7:15 AM	0	0	0	0	1	0	9	194	11	0	0	0	61	18	0	0	54	155	0	0	502
7:30 AM	0	0	0	0	0	0	17	244	14	0	0	0	70	13	2	0	79	171	0	1	608
7:45 AM	0	0	0	0	0	0	17	281	17	1	0	0	91	20	1	0	87	171	0	0	684
8:00 AM	0	0	0	0	1	0	17	234	18	0	0	0	64	18	1	0	75	178	0	2	604
8:15 AM	0	0	0	0	0	0	9	236	19	0	0	0	82	13	2	0	74	206	0	0	639
8:30 AM	0	0	0	0	0	0	18	241	15	2	0	0	58	29	1	0	67	171	0	0	599
8:45 AM	0	0	0	0	0	0	20	257	19	0	0	0	74	24	1	0	84	187	0	0	665
9:00 AM	0	0	0	0	1	0	18	259	11	0	0	0	57	17	9	0	93	175	0	0	630
9:15 AM	0	0	0	0	1	0	12	246	11	0	0	0	45	17	9	0	56	127	0	0	514
9:30 AM	0	0	0	0	1	0	11	260	12	0	0	0	60	22	1	0	61	121	0	0	547
9:45 AM	0	0	0	0	2	0	23	242	13	0	0	0	53	13	2	0	67	114	0	0	525
10:00 AM	0	0	0	0	1	0	17	246	12	1	0	0	42	13	3	0	43	73	0	3	446
10:15 AM	0	0	0	0	0	0	13	209	13	2	0	0	39	10	1	0	56	95	0	0	435
10:30 AM	0	0	0	0	0	0	20	234	15	0	0	0	41	11	0	0	55	101	0	0	477
10:45 AM	0	0	0	0	0	0	30	255	15	0	0	0	65	12	2	0	59	118	0	1	554
11:00 AM	0	0	0	0	0	0	26	251	16	0	0	0	42	10	0	0	58	93	0	0	496
11:15 AM	0	0	0	0	0	0	28	288	16	0	0	0	52	9	1	0	66	98	0	1	557
11:30 AM	0	0	0	0	1	0	31	234	18	2	0	0	58	18	10	0	78	128	0	0	565
11:45 AM	0	0	0	0	0	0	14	321	10	2	0	0	53	19	5	0	62	114	0	1	593
12:00 PM	0	0	0	0	3	0	28	288	18	2	0	0	61	19	1	0	70	147	0	0	631
12:15 PM	0	0	0	0	0	0	21	276	22	0	0	0	59	22	4	0	56	126	0	1	582
12:30 PM	0	0	0	0	0	0	29	285	28	0	0	0	67	29	3	0	55	136	0	0	629
12:45 PM	0	0	0	0	0	0	19	262	14	0	0	0	67	24	2	0	84	125	0	1	595
1:00 PM	0	0	0	0	1	0	32	312	20	2	0	0	79	21	3	0	58	111	0	0	633
1:15 PM	0	0	0	0	0	0	19	259	22	1	0	0	64	19	0	0	71	128	0	1	582
1:30 PM	0	0	0	0	1	0	35	284	25	0	0	0	62	22	3	0	94	122	0	0	644
1:45 PM	0	0	0	0	0	0	31	262	15	2	0	0	66	16	1	0	56	157	0	0	603
2:00 PM	0	0	0	0	0	0	32	284	23	4	0	0	67	22	3	0	75	127	0	4	630
2:15 PM	0	0	0	0	1	0	23	232	14	1	0	0	67	21	4	0	76	141	0	0	574
2:30 PM	0	0	0	0	0	0	33	237	18	2	0	0	80	17	6	0	78	169	0	1	632
2:45 PM	0	0	0	0	2	0	33	268	20	0	0	0	63	24	5	0	68	152	0	2	628
3:00 PM	0	0	0	0	1	0	26	281	13	1	0	0	101	27	6	0	86	177	0	1	711
3:15 PM	0	0	0	0	0	0	28	304	13	1	0	0	62	19	1	0	90	144	0	1	660
3:30 PM	0	0	0	0	2	0	54	351	21	5	0	0	84	30	4	0	82	126	0	0	748
3:45 PM	0	0	0	0	5	0	45	320	24	2	0	0	102	27	1	0	101	192	0	1	811
4:00 PM	0	0	0	0	2	0	51	379	23	0	0	0	94	27	3	0	96	164	0	0	834
4:15 PM	0	0	0	0	0	0	39	359	24	0	0	0	87	20	6	0	80	164	0	0	773
4:30 PM	0	0	0	0	0	0	57	345	24	0	0	0	114	24	3	0	78	156	0	1	798
4:45 PM	0	0	0	0	0	0	42	409	19	2	0	0	107	23	0	0	81	173	0	3	854
5:00 PM	0	0	0	0	0	0	81	393	20	0	0	0	128	33	1	0	56	177	0	0	888
5:15 PM	0	0	0	0	0	0	60	326	24	3	0	0	127	26	3	0	69	199	0	0	831
5:30 PM	0	0	0	0	0	0	62	353	29	4	1	0	95	15	4	0	56	157	0	1	768
5:45 PM	0	0	0	0	0	0	40	305	20	0	0	0	97	22	1	0	74	160	0	1	718
6:00 PM	0	0	0	0	2	0	33	249	21	1	0	0	93	13	3	0	76	182	0	0	667
6:15 PM	0	0	0	0	1	0	28	265	15	2	0	0	76	21	1	0	76	129	0	3	610
6:30 PM	0	0	0	0	4	0	31	193	15	0	0	0	96	17	7	0	96	164	0	0	612
6:45 PM	0	0	0	0	3	0	18	206	19	0	0	0	71	27	7	0	90	148	0	4	579
Total	0	0	0	0	41	0	1,404	13,800	855	47	1	0	3,578	969	143	0	3,559	7,185	0	36	31,351

*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total" or graph below)





Turning Movement Count

Gambell St & 15th Ave

Heavy Vehicles (15-Minute Periods)

All Data

Wednesday, October 11, 2017

6:00 AM to 7:00 PM

Start Time	N/A (Northbound)				Gambell St (Southbound)				15th Ave (Eastbound)				15th Ave (Westbound)				Period Total (Veh)
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	
6:00 AM	0	0	0	0	0	1	6	0	0	0	0	0	0	0	0	0	7
6:15 AM	0	0	0	0	0	0	6	0	0	0	0	0	0	1	0	0	7
6:30 AM	0	0	0	0	0	1	5	1	0	0	1	0	0	0	3	0	11
6:45 AM	0	0	0	0	0	0	9	0	0	0	1	1	0	0	3	0	14
7:00 AM	0	0	0	0	0	2	5	0	0	0	1	0	0	2	0	0	10
7:15 AM	0	0	0	0	0	0	10	0	0	0	0	1	0	2	1	0	14
7:30 AM	0	0	0	0	0	0	6	0	0	0	1	0	0	1	3	0	11
7:45 AM	0	0	0	0	0	1	13	0	0	0	1	0	0	0	4	0	19
8:00 AM	0	0	0	0	0	1	6	0	0	0	2	1	0	1	3	0	14
8:15 AM	0	0	0	0	0	0	16	1	0	0	0	0	0	1	5	0	23
8:30 AM	0	0	0	0	0	1	13	1	0	0	1	2	0	2	2	0	22
8:45 AM	0	0	0	0	0	1	13	1	0	0	0	0	0	3	3	0	21
9:00 AM	0	0	0	0	0	0	16	0	0	0	2	1	0	1	3	0	23
9:15 AM	0	0	0	0	0	0	25	0	0	0	2	0	0	0	0	0	27
9:30 AM	0	0	0	0	0	0	19	0	0	0	1	2	0	0	1	0	23
9:45 AM	0	0	0	0	0	0	15	0	0	0	2	2	0	1	4	0	24
10:00 AM	0	0	0	0	0	1	19	0	0	0	1	0	0	3	1	0	25
10:15 AM	0	0	0	0	0	0	14	1	0	0	0	1	0	1	2	0	19
10:30 AM	0	0	0	0	0	0	21	0	0	0	1	0	0	3	6	0	31
10:45 AM	0	0	0	0	0	1	16	0	0	0	0	1	0	3	3	0	24
11:00 AM	0	0	0	0	0	0	10	1	0	0	2	1	0	0	2	0	16
11:15 AM	0	0	0	0	0	1	20	0	0	0	1	0	0	1	2	0	25
11:30 AM	0	0	0	0	0	0	14	1	0	0	1	0	0	3	4	0	23
11:45 AM	0	0	0	0	0	0	9	0	0	0	0	1	0	1	4	0	15
12:00 PM	0	0	0	0	0	1	15	1	0	0	2	0	0	1	3	0	23
12:15 PM	0	0	0	0	0	1	21	0	0	0	2	0	0	0	1	0	25
12:30 PM	0	0	0	0	0	1	13	1	0	0	3	0	0	1	2	0	21
12:45 PM	0	0	0	0	0	0	17	1	0	0	2	0	0	0	2	0	22
1:00 PM	0	0	0	0	0	1	14	0	0	0	4	1	0	1	4	0	25
1:15 PM	0	0	0	0	0	0	24	0	0	0	2	0	0	0	0	0	26
1:30 PM	0	0	0	0	0	0	18	0	0	0	2	0	0	3	1	0	24
1:45 PM	0	0	0	0	0	0	14	0	0	0	2	0	0	2	3	0	21
2:00 PM	0	0	0	0	0	0	12	0	0	0	1	0	0	0	5	0	18
2:15 PM	0	0	0	0	0	1	19	0	0	0	2	0	0	4	4	0	30
2:30 PM	0	0	0	0	0	1	10	0	0	0	2	1	0	3	6	0	23
2:45 PM	0	0	0	0	0	0	16	0	0	0	1	0	0	0	1	0	18
3:00 PM	0	0	0	0	0	0	26	0	0	0	3	1	0	4	8	0	42
3:15 PM	0	0	0	0	0	0	19	0	0	0	2	1	0	1	5	0	28
3:30 PM	0	0	0	0	0	0	17	0	0	0	0	0	0	2	1	0	20
3:45 PM	0	0	0	0	0	1	20	0	0	0	2	0	0	1	3	0	27
4:00 PM	0	0	0	0	0	0	9	0	0	0	1	1	0	5	3	0	19
4:15 PM	0	0	0	0	0	1	21	1	0	0	1	1	0	3	1	0	29
4:30 PM	0	0	0	0	0	0	21	0	0	0	0	0	0	0	2	0	23
4:45 PM	0	0	0	0	0	0	11	0	0	0	2	0	0	1	0	0	14
5:00 PM	0	0	0	0	0	1	12	0	0	0	1	0	0	0	1	0	15
5:15 PM	0	0	0	0	0	1	6	0	0	0	1	0	0	0	2	0	10
5:30 PM	0	0	0	0	0	2	13	0	0	0	0	0	0	0	1	0	16
5:45 PM	0	0	0	0	0	0	7	0	0	0	1	0	0	1	0	0	9
6:00 PM	0	0	0	0	0	0	5	0	0	0	1	0	0	1	0	0	7
6:15 PM	0	0	0	0	0	0	5	0	0	0	0	0	0	0	1	0	6
6:30 PM	0	0	0	0	0	0	2	0	0	0	1	0	0	0	2	0	5
6:45 PM	0	0	0	0	0	2	5	0	0	0	0	0	0	0	1	0	8
Total	0	0	0	0	0	25	698	11	0	0	62	20	0	64	122	0	1,002

Turning Movement Count

Gambell St & 15th Ave

Total Vehicles (15-Minute Periods)

AM Peak Hour

Wednesday, October 11, 2017

7:00 AM to 9:00 AM

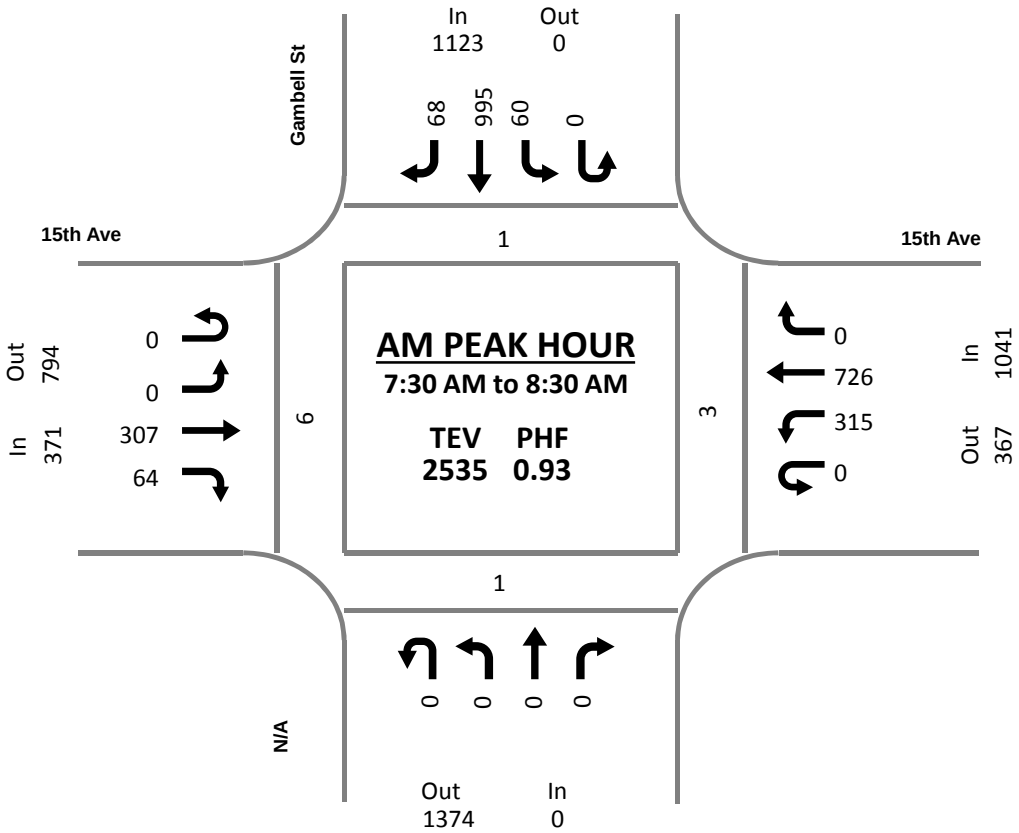
Start Time	N/A (Northbound)					Gambell St (Southbound)					15th Ave (Eastbound)					15th Ave (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
7:00 AM	0	0	0	0	0	0	5	196	6	0	0	0	40	8	2	0	45	114	0	0	414
7:15 AM	0	0	0	0	1	0	9	194	11	0	0	0	61	18	0	0	54	155	0	0	502
7:30 AM	0	0	0	0	0	0	17	244	14	0	0	0	70	13	2	0	79	171	0	1	608
7:45 AM	0	0	0	0	0	0	17	281	17	1	0	0	91	20	1	0	87	171	0	0	684
8:00 AM	0	0	0	0	1	0	17	234	18	0	0	0	64	18	1	0	75	178	0	2	604
8:15 AM	0	0	0	0	0	0	9	236	19	0	0	0	82	13	2	0	74	206	0	0	639
8:30 AM	0	0	0	0	0	0	18	241	15	2	0	0	58	29	1	0	67	171	0	0	599
8:45 AM	0	0	0	0	0	0	20	257	19	0	0	0	74	24	1	0	84	187	0	0	665
Total	0	0	0	0	2	0	112	1,883	119	3	0	0	540	143	10	0	565	1,353	0	3	4,715

*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total")

Peak Hour Summary

7:30 AM to 8:30 AM

Data Type	N/A (Northbound)					Gambell St (Southbound)					15th Ave (Eastbound)					15th Ave (Westbound)					Peak Hour Total
	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	
Volume	0	0	0	0	1	0	60	995	68	1	0	0	307	64	6	0	315	726	0	3	2535
%HV	0.0%	0.0%	0.0%	0.0%		0.0%	3.3%	4.1%	1.5%		0.0%	0.0%	1.3%	1.6%		0.0%	1.0%	2.1%	0.0%		2.6%
PHF	0.00	0.00	0.00	0.00	0.25	0.00	0.88	0.89	0.89	0.25	0.00	0.00	0.84	0.80	0.75	0.00	0.91	0.88	0.00	0.38	0.93
Volume			0					1123					371					1041			2535
%HV			0.0%					3.9%					1.3%					1.7%			2.6%
PHF			0.00					0.89					0.84					0.93			0.93



Turning Movement Count

Gambell St & 15th Ave

Total Vehicles (15-Minute Periods)

PM Peak Hour

Wednesday, October 11, 2017

4:00 PM to 6:00 PM

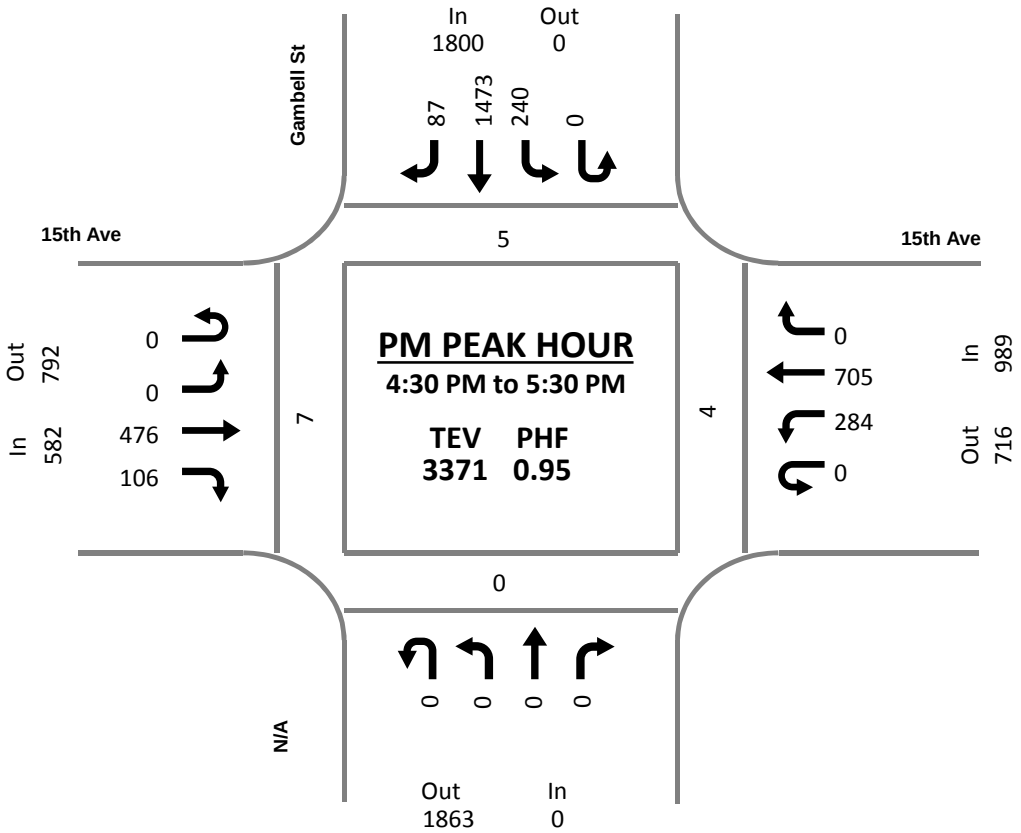
Start Time	N/A (Northbound)					Gambell St (Southbound)					15th Ave (Eastbound)					15th Ave (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
4:00 PM	0	0	0	0	2	0	51	379	23	0	0	0	94	27	3	0	96	164	0	0	834
4:15 PM	0	0	0	0	0	0	39	359	24	0	0	0	87	20	6	0	80	164	0	0	773
4:30 PM	0	0	0	0	0	0	57	345	24	0	0	0	114	24	3	0	78	156	0	1	798
4:45 PM	0	0	0	0	0	0	42	409	19	2	0	0	107	23	0	0	81	173	0	3	854
5:00 PM	0	0	0	0	0	0	81	393	20	0	0	0	128	33	1	0	56	177	0	0	888
5:15 PM	0	0	0	0	0	0	60	326	24	3	0	0	127	26	3	0	69	199	0	0	831
5:30 PM	0	0	0	0	0	0	62	353	29	4	1	0	95	15	4	0	56	157	0	1	768
5:45 PM	0	0	0	0	0	0	40	305	20	0	0	0	97	22	1	0	74	160	0	1	718
Total	0	0	0	0	2	0	432	2,869	183	9	1	0	849	190	21	0	590	1,350	0	6	6,464

*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total")

Peak Hour Summary

4:30 PM to 5:30 PM

Data Type	N/A (Northbound)					Gambell St (Southbound)					15th Ave (Eastbound)					15th Ave (Westbound)					Peak Hour Total
	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	
Volume	0	0	0	0	0	0	240	1473	87	5	0	0	476	106	7	0	284	705	0	4	3371
%HV	0.0%	0.0%	0.0%	0.0%		0.0%	0.8%	3.4%	0.0%		0.0%	0.0%	0.8%	0.0%		0.0%	0.4%	0.7%	0.0%		1.8%
PHF	0.00	0.00	0.00	0.00	0.00	0.00	0.74	0.90	0.91	0.42	0.00	0.00	0.93	0.80	0.58	0.00	0.88	0.89	0.00	0.33	0.95
Volume			0					1800					582					989			3371
%HV			0.0%					2.9%					0.7%					0.6%			1.8%
PHF			0.00					0.91					0.90					0.92			0.95



Traffic Camera Count and Placement Information

Intersection Name: Ingra St & 15th Ave

Intersection Location	
Northbound Street	Ingra St
Southbound Street	Ingra St
Eastbound Street	15th Ave
Westbound Street	15th Ave
City, State	Anchorage, AK

Project Information	
Name	Midtown Congestion Relief
Client	AK DOT&PF
Project #	1124.62458.01, Phase 02
PM/Traffic Lead	Steve Noble/Brad Coy

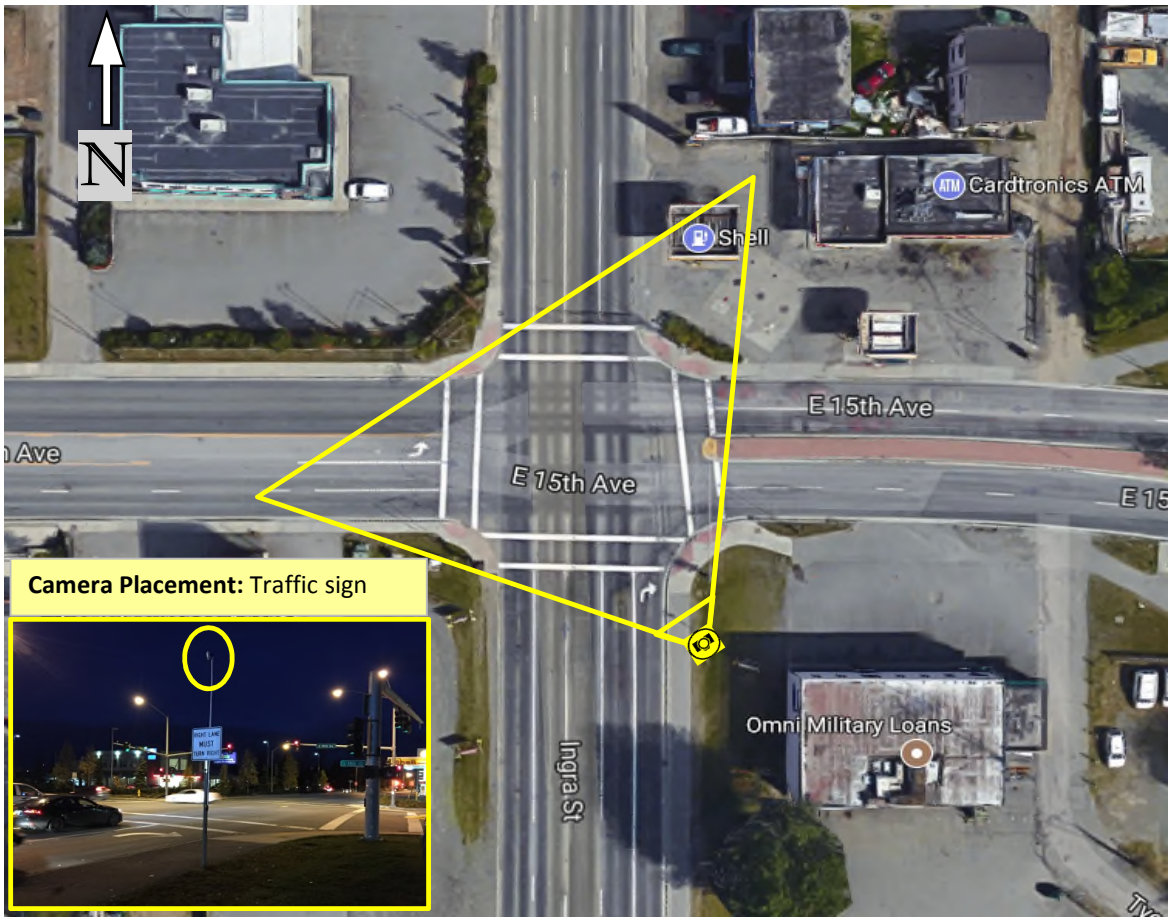
Count Description (e.g., day(s) of week, time periods, other related counts also occuring, etc.)

2 weekdays (Tue, Wed, or Thu) back-to-back; AM/PM peak periods are priority, but midday is also desirable

Camera Setup/Video Footage	
Staff Responsible	Brad Coy
Setup Time	10/10/2017 6:13 AM
Take Down Time	10/11/2017 8:20 PM
Duration (hours)	38.12
Camera # (2-digit)	c3

Count Date, Time, Vendor	
Date	10/10/2017 (Tuesday)
Start Time	6:15 AM
End Time	7:15 PM
Duration (hours)	13.00
Count Vendor	CountingCars.com

Camera Placement



Other Notes (Before, During, or After Count)

Camera stopped recording and shut off at 11:39 p.m. on 10/10/17 for unknown reason (still had half of its battery life left); ended up capturing one day instead of the two it was intending to.

Turning Movement Count

Ingra St & 15th Ave

Total Vehicles (15-Minute Periods)

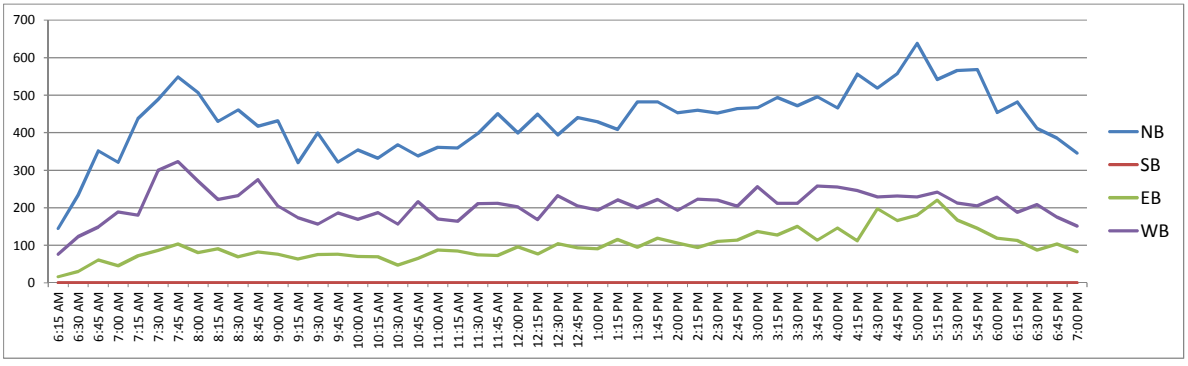
All Data

Tuesday, October 10, 2017

6:15 AM to 7:15 PM

Start Time	Ingra St (Northbound)					Ingra St (Southbound)					15th Ave (Eastbound)					15th Ave (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
6:15 AM	0	7	118	20	0	0	0	0	0	0	0	2	14	0	0	0	0	66	10	0	237
6:30 AM	0	4	195	35	0	0	0	0	0	5	0	7	23	0	0	0	0	105	18	0	387
6:45 AM	0	17	290	45	0	0	0	0	0	0	0	9	52	0	0	0	0	119	30	0	562
7:00 AM	0	12	271	38	0	0	0	0	0	0	0	5	40	0	0	0	0	157	32	2	555
7:15 AM	0	24	347	67	0	0	0	0	0	9	0	11	61	0	0	0	0	145	35	1	690
7:30 AM	0	29	388	72	1	0	0	0	0	0	0	1	85	0	0	0	0	258	42	2	875
7:45 AM	0	34	445	70	1	0	0	0	0	1	0	12	91	0	0	0	0	261	62	2	975
8:00 AM	0	51	380	76	0	0	0	0	0	0	0	6	74	0	0	0	0	226	45	0	858
8:15 AM	0	32	346	52	0	0	0	0	0	0	0	9	82	0	0	0	0	189	33	1	743
8:30 AM	0	33	352	76	0	0	0	0	0	0	0	5	64	0	0	0	0	197	35	1	762
8:45 AM	0	35	309	73	0	0	0	0	0	0	0	2	80	0	0	0	0	236	39	0	774
9:00 AM	0	25	326	81	0	0	0	0	0	0	0	6	70	0	1	0	0	163	42	0	713
9:15 AM	0	19	235	66	0	0	0	0	0	0	0	9	54	0	0	0	0	142	31	1	556
9:30 AM	0	23	297	79	0	0	0	0	0	1	0	6	69	0	0	0	0	128	28	0	630
9:45 AM	0	27	245	50	0	0	0	0	0	0	0	12	64	0	0	0	0	153	33	0	584
10:00 AM	0	18	273	63	0	0	0	0	0	2	0	7	63	0	0	0	0	141	28	0	593
10:15 AM	0	34	234	64	2	0	0	0	0	0	0	6	63	0	3	0	0	160	27	1	588
10:30 AM	0	24	286	58	0	0	0	0	0	2	0	9	38	0	0	0	0	129	27	2	571
10:45 AM	0	18	254	66	0	0	0	0	0	0	0	7	58	0	0	0	0	189	27	0	619
11:00 AM	0	15	275	71	0	0	0	0	0	1	0	14	73	0	0	0	0	138	32	2	618
11:15 AM	0	20	260	79	0	0	0	0	0	1	0	4	81	0	0	0	0	143	21	2	608
11:30 AM	0	25	292	81	0	0	0	0	0	0	0	8	66	0	1	0	0	176	35	1	683
11:45 AM	0	36	337	78	0	0	0	0	0	1	0	12	61	0	0	0	0	170	42	2	736
12:00 PM	0	32	284	83	1	0	0	0	0	2	0	9	87	0	0	0	0	178	24	2	697
12:15 PM	0	22	331	97	0	0	0	0	0	1	0	7	70	0	0	0	0	135	33	0	695
12:30 PM	0	24	287	83	0	0	0	0	0	0	0	5	99	0	0	0	0	200	32	0	730
12:45 PM	0	32	335	73	4	0	0	0	0	1	0	8	85	0	0	0	0	179	26	3	738
1:00 PM	0	20	324	85	1	0	0	0	0	0	0	7	84	0	0	0	0	164	30	3	714
1:15 PM	0	18	312	79	0	0	0	0	0	1	0	15	100	0	0	0	0	183	38	1	745
1:30 PM	0	27	377	78	0	0	0	0	0	0	0	11	84	0	0	0	0	170	30	0	777
1:45 PM	0	30	374	78	1	0	0	0	0	1	0	9	110	0	1	0	0	195	27	2	823
2:00 PM	0	37	328	88	0	0	0	0	0	1	0	9	97	0	0	0	0	159	34	3	752
2:15 PM	0	30	323	107	3	0	0	0	0	2	0	9	85	0	2	0	0	185	38	3	777
2:30 PM	0	40	317	95	3	0	0	0	0	4	0	10	100	0	1	0	0	188	32	1	782
2:45 PM	0	38	332	94	1	0	0	0	0	2	0	8	106	0	0	0	0	173	31	2	782
3:00 PM	0	29	336	102	1	0	0	0	0	4	0	14	123	0	0	0	0	221	35	1	860
3:15 PM	0	33	366	95	0	0	0	0	0	4	0	14	113	0	1	0	0	181	31	1	833
3:30 PM	0	36	337	99	1	0	0	0	0	0	0	10	140	0	0	0	0	187	25	1	834
3:45 PM	0	40	365	91	0	0	0	0	0	3	0	12	102	0	3	0	0	219	39	3	868
4:00 PM	0	27	322	117	1	0	0	0	0	4	0	5	141	0	1	0	0	216	39	2	867
4:15 PM	0	39	380	137	0	0	0	0	0	3	0	6	106	0	0	0	0	216	30	0	914
4:30 PM	0	35	362	122	0	0	0	0	0	1	0	9	188	0	0	0	0	204	25	1	945
4:45 PM	0	35	386	136	0	0	0	0	0	3	0	9	157	0	0	0	0	206	25	5	954
5:00 PM	0	52	409	177	0	0	0	0	0	3	0	8	172	0	0	0	0	197	32	1	1047
5:15 PM	0	49	352	141	0	0	0	0	0	3	0	12	208	0	0	0	0	207	35	0	1004
5:30 PM	0	49	373	144	0	0	0	0	0	2	0	4	163	0	0	0	0	179	34	1	946
5:45 PM	0	48	394	126	1	0	0	0	0	2	0	2	143	0	0	0	0	181	24	1	918
6:00 PM	0	47	298	109	0	0	0	0	0	3	0	15	104	0	3	0	0	206	22	2	801
6:15 PM	0	42	341	99	1	0	0	0	0	1	0	7	106	0	0	0	0	161	27	2	783
6:30 PM	0	28	276	107	2	0	0	0	0	4	0	2	85	0	1	0	0	177	31	3	706
6:45 PM	0	34	266	86	1	0	0	0	0	3	0	7	96	0	1	0	0	151	24	2	664
7:00 PM	0	36	228	82	1	0	0	0	0	3	0	9	74	0	0	0	0	125	26	2	580
Total	0	1,571	16,470	4,470	27	0	0	0	0	84	0	421	4,754	0	19	0	0	9,134	1,633	68	38,453

*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total" or graph below)





Turning Movement Count

Ingra St & 15th Ave

Heavy Vehicles (15-Minute Periods)

All Data

Tuesday, October 10, 2017

6:15 AM to 7:15 PM

Start Time	Ingra St (Northbound)				Ingra St (Southbound)				15th Ave (Eastbound)				15th Ave (Westbound)				Period Total (Veh)
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	
6:15 AM	0	0	8	1	0	0	0	0	0	1	1	0	0	0	2	0	13
6:30 AM	0	0	6	1	0	0	0	0	0	0	1	0	0	0	2	0	10
6:45 AM	0	0	2	2	0	0	0	0	0	0	0	0	0	0	3	0	7
7:00 AM	0	0	9	2	0	0	0	0	0	0	3	0	0	0	5	0	19
7:15 AM	0	0	4	1	0	0	0	0	0	0	2	0	0	0	2	0	9
7:30 AM	0	0	13	6	0	0	0	0	0	0	1	0	0	0	3	0	23
7:45 AM	0	1	13	2	0	0	0	0	0	0	2	0	0	0	1	1	20
8:00 AM	0	2	23	2	0	0	0	0	0	0	0	0	0	0	4	0	31
8:15 AM	0	2	15	0	0	0	0	0	0	0	1	0	0	0	2	1	21
8:30 AM	0	1	25	1	0	0	0	0	0	0	2	0	0	0	2	2	33
8:45 AM	0	0	17	1	0	0	0	0	0	0	0	0	0	0	2	0	20
9:00 AM	0	0	14	0	0	0	0	0	0	0	4	0	0	0	1	1	20
9:15 AM	0	2	13	1	0	0	0	0	0	0	1	0	0	0	2	0	19
9:30 AM	0	0	27	1	0	0	0	0	0	0	2	0	0	0	5	0	35
9:45 AM	0	2	11	0	0	0	0	0	0	0	1	0	0	0	3	0	17
10:00 AM	0	1	23	4	0	0	0	0	0	0	1	0	0	0	5	0	34
10:15 AM	0	0	15	2	0	0	0	0	0	0	3	0	0	0	4	0	24
10:30 AM	0	0	13	0	0	0	0	0	0	0	0	0	0	0	5	0	18
10:45 AM	0	0	11	0	0	0	0	0	0	1	4	0	0	0	10	0	26
11:00 AM	0	0	18	2	0	0	0	0	0	0	3	0	0	0	5	0	28
11:15 AM	0	0	15	3	0	0	0	0	0	0	1	0	0	0	3	1	23
11:30 AM	0	0	15	0	0	0	0	0	0	0	1	0	0	0	9	0	25
11:45 AM	0	0	19	3	0	0	0	0	0	0	1	0	0	0	4	1	28
12:00 PM	0	0	16	4	0	0	0	0	0	0	1	0	0	0	3	1	25
12:15 PM	0	0	10	0	0	0	0	0	0	0	5	0	0	0	6	0	21
12:30 PM	0	1	16	4	0	0	0	0	0	0	2	0	0	0	5	0	28
12:45 PM	0	0	11	0	0	0	0	0	0	0	1	0	0	0	5	0	17
1:00 PM	0	0	19	1	0	0	0	0	0	0	2	0	0	0	6	1	29
1:15 PM	0	0	14	1	0	0	0	0	0	0	2	0	0	0	4	1	22
1:30 PM	0	0	21	3	0	0	0	0	0	1	0	0	0	0	4	0	29
1:45 PM	0	0	17	1	0	0	0	0	0	0	3	0	0	0	3	1	25
2:00 PM	0	1	11	2	0	0	0	0	0	0	1	0	0	0	4	0	19
2:15 PM	0	1	19	3	0	0	0	0	0	0	2	0	0	0	5	0	30
2:30 PM	0	0	14	2	0	0	0	0	0	0	1	0	0	0	11	1	29
2:45 PM	0	0	18	4	0	0	0	0	0	0	4	0	0	0	0	1	27
3:00 PM	0	0	11	1	0	0	0	0	0	0	7	0	0	0	6	1	26
3:15 PM	0	0	10	4	0	0	0	0	0	0	1	0	0	0	5	1	21
3:30 PM	0	0	12	2	0	0	0	0	0	1	0	0	0	0	8	1	24
3:45 PM	0	2	11	1	0	0	0	0	0	1	3	0	0	0	1	1	20
4:00 PM	0	0	7	0	0	0	0	0	0	0	1	0	0	0	5	0	13
4:15 PM	0	0	5	1	0	0	0	0	0	0	3	0	0	0	2	0	11
4:30 PM	0	0	5	0	0	0	0	0	0	0	0	0	0	0	1	0	6
4:45 PM	0	1	5	0	0	0	0	0	0	0	1	0	0	0	1	0	8
5:00 PM	0	0	9	2	0	0	0	0	0	0	0	0	0	0	2	0	13
5:15 PM	0	1	6	1	0	0	0	0	0	0	1	0	0	0	3	1	13
5:30 PM	0	0	6	0	0	0	0	0	0	0	0	0	0	0	1	0	7
5:45 PM	0	0	4	0	0	0	0	0	0	0	1	0	0	0	3	1	9
6:00 PM	0	0	6	0	0	0	0	0	0	0	0	0	0	0	2	0	8
6:15 PM	0	0	4	0	0	0	0	0	0	0	2	0	0	0	0	0	6
6:30 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2	0	3
6:45 PM	0	0	4	0	0	0	0	0	0	0	0	0	0	0	3	0	7
7:00 PM	0	0	1	0	0	0	0	0	0	0	1	0	0	0	5	0	7
Total	0	18	622	72	0	0	0	0	0	5	80	0	0	0	190	19	1,006

Turning Movement Count

Ingra St & 15th Ave

Total Vehicles (15-Minute Periods)

AM Peak Hour

Tuesday, October 10, 2017

7:00 AM to 9:00 AM

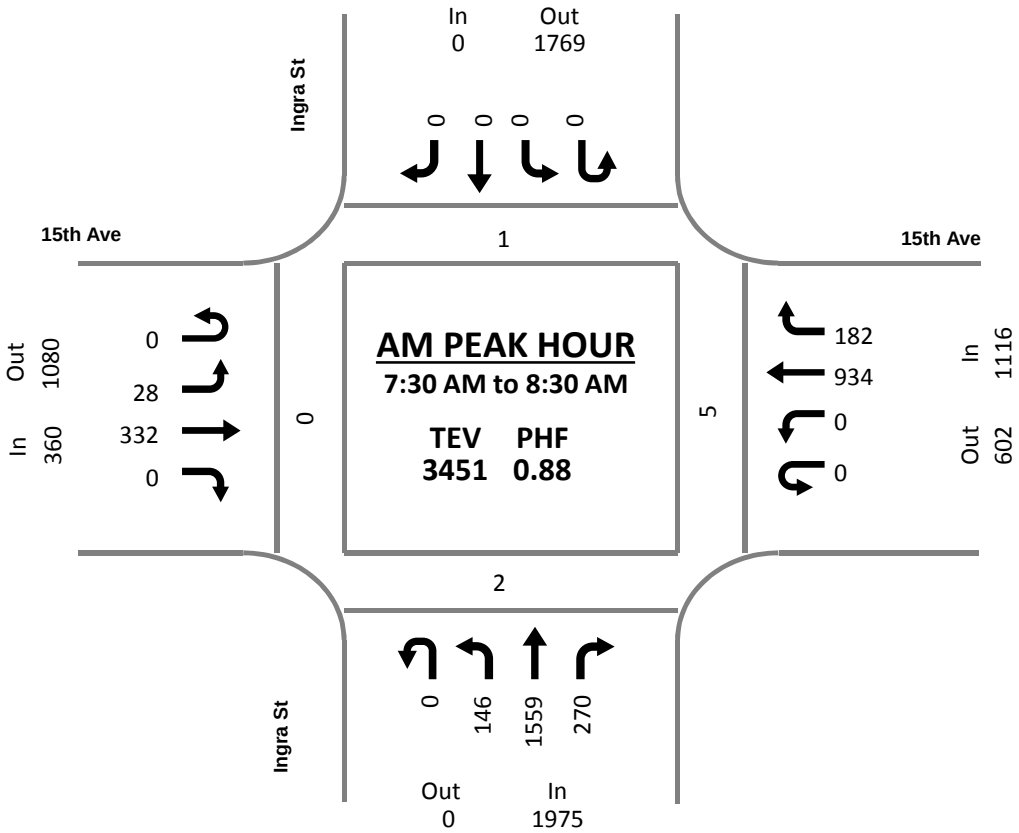
Start Time	Ingra St (Northbound)					Ingra St (Southbound)					15th Ave (Eastbound)					15th Ave (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
7:00 AM	0	12	271	38	0	0	0	0	0	0	0	5	40	0	0	0	0	157	32	2	555
7:15 AM	0	24	347	67	0	0	0	0	0	9	0	11	61	0	0	0	0	145	35	1	690
7:30 AM	0	29	388	72	1	0	0	0	0	0	0	1	85	0	0	0	0	258	42	2	875
7:45 AM	0	34	445	70	1	0	0	0	0	1	0	12	91	0	0	0	0	261	62	2	975
8:00 AM	0	51	380	76	0	0	0	0	0	0	0	6	74	0	0	0	0	226	45	0	858
8:15 AM	0	32	346	52	0	0	0	0	0	0	0	9	82	0	0	0	0	189	33	1	743
8:30 AM	0	33	352	76	0	0	0	0	0	0	0	5	64	0	0	0	0	197	35	1	762
8:45 AM	0	35	309	73	0	0	0	0	0	0	0	2	80	0	0	0	0	236	39	0	774
Total	0	250	2,838	524	2	0	0	0	0	10	0	51	577	0	0	0	0	1,669	323	9	6,232

*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total")

Peak Hour Summary

7:30 AM to 8:30 AM

Data Type	Ingra St (Northbound)					Ingra St (Southbound)					15th Ave (Eastbound)					15th Ave (Westbound)					Peak Hour Total
	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	
Volume	0	146	1559	270	2	0	0	0	0	1	0	28	332	0	0	0	0	934	182	5	3451
%HV	0.0%	3.4%	4.1%	3.7%		0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	1.2%	0.0%		0.0%	0.0%	1.1%	1.1%		2.8%
PHF	0.00	0.72	0.88	0.89	0.50	0.00	0.00	0.00	0.00	0.25	0.00	0.58	0.91	0.00	0.00	0.00	0.00	0.89	0.73	0.63	0.88
Volume			1975					0					360					1116			3451
%HV			4.0%					0.0%					1.1%					1.1%			2.8%
PHF			0.90					0.00					0.87					0.86			0.88



Turning Movement Count

Ingra St & 15th Ave

Total Vehicles (15-Minute Periods)

PM Peak Hour

Tuesday, October 10, 2017

4:00 PM to 6:00 PM

Start Time	Ingra St (Northbound)					Ingra St (Southbound)					15th Ave (Eastbound)					15th Ave (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
4:00 PM	0	27	322	117	1	0	0	0	0	4	0	5	141	0	1	0	0	216	39	2	867
4:15 PM	0	39	380	137	0	0	0	0	0	3	0	6	106	0	0	0	0	216	30	0	914
4:30 PM	0	35	362	122	0	0	0	0	0	1	0	9	188	0	0	0	0	204	25	1	945
4:45 PM	0	35	386	136	0	0	0	0	0	3	0	9	157	0	0	0	0	206	25	5	954
5:00 PM	0	52	409	177	0	0	0	0	0	3	0	8	172	0	0	0	0	197	32	1	1047
5:15 PM	0	49	352	141	0	0	0	0	0	3	0	12	208	0	0	0	0	207	35	0	1004
5:30 PM	0	49	373	144	0	0	0	0	0	2	0	4	163	0	0	0	0	179	34	1	946
5:45 PM	0	48	394	126	1	0	0	0	0	2	0	2	143	0	0	0	0	181	24	1	918
Total	0	334	2,978	1,100	2	0	0	0	0	21	0	55	1,278	0	1	0	0	1,606	244	11	7,595

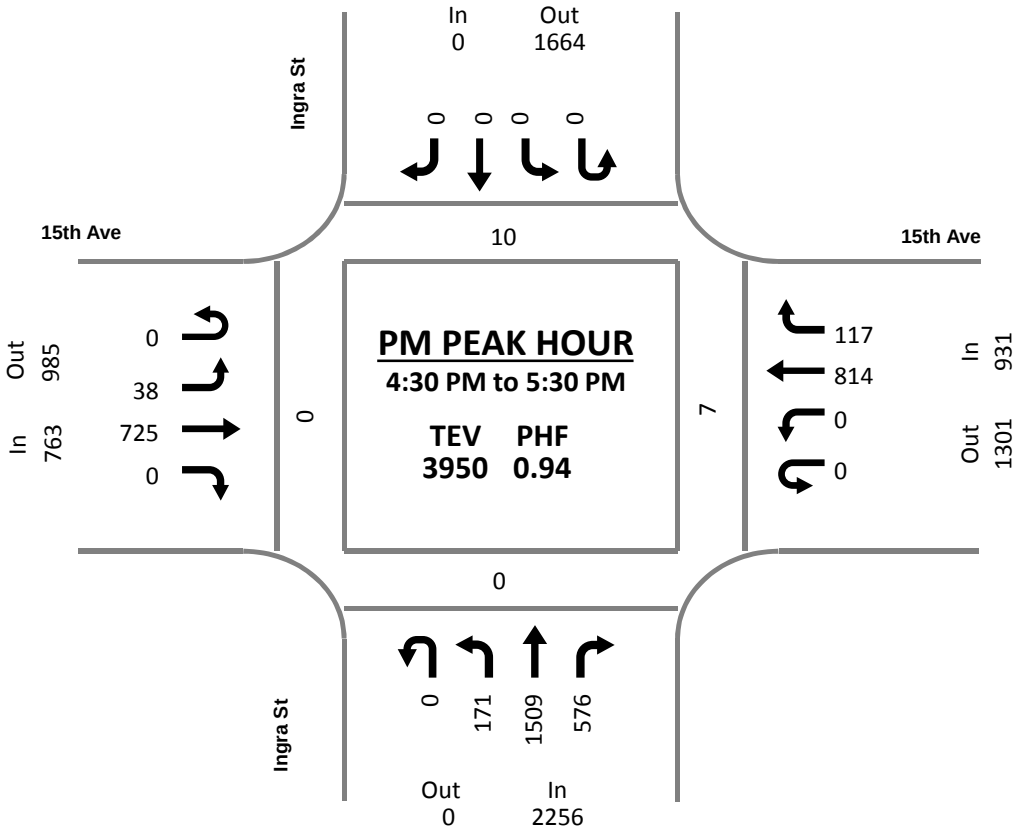
*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total")

Peak Hour Summary (System Peak*)

4:30 PM to 5:30 PM

Data Type	Ingra St (Northbound)					Ingra St (Southbound)					15th Ave (Eastbound)					15th Ave (Westbound)					Peak Hour Total
	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	
Volume	0	171	1509	576	0	0	0	0	0	10	0	38	725	0	0	0	0	814	117	7	3950
%HV	0.0%	1.2%	1.7%	0.5%		0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.3%	0.0%		0.0%	0.0%	0.9%	0.9%		1.0%
PHF	0.00	0.82	0.92	0.81	0.00	0.00	0.00	0.00	0.00	0.83	0.00	0.79	0.87	0.00	0.00	0.00	0.00	0.98	0.84	0.35	0.94
Volume			2256					0					763					931			3950
%HV			1.3%					0.0%					0.3%					0.9%			1.0%
PHF			0.88					0.00					0.87					0.96			0.94

*System Peak is based on comparison of other study area counts rather than highest total entering volume at this intersection.



Traffic Camera Count and Placement Information

Intersection Name: Seward Hwy & 20th Ave

Intersection Location	
Northbound Street	Seward Hwy
Southbound Street	Seward Hwy
Eastbound Street	N/A
Westbound Street	20th Ave
City, State	Anchorage, AK

Project Information	
Name	Midtown Congestion Relief
Client	AK DOT&PF
Project #	1124.62458.01, Phase 02
PM/Traffic Lead	Steve Noble/Brad Coy

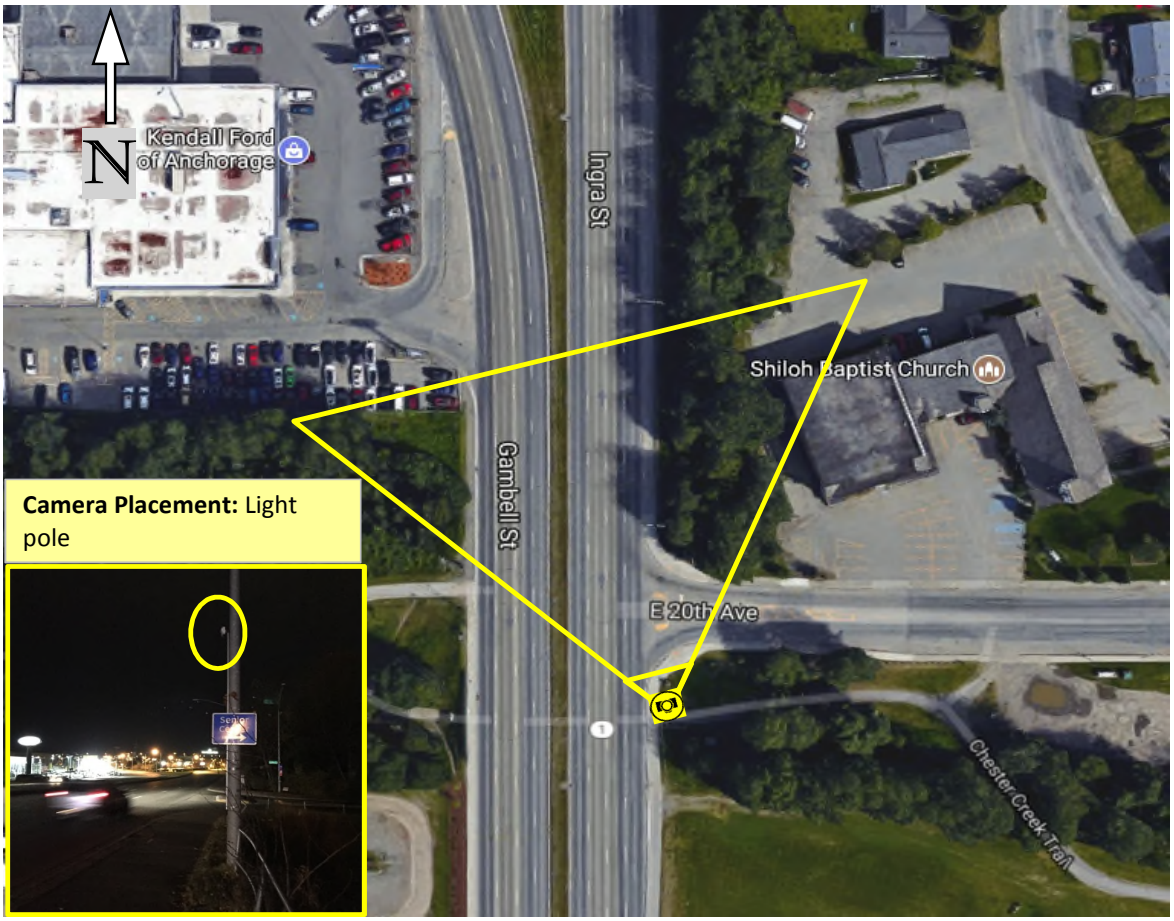
Count Description (e.g., day(s) of week, time periods, other related counts also occuring, etc.)

1 weekday (Tue, Wed, or Thu); AM/PM peak periods are priority, but midday is also desirable

Camera Setup/Video Footage	
Staff Responsible	Brad Coy
Setup Time	10/10/2017 9:25 PM
Take Down Time	10/11/2017 8:10 PM
Duration (hours)	22.75
Camera # (2-digit)	a1

Count Date, Time, Vendor	
Date	10/11/2017 (Wednesday)
Start Time	6:00 AM
End Time	7:00 PM
Duration (hours)	13.00
Count Vendor	CountingCars.com

Camera Placement



Other Notes (Before, During, or After Count)

DOWL

Turning Movement Count

Seward Hwy & 20th Ave

Total Vehicles (15-Minute Periods)

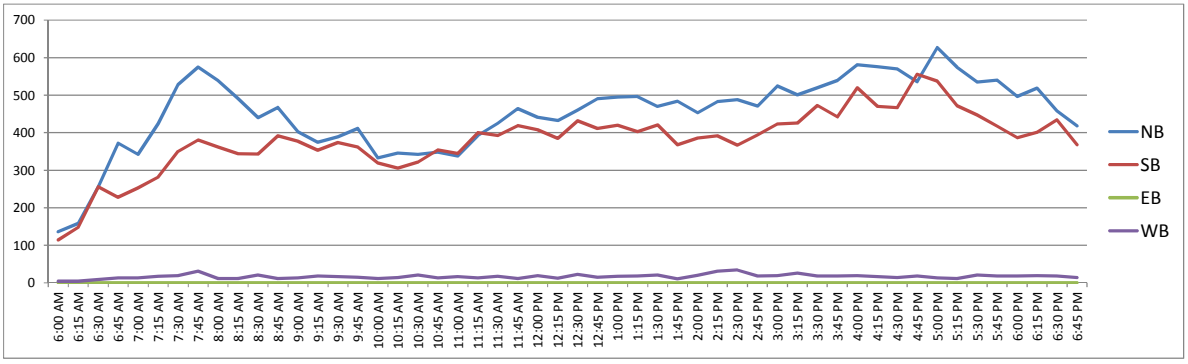
All Data

Wednesday, October 11, 2017

6:00 AM to 7:00 PM

Start Time	Seward Hwy (Northbound)					Seward Hwy (Southbound)					N/A (Eastbound)					20th Ave (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
6:00 AM	0	0	132	4	0	0	0	114	0	0	0	0	0	0	0	0	0	0	4	0	254
6:15 AM	0	0	155	3	0	0	0	148	0	0	0	0	0	0	0	0	0	0	4	0	310
6:30 AM	0	0	251	5	0	0	0	256	0	0	0	0	0	0	0	0	0	0	9	0	521
6:45 AM	0	0	363	9	0	0	0	228	0	0	0	0	0	0	0	0	0	0	13	0	613
7:00 AM	0	0	334	8	0	0	0	253	0	0	0	0	0	0	0	0	0	0	13	0	608
7:15 AM	0	0	418	6	0	0	0	282	0	0	0	0	0	0	0	0	0	0	17	1	723
7:30 AM	0	0	520	8	0	0	0	350	0	0	0	0	0	0	0	0	0	0	19	0	897
7:45 AM	0	0	565	10	0	0	0	381	0	0	0	0	0	0	0	0	0	0	31	0	987
8:00 AM	0	0	522	17	0	0	0	362	0	0	0	0	0	0	0	0	0	0	11	1	912
8:15 AM	0	0	478	13	0	0	0	344	0	0	0	0	0	0	0	0	0	0	11	0	846
8:30 AM	0	0	431	9	0	0	0	343	0	0	0	0	0	0	0	0	0	0	21	0	804
8:45 AM	0	0	452	16	0	0	0	392	0	1	0	0	0	0	0	0	0	0	11	0	871
9:00 AM	0	0	387	16	0	0	0	377	0	0	0	0	0	0	0	0	0	0	13	1	793
9:15 AM	0	0	359	16	0	0	0	353	0	0	0	0	0	0	0	0	0	0	18	0	746
9:30 AM	0	0	379	10	0	0	0	374	0	0	0	0	0	0	0	0	0	0	16	0	779
9:45 AM	0	0	389	22	0	0	0	362	0	1	0	0	0	0	0	0	0	0	15	0	788
10:00 AM	0	0	316	17	0	0	0	319	0	0	0	0	0	0	0	0	0	0	11	0	663
10:15 AM	0	0	331	15	0	0	0	306	0	0	0	0	0	0	0	0	0	0	14	1	666
10:30 AM	0	0	324	18	0	0	0	322	0	0	0	0	0	0	0	0	0	0	21	1	685
10:45 AM	0	0	316	32	0	0	0	354	0	0	0	0	0	0	0	0	0	0	13	0	715
11:00 AM	0	0	319	19	0	0	0	345	0	0	0	0	0	0	0	0	0	0	16	1	699
11:15 AM	0	0	378	15	0	0	0	400	0	0	0	0	0	0	0	0	0	0	13	0	806
11:30 AM	0	0	410	15	0	0	0	393	0	0	0	0	0	0	0	0	0	0	17	2	835
11:45 AM	0	0	450	14	0	0	0	419	0	0	0	0	0	0	0	0	0	0	11	0	894
12:00 PM	0	0	417	24	0	0	0	408	0	1	0	0	0	0	0	0	0	0	19	3	868
12:15 PM	0	0	404	29	0	0	0	385	0	0	0	0	0	0	0	0	0	0	12	0	830
12:30 PM	0	0	433	28	0	0	0	432	0	0	0	0	0	0	1	0	0	0	22	1	915
12:45 PM	0	0	462	29	0	0	0	411	0	0	0	0	0	0	0	0	0	0	15	0	917
1:00 PM	0	0	464	31	0	0	0	420	0	0	0	0	0	0	0	0	0	0	17	0	932
1:15 PM	0	0	476	21	0	0	0	403	0	0	0	0	0	0	0	0	0	0	18	0	918
1:30 PM	0	0	443	27	0	0	0	421	0	0	0	0	0	0	0	0	0	0	21	1	912
1:45 PM	0	0	468	16	0	0	0	368	0	0	0	0	0	0	0	0	0	0	10	1	862
2:00 PM	0	0	430	23	0	0	0	386	0	0	0	0	0	0	0	0	0	0	20	3	859
2:15 PM	0	0	467	16	0	0	0	392	0	0	0	0	0	0	0	0	0	0	31	2	906
2:30 PM	0	0	461	27	0	0	0	367	0	0	0	0	0	0	0	0	0	0	34	1	889
2:45 PM	0	0	446	25	0	0	0	394	0	0	0	0	0	0	0	0	0	0	18	0	883
3:00 PM	0	0	504	21	0	0	0	423	0	0	0	0	0	0	0	0	0	0	19	0	967
3:15 PM	0	0	473	28	0	0	0	426	0	0	0	0	0	0	0	0	0	0	26	1	953
3:30 PM	0	0	498	22	0	0	0	473	0	0	0	0	0	0	0	0	0	0	18	0	1011
3:45 PM	0	0	514	25	0	0	0	442	0	0	0	0	0	0	0	0	0	0	18	0	999
4:00 PM	0	0	552	29	0	0	0	520	0	0	0	0	0	0	0	0	0	0	19	2	1120
4:15 PM	0	0	551	25	0	0	0	470	0	0	0	0	0	0	0	0	0	0	16	1	1062
4:30 PM	0	0	545	25	0	0	0	467	0	0	0	0	0	0	0	0	0	0	14	1	1051
4:45 PM	0	0	510	26	0	0	0	556	0	0	0	0	0	0	0	0	0	0	18	0	1110
5:00 PM	0	0	589	38	0	0	0	538	0	0	0	0	0	0	0	0	0	0	13	1	1178
5:15 PM	0	0	546	28	0	0	0	472	0	0	0	0	0	0	0	0	0	0	11	2	1057
5:30 PM	0	0	502	33	0	0	0	447	0	0	0	0	0	0	0	0	0	0	21	1	1003
5:45 PM	0	0	518	22	0	0	0	417	0	0	0	0	0	0	0	0	0	0	18	2	975
6:00 PM	0	0	455	42	0	0	0	387	0	0	0	0	0	0	0	0	0	0	18	0	902
6:15 PM	0	0	488	31	0	0	0	401	0	0	0	0	0	0	0	0	0	0	19	2	939
6:30 PM	0	0	420	38	0	0	0	434	0	0	0	0	0	0	0	0	0	0	18	1	910
6:45 PM	0	0	391	27	0	0	0	368	0	2	0	0	0	0	0	0	0	0	14	3	800
Total	0	0	22,406	1,073	0	0	0	19,805	0	5	0	0	0	0	1	0	0	0	859	37	44,143

*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total" or graph below)





Turning Movement Count

Seward Hwy & 20th Ave

Heavy Vehicles (15-Minute Periods)

All Data

Wednesday, October 11, 2017

6:00 AM to 7:00 PM

Start Time	Seward Hwy (Northbound)				Seward Hwy (Southbound)				N/A (Eastbound)				20th Ave (Westbound)				Period Total (Veh)
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	
6:00 AM	0	0	13	0	0	0	6	0	0	0	0	0	0	0	0	0	19
6:15 AM	0	0	8	1	0	0	10	0	0	0	0	0	0	0	0	0	19
6:30 AM	0	0	13	1	0	0	12	0	0	0	0	0	0	0	0	1	27
6:45 AM	0	0	10	0	0	0	9	0	0	0	0	0	0	0	0	0	19
7:00 AM	0	0	14	0	0	0	8	0	0	0	0	0	0	0	0	0	22
7:15 AM	0	0	14	0	0	0	12	0	0	0	0	0	0	0	0	0	26
7:30 AM	0	0	15	1	0	0	8	0	0	0	0	0	0	0	0	1	25
7:45 AM	0	0	15	2	0	0	10	0	0	0	0	0	0	0	0	4	31
8:00 AM	0	0	13	1	0	0	9	0	0	0	0	0	0	0	0	1	24
8:15 AM	0	0	24	0	0	0	18	0	0	0	0	0	0	0	0	0	42
8:30 AM	0	0	27	1	0	0	16	0	0	0	0	0	0	0	0	2	46
8:45 AM	0	0	18	0	0	0	20	0	0	0	0	0	0	0	0	0	38
9:00 AM	0	0	19	1	0	0	16	0	0	0	0	0	0	0	0	0	36
9:15 AM	0	0	18	0	0	0	27	0	0	0	0	0	0	0	0	1	46
9:30 AM	0	0	23	0	0	0	17	0	0	0	0	0	0	0	0	0	40
9:45 AM	0	0	28	0	0	0	21	0	0	0	0	0	0	0	0	0	49
10:00 AM	0	0	22	3	0	0	21	0	0	0	0	0	0	0	0	0	46
10:15 AM	0	0	21	1	0	0	16	0	0	0	0	0	0	0	0	0	38
10:30 AM	0	0	21	0	0	0	25	0	0	0	0	0	0	0	0	0	46
10:45 AM	0	0	12	0	0	0	17	0	0	0	0	0	0	0	0	0	29
11:00 AM	0	0	22	0	0	0	17	0	0	0	0	0	0	0	0	0	39
11:15 AM	0	0	28	0	0	0	25	0	0	0	0	0	0	0	0	0	53
11:30 AM	0	0	20	0	0	0	27	0	0	0	0	0	0	0	0	1	48
11:45 AM	0	0	32	0	0	0	16	0	0	0	0	0	0	0	0	0	48
12:00 PM	0	0	26	1	0	0	20	0	0	0	0	0	0	0	0	1	48
12:15 PM	0	0	25	1	0	0	21	0	0	0	0	0	0	0	0	0	47
12:30 PM	0	0	22	0	0	0	26	0	0	0	0	0	0	0	0	0	48
12:45 PM	0	0	24	1	0	0	18	0	0	0	0	0	0	0	0	0	43
1:00 PM	0	0	21	0	0	0	18	0	0	0	0	0	0	0	0	1	40
1:15 PM	0	0	15	1	0	0	31	0	0	0	0	0	0	0	0	0	47
1:30 PM	0	0	22	0	0	0	24	0	0	0	0	0	0	0	0	0	46
1:45 PM	0	0	29	0	0	0	17	0	0	0	0	0	0	0	0	0	46
2:00 PM	0	0	25	0	0	0	14	0	0	0	0	0	0	0	0	0	39
2:15 PM	0	0	22	1	0	0	27	0	0	0	0	0	0	0	0	1	51
2:30 PM	0	0	22	0	0	0	18	0	0	0	0	0	0	0	0	1	41
2:45 PM	0	0	21	1	0	0	22	0	0	0	0	0	0	0	0	0	44
3:00 PM	0	0	25	1	0	0	29	0	0	0	0	0	0	0	0	1	56
3:15 PM	0	0	15	0	0	0	19	0	0	0	0	0	0	0	0	0	34
3:30 PM	0	0	18	1	0	0	15	0	0	0	0	0	0	0	0	0	34
3:45 PM	0	0	5	3	0	0	15	0	0	0	0	0	0	0	0	2	25
4:00 PM	0	0	9	2	0	0	17	0	0	0	0	0	0	0	0	0	28
4:15 PM	0	0	17	0	0	0	24	0	0	0	0	0	0	0	0	0	41
4:30 PM	0	0	14	1	0	0	23	0	0	0	0	0	0	0	0	0	38
4:45 PM	0	0	8	2	0	0	13	0	0	0	0	0	0	0	0	0	23
5:00 PM	0	0	9	0	0	0	11	0	0	0	0	0	0	0	0	0	20
5:15 PM	0	0	6	0	0	0	7	0	0	0	0	0	0	0	0	1	14
5:30 PM	0	0	5	0	0	0	14	0	0	0	0	0	0	0	0	0	19
5:45 PM	0	0	2	1	0	0	4	0	0	0	0	0	0	0	0	0	7
6:00 PM	0	0	5	0	0	0	8	0	0	0	0	0	0	0	0	0	13
6:15 PM	0	0	2	0	0	0	5	0	0	0	0	0	0	0	0	0	7
6:30 PM	0	0	8	0	0	0	3	0	0	0	0	0	0	0	0	0	11
6:45 PM	0	0	3	0	0	0	6	0	0	0	0	0	0	0	0	0	9
Total	0	0	875	29	0	0	852	0	0	0	0	0	0	0	0	19	1,775

Turning Movement Count

Seward Hwy & 20th Ave

Total Vehicles (15-Minute Periods)

AM Peak Hour

Wednesday, October 11, 2017

7:00 AM to 9:00 AM

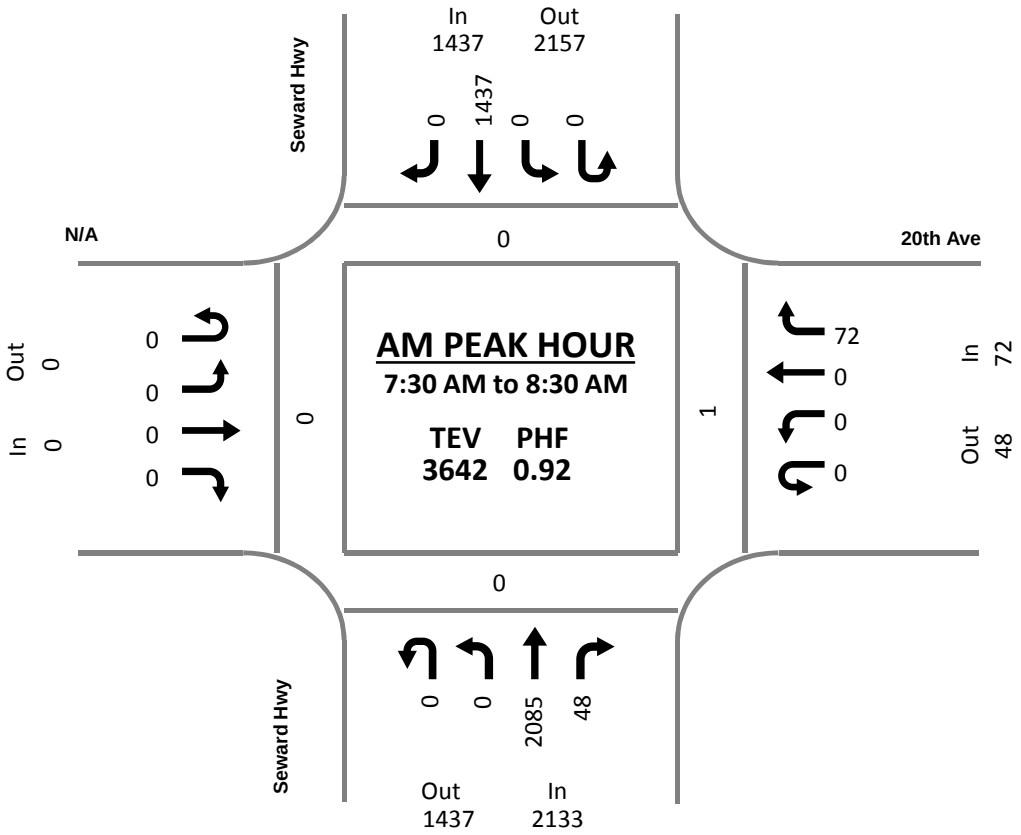
Start Time	Seward Hwy (Northbound)					Seward Hwy (Southbound)					N/A (Eastbound)					20th Ave (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
7:00 AM	0	0	334	8	0	0	0	253	0	0	0	0	0	0	0	0	0	0	13	0	608
7:15 AM	0	0	418	6	0	0	0	282	0	0	0	0	0	0	0	0	0	0	17	1	723
7:30 AM	0	0	520	8	0	0	0	350	0	0	0	0	0	0	0	0	0	0	19	0	897
7:45 AM	0	0	565	10	0	0	0	381	0	0	0	0	0	0	0	0	0	0	31	0	987
8:00 AM	0	0	522	17	0	0	0	362	0	0	0	0	0	0	0	0	0	0	11	1	912
8:15 AM	0	0	478	13	0	0	0	344	0	0	0	0	0	0	0	0	0	0	11	0	846
8:30 AM	0	0	431	9	0	0	0	343	0	0	0	0	0	0	0	0	0	0	21	0	804
8:45 AM	0	0	452	16	0	0	0	392	0	1	0	0	0	0	0	0	0	0	11	0	871
Total	0	0	3,720	87	0	0	0	2,707	0	1	0	0	0	0	0	0	0	0	134	2	6,648

*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total")

Peak Hour Summary

7:30 AM to 8:30 AM

Data Type	Seward Hwy (Northbound)					Seward Hwy (Southbound)					N/A (Eastbound)					20th Ave (Westbound)					Peak Hour Total
	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	
Volume	0	0	2085	48	0	0	0	1437	0	0	0	0	0	0	0	0	0	0	72	1	3642
%HV	0.0%	0.0%	3.2%	8.3%		0.0%	0.0%	3.1%	0.0%		0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%	8.3%		3.3%
PHF	0.00	0.00	0.92	0.71	0.00	0.00	0.00	0.94	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.58	0.25	0.92
Volume			2133					1437					0					72			3642
%HV			3.3%					3.1%					0.0%					8.3%			3.3%
PHF			0.93					0.94					0.00					0.58			0.92



Turning Movement Count

Seward Hwy & 20th Ave

Total Vehicles (15-Minute Periods)

PM Peak Hour

Wednesday, October 11, 2017

4:00 PM to 6:00 PM

Start Time	Seward Hwy (Northbound)					Seward Hwy (Southbound)					N/A (Eastbound)					20th Ave (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
4:00 PM	0	0	552	29	0	0	0	520	0	0	0	0	0	0	0	0	0	0	19	2	1120
4:15 PM	0	0	551	25	0	0	0	470	0	0	0	0	0	0	0	0	0	0	16	1	1062
4:30 PM	0	0	545	25	0	0	0	467	0	0	0	0	0	0	0	0	0	0	14	1	1051
4:45 PM	0	0	510	26	0	0	0	556	0	0	0	0	0	0	0	0	0	0	18	0	1110
5:00 PM	0	0	589	38	0	0	0	538	0	0	0	0	0	0	0	0	0	0	13	1	1178
5:15 PM	0	0	546	28	0	0	0	472	0	0	0	0	0	0	0	0	0	0	11	2	1057
5:30 PM	0	0	502	33	0	0	0	447	0	0	0	0	0	0	0	0	0	0	21	1	1003
5:45 PM	0	0	518	22	0	0	0	417	0	0	0	0	0	0	0	0	0	0	18	2	975
Total	0	0	4,313	226	0	0	0	3,887	0	0	0	0	0	0	0	0	0	0	130	10	8,556

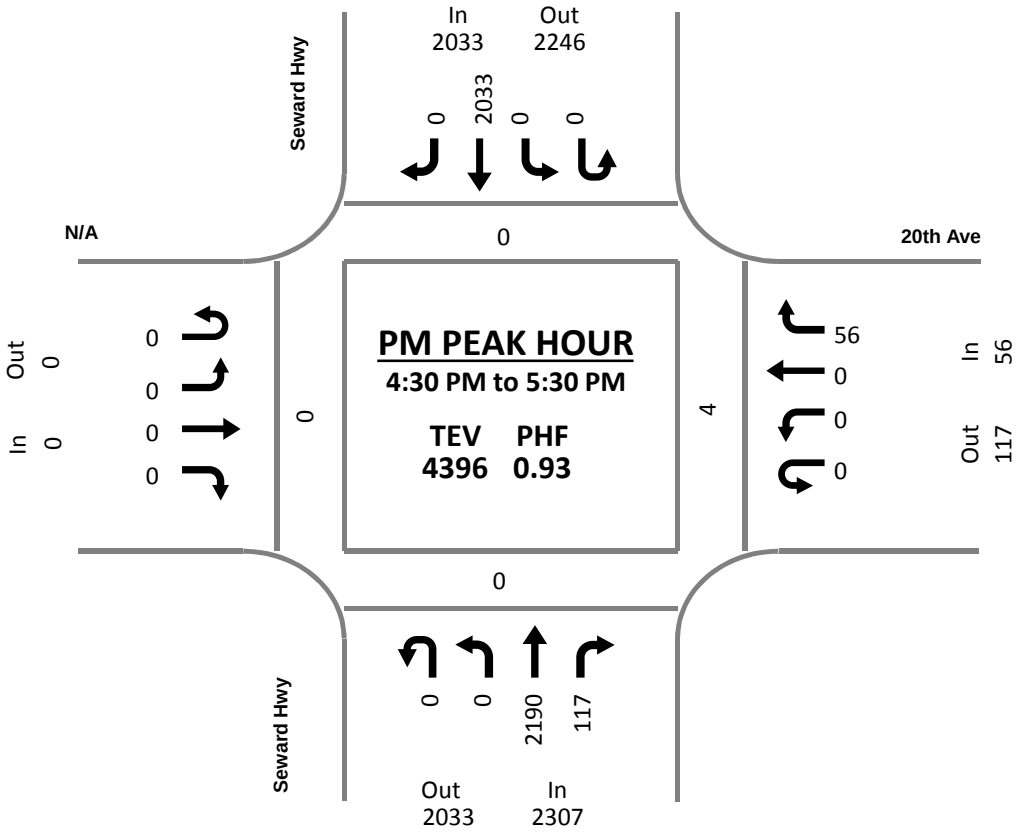
*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total")

Peak Hour Summary (System Peak*)

4:30 PM to 5:30 PM

Data Type	Seward Hwy (Northbound)					Seward Hwy (Southbound)					N/A (Eastbound)					20th Ave (Westbound)					Peak Hour Total
	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	
Volume	0	0	2190	117	0	0	0	2033	0	0	0	0	0	0	0	0	0	0	56	4	4396
%HV	0.0%	0.0%	1.7%	2.6%		0.0%	0.0%	2.7%	0.0%		0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%	1.8%		2.2%
PHF	0.00	0.00	0.93	0.77	0.00	0.00	0.00	0.91	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.78	0.50	0.93
Volume			2307					2033					0					56			4396
%HV			1.7%					2.7%					0.0%					1.8%			2.2%
PHF			0.92					0.91					0.00					0.78			0.93

*System Peak is based on comparison of other study area counts rather than highest total entering volume at this intersection.



Traffic Camera Count and Placement Information

Intersection Name: Seward Hwy & 22nd Ave

Intersection Location	
Northbound Street	Seward Hwy
Southbound Street	Seward Hwy
Eastbound Street	22nd Ave
Westbound Street	N/A
City, State	Anchorage, AK

Project Information	
Name	Midtown Congestion Relief
Client	AK DOT&PF
Project #	1124.62458.01, Phase 02
PM/Traffic Lead	Steve Noble/Brad Coy

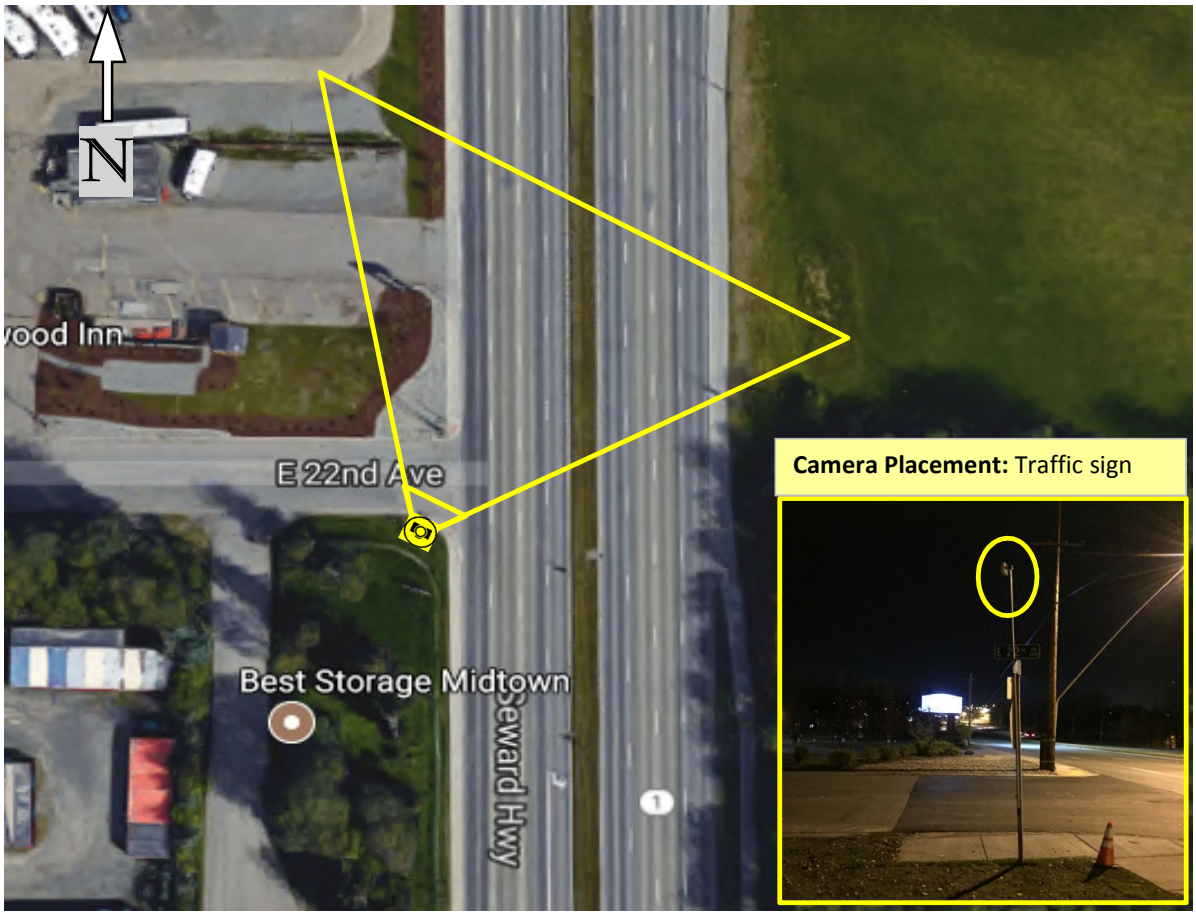
Count Description (e.g., day(s) of week, time periods, other related counts also occuring, etc.)

1 weekday (Tue, Wed, or Thu); AM/PM peak periods are priority, but midday is also desirable

Camera Setup/Video Footage	
Staff Responsible	Brad Coy
Setup Time	10/10/2017 9:45 PM
Take Down Time	10/11/2017 8:35 PM
Duration (hours)	22.83
Camera # (2-digit)	49

Count Date, Time, Vendor	
Date	10/11/2017 (Wednesday)
Start Time	6:00 AM
End Time	7:00 PM
Duration (hours)	13.00
Count Vendor	CountingCars.com

Camera Placement



Other Notes (Before, During, or After Count)

DOWL

Turning Movement Count

Seward Hwy & 22nd Ave

Total Vehicles (15-Minute Periods)

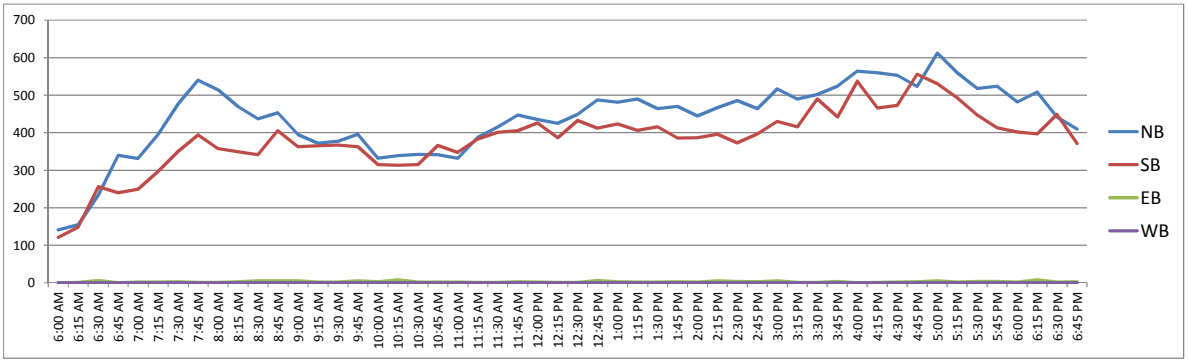
All Data

Wednesday, October 11, 2017

6:00 AM to 7:00 PM

Start Time	Seward Hwy (Northbound)					Seward Hwy (Southbound)					22nd Ave (Eastbound)					N/A (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
6:00 AM	0	0	141	0	0	0	0	121	0	0	0	0	0	0	0	0	0	0	0	0	262
6:15 AM	0	0	155	0	0	0	0	148	1	0	0	0	0	1	0	0	0	0	0	0	305
6:30 AM	0	0	234	0	0	0	0	256	0	0	0	0	0	6	0	0	0	0	0	0	496
6:45 AM	0	0	340	0	0	0	0	240	0	0	0	0	0	0	1	0	0	0	0	0	580
7:00 AM	0	0	331	0	0	0	0	248	1	0	0	0	0	2	1	0	0	0	0	0	582
7:15 AM	0	0	395	0	0	0	0	296	1	0	0	0	0	2	0	0	0	0	0	0	694
7:30 AM	0	0	476	0	0	0	0	350	0	0	0	0	0	3	1	0	0	0	0	0	829
7:45 AM	0	0	540	0	0	0	0	392	2	0	0	0	0	1	0	0	0	0	0	0	935
8:00 AM	0	0	515	0	0	0	0	355	3	0	0	0	0	1	0	0	0	0	0	0	874
8:15 AM	0	0	469	0	0	0	0	346	3	0	0	0	0	3	2	0	0	0	0	0	821
8:30 AM	0	0	437	0	0	0	0	339	2	0	0	0	0	5	3	0	0	0	0	0	783
8:45 AM	0	0	453	0	0	0	0	403	2	0	0	0	0	5	0	0	0	0	0	0	863
9:00 AM	0	0	395	0	0	0	0	360	3	0	0	0	0	5	0	0	0	0	0	0	763
9:15 AM	0	0	372	0	0	0	0	362	3	0	0	0	0	2	2	0	0	0	0	0	739
9:30 AM	0	0	377	0	0	0	0	364	3	0	0	0	0	2	1	0	0	0	0	0	746
9:45 AM	0	0	396	0	0	0	0	356	7	0	0	0	0	5	2	0	0	0	0	0	764
10:00 AM	0	0	332	0	0	0	0	313	2	0	0	0	0	3	1	0	0	0	0	0	650
10:15 AM	0	0	339	0	0	0	0	312	1	0	0	0	0	8	2	0	0	0	0	0	660
10:30 AM	0	0	342	0	0	0	0	313	2	0	0	0	0	2	0	0	0	0	0	0	659
10:45 AM	0	0	341	0	0	0	0	364	2	0	0	0	0	2	0	0	0	0	0	0	709
11:00 AM	0	0	332	0	0	0	0	344	3	0	0	0	0	2	0	0	0	0	0	0	681
11:15 AM	0	0	388	0	0	0	0	382	1	0	0	0	0	1	0	0	0	0	0	0	772
11:30 AM	0	0	416	0	1	0	0	400	1	0	0	0	0	1	2	0	0	0	0	1	818
11:45 AM	0	0	447	0	0	0	0	402	3	0	0	0	0	3	5	0	0	0	0	0	855
12:00 PM	0	0	435	0	0	0	0	424	2	0	0	0	0	2	0	0	0	0	0	0	863
12:15 PM	0	0	425	0	0	0	0	385	2	0	0	0	0	1	1	0	0	0	0	1	813
12:30 PM	0	0	449	0	0	0	0	427	6	0	0	0	0	1	0	0	0	0	0	0	883
12:45 PM	0	0	487	0	0	0	0	409	3	0	0	0	0	6	2	0	0	0	0	0	905
1:00 PM	0	0	481	0	0	0	0	420	3	0	0	0	0	3	0	0	0	0	0	0	907
1:15 PM	0	0	490	0	1	0	0	401	5	0	0	0	0	2	0	0	0	0	0	0	898
1:30 PM	0	0	464	0	0	0	0	414	2	0	0	0	0	2	0	0	0	0	0	0	882
1:45 PM	0	0	470	0	0	0	0	384	2	0	0	0	0	3	1	0	0	0	0	0	859
2:00 PM	0	0	445	0	0	0	0	385	2	0	0	0	0	2	3	0	0	0	0	0	834
2:15 PM	0	0	467	0	0	0	0	391	5	0	0	0	0	5	2	0	0	0	0	0	868
2:30 PM	0	0	486	0	0	0	0	372	1	0	0	0	0	4	2	0	0	0	0	0	863
2:45 PM	0	0	464	0	0	0	0	388	9	0	0	0	0	3	2	0	0	0	0	0	864
3:00 PM	0	0	517	0	0	0	0	425	5	0	0	0	0	5	0	0	0	0	0	0	952
3:15 PM	0	0	490	0	0	0	0	412	4	0	0	0	0	1	1	0	0	0	0	2	907
3:30 PM	0	0	502	0	0	0	0	487	3	0	0	0	0	1	2	0	0	0	0	1	993
3:45 PM	0	0	524	0	0	0	0	438	4	0	0	0	0	4	0	0	0	0	0	0	970
4:00 PM	0	0	564	0	0	0	0	532	6	0	0	0	0	0	0	0	0	0	0	0	1102
4:15 PM	0	0	560	0	0	0	0	462	4	0	0	0	0	1	2	0	0	0	0	0	1027
4:30 PM	0	0	553	0	0	0	0	466	7	0	0	0	0	2	2	0	0	0	0	0	1028
4:45 PM	0	0	523	0	0	0	0	551	5	0	0	0	0	3	3	0	0	0	0	0	1082
5:00 PM	0	0	612	0	0	0	0	521	10	0	0	0	0	5	1	0	0	0	0	0	1148
5:15 PM	0	0	560	0	0	0	0	475	18	0	0	0	0	2	1	0	0	0	0	0	1055
5:30 PM	0	0	518	0	0	0	0	443	4	0	0	0	0	4	1	0	0	0	0	0	969
5:45 PM	0	0	524	0	0	0	0	410	3	0	0	0	0	4	1	0	0	0	0	0	941
6:00 PM	0	0	482	0	0	0	0	397	5	0	0	0	0	2	0	0	0	0	0	0	886
6:15 PM	0	0	509	0	0	0	0	393	4	0	0	0	0	8	1	0	0	0	0	0	914
6:30 PM	0	0	442	0	0	0	0	445	4	0	0	0	0	2	1	0	0	0	0	0	893
6:45 PM	0	0	410	0	0	0	0	364	7	0	0	0	0	3	3	0	0	0	0	0	784
Total	0	0	22,816	0	2	0	0	19,787	181	0	0	0	0	146	55	0	0	0	0	5	42,930

*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total" or graph below)





Turning Movement Count

Seward Hwy & 22nd Ave

Heavy Vehicles (15-Minute Periods)

All Data

Wednesday, October 11, 2017

6:00 AM to 7:00 PM

Start Time	Seward Hwy (Northbound)				Seward Hwy (Southbound)				22nd Ave (Eastbound)				N/A (Westbound)				Period Total (Veh)
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	
6:00 AM	0	0	11	0	0	0	6	0	0	0	0	0	0	0	0	0	17
6:15 AM	0	0	6	0	0	0	7	0	0	0	0	0	0	0	0	0	13
6:30 AM	0	0	10	0	0	0	7	0	0	0	0	0	0	0	0	0	17
6:45 AM	0	0	8	0	0	0	10	0	0	0	0	0	0	0	0	0	18
7:00 AM	0	0	11	0	0	0	8	0	0	0	0	0	0	0	0	0	19
7:15 AM	0	0	10	0	0	0	12	0	0	0	0	0	0	0	0	0	22
7:30 AM	0	0	15	0	0	0	9	0	0	0	0	0	0	0	0	0	24
7:45 AM	0	0	12	0	0	0	10	0	0	0	0	0	0	0	0	0	22
8:00 AM	0	0	13	0	0	0	7	0	0	0	0	0	0	0	0	0	20
8:15 AM	0	0	21	0	0	0	20	0	0	0	0	0	0	0	0	0	41
8:30 AM	0	0	29	0	0	0	15	0	0	0	0	0	0	0	0	0	44
8:45 AM	0	0	18	0	0	0	19	1	0	0	0	0	0	0	0	0	38
9:00 AM	0	0	19	0	0	0	14	0	0	0	0	1	0	0	0	0	34
9:15 AM	0	0	17	0	0	0	25	0	0	0	0	0	0	0	0	0	42
9:30 AM	0	0	21	0	0	0	17	0	0	0	0	0	0	0	0	0	38
9:45 AM	0	0	24	0	0	0	21	1	0	0	0	0	0	0	0	0	46
10:00 AM	0	0	19	0	0	0	21	0	0	0	0	0	0	0	0	0	40
10:15 AM	0	0	19	0	0	0	15	0	0	0	0	1	0	0	0	0	35
10:30 AM	0	0	19	0	0	0	25	0	0	0	0	0	0	0	0	0	44
10:45 AM	0	0	10	0	0	0	15	1	0	0	0	0	0	0	0	0	26
11:00 AM	0	0	14	0	0	0	13	0	0	0	0	1	0	0	0	0	28
11:15 AM	0	0	26	0	0	0	23	0	0	0	0	0	0	0	0	0	49
11:30 AM	0	0	18	0	0	0	24	0	0	0	0	0	0	0	0	0	42
11:45 AM	0	0	31	0	0	0	11	0	0	0	0	1	0	0	0	0	43
12:00 PM	0	0	27	0	0	0	16	0	0	0	0	0	0	0	0	0	43
12:15 PM	0	0	26	0	0	0	19	0	0	0	0	0	0	0	0	0	45
12:30 PM	0	0	19	0	0	0	18	1	0	0	0	0	0	0	0	0	38
12:45 PM	0	0	23	0	0	0	17	0	0	0	0	0	0	0	0	0	40
1:00 PM	0	0	20	0	0	0	14	0	0	0	0	0	0	0	0	0	34
1:15 PM	0	0	15	0	0	0	26	0	0	0	0	0	0	0	0	0	41
1:30 PM	0	0	19	0	0	0	21	0	0	0	0	0	0	0	0	0	40
1:45 PM	0	0	24	0	0	0	16	0	0	0	0	0	0	0	0	0	40
2:00 PM	0	0	23	0	0	0	11	0	0	0	0	0	0	0	0	0	34
2:15 PM	0	0	22	0	0	0	24	0	0	0	0	0	0	0	0	0	46
2:30 PM	0	0	19	0	0	0	14	0	0	0	0	0	0	0	0	0	33
2:45 PM	0	0	19	0	0	0	15	2	0	0	0	0	0	0	0	0	36
3:00 PM	0	0	28	0	0	0	28	0	0	0	0	0	0	0	0	0	56
3:15 PM	0	0	14	0	0	0	16	0	0	0	0	0	0	0	0	0	30
3:30 PM	0	0	19	0	0	0	15	0	0	0	0	0	0	0	0	0	34
3:45 PM	0	0	10	0	0	0	17	0	0	0	0	0	0	0	0	0	27
4:00 PM	0	0	12	0	0	0	14	0	0	0	0	0	0	0	0	0	26
4:15 PM	0	0	17	0	0	0	23	0	0	0	0	0	0	0	0	0	40
4:30 PM	0	0	14	0	0	0	23	0	0	0	0	0	0	0	0	0	37
4:45 PM	0	0	9	0	0	0	11	0	0	0	0	0	0	0	0	0	20
5:00 PM	0	0	7	0	0	0	12	0	0	0	0	1	0	0	0	0	20
5:15 PM	0	0	8	0	0	0	7	0	0	0	0	0	0	0	0	0	15
5:30 PM	0	0	6	0	0	0	10	0	0	0	0	0	0	0	0	0	16
5:45 PM	0	0	4	0	0	0	4	0	0	0	0	0	0	0	0	0	8
6:00 PM	0	0	6	0	0	0	8	0	0	0	0	0	0	0	0	0	14
6:15 PM	0	0	3	0	0	0	3	0	0	0	0	0	0	0	0	0	6
6:30 PM	0	0	8	0	0	0	3	0	0	0	0	0	0	0	0	0	11
6:45 PM	0	0	2	0	0	0	6	0	0	0	0	0	0	0	0	0	8
Total	0	0	824	0	0	0	765	6	0	0	0	5	0	0	0	0	1,600

Turning Movement Count

Seward Hwy & 22nd Ave

Total Vehicles (15-Minute Periods)

AM Peak Hour

Wednesday, October 11, 2017

7:00 AM to 9:00 AM

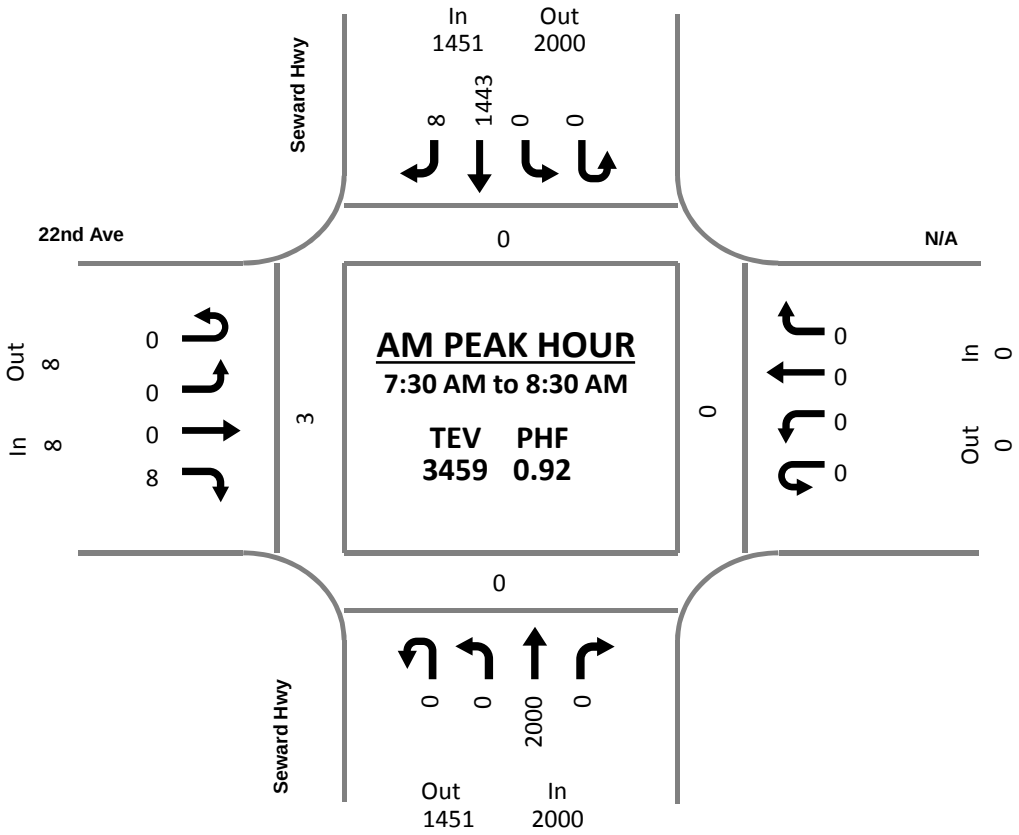
Start Time	Seward Hwy (Northbound)					Seward Hwy (Southbound)					22nd Ave (Eastbound)					N/A (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
7:00 AM	0	0	331	0	0	0	0	248	1	0	0	0	0	2	1	0	0	0	0	0	582
7:15 AM	0	0	395	0	0	0	0	296	1	0	0	0	0	2	0	0	0	0	0	0	694
7:30 AM	0	0	476	0	0	0	0	350	0	0	0	0	0	3	1	0	0	0	0	0	829
7:45 AM	0	0	540	0	0	0	0	392	2	0	0	0	0	1	0	0	0	0	0	0	935
8:00 AM	0	0	515	0	0	0	0	355	3	0	0	0	0	1	0	0	0	0	0	0	874
8:15 AM	0	0	469	0	0	0	0	346	3	0	0	0	0	3	2	0	0	0	0	0	821
8:30 AM	0	0	437	0	0	0	0	339	2	0	0	0	0	5	3	0	0	0	0	0	783
8:45 AM	0	0	453	0	0	0	0	403	2	0	0	0	0	5	0	0	0	0	0	0	863
Total	0	0	3,616	0	0	0	0	2,729	14	0	0	0	0	22	7	0	0	0	0	0	6,381

*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total")

Peak Hour Summary

7:30 AM to 8:30 AM

Data Type	Seward Hwy (Northbound)					Seward Hwy (Southbound)					22nd Ave (Eastbound)					N/A (Westbound)					Peak Hour Total
	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	
Volume	0	0	2000	0	0	0	0	1443	8	0	0	0	0	8	3	0	0	0	0	0	3459
%HV	0.0%	0.0%	3.1%	0.0%		0.0%	0.0%	3.2%	0.0%		0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%		3.1%
PHF	0.00	0.00	0.93	0.00	0.00	0.00	0.00	0.92	0.67	0.00	0.00	0.00	0.00	0.67	0.38	0.00	0.00	0.00	0.00	0.00	0.92
Volume			2000					1451						8				0			3459
%HV			3.1%					3.2%						0.0%				0.0%			3.1%
PHF			0.93					0.92						0.67				0.00			0.92



Turning Movement Count

Seward Hwy & 22nd Ave

Total Vehicles (15-Minute Periods)

PM Peak Hour

Wednesday, October 11, 2017

4:00 PM to 6:00 PM

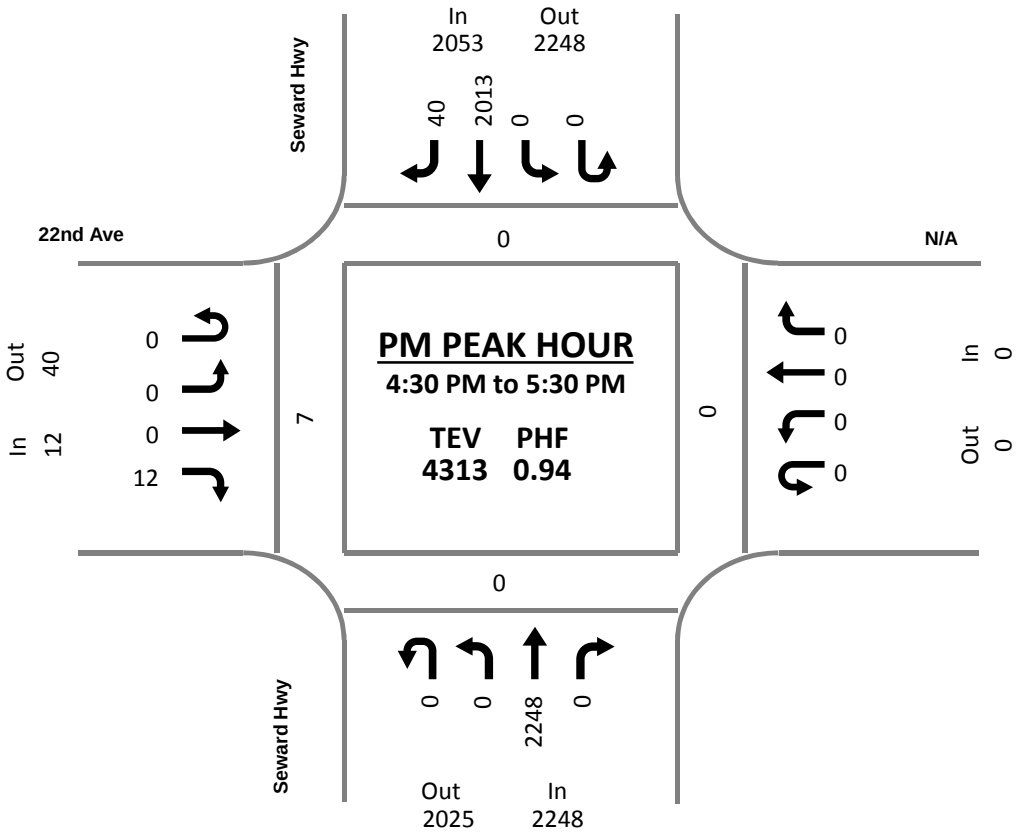
Start Time	Seward Hwy (Northbound)					Seward Hwy (Southbound)					22nd Ave (Eastbound)					N/A (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
4:00 PM	0	0	564	0	0	0	0	532	6	0	0	0	0	0	0	0	0	0	0	0	1102
4:15 PM	0	0	560	0	0	0	0	462	4	0	0	0	0	1	2	0	0	0	0	0	1027
4:30 PM	0	0	553	0	0	0	0	466	7	0	0	0	0	2	2	0	0	0	0	0	1028
4:45 PM	0	0	523	0	0	0	0	551	5	0	0	0	0	3	3	0	0	0	0	0	1082
5:00 PM	0	0	612	0	0	0	0	521	10	0	0	0	0	5	1	0	0	0	0	0	1148
5:15 PM	0	0	560	0	0	0	0	475	18	0	0	0	0	2	1	0	0	0	0	0	1055
5:30 PM	0	0	518	0	0	0	0	443	4	0	0	0	0	4	1	0	0	0	0	0	969
5:45 PM	0	0	524	0	0	0	0	410	3	0	0	0	0	4	1	0	0	0	0	0	941
Total	0	0	4,414	0	0	0	0	3,860	57	0	0	0	0	21	11	0	0	0	0	0	8,352

*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total")

Peak Hour Summary

4:30 PM to 5:30 PM

Data Type	Seward Hwy (Northbound)					Seward Hwy (Southbound)					22nd Ave (Eastbound)					N/A (Westbound)					Peak Hour Total
	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	
Volume	0	0	2248	0	0	0	0	2013	40	0	0	0	0	12	7	0	0	0	0	0	4313
%HV	0.0%	0.0%	1.7%	0.0%		0.0%	0.0%	2.6%	0.0%		0.0%	0.0%	0.0%	8.3%		0.0%	0.0%	0.0%	0.0%		2.1%
PHF	0.00	0.00	0.92	0.00	0.00	0.00	0.00	0.91	0.56	0.00	0.00	0.00	0.00	0.60	0.58	0.00	0.00	0.00	0.00	0.00	0.94
Volume			2248					2053						12				0			4313
%HV			1.7%					2.6%						8.3%				0.0%			2.1%
PHF			0.92					0.92						0.60				0.00			0.94



Traffic Camera Count and Placement Information

Intersection Name: Seward Hwy & Fireweed Ln

Intersection Location	
Northbound Street	Seward Hwy
Southbound Street	Seward Hwy
Eastbound Street	Fireweed Ln
Westbound Street	Fireweed Ln
City, State	Anchorage, AK

Project Information	
Name	Midtown Congestion Relief
Client	AK DOT&PF
Project #	1124.62458.01, Phase 02
PM/Traffic Lead	Steve Noble/Brad Coy

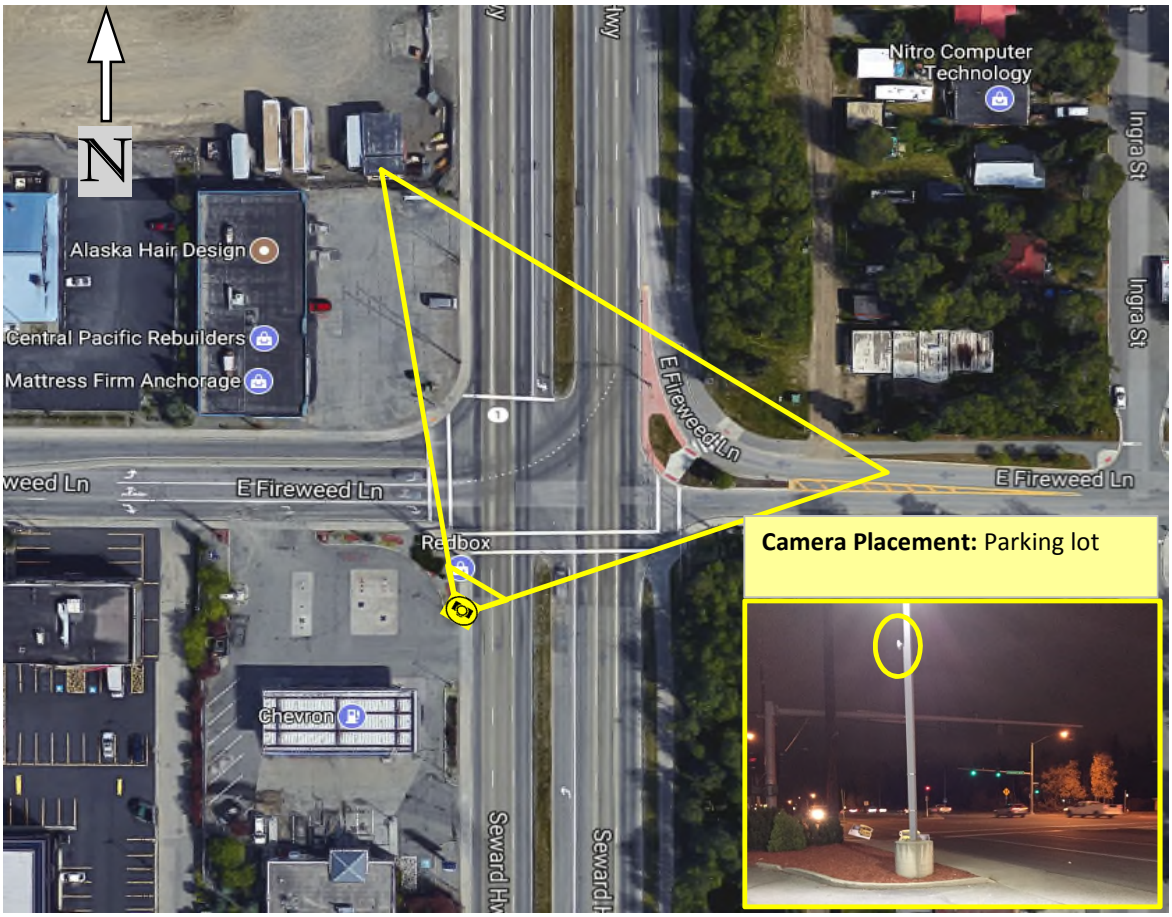
Count Description (e.g., day(s) of week, time periods, other related counts also occuring, etc.)

2 weekdays (Tue, Wed, or Thu) back-to-back; AM/PM peak periods are priority, but midday is also desirable

Camera Setup/Video Footage	
Staff Responsible	Brad Coy
Setup Time	10/11/2017 6:50 AM
Take Down Time	10/12/2017 8:45 PM
Duration (hours)	37.92
Camera # (2-digit)	d7

Count Date, Time, Vendor	
Date	10/11/2017 (Wednesday)
Start Time	7:00 AM
End Time	7:30 PM
Duration (hours)	12.50
Count Vendor	CountingCars.com

Camera Placement



Other Notes (Before, During, or After Count)

DOWL

Turning Movement Count

Seward Hwy & Fireweed Ln

Total Vehicles (15-Minute Periods)

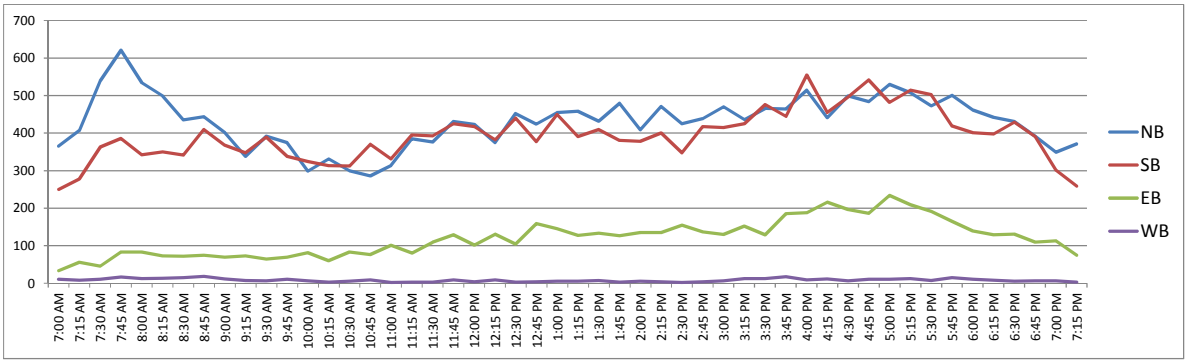
All Data

Wednesday, October 11, 2017

7:00 AM to 7:30 PM

Start Time	Seward Hwy (Northbound)					Seward Hwy (Southbound)					Fireweed Ln (Eastbound)					Fireweed Ln (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
7:00 AM	2	30	328	5	0	2	2	228	18	0	0	24	5	4	0	0	0	0	10	1	658
7:15 AM	2	44	359	2	0	1	1	260	16	0	0	32	4	20	0	0	0	0	8	3	749
7:30 AM	4	32	500	3	1	1	1	337	24	0	0	26	3	16	0	0	0	0	10	3	957
7:45 AM	0	86	533	2	3	2	4	350	30	0	0	45	6	32	1	0	0	0	16	1	1106
8:00 AM	1	69	462	2	2	0	1	314	27	0	0	47	4	32	1	0	0	0	12	0	971
8:15 AM	2	46	449	2	1	0	2	317	31	0	0	42	9	22	0	0	0	0	13	2	935
8:30 AM	2	34	394	5	0	3	3	304	31	0	1	27	3	41	2	0	0	0	15	1	863
8:45 AM	1	43	399	1	0	4	5	364	37	0	0	32	4	38	1	0	0	0	18	1	946
9:00 AM	1	38	358	5	1	2	6	319	41	0	0	37	4	28	0	0	0	0	11	1	850
9:15 AM	1	22	312	3	2	7	4	311	25	0	0	44	3	26	0	0	0	0	7	1	765
9:30 AM	0	21	368	3	0	1	6	343	39	0	0	33	3	28	1	0	0	0	6	0	851
9:45 AM	0	24	349	2	0	5	2	308	23	0	0	40	4	25	0	0	0	0	10	0	792
10:00 AM	1	29	265	4	1	7	6	290	21	0	0	45	7	29	0	0	0	0	6	1	710
10:15 AM	0	19	308	4	0	2	5	276	30	0	0	35	5	20	1	0	0	0	3	2	707
10:30 AM	1	19	278	2	0	2	2	282	26	0	0	48	12	23	1	0	0	0	5	0	700
10:45 AM	0	22	262	2	4	5	2	335	28	0	0	43	0	33	1	0	0	0	9	1	741
11:00 AM	1	28	284	1	0	4	4	304	19	0	1	46	8	46	0	0	0	0	2	2	748
11:15 AM	0	22	352	11	1	6	6	355	28	0	0	38	6	36	0	0	0	0	3	2	863
11:30 AM	3	24	337	12	0	6	3	357	27	0	0	59	8	42	2	0	0	0	3	1	881
11:45 AM	3	37	384	7	1	4	9	391	21	0	0	62	7	60	4	0	0	0	9	7	994
12:00 PM	0	31	382	10	0	0	5	367	45	0	0	56	10	36	0	0	0	0	4	1	946
12:15 PM	1	21	343	10	2	6	9	344	23	0	0	76	8	47	5	0	0	0	9	6	897
12:30 PM	3	34	408	7	1	3	8	395	34	0	0	48	7	49	2	0	0	0	3	0	999
12:45 PM	0	37	384	3	1	7	4	346	20	0	0	94	5	60	2	0	0	0	4	1	964
1:00 PM	1	29	411	14	0	5	4	403	38	0	0	76	5	64	1	0	0	0	5	1	1055
1:15 PM	3	31	416	8	1	2	2	359	28	0	0	66	9	52	0	0	0	0	5	1	981
1:30 PM	2	40	382	8	1	1	7	379	23	0	0	71	12	50	2	0	0	0	7	4	982
1:45 PM	0	43	429	8	0	3	3	344	31	0	0	60	6	60	2	0	0	0	3	3	990
2:00 PM	2	39	363	5	0	3	11	337	27	0	1	67	12	55	2	0	0	0	5	5	927
2:15 PM	4	15	443	9	0	0	4	363	33	0	0	58	13	64	2	0	0	0	4	5	1010
2:30 PM	1	32	388	4	2	1	5	315	26	0	1	76	14	64	0	0	0	0	2	0	929
2:45 PM	2	32	401	4	0	3	10	388	16	0	0	81	6	50	1	0	0	0	4	5	997
3:00 PM	1	27	437	5	2	5	10	377	23	0	0	58	18	54	5	0	0	0	6	3	1021
3:15 PM	1	24	403	8	0	7	10	377	31	0	0	78	10	64	1	0	0	0	12	0	1025
3:30 PM	0	19	435	12	0	5	4	446	21	0	0	64	8	57	2	0	0	0	12	0	1083
3:45 PM	3	37	412	12	3	8	8	401	28	0	0	118	7	60	0	0	0	0	17	2	1111
4:00 PM	0	26	478	11	0	6	9	507	33	0	0	103	14	71	2	0	0	0	9	1	1267
4:15 PM	2	26	404	9	2	2	15	416	22	0	0	131	8	77	1	0	0	0	11	1	1123
4:30 PM	2	28	458	11	0	6	10	458	22	2	0	102	12	82	3	0	0	0	6	2	1197
4:45 PM	1	36	433	14	6	2	16	491	33	0	0	97	19	70	4	0	0	0	10	1	1222
5:00 PM	0	41	472	17	3	9	21	427	25	0	0	120	14	100	0	0	0	0	10	5	1256
5:15 PM	2	29	458	19	2	7	32	459	17	1	0	92	27	90	2	0	0	0	12	1	1244
5:30 PM	1	48	410	14	0	6	22	452	23	0	0	96	21	74	0	0	0	0	7	2	1174
5:45 PM	1	55	428	17	0	3	5	385	26	0	0	88	13	64	0	0	0	0	15	5	1100
6:00 PM	0	38	413	11	2	8	9	361	23	0	0	66	12	61	2	0	0	0	10	4	1012
6:15 PM	3	34	395	10	0	7	11	360	20	0	0	82	11	36	1	0	0	0	8	1	977
6:30 PM	3	44	370	14	0	16	4	387	22	0	0	66	9	56	1	0	0	0	5	2	996
6:45 PM	2	27	353	10	1	12	4	351	24	0	0	60	13	36	2	0	0	0	6	7	898
7:00 PM	1	27	316	5	0	1	6	276	18	0	0	50	5	58	0	0	0	0	6	2	769
7:15 PM	1	18	348	4	0	2	7	230	20	0	0	31	8	35	1	0	0	0	3	1	707
Total	68	1,657	19,454	371	46	210	349	17,846	1,317	3	4	3,136	441	2,397	61	0	0	0	396	102	47,646

*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total" or graph below)



DOWL

Turning Movement Count

Seward Hwy & Fireweed Ln

Heavy Vehicles (15-Minute Periods)

All Data

Wednesday, October 11, 2017

7:00 AM to 7:30 PM

Start Time	Seward Hwy (Northbound)				Seward Hwy (Southbound)				Fireweed Ln (Eastbound)				Fireweed Ln (Westbound)				Period Total (Veh)
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	
7:00 AM	0	0	13	0	0	0	7	0	0	0	0	0	0	0	0	0	20
7:15 AM	0	0	11	0	0	0	10	0	0	1	0	0	0	0	0	0	22
7:30 AM	0	0	18	0	0	0	10	0	0	2	0	0	0	0	0	0	30
7:45 AM	0	0	13	0	0	0	13	0	0	2	0	1	0	0	0	0	29
8:00 AM	0	0	11	0	0	0	7	0	0	1	0	0	0	0	0	0	19
8:15 AM	0	0	27	0	0	0	21	0	0	5	0	2	0	0	0	0	55
8:30 AM	0	0	34	0	0	0	15	0	0	1	0	0	0	0	0	0	50
8:45 AM	0	0	16	0	0	0	21	1	0	1	0	3	0	0	0	0	42
9:00 AM	0	3	22	2	0	0	19	1	0	0	0	3	0	0	0	0	50
9:15 AM	0	0	18	0	0	0	29	0	0	1	0	1	0	0	0	0	49
9:30 AM	0	1	29	0	0	0	25	1	0	1	0	1	0	0	0	0	58
9:45 AM	0	0	28	0	0	0	22	0	0	2	0	1	0	0	0	0	53
10:00 AM	0	0	21	0	1	0	25	0	0	1	0	0	0	0	0	0	48
10:15 AM	0	1	22	0	0	0	18	0	0	0	0	0	0	0	0	0	41
10:30 AM	0	0	17	0	0	0	26	2	0	1	0	2	0	0	0	0	48
10:45 AM	0	0	13	0	0	0	18	1	0	0	0	2	0	0	0	0	34
11:00 AM	0	1	20	0	0	0	13	0	0	0	0	0	0	0	0	0	34
11:15 AM	0	0	30	1	0	0	22	4	0	0	0	0	0	0	0	0	57
11:30 AM	0	0	15	0	0	0	25	2	0	1	0	0	0	0	0	0	43
11:45 AM	0	2	29	0	1	0	13	0	0	2	0	1	0	0	0	0	48
12:00 PM	0	0	28	1	0	0	17	1	0	0	0	2	0	0	0	0	49
12:15 PM	0	0	24	0	0	0	22	0	0	1	0	1	0	0	0	0	48
12:30 PM	0	0	23	0	0	0	20	0	0	1	0	1	0	0	0	0	45
12:45 PM	0	0	25	0	0	0	16	1	0	0	0	0	0	0	0	0	42
1:00 PM	0	0	20	2	0	0	21	0	0	1	0	0	0	0	0	0	44
1:15 PM	0	2	16	0	0	0	30	1	0	2	0	1	0	0	0	0	52
1:30 PM	0	3	20	0	0	0	22	0	0	1	0	0	0	0	0	0	46
1:45 PM	0	0	34	0	0	0	15	0	0	2	0	1	0	0	0	0	52
2:00 PM	0	0	22	0	0	1	14	0	0	2	0	1	0	0	0	0	40
2:15 PM	0	0	23	1	0	0	25	1	0	0	0	2	0	0	0	1	53
2:30 PM	0	0	18	1	0	0	19	0	0	2	0	0	0	0	0	0	40
2:45 PM	0	0	25	0	0	0	19	0	0	0	0	0	0	0	0	0	44
3:00 PM	0	1	29	1	0	1	35	0	0	1	0	0	0	0	0	0	68
3:15 PM	0	0	15	0	0	0	17	0	0	2	0	0	0	0	0	0	34
3:30 PM	0	1	18	1	1	0	15	0	0	1	0	0	0	0	0	0	37
3:45 PM	0	1	7	0	0	0	19	0	0	3	0	0	0	0	0	0	30
4:00 PM	0	0	11	0	0	0	15	1	0	1	0	1	0	0	0	0	29
4:15 PM	0	0	14	1	0	0	24	1	0	2	0	3	0	0	0	0	45
4:30 PM	0	1	18	0	0	0	25	0	0	1	0	0	0	0	0	0	45
4:45 PM	0	1	7	0	0	0	10	0	0	2	0	0	0	0	0	0	20
5:00 PM	0	0	8	0	0	0	15	1	0	0	0	0	0	0	0	0	24
5:15 PM	0	0	7	1	0	0	7	0	0	1	0	0	0	0	0	0	16
5:30 PM	0	0	3	0	0	0	12	0	0	1	0	0	0	0	0	1	17
5:45 PM	0	0	4	0	0	0	7	1	0	0	0	0	0	0	0	0	12
6:00 PM	0	0	6	0	0	0	6	1	0	0	0	3	0	0	0	0	16
6:15 PM	0	0	3	0	0	0	3	1	0	0	0	0	0	0	0	0	7
6:30 PM	0	0	10	0	0	0	3	0	0	0	0	0	0	0	0	0	13
6:45 PM	0	0	3	0	0	0	7	0	0	0	0	0	0	0	0	0	10
7:00 PM	0	0	2	0	0	0	3	1	0	0	0	0	0	0	0	0	6
7:15 PM	0	0	6	0	0	0	3	0	0	0	0	0	0	0	0	0	9
Total	0	18	856	12	3	2	825	23	0	49	0	33	0	0	0	2	1,823

Turning Movement Count

Seward Hwy & Fireweed Ln

Total Vehicles (15-Minute Periods)

AM Peak Hour

Wednesday, October 11, 2017

7:00 AM to 9:00 AM

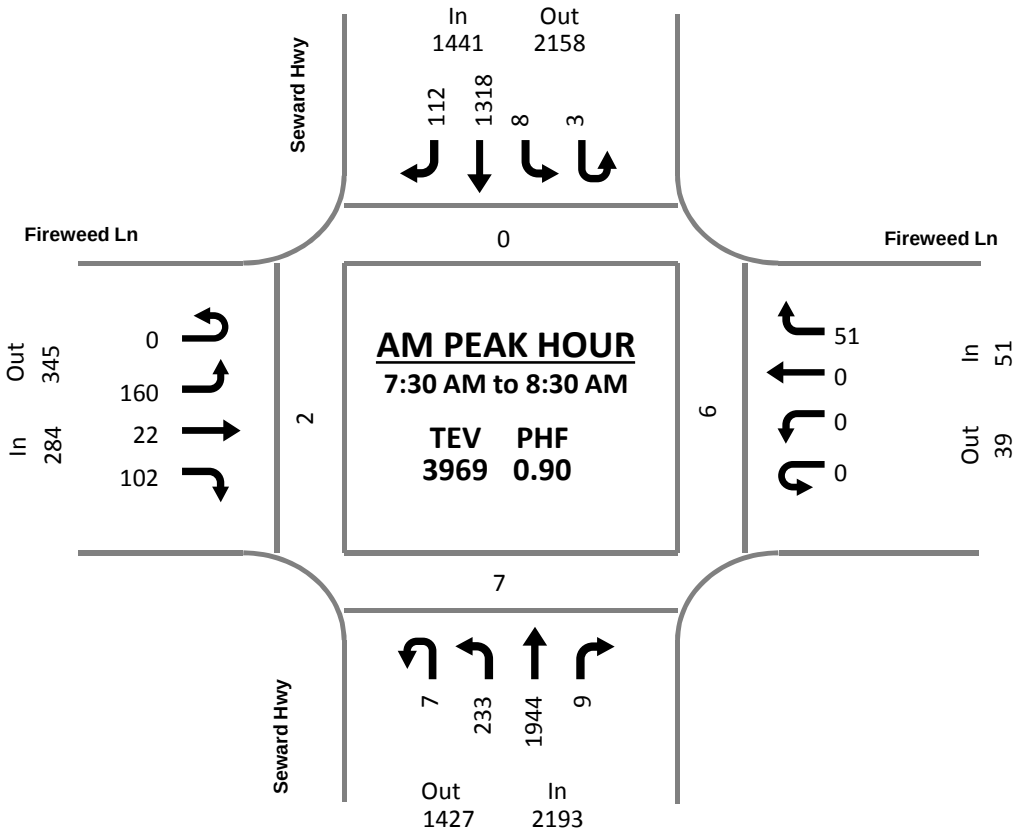
Start Time	Seward Hwy (Northbound)					Seward Hwy (Southbound)					Fireweed Ln (Eastbound)					Fireweed Ln (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
7:00 AM	2	30	328	5	0	2	2	228	18	0	0	24	5	4	0	0	0	0	10	1	658
7:15 AM	2	44	359	2	0	1	1	260	16	0	0	32	4	20	0	0	0	0	8	3	749
7:30 AM	4	32	500	3	1	1	1	337	24	0	0	26	3	16	0	0	0	0	10	3	957
7:45 AM	0	86	533	2	3	2	4	350	30	0	0	45	6	32	1	0	0	0	16	1	1106
8:00 AM	1	69	462	2	2	0	1	314	27	0	0	47	4	32	1	0	0	0	12	0	971
8:15 AM	2	46	449	2	1	0	2	317	31	0	0	42	9	22	0	0	0	0	13	2	935
8:30 AM	2	34	394	5	0	3	3	304	31	0	1	27	3	41	2	0	0	0	15	1	863
8:45 AM	1	43	399	1	0	4	5	364	37	0	0	32	4	38	1	0	0	0	18	1	946
Total	14	384	3,424	22	7	13	19	2,474	214	0	1	275	38	205	5	0	0	0	102	12	7,185

*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total")

Peak Hour Summary

7:30 AM to 8:30 AM

Data Type	Seward Hwy (Northbound)					Seward Hwy (Southbound)					Fireweed Ln (Eastbound)					Fireweed Ln (Westbound)					Peak Hour Total
	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	
Volume	7	233	1944	9	7	3	8	1318	112	0	0	160	22	102	2	0	0	0	51	6	3969
%HV	0.0%	0.0%	3.5%	0.0%		0.0%	0.0%	3.9%	0.0%		0.0%	6.3%	0.0%	2.9%		0.0%	0.0%	0.0%	0.0%		3.4%
PHF	0.44	0.68	0.91	0.75	0.58	0.38	0.50	0.94	0.90	0.00	0.00	0.85	0.61	0.80	0.50	0.00	0.00	0.00	0.80	0.50	0.90
Volume			2193					1441					284					51			3969
%HV			3.1%					3.5%					4.6%					0.0%			3.4%
PHF			0.88					0.93					0.86					0.80			0.90



Turning Movement Count

Seward Hwy & Fireweed Ln

Total Vehicles (15-Minute Periods)

PM Peak Hour

Wednesday, October 11, 2017

4:00 PM to 6:00 PM

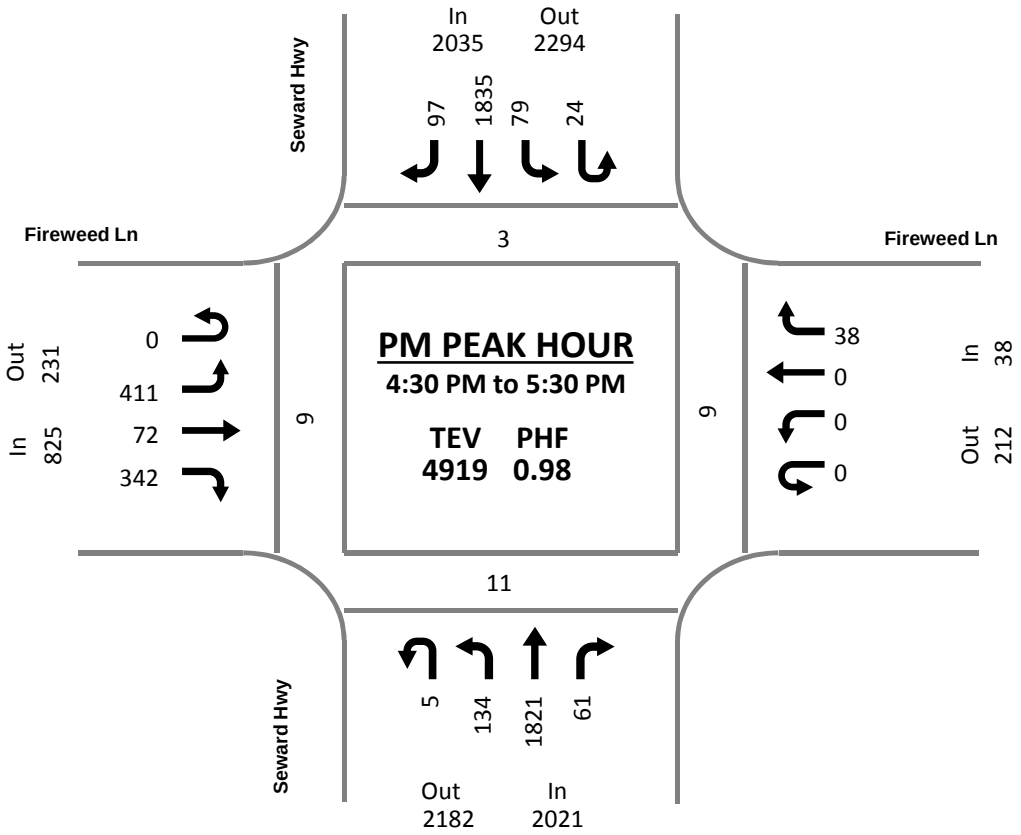
Start Time	Seward Hwy (Northbound)					Seward Hwy (Southbound)					Fireweed Ln (Eastbound)					Fireweed Ln (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
4:00 PM	0	26	478	11	0	6	9	507	33	0	0	103	14	71	2	0	0	0	9	1	1267
4:15 PM	2	26	404	9	2	2	15	416	22	0	0	131	8	77	1	0	0	0	11	1	1123
4:30 PM	2	28	458	11	0	6	10	458	22	2	0	102	12	82	3	0	0	0	6	2	1197
4:45 PM	1	36	433	14	6	2	16	491	33	0	0	97	19	70	4	0	0	0	10	1	1222
5:00 PM	0	41	472	17	3	9	21	427	25	0	0	120	14	100	0	0	0	0	10	5	1256
5:15 PM	2	29	458	19	2	7	32	459	17	1	0	92	27	90	2	0	0	0	12	1	1244
5:30 PM	1	48	410	14	0	6	22	452	23	0	0	96	21	74	0	0	0	0	7	2	1174
5:45 PM	1	55	428	17	0	3	5	385	26	0	0	88	13	64	0	0	0	0	15	5	1100
Total	9	289	3,541	112	13	41	130	3,595	201	3	0	829	128	628	12	0	0	0	80	18	9,583

*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total")

Peak Hour Summary

4:30 PM to 5:30 PM

Data Type	Seward Hwy (Northbound)					Seward Hwy (Southbound)					Fireweed Ln (Eastbound)					Fireweed Ln (Westbound)					Peak Hour Total
	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	
Volume	5	134	1821	61	11	24	79	1835	97	3	0	411	72	342	9	0	0	0	38	9	4919
%HV	0.0%	1.5%	2.2%	1.6%		0.0%	0.0%	3.1%	1.0%		0.0%	1.0%	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%		2.1%
PHF	0.63	0.82	0.96	0.80	0.46	0.67	0.62	0.93	0.73	0.38	0.00	0.86	0.67	0.86	0.56	0.00	0.00	0.00	0.79	0.45	0.98
Volume			2021					2035					825					38			4919
%HV			2.1%					2.9%					0.5%					0.0%			2.1%
PHF			0.95					0.94					0.88					0.79			0.98



Traffic Camera Count and Placement Information

Intersection Name: Seward Hwy & Fireweed Ln

Intersection Location	
Northbound Street	Seward Hwy
Southbound Street	Seward Hwy
Eastbound Street	Fireweed Ln
Westbound Street	Fireweed Ln
City, State	Anchorage, AK

Project Information	
Name	Midtown Congestion Relief
Client	AK DOT&PF
Project #	1124.62458.01, Phase 02
PM/Traffic Lead	Steve Noble/Brad Coy

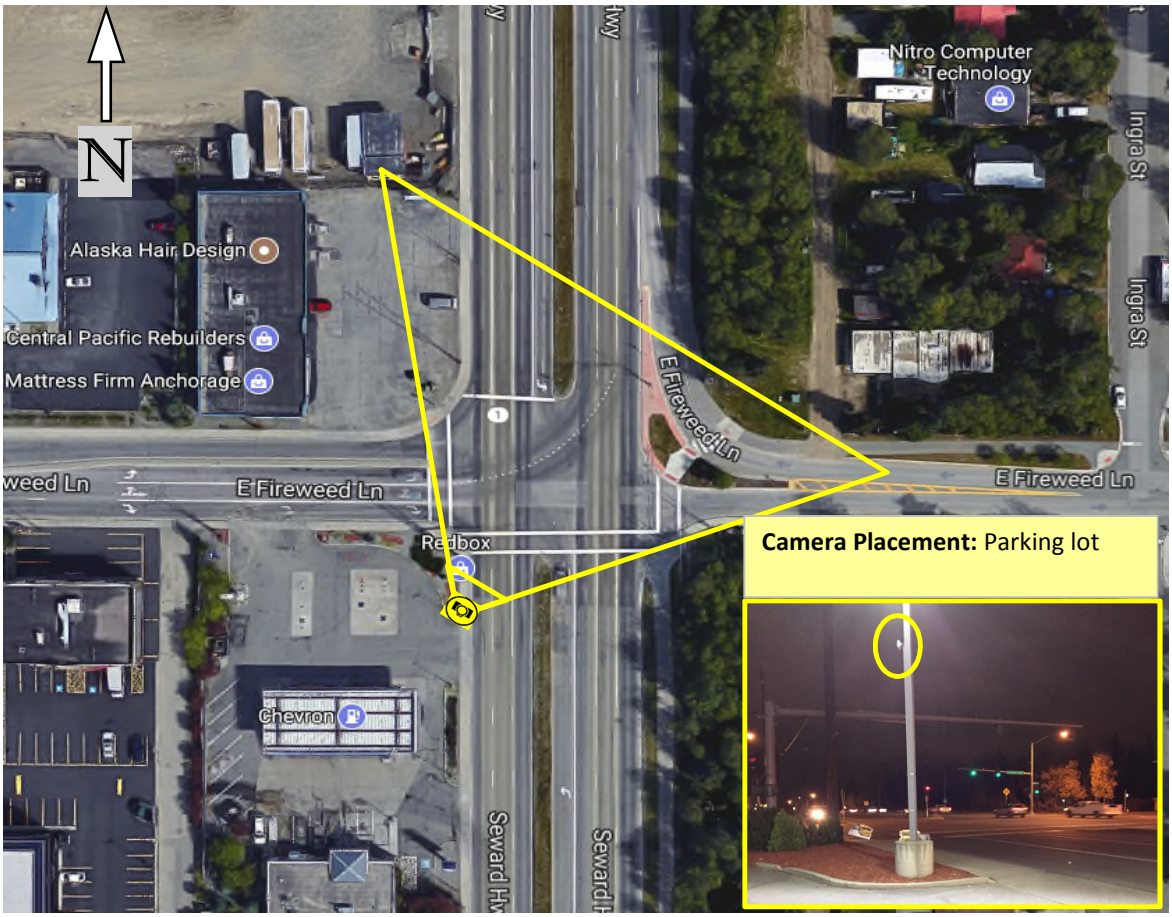
Count Description (e.g., day(s) of week, time periods, other related counts also occuring, etc.)

2 weekdays (Tue, Wed, or Thu) back-to-back; AM/PM peak periods are priority, but midday is also desirable

Camera Setup/Video Footage	
Staff Responsible	Brad Coy
Setup Time	10/11/2017 6:50 AM
Take Down Time	10/12/2017 8:45 PM
Duration (hours)	37.92
Camera # (2-digit)	d7

Count Date, Time, Vendor	
Date	10/12/2017 (Thursday)
Start Time	6:00 AM
End Time	7:00 PM
Duration (hours)	13.00
Count Vendor	CountingCars.com

Camera Placement



Other Notes (Before, During, or After Count)

DOWL

Turning Movement Count

Seward Hwy & Fireweed Ln

Total Vehicles (15-Minute Periods)

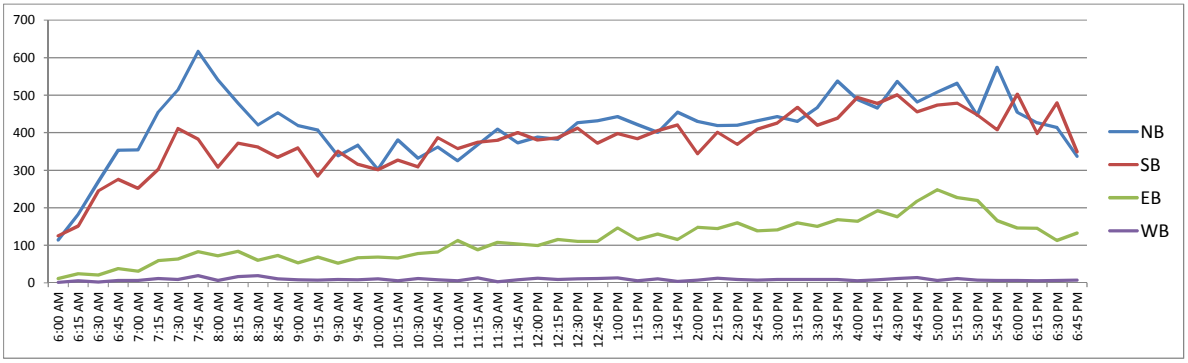
All Data

Thursday, October 12, 2017

6:00 AM to 7:00 PM

Start Time	Seward Hwy (Northbound)					Seward Hwy (Southbound)					Fireweed Ln (Eastbound)					Fireweed Ln (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
6:00 AM	0	9	105	0	0	0	2	117	6	0	0	6	1	4	0	0	0	0	1	0	251
6:15 AM	0	3	178	1	0	1	1	146	3	0	0	14	0	10	0	0	0	0	5	0	362
6:30 AM	0	11	259	0	0	1	0	234	10	0	0	6	1	14	0	0	0	0	2	0	538
6:45 AM	0	29	321	3	0	0	0	266	10	0	0	19	3	16	1	0	0	0	6	0	673
7:00 AM	0	24	328	2	0	2	2	224	24	0	0	16	1	14	0	0	0	0	6	1	643
7:15 AM	3	36	414	2	0	1	3	283	15	0	0	17	3	39	1	0	0	0	11	0	827
7:30 AM	1	38	474	2	0	1	1	387	22	0	0	35	10	18	0	0	0	0	9	0	998
7:45 AM	0	80	535	2	0	2	3	336	42	0	0	40	6	37	1	0	0	0	19	1	1102
8:00 AM	1	65	474	1	0	0	2	279	27	0	0	35	6	31	0	0	0	0	6	0	927
8:15 AM	0	41	435	3	0	3	5	321	43	0	0	33	12	39	0	0	0	0	16	1	951
8:30 AM	0	27	387	7	0	2	3	331	26	0	0	27	6	27	1	0	0	0	19	0	862
8:45 AM	1	37	413	2	2	3	6	300	26	0	0	34	3	36	0	0	0	0	10	2	871
9:00 AM	0	36	377	6	1	1	5	330	23	0	0	18	0	35	2	0	0	0	8	0	839
9:15 AM	0	25	378	4	1	2	5	251	26	0	0	39	7	22	1	0	0	0	7	0	766
9:30 AM	1	20	314	4	1	3	2	322	24	0	0	30	4	18	1	0	0	0	9	0	751
9:45 AM	0	25	339	3	0	1	8	283	24	0	0	31	5	31	0	0	0	0	8	2	758
10:00 AM	0	24	273	5	0	4	1	271	25	0	0	44	2	22	0	0	0	0	10	1	681
10:15 AM	3	26	348	4	0	2	5	296	24	0	0	34	2	30	0	0	0	0	5	1	779
10:30 AM	1	26	305	0	2	10	3	269	27	0	0	38	8	32	2	0	0	0	11	1	730
10:45 AM	4	26	328	4	0	0	4	353	30	0	0	43	4	35	0	0	0	0	8	0	839
11:00 AM	0	22	299	4	0	4	6	319	29	0	0	64	10	39	1	0	0	0	5	3	801
11:15 AM	0	20	340	8	2	3	4	342	26	0	0	42	10	36	0	0	0	0	13	3	844
11:30 AM	3	24	375	8	1	2	4	357	17	0	0	50	7	51	0	0	0	0	3	1	901
11:45 AM	3	31	336	3	1	5	3	365	27	0	0	52	5	46	2	0	0	0	8	3	884
12:00 PM	1	30	346	11	1	6	6	347	22	0	0	46	11	42	1	0	0	0	12	0	880
12:15 PM	3	31	339	9	0	3	4	347	33	0	0	53	9	53	1	0	0	0	9	1	893
12:30 PM	1	31	386	9	0	3	9	369	31	0	0	59	8	43	1	0	0	0	10	1	959
12:45 PM	3	36	387	6	0	2	4	332	34	0	0	58	8	44	1	0	0	0	11	1	925
1:00 PM	3	31	398	11	0	2	11	365	20	0	0	77	13	56	1	0	0	0	13	1	1000
1:15 PM	1	36	381	4	1	4	5	345	30	0	0	61	11	43	0	0	0	0	5	2	926
1:30 PM	0	27	370	4	2	4	11	357	33	0	0	74	8	48	3	0	0	0	10	0	946
1:45 PM	3	25	416	11	0	1	5	382	33	0	0	60	5	50	0	0	0	0	4	2	995
2:00 PM	1	26	396	7	0	3	6	301	34	0	0	83	8	57	1	0	0	0	7	1	929
2:15 PM	1	36	379	3	0	2	8	363	28	0	0	67	14	63	1	0	0	0	12	3	976
2:30 PM	2	33	380	5	1	2	8	331	28	0	0	89	10	61	0	0	0	0	9	2	958
2:45 PM	3	33	384	12	2	5	4	357	44	0	0	64	16	58	0	0	0	0	7	2	987
3:00 PM	0	35	405	3	1	9	7	384	26	0	0	70	11	60	0	0	0	0	9	1	1019
3:15 PM	4	28	388	10	0	18	32	401	17	0	0	91	15	54	0	0	0	0	9	3	1067
3:30 PM	1	31	429	6	0	4	10	375	31	0	0	77	8	65	1	0	0	0	9	0	1046
3:45 PM	1	42	484	11	2	6	9	400	24	0	0	91	7	70	1	0	0	0	9	3	1154
4:00 PM	0	21	454	14	0	11	5	448	30	0	0	80	14	70	1	0	0	0	5	2	1152
4:15 PM	1	48	406	11	3	10	18	424	26	0	0	120	10	62	0	0	0	0	8	4	1144
4:30 PM	1	33	491	12	1	2	12	466	21	0	0	91	16	69	1	0	0	0	11	3	1225
4:45 PM	2	28	439	13	1	9	19	407	21	0	0	122	12	84	2	0	0	0	14	5	1170
5:00 PM	3	48	449	9	1	2	36	415	21	0	0	129	24	95	1	0	0	0	6	1	1237
5:15 PM	2	32	488	10	0	9	43	400	27	0	0	113	15	99	0	0	0	0	11	0	1249
5:30 PM	1	32	408	5	0	6	36	373	32	0	0	107	18	94	0	0	0	0	7	1	1119
5:45 PM	0	48	511	15	0	5	6	375	22	0	0	93	12	61	1	0	0	0	6	2	1154
6:00 PM	2	35	401	17	0	13	6	454	30	0	0	69	7	70	2	0	0	0	6	1	1110
6:15 PM	5	47	362	13	1	7	5	368	18	0	0	70	16	59	0	0	0	0	5	3	975
6:30 PM	3	22	373	16	0	17	6	425	32	0	0	58	3	52	0	0	0	0	6	0	1013
6:45 PM	0	29	297	11	0	8	8	317	16	0	0	64	7	61	0	0	0	0	7	0	825
Total	69	1,639	19,682	346	28	226	417	17,610	1,320	0	0	3,003	432	2,425	33	0	0	0	442	65	47,611

*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total" or graph below)





Turning Movement Count

Seward Hwy & Fireweed Ln

Heavy Vehicles (15-Minute Periods)

All Data

Thursday, October 12, 2017

6:00 AM to 7:00 PM

Start Time	Seward Hwy (Northbound)				Seward Hwy (Southbound)				Fireweed Ln (Eastbound)				Fireweed Ln (Westbound)				Period Total (Veh)
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	
6:00 AM	0	0	6	0	0	0	5	1	0	0	0	0	0	0	0	0	12
6:15 AM	0	0	14	0	0	0	4	0	0	1	0	0	0	0	0	0	19
6:30 AM	0	0	14	0	0	0	3	0	0	1	0	0	0	0	0	0	18
6:45 AM	0	1	10	0	0	0	6	0	0	0	0	0	0	0	0	0	17
7:00 AM	0	0	8	0	0	1	12	0	0	0	0	0	0	0	0	0	21
7:15 AM	0	0	16	0	0	0	10	0	0	0	0	0	0	0	0	0	26
7:30 AM	0	0	17	0	0	0	9	0	0	1	0	0	0	0	0	0	27
7:45 AM	0	0	18	0	0	0	14	0	0	1	1	1	0	0	0	0	35
8:00 AM	0	1	34	0	0	0	15	0	0	1	1	0	0	0	0	0	52
8:15 AM	0	0	32	0	0	0	9	2	0	2	0	3	0	0	0	0	48
8:30 AM	0	0	27	1	0	0	18	0	0	0	0	3	0	0	0	0	49
8:45 AM	0	2	21	0	0	0	16	1	0	1	0	2	0	0	0	0	43
9:00 AM	0	0	15	0	0	0	24	0	0	1	0	2	0	0	0	0	42
9:15 AM	0	0	25	0	0	0	18	0	0	1	0	1	0	0	0	0	45
9:30 AM	0	0	23	0	0	0	25	1	0	1	0	0	0	0	0	0	50
9:45 AM	0	0	28	0	0	0	16	1	0	1	0	1	0	0	0	0	47
10:00 AM	0	1	26	1	0	0	22	1	0	1	0	0	0	0	0	0	52
10:15 AM	0	2	23	1	0	0	24	0	0	1	0	1	0	0	0	0	52
10:30 AM	0	1	19	0	0	0	12	1	0	2	0	3	0	0	0	0	38
10:45 AM	0	0	27	0	0	0	16	0	0	2	0	1	0	0	0	0	46
11:00 AM	0	1	20	0	0	0	19	0	0	2	0	1	0	0	0	0	43
11:15 AM	0	0	23	0	0	1	24	2	0	0	0	0	0	0	0	2	52
11:30 AM	0	0	19	0	0	0	17	0	0	1	0	2	0	0	0	1	40
11:45 AM	0	0	12	0	0	0	14	1	0	0	0	1	0	0	0	0	28
12:00 PM	0	1	13	0	0	0	24	1	0	0	0	0	0	0	0	0	39
12:15 PM	0	1	17	1	0	0	17	1	0	1	0	1	0	0	0	0	39
12:30 PM	0	0	16	0	0	0	19	1	0	0	0	1	0	0	0	1	38
12:45 PM	0	0	20	0	0	0	20	0	0	1	0	0	0	0	0	0	41
1:00 PM	0	0	13	0	0	0	25	1	0	0	0	0	0	0	0	0	39
1:15 PM	0	0	21	0	0	0	20	1	0	1	1	0	0	0	0	0	44
1:30 PM	0	0	18	0	0	0	16	0	0	1	0	1	0	0	0	0	36
1:45 PM	0	0	17	0	0	0	16	1	0	0	0	0	0	0	0	0	34
2:00 PM	0	0	24	0	0	1	17	0	0	1	1	1	0	0	0	0	45
2:15 PM	0	1	12	0	0	0	22	0	0	0	1	1	0	0	0	0	37
2:30 PM	0	2	17	0	0	0	15	1	0	0	0	0	0	0	0	0	35
2:45 PM	0	1	15	1	0	0	15	1	0	1	0	1	0	0	0	1	36
3:00 PM	0	0	17	0	0	0	23	0	0	2	0	1	0	0	0	0	43
3:15 PM	0	0	15	0	0	0	16	1	0	0	0	0	0	0	0	0	32
3:30 PM	0	1	8	0	0	0	15	2	0	1	0	0	0	0	0	1	28
3:45 PM	0	2	15	0	0	0	13	1	0	3	0	2	0	0	0	0	36
4:00 PM	0	0	11	0	0	0	13	0	0	0	0	3	0	0	0	0	27
4:15 PM	0	0	8	1	0	0	17	0	0	0	0	2	0	0	0	0	28
4:30 PM	0	0	10	0	0	0	16	0	0	1	0	0	0	0	0	0	27
4:45 PM	0	0	13	0	0	0	10	0	0	0	0	1	0	0	0	2	26
5:00 PM	0	0	13	0	0	0	11	0	0	0	0	0	0	0	0	0	24
5:15 PM	0	0	13	0	0	0	11	1	0	0	0	3	0	0	0	0	28
5:30 PM	0	0	5	0	0	0	3	0	0	0	0	1	0	0	0	0	9
5:45 PM	0	0	5	0	0	0	7	0	0	1	0	1	0	0	0	0	14
6:00 PM	0	0	8	0	0	0	11	0	0	0	0	0	0	0	0	0	19
6:15 PM	0	0	7	0	0	0	4	0	0	0	0	0	0	0	0	0	11
6:30 PM	0	0	2	0	0	0	3	1	0	1	0	0	0	0	0	0	7
6:45 PM	0	0	2	0	0	0	6	0	0	0	0	0	0	0	0	0	8
Total	0	18	832	6	0	3	757	25	0	36	5	42	0	0	0	8	1,732

Turning Movement Count

Seward Hwy & Fireweed Ln

Total Vehicles (15-Minute Periods)

AM Peak Hour

Thursday, October 12, 2017

7:00 AM to 9:00 AM

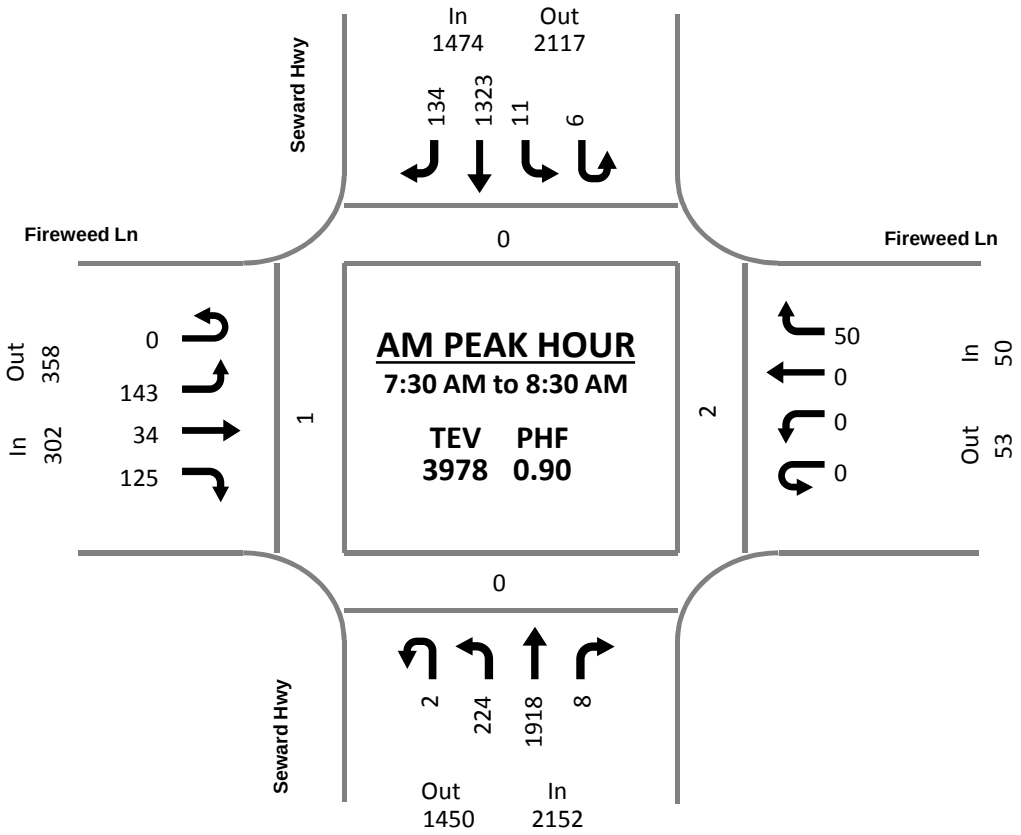
Start Time	Seward Hwy (Northbound)					Seward Hwy (Southbound)					Fireweed Ln (Eastbound)					Fireweed Ln (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
7:00 AM	0	24	328	2	0	2	2	224	24	0	0	16	1	14	0	0	0	0	6	1	643
7:15 AM	3	36	414	2	0	1	3	283	15	0	0	17	3	39	1	0	0	0	11	0	827
7:30 AM	1	38	474	2	0	1	1	387	22	0	0	35	10	18	0	0	0	0	9	0	998
7:45 AM	0	80	535	2	0	2	3	336	42	0	0	40	6	37	1	0	0	0	19	1	1102
8:00 AM	1	65	474	1	0	0	2	279	27	0	0	35	6	31	0	0	0	0	6	0	927
8:15 AM	0	41	435	3	0	3	5	321	43	0	0	33	12	39	0	0	0	0	16	1	951
8:30 AM	0	27	387	7	0	2	3	331	26	0	0	27	6	27	1	0	0	0	19	0	862
8:45 AM	1	37	413	2	2	3	6	300	26	0	0	34	3	36	0	0	0	0	10	2	871
Total	6	348	3,460	21	2	14	25	2,461	225	0	0	237	47	241	3	0	0	0	96	5	7,181

*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total")

Peak Hour Summary

7:30 AM to 8:30 AM

Data Type	Seward Hwy (Northbound)					Seward Hwy (Southbound)					Fireweed Ln (Eastbound)					Fireweed Ln (Westbound)					Peak Hour Total
	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	
Volume	2	224	1918	8	0	6	11	1323	134	0	0	143	34	125	1	0	0	0	50	2	3978
%HV	0.0%	0.4%	5.3%	0.0%		0.0%	0.0%	3.6%	1.5%		0.0%	3.5%	5.9%	3.2%		0.0%	0.0%	0.0%	0.0%		4.1%
PHF	0.50	0.70	0.90	0.67	0.00	0.50	0.55	0.85	0.78	0.00	0.00	0.89	0.71	0.80	0.25	0.00	0.00	0.00	0.66	0.50	0.90
Volume			2152					1474					302					50			3978
%HV			4.7%					3.3%					3.6%					0.0%			4.1%
PHF			0.87					0.90					0.90					0.66			0.90



Turning Movement Count

Seward Hwy & Fireweed Ln

Total Vehicles (15-Minute Periods)

PM Peak Hour

Thursday, October 12, 2017

4:00 PM to 6:00 PM

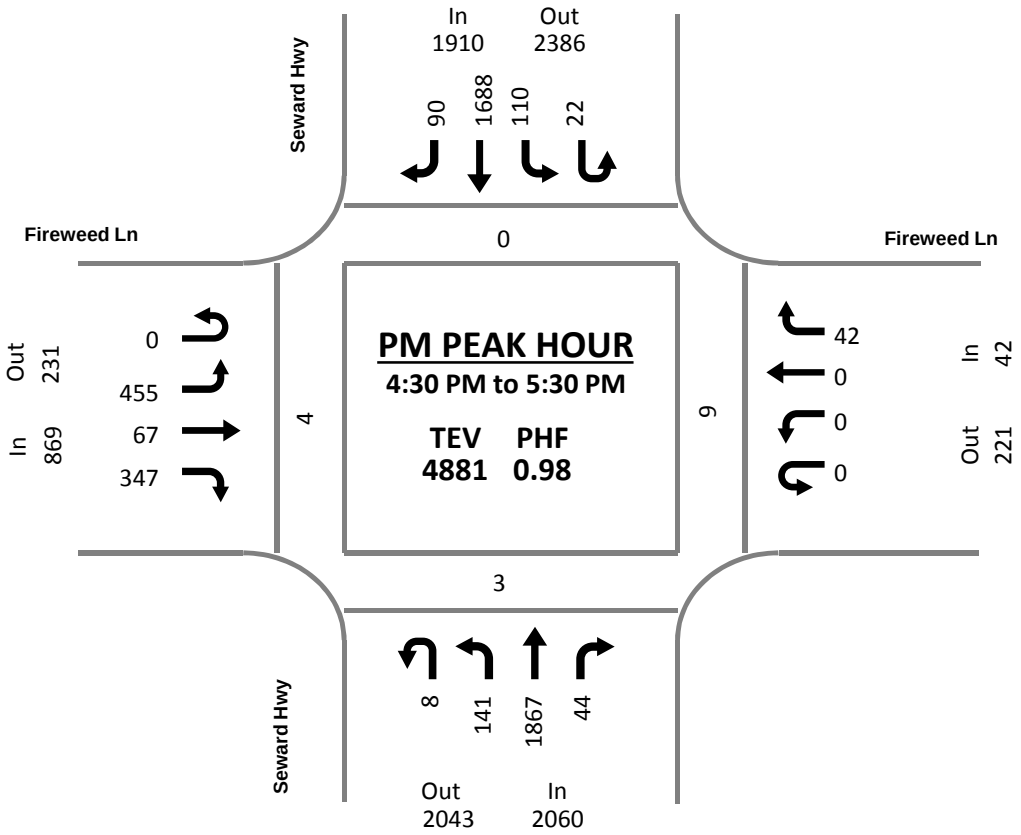
Start Time	Seward Hwy (Northbound)					Seward Hwy (Southbound)					Fireweed Ln (Eastbound)					Fireweed Ln (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
4:00 PM	0	21	454	14	0	11	5	448	30	0	0	80	14	70	1	0	0	0	5	2	1152
4:15 PM	1	48	406	11	3	10	18	424	26	0	0	120	10	62	0	0	0	0	8	4	1144
4:30 PM	1	33	491	12	1	2	12	466	21	0	0	91	16	69	1	0	0	0	11	3	1225
4:45 PM	2	28	439	13	1	9	19	407	21	0	0	122	12	84	2	0	0	0	14	5	1170
5:00 PM	3	48	449	9	1	2	36	415	21	0	0	129	24	95	1	0	0	0	6	1	1237
5:15 PM	2	32	488	10	0	9	43	400	27	0	0	113	15	99	0	0	0	0	11	0	1249
5:30 PM	1	32	408	5	0	6	36	373	32	0	0	107	18	94	0	0	0	0	7	1	1119
5:45 PM	0	48	511	15	0	5	6	375	22	0	0	93	12	61	1	0	0	0	6	2	1154
Total	10	290	3,646	89	6	54	175	3,308	200	0	0	855	121	634	6	0	0	0	68	18	9,450

*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total")

Peak Hour Summary

4:30 PM to 5:30 PM

Data Type	Seward Hwy (Northbound)					Seward Hwy (Southbound)					Fireweed Ln (Eastbound)					Fireweed Ln (Westbound)					Peak Hour Total
	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	
Volume	8	141	1867	44	3	22	110	1688	90	0	0	455	67	347	4	0	0	0	42	9	4881
%HV	0.0%	0.0%	2.6%	0.0%		0.0%	0.0%	2.8%	1.1%		0.0%	0.2%	0.0%	1.2%		0.0%	0.0%	0.0%	4.8%		2.2%
PHF	0.67	0.73	0.95	0.85	0.75	0.61	0.64	0.91	0.83	0.00	0.00	0.88	0.70	0.88	0.50	0.00	0.00	0.00	0.75	0.45	0.98
Volume			2060					1910					869					42			4881
%HV			2.4%					2.6%					0.6%					4.8%			2.2%
PHF			0.96					0.95					0.88					0.75			0.98



Traffic Camera Count and Placement Information

Intersection Name: Seward Hwy & Northern Lights Blvd

Intersection Location	
Northbound Street	Seward Hwy
Southbound Street	Seward Hwy
Eastbound Street	N/A
Westbound Street	Northern Lights Blvd
City, State	Anchorage, AK

Project Information	
Name	Midtown Congestion Relief
Client	AK DOT&PF
Project #	1124.62458.01, Phase 02
PM/Traffic Lead	Steve Noble/Brad Coy

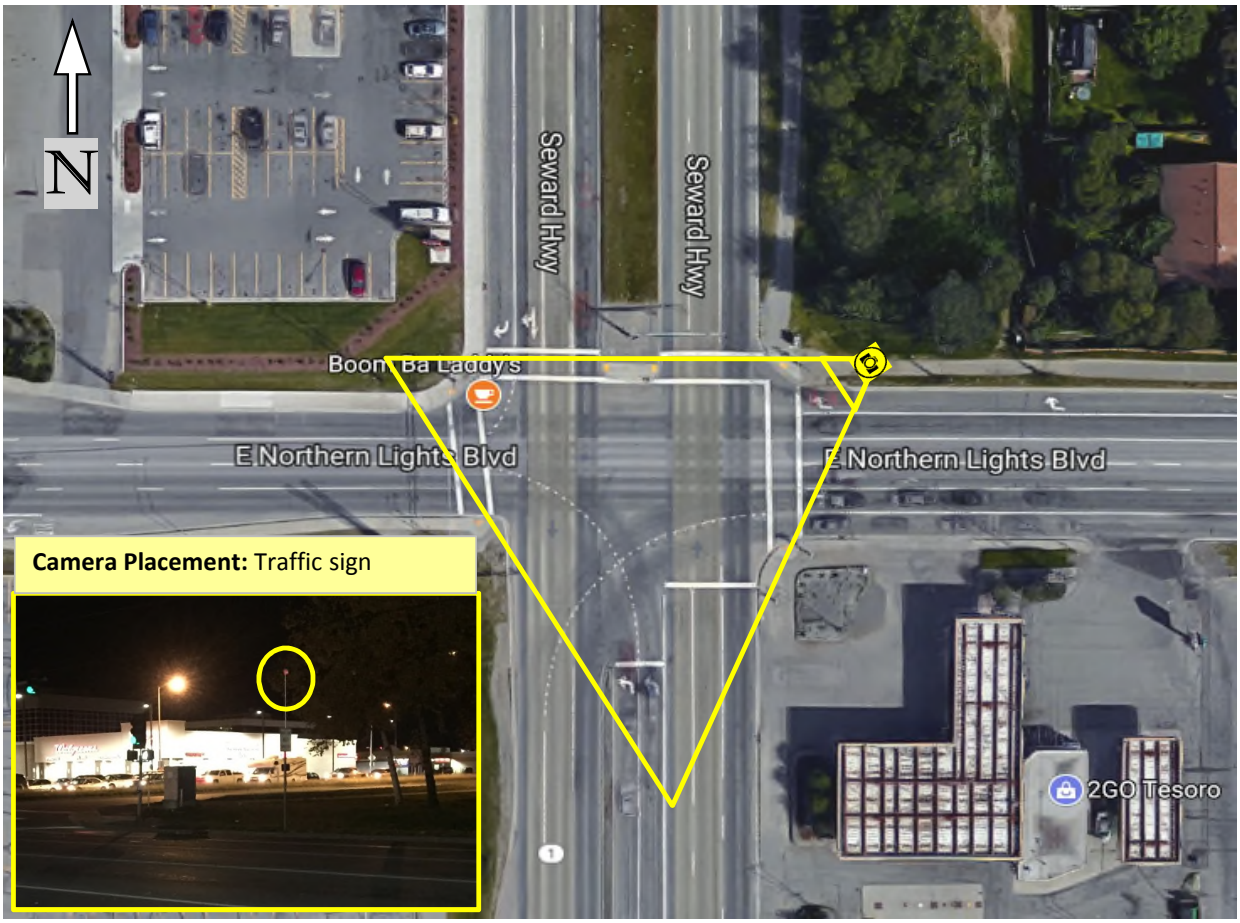
Count Description (e.g., day(s) of week, time periods, other related counts also occuring, etc.)

2 weekdays (Tue, Wed, or Thu) back-to-back; AM/PM peak periods are priority, but midday is also desirable

Camera Setup/Video Footage	
Staff Responsible	Brad Coy
Setup Time	10/3/2017 6:35 AM
Take Down Time	10/4/2017 8:00 PM
Duration (hours)	37.42
Camera # (2-digit)	c3

Count Date, Time, Vendor	
Date	10/3/2017 (Tuesday)
Start Time	6:45 AM
End Time	7:30 PM
Duration (hours)	12.75
Count Vendor	CountingCars.com

Camera Placement



Other Notes (Before, During, or After Count)

Camera angle got most of (but not all of) north leg crosswalk

DOWL

Turning Movement Count

Seward Hwy & Northern Lights Blvd

Total Vehicles (15-Minute Periods)

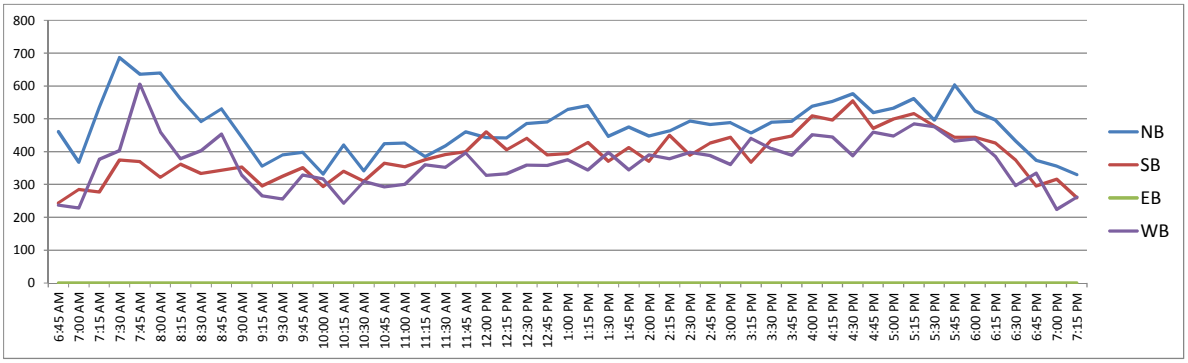
All Data

Tuesday, October 03, 2017

6:45 AM to 7:30 PM

Start Time	Seward Hwy (Northbound)					Seward Hwy (Southbound)					N/A (Eastbound)					Northern Lights Blvd (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
6:45 AM	1	76	384	0	0	0	0	210	34	0	0	0	0	0	0	0	61	158	18	1	942
7:00 AM	1	38	329	0	0	0	0	251	34	0	0	0	0	0	0	0	55	151	22	0	881
7:15 AM	1	101	433	0	0	0	0	240	37	0	0	0	0	0	0	0	83	259	35	1	1189
7:30 AM	0	109	578	0	0	0	0	319	56	0	0	0	0	0	0	0	100	267	36	0	1465
7:45 AM	1	110	525	0	0	0	0	318	52	0	0	0	0	0	2	0	133	416	57	4	1612
8:00 AM	0	139	501	0	0	0	0	272	50	2	0	0	0	0	3	0	89	324	47	6	1422
8:15 AM	0	85	476	0	0	0	0	322	40	1	0	0	0	0	2	0	73	278	27	3	1301
8:30 AM	0	103	389	0	0	0	0	280	54	0	0	0	0	0	1	0	79	283	41	0	1229
8:45 AM	0	114	417	0	0	0	0	291	52	2	0	0	0	0	1	0	92	331	31	0	1328
9:00 AM	2	81	362	0	0	0	0	303	50	11	0	0	0	0	1	0	75	233	21	12	1127
9:15 AM	1	70	285	0	0	0	0	252	44	3	0	0	0	0	0	0	60	180	25	3	917
9:30 AM	1	79	310	0	0	0	0	274	51	1	0	0	0	0	1	0	58	175	23	1	971
9:45 AM	0	93	305	0	0	0	0	279	72	3	0	0	0	0	1	0	59	228	42	3	1078
10:00 AM	1	60	271	0	0	0	0	240	54	2	0	0	0	0	1	0	58	226	33	6	943
10:15 AM	3	89	328	0	0	0	0	274	66	6	0	0	0	0	0	0	51	164	28	6	1003
10:30 AM	0	88	253	0	0	0	0	257	53	3	0	0	0	0	0	0	65	212	32	3	960
10:45 AM	0	73	351	0	0	0	0	299	66	1	0	0	0	0	0	0	66	195	32	4	1082
11:00 AM	5	94	327	0	0	0	0	289	65	4	0	0	0	0	1	0	57	209	34	3	1080
11:15 AM	2	88	295	0	0	0	0	312	64	2	0	0	0	0	1	0	78	248	34	3	1121
11:30 AM	3	91	324	0	0	0	0	315	76	3	0	0	0	0	2	0	68	248	36	3	1161
11:45 AM	3	104	353	0	0	0	0	308	92	4	0	0	0	0	3	0	76	292	28	6	1256
12:00 PM	2	79	362	0	0	0	0	384	76	5	0	0	0	0	0	0	53	225	50	5	1231
12:15 PM	8	92	342	0	0	0	0	329	77	5	0	0	0	0	1	0	65	225	43	4	1181
12:30 PM	3	101	382	0	0	0	0	369	72	5	0	0	0	0	4	0	87	234	38	7	1286
12:45 PM	2	105	384	0	0	0	0	299	91	3	0	0	0	0	2	0	69	263	26	4	1239
1:00 PM	6	113	410	0	0	0	0	312	82	4	0	0	0	0	3	0	81	258	37	8	1299
1:15 PM	4	109	427	0	1	0	0	357	71	3	0	0	0	0	2	0	78	224	42	2	1312
1:30 PM	7	75	365	0	0	0	0	308	63	3	0	0	0	0	0	0	90	266	42	5	1216
1:45 PM	5	109	361	0	0	0	0	344	69	8	0	0	0	0	2	0	75	238	31	7	1232
2:00 PM	6	91	351	0	0	0	0	306	65	2	0	0	0	0	1	0	84	274	32	4	1209
2:15 PM	5	91	367	0	0	0	0	374	76	2	0	0	0	0	1	0	71	269	38	5	1291
2:30 PM	3	101	390	0	0	0	0	328	61	3	0	0	0	0	2	0	101	265	32	2	1281
2:45 PM	5	91	387	0	0	0	0	361	65	3	0	0	0	0	2	0	77	264	47	2	1297
3:00 PM	2	80	407	0	0	0	0	368	76	5	0	0	0	0	1	0	79	241	41	4	1294
3:15 PM	0	67	390	0	0	0	0	308	60	2	0	0	0	0	3	0	91	296	54	2	1266
3:30 PM	4	71	415	0	0	0	0	378	57	1	0	0	0	0	0	0	94	272	44	3	1335
3:45 PM	8	75	410	0	0	0	0	383	65	4	0	0	0	0	4	0	84	267	38	3	1330
4:00 PM	10	71	457	0	0	0	0	446	63	4	0	0	0	0	1	0	95	316	41	4	1499
4:15 PM	7	96	450	0	0	0	0	434	62	2	0	0	0	0	0	0	109	305	31	2	1494
4:30 PM	4	78	494	0	0	0	0	477	78	3	0	0	0	0	2	0	95	247	45	3	1518
4:45 PM	6	86	427	0	0	0	0	426	45	4	0	0	0	0	3	0	110	302	47	6	1449
5:00 PM	15	106	412	0	0	0	0	447	52	4	0	0	0	0	0	0	112	301	35	6	1480
5:15 PM	8	84	470	0	0	0	0	458	58	7	0	0	0	0	5	0	109	334	42	10	1563
5:30 PM	13	94	389	0	0	0	0	421	57	9	0	0	0	0	2	0	94	323	59	9	1450
5:45 PM	5	97	502	0	0	0	0	394	50	4	0	0	0	0	0	0	102	285	45	9	1480
6:00 PM	9	63	452	0	0	0	0	400	44	3	0	0	0	0	4	0	98	292	49	8	1407
6:15 PM	8	84	404	0	0	0	0	368	58	3	0	0	0	0	0	0	86	256	43	3	1307
6:30 PM	5	74	354	0	0	0	0	320	55	5	0	0	0	0	1	0	69	205	23	10	1105
6:45 PM	6	73	295	0	0	0	0	253	43	7	0	0	0	0	1	0	90	212	33	10	1005
7:00 PM	5	60	291	0	0	0	0	281	35	3	0	0	0	0	0	0	54	142	28	7	896
7:15 PM	3	81	246	0	0	0	0	212	48	4	0	0	0	0	1	0	56	177	28	8	851
Total	199	4,482	19,589	0	1	0	0	16,750	3,036	168	0	0	0	0	68	0	4,094	12,855	1,866	230	62,871

*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total" or graph below)





Turning Movement Count

Seward Hwy & Northern Lights Blvd

Heavy Vehicles (15-Minute Periods)

All Data

Tuesday, October 03, 2017

6:45 AM to 7:30 PM

Start Time	Seward Hwy (Northbound)				Seward Hwy (Southbound)				N/A (Eastbound)				Northern Lights Blvd (Westbound)				Period Total (Veh)
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	
6:45 AM	0	1	16	0	0	0	3	0	0	0	0	0	0	0	1	0	21
7:00 AM	0	1	13	0	0	0	5	1	0	0	0	0	0	1	1	0	22
7:15 AM	0	1	12	0	0	0	7	2	0	0	0	0	0	0	2	0	24
7:30 AM	0	0	9	0	0	0	9	0	0	0	0	0	0	1	3	1	23
7:45 AM	0	0	13	0	0	0	6	0	0	0	0	0	0	1	1	0	21
8:00 AM	0	1	25	0	0	0	5	0	0	0	0	0	0	3	6	0	40
8:15 AM	0	2	16	0	0	0	24	0	0	0	0	0	0	3	2	1	48
8:30 AM	0	1	24	0	0	0	13	0	0	0	0	0	0	1	4	0	43
8:45 AM	0	1	24	0	0	0	22	0	0	0	0	0	0	1	1	0	49
9:00 AM	0	1	19	0	0	0	25	0	0	0	0	0	0	5	3	0	53
9:15 AM	0	2	14	0	0	0	16	3	0	0	0	0	0	2	4	3	44
9:30 AM	0	1	15	0	0	0	14	1	0	0	0	0	0	1	7	1	40
9:45 AM	0	2	24	0	0	0	17	0	0	0	0	0	0	0	0	2	45
10:00 AM	0	2	17	0	0	0	16	0	0	0	0	0	0	1	4	3	43
10:15 AM	0	0	17	0	0	0	28	0	0	0	0	0	0	1	1	0	47
10:30 AM	0	2	19	0	0	0	16	1	0	0	0	0	0	1	4	1	44
10:45 AM	0	0	18	0	0	0	24	0	0	0	0	0	0	2	2	0	46
11:00 AM	0	1	12	0	0	0	13	1	0	0	0	0	0	4	4	1	36
11:15 AM	0	3	16	0	0	0	12	2	0	0	0	0	0	0	4	0	37
11:30 AM	0	2	23	0	0	0	19	1	0	0	0	0	0	1	2	1	49
11:45 AM	0	1	17	0	0	0	16	2	0	0	0	0	0	0	4	0	40
12:00 PM	0	1	14	0	0	0	16	1	0	0	0	0	0	0	5	1	38
12:15 PM	0	2	14	0	0	0	17	0	0	0	0	0	0	5	1	0	39
12:30 PM	0	0	15	0	0	0	24	0	0	0	0	0	0	1	4	0	44
12:45 PM	0	0	18	0	0	0	13	4	0	0	0	0	0	0	2	0	37
1:00 PM	0	1	24	0	0	0	18	0	0	0	0	0	0	1	4	0	48
1:15 PM	0	4	20	0	0	0	22	2	0	0	0	0	0	1	1	3	53
1:30 PM	0	6	28	0	0	0	24	3	0	0	0	0	0	4	3	1	69
1:45 PM	0	1	20	0	0	0	21	1	0	0	0	0	0	2	0	4	49
2:00 PM	0	0	25	0	0	0	11	1	0	0	0	0	0	3	3	1	44
2:15 PM	0	1	22	0	0	0	20	1	0	0	0	0	0	1	3	1	49
2:30 PM	0	0	16	0	0	0	20	1	0	0	0	0	0	1	4	1	43
2:45 PM	0	1	15	0	0	0	22	0	0	0	0	0	0	3	5	1	47
3:00 PM	0	0	21	0	0	0	23	2	0	0	0	0	0	2	3	2	53
3:15 PM	0	3	13	0	0	0	13	0	0	0	0	0	0	0	4	2	35
3:30 PM	0	1	11	0	0	0	11	0	0	0	0	0	0	1	2	0	26
3:45 PM	0	1	23	0	0	0	15	0	0	0	0	0	0	2	2	2	45
4:00 PM	0	1	13	0	0	0	20	0	0	0	0	0	0	1	4	0	39
4:15 PM	0	0	20	0	0	0	21	0	0	0	0	0	0	4	2	0	47
4:30 PM	0	0	20	0	0	0	10	2	0	0	0	0	0	2	3	1	38
4:45 PM	0	0	9	0	0	0	11	0	0	0	0	0	0	3	4	0	27
5:00 PM	0	0	12	0	0	0	15	1	0	0	0	0	0	1	0	0	29
5:15 PM	0	0	10	0	0	0	8	1	0	0	0	0	0	5	2	0	26
5:30 PM	0	0	9	0	0	0	7	0	0	0	0	0	0	3	1	1	21
5:45 PM	0	0	11	0	0	0	4	0	0	0	0	0	0	3	2	0	20
6:00 PM	0	0	14	0	0	0	7	1	0	0	0	0	0	1	3	2	28
6:15 PM	0	0	8	0	0	0	7	0	0	0	0	0	0	1	1	0	17
6:30 PM	0	0	9	0	0	0	4	0	0	0	0	0	0	0	0	0	13
6:45 PM	0	0	5	0	0	0	3	1	0	0	0	0	0	0	1	0	10
7:00 PM	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
7:15 PM	0	0	1	0	0	0	2	0	0	0	0	0	0	0	1	0	4
Total	0	48	806	0	0	0	719	36	0	0	0	0	0	80	130	37	1,856

DOWL

Turning Movement Count

Seward Hwy & Northern Lights Blvd

Total Vehicles (15-Minute Periods)

AM Peak Hour

Tuesday, October 03, 2017

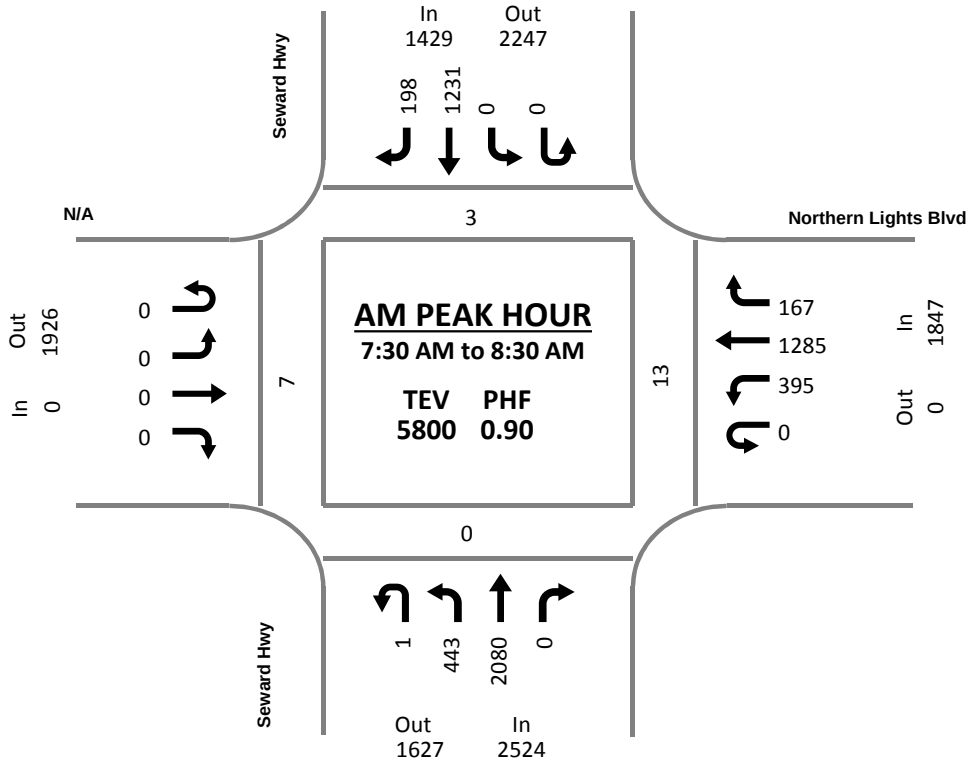
7:00 AM to 9:00 AM

Start Time	Seward Hwy (Northbound)					Seward Hwy (Southbound)					N/A (Eastbound)					Northern Lights Blvd (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
7:00 AM	1	38	329	0	0	0	0	251	34	0	0	0	0	0	0	0	55	151	22	0	881
7:15 AM	1	101	433	0	0	0	0	240	37	0	0	0	0	0	0	0	83	259	35	1	1189
7:30 AM	0	109	578	0	0	0	0	319	56	0	0	0	0	0	0	0	100	267	36	0	1465
7:45 AM	1	110	525	0	0	0	0	318	52	0	0	0	0	0	2	0	133	416	57	4	1612
8:00 AM	0	139	501	0	0	0	0	272	50	2	0	0	0	0	3	0	89	324	47	6	1422
8:15 AM	0	85	476	0	0	0	0	322	40	1	0	0	0	0	2	0	73	278	27	3	1301
8:30 AM	0	103	389	0	0	0	0	280	54	0	0	0	0	0	1	0	79	283	41	0	1229
8:45 AM	0	114	417	0	0	0	0	291	52	2	0	0	0	0	1	0	92	331	31	0	1328
Total	3	799	3,648	0	0	0	0	2,293	375	5	0	0	0	0	9	0	704	2,309	296	14	10,427

*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total")

Peak Hour Summary
7:30 AM to 8:30 AM

Data Type	Seward Hwy (Northbound)					Seward Hwy (Southbound)					N/A (Eastbound)					Northern Lights Blvd (Westbound)					Peak Hour Total
	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	
Volume	1	443	2080	0	0	0	0	1231	198	3	0	0	0	0	7	0	395	1285	167	13	5800
%HV	0.0%	0.7%	3.0%	0.0%		0.0%	0.0%	3.6%	0.0%		0.0%	0.0%	0.0%	0.0%		0.0%	2.0%	0.9%	1.2%		2.3%
PHF	0.25	0.80	0.90	0.00	0.00	0.00	0.00	0.96	0.88	0.38	0.00	0.00	0.00	0.00	0.58	0.00	0.74	0.77	0.73	0.54	0.90
Volume			2524					1429					0					1847			5800
%HV			2.6%					3.1%					0.0%					1.2%			2.3%
PHF			0.92					0.95					0.00					0.76			0.90



DOWL

Turning Movement Count

Seward Hwy & Northern Lights Blvd

Total Vehicles (15-Minute Periods)

PM Peak Hour

Tuesday, October 03, 2017

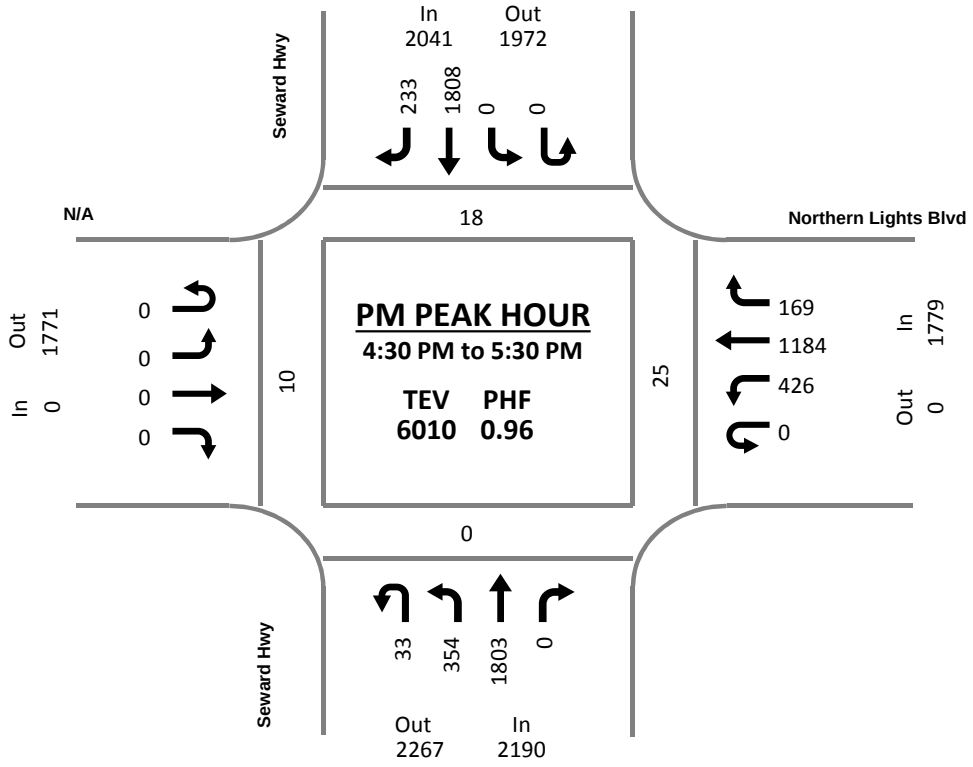
4:00 PM to 6:00 PM

Start Time	Seward Hwy (Northbound)					Seward Hwy (Southbound)					N/A (Eastbound)					Northern Lights Blvd (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
4:00 PM	10	71	457	0	0	0	0	446	63	4	0	0	0	0	1	0	95	316	41	4	1499
4:15 PM	7	96	450	0	0	0	0	434	62	2	0	0	0	0	0	0	109	305	31	2	1494
4:30 PM	4	78	494	0	0	0	0	477	78	3	0	0	0	0	2	0	95	247	45	3	1518
4:45 PM	6	86	427	0	0	0	0	426	45	4	0	0	0	0	3	0	110	302	47	6	1449
5:00 PM	15	106	412	0	0	0	0	447	52	4	0	0	0	0	0	0	112	301	35	6	1480
5:15 PM	8	84	470	0	0	0	0	458	58	7	0	0	0	0	5	0	109	334	42	10	1563
5:30 PM	13	94	389	0	0	0	0	421	57	9	0	0	0	0	2	0	94	323	59	9	1450
5:45 PM	5	97	502	0	0	0	0	394	50	4	0	0	0	0	0	0	102	285	45	9	1480
Total	68	712	3,601	0	0	0	0	3,503	465	37	0	0	0	0	13	0	826	2,413	345	49	11,933

*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total")

Peak Hour Summary
4:30 PM to 5:30 PM

Data Type	Seward Hwy (Northbound)					Seward Hwy (Southbound)					N/A (Eastbound)					Northern Lights Blvd (Westbound)					Peak Hour Total
	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	
Volume	33	354	1803	0	0	0	0	1808	233	18	0	0	0	0	10	0	426	1184	169	25	6010
%HV	0.0%	0.0%	2.8%	0.0%		0.0%	0.0%	2.4%	1.7%		0.0%	0.0%	0.0%	0.0%		0.0%	2.6%	0.8%	0.6%		2.0%
PHF	0.55	0.83	0.91	0.00	0.00	0.00	0.00	0.95	0.75	0.64	0.00	0.00	0.00	0.00	0.50	0.00	0.95	0.89	0.90	0.63	0.96
Volume			2190					2041					0					1779			6010
%HV			2.3%					2.4%					0.0%					1.2%			2.0%
PHF			0.95					0.92					0.00					0.92			0.96



Traffic Camera Count and Placement Information

Intersection Name: Seward Hwy & Benson Blvd

Intersection Location	
Northbound Street	Seward Hwy
Southbound Street	Seward Hwy
Eastbound Street	Benson Blvd
Westbound Street	N/A
City, State	Anchorage, AK

Project Information	
Name	Midtown Congestion Relief
Client	AK DOT&PF
Project #	1124.62458.01, Phase 02
PM/Traffic Lead	Steve Noble/Brad Coy

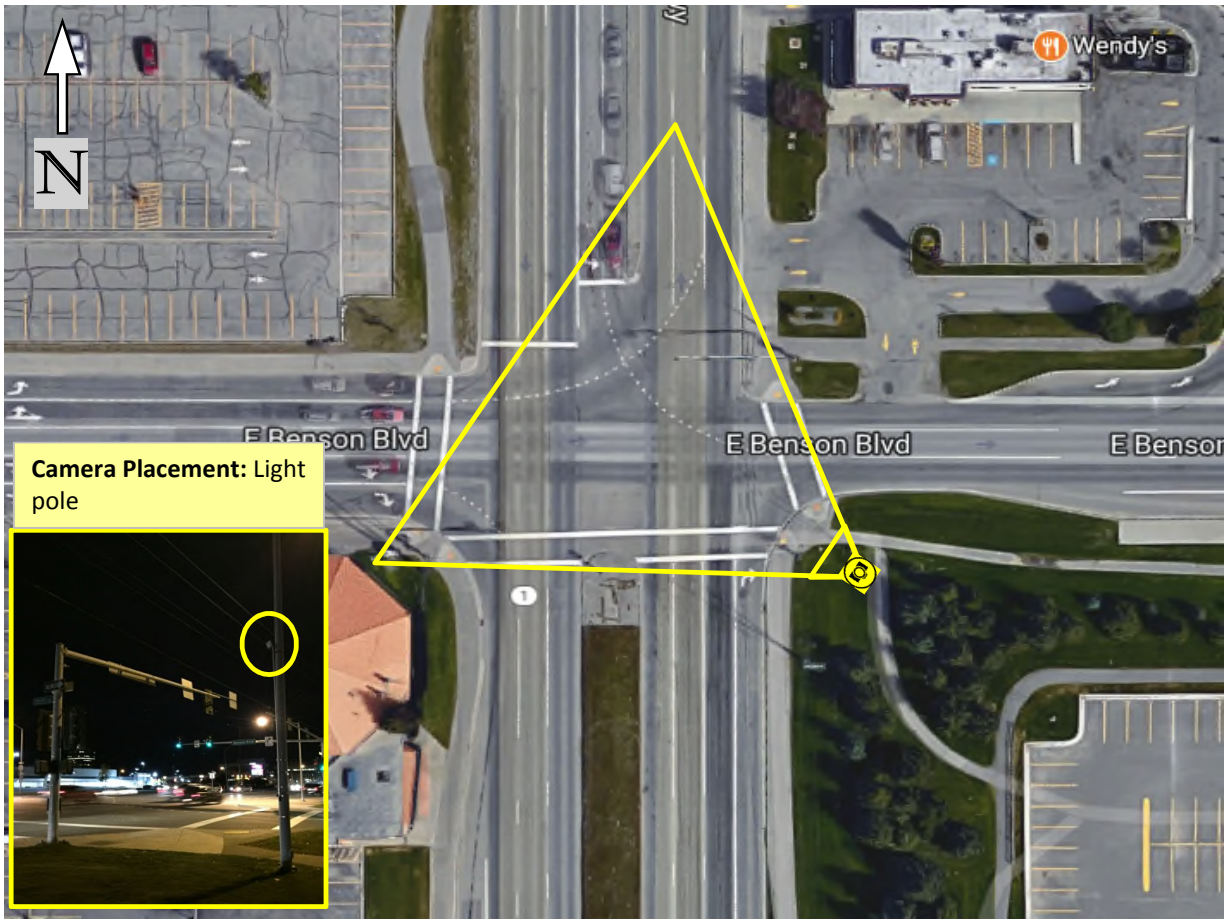
Count Description (e.g., day(s) of week, time periods, other related counts also occuring, etc.)

2 weekdays (Tue, Wed, or Thu) back-to-back; AM/PM peak periods are priority, but midday is also desirable

Camera Setup/Video Footage	
Staff Responsible	Brad Coy
Setup Time	10/3/2017 6:25 AM
Take Down Time	10/4/2017 7:50 PM
Duration (hours)	37.42
Camera # (2-digit)	a1

Count Date, Time, Vendor	
Date	10/3/2017 (Tuesday)
Start Time	6:30 AM
End Time	7:00 PM
Duration (hours)	12.50
Count Vendor	CountingCars.com

Camera Placement



Other Notes (Before, During, or After Count)

DOWL

Turning Movement Count

Seward Hwy & Benson Blvd

Total Vehicles (15-Minute Periods)

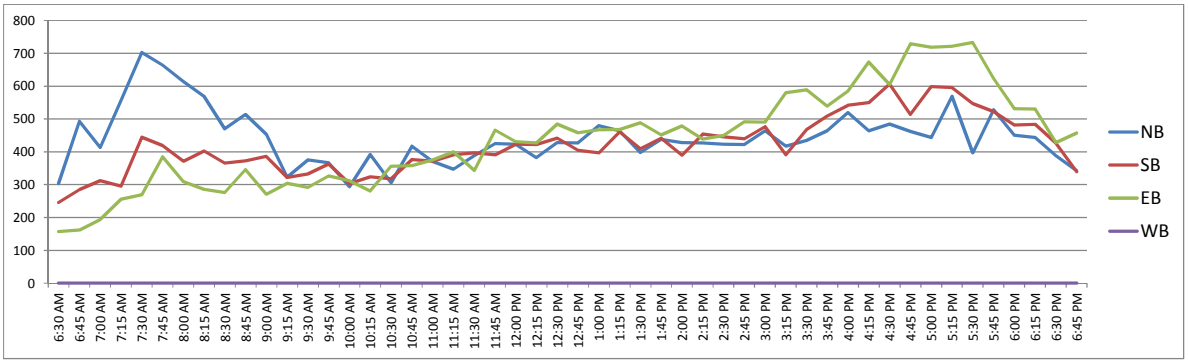
All Data

Tuesday, October 03, 2017

6:30 AM to 7:00 PM

Start Time	Seward Hwy (Northbound)					Seward Hwy (Southbound)					Benson Blvd (Eastbound)					N/A (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
6:30 AM	0	0	276	27	1	0	23	223	0	0	0	37	107	13	0	0	0	0	0	0	706
6:45 AM	0	0	448	46	0	0	22	263	0	0	0	39	101	22	1	0	0	0	0	0	941
7:00 AM	0	0	350	64	5	1	38	273	0	0	0	37	132	25	0	0	0	0	0	2	920
7:15 AM	0	0	501	56	5	0	31	265	0	0	0	55	163	38	1	0	0	0	0	2	1109
7:30 AM	0	0	628	75	2	0	38	407	0	0	0	57	171	41	0	0	0	0	0	2	1417
7:45 AM	0	0	605	59	2	0	30	389	0	0	0	51	287	47	3	0	0	0	0	2	1468
8:00 AM	0	0	565	49	1	0	41	331	0	0	0	59	184	66	2	0	0	0	0	1	1295
8:15 AM	0	0	524	46	0	0	35	368	0	0	0	46	195	45	0	0	0	0	0	3	1259
8:30 AM	0	0	431	39	1	1	31	334	0	0	0	57	173	46	0	0	0	0	0	0	1112
8:45 AM	0	0	453	61	1	0	34	339	0	1	0	60	230	56	3	0	0	0	0	3	1233
9:00 AM	0	0	405	49	1	1	36	349	0	0	0	60	163	48	1	0	0	0	0	0	1111
9:15 AM	0	0	284	39	2	1	29	292	0	0	0	63	176	65	0	0	0	0	0	0	949
9:30 AM	0	0	337	39	0	1	32	300	0	0	0	62	183	47	2	0	0	0	0	1	1001
9:45 AM	0	0	326	41	0	1	46	316	0	0	0	64	199	64	0	0	0	0	0	9	1057
10:00 AM	0	0	260	34	4	4	23	276	0	0	0	71	175	66	1	0	0	0	0	1	909
10:15 AM	0	0	338	54	2	2	33	289	0	0	0	72	161	48	3	0	0	0	0	6	997
10:30 AM	0	0	271	35	4	1	42	275	0	0	0	76	213	67	0	0	0	0	0	5	980
10:45 AM	0	0	353	64	5	0	40	337	0	0	0	77	208	73	1	0	0	0	0	4	1152
11:00 AM	0	0	325	46	4	0	55	317	0	0	0	82	222	72	1	0	0	0	0	3	1119
11:15 AM	0	0	292	55	3	1	42	348	0	0	0	72	246	82	1	0	0	0	0	0	1138
11:30 AM	0	0	327	61	5	1	51	345	0	0	0	72	196	75	1	0	0	0	0	2	1128
11:45 AM	0	0	363	62	6	2	40	349	0	0	0	101	275	90	4	0	0	0	0	9	1282
12:00 PM	0	0	351	72	7	2	44	377	0	0	0	98	230	103	4	0	0	0	0	6	1277
12:15 PM	0	0	323	59	6	1	67	354	0	0	0	91	236	100	2	0	0	0	0	4	1231
12:30 PM	0	0	365	63	5	2	56	384	0	0	0	113	282	90	3	0	0	0	0	5	1355
12:45 PM	0	0	366	61	5	0	64	341	0	0	0	99	261	98	3	0	0	0	0	3	1290
1:00 PM	0	0	413	67	4	1	48	348	0	0	0	113	274	80	1	0	0	0	0	6	1344
1:15 PM	0	0	400	64	5	3	66	392	0	3	0	112	259	97	1	0	0	0	0	0	1393
1:30 PM	0	0	331	67	6	0	43	367	0	0	0	108	288	93	1	0	0	0	0	4	1297
1:45 PM	0	0	377	61	3	3	52	387	0	0	0	93	257	102	2	0	0	0	0	2	1332
2:00 PM	0	0	353	75	6	0	59	331	0	0	0	92	298	89	5	0	0	0	0	5	1297
2:15 PM	0	0	373	54	1	5	41	409	0	0	0	93	249	97	0	0	0	0	0	1	1321
2:30 PM	0	0	362	61	3	1	57	388	0	0	0	102	248	100	2	0	0	0	0	1	1319
2:45 PM	0	0	366	56	4	1	42	397	0	0	0	109	264	119	2	0	0	0	0	3	1354
3:00 PM	0	0	382	82	10	0	71	406	0	0	0	95	274	122	3	0	0	0	0	10	1432
3:15 PM	0	0	360	57	4	1	52	338	0	0	0	129	325	126	3	0	0	0	0	6	1388
3:30 PM	0	0	371	64	3	4	55	409	0	0	0	120	340	129	3	0	0	0	0	3	1492
3:45 PM	1	0	386	77	4	1	52	456	0	0	0	93	323	123	4	0	0	0	0	4	1512
4:00 PM	0	0	428	92	1	2	51	489	0	0	0	124	341	120	5	0	0	0	0	1	1647
4:15 PM	0	0	378	86	1	0	55	495	0	0	0	131	400	143	0	0	0	0	0	1	1688
4:30 PM	0	0	416	69	8	3	60	544	0	0	0	128	339	139	3	0	0	0	0	6	1698
4:45 PM	0	0	381	81	8	2	56	456	0	0	0	131	433	165	3	0	0	0	0	10	1705
5:00 PM	0	0	368	76	3	1	65	533	0	0	0	146	399	174	1	0	0	0	0	9	1762
5:15 PM	0	0	456	114	5	0	58	538	0	0	0	124	428	170	3	0	0	0	0	12	1888
5:30 PM	0	0	316	81	11	2	68	477	0	0	0	132	431	170	1	0	0	0	0	8	1677
5:45 PM	0	0	440	89	4	1	64	458	0	0	0	147	339	138	3	0	0	0	0	3	1676
6:00 PM	0	0	381	70	1	1	45	436	0	0	0	125	303	104	1	0	0	0	0	2	1465
6:15 PM	0	0	360	84	3	0	71	413	0	0	0	112	307	112	2	0	0	0	0	3	1459
6:30 PM	0	0	314	74	6	0	61	365	0	0	0	91	239	98	3	0	0	0	0	5	1242
6:45 PM	0	0	281	61	6	0	34	305	0	0	0	84	290	83	0	0	0	0	0	7	1138
Total	1	0	19,060	3,118	187	54	2,349	18,578	0	4	0	4,505	12,817	4,480	89	0	0	0	0	185	64,962

*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total" or graph below)





Turning Movement Count

Seward Hwy & Benson Blvd

Heavy Vehicles (15-Minute Periods)

All Data

Tuesday, October 03, 2017

6:30 AM to 7:00 PM

Start Time	Seward Hwy (Northbound)				Seward Hwy (Southbound)				Benson Blvd (Eastbound)				N/A (Westbound)				Period Total (Veh)
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	
6:30 AM	0	0	13	0	0	0	3	0	0	2	2	1	0	0	0	0	21
6:45 AM	0	0	15	1	0	0	3	0	0	1	1	0	0	0	0	0	21
7:00 AM	0	0	14	1	0	0	6	0	0	1	2	0	0	0	0	0	24
7:15 AM	0	0	11	0	0	0	7	0	0	1	2	4	0	0	0	0	25
7:30 AM	0	0	5	3	0	0	17	0	0	2	5	0	0	0	0	0	32
7:45 AM	0	0	15	3	0	1	9	0	0	2	2	0	0	0	0	0	32
8:00 AM	0	0	21	2	0	3	9	0	0	3	6	0	0	0	0	0	44
8:15 AM	0	0	20	1	0	0	29	0	0	3	2	1	0	0	0	0	56
8:30 AM	0	0	27	0	0	1	15	0	0	0	4	1	0	0	0	0	48
8:45 AM	0	0	19	0	0	3	25	0	0	4	5	0	0	0	0	0	56
9:00 AM	0	0	17	1	0	1	30	0	0	4	8	1	0	0	0	0	62
9:15 AM	0	0	16	0	0	0	26	0	0	2	2	2	0	0	0	0	48
9:30 AM	0	0	19	3	0	1	15	0	0	2	10	3	0	0	0	0	53
9:45 AM	0	0	20	1	0	1	19	0	0	3	5	2	0	0	0	0	51
10:00 AM	0	0	14	2	0	0	19	0	0	4	4	2	0	0	0	0	45
10:15 AM	0	0	11	4	0	0	20	0	0	6	4	2	0	0	0	0	47
10:30 AM	0	0	18	1	0	0	20	0	0	4	4	0	0	0	0	0	47
10:45 AM	0	0	20	2	0	3	21	0	0	1	3	0	0	0	0	0	50
11:00 AM	0	0	10	0	0	1	20	0	0	2	3	1	0	0	0	0	37
11:15 AM	0	0	20	1	0	0	13	0	0	1	5	2	0	0	0	0	42
11:30 AM	0	0	24	2	0	0	23	0	0	2	3	1	0	0	0	0	55
11:45 AM	0	0	15	1	0	1	21	0	0	2	1	1	0	0	0	0	42
12:00 PM	0	0	17	2	0	0	16	0	0	1	5	2	0	0	0	0	43
12:15 PM	0	0	12	0	0	1	26	0	0	2	0	2	0	0	0	0	43
12:30 PM	0	0	14	1	0	1	24	0	0	2	3	2	0	0	0	0	47
12:45 PM	0	0	16	1	0	0	16	0	0	2	5	2	0	0	0	0	42
1:00 PM	0	0	23	4	0	0	18	0	0	5	5	3	0	0	0	0	58
1:15 PM	0	0	22	3	0	1	22	0	0	3	7	0	0	0	0	0	58
1:30 PM	0	0	20	1	0	0	30	0	0	2	5	0	0	0	0	0	58
1:45 PM	0	0	20	2	0	1	27	0	0	1	6	4	0	0	0	0	61
2:00 PM	0	0	23	6	0	0	14	0	0	0	4	1	0	0	0	0	48
2:15 PM	0	0	21	1	0	1	24	0	0	2	7	1	0	0	0	0	57
2:30 PM	0	0	16	3	0	2	20	0	0	0	4	1	0	0	0	0	46
2:45 PM	0	0	18	0	0	1	22	0	0	2	1	2	0	0	0	0	46
3:00 PM	0	0	22	1	0	0	26	0	0	0	6	3	0	0	0	0	58
3:15 PM	0	0	18	0	0	0	12	0	0	1	3	1	0	0	0	0	35
3:30 PM	0	0	9	0	0	1	15	0	0	3	5	1	0	0	0	0	34
3:45 PM	0	0	16	1	0	0	18	0	0	4	5	3	0	0	0	0	47
4:00 PM	0	0	12	1	0	1	21	0	0	2	2	1	0	0	0	0	40
4:15 PM	0	0	18	1	0	0	25	0	0	3	4	0	0	0	0	0	51
4:30 PM	0	0	14	3	0	0	16	0	0	0	1	0	0	0	0	0	34
4:45 PM	0	0	7	0	0	0	13	0	0	3	6	2	0	0	0	0	31
5:00 PM	0	0	13	1	0	0	16	0	0	0	3	3	0	0	0	0	36
5:15 PM	0	0	7	1	0	0	15	0	0	2	4	1	0	0	0	0	30
5:30 PM	0	0	9	0	0	0	12	0	0	1	6	0	0	0	0	0	28
5:45 PM	0	0	10	0	0	1	6	0	0	2	3	2	0	0	0	0	24
6:00 PM	0	0	12	0	0	0	10	0	0	0	1	1	0	0	0	0	24
6:15 PM	0	0	8	0	0	0	6	0	0	0	3	1	0	0	0	0	18
6:30 PM	0	0	7	0	0	1	4	0	0	2	2	2	0	0	0	0	18
6:45 PM	0	0	4	0	0	0	4	0	0	1	1	0	0	0	0	0	10
Total	0	0	772	62	0	28	848	0	0	98	190	65	0	0	0	0	2,063

Turning Movement Count

Seward Hwy & Benson Blvd

Total Vehicles (15-Minute Periods)

AM Peak Hour

Tuesday, October 03, 2017

7:00 AM to 9:00 AM

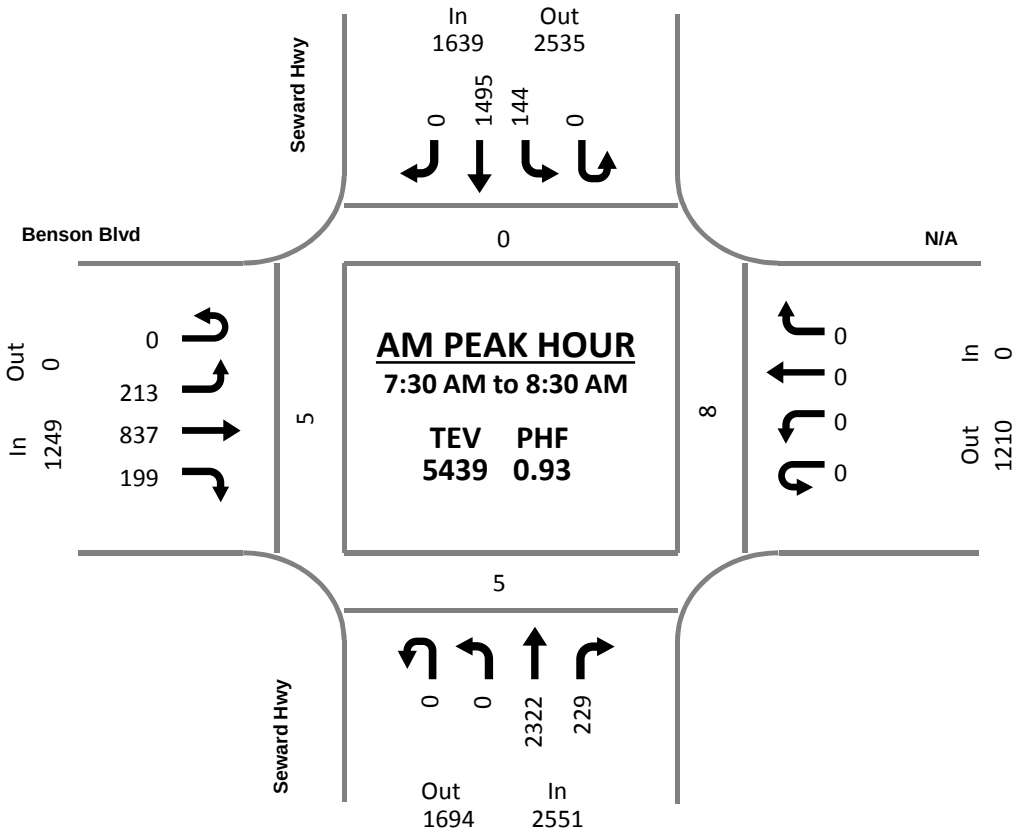
Start Time	Seward Hwy (Northbound)					Seward Hwy (Southbound)					Benson Blvd (Eastbound)					N/A (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
7:00 AM	0	0	350	64	5	1	38	273	0	0	0	37	132	25	0	0	0	0	0	2	920
7:15 AM	0	0	501	56	5	0	31	265	0	0	0	55	163	38	1	0	0	0	0	2	1109
7:30 AM	0	0	628	75	2	0	38	407	0	0	0	57	171	41	0	0	0	0	0	2	1417
7:45 AM	0	0	605	59	2	0	30	389	0	0	0	51	287	47	3	0	0	0	0	2	1468
8:00 AM	0	0	565	49	1	0	41	331	0	0	0	59	184	66	2	0	0	0	0	1	1295
8:15 AM	0	0	524	46	0	0	35	368	0	0	0	46	195	45	0	0	0	0	0	3	1259
8:30 AM	0	0	431	39	1	1	31	334	0	0	0	57	173	46	0	0	0	0	0	0	1112
8:45 AM	0	0	453	61	1	0	34	339	0	1	0	60	230	56	3	0	0	0	0	3	1233
Total	0	0	4,057	449	17	2	278	2,706	0	1	0	422	1,535	364	9	0	0	0	0	15	9,813

*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total")

Peak Hour Summary

7:30 AM to 8:30 AM

Data Type	Seward Hwy (Northbound)					Seward Hwy (Southbound)					Benson Blvd (Eastbound)					N/A (Westbound)					Peak Hour Total
	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	
Volume	0	0	2322	229	5	0	144	1495	0	0	0	213	837	199	5	0	0	0	0	8	5439
%HV	0.0%	0.0%	2.6%	3.9%		0.0%	2.8%	4.3%	0.0%		0.0%	4.7%	1.8%	0.5%		0.0%	0.0%	0.0%	0.0%		3.0%
PHF	0.00	0.00	0.92	0.76	0.63	0.00	0.88	0.92	0.00	0.00	0.00	0.90	0.73	0.75	0.42	0.00	0.00	0.00	0.00	0.67	0.93
Volume			2551					1639					1249					0			5439
%HV			2.7%					4.1%					2.1%					0.0%			3.0%
PHF			0.91					0.92					0.81					0.00			0.93



Turning Movement Count

Seward Hwy & Benson Blvd

Total Vehicles (15-Minute Periods)

PM Peak Hour

Tuesday, October 03, 2017

4:00 PM to 6:00 PM

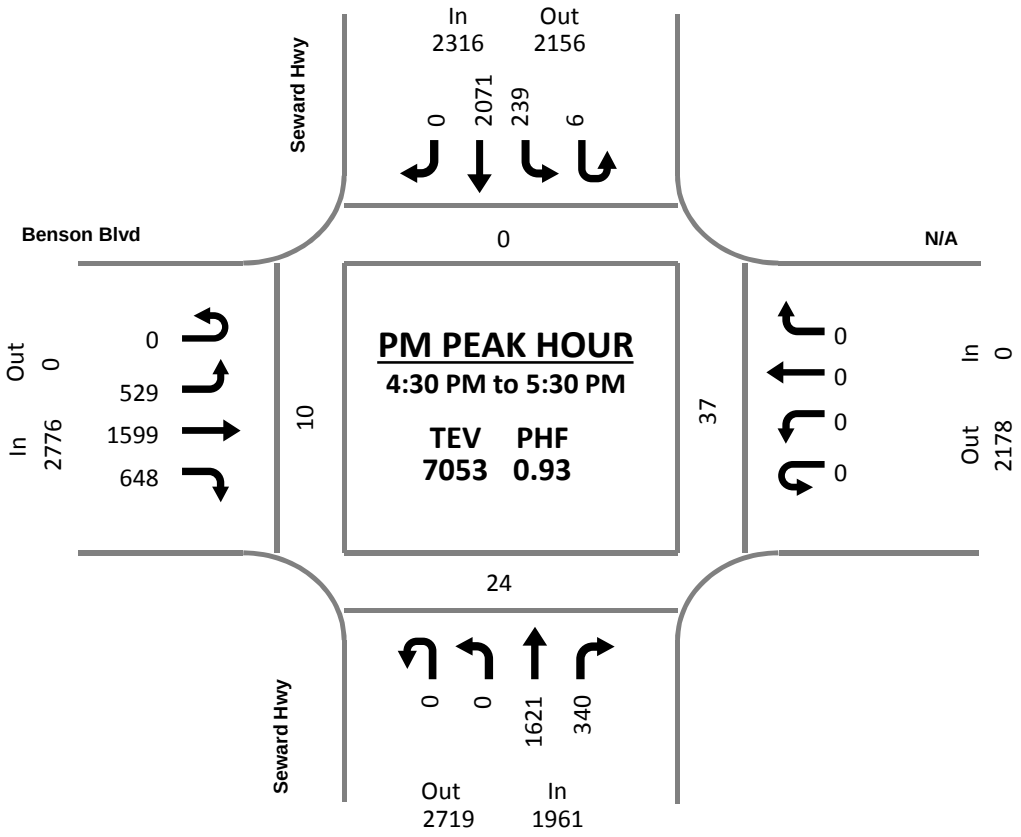
Start Time	Seward Hwy (Northbound)					Seward Hwy (Southbound)					Benson Blvd (Eastbound)					N/A (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
4:00 PM	0	0	428	92	1	2	51	489	0	0	0	124	341	120	5	0	0	0	0	1	1647
4:15 PM	0	0	378	86	1	0	55	495	0	0	0	131	400	143	0	0	0	0	0	1	1688
4:30 PM	0	0	416	69	8	3	60	544	0	0	0	128	339	139	3	0	0	0	0	6	1698
4:45 PM	0	0	381	81	8	2	56	456	0	0	0	131	433	165	3	0	0	0	0	10	1705
5:00 PM	0	0	368	76	3	1	65	533	0	0	0	146	399	174	1	0	0	0	0	9	1762
5:15 PM	0	0	456	114	5	0	58	538	0	0	0	124	428	170	3	0	0	0	0	12	1888
5:30 PM	0	0	316	81	11	2	68	477	0	0	0	132	431	170	1	0	0	0	0	8	1677
5:45 PM	0	0	440	89	4	1	64	458	0	0	0	147	339	138	3	0	0	0	0	3	1676
Total	0	0	3,183	688	41	11	477	3,990	0	0	0	1,063	3,110	1,219	19	0	0	0	0	50	13,741

*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total")

Peak Hour Summary

4:30 PM to 5:30 PM

Data Type	Seward Hwy (Northbound)					Seward Hwy (Southbound)					Benson Blvd (Eastbound)					N/A (Westbound)					Peak Hour Total
	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	
Volume	0	0	1621	340	24	6	239	2071	0	0	0	529	1599	648	10	0	0	0	0	37	7053
%HV	0.0%	0.0%	2.5%	1.5%		0.0%	0.0%	2.9%	0.0%		0.0%	0.9%	0.9%	0.9%		0.0%	0.0%	0.0%	0.0%		1.9%
PHF	0.00	0.00	0.89	0.75	0.75	0.50	0.92	0.95	0.00	0.00	0.00	0.91	0.92	0.93	0.83	0.00	0.00	0.00	0.00	0.77	0.93
Volume			1961					2316					2776					0			7053
%HV			2.3%					2.6%					0.9%					0.0%			1.9%
PHF			0.86					0.95					0.95					0.00			0.93



Traffic Camera Count and Placement Information

Intersection Name: Seward Hwy & Benson Blvd

Intersection Location	
Northbound Street	Seward Hwy
Southbound Street	Seward Hwy
Eastbound Street	Benson Blvd
Westbound Street	N/A
City, State	Anchorage, AK

Project Information	
Name	Midtown Congestion Relief
Client	AK DOT&PF
Project #	1124.62458.01, Phase 02
PM/Traffic Lead	Steve Noble/Brad Coy

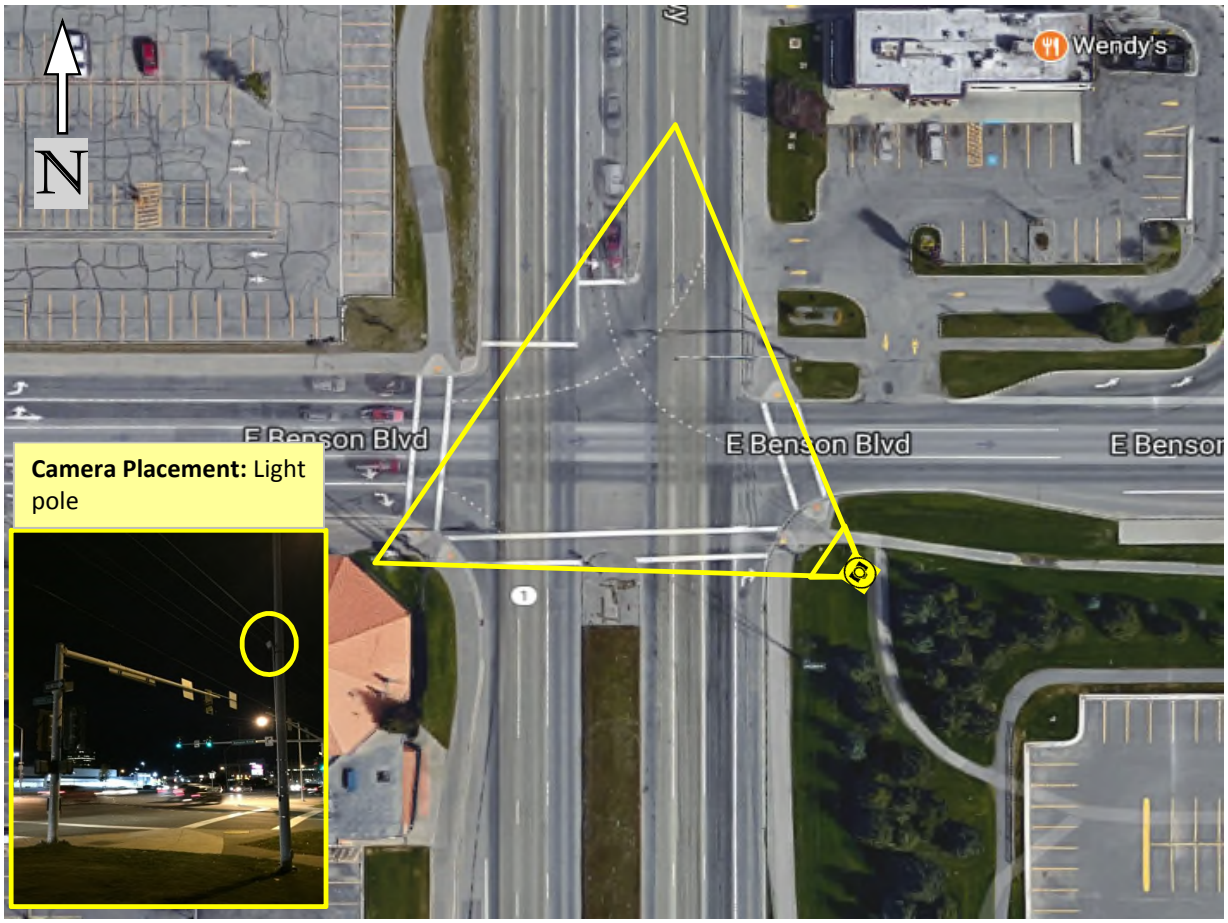
Count Description (e.g., day(s) of week, time periods, other related counts also occuring, etc.)

2 weekdays (Tue, Wed, or Thu) back-to-back; AM/PM peak periods are priority, but midday is also desirable

Camera Setup/Video Footage	
Staff Responsible	Brad Coy
Setup Time	10/3/2017 6:25 AM
Take Down Time	10/4/2017 7:50 PM
Duration (hours)	37.42
Camera # (2-digit)	a1

Count Date, Time, Vendor	
Date	10/4/2017 (Wednesday)
Start Time	6:00 AM
End Time	7:00 PM
Duration (hours)	13.00
Count Vendor	CountingCars.com

Camera Placement



Other Notes (Before, During, or After Count)

DOWL

Turning Movement Count

Seward Hwy & Benson Blvd

Total Vehicles (15-Minute Periods)

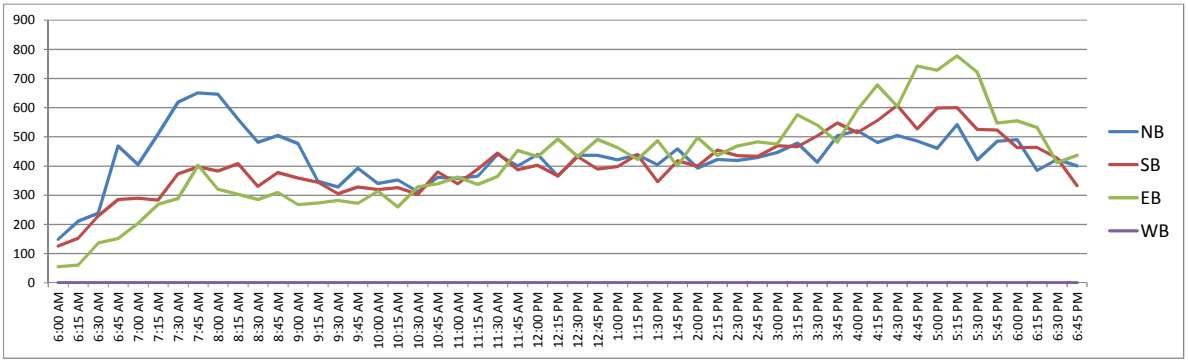
All Data

Wednesday, October 04, 2017

6:00 AM to 7:00 PM

Start Time	Seward Hwy (Northbound)					Seward Hwy (Southbound)					Benson Blvd (Eastbound)					N/A (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
6:00 AM	0	0	133	16	0	0	8	118	0	0	0	14	31	10	0	0	0	0	0	0	330
6:15 AM	0	0	188	23	0	0	8	145	0	0	0	10	37	14	0	0	0	0	0	0	425
6:30 AM	0	0	213	25	1	0	15	214	0	0	0	29	97	10	1	0	0	0	0	0	603
6:45 AM	0	0	431	38	0	0	22	263	0	0	0	30	102	20	0	0	0	0	0	0	906
7:00 AM	0	0	346	59	1	2	45	243	0	0	0	43	135	25	0	0	0	0	0	1	898
7:15 AM	0	0	445	65	0	0	31	252	0	0	0	50	182	37	0	0	0	0	0	0	1062
7:30 AM	0	0	557	62	1	0	24	349	0	0	0	58	196	35	0	0	0	0	0	1	1281
7:45 AM	0	0	594	57	1	1	42	354	0	0	0	74	286	43	0	0	0	0	0	1	1451
8:00 AM	0	0	579	67	2	0	38	345	0	0	0	67	208	46	0	0	0	0	0	1	1350
8:15 AM	0	0	507	54	0	0	35	373	0	0	0	51	202	50	1	0	0	0	0	0	1272
8:30 AM	0	0	440	42	2	0	32	298	0	0	0	50	195	40	1	0	0	0	0	0	1097
8:45 AM	0	0	456	49	1	0	45	333	0	0	0	50	213	47	1	0	0	0	0	0	1193
9:00 AM	0	0	430	47	4	0	32	327	0	0	0	53	163	52	0	0	0	0	0	3	1104
9:15 AM	0	0	320	28	3	0	45	300	0	0	0	45	176	52	2	0	0	0	0	2	966
9:30 AM	0	0	288	40	1	0	27	278	0	0	0	51	180	51	0	0	0	0	0	3	915
9:45 AM	0	0	357	36	0	0	43	285	0	0	0	61	162	49	1	0	0	0	0	0	993
10:00 AM	0	0	302	38	1	0	31	288	0	0	0	69	186	59	0	0	0	0	0	1	973
10:15 AM	0	0	308	44	3	0	41	285	0	0	0	58	158	44	0	0	0	0	0	2	938
10:30 AM	0	0	274	38	4	0	30	273	0	0	0	79	178	72	0	0	0	0	0	4	944
10:45 AM	0	0	308	53	4	0	34	346	0	0	0	68	202	69	0	0	0	0	0	4	1080
11:00 AM	0	0	315	43	4	0	55	284	0	0	0	80	207	75	3	0	0	0	0	4	1059
11:15 AM	0	0	331	35	2	0	41	349	0	0	0	65	206	66	1	0	0	0	0	5	1093
11:30 AM	0	0	383	57	10	0	43	401	0	0	0	81	200	83	1	0	0	0	0	4	1248
11:45 AM	0	0	348	53	4	1	48	338	0	0	0	87	265	101	0	0	0	0	0	1	1241
12:00 PM	0	0	385	55	1	2	59	342	0	0	0	91	253	88	0	0	0	0	0	2	1275
12:15 PM	0	0	306	61	10	2	65	300	0	0	0	127	279	87	2	0	0	0	0	4	1227
12:30 PM	0	0	382	55	6	1	48	383	0	0	0	96	251	85	1	0	0	0	0	4	1301
12:45 PM	0	0	367	70	4	0	57	333	0	0	0	114	278	100	4	0	0	0	0	0	1319
1:00 PM	0	0	360	61	1	0	38	360	0	0	0	95	272	96	4	0	0	0	0	4	1282
1:15 PM	0	0	368	71	1	0	61	378	0	0	0	107	234	81	0	0	0	0	0	3	1300
1:30 PM	0	0	350	55	6	2	36	309	0	0	0	100	272	115	0	0	0	0	0	5	1239
1:45 PM	0	0	400	59	7	0	39	379	0	0	0	91	226	84	1	0	0	0	0	11	1278
2:00 PM	0	0	340	53	0	1	59	339	0	0	0	118	283	96	1	0	0	0	0	0	1289
2:15 PM	0	0	351	71	7	3	54	397	0	0	0	91	267	79	2	0	0	0	0	8	1313
2:30 PM	0	0	355	64	5	1	69	366	0	0	0	120	271	78	2	0	0	0	0	4	1324
2:45 PM	0	0	360	69	3	2	46	385	0	0	0	113	247	123	0	0	0	0	0	4	1345
3:00 PM	0	0	391	56	2	0	47	423	0	0	0	102	271	102	3	0	0	0	0	3	1392
3:15 PM	0	0	408	70	5	3	46	417	0	0	0	113	324	139	0	0	0	0	0	5	1520
3:30 PM	0	0	344	69	6	1	50	453	0	0	0	102	305	134	1	0	0	0	0	2	1458
3:45 PM	0	0	432	72	11	2	63	483	0	0	0	108	282	92	2	0	0	0	0	6	1534
4:00 PM	0	0	433	88	4	2	57	456	0	0	0	135	333	124	3	0	0	0	0	3	1628
4:15 PM	0	0	394	87	12	0	68	488	0	0	0	169	371	138	2	0	0	0	0	8	1715
4:30 PM	0	0	418	87	2	0	58	550	0	0	0	130	320	155	0	0	0	0	0	2	1718
4:45 PM	0	0	408	78	5	1	53	474	0	0	0	149	423	171	3	0	0	0	0	5	1757
5:00 PM	0	0	391	70	7	0	70	529	0	0	0	141	411	176	1	0	0	0	0	8	1788
5:15 PM	0	0	461	81	2	1	48	551	0	0	0	146	453	179	3	0	0	0	0	3	1920
5:30 PM	0	0	348	73	5	0	61	465	0	0	0	158	413	151	1	0	0	0	0	4	1669
5:45 PM	0	0	397	88	8	4	51	468	0	0	0	105	318	125	1	0	0	0	0	7	1556
6:00 PM	0	0	427	64	2	1	49	413	0	0	0	109	324	122	1	0	0	0	0	8	1509
6:15 PM	0	0	314	71	3	1	60	403	0	0	0	120	308	104	0	0	0	0	0	0	1381
6:30 PM	0	0	358	64	3	0	62	366	0	0	0	75	245	92	2	0	0	0	0	3	1262
6:45 PM	0	0	343	58	5	0	45	288	0	2	0	86	265	86	1	0	0	0	0	7	1171
Total	0	0	19,444	2,989	182	34	2,334	18,539	0	2	0	4,534	12,666	4,352	53	0	0	0	0	160	64,892

*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total" or graph below)



DOWL

Turning Movement Count

Seward Hwy & Benson Blvd

Heavy Vehicles (15-Minute Periods)

All Data

Wednesday, October 04, 2017

6:00 AM to 7:00 PM

Start Time	Seward Hwy (Northbound)				Seward Hwy (Southbound)				Benson Blvd (Eastbound)				N/A (Westbound)				Period Total (Veh)
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	
6:00 AM	0	0	8	1	0	1	4	0	0	0	0	0	0	0	0	0	14
6:15 AM	0	0	18	0	0	0	4	0	0	0	0	0	0	0	0	0	22
6:30 AM	0	0	12	1	0	0	6	0	0	1	1	0	0	0	0	0	21
6:45 AM	0	0	16	2	0	0	5	0	0	1	2	2	0	0	0	0	28
7:00 AM	0	0	12	1	0	0	7	0	0	1	3	0	0	0	0	0	24
7:15 AM	0	0	9	3	0	1	9	0	0	1	2	1	0	0	0	0	26
7:30 AM	0	0	13	1	0	0	2	0	0	0	6	0	0	0	0	0	22
7:45 AM	0	0	12	3	0	0	9	0	0	1	5	0	0	0	0	0	30
8:00 AM	0	0	15	1	0	1	13	0	0	3	1	3	0	0	0	0	37
8:15 AM	0	0	14	1	0	2	18	0	0	3	4	0	0	0	0	0	42
8:30 AM	0	0	32	1	0	3	15	0	0	2	2	2	0	0	0	0	57
8:45 AM	0	0	14	1	0	1	17	0	0	0	1	3	0	0	0	0	37
9:00 AM	0	0	25	3	0	1	22	0	0	0	7	0	0	0	0	0	58
9:15 AM	0	0	19	2	0	1	24	0	0	2	10	1	0	0	0	0	59
9:30 AM	0	0	20	1	0	1	10	0	0	3	6	1	0	0	0	0	42
9:45 AM	0	0	20	1	0	0	20	0	0	3	6	0	0	0	0	0	50
10:00 AM	0	0	24	1	0	1	21	0	0	4	4	1	0	0	0	0	56
10:15 AM	0	0	11	2	0	1	16	0	0	2	1	2	0	0	0	0	35
10:30 AM	0	0	14	0	0	2	21	0	0	3	7	3	0	0	0	0	50
10:45 AM	0	0	14	3	0	0	18	0	0	3	5	0	0	0	0	0	43
11:00 AM	0	0	18	2	0	1	8	0	0	3	2	2	0	0	0	0	36
11:15 AM	0	0	15	0	0	0	23	0	0	3	2	1	0	0	0	0	44
11:30 AM	0	0	13	2	0	1	18	0	0	3	3	2	0	0	0	0	42
11:45 AM	0	0	10	2	0	2	11	0	0	3	2	4	0	0	0	0	34
12:00 PM	0	0	15	2	0	0	13	0	0	4	3	0	0	0	0	0	37
12:15 PM	0	0	17	0	0	0	8	0	0	8	3	3	0	0	0	0	39
12:30 PM	0	0	16	1	0	0	16	0	0	1	3	2	0	0	0	0	39
12:45 PM	0	0	18	0	0	0	19	0	0	2	4	2	0	0	0	0	45
1:00 PM	0	0	15	4	0	1	18	0	0	0	6	1	0	0	0	0	45
1:15 PM	0	0	18	3	0	3	16	0	0	2	3	1	0	0	0	0	46
1:30 PM	0	0	18	6	0	0	13	0	0	1	6	0	0	0	0	0	44
1:45 PM	0	0	18	3	0	1	20	0	0	1	3	3	0	0	0	0	49
2:00 PM	0	0	14	3	0	1	21	0	0	3	4	1	0	0	0	0	47
2:15 PM	0	0	15	0	0	1	13	0	0	2	1	0	0	0	0	0	32
2:30 PM	0	0	20	3	0	1	15	0	0	1	3	2	0	0	0	0	45
2:45 PM	0	0	14	0	0	0	16	0	0	3	3	2	0	0	0	0	38
3:00 PM	0	0	16	0	0	1	10	0	0	4	1	0	0	0	0	0	32
3:15 PM	0	0	16	0	0	0	14	0	0	0	4	1	0	0	0	0	35
3:30 PM	0	0	10	3	0	0	14	0	0	2	3	2	0	0	0	0	34
3:45 PM	0	0	10	0	0	0	10	0	0	2	0	0	0	0	0	0	22
4:00 PM	0	0	9	0	0	1	14	0	0	4	3	2	0	0	0	0	33
4:15 PM	0	0	10	2	0	0	15	0	0	2	2	1	0	0	0	0	32
4:30 PM	0	0	13	0	0	0	16	0	0	0	0	1	0	0	0	0	30
4:45 PM	0	0	11	0	0	1	11	0	0	4	1	2	0	0	0	0	30
5:00 PM	0	0	5	1	0	0	4	0	0	2	1	0	0	0	0	0	13
5:15 PM	0	0	7	0	0	0	6	0	0	0	2	1	0	0	0	0	16
5:30 PM	0	0	13	0	0	0	7	0	0	0	5	1	0	0	0	0	26
5:45 PM	0	0	7	0	0	0	8	0	0	0	0	0	0	0	0	0	15
6:00 PM	0	0	5	0	0	0	9	0	0	2	2	1	0	0	0	0	19
6:15 PM	0	0	5	1	0	0	9	0	0	1	0	0	0	0	0	0	16
6:30 PM	0	0	3	0	0	0	3	0	0	0	0	0	0	0	0	0	6
6:45 PM	0	0	11	0	0	0	2	0	0	1	2	0	0	0	0	0	16
Total	0	0	727	67	0	31	661	0	0	97	150	57	0	0	0	0	1,790

Turning Movement Count

Seward Hwy & Benson Blvd

Total Vehicles (15-Minute Periods)

AM Peak Hour

Wednesday, October 04, 2017

7:00 AM to 9:00 AM

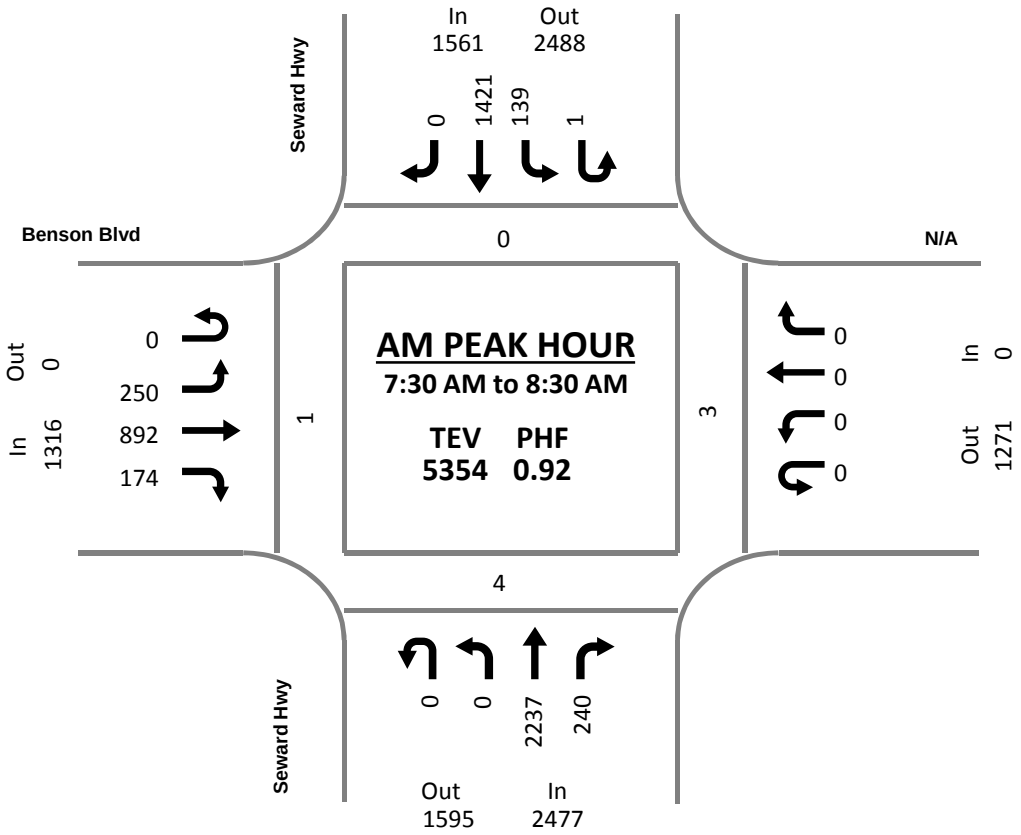
Start Time	Seward Hwy (Northbound)					Seward Hwy (Southbound)					Benson Blvd (Eastbound)					N/A (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
7:00 AM	0	0	346	59	1	2	45	243	0	0	0	43	135	25	0	0	0	0	0	1	898
7:15 AM	0	0	445	65	0	0	31	252	0	0	0	50	182	37	0	0	0	0	0	0	1062
7:30 AM	0	0	557	62	1	0	24	349	0	0	0	58	196	35	0	0	0	0	0	1	1281
7:45 AM	0	0	594	57	1	1	42	354	0	0	0	74	286	43	0	0	0	0	0	1	1451
8:00 AM	0	0	579	67	2	0	38	345	0	0	0	67	208	46	0	0	0	0	0	1	1350
8:15 AM	0	0	507	54	0	0	35	373	0	0	0	51	202	50	1	0	0	0	0	0	1272
8:30 AM	0	0	440	42	2	0	32	298	0	0	0	50	195	40	1	0	0	0	0	0	1097
8:45 AM	0	0	456	49	1	0	45	333	0	0	0	50	213	47	1	0	0	0	0	0	1193
Total	0	0	3,924	455	8	3	292	2,547	0	0	0	443	1,617	323	3	0	0	0	0	4	9,604

*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total")

Peak Hour Summary

7:30 AM to 8:30 AM

Data Type	Seward Hwy (Northbound)					Seward Hwy (Southbound)					Benson Blvd (Eastbound)					N/A (Westbound)					Peak Hour Total
	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	
Volume	0	0	2237	240	4	1	139	1421	0	0	0	250	892	174	1	0	0	0	0	3	5354
%HV	0.0%	0.0%	2.4%	2.5%		0.0%	2.2%	3.0%	0.0%		0.0%	2.8%	1.8%	1.7%		0.0%	0.0%	0.0%	0.0%		2.4%
PHF	0.00	0.00	0.94	0.90	0.50	0.25	0.83	0.95	0.00	0.00	0.00	0.84	0.78	0.87	0.25	0.00	0.00	0.00	0.00	0.75	0.92
Volume			2477					1561					1316					0			5354
%HV			2.4%					2.9%					2.0%					0.0%			2.4%
PHF			0.95					0.96					0.82					0.00			0.92



Turning Movement Count

Seward Hwy & Benson Blvd

Total Vehicles (15-Minute Periods)

PM Peak Hour

Wednesday, October 04, 2017

4:00 PM to 6:00 PM

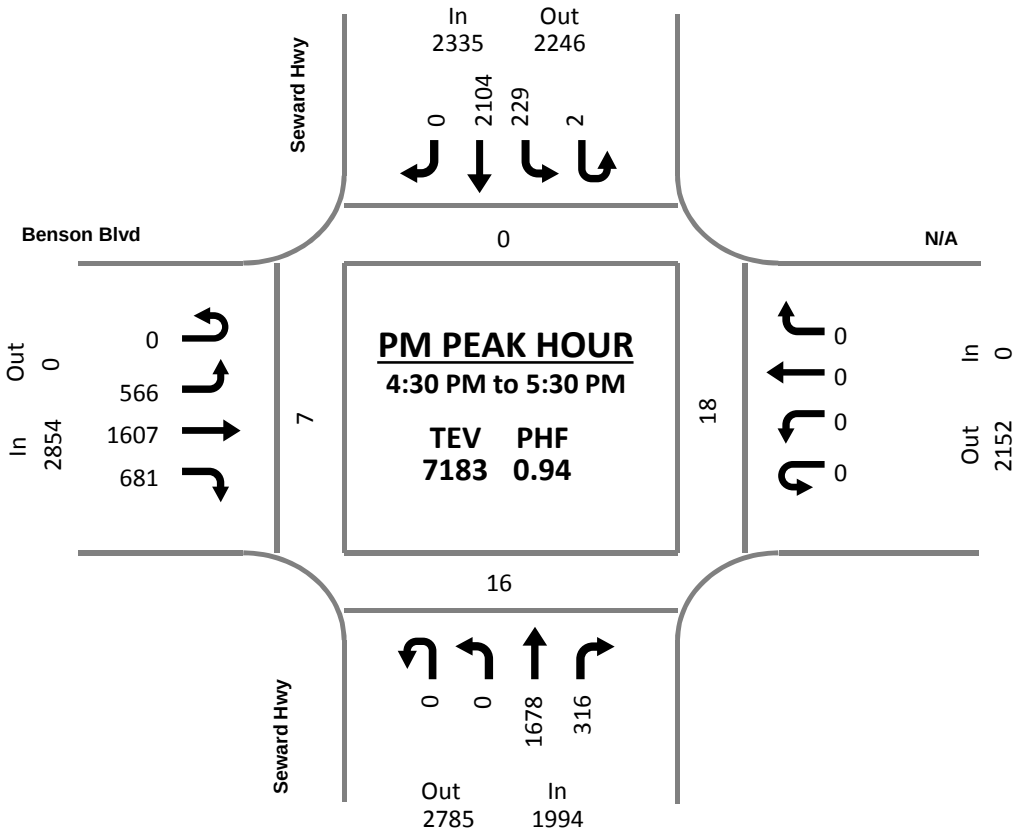
Start Time	Seward Hwy (Northbound)					Seward Hwy (Southbound)					Benson Blvd (Eastbound)					N/A (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
4:00 PM	0	0	433	88	4	2	57	456	0	0	0	135	333	124	3	0	0	0	0	3	1628
4:15 PM	0	0	394	87	12	0	68	488	0	0	0	169	371	138	2	0	0	0	0	8	1715
4:30 PM	0	0	418	87	2	0	58	550	0	0	0	130	320	155	0	0	0	0	0	2	1718
4:45 PM	0	0	408	78	5	1	53	474	0	0	0	149	423	171	3	0	0	0	0	5	1757
5:00 PM	0	0	391	70	7	0	70	529	0	0	0	141	411	176	1	0	0	0	0	8	1788
5:15 PM	0	0	461	81	2	1	48	551	0	0	0	146	453	179	3	0	0	0	0	3	1920
5:30 PM	0	0	348	73	5	0	61	465	0	0	0	158	413	151	1	0	0	0	0	4	1669
5:45 PM	0	0	397	88	8	4	51	468	0	0	0	105	318	125	1	0	0	0	0	7	1556
Total	0	0	3,250	652	45	8	466	3,981	0	0	0	1,133	3,042	1,219	14	0	0	0	0	40	13,751

*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total")

Peak Hour Summary

4:30 PM to 5:30 PM

Data Type	Seward Hwy (Northbound)					Seward Hwy (Southbound)					Benson Blvd (Eastbound)					N/A (Westbound)					Peak Hour Total
	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	
Volume	0	0	1678	316	16	2	229	2104	0	0	0	566	1607	681	7	0	0	0	0	18	7183
%HV	0.0%	0.0%	2.1%	0.3%		0.0%	0.4%	1.8%	0.0%		0.0%	1.1%	0.2%	0.6%		0.0%	0.0%	0.0%	0.0%		1.2%
PHF	0.00	0.00	0.91	0.91	0.57	0.50	0.82	0.95	0.00	0.00	0.00	0.95	0.89	0.95	0.58	0.00	0.00	0.00	0.00	0.56	0.94
Volume			1994					2335					2854					0			7183
%HV			1.9%					1.6%					0.5%					0.0%			1.2%
PHF			0.92					0.96					0.92					0.00			0.94



Traffic Camera Count and Placement Information

Intersection Name: Seward Hwy & Energy Ct

Intersection Location	
Northbound Street	Seward Hwy
Southbound Street	Seward Hwy
Eastbound Street	N/A
Westbound Street	Energy Ct
City, State	Anchorage, AK

Project Information	
Name	Midtown Congestion Relief
Client	AK DOT&PF
Project #	1124.62458.01, Phase 02
PM/Traffic Lead	Steve Noble/Brad Coy

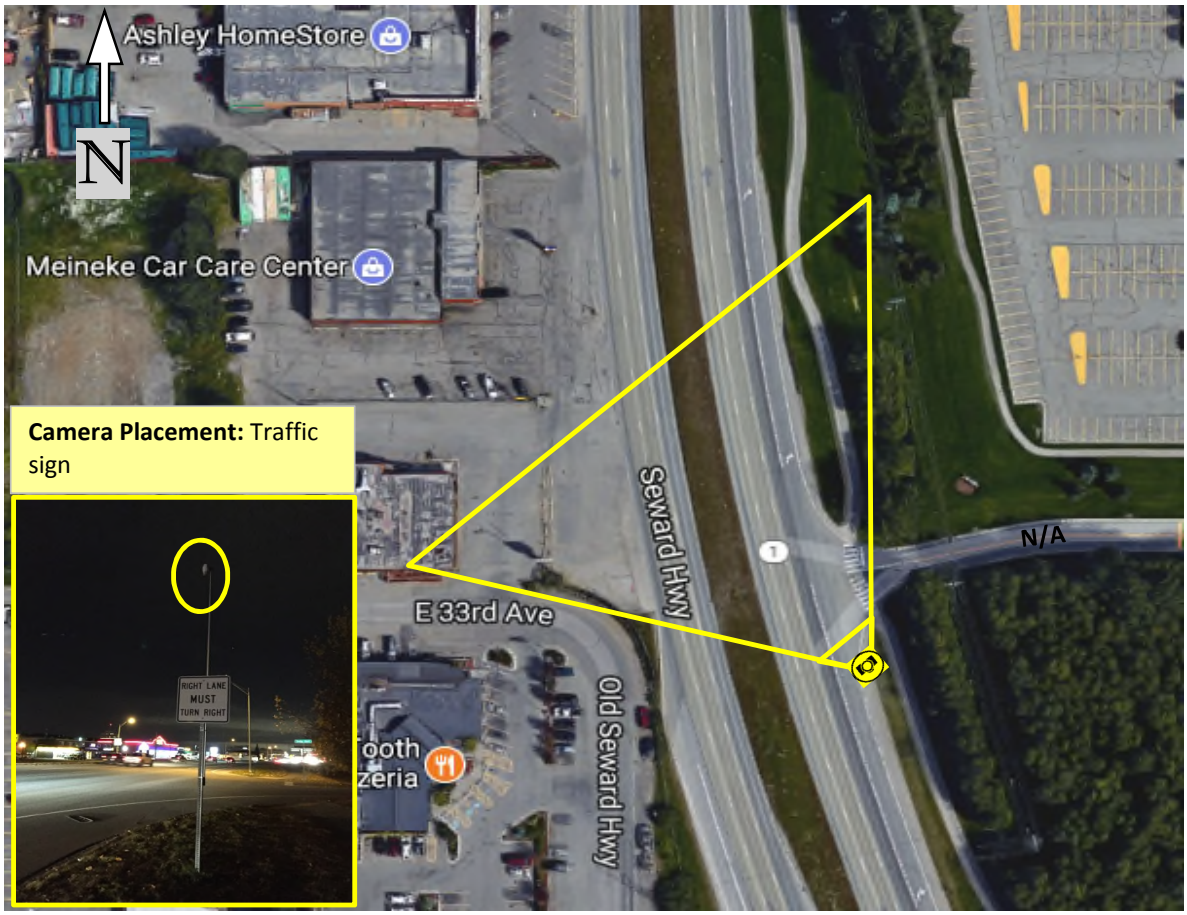
Count Description (e.g., day(s) of week, time periods, other related counts also occuring, etc.)

1 weekday (Tue, Wed, or Thu); AM/PM peak periods are priority, but midday is also desirable

Camera Setup/Video Footage	
Staff Responsible	Brad Coy
Setup Time	10/18/2017 6:09 AM
Take Down Time	10/18/2017 9:00 PM
Duration (hours)	14.85
Camera # (2-digit)	c3

Count Date, Time, Vendor	
Date	10/18/2017 (Wednesday)
Start Time	6:15 AM
End Time	7:15 PM
Duration (hours)	13.00
Count Vendor	CountingCars.com

Camera Placement



Other Notes (Before, During, or After Count)

DOWL

Turning Movement Count

Seward Hwy & Energy Ct

Total Vehicles (15-Minute Periods)

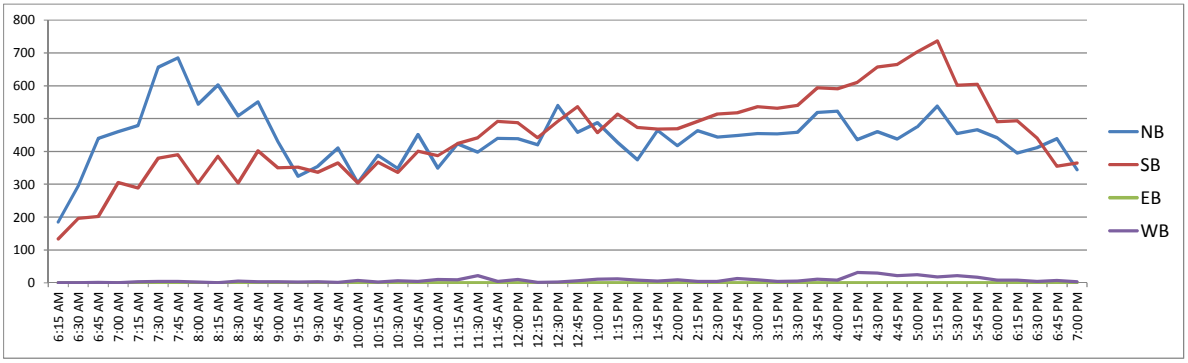
All Data

Wednesday, October 18, 2017

6:15 AM to 7:15 PM

Start Time	Seward Hwy (Northbound)					Seward Hwy (Southbound)					N/A (Eastbound)					Energy Ct (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
6:15 AM	0	0	177	8	0	0	0	132	1	0	0	0	0	0	0	0	0	0	0	0	318
6:30 AM	0	0	278	17	0	0	0	195	1	0	0	0	0	0	0	0	0	0	0	1	491
6:45 AM	0	0	405	35	0	0	0	202	0	0	0	0	0	0	0	0	0	0	1	0	643
7:00 AM	0	0	420	40	0	0	0	304	1	0	0	0	0	0	0	0	0	0	0	0	765
7:15 AM	0	0	435	44	0	0	0	288	1	0	0	0	0	0	0	0	0	0	3	0	771
7:30 AM	0	0	610	46	0	0	0	376	3	0	0	0	0	0	0	0	0	0	4	0	1039
7:45 AM	0	0	640	45	0	0	0	389	1	0	0	0	0	0	0	0	0	0	4	1	1079
8:00 AM	0	0	512	32	0	0	0	297	6	0	0	0	0	0	0	0	0	0	2	0	849
8:15 AM	0	0	566	37	0	0	0	383	2	0	0	0	0	0	0	0	0	0	0	0	988
8:30 AM	0	0	481	27	0	0	0	302	2	0	0	0	0	0	0	0	0	0	5	1	817
8:45 AM	0	0	524	27	0	0	0	398	4	0	0	0	0	0	0	0	0	0	3	1	956
9:00 AM	0	0	412	18	0	0	0	348	2	0	0	0	0	0	0	0	0	0	3	0	783
9:15 AM	0	0	319	6	0	0	0	351	1	0	0	0	0	0	0	0	0	0	2	1	679
9:30 AM	0	0	348	7	0	0	0	336	1	0	0	0	0	0	0	0	0	0	3	0	695
9:45 AM	0	0	405	6	0	0	0	363	2	0	0	0	0	0	0	0	0	0	1	0	777
10:00 AM	0	0	300	4	0	0	0	304	0	0	0	0	0	0	0	0	0	0	7	0	615
10:15 AM	0	0	382	6	0	0	0	366	2	0	0	0	0	0	0	0	0	0	2	2	758
10:30 AM	0	0	341	7	0	0	0	337	0	0	0	0	0	0	0	0	0	0	6	0	691
10:45 AM	0	0	450	2	0	0	0	400	1	0	0	0	0	0	0	0	0	0	4	2	857
11:00 AM	0	0	343	6	0	0	0	386	1	0	0	0	0	0	0	0	0	0	10	1	746
11:15 AM	0	0	417	6	0	0	0	420	4	0	0	0	0	0	0	0	0	0	9	1	856
11:30 AM	0	0	384	14	0	0	0	437	5	0	0	0	0	0	0	0	0	0	22	2	862
11:45 AM	0	0	428	12	0	0	0	491	1	0	0	0	0	0	0	0	0	0	4	1	936
12:00 PM	0	0	427	12	0	0	0	486	2	0	0	0	0	0	0	0	0	0	10	0	937
12:15 PM	0	0	414	6	0	0	0	439	3	0	0	0	0	0	0	0	0	0	1	2	863
12:30 PM	0	0	526	14	0	0	0	488	4	0	0	0	0	0	0	0	0	0	2	0	1034
12:45 PM	0	0	444	14	0	0	0	533	3	0	0	0	0	0	0	0	0	0	6	0	1000
1:00 PM	0	0	477	11	0	0	0	457	0	0	0	0	0	0	0	0	0	0	11	0	956
1:15 PM	0	0	416	11	0	0	0	513	1	0	0	0	0	0	0	0	0	0	12	0	953
1:30 PM	0	0	365	10	0	0	0	469	4	0	0	0	0	0	0	0	0	0	8	1	856
1:45 PM	0	0	457	7	0	0	0	466	2	0	0	0	0	0	0	0	0	0	5	2	937
2:00 PM	0	0	414	3	0	0	0	469	0	0	0	0	0	0	0	0	0	0	9	3	895
2:15 PM	0	0	458	5	0	0	0	492	0	0	0	0	0	0	0	0	0	0	4	0	959
2:30 PM	0	0	439	5	0	0	0	512	2	0	0	0	0	0	0	0	0	0	4	0	962
2:45 PM	0	0	443	6	0	0	0	517	1	0	0	0	0	0	0	0	0	0	13	1	980
3:00 PM	0	0	451	4	0	0	0	534	2	0	0	0	0	0	0	0	0	0	9	0	1000
3:15 PM	0	0	452	2	0	0	0	532	0	0	0	0	0	0	0	0	0	0	4	2	990
3:30 PM	0	0	454	4	0	0	0	536	4	0	0	0	0	0	0	0	0	0	5	5	1003
3:45 PM	0	0	516	3	0	0	0	593	1	0	0	0	0	0	0	0	0	0	11	1	1124
4:00 PM	0	0	522	1	0	0	0	589	2	0	0	0	0	0	0	0	0	0	8	2	1122
4:15 PM	0	0	434	2	0	0	0	609	2	0	0	0	0	0	0	0	0	0	31	1	1078
4:30 PM	0	0	457	3	0	0	0	655	2	0	0	0	0	0	0	0	0	0	29	0	1146
4:45 PM	0	0	430	8	0	0	0	662	3	0	0	0	0	0	0	0	0	0	22	0	1125
5:00 PM	0	0	472	3	0	0	0	702	1	0	0	0	0	0	0	0	0	0	25	1	1203
5:15 PM	0	0	530	8	0	0	0	734	3	0	0	0	0	0	0	0	0	0	18	2	1293
5:30 PM	0	0	451	4	0	0	0	601	1	0	0	0	0	0	0	0	0	0	22	1	1079
5:45 PM	0	0	458	8	0	0	0	602	3	0	0	0	0	0	0	0	0	0	17	0	1088
6:00 PM	0	0	437	5	0	0	0	487	4	0	0	0	0	0	0	0	0	0	8	1	941
6:15 PM	0	0	390	5	0	0	0	491	3	0	0	0	0	0	0	0	0	0	8	1	897
6:30 PM	0	0	406	6	0	0	0	441	0	0	0	0	0	0	0	0	0	0	4	1	857
6:45 PM	0	0	427	12	0	0	0	351	4	0	0	0	0	0	0	0	0	0	7	1	801
7:00 PM	0	0	342	2	0	0	0	362	3	0	0	0	0	0	0	0	0	0	3	0	712
Total	0	0	22,486	636	0	0	0	23,127	102	0	0	0	0	0	0	0	0	0	411	42	46,762

*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total" or graph below)





Turning Movement Count

Seward Hwy & Energy Ct

Heavy Vehicles (15-Minute Periods)

All Data

Wednesday, October 18, 2017

6:15 AM to 7:15 PM

Start Time	Seward Hwy (Northbound)				Seward Hwy (Southbound)				N/A (Eastbound)				Energy Ct (Westbound)				Period Total (Veh)
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	
6:15 AM	0	0	9	0	0	0	2	0	0	0	0	0	0	0	0	0	11
6:30 AM	0	0	16	0	0	0	12	0	0	0	0	0	0	0	0	0	28
6:45 AM	0	0	11	0	0	0	2	0	0	0	0	0	0	0	0	0	13
7:00 AM	0	0	9	0	0	0	6	0	0	0	0	0	0	0	0	0	15
7:15 AM	0	0	6	1	0	0	5	0	0	0	0	0	0	0	0	1	13
7:30 AM	0	0	10	0	0	0	8	0	0	0	0	0	0	0	0	0	18
7:45 AM	0	0	10	0	0	0	5	0	0	0	0	0	0	0	0	0	15
8:00 AM	0	0	20	0	0	0	8	0	0	0	0	0	0	0	0	0	28
8:15 AM	0	0	18	0	0	0	12	0	0	0	0	0	0	0	0	0	30
8:30 AM	0	0	24	0	0	0	13	0	0	0	0	0	0	0	0	0	37
8:45 AM	0	0	19	0	0	0	18	0	0	0	0	0	0	0	0	0	37
9:00 AM	0	0	20	0	0	0	21	0	0	0	0	0	0	0	0	0	41
9:15 AM	0	0	17	0	0	0	23	0	0	0	0	0	0	0	0	0	40
9:30 AM	0	0	14	0	0	0	22	0	0	0	0	0	0	0	0	0	36
9:45 AM	0	0	26	0	0	0	17	0	0	0	0	0	0	0	0	0	43
10:00 AM	0	0	26	0	0	0	17	0	0	0	0	0	0	0	0	0	43
10:15 AM	0	0	26	0	0	0	16	0	0	0	0	0	0	0	0	0	42
10:30 AM	0	0	14	0	0	0	15	0	0	0	0	0	0	0	0	1	30
10:45 AM	0	0	25	0	0	0	28	0	0	0	0	0	0	0	0	0	53
11:00 AM	0	0	13	0	0	0	19	0	0	0	0	0	0	0	0	0	32
11:15 AM	0	0	27	0	0	0	20	0	0	0	0	0	0	0	0	0	47
11:30 AM	0	0	20	0	0	0	14	0	0	0	0	0	0	0	0	0	34
11:45 AM	0	0	14	0	0	0	26	0	0	0	0	0	0	0	0	0	40
12:00 PM	0	0	13	0	0	0	20	0	0	0	0	0	0	0	0	0	33
12:15 PM	0	0	20	0	0	0	20	0	0	0	0	0	0	0	0	0	40
12:30 PM	0	0	35	0	0	0	15	0	0	0	0	0	0	0	0	0	50
12:45 PM	0	0	19	0	0	0	13	0	0	0	0	0	0	0	0	0	32
1:00 PM	0	0	23	1	0	0	15	0	0	0	0	0	0	0	0	0	39
1:15 PM	0	0	20	0	0	0	21	0	0	0	0	0	0	0	0	0	41
1:30 PM	0	0	27	0	0	0	18	0	0	0	0	0	0	0	0	0	45
1:45 PM	0	0	19	0	0	0	19	0	0	0	0	0	0	0	0	0	38
2:00 PM	0	0	20	0	0	0	21	0	0	0	0	0	0	0	0	0	41
2:15 PM	0	0	27	0	0	0	23	0	0	0	0	0	0	0	0	0	50
2:30 PM	0	0	25	0	0	0	19	1	0	0	0	0	0	0	0	0	45
2:45 PM	0	0	22	0	0	0	19	0	0	0	0	0	0	0	0	0	41
3:00 PM	0	0	18	0	0	0	21	0	0	0	0	0	0	0	0	0	39
3:15 PM	0	0	13	0	0	0	21	0	0	0	0	0	0	0	0	0	34
3:30 PM	0	0	14	0	0	0	18	0	0	0	0	0	0	0	0	0	32
3:45 PM	0	0	19	0	0	0	19	0	0	0	0	0	0	0	0	0	38
4:00 PM	0	0	20	0	0	0	17	0	0	0	0	0	0	0	0	0	37
4:15 PM	0	0	13	0	0	0	24	0	0	0	0	0	0	0	0	0	37
4:30 PM	0	0	6	0	0	0	14	0	0	0	0	0	0	0	0	0	20
4:45 PM	0	0	9	0	0	0	14	0	0	0	0	0	0	0	0	0	23
5:00 PM	0	0	7	0	0	0	16	0	0	0	0	0	0	0	0	0	23
5:15 PM	0	0	4	0	0	0	16	0	0	0	0	0	0	0	0	0	20
5:30 PM	0	0	7	0	0	0	12	0	0	0	0	0	0	0	0	0	19
5:45 PM	0	0	6	0	0	0	7	0	0	0	0	0	0	0	0	0	13
6:00 PM	0	0	8	0	0	0	4	0	0	0	0	0	0	0	0	0	12
6:15 PM	0	0	2	0	0	0	3	0	0	0	0	0	0	0	0	0	5
6:30 PM	0	0	4	0	0	0	7	0	0	0	0	0	0	0	0	0	11
6:45 PM	0	0	2	0	0	0	9	0	0	0	0	0	0	0	0	0	11
7:00 PM	0	0	2	0	0	0	3	0	0	0	0	0	0	0	0	0	5
Total	0	0	818	2	0	0	777	1	0	0	0	0	0	0	0	2	1,600

Turning Movement Count

Seward Hwy & Energy Ct

Total Vehicles (15-Minute Periods)

AM Peak Hour

Wednesday, October 18, 2017

7:00 AM to 9:00 AM

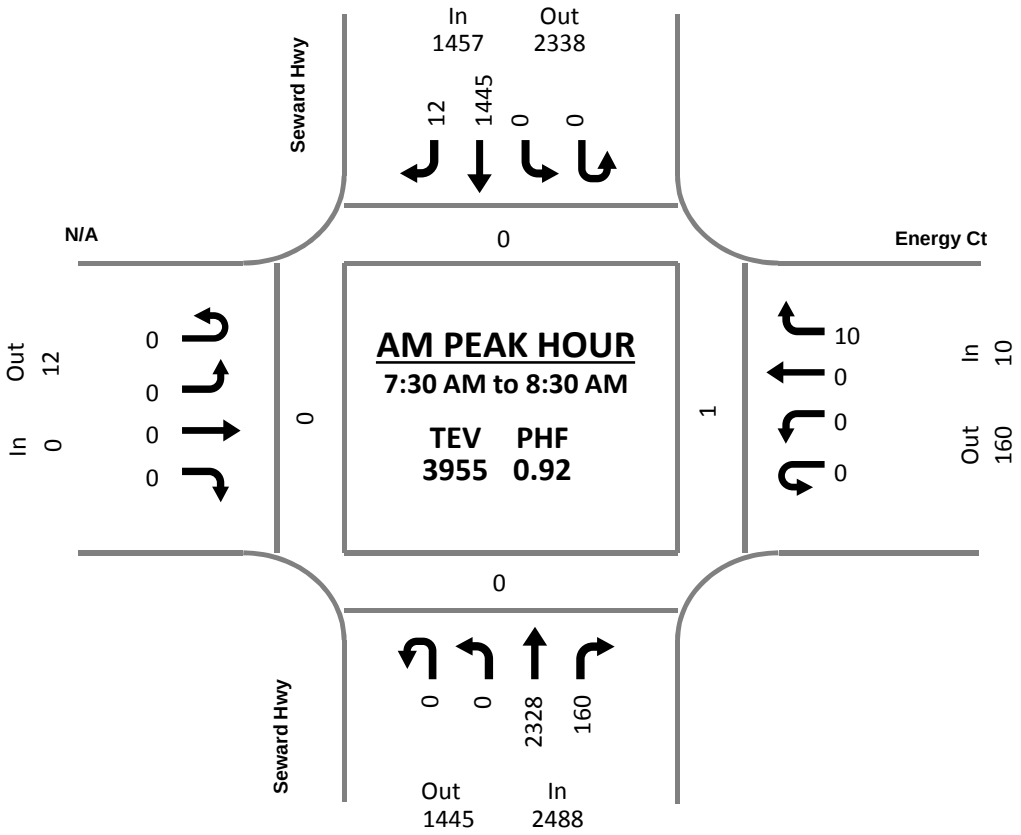
Start Time	Seward Hwy (Northbound)					Seward Hwy (Southbound)					N/A (Eastbound)					Energy Ct (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
7:00 AM	0	0	420	40	0	0	0	304	1	0	0	0	0	0	0	0	0	0	0	0	765
7:15 AM	0	0	435	44	0	0	0	288	1	0	0	0	0	0	0	0	0	0	3	0	771
7:30 AM	0	0	610	46	0	0	0	376	3	0	0	0	0	0	0	0	0	0	4	0	1039
7:45 AM	0	0	640	45	0	0	0	389	1	0	0	0	0	0	0	0	0	0	4	1	1079
8:00 AM	0	0	512	32	0	0	0	297	6	0	0	0	0	0	0	0	0	0	2	0	849
8:15 AM	0	0	566	37	0	0	0	383	2	0	0	0	0	0	0	0	0	0	0	0	988
8:30 AM	0	0	481	27	0	0	0	302	2	0	0	0	0	0	0	0	0	0	5	1	817
8:45 AM	0	0	524	27	0	0	0	398	4	0	0	0	0	0	0	0	0	0	3	1	956
Total	0	0	4,188	298	0	0	0	2,737	20	0	0	0	0	0	0	0	0	0	21	3	7,264

*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total")

Peak Hour Summary

7:30 AM to 8:30 AM

Data Type	Seward Hwy (Northbound)					Seward Hwy (Southbound)					N/A (Eastbound)					Energy Ct (Westbound)					Peak Hour Total
	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	
Volume	0	0	2328	160	0	0	0	1445	12	0	0	0	0	0	0	0	0	0	10	1	3955
%HV	0.0%	0.0%	2.5%	0.0%		0.0%	0.0%	2.3%	0.0%		0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%		2.3%
PHF	0.00	0.00	0.91	0.87	0.00	0.00	0.00	0.93	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.63	0.25	0.92
Volume			2488					1457					0					10			3955
%HV			2.3%					2.3%					0.0%					0.0%			2.3%
PHF			0.91					0.93					0.00					0.63			0.92



Turning Movement Count

Seward Hwy & Energy Ct

Total Vehicles (15-Minute Periods)

PM Peak Hour

Wednesday, October 18, 2017

4:00 PM to 6:00 PM

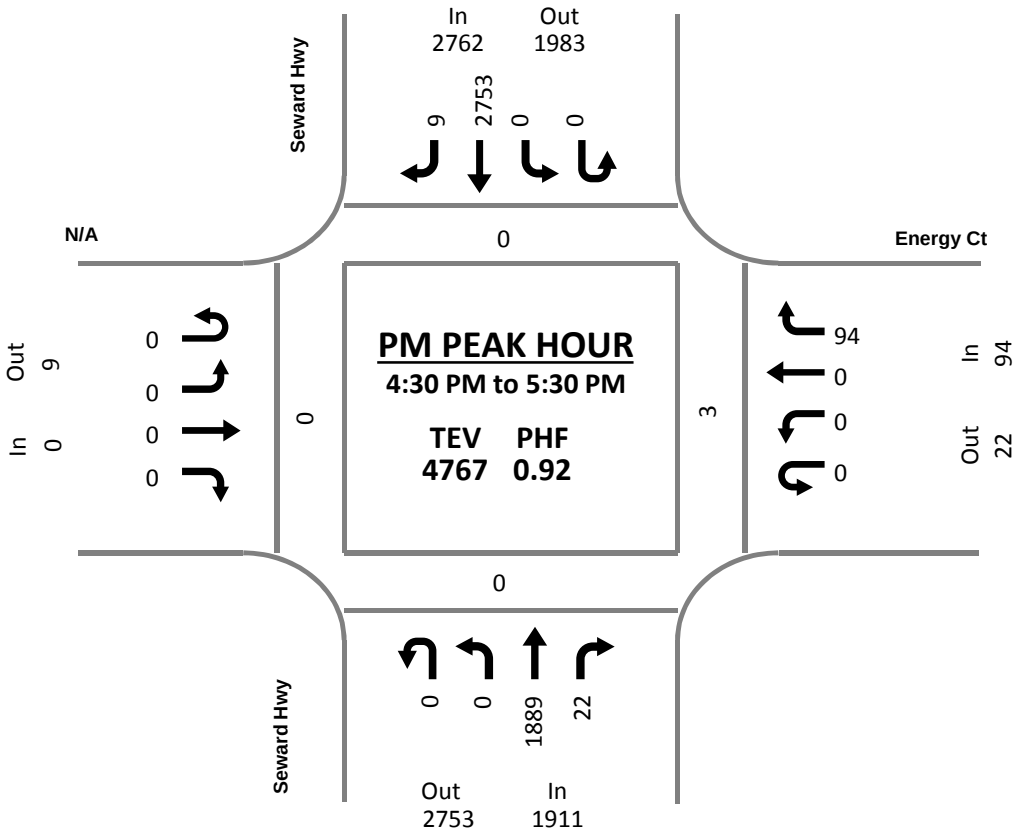
Start Time	Seward Hwy (Northbound)					Seward Hwy (Southbound)					N/A (Eastbound)					Energy Ct (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
4:00 PM	0	0	522	1	0	0	0	589	2	0	0	0	0	0	0	0	0	0	8	2	1122
4:15 PM	0	0	434	2	0	0	0	609	2	0	0	0	0	0	0	0	0	0	31	1	1078
4:30 PM	0	0	457	3	0	0	0	655	2	0	0	0	0	0	0	0	0	0	29	0	1146
4:45 PM	0	0	430	8	0	0	0	662	3	0	0	0	0	0	0	0	0	0	22	0	1125
5:00 PM	0	0	472	3	0	0	0	702	1	0	0	0	0	0	0	0	0	0	25	1	1203
5:15 PM	0	0	530	8	0	0	0	734	3	0	0	0	0	0	0	0	0	0	18	2	1293
5:30 PM	0	0	451	4	0	0	0	601	1	0	0	0	0	0	0	0	0	0	22	1	1079
5:45 PM	0	0	458	8	0	0	0	602	3	0	0	0	0	0	0	0	0	0	17	0	1088
Total	0	0	3,754	37	0	0	0	5,154	17	0	0	0	0	0	0	0	0	0	172	7	9,134

*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total")

Peak Hour Summary

4:30 PM to 5:30 PM

Data Type	Seward Hwy (Northbound)					Seward Hwy (Southbound)					N/A (Eastbound)					Energy Ct (Westbound)					Peak Hour Total
	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	
Volume	0	0	1889	22	0	0	0	2753	9	0	0	0	0	0	0	0	0	0	94	3	4767
%HV	0.0%	0.0%	1.4%	0.0%		0.0%	0.0%	2.2%	0.0%		0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%		1.8%
PHF	0.00	0.00	0.89	0.69	0.00	0.00	0.00	0.94	0.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.81	0.38	0.92
Volume			1911					2762					0					94			4767
%HV			1.4%					2.2%					0.0%					0.0%			1.8%
PHF			0.89					0.94					0.00					0.81			0.92



Traffic Camera Count and Placement Information

Intersection Name: Old Seward Hwy & 34th Ave

Intersection Location	
Northbound Street	Old Seward Hwy
Southbound Street	Old Seward Hwy
Eastbound Street	34th Ave
Westbound Street	34th Ave
City, State	Anchorage, AK

Project Information	
Name	Midtown Congestion Relief
Client	AK DOT&PF
Project #	1124.62458.01, Phase 02
PM/Traffic Lead	Steve Noble/Brad Coy

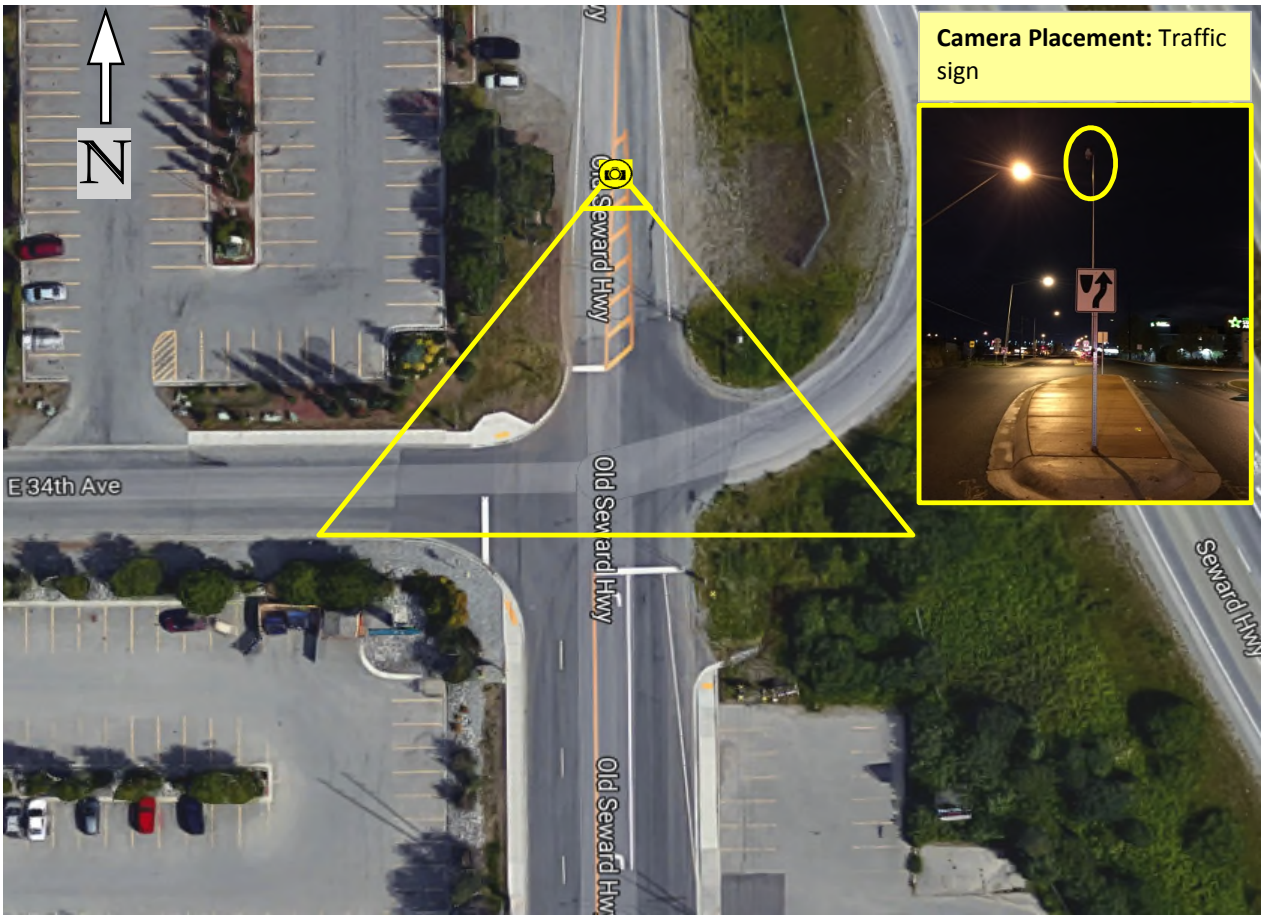
Count Description (e.g., day(s) of week, time periods, other related counts also occuring, etc.)

1 weekday (Tue, Wed, or Thu), simultaneous as Seward Hwy/36th Ave

Camera Setup/Video Footage	
Staff Responsible	Brad Coy
Setup Time	10/4/2017 10:30 PM
Take Down Time	10/5/2017 9:05 PM
Duration (hours)	22.58
Camera # (2-digit)	49

Count Date, Time, Vendor	
Date	10/5/2017 (Thursday)
Start Time	6:00 AM
End Time	7:00 PM
Duration (hours)	13.00
Count Vendor	CountingCars.com

Camera Placement



Camera Placement: Traffic sign

Other Notes (Before, During, or After Count)

DOWL

Turning Movement Count

Old Seward Hwy & 34th Ave

Total Vehicles (15-Minute Periods)

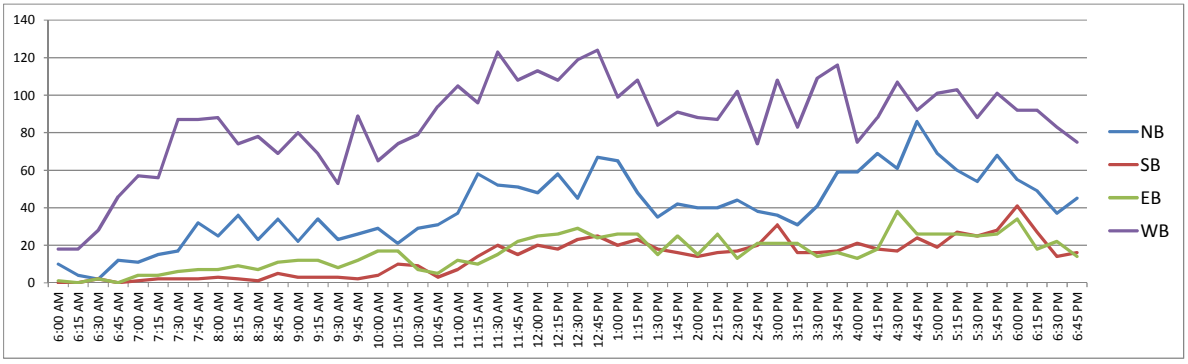
All Data

Thursday, October 05, 2017

6:00 AM to 7:00 PM

Start Time	Old Seward Hwy (Northbound)					Old Seward Hwy (Southbound)					34th Ave (Eastbound)					34th Ave (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
6:00 AM	0	1	9	0	0	0	0	0	0	0	0	0	0	1	0	0	13	4	1	1	29
6:15 AM	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	12	4	2	0	22
6:30 AM	0	1	1	0	0	0	0	2	0	0	0	1	0	1	0	0	22	4	2	0	34
6:45 AM	0	9	3	0	0	0	0	0	0	0	0	0	0	0	1	0	39	7	0	0	58
7:00 AM	0	8	3	0	0	0	0	1	0	0	0	0	0	4	1	0	44	11	2	0	73
7:15 AM	0	10	5	0	0	0	0	2	0	0	0	0	0	4	0	0	45	11	0	0	77
7:30 AM	0	11	6	0	0	0	0	2	0	0	0	0	0	6	0	0	70	15	2	1	112
7:45 AM	0	23	9	0	0	0	0	2	0	0	0	0	0	7	0	0	64	20	3	0	128
8:00 AM	0	18	7	0	0	0	0	3	0	0	0	0	0	7	0	0	64	23	1	0	123
8:15 AM	0	22	14	0	0	0	0	2	0	0	0	0	0	9	0	0	58	16	0	0	121
8:30 AM	0	18	5	0	0	0	0	1	0	0	0	0	0	7	0	0	65	13	0	0	109
8:45 AM	0	20	14	0	0	0	0	5	0	0	0	0	0	11	2	0	52	15	2	0	119
9:00 AM	0	10	12	0	0	0	0	3	0	0	0	1	0	11	0	0	65	11	4	0	117
9:15 AM	0	16	18	0	0	0	0	3	0	0	0	0	0	12	1	0	58	10	1	0	118
9:30 AM	1	15	7	0	0	0	0	3	0	0	0	0	0	8	0	0	44	7	2	0	87
9:45 AM	1	17	8	0	0	0	0	2	0	0	0	0	0	12	1	0	76	12	1	0	129
10:00 AM	0	17	12	0	0	0	0	4	0	0	0	0	0	17	0	0	58	5	2	0	115
10:15 AM	1	12	8	0	0	0	0	9	1	0	0	0	0	17	0	0	58	15	1	0	122
10:30 AM	1	14	14	0	0	0	0	9	0	0	0	0	0	7	0	0	65	10	4	0	124
10:45 AM	0	14	17	0	0	0	0	3	0	0	0	0	0	5	0	0	74	11	9	0	133
11:00 AM	0	15	22	0	0	0	0	7	0	0	0	0	0	12	1	0	81	12	12	0	161
11:15 AM	0	22	36	0	0	0	0	14	0	0	0	0	0	10	2	0	69	12	15	1	178
11:30 AM	1	25	26	0	0	0	0	19	1	0	0	0	0	15	5	0	87	18	18	0	210
11:45 AM	1	19	31	0	0	0	0	15	0	0	0	2	0	20	0	0	86	14	8	0	196
12:00 PM	0	19	29	0	0	0	0	14	6	0	0	2	0	23	2	0	87	16	10	0	206
12:15 PM	0	23	35	0	0	0	0	13	5	0	0	0	0	26	0	0	90	11	7	0	210
12:30 PM	0	19	26	0	0	0	0	21	2	0	0	1	0	28	0	0	89	18	12	1	216
12:45 PM	0	33	34	0	0	0	0	22	3	0	0	1	0	23	0	0	93	18	13	0	240
1:00 PM	0	33	32	0	0	0	0	19	1	0	0	1	0	25	0	0	79	12	8	0	210
1:15 PM	1	25	22	0	0	0	0	21	2	0	0	0	0	26	0	0	83	15	10	0	205
1:30 PM	0	19	16	0	1	0	0	15	3	0	0	1	0	14	1	0	66	14	4	0	152
1:45 PM	0	22	20	0	0	0	0	16	0	0	0	0	0	25	1	0	65	20	6	0	174
2:00 PM	1	19	20	0	0	0	0	14	0	0	0	1	0	14	0	0	75	9	4	0	157
2:15 PM	1	21	18	0	0	0	0	13	3	0	0	1	0	25	2	0	63	14	10	1	169
2:30 PM	2	22	20	0	0	0	0	17	0	0	0	0	0	13	2	0	81	15	6	0	176
2:45 PM	0	19	19	0	0	0	0	19	1	2	0	0	0	21	0	0	60	10	4	0	153
3:00 PM	1	17	18	0	0	0	0	31	0	0	0	1	0	20	0	0	80	21	7	0	196
3:15 PM	0	22	9	0	0	0	0	16	0	0	0	0	0	21	0	0	75	4	4	0	151
3:30 PM	2	18	21	0	0	0	0	15	1	0	0	0	0	14	1	0	90	12	7	0	180
3:45 PM	0	32	27	0	0	0	0	15	2	0	0	2	0	14	1	0	94	11	11	0	208
4:00 PM	1	27	31	0	2	0	0	20	1	1	0	1	0	12	1	0	54	12	9	0	168
4:15 PM	5	27	37	0	0	0	0	17	1	0	0	0	0	18	2	0	67	13	8	0	193
4:30 PM	0	28	33	0	0	0	0	17	0	0	0	0	0	38	1	0	82	14	11	2	223
4:45 PM	2	43	41	0	0	0	0	24	0	0	0	0	0	26	1	0	65	13	14	2	228
5:00 PM	0	31	38	0	0	0	0	19	0	0	0	1	0	25	2	0	67	17	17	1	215
5:15 PM	0	32	28	0	1	0	0	27	0	0	0	1	0	25	1	0	74	14	15	0	216
5:30 PM	0	21	33	0	0	0	0	21	4	0	0	0	0	25	0	0	61	13	14	3	192
5:45 PM	0	26	42	0	1	0	0	21	7	0	0	0	0	26	0	0	64	19	18	0	223
6:00 PM	2	21	32	0	0	0	0	37	4	0	0	0	0	34	1	0	60	21	11	0	222
6:15 PM	1	26	22	0	0	0	0	25	2	0	0	0	0	18	0	0	60	17	15	3	186
6:30 PM	1	21	15	0	0	0	0	12	2	1	0	1	0	21	0	0	53	9	21	1	156
6:45 PM	0	16	29	0	0	0	0	15	1	0	0	1	0	13	1	0	43	12	20	1	150
Total	26	1,020	1,037	0	5	0	0	647	53	4	0	20	0	816	34	0	3,389	674	388	18	8,070

*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total" or graph below)





Turning Movement Count

Old Seward Hwy & 34th Ave

Heavy Vehicles (15-Minute Periods)

All Data

Thursday, October 05, 2017

6:00 AM to 7:00 PM

Start Time	Old Seward Hwy (Northbound)				Old Seward Hwy (Southbound)				34th Ave (Eastbound)				34th Ave (Westbound)				Period Total (Veh)
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0	3
7:45 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	2	0	0	3
8:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	3	0	0	4
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
8:30 AM	0	0	1	0	0	0	0	0	0	0	0	1	0	2	1	0	5
8:45 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	2	0	0	4
9:00 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	2	0	0	3
9:15 AM	0	2	1	0	0	0	0	0	0	0	0	0	0	0	1	0	4
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	2
9:45 AM	0	0	0	0	0	0	0	0	0	0	0	2	0	3	0	0	5
10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	1	4
10:15 AM	0	0	0	0	0	0	1	0	0	0	0	2	0	0	1	0	4
10:30 AM	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	2
10:45 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	3
11:15 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	5	2	1	9
11:30 AM	0	0	0	0	0	0	0	1	0	0	0	1	0	1	0	0	3
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	2
12:00 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	2
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
12:30 PM	0	1	0	0	0	0	0	0	0	0	0	1	0	1	0	0	3
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	3
1:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	2	0	0	3
1:15 PM	0	1	0	0	0	0	0	0	0	0	0	1	0	0	1	0	3
1:30 PM	0	1	0	0	0	0	0	0	0	0	0	1	0	1	0	0	3
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3
2:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	2	0	0	3
2:15 PM	0	0	2	0	0	0	0	0	0	0	0	1	0	0	1	0	4
2:30 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	5	0	0	6
2:45 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	2	0	0	3
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	2	0	1	0	0	3
3:15 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	2	0	0	3
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0	3
3:45 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	4	0	0	5
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
4:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:30 PM	0	1	0	0	0	0	0	0	0	0	0	1	0	3	1	0	6
4:45 PM	0	1	0	0	0	0	0	0	0	0	0	2	0	1	0	0	4
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
5:15 PM	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
6:15 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
6:30 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	2
6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
Total	0	14	10	0	0	0	7	1	0	0	0	23	0	68	15	4	142

Turning Movement Count

Old Seward Hwy & 34th Ave

Total Vehicles (15-Minute Periods)

AM Peak Hour

Thursday, October 05, 2017

7:00 AM to 9:00 AM

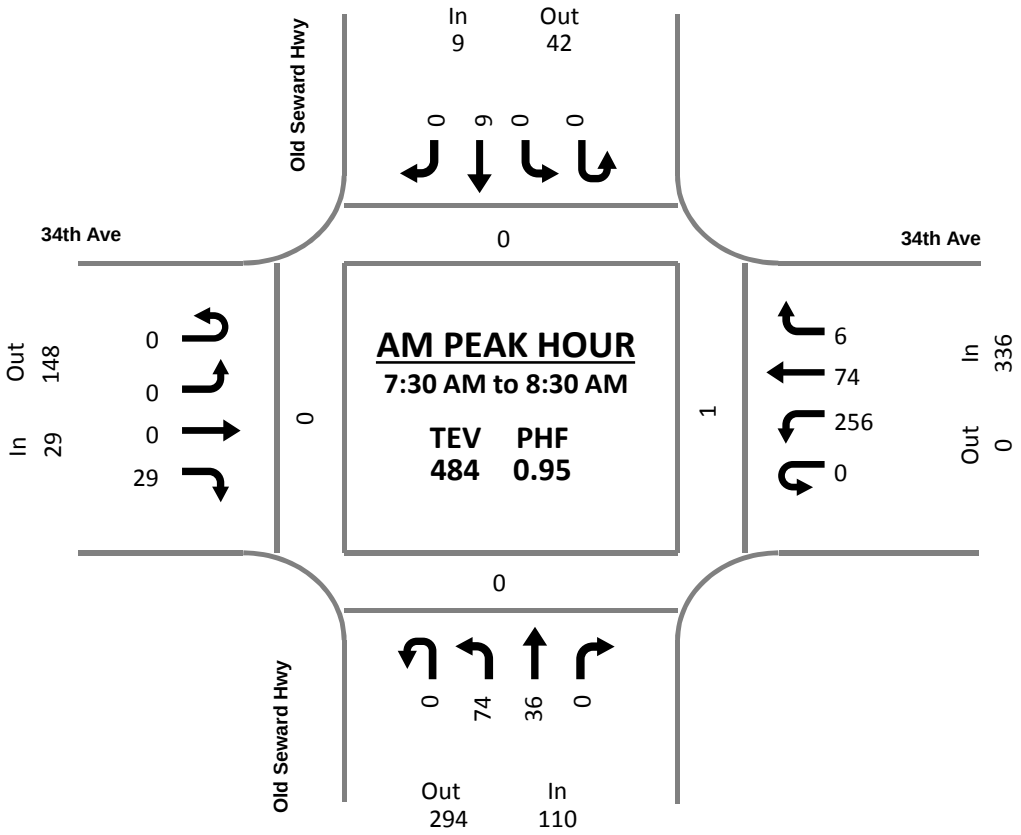
Start Time	Old Seward Hwy (Northbound)					Old Seward Hwy (Southbound)					34th Ave (Eastbound)					34th Ave (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
7:00 AM	0	8	3	0	0	0	0	1	0	0	0	0	0	4	1	0	44	11	2	0	73
7:15 AM	0	10	5	0	0	0	0	2	0	0	0	0	0	4	0	0	45	11	0	0	77
7:30 AM	0	11	6	0	0	0	0	2	0	0	0	0	0	6	0	0	70	15	2	1	112
7:45 AM	0	23	9	0	0	0	0	2	0	0	0	0	0	7	0	0	64	20	3	0	128
8:00 AM	0	18	7	0	0	0	0	3	0	0	0	0	0	7	0	0	64	23	1	0	123
8:15 AM	0	22	14	0	0	0	0	2	0	0	0	0	0	9	0	0	58	16	0	0	121
8:30 AM	0	18	5	0	0	0	0	1	0	0	0	0	0	7	0	0	65	13	0	0	109
8:45 AM	0	20	14	0	0	0	0	5	0	0	0	0	0	11	2	0	52	15	2	0	119
Total	0	130	63	0	0	0	0	18	0	0	0	0	0	55	3	0	462	124	10	1	862

*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total")

Peak Hour Summary

7:30 AM to 8:30 AM

Data Type	Old Seward Hwy (Northbound)					Old Seward Hwy (Southbound)					34th Ave (Eastbound)					34th Ave (Westbound)					Peak Hour Total
	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	
Volume	0	74	36	0	0	0	0	9	0	0	0	0	0	29	0	0	256	74	6	1	484
%HV	0.0%	0.0%	5.6%	0.0%		0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%	3.4%		0.0%	2.7%	1.4%	0.0%		2.3%
PHF	0.00	0.80	0.64	0.00	0.00	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0.00	0.81	0.00	0.00	0.91	0.80	0.50	0.25	0.95
Volume			110					9					29					336			484
%HV			1.8%					0.0%					3.4%					2.4%			2.3%
PHF			0.76					0.75					0.81					0.95			0.95



Turning Movement Count

Old Seward Hwy & 34th Ave

Total Vehicles (15-Minute Periods)

PM Peak Hour

Thursday, October 05, 2017

4:00 PM to 6:00 PM

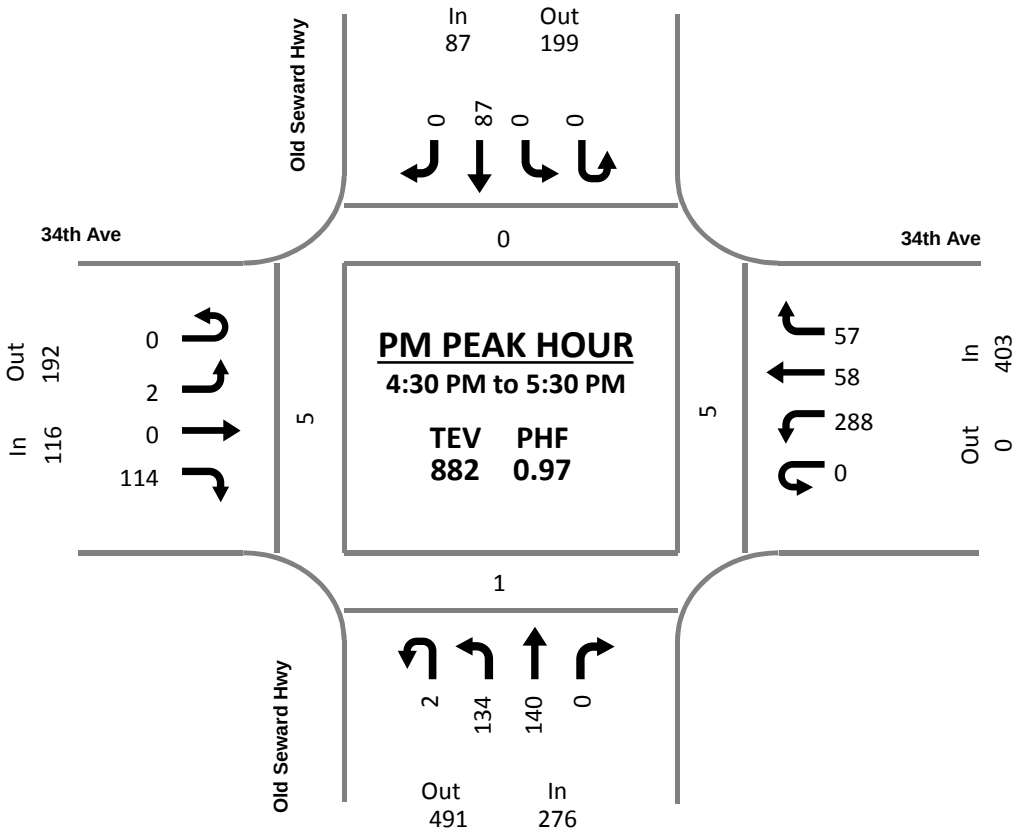
Start Time	Old Seward Hwy (Northbound)					Old Seward Hwy (Southbound)					34th Ave (Eastbound)					34th Ave (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
4:00 PM	1	27	31	0	2	0	0	20	1	1	0	1	0	12	1	0	54	12	9	0	168
4:15 PM	5	27	37	0	0	0	0	17	1	0	0	0	0	18	2	0	67	13	8	0	193
4:30 PM	0	28	33	0	0	0	0	17	0	0	0	0	0	38	1	0	82	14	11	2	223
4:45 PM	2	43	41	0	0	0	0	24	0	0	0	0	0	26	1	0	65	13	14	2	228
5:00 PM	0	31	38	0	0	0	0	19	0	0	0	1	0	25	2	0	67	17	17	1	215
5:15 PM	0	32	28	0	1	0	0	27	0	0	0	1	0	25	1	0	74	14	15	0	216
5:30 PM	0	21	33	0	0	0	0	21	4	0	0	0	0	25	0	0	61	13	14	3	192
5:45 PM	0	26	42	0	1	0	0	21	7	0	0	0	0	26	0	0	64	19	18	0	223
Total	8	235	283	0	4	0	0	166	13	1	0	3	0	195	8	0	534	115	106	8	1,658

*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total")

Peak Hour Summary

4:30 PM to 5:30 PM

Data Type	Old Seward Hwy (Northbound)					Old Seward Hwy (Southbound)					34th Ave (Eastbound)					34th Ave (Westbound)					Peak Hour Total
	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	
Volume	2	134	140	0	1	0	0	87	0	0	0	2	0	114	5	0	288	58	57	5	882
%HV	0.0%	2.2%	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%	3.5%		0.0%	2.1%	1.7%	0.0%		1.6%
PHF	0.25	0.78	0.85	0.00	0.25	0.00	0.00	0.81	0.00	0.00	0.00	0.50	0.00	0.75	0.63	0.00	0.88	0.85	0.84	0.63	0.97
Volume			276					87					116					403			882
%HV			1.1%					0.0%					3.4%					1.7%			1.6%
PHF			0.80					0.81					0.76					0.94			0.97



Traffic Camera Count and Placement Information

Intersection Name: Seward Hwy & 36th Ave

Intersection Location	
Northbound Street	Seward Hwy
Southbound Street	Seward Hwy
Eastbound Street	36th Ave
Westbound Street	36th Ave
City, State	Anchorage, AK

Project Information	
Name	Midtown Congestion Relief
Client	AK DOT&PF
Project #	1124.62458.01, Phase 02
PM/Traffic Lead	Steve Noble/Brad Coy

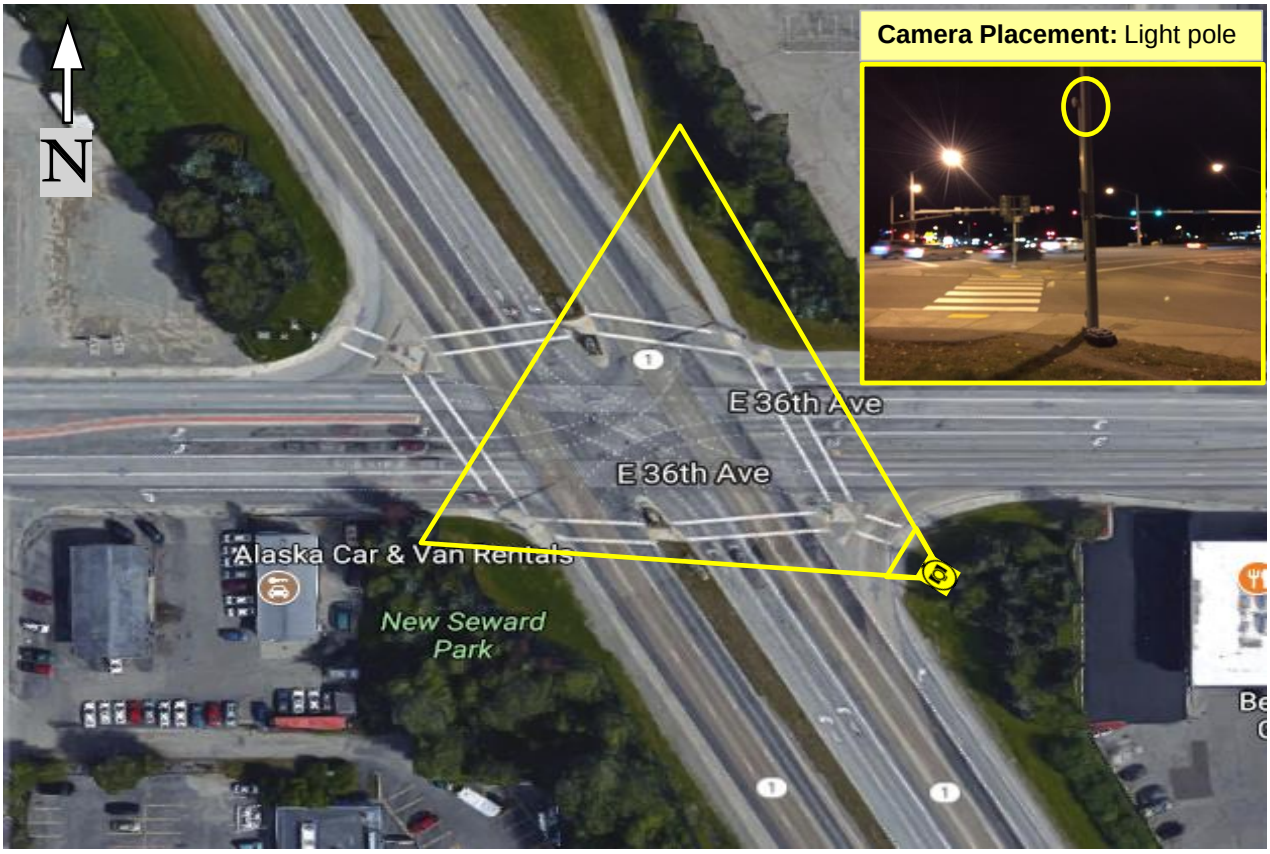
Count Description (e.g., day(s) of week, time periods, other related counts also occuring, etc.)

Recount = 1 weekday (Tue, Wed, or Thu); AM/PM peak periods are priority, but midday is also desirable

Camera Setup/Video Footage	
Staff Responsible	Brad Coy
Setup Time	10/18/2017 5:59 AM
Take Down Time	10/18/2017 8:50 PM
Duration (hours)	14.85
Camera # (2-digit)	d7

Count Date, Time, Vendor	
Date	10/18/2017 (Wednesday)
Start Time	6:00 AM
End Time	7:00 PM
Duration (hours)	13.00
Count Vendor	CountingCars.com

Camera Placement



Other Notes (Before, During, or After Count)

Additional video of intersection to better capture all movements

DOWL

Turning Movement Count

Seward Hwy & 36th Ave

Total Vehicles (15-Minute Periods)

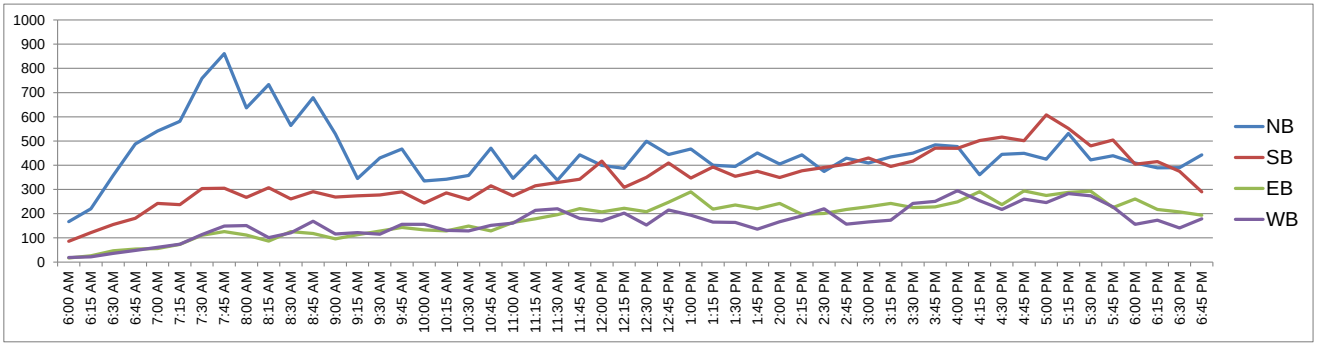
All Data

Wednesday, October 18, 2017

6:00 AM to 7:00 PM

Start Time	Seward Hwy (Northbound)					Seward Hwy (Southbound)					36th Ave (Eastbound)					36th Ave (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
6:00 AM	0	21	130	16	0	0	4	75	7	0	0	7	9	1	0	0	4	10	5	0	289
6:15 AM	1	21	175	23	1	0	10	104	8	0	0	5	19	2	0	0	7	13	2	0	390
6:30 AM	1	27	285	45	1	0	19	117	19	0	0	10	31	6	0	0	9	17	10	1	596
6:45 AM	0	51	400	37	0	0	20	144	17	0	0	17	31	6	0	0	12	29	7	0	771
7:00 AM	0	57	429	55	0	0	17	210	15	0	0	18	27	11	0	0	17	31	13	0	900
7:15 AM	0	77	456	48	0	0	27	191	19	0	0	22	46	5	0	0	18	44	12	1	965
7:30 AM	0	93	567	99	1	0	33	252	19	0	0	21	83	7	0	0	29	56	29	0	1288
7:45 AM	0	132	619	110	1	0	36	257	12	0	0	26	85	15	0	0	31	82	36	0	1441
8:00 AM	0	88	458	91	1	1	30	220	16	0	0	22	76	14	0	0	30	78	43	1	1167
8:15 AM	0	95	548	90	0	0	43	248	16	0	0	26	50	11	0	0	19	54	28	0	1228
8:30 AM	0	70	410	84	0	1	31	219	10	0	0	48	61	17	0	0	19	62	40	0	1072
8:45 AM	0	88	496	95	1	0	41	224	26	0	0	37	68	13	0	0	47	81	41	0	1257
9:00 AM	0	92	371	66	0	1	36	221	11	0	0	25	55	16	0	0	33	59	24	0	1010
9:15 AM	0	43	253	49	1	1	39	215	19	0	0	32	70	11	0	0	26	66	30	0	854
9:30 AM	0	41	295	94	0	1	28	233	15	1	0	32	78	18	0	0	29	67	19	1	950
9:45 AM	0	61	308	98	1	0	38	242	10	0	0	31	94	18	0	0	38	84	34	0	1056
10:00 AM	0	36	259	40	0	0	28	204	12	0	0	37	67	29	0	0	56	77	23	0	868
10:15 AM	1	41	267	33	1	0	27	235	24	0	1	52	49	27	0	0	25	69	37	0	888
10:30 AM	0	39	271	48	2	1	36	216	6	1	0	54	63	32	1	0	34	67	28	0	895
10:45 AM	0	55	357	59	1	0	28	280	7	1	0	39	66	24	0	0	29	84	39	1	1067
11:00 AM	0	40	250	56	2	0	29	237	8	1	0	49	96	19	0	0	30	91	40	0	945
11:15 AM	0	53	324	62	0	2	34	269	10	1	0	53	96	30	0	0	55	114	45	0	1147
11:30 AM	0	48	252	38	6	2	36	282	9	0	0	61	96	39	0	0	48	124	48	1	1083
11:45 AM	0	69	341	33	0	1	36	295	10	3	0	72	103	46	1	0	32	103	45	0	1186
12:00 PM	0	53	319	27	1	1	48	357	11	1	0	45	102	60	0	0	39	92	39	0	1193
12:15 PM	0	48	294	45	1	0	47	257	5	0	0	70	112	40	0	0	45	106	51	1	1120
12:30 PM	1	49	399	50	0	0	47	291	12	1	0	64	100	44	0	0	26	93	34	1	1210
12:45 PM	2	71	306	65	0	2	63	331	13	1	0	78	120	49	0	0	59	112	44	0	1315
1:00 PM	0	43	373	51	5	1	53	281	12	1	0	102	129	59	0	0	34	122	38	0	1298
1:15 PM	0	57	307	36	1	0	50	321	22	6	0	55	103	61	0	0	37	90	38	0	1177
1:30 PM	0	48	298	49	3	0	44	298	12	1	0	59	133	44	0	0	42	90	32	1	1149
1:45 PM	0	48	343	60	2	1	40	324	10	1	0	69	114	37	0	0	15	77	44	4	1182
2:00 PM	0	48	290	67	0	0	45	294	10	0	0	79	118	45	0	0	38	91	38	0	1163
2:15 PM	0	52	347	44	0	2	47	315	13	2	0	54	92	51	0	0	63	92	36	0	1208
2:30 PM	0	21	310	43	0	0	43	338	10	2	0	59	92	50	0	0	53	116	51	0	1186
2:45 PM	0	56	346	27	1	0	48	353	3	5	0	64	101	52	0	0	37	80	40	2	1207
3:00 PM	0	32	334	43	0	1	44	370	15	0	0	56	110	63	0	0	44	88	34	0	1234
3:15 PM	0	37	346	51	1	0	47	343	5	1	0	70	118	54	0	0	52	84	37	0	1244
3:30 PM	0	61	332	57	1	2	48	357	10	0	0	57	116	52	0	0	82	111	49	2	1334
3:45 PM	0	45	379	60	0	2	52	405	12	0	0	65	107	56	0	0	88	120	43	3	1434
4:00 PM	0	42	378	57	1	1	42	415	12	0	0	62	103	84	0	0	88	147	60	2	1491
4:15 PM	0	34	280	47	2	2	39	452	9	0	0	74	139	78	0	0	78	126	50	2	1408
4:30 PM	0	46	344	55	0	0	41	467	8	0	0	52	103	82	0	0	80	94	43	0	1415
4:45 PM	0	57	338	54	2	4	60	428	9	1	1	60	129	104	0	0	85	132	43	0	1504
5:00 PM	1	36	307	81	0	1	57	539	11	1	0	66	129	80	0	0	90	102	54	1	1554
5:15 PM	0	46	406	79	4	0	37	505	10	0	0	63	125	100	0	0	92	135	56	1	1654
5:30 PM	0	41	336	45	0	0	52	417	11	0	0	71	129	93	0	0	98	120	56	0	1469
5:45 PM	0	50	347	42	0	1	32	459	12	0	0	59	91	75	0	0	86	102	40	0	1396
6:00 PM	0	42	328	39	1	1	35	362	6	0	0	60	107	94	0	0	45	74	37	0	1230
6:15 PM	0	41	302	46	0	0	31	369	15	0	0	54	88	75	0	0	44	97	32	0	1194
6:30 PM	0	39	309	42	0	2	35	330	8	0	0	63	74	70	0	0	48	61	32	0	1113
6:45 PM	0	42	338	63	0	1	28	255	6	0	0	53	94	47	0	0	56	90	33	1	1106
Total	7	2,723	17,857	2,894	46	36	1,961	15,423	617	32	2	2,579	4,597	2,216	2	0	2,321	4,406	1,862	27	59,501

*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total" or graph below)





Turning Movement Count

Seward Hwy & 36th Ave

Heavy Vehicles (15-Minute Periods)

All Data

Wednesday, October 18, 2017

6:00 AM to 7:00 PM

Start Time	Seward Hwy (Northbound)				Seward Hwy (Southbound)				36th Ave (Eastbound)				36th Ave (Westbound)				Period Total (Veh)
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	
6:00 AM	0	0	10	1	0	0	3	0	0	0	1	0	0	0	2	0	17
6:15 AM	0	0	9	0	0	0	1	0	0	0	0	0	0	0	0	0	10
6:30 AM	0	0	15	1	0	0	9	1	0	1	2	0	0	0	2	0	31
6:45 AM	0	0	8	0	0	0	2	0	0	3	3	0	0	0	0	0	16
7:00 AM	0	0	7	0	0	1	4	0	0	1	2	1	0	0	1	0	17
7:15 AM	0	0	7	0	0	0	4	0	0	0	0	0	0	1	2	1	15
7:30 AM	0	0	8	3	0	1	7	0	0	0	3	0	0	0	0	0	22
7:45 AM	0	0	10	1	0	1	3	0	0	2	2	1	0	0	2	0	22
8:00 AM	0	0	17	0	0	2	5	1	0	3	5	0	0	0	3	1	37
8:15 AM	0	0	16	1	0	1	9	2	0	3	1	0	0	2	3	0	38
8:30 AM	0	0	22	3	0	1	11	1	0	2	4	0	0	0	1	1	46
8:45 AM	0	2	19	3	0	0	17	1	0	3	3	2	0	3	3	0	56
9:00 AM	0	0	14	3	0	0	22	1	0	3	2	0	0	4	0	0	49
9:15 AM	0	0	20	0	0	0	22	0	0	1	1	0	0	0	3	0	47
9:30 AM	0	2	15	3	0	0	20	0	0	0	2	0	0	0	2	0	44
9:45 AM	0	2	26	1	0	0	15	0	0	2	1	0	0	0	2	0	49
10:00 AM	0	0	24	2	0	0	13	1	0	3	4	1	0	2	2	3	55
10:15 AM	0	1	25	0	0	0	11	0	0	1	1	1	0	0	4	2	46
10:30 AM	0	4	12	1	0	0	13	0	0	4	4	1	0	2	1	0	42
10:45 AM	0	3	22	1	0	1	25	0	0	2	4	0	0	0	2	1	61
11:00 AM	0	0	10	0	0	0	14	0	0	2	3	2	0	2	1	0	34
11:15 AM	0	0	25	1	0	0	19	0	0	5	2	1	0	1	4	1	59
11:30 AM	0	1	13	0	0	1	10	0	0	4	3	0	0	2	1	2	37
11:45 AM	0	0	14	0	0	1	21	0	0	1	1	0	0	0	1	2	41
12:00 PM	0	1	17	0	0	0	18	0	0	0	2	2	0	3	0	0	43
12:15 PM	0	1	15	1	0	0	16	1	0	1	0	1	0	0	4	1	41
12:30 PM	0	0	17	1	0	0	12	0	0	0	2	0	0	1	0	0	33
12:45 PM	0	0	19	0	0	0	10	1	0	1	1	0	0	0	3	0	35
1:00 PM	0	0	21	2	0	1	12	0	0	1	2	1	0	0	2	1	43
1:15 PM	0	3	17	1	0	0	17	1	0	2	2	3	0	1	4	1	52
1:30 PM	0	0	25	0	0	1	15	0	0	2	1	0	0	1	1	0	46
1:45 PM	0	1	23	2	0	0	21	0	0	1	1	1	0	1	3	3	57
2:00 PM	0	1	19	4	0	1	19	0	0	1	4	3	0	1	4	0	57
2:15 PM	0	0	26	0	0	1	20	1	0	1	1	1	0	0	3	1	55
2:30 PM	0	0	17	2	0	1	16	0	0	5	5	2	0	1	5	2	56
2:45 PM	0	0	16	5	0	0	18	0	0	3	2	1	0	0	3	1	49
3:00 PM	0	0	17	1	0	0	17	1	0	2	2	0	0	0	2	0	42
3:15 PM	0	0	10	4	0	2	19	0	0	4	0	1	0	0	4	0	44
3:30 PM	0	0	13	1	0	1	15	0	0	1	4	1	0	3	1	2	42
3:45 PM	0	1	15	0	0	0	17	0	0	0	3	0	0	3	4	0	43
4:00 PM	0	0	21	0	0	0	19	0	0	1	4	4	0	0	4	0	53
4:15 PM	0	1	10	1	0	0	21	0	0	1	0	0	0	1	5	0	40
4:30 PM	0	1	7	0	0	0	12	0	0	0	2	0	0	1	0	0	23
4:45 PM	0	0	8	1	0	0	15	0	0	2	1	0	0	0	4	0	31
5:00 PM	0	1	7	0	0	0	16	0	0	0	4	1	0	0	4	0	33
5:15 PM	0	0	3	0	0	0	15	0	0	1	0	0	0	2	3	1	25
5:30 PM	0	1	4	1	0	0	13	0	0	1	2	0	0	0	1	0	23
5:45 PM	0	0	6	0	0	0	7	0	0	1	2	0	0	0	2	0	18
6:00 PM	0	0	7	0	0	0	5	0	0	1	2	0	0	0	3	0	18
6:15 PM	0	0	1	1	0	0	5	0	0	0	0	0	0	0	3	0	10
6:30 PM	0	0	4	0	0	0	6	0	0	0	1	0	0	0	0	0	11
6:45 PM	0	0	2	2	0	0	8	0	0	0	1	1	0	0	1	0	15
Total	0	27	735	55	0	18	684	13	0	79	105	33	0	38	115	27	1,929

Turning Movement Count

Seward Hwy & 36th Ave

Total Vehicles (15-Minute Periods)

AM Peak Hour

Wednesday, October 18, 2017

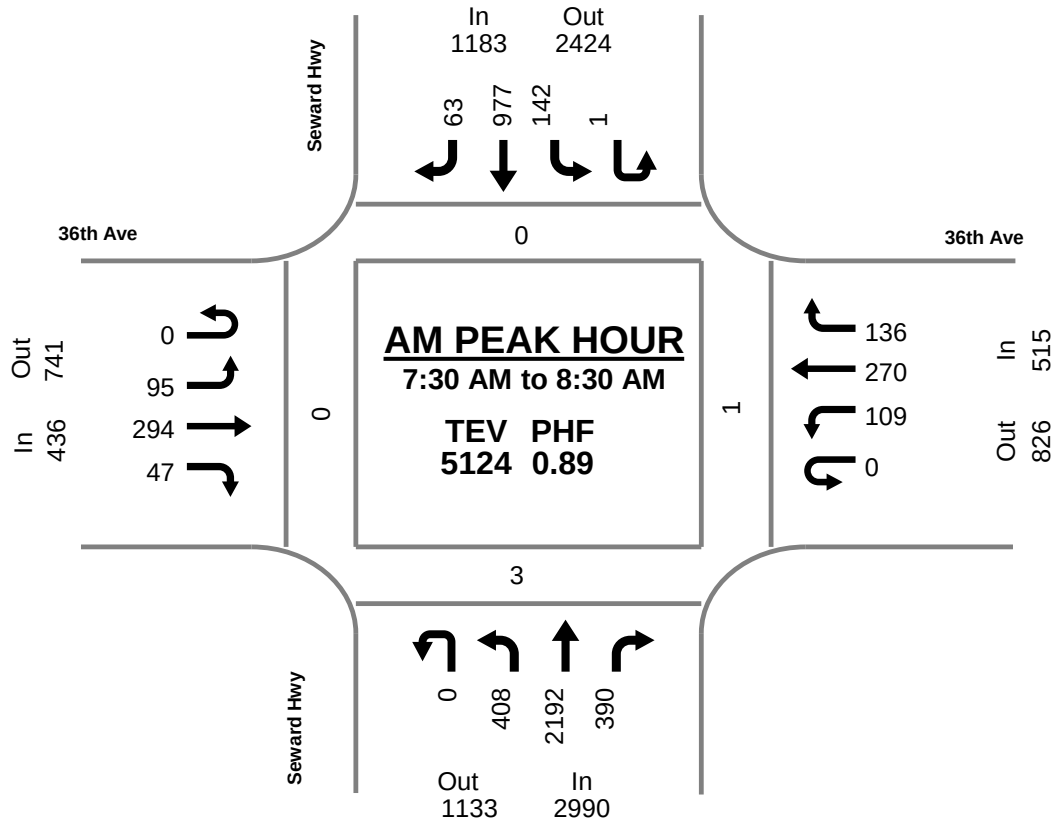
7:00 AM to 9:00 AM

Start Time	Seward Hwy (Northbound)					Seward Hwy (Southbound)					36th Ave (Eastbound)					36th Ave (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
7:00 AM	0	57	429	55	0	0	17	210	15	0	0	18	27	11	0	0	17	31	13	0	900
7:15 AM	0	77	456	48	0	0	27	191	19	0	0	22	46	5	0	0	18	44	12	1	965
7:30 AM	0	93	567	99	1	0	33	252	19	0	0	21	83	7	0	0	29	56	29	0	1288
7:45 AM	0	132	619	110	1	0	36	257	12	0	0	26	85	15	0	0	31	82	36	0	1441
8:00 AM	0	88	458	91	1	1	30	220	16	0	0	22	76	14	0	0	30	78	43	1	1167
8:15 AM	0	95	548	90	0	0	43	248	16	0	0	26	50	11	0	0	19	54	28	0	1228
8:30 AM	0	70	410	84	0	1	31	219	10	0	0	48	61	17	0	0	19	62	40	0	1072
8:45 AM	0	88	496	95	1	0	41	224	26	0	0	37	68	13	0	0	47	81	41	0	1257
Total	0	700	3,983	672	4	2	258	1,821	133	0	0	220	496	93	0	0	210	488	242	2	9,318

*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total")

Peak Hour Summary
7:30 AM to 8:30 AM

Data Type	Seward Hwy (Northbound)					Seward Hwy (Southbound)					36th Ave (Eastbound)					36th Ave (Westbound)					Peak Hour Total
	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	
Volume	0	408	2192	390	3	1	142	977	63	0	0	95	294	47	0	0	109	270	136	1	5124
%HV	0.0%	0.0%	2.3%	1.3%		0.0%	3.5%	2.5%	4.8%		0.0%	8.4%	3.7%	2.1%		0.0%	1.8%	3.0%	0.7%		2.3%
PHF	0.00	0.77	0.89	0.89	0.75	0.25	0.83	0.95	0.83	0.00	0.00	0.91	0.86	0.78	0.00	0.00	0.88	0.82	0.79	0.25	0.89
Volume			2990					1183					436					515			5124
%HV			1.9%					2.7%					4.6%					2.1%			2.3%
PHF			0.87					0.96					0.87					0.85			0.89



Turning Movement Count

Seward Hwy & 36th Ave

Total Vehicles (15-Minute Periods)

PM Peak Hour

Wednesday, October 18, 2017

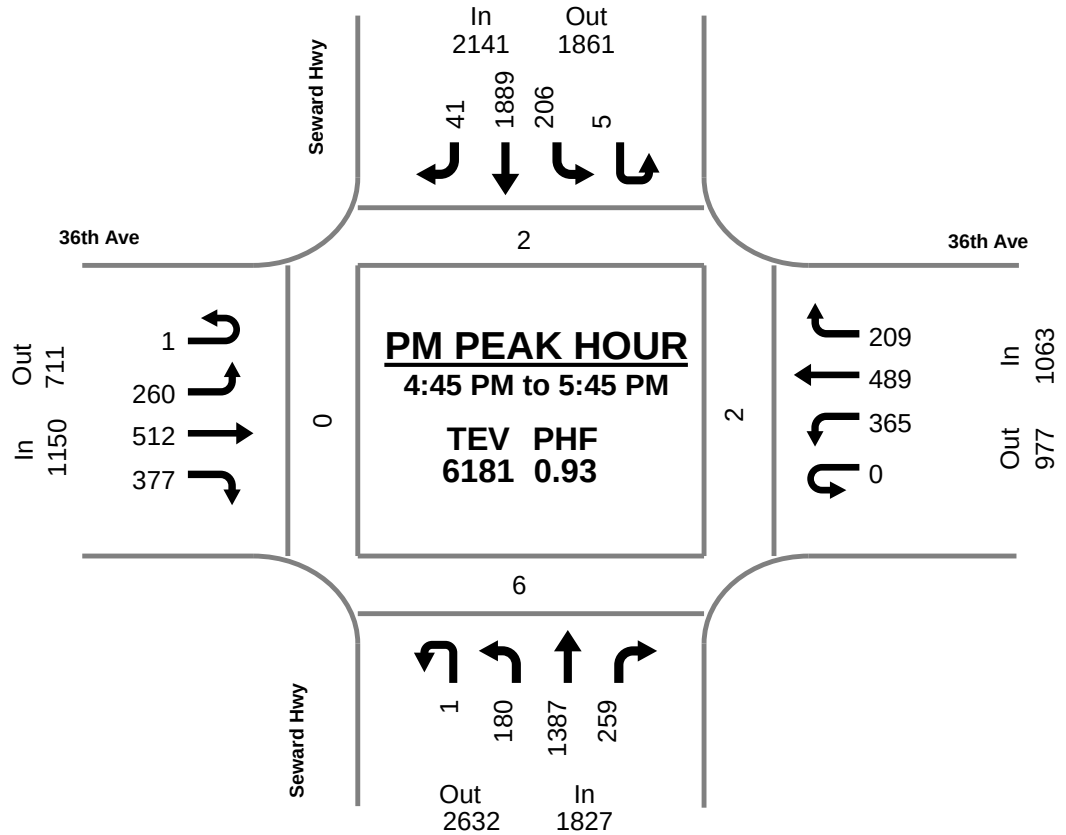
4:00 PM to 6:00 PM

Start Time	Seward Hwy (Northbound)					Seward Hwy (Southbound)					36th Ave (Eastbound)					36th Ave (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
4:00 PM	0	42	378	57	1	1	42	415	12	0	0	62	103	84	0	0	88	147	60	2	1491
4:15 PM	0	34	280	47	2	2	39	452	9	0	0	74	139	78	0	0	78	126	50	2	1408
4:30 PM	0	46	344	55	0	0	41	467	8	0	0	52	103	82	0	0	80	94	43	0	1415
4:45 PM	0	57	338	54	2	4	60	428	9	1	1	60	129	104	0	0	85	132	43	0	1504
5:00 PM	1	36	307	81	0	1	57	539	11	1	0	66	129	80	0	0	90	102	54	1	1554
5:15 PM	0	46	406	79	4	0	37	505	10	0	0	63	125	100	0	0	92	135	56	1	1654
5:30 PM	0	41	336	45	0	0	52	417	11	0	0	71	129	93	0	0	98	120	56	0	1469
5:45 PM	0	50	347	42	0	1	32	459	12	0	0	59	91	75	0	0	86	102	40	0	1396
Total	1	352	2,736	460	9	9	360	3,682	82	2	1	507	948	696	0	0	697	958	402	6	11,891

*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total")

Peak Hour Summary
4:45 PM to 5:45 PM

Data Type	Seward Hwy (Northbound)					Seward Hwy (Southbound)					36th Ave (Eastbound)					36th Ave (Westbound)					Peak Hour Total
	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	
Volume	1	180	1387	259	6	5	206	1889	41	2	1	260	512	377	0	0	365	489	209	2	6181
%HV	0.0%	1.1%	1.6%	0.8%		0.0%	0.0%	3.1%	0.0%		0.0%	1.5%	1.4%	0.3%		0.0%	0.5%	2.5%	0.5%		1.8%
PHF	0.25	0.79	0.85	0.80	0.38	0.31	0.86	0.88	0.93	0.50	0.25	0.92	0.99	0.91	0.00	0.00	0.93	0.91	0.93	0.50	0.93
Volume	1827					2141					1150					1063					6181
%HV	1.4%					2.8%					1.0%					1.4%					1.8%
PHF	0.86					0.88					0.98					0.94					0.93



Traffic Camera Count and Placement Information

Intersection Name: Tudor Rd & Seward Hwy SB Ramps

Intersection Location	
Northbound Street	Seward Hwy SB On-Ramp
Southbound Street	Seward Hwy SB Off-Ramp
Eastbound Street	Tudor Rd
Westbound Street	Tudor Rd
City, State	Anchorage, AK

Project Information	
Name	Midtown Congestion Relief
Client	AK DOT&PF
Project #	1124.62458.01, Phase 02
PM/Traffic Lead	Steve Noble/Brad Coy

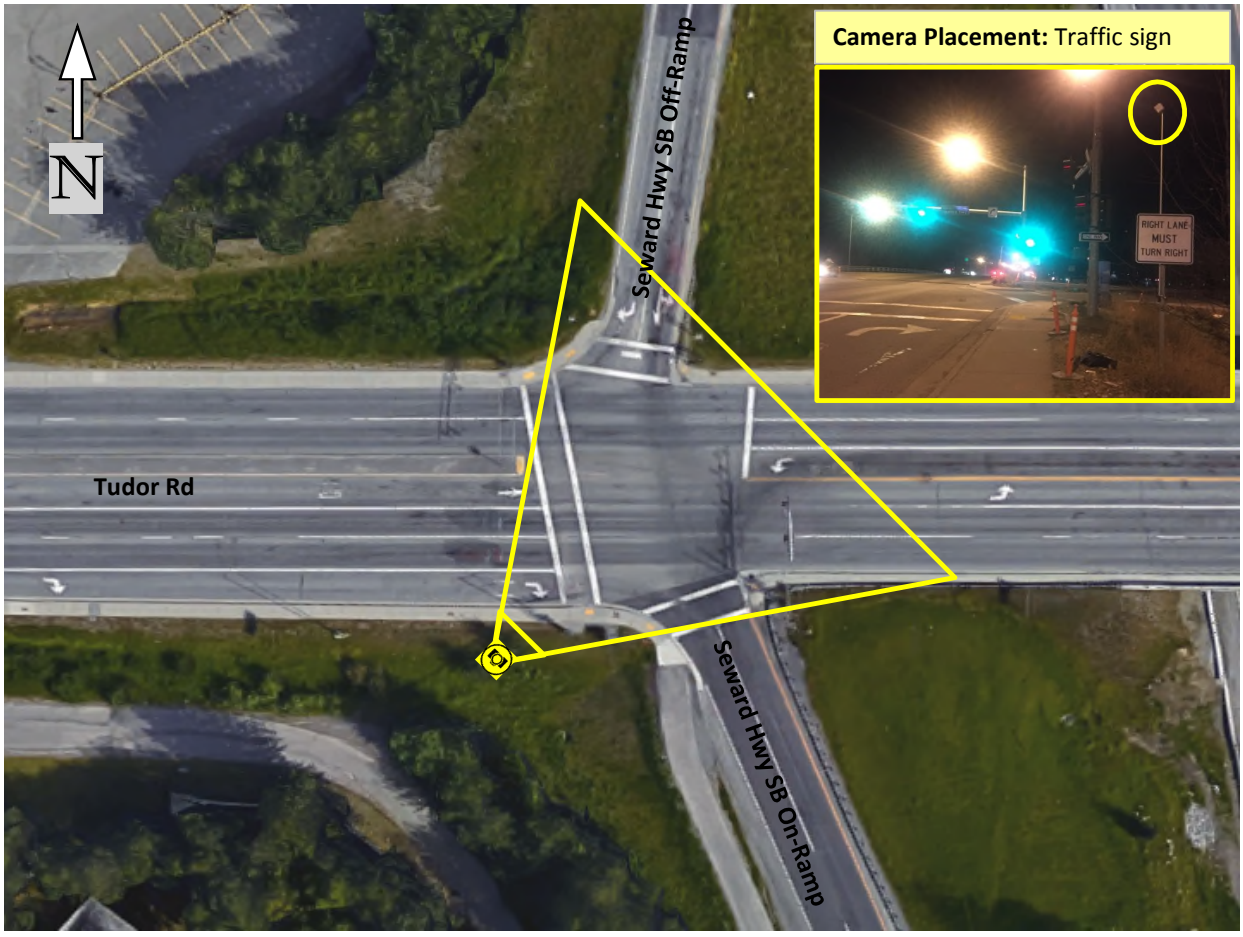
Count Description (e.g., day(s) of week, time periods, other related counts also occuring, etc.)

2 weekdays (Tue, Wed, or Thu) back-to-back; AM/PM peak periods are priority, but midday is also desirable

Camera Setup/Video Footage	
Staff Responsible	Brad Coy
Setup Time	10/17/2017 6:23 AM
Take Down Time	10/17/2017 8:05 PM
Duration (hours)	13.70
Camera # (2-digit)	a1

Count Date, Time, Vendor	
Date	10/17/2017 (Tuesday)
Start Time	6:30 AM
End Time	7:30 PM
Duration (hours)	13.00
Count Vendor	CountingCars.com

Camera Placement



Other Notes (Before, During, or After Count)

Turning Movement Count

Tudor Rd & Seward Hwy SB Ramps

Total Vehicles (15-Minute Periods)

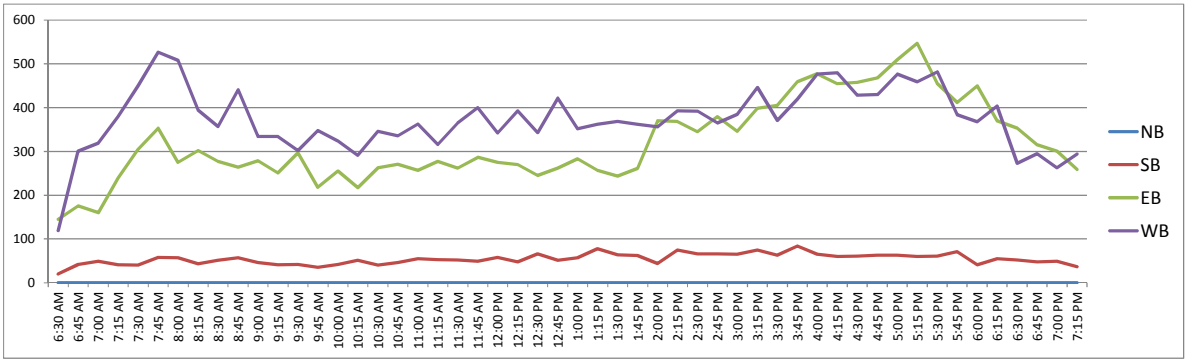
All Data

Tuesday, October 17, 2017

6:30 AM to 7:30 PM

Start Time	Seward Hwy SB On-Ramp (Northbound)					Seward Hwy SB Off-Ramp (Southbound)					Tudor Rd (Eastbound)					Tudor Rd (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
6:30 AM	0	0	0	0	0	0	7	0	13	0	1	0	134	10	1	1	23	95	0	0	284
6:45 AM	0	0	0	0	0	0	9	4	29	0	0	0	160	16	0	0	28	273	0	0	519
7:00 AM	0	0	0	0	0	0	11	11	27	2	0	0	149	11	0	0	39	280	0	0	528
7:15 AM	0	0	0	0	0	0	10	4	27	0	0	0	226	14	0	0	49	331	0	0	661
7:30 AM	0	0	0	0	0	0	11	5	24	0	0	0	290	14	0	0	51	399	0	0	794
7:45 AM	0	0	0	0	0	0	18	6	34	0	0	0	333	20	1	0	77	450	0	0	938
8:00 AM	0	0	0	0	0	0	15	8	34	2	0	0	260	15	0	0	58	450	0	0	840
8:15 AM	0	0	0	0	0	0	12	10	21	0	0	0	286	16	1	1	42	351	0	0	739
8:30 AM	0	0	0	0	0	0	16	5	30	0	0	0	260	17	1	0	44	313	0	0	685
8:45 AM	0	0	0	0	0	0	22	9	26	1	0	0	246	18	0	0	73	368	0	0	762
9:00 AM	0	0	0	0	0	0	15	8	23	1	0	0	256	23	0	0	48	286	0	0	659
9:15 AM	0	0	0	0	0	0	17	6	18	1	0	0	224	27	0	0	49	285	0	0	626
9:30 AM	0	0	0	0	0	0	17	8	17	1	0	0	274	23	0	0	51	251	0	0	641
9:45 AM	0	0	0	0	0	0	13	4	18	1	0	0	194	24	2	0	47	301	0	0	601
10:00 AM	0	0	0	0	0	0	8	3	31	0	0	0	237	18	0	0	50	274	0	0	621
10:15 AM	0	0	0	0	0	0	11	3	37	0	0	0	205	12	0	0	56	235	0	0	559
10:30 AM	0	0	0	0	0	0	12	5	23	0	0	0	232	31	0	0	74	272	0	0	649
10:45 AM	0	0	0	0	0	0	10	8	28	4	0	0	251	20	0	0	59	277	0	0	653
11:00 AM	0	0	0	0	0	0	19	5	31	1	0	0	234	23	0	0	67	296	0	0	675
11:15 AM	0	0	0	0	0	0	13	4	36	1	0	0	257	20	0	0	52	264	0	0	646
11:30 AM	0	0	0	0	0	0	24	8	20	1	0	0	231	31	0	0	64	301	0	0	679
11:45 AM	0	0	0	0	0	0	15	7	27	0	0	0	246	41	0	0	64	336	0	0	736
12:00 PM	0	0	0	0	0	0	25	5	28	2	0	0	239	36	0	0	56	286	0	0	675
12:15 PM	0	0	0	0	0	0	18	3	27	0	0	0	243	27	0	1	79	313	0	0	711
12:30 PM	0	0	0	0	0	0	32	5	29	2	0	0	230	15	0	0	48	295	0	0	654
12:45 PM	0	0	0	0	0	0	24	5	22	1	0	0	234	28	2	0	66	356	0	0	735
1:00 PM	0	0	0	0	0	0	22	4	31	1	0	0	261	22	0	0	56	296	0	0	692
1:15 PM	0	0	0	0	0	0	27	12	39	4	0	0	239	18	2	0	61	301	0	0	697
1:30 PM	0	0	0	0	0	0	24	5	35	3	0	0	234	10	1	0	56	313	0	0	677
1:45 PM	0	0	0	0	0	0	25	7	30	1	0	0	246	15	2	0	52	310	0	0	685
2:00 PM	0	0	0	0	0	0	18	10	16	0	0	0	333	37	1	0	67	289	0	0	770
2:15 PM	0	0	0	0	0	0	29	8	38	2	0	0	320	49	0	0	64	329	0	0	837
2:30 PM	0	0	0	0	0	0	20	12	34	4	0	0	307	38	0	0	66	326	0	0	803
2:45 PM	0	0	0	0	0	0	25	11	30	2	0	0	323	57	0	0	59	306	0	0	811
3:00 PM	0	0	0	0	0	0	36	10	19	2	0	0	296	50	0	0	77	308	0	0	796
3:15 PM	0	0	0	0	0	0	32	7	36	2	0	0	345	54	1	1	84	361	0	0	920
3:30 PM	0	0	0	0	0	0	29	5	29	3	0	0	341	64	0	0	63	308	0	0	839
3:45 PM	0	0	0	0	0	0	35	7	42	2	0	0	400	59	1	0	86	334	0	0	963
4:00 PM	0	0	0	0	0	0	26	7	32	3	0	0	421	57	0	0	86	391	0	0	1020
4:15 PM	0	0	0	0	0	0	30	4	26	0	0	0	398	57	0	0	84	396	0	0	995
4:30 PM	0	0	0	0	0	0	33	5	23	1	0	0	399	59	0	0	100	329	0	0	948
4:45 PM	0	0	0	0	0	0	40	5	18	1	0	0	408	60	0	0	83	347	0	0	961
5:00 PM	0	0	0	0	0	0	33	5	25	4	0	0	431	79	1	0	92	385	0	0	1050
5:15 PM	0	0	0	0	0	0	37	4	19	4	0	0	463	84	1	0	87	372	0	0	1066
5:30 PM	0	0	0	0	0	0	34	5	22	2	0	0	393	62	1	0	116	366	0	0	998
5:45 PM	0	0	0	0	0	0	40	6	25	5	0	0	362	50	0	0	109	275	0	0	867
6:00 PM	0	0	0	0	0	0	23	2	16	0	0	0	373	77	0	1	80	287	0	0	859
6:15 PM	0	0	0	0	0	0	31	0	24	4	0	0	320	50	0	0	84	320	0	0	829
6:30 PM	0	0	0	0	0	0	31	4	17	2	0	0	314	39	0	2	48	223	0	0	678
6:45 PM	0	0	0	0	0	0	28	0	20	3	0	0	269	46	0	1	50	244	0	0	658
7:00 PM	0	0	0	0	0	0	34	2	13	2	0	0	258	43	0	1	55	207	0	0	613
7:15 PM	0	0	0	0	0	0	22	2	13	0	0	0	218	41	1	0	57	237	0	0	590
Total	0	0	0	0	0	0	1,168	298	1,352	78	1	0	14,803	1,827	20	9	3,336	16,098	0	0	38,892

*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total" or graph below)





Turning Movement Count

Tudor Rd & Seward Hwy SB Ramps

Heavy Vehicles (15-Minute Periods)

All Data

Tuesday, October 17, 2017

6:30 AM to 7:30 PM

Start Time	Seward Hwy SB On-Ramp (Northbound)				Seward Hwy SB Off-Ramp (Southbound)				Tudor Rd (Eastbound)				Tudor Rd (Westbound)				Period Total (Veh)
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	
6:30 AM	0	0	0	0	0	0	0	0	0	0	4	4	0	1	2	0	11
6:45 AM	0	0	0	0	0	0	0	0	0	0	8	1	0	1	3	0	13
7:00 AM	0	0	0	0	0	0	1	0	0	0	6	3	0	0	3	0	13
7:15 AM	0	0	0	0	0	0	1	2	0	0	6	1	0	2	3	0	15
7:30 AM	0	0	0	0	0	0	0	1	0	0	10	2	0	1	8	0	22
7:45 AM	0	0	0	0	0	1	1	1	0	0	12	1	0	1	4	0	21
8:00 AM	0	0	0	0	0	0	1	0	0	0	9	0	0	1	7	0	18
8:15 AM	0	0	0	0	0	3	2	2	0	0	12	4	0	0	4	0	27
8:30 AM	0	0	0	0	0	1	1	1	0	0	13	0	0	1	9	0	26
8:45 AM	0	0	0	0	0	0	1	2	0	0	17	4	0	4	7	0	35
9:00 AM	0	0	0	0	0	0	3	1	0	0	14	2	0	3	6	0	29
9:15 AM	0	0	0	0	0	2	1	2	0	0	18	2	0	2	15	0	42
9:30 AM	0	0	0	0	0	0	3	0	0	0	11	1	0	4	5	0	24
9:45 AM	0	0	0	0	0	0	2	0	0	0	11	3	0	9	11	0	36
10:00 AM	0	0	0	0	0	1	1	1	0	0	18	1	0	3	11	0	36
10:15 AM	0	0	0	0	0	0	2	3	0	0	18	0	0	5	12	0	40
10:30 AM	0	0	0	0	0	0	2	2	0	0	11	2	0	2	15	0	34
10:45 AM	0	0	0	0	0	0	1	0	0	0	13	0	0	5	4	0	23
11:00 AM	0	0	0	0	0	2	2	0	0	0	8	2	0	2	14	0	30
11:15 AM	0	0	0	0	0	2	2	3	0	0	12	0	0	2	9	0	30
11:30 AM	0	0	0	0	0	2	2	0	0	0	13	1	0	6	10	0	34
11:45 AM	0	0	0	0	0	0	2	0	0	0	10	0	0	6	11	0	29
12:00 PM	0	0	0	0	0	2	2	0	0	0	9	1	0	3	13	0	30
12:15 PM	0	0	0	0	0	0	1	1	0	0	5	0	0	5	9	0	21
12:30 PM	0	0	0	0	0	1	2	0	0	0	11	1	0	4	5	0	24
12:45 PM	0	0	0	0	0	0	2	0	0	0	7	2	0	4	7	0	22
1:00 PM	0	0	0	0	0	0	1	2	0	0	14	0	0	3	17	0	37
1:15 PM	0	0	0	0	0	0	2	3	0	0	7	0	0	5	17	0	34
1:30 PM	0	0	0	0	0	1	2	1	0	0	13	1	0	5	5	0	28
1:45 PM	0	0	0	0	0	0	2	2	0	0	14	0	0	3	7	0	28
2:00 PM	0	0	0	0	0	0	2	2	0	0	9	2	0	2	7	0	24
2:15 PM	0	0	0	0	0	1	1	0	0	0	11	0	0	4	11	0	28
2:30 PM	0	0	0	0	0	1	3	2	0	0	9	0	0	5	12	0	32
2:45 PM	0	0	0	0	0	1	4	1	0	0	15	4	0	3	5	0	33
3:00 PM	0	0	0	0	0	1	2	2	0	0	14	2	0	3	12	0	36
3:15 PM	0	0	0	0	0	1	4	1	0	0	9	0	0	3	6	0	24
3:30 PM	0	0	0	0	0	1	3	1	0	0	7	0	0	9	9	0	30
3:45 PM	0	0	0	0	0	2	1	1	0	0	18	0	0	1	4	0	27
4:00 PM	0	0	0	0	0	2	1	1	0	0	10	0	0	7	4	0	25
4:15 PM	0	0	0	0	0	2	0	0	0	0	9	3	0	7	7	0	28
4:30 PM	0	0	0	0	0	3	0	0	0	0	9	1	0	2	5	0	20
4:45 PM	0	0	0	0	0	0	0	0	0	0	11	0	0	2	7	0	20
5:00 PM	0	0	0	0	0	0	2	3	0	0	2	0	0	1	5	0	13
5:15 PM	0	0	0	0	0	1	0	1	0	0	3	1	0	1	12	0	19
5:30 PM	0	0	0	0	0	1	0	1	0	0	3	0	0	4	18	0	27
5:45 PM	0	0	0	0	0	0	2	1	0	0	4	0	0	2	4	0	13
6:00 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	3	0	5
6:15 PM	0	0	0	0	0	1	0	0	0	0	2	0	0	2	6	0	11
6:30 PM	0	0	0	0	0	0	0	1	0	0	3	0	0	2	4	0	10
6:45 PM	0	0	0	0	0	0	0	0	0	0	3	1	0	0	4	0	8
7:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	3	0	4
7:15 PM	0	0	0	0	0	0	0	1	0	0	4	0	0	0	2	0	7
Total	0	0	0	0	0	36	70	49	0	0	492	53	0	153	403	0	1,256

Turning Movement Count

Tudor Rd & Seward Hwy SB Ramps

Total Vehicles (15-Minute Periods)

AM Peak Hour

Tuesday, October 17, 2017

7:00 AM to 9:00 AM

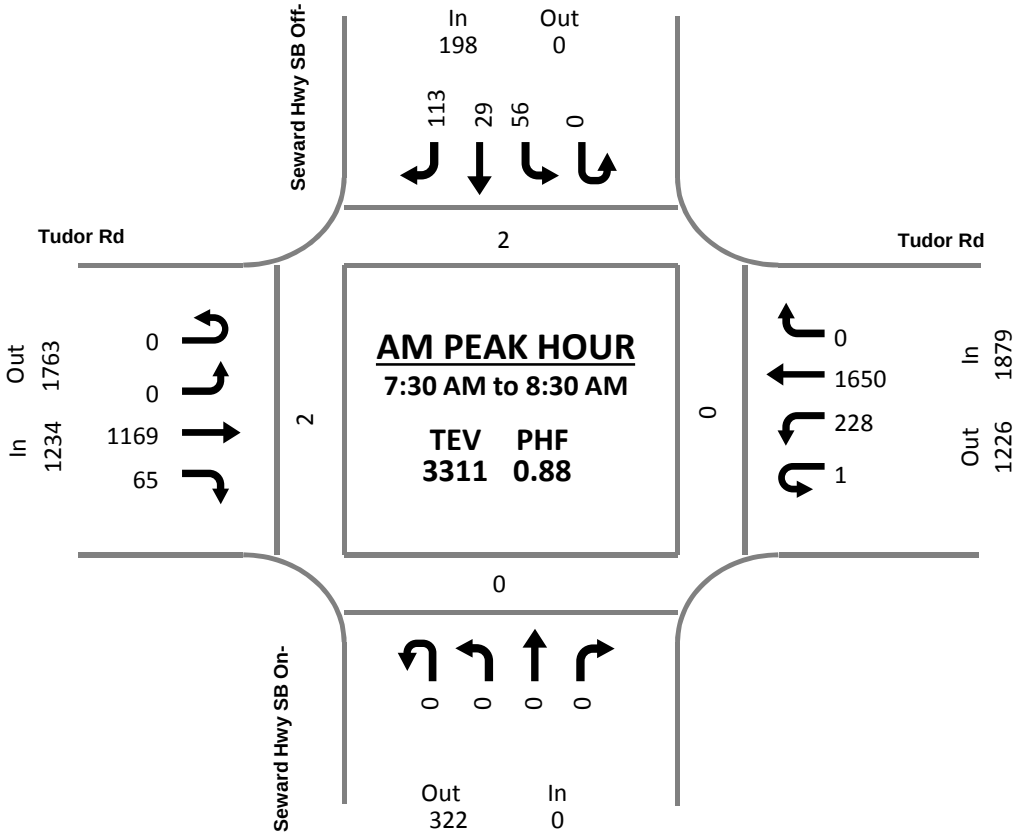
Start Time	Seward Hwy SB On-Ramp (Northbound)					Seward Hwy SB Off-Ramp (Southbound)					Tudor Rd (Eastbound)					Tudor Rd (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
7:00 AM	0	0	0	0	0	0	11	11	27	2	0	0	149	11	0	0	39	280	0	0	528
7:15 AM	0	0	0	0	0	0	10	4	27	0	0	0	226	14	0	0	49	331	0	0	661
7:30 AM	0	0	0	0	0	0	11	5	24	0	0	0	290	14	0	0	51	399	0	0	794
7:45 AM	0	0	0	0	0	0	18	6	34	0	0	0	333	20	1	0	77	450	0	0	938
8:00 AM	0	0	0	0	0	0	15	8	34	2	0	0	260	15	0	0	58	450	0	0	840
8:15 AM	0	0	0	0	0	0	12	10	21	0	0	0	286	16	1	1	42	351	0	0	739
8:30 AM	0	0	0	0	0	0	16	5	30	0	0	0	260	17	1	0	44	313	0	0	685
8:45 AM	0	0	0	0	0	0	22	9	26	1	0	0	246	18	0	0	73	368	0	0	762
Total	0	0	0	0	0	0	115	58	223	5	0	0	2,050	125	3	1	433	2,942	0	0	5,947

*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total")

Peak Hour Summary

7:30 AM to 8:30 AM

Data Type	Seward Hwy SB On-Ramp (Northbound)					Seward Hwy SB Off-Ramp (Southbound)					Tudor Rd (Eastbound)					Tudor Rd (Westbound)					Peak Hour Total
	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	
Volume	0	0	0	0	0	0	56	29	113	2	0	0	1169	65	2	1	228	1650	0	0	3311
%HV	0.0%	0.0%	0.0%	0.0%		0.0%	7.1%	13.8%	3.5%		0.0%	0.0%	3.7%	10.8%		0.0%	1.3%	1.4%	0.0%		2.7%
PHF	0.00	0.00	0.00	0.00	0.00	0.00	0.78	0.73	0.83	0.25	0.00	0.00	0.88	0.81	0.50	0.25	0.74	0.92	0.00	0.00	0.88
Volume			0					198					1234					1879			3311
%HV			0.0%					6.1%					4.1%					1.4%			2.7%
PHF			0.00					0.85					0.87					0.89			0.88



Turning Movement Count

Tudor Rd & Seward Hwy SB Ramps

Total Vehicles (15-Minute Periods)

PM Peak Hour

Tuesday, October 17, 2017

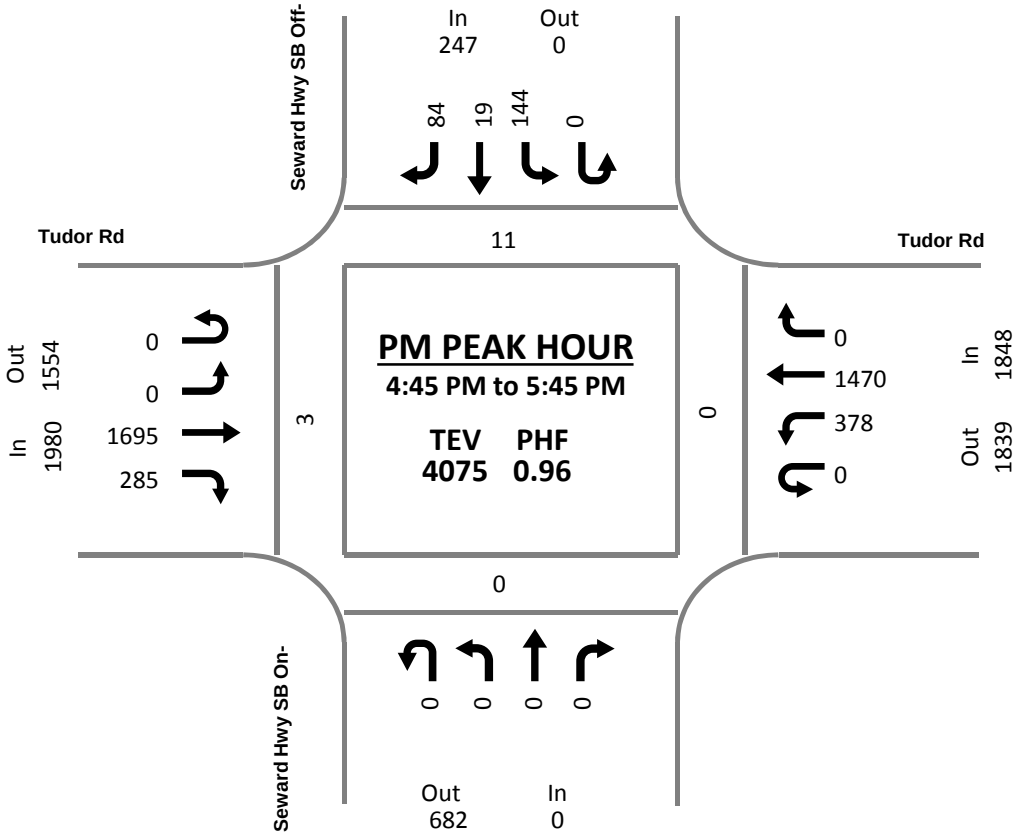
4:00 PM to 6:00 PM

Start Time	Seward Hwy SB On-Ramp (Northbound)					Seward Hwy SB Off-Ramp (Southbound)					Tudor Rd (Eastbound)					Tudor Rd (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
4:00 PM	0	0	0	0	0	0	26	7	32	3	0	0	421	57	0	0	86	391	0	0	1020
4:15 PM	0	0	0	0	0	0	30	4	26	0	0	0	398	57	0	0	84	396	0	0	995
4:30 PM	0	0	0	0	0	0	33	5	23	1	0	0	399	59	0	0	100	329	0	0	948
4:45 PM	0	0	0	0	0	0	40	5	18	1	0	0	408	60	0	0	83	347	0	0	961
5:00 PM	0	0	0	0	0	0	33	5	25	4	0	0	431	79	1	0	92	385	0	0	1050
5:15 PM	0	0	0	0	0	0	37	4	19	4	0	0	463	84	1	0	87	372	0	0	1066
5:30 PM	0	0	0	0	0	0	34	5	22	2	0	0	393	62	1	0	116	366	0	0	998
5:45 PM	0	0	0	0	0	0	40	6	25	5	0	0	362	50	0	0	109	275	0	0	867
Total	0	0	0	0	0	0	273	41	190	20	0	0	3,275	508	3	0	757	2,861	0	0	7,905

*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total")

Peak Hour Summary
4:45 PM to 5:45 PM

Data Type	Seward Hwy SB On-Ramp (Northbound)					Seward Hwy SB Off-Ramp (Southbound)					Tudor Rd (Eastbound)					Tudor Rd (Westbound)					Peak Hour Total
	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	
Volume	0	0	0	0	0	0	144	19	84	11	0	0	1695	285	3	0	378	1470	0	0	4075
%HV	0.0%	0.0%	0.0%	0.0%		0.0%	1.4%	10.5%	6.0%		0.0%	0.0%	1.1%	0.4%		0.0%	2.1%	2.9%	0.0%		1.9%
PHF	0.00	0.00	0.00	0.00	0.00	0.00	0.90	0.95	0.84	0.69	0.00	0.00	0.92	0.85	0.75	0.00	0.81	0.95	0.00	0.00	0.96
Volume			0					247					1980					1848			4075
%HV			0.0%					3.6%					1.0%					2.7%			1.9%
PHF			0.00					0.98					0.90					0.96			0.96



Traffic Camera Count and Placement Information

Intersection Name: Tudor Rd & Seward Hwy NB Ramps

Intersection Location	
Northbound Street	Seward Hwy NB Off-Ramp
Southbound Street	Seward Hwy NB On-Ramp
Eastbound Street	Tudor Rd
Westbound Street	Tudor Rd
City, State	Anchorage, AK

Project Information	
Name	Midtown Congestion Relief
Client	AK DOT&PF
Project #	1124.62458.01, Phase 02
PM/Traffic Lead	Steve Noble/Brad Coy

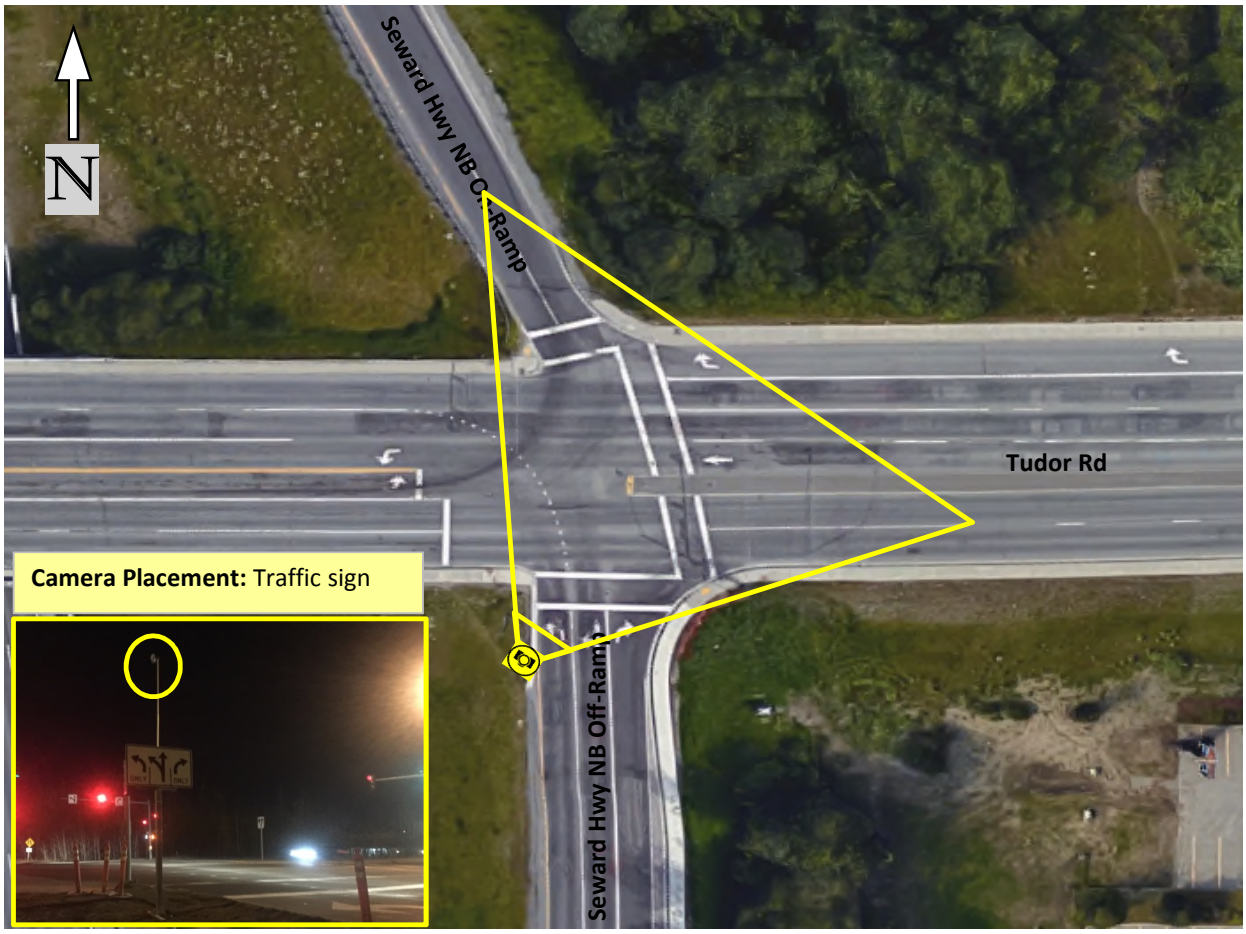
Count Description (e.g., day(s) of week, time periods, other related counts also occuring, etc.)

2 weekdays (Tue, Wed, or Thu) back-to-back; AM/PM peak periods are priority, but midday is also desirable

Camera Setup/Video Footage	
Staff Responsible	Brad Coy
Setup Time	10/17/2017 5:55 AM
Take Down Time	10/17/2017 7:55 PM
Duration (hours)	14.00
Camera # (2-digit)	d7

Count Date, Time, Vendor	
Date	10/17/2017 (Tuesday)
Start Time	6:00 AM
End Time	7:00 PM
Duration (hours)	13.00
Count Vendor	CountingCars.com

Camera Placement



Other Notes (Before, During, or After Count)

Turning Movement Count

Tudor Rd & Seward Hwy NB Ramps

Total Vehicles (15-Minute Periods)

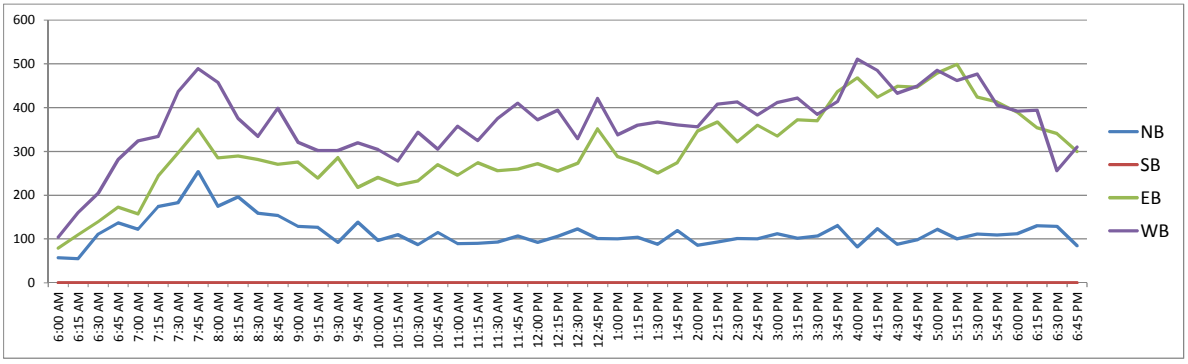
All Data

Tuesday, October 17, 2017

6:00 AM to 7:00 PM

Start Time	Seward Hwy NB Off-Ramp (Northbound)					Seward Hwy NB On-Ramp (Southbound)					Tudor Rd (Eastbound)					Tudor Rd (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
6:00 AM	0	20	1	36	0	0	0	0	0	0	0	10	69	0	0	0	0	96	8	0	240
6:15 AM	0	12	3	40	0	0	0	0	0	0	0	7	103	0	0	0	0	145	15	0	325
6:30 AM	0	39	3	69	1	0	0	0	0	0	0	11	129	0	0	0	0	179	26	1	456
6:45 AM	0	44	11	82	0	0	0	0	0	0	0	15	158	0	0	0	0	256	26	0	592
7:00 AM	0	45	8	69	0	0	0	0	0	0	0	8	149	0	0	0	0	285	39	0	603
7:15 AM	0	74	13	87	1	0	0	0	0	0	0	18	226	0	0	0	0	302	32	0	752
7:30 AM	0	80	11	92	1	0	0	0	0	0	0	14	282	0	0	1	0	389	46	0	915
7:45 AM	0	115	21	118	1	0	0	0	0	0	0	25	326	0	0	0	0	417	72	0	1094
8:00 AM	0	71	13	91	1	0	0	0	0	0	0	25	260	0	0	0	0	405	53	0	918
8:15 AM	0	90	14	92	1	0	0	0	0	0	0	31	259	0	0	0	0	329	46	0	861
8:30 AM	0	65	12	82	1	0	0	0	0	0	0	45	237	0	0	0	0	293	41	0	775
8:45 AM	0	68	11	75	1	0	0	0	0	0	0	26	245	0	0	0	0	354	45	0	824
9:00 AM	0	46	11	72	1	0	0	0	0	0	0	30	246	0	0	0	0	282	39	0	726
9:15 AM	0	64	6	57	0	0	0	0	0	0	0	20	219	0	0	0	0	276	26	0	668
9:30 AM	0	31	2	59	0	0	0	0	0	0	0	35	251	0	0	0	0	262	40	0	680
9:45 AM	0	60	8	70	1	0	0	0	0	0	0	30	188	0	0	0	0	287	33	0	676
10:00 AM	0	36	9	52	0	0	0	0	0	0	0	31	210	0	0	0	0	276	28	0	642
10:15 AM	0	47	6	57	0	0	0	0	0	0	0	34	189	0	0	0	0	246	32	0	611
10:30 AM	0	38	6	43	1	0	0	0	0	0	0	34	199	0	0	0	0	308	36	0	664
10:45 AM	0	49	7	59	0	0	0	0	0	0	0	41	229	0	0	0	0	279	26	2	690
11:00 AM	0	33	6	50	1	0	0	0	0	0	0	37	209	0	0	0	0	324	34	0	693
11:15 AM	0	26	8	56	0	0	0	0	0	0	0	42	232	0	0	0	0	294	31	0	689
11:30 AM	0	37	8	48	0	0	0	0	0	0	0	38	218	0	0	0	0	331	44	0	724
11:45 AM	0	36	7	64	1	0	0	0	0	0	0	29	231	0	0	0	0	363	47	0	777
12:00 PM	0	33	6	53	0	0	0	0	0	0	0	42	230	0	0	0	0	329	43	0	736
12:15 PM	0	38	12	56	0	0	0	0	0	0	0	38	217	0	0	0	0	336	58	1	755
12:30 PM	0	50	8	65	0	0	0	0	0	0	0	33	240	0	0	0	0	298	31	0	725
12:45 PM	0	54	9	38	1	0	0	0	0	0	0	37	315	0	0	0	0	370	51	0	874
1:00 PM	0	36	10	54	2	0	0	0	0	0	0	43	245	0	0	0	0	311	27	0	726
1:15 PM	0	44	3	57	1	0	0	0	0	0	0	43	230	0	0	0	0	323	37	1	737
1:30 PM	0	38	4	46	0	0	0	0	0	0	0	31	220	0	0	0	0	323	44	0	706
1:45 PM	0	47	11	61	2	0	0	0	0	0	0	36	239	0	0	0	0	313	48	0	755
2:00 PM	0	24	7	55	0	0	0	0	0	0	0	48	299	0	0	0	0	327	29	0	789
2:15 PM	0	41	3	49	0	0	0	0	0	0	0	50	317	0	0	0	0	357	51	0	868
2:30 PM	0	36	4	61	2	0	0	0	0	0	0	41	281	0	0	0	0	371	42	0	836
2:45 PM	0	35	9	56	2	0	0	0	0	0	0	55	305	0	0	0	0	337	46	1	843
3:00 PM	0	36	8	68	1	0	0	0	0	0	0	42	293	0	0	0	0	362	50	0	859
3:15 PM	0	46	1	55	1	0	0	0	0	0	0	34	338	0	0	0	0	381	41	1	896
3:30 PM	0	39	17	51	2	0	0	0	0	0	0	42	328	0	0	0	0	334	51	0	862
3:45 PM	0	60	5	66	0	0	0	0	0	0	0	55	382	0	0	0	0	362	52	0	982
4:00 PM	0	26	4	52	2	0	0	0	0	0	0	53	415	0	0	0	0	444	67	0	1061
4:15 PM	0	39	11	74	2	0	0	0	0	0	0	55	369	0	0	0	0	435	50	0	1033
4:30 PM	0	25	5	58	2	0	0	0	0	0	0	49	400	0	0	0	0	379	54	0	970
4:45 PM	0	32	5	61	0	0	0	0	0	0	0	37	410	0	0	0	0	400	49	0	994
5:00 PM	0	51	6	65	3	0	0	0	0	0	0	61	418	0	0	0	0	426	60	0	1087
5:15 PM	0	41	9	50	2	0	0	0	0	0	0	63	436	0	0	0	0	417	45	0	1061
5:30 PM	0	34	8	69	1	0	0	0	0	0	0	50	374	0	0	0	0	417	60	0	1012
5:45 PM	0	35	7	67	1	0	0	0	0	0	0	53	360	0	0	0	0	337	69	0	928
6:00 PM	0	26	8	78	1	0	0	0	0	0	0	47	343	0	0	0	0	342	50	0	894
6:15 PM	0	42	11	77	0	0	0	0	0	0	0	51	303	0	0	0	0	353	41	0	878
6:30 PM	0	36	11	82	2	0	0	0	0	0	0	38	303	0	0	0	0	228	28	0	726
6:45 PM	0	26	9	50	1	0	0	0	0	0	0	23	277	0	0	0	0	272	38	0	695
Total	0	2,296	416	3,294	44	0	0	0	0	0	0	1,886	13,951	0	0	1	0	16,862	2,177	7	40,883

*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total" or graph below)





Turning Movement Count

Tudor Rd & Seward Hwy NB Ramps

Heavy Vehicles (15-Minute Periods)

All Data

Tuesday, October 17, 2017

6:00 AM to 7:00 PM

Start Time	Seward Hwy NB Off-Ramp (Northbound)				Seward Hwy NB On-Ramp (Southbound)				Tudor Rd (Eastbound)				Tudor Rd (Westbound)				Period Total (Veh)
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	
6:00 AM	0	0	0	2	0	0	0	0	0	1	1	0	0	0	4	0	8
6:15 AM	0	0	0	0	0	0	0	0	0	1	3	0	0	0	4	2	10
6:30 AM	0	2	0	0	0	0	0	0	0	0	6	0	0	0	2	0	10
6:45 AM	0	0	0	3	0	0	0	0	0	0	7	0	0	0	3	2	15
7:00 AM	0	0	0	3	0	0	0	0	0	0	5	0	0	0	4	0	12
7:15 AM	0	0	0	1	0	0	0	0	0	1	4	0	0	0	3	0	9
7:30 AM	0	0	0	0	0	0	0	0	0	1	9	0	0	0	10	1	21
7:45 AM	0	1	0	2	0	0	0	0	0	3	10	0	0	0	3	1	20
8:00 AM	0	0	0	1	0	0	0	0	0	3	5	0	0	0	10	0	19
8:15 AM	0	1	0	6	0	0	0	0	0	3	14	0	0	0	3	0	27
8:30 AM	0	0	0	6	0	0	0	0	0	1	13	0	0	0	10	2	32
8:45 AM	0	0	1	2	0	0	0	0	0	5	11	0	0	0	12	0	31
9:00 AM	0	1	1	1	0	0	0	0	0	3	12	0	0	0	7	0	25
9:15 AM	0	1	0	1	0	0	0	0	0	2	14	0	0	0	16	0	34
9:30 AM	0	0	0	2	0	0	0	0	0	4	10	0	0	0	10	1	27
9:45 AM	0	2	0	0	0	0	0	0	0	2	9	0	0	0	15	0	28
10:00 AM	0	1	1	2	0	0	0	0	0	3	15	0	0	0	11	0	33
10:15 AM	0	1	0	3	0	0	0	0	0	3	14	0	0	0	13	2	36
10:30 AM	0	1	0	5	0	0	0	0	0	4	7	0	0	0	15	2	34
10:45 AM	0	1	0	5	0	0	0	0	0	3	9	0	0	0	8	2	28
11:00 AM	0	2	0	4	0	0	0	0	0	4	6	0	0	0	14	2	32
11:15 AM	0	0	0	4	0	0	0	0	0	3	9	0	0	0	12	1	29
11:30 AM	0	1	0	2	0	0	0	0	0	2	13	0	0	0	11	0	29
11:45 AM	0	1	0	4	0	0	0	0	0	3	7	0	0	0	16	0	31
12:00 PM	0	2	0	2	0	0	0	0	0	2	8	0	0	0	18	1	33
12:15 PM	0	0	1	2	0	0	0	0	0	1	6	0	0	0	13	1	24
12:30 PM	0	0	0	2	0	0	0	0	0	2	13	0	0	0	9	0	26
12:45 PM	0	1	0	3	0	0	0	0	0	1	7	0	0	0	9	2	23
1:00 PM	0	1	1	1	0	0	0	0	0	2	11	0	0	0	19	0	35
1:15 PM	0	4	0	0	0	0	0	0	0	4	7	0	0	0	20	0	35
1:30 PM	0	0	0	1	0	0	0	0	0	1	10	0	0	0	10	0	22
1:45 PM	0	1	1	1	0	0	0	0	0	3	13	0	0	0	11	2	32
2:00 PM	0	0	0	4	0	0	0	0	0	3	8	0	0	0	10	2	27
2:15 PM	0	2	0	1	0	0	0	0	0	3	9	0	0	0	13	1	29
2:30 PM	0	1	0	0	0	0	0	0	0	3	9	0	0	0	16	1	30
2:45 PM	0	2	0	2	0	0	0	0	0	5	12	0	0	0	7	2	30
3:00 PM	0	0	0	6	0	0	0	0	0	9	5	0	0	0	17	0	37
3:15 PM	0	0	0	1	0	0	0	0	0	2	9	0	0	0	11	3	26
3:30 PM	0	0	0	2	0	0	0	0	0	4	3	0	0	0	16	3	28
3:45 PM	0	2	0	2	0	0	0	0	0	6	13	0	0	0	9	1	33
4:00 PM	0	0	0	0	0	0	0	0	0	5	13	0	0	0	7	1	26
4:15 PM	0	1	0	1	0	0	0	0	0	4	6	0	0	0	12	3	27
4:30 PM	0	1	0	2	0	0	0	0	0	4	7	0	0	0	7	0	21
4:45 PM	0	1	0	1	0	0	0	0	0	3	9	0	0	0	8	1	23
5:00 PM	0	0	0	2	0	0	0	0	0	1	2	0	0	0	4	0	9
5:15 PM	0	1	0	0	0	0	0	0	0	0	3	0	0	0	9	2	15
5:30 PM	0	1	0	2	0	0	0	0	0	1	3	0	0	0	9	0	16
5:45 PM	0	0	0	1	0	0	0	0	0	1	3	0	0	0	6	1	12
6:00 PM	0	1	0	1	0	0	0	0	0	1	1	0	0	0	2	2	8
6:15 PM	0	1	0	0	0	0	0	0	0	0	2	0	0	0	6	0	9
6:30 PM	0	0	0	0	0	0	0	0	0	0	3	0	0	0	6	0	9
6:45 PM	0	1	0	1	0	0	0	0	0	0	3	0	0	0	2	0	7
Total	0	40	6	100	0	0	0	0	0	126	411	0	0	0	502	47	1,232

Turning Movement Count

Tudor Rd & Seward Hwy NB Ramps

Total Vehicles (15-Minute Periods)

AM Peak Hour

Tuesday, October 17, 2017

7:00 AM to 9:00 AM

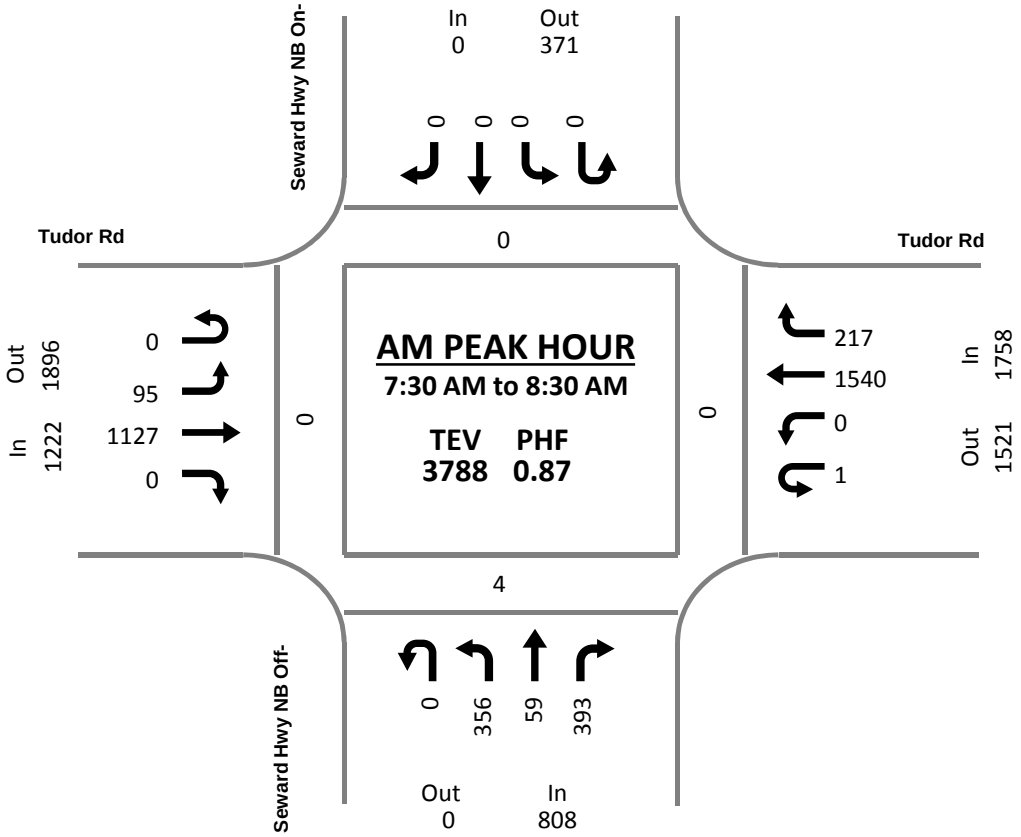
Start Time	Seward Hwy NB Off-Ramp (Northbound)					Seward Hwy NB On-Ramp (Southbound)					Tudor Rd (Eastbound)					Tudor Rd (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
7:00 AM	0	45	8	69	0	0	0	0	0	0	0	8	149	0	0	0	0	285	39	0	603
7:15 AM	0	74	13	87	1	0	0	0	0	0	0	18	226	0	0	0	0	302	32	0	752
7:30 AM	0	80	11	92	1	0	0	0	0	0	0	14	282	0	0	1	0	389	46	0	915
7:45 AM	0	115	21	118	1	0	0	0	0	0	0	25	326	0	0	0	0	417	72	0	1094
8:00 AM	0	71	13	91	1	0	0	0	0	0	0	25	260	0	0	0	0	405	53	0	918
8:15 AM	0	90	14	92	1	0	0	0	0	0	0	31	259	0	0	0	0	329	46	0	861
8:30 AM	0	65	12	82	1	0	0	0	0	0	0	45	237	0	0	0	0	293	41	0	775
8:45 AM	0	68	11	75	1	0	0	0	0	0	0	26	245	0	0	0	0	354	45	0	824
Total	0	608	103	706	7	0	0	0	0	0	0	192	1,984	0	0	1	0	2,774	374	0	6,742

*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total")

Peak Hour Summary

7:30 AM to 8:30 AM

Data Type	Seward Hwy NB Off-Ramp (Northbound)					Seward Hwy NB On-Ramp (Southbound)					Tudor Rd (Eastbound)					Tudor Rd (Westbound)					Peak Hour Total
	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	
Volume	0	356	59	393	4	0	0	0	0	0	0	95	1127	0	0	1	0	1540	217	0	3788
%HV	0.0%	0.6%	0.0%	2.3%		0.0%	0.0%	0.0%	0.0%		0.0%	10.5%	3.4%	0.0%		0.0%	0.0%	1.7%	0.9%		2.3%
PHF	0.00	0.77	0.70	0.83	1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.77	0.86	0.00	0.00	0.25	0.00	0.92	0.75	0.00	0.87
Volume			808					0					1222					1758			3788
%HV			1.4%					0.0%					3.9%					1.6%			2.3%
PHF			0.80					0.00					0.87					0.90			0.87



Turning Movement Count

Tudor Rd & Seward Hwy NB Ramps

Total Vehicles (15-Minute Periods)

PM Peak Hour

Tuesday, October 17, 2017

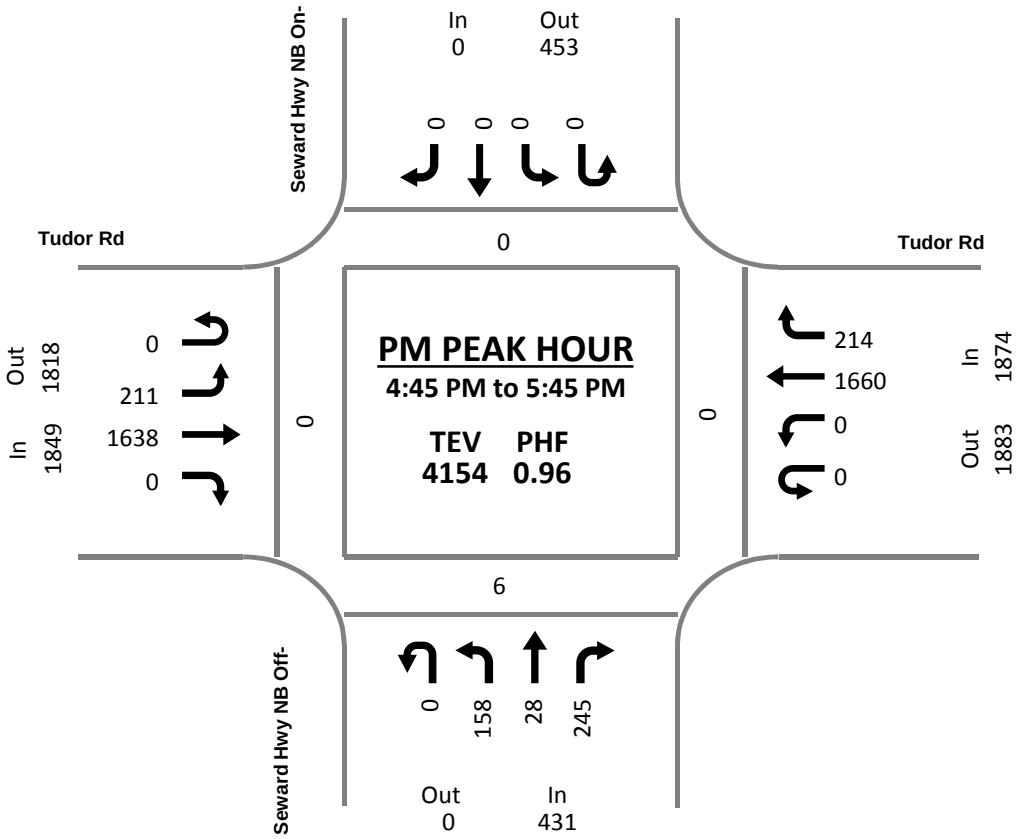
4:00 PM to 6:00 PM

Start Time	Seward Hwy NB Off-Ramp (Northbound)					Seward Hwy NB On-Ramp (Southbound)					Tudor Rd (Eastbound)					Tudor Rd (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
4:00 PM	0	26	4	52	2	0	0	0	0	0	0	53	415	0	0	0	0	444	67	0	1061
4:15 PM	0	39	11	74	2	0	0	0	0	0	0	55	369	0	0	0	0	435	50	0	1033
4:30 PM	0	25	5	58	2	0	0	0	0	0	0	49	400	0	0	0	0	379	54	0	970
4:45 PM	0	32	5	61	0	0	0	0	0	0	0	37	410	0	0	0	0	400	49	0	994
5:00 PM	0	51	6	65	3	0	0	0	0	0	0	61	418	0	0	0	0	426	60	0	1087
5:15 PM	0	41	9	50	2	0	0	0	0	0	0	63	436	0	0	0	0	417	45	0	1061
5:30 PM	0	34	8	69	1	0	0	0	0	0	0	50	374	0	0	0	0	417	60	0	1012
5:45 PM	0	35	7	67	1	0	0	0	0	0	0	53	360	0	0	0	0	337	69	0	928
Total	0	283	55	496	13	0	0	0	0	0	0	421	3,182	0	0	0	0	3,255	454	0	8,146

*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total")

Peak Hour Summary
4:45 PM to 5:45 PM

Data Type	Seward Hwy NB Off-Ramp (Northbound)					Seward Hwy NB On-Ramp (Southbound)					Tudor Rd (Eastbound)					Tudor Rd (Westbound)					Peak Hour Total
	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	
Volume	0	158	28	245	6	0	0	0	0	0	0	211	1638	0	0	0	0	1660	214	0	4154
%HV	0.0%	1.9%	0.0%	2.0%		0.0%	0.0%	0.0%	0.0%		0.0%	2.4%	1.0%	0.0%		0.0%	0.0%	1.8%	1.4%		1.5%
PHF	0.00	0.77	0.78	0.89	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.84	0.94	0.00	0.00	0.00	0.00	0.97	0.89	0.00	0.96
Volume			431					0					1849					1874			4154
%HV			1.9%					0.0%					1.2%					1.8%			1.5%
PHF			0.88					0.00					0.93					0.96			0.96



Traffic Camera Count and Placement Information

Intersection Name: C St & Fireweed Ln

Intersection Location	
Northbound Street	C St
Southbound Street	C St
Eastbound Street	Fireweed Ln
Westbound Street	Fireweed Ln
City, State	Anchorage, AK

Project Information	
Name	Midtown Congestion Relief
Client	AK DOT&PF
Project #	1124.62458.01, Phase 02
PM/Traffic Lead	Steve Noble/Brad Coy

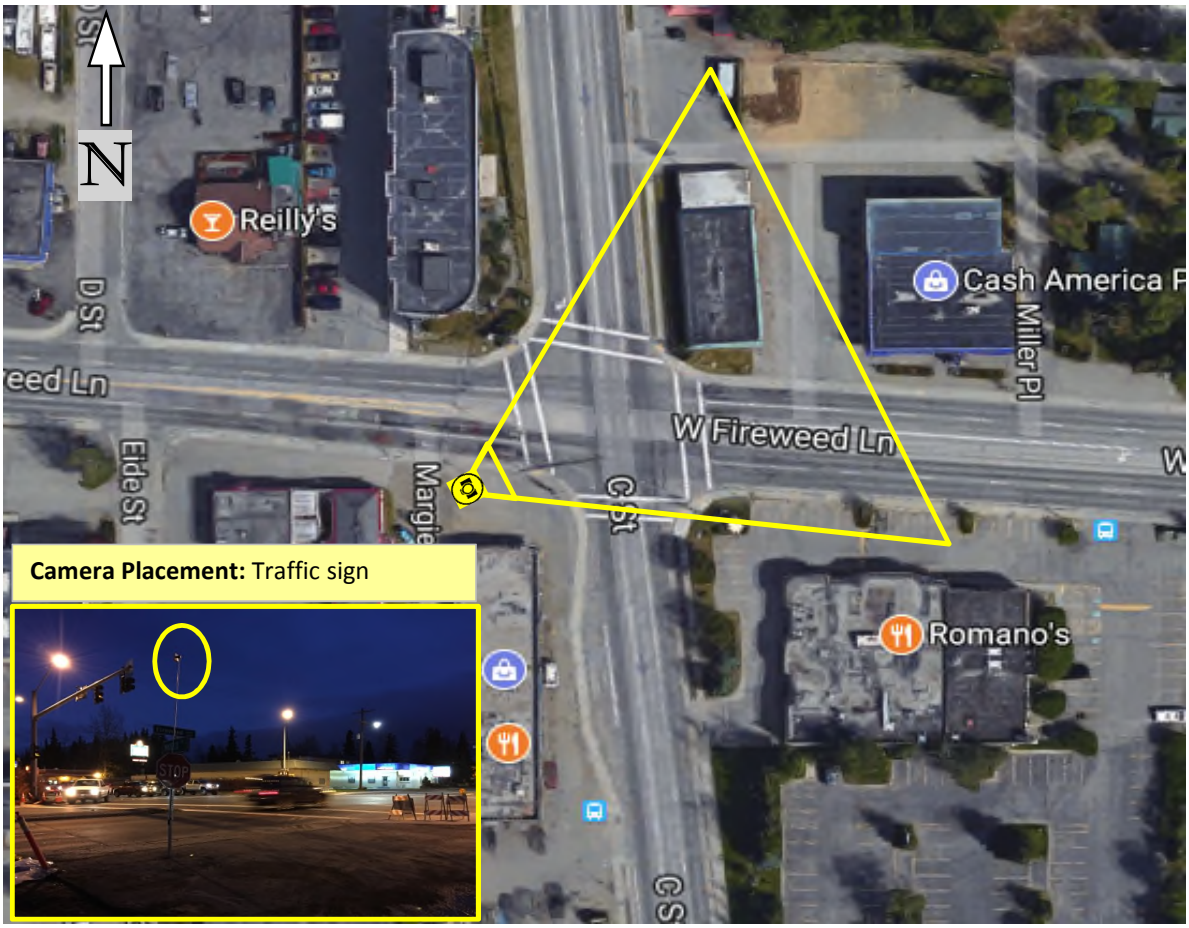
Count Description (e.g., day(s) of week, time periods, other related counts also occuring, etc.)

1 weekday (Tue, Wed, or Thu); AM/PM peak periods are priority, but midday is also desirable; do at same time as C St corridor

Camera Setup/Video Footage	
Staff Responsible	Brad Coy
Setup Time	10/10/2017 6:00 AM
Take Down Time	10/10/2017 8:00 PM
Duration (hours)	14.00
Camera # (2-digit)	a1

Count Date, Time, Vendor	
Date	10/10/2017 (Tuesday)
Start Time	6:45 AM
End Time	7:15 PM
Duration (hours)	12.50
Count Vendor	CountingCars.com

Camera Placement



Other Notes (Before, During, or After Count)

Doesn't capture full extent of south crosswalk or SBR turn (can only see part of each of these)

Turning Movement Count

C St & Fireweed Ln

Total Vehicles (15-Minute Periods)

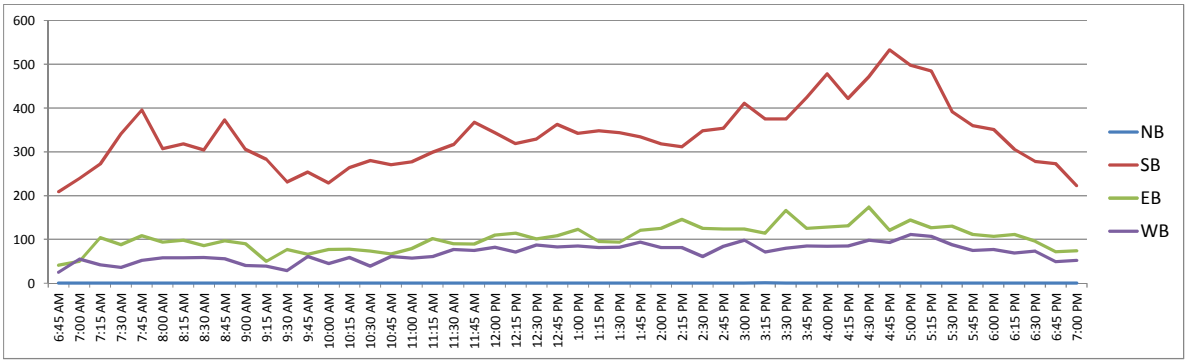
All Data

Tuesday, October 10, 2017

6:45 AM to 7:15 PM

Start Time	C St (Northbound)					C St (Southbound)					Fireweed Ln (Eastbound)					Fireweed Ln (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
6:45 AM	0	0	0	0	0	0	5	189	15	0	0	0	29	12	0	1	6	18	0	0	275
7:00 AM	0	0	0	0	0	0	14	202	23	0	0	0	28	22	0	0	10	45	0	2	344
7:15 AM	0	0	0	0	0	0	7	248	17	0	0	0	52	52	0	0	6	36	0	0	418
7:30 AM	0	0	0	0	0	0	15	297	29	1	0	0	59	29	1	1	11	24	0	0	465
7:45 AM	0	0	0	0	0	0	16	354	26	0	0	0	67	41	0	0	13	39	0	0	556
8:00 AM	0	0	0	0	0	0	16	263	28	1	0	0	55	39	1	0	14	44	0	0	459
8:15 AM	0	0	0	0	0	0	12	275	31	0	0	0	73	25	0	0	15	43	0	0	474
8:30 AM	0	0	0	0	0	0	15	256	33	0	0	0	58	28	1	0	21	38	0	1	449
8:45 AM	0	0	0	0	0	0	22	324	27	1	0	0	67	30	1	0	9	47	0	2	526
9:00 AM	0	0	0	0	0	0	18	270	18	0	0	0	57	33	0	0	11	29	0	0	436
9:15 AM	0	0	0	0	0	0	10	259	14	0	0	0	31	19	1	1	8	30	0	0	372
9:30 AM	0	0	0	0	2	0	8	199	24	0	0	0	50	27	0	1	10	18	0	0	337
9:45 AM	0	0	0	0	0	0	12	227	15	3	0	0	48	18	0	0	26	35	0	2	381
10:00 AM	0	0	0	0	0	0	9	201	19	0	0	0	58	19	2	0	14	31	0	0	351
10:15 AM	0	0	0	0	0	0	13	233	18	3	0	0	55	23	0	1	17	41	0	4	401
10:30 AM	0	0	0	0	0	0	21	247	12	1	0	0	42	31	1	1	10	28	0	0	392
10:45 AM	0	0	0	0	0	0	11	240	20	2	0	0	44	23	3	1	13	47	0	1	399
11:00 AM	0	0	0	0	1	0	17	249	11	6	0	0	57	22	0	1	11	45	0	0	413
11:15 AM	0	0	0	0	0	0	20	267	12	5	0	0	62	40	1	0	23	38	0	1	462
11:30 AM	0	0	0	0	0	0	21	278	18	3	0	0	47	43	1	0	21	56	0	3	484
11:45 AM	0	0	0	0	0	0	26	319	23	1	0	0	64	25	2	3	28	44	0	1	532
12:00 PM	0	0	0	0	0	0	23	302	19	0	0	0	78	32	1	0	23	59	0	1	536
12:15 PM	0	0	0	0	1	0	16	279	24	1	0	0	70	44	3	2	21	48	0	0	504
12:30 PM	0	0	0	0	1	0	24	288	17	0	0	0	63	38	0	2	24	61	0	0	517
12:45 PM	0	0	0	0	0	0	25	316	22	5	0	0	70	38	0	0	25	58	0	5	554
1:00 PM	0	0	0	0	0	0	17	302	23	4	0	0	79	44	2	0	28	57	0	1	550
1:15 PM	0	0	0	0	0	0	17	302	29	1	0	0	56	39	5	1	36	44	0	2	524
1:30 PM	0	0	0	0	0	0	15	303	26	2	0	0	69	25	0	0	25	57	0	2	520
1:45 PM	0	0	0	0	0	0	20	295	19	2	0	0	85	36	0	1	19	74	0	1	549
2:00 PM	0	0	0	0	0	0	23	264	31	0	0	0	86	39	0	0	25	56	0	0	524
2:15 PM	0	0	0	0	1	0	16	260	36	0	0	0	112	34	0	0	26	55	0	1	539
2:30 PM	0	0	0	0	0	0	26	295	27	2	0	0	89	36	2	1	17	43	0	2	534
2:45 PM	0	0	0	0	1	0	20	309	25	1	0	0	90	34	4	0	26	58	0	2	562
3:00 PM	0	0	0	0	0	0	23	355	33	2	0	0	77	47	2	1	22	75	0	3	633
3:15 PM	0	0	0	1	0	0	20	322	33	3	0	0	81	33	3	0	9	62	0	2	561
3:30 PM	0	0	0	0	0	0	32	321	22	2	0	0	115	51	1	0	23	57	0	0	621
3:45 PM	0	0	0	0	0	0	27	372	26	5	0	0	88	37	1	0	32	53	0	1	635
4:00 PM	0	0	0	0	2	0	31	413	34	1	0	0	90	38	0	0	22	62	0	0	690
4:15 PM	0	0	0	0	1	0	26	368	28	4	0	0	99	32	7	1	19	65	0	3	638
4:30 PM	0	0	0	0	0	0	38	408	26	7	0	0	136	38	3	0	30	68	0	2	744
4:45 PM	0	0	0	0	0	0	34	469	30	4	0	0	88	33	4	3	24	66	0	0	747
5:00 PM	0	0	0	0	2	0	34	431	33	1	0	0	109	35	2	3	37	71	0	2	753
5:15 PM	0	0	0	0	2	0	23	428	34	3	0	0	96	31	3	1	25	81	0	1	719
5:30 PM	0	0	0	0	1	0	19	348	25	5	0	0	97	33	3	0	33	55	0	0	610
5:45 PM	0	0	0	0	1	0	26	309	25	3	0	0	80	31	1	0	20	55	0	0	546
6:00 PM	0	0	0	0	0	0	20	309	22	1	0	0	71	36	1	2	20	55	0	2	535
6:15 PM	0	0	0	0	1	0	19	263	24	2	0	0	82	29	0	0	10	59	0	0	486
6:30 PM	0	0	0	0	0	0	22	235	21	1	0	0	64	32	1	1	13	59	0	0	447
6:45 PM	0	0	0	0	0	0	12	241	20	0	0	0	48	24	0	0	11	38	0	1	394
7:00 PM	0	0	0	0	2	0	15	185	23	2	0	0	56	18	1	0	8	44	0	1	349
Total	0	0	0	1	19	0	971	14,689	1,190	91	0	0	3,527	1,618	65	30	950	2,471	0	52	25,447

*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total" or graph below)





Turning Movement Count

C St & Fireweed Ln

Heavy Vehicles (15-Minute Periods)

All Data

Tuesday, October 10, 2017

6:45 AM to 7:15 PM

Start Time	C St (Northbound)				C St (Southbound)				Fireweed Ln (Eastbound)				Fireweed Ln (Westbound)				Period Total (Veh)
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	
6:45 AM	0	0	0	0	0	0	5	2	0	0	1	0	0	1	2	0	11
7:00 AM	0	0	0	0	0	0	5	1	0	0	0	0	0	0	1	0	7
7:15 AM	0	0	0	0	0	0	7	1	0	0	0	5	0	0	2	0	15
7:30 AM	0	0	0	0	0	1	9	1	0	0	3	3	0	0	0	0	17
7:45 AM	0	0	0	0	0	0	11	0	0	0	1	1	0	0	3	0	16
8:00 AM	0	0	0	0	0	0	12	0	0	0	4	2	0	0	1	0	19
8:15 AM	0	0	0	0	0	1	11	0	0	0	5	0	0	1	1	0	19
8:30 AM	0	0	0	0	0	0	9	0	0	0	3	1	0	2	6	0	21
8:45 AM	0	0	0	0	0	1	15	4	0	0	3	1	0	0	2	0	26
9:00 AM	0	0	0	0	0	0	12	0	0	0	3	0	0	0	1	0	16
9:15 AM	0	0	0	0	0	0	15	0	0	0	2	2	0	1	0	0	20
9:30 AM	0	0	0	0	0	0	11	1	0	0	2	0	0	0	2	0	16
9:45 AM	0	0	0	0	0	1	11	0	0	0	2	0	0	0	2	0	16
10:00 AM	0	0	0	0	0	0	15	1	0	0	4	1	0	0	0	0	21
10:15 AM	0	0	0	0	0	0	21	1	0	0	2	1	0	0	1	0	26
10:30 AM	0	0	0	0	0	0	12	1	0	0	1	2	0	0	3	0	19
10:45 AM	0	0	0	0	0	0	17	1	0	0	1	4	0	1	3	0	27
11:00 AM	0	0	0	0	0	0	14	0	0	0	0	0	0	0	1	0	15
11:15 AM	0	0	0	0	0	0	12	0	0	0	3	1	0	0	3	0	19
11:30 AM	0	0	0	0	0	0	13	0	0	0	1	2	0	0	1	0	17
11:45 AM	0	0	0	0	0	0	19	1	0	0	1	0	0	0	1	0	22
12:00 PM	0	0	0	0	0	0	15	0	0	0	1	0	0	0	2	0	18
12:15 PM	0	0	0	0	0	0	12	0	0	0	3	0	0	0	1	0	16
12:30 PM	0	0	0	0	0	0	11	0	0	0	1	0	0	0	1	0	13
12:45 PM	0	0	0	0	0	0	6	0	0	0	0	0	0	1	0	0	7
1:00 PM	0	0	0	0	0	0	15	0	0	0	0	0	0	0	1	0	16
1:15 PM	0	0	0	0	0	0	9	1	0	0	2	1	0	0	2	0	15
1:30 PM	0	0	0	0	0	0	18	1	0	0	1	1	0	1	0	0	22
1:45 PM	0	0	0	0	0	0	13	1	0	0	2	0	0	0	3	0	19
2:00 PM	0	0	0	0	0	0	17	0	0	0	0	1	0	0	1	0	19
2:15 PM	0	0	0	0	0	0	15	0	0	0	5	0	0	0	1	0	21
2:30 PM	0	0	0	0	0	0	14	0	0	0	2	1	0	0	2	0	19
2:45 PM	0	0	0	0	0	0	16	0	0	0	1	2	0	3	4	0	26
3:00 PM	0	0	0	0	0	0	24	0	0	0	2	3	0	0	2	0	31
3:15 PM	0	0	0	0	0	0	27	4	0	0	1	0	0	0	0	0	32
3:30 PM	0	0	0	0	0	0	16	0	0	0	8	5	0	1	2	0	32
3:45 PM	0	0	0	0	0	1	12	0	0	0	1	0	0	1	0	0	15
4:00 PM	0	0	0	0	0	2	11	3	0	0	3	0	0	0	2	0	21
4:15 PM	0	0	0	0	0	0	8	1	0	0	3	4	0	0	1	0	17
4:30 PM	0	0	0	0	0	0	8	0	0	0	1	1	0	0	1	0	11
4:45 PM	0	0	0	0	0	0	8	0	0	0	3	0	0	0	0	0	11
5:00 PM	0	0	0	0	0	0	7	0	0	0	1	0	0	0	1	0	9
5:15 PM	0	0	0	0	0	0	8	0	0	0	2	0	0	0	1	0	11
5:30 PM	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	9
5:45 PM	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	10
6:00 PM	0	0	0	0	0	0	5	0	0	0	1	0	0	0	0	0	6
6:15 PM	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	5
6:30 PM	0	0	0	0	0	0	5	0	0	0	1	0	0	0	0	0	6
6:45 PM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	1	0	3
7:00 PM	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	4
Total	0	0	0	0	0	7	586	26	0	0	87	45	0	13	65	0	829

Turning Movement Count

C St & Fireweed Ln

Total Vehicles (15-Minute Periods)

AM Peak Hour

Tuesday, October 10, 2017

7:00 AM to 9:00 AM

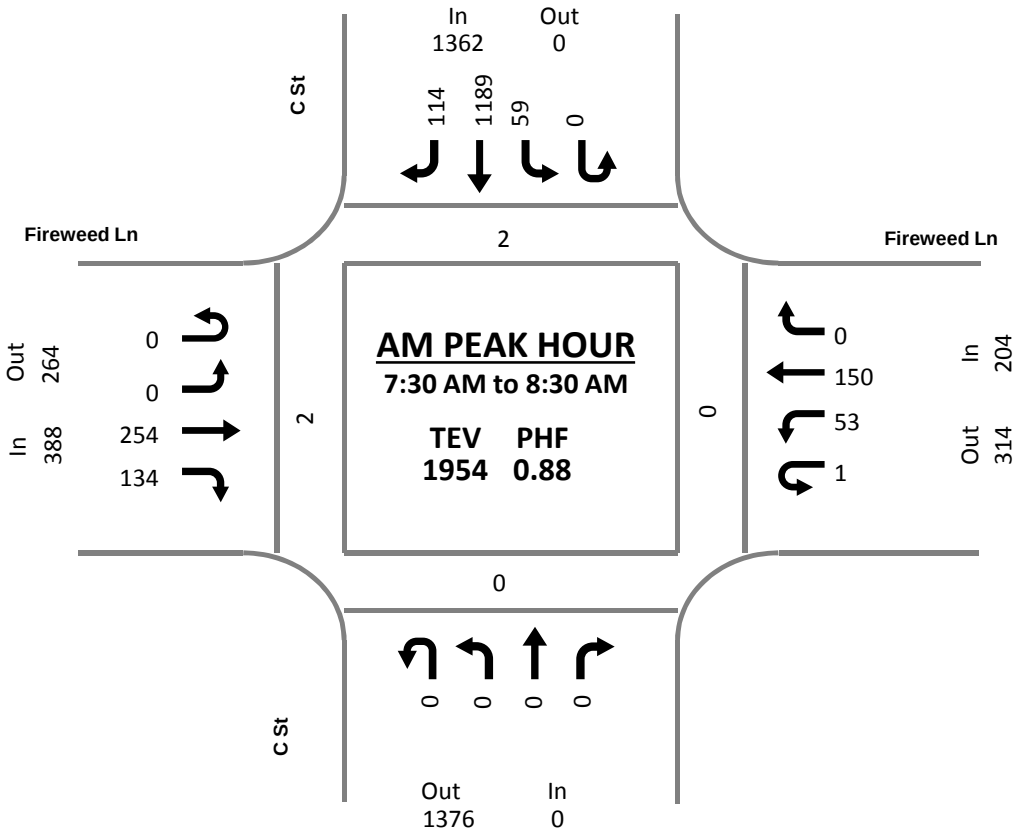
Start Time	C St (Northbound)					C St (Southbound)					Fireweed Ln (Eastbound)					Fireweed Ln (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
7:00 AM	0	0	0	0	0	0	14	202	23	0	0	0	28	22	0	0	10	45	0	2	344
7:15 AM	0	0	0	0	0	0	7	248	17	0	0	0	52	52	0	0	6	36	0	0	418
7:30 AM	0	0	0	0	0	0	15	297	29	1	0	0	59	29	1	1	11	24	0	0	465
7:45 AM	0	0	0	0	0	0	16	354	26	0	0	0	67	41	0	0	13	39	0	0	556
8:00 AM	0	0	0	0	0	0	16	263	28	1	0	0	55	39	1	0	14	44	0	0	459
8:15 AM	0	0	0	0	0	0	12	275	31	0	0	0	73	25	0	0	15	43	0	0	474
8:30 AM	0	0	0	0	0	0	15	256	33	0	0	0	58	28	1	0	21	38	0	1	449
8:45 AM	0	0	0	0	0	0	22	324	27	1	0	0	67	30	1	0	9	47	0	2	526
Total	0	0	0	0	0	0	117	2,219	214	3	0	0	459	266	4	1	99	316	0	5	3,691

*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total")

Peak Hour Summary

7:30 AM to 8:30 AM

Data Type	C St (Northbound)					C St (Southbound)					Fireweed Ln (Eastbound)					Fireweed Ln (Westbound)					Peak Hour Total
	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	
Volume	0	0	0	0	0	0	59	1189	114	2	0	0	254	134	2	1	53	150	0	0	1954
%HV	0.0%	0.0%	0.0%	0.0%		0.0%	3.4%	3.6%	0.9%		0.0%	0.0%	5.1%	4.5%		0.0%	1.9%	3.3%	0.0%		3.6%
PHF	0.00	0.00	0.00	0.00	0.00	0.00	0.92	0.84	0.92	0.50	0.00	0.00	0.87	0.82	0.50	0.25	0.88	0.85	0.00	0.00	0.88
Volume			0					1362					388					204			1954
%HV			0.0%					3.4%					4.9%					2.9%			3.6%
PHF			0.00					0.86					0.90					0.88			0.88



Turning Movement Count

C St & Fireweed Ln

Total Vehicles (15-Minute Periods)

PM Peak Hour

Tuesday, October 10, 2017

4:00 PM to 6:00 PM

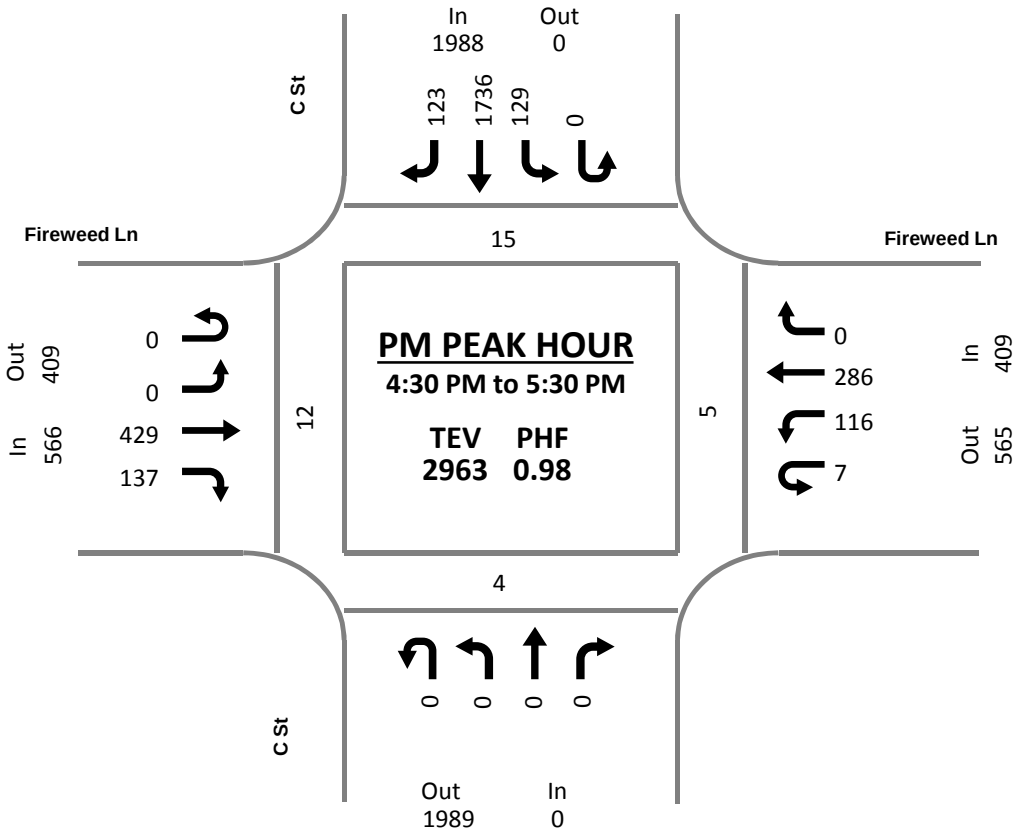
Start Time	C St (Northbound)					C St (Southbound)					Fireweed Ln (Eastbound)					Fireweed Ln (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
4:00 PM	0	0	0	0	2	0	31	413	34	1	0	0	90	38	0	0	22	62	0	0	690
4:15 PM	0	0	0	0	1	0	26	368	28	4	0	0	99	32	7	1	19	65	0	3	638
4:30 PM	0	0	0	0	0	0	38	408	26	7	0	0	136	38	3	0	30	68	0	2	744
4:45 PM	0	0	0	0	0	0	34	469	30	4	0	0	88	33	4	3	24	66	0	0	747
5:00 PM	0	0	0	0	2	0	34	431	33	1	0	0	109	35	2	3	37	71	0	2	753
5:15 PM	0	0	0	0	2	0	23	428	34	3	0	0	96	31	3	1	25	81	0	1	719
5:30 PM	0	0	0	0	1	0	19	348	25	5	0	0	97	33	3	0	33	55	0	0	610
5:45 PM	0	0	0	0	1	0	26	309	25	3	0	0	80	31	1	0	20	55	0	0	546
Total	0	0	0	0	9	0	231	3,174	235	28	0	0	795	271	23	8	210	523	0	8	5,447

*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total")

Peak Hour Summary

4:30 PM to 5:30 PM

Data Type	C St (Northbound)					C St (Southbound)					Fireweed Ln (Eastbound)					Fireweed Ln (Westbound)					Peak Hour Total
	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	
Volume	0	0	0	0	4	0	129	1736	123	15	0	0	429	137	12	7	116	286	0	5	2963
%HV	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	1.8%	0.0%		0.0%	0.0%	1.6%	0.7%		0.0%	0.0%	1.0%	0.0%		1.4%
PHF	0.00	0.00	0.00	0.00	0.50	0.00	0.85	0.93	0.90	0.54	0.00	0.00	0.79	0.90	0.75	0.58	0.78	0.88	0.00	0.63	0.98
Volume			0					1988					566					409			2963
%HV			0.0%					1.6%					1.4%					0.7%			1.4%
PHF			0.00					0.93					0.81					0.92			0.98



Traffic Camera Count and Placement Information

Intersection Name: C St & Northern Lights Blvd

Intersection Location	
Northbound Street	C St
Southbound Street	C St
Eastbound Street	Northern Lights Blvd
Westbound Street	Northern Lights Blvd
City, State	Anchorage, AK

Project Information	
Name	Midtown Congestion Relief
Client	AK DOT&PF
Project #	1124.62458.01, Phase 02
PM/Traffic Lead	Steve Noble/Brad Coy

Count Description (e.g., day(s) of week, time periods, other related counts also occuring, etc.)

1 weekday (Tue, Wed, or Thu); AM/PM peak periods are priority, but midday is also desirable; do at same time as C St corridor

Camera Setup/Video Footage	
Staff Responsible	Brad Coy
Setup Time	10/10/2017 7:08 AM
Take Down Time	10/10/2017 7:35 PM
Duration (hours)	12.45
Camera # (2-digit)	49

Count Date, Time, Vendor	
Date	10/10/2017 (Tuesday)
Start Time	7:15 AM
End Time	7:30 PM
Duration (hours)	12.25
Count Vendor	CountingCars.com

Camera Placement



Other Notes (Before, During, or After Count)

Was delayed while setting up camera due to size of pole (was just between hose clamp sizes)

DOWL

Turning Movement Count

C St & Northern Lights Blvd

Total Vehicles (15-Minute Periods)

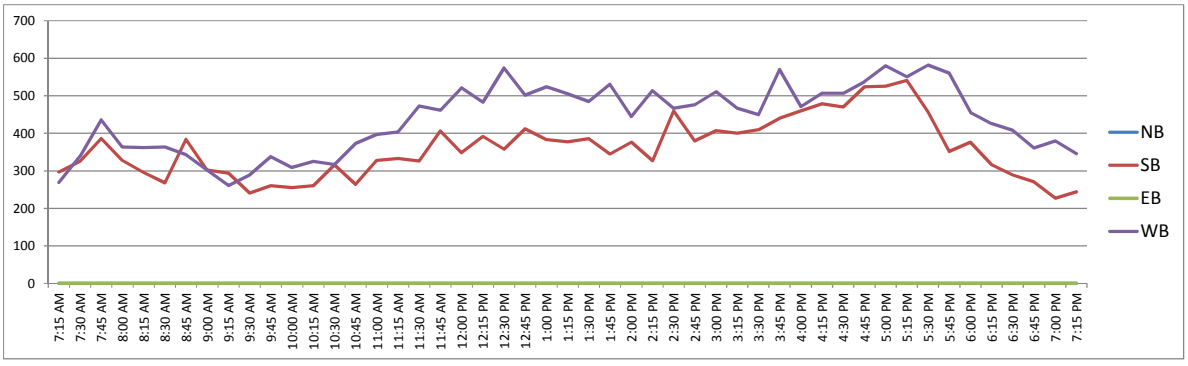
All Data

Tuesday, October 10, 2017

7:15 AM to 7:30 PM

Start Time	C St (Northbound)					C St (Southbound)					Northern Lights Blvd (Eastbound)					Northern Lights Blvd (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
7:15 AM	0	0	0	0	0	0	0	269	28	0	0	0	0	0	0	0	82	187	0	0	566
7:30 AM	0	0	0	0	0	0	0	306	20	1	0	0	0	0	0	0	105	234	0	0	665
7:45 AM	0	0	0	0	0	0	0	363	24	2	0	0	0	0	0	0	125	311	0	1	823
8:00 AM	0	0	0	0	0	0	0	293	35	2	0	0	0	0	0	0	104	260	0	1	692
8:15 AM	0	0	0	0	2	0	0	266	29	0	0	0	0	0	1	0	83	279	0	2	657
8:30 AM	0	0	0	0	2	0	0	241	27	1	0	0	0	0	1	0	88	276	0	0	632
8:45 AM	0	0	0	0	1	0	0	332	52	0	0	0	0	0	0	0	90	253	0	1	727
9:00 AM	0	0	0	0	0	0	0	277	25	3	0	0	0	0	0	0	81	221	0	1	604
9:15 AM	0	0	0	0	2	0	0	260	34	1	0	0	0	0	3	0	75	186	0	0	555
9:30 AM	0	0	0	0	1	0	0	203	38	4	0	0	0	0	2	0	61	228	0	1	530
9:45 AM	0	0	0	0	0	0	0	222	38	2	0	0	0	0	2	0	82	256	0	0	598
10:00 AM	0	0	0	0	4	0	0	225	30	2	0	0	0	0	0	0	67	242	0	0	564
10:15 AM	0	0	0	0	4	0	0	227	33	2	0	0	0	0	0	0	70	255	0	5	585
10:30 AM	0	0	0	0	1	0	0	272	44	4	0	0	0	0	0	0	74	243	0	0	633
10:45 AM	0	0	0	0	0	0	0	227	37	1	0	0	0	0	1	0	80	293	0	3	637
11:00 AM	0	0	0	0	2	0	0	290	38	3	0	0	0	0	0	0	96	301	0	2	725
11:15 AM	0	0	0	0	2	0	0	278	55	6	0	0	0	0	1	0	80	324	0	3	737
11:30 AM	0	0	0	0	3	0	0	274	52	0	0	0	0	0	3	0	119	354	0	6	799
11:45 AM	0	0	0	0	6	0	0	356	50	7	0	0	0	0	1	0	106	356	0	7	868
12:00 PM	0	0	0	0	2	0	0	290	58	4	0	0	0	0	0	0	99	422	0	7	869
12:15 PM	0	0	0	0	5	0	0	333	59	3	0	0	0	0	9	0	99	384	0	1	875
12:30 PM	0	0	0	0	2	0	0	293	65	6	0	0	0	0	1	0	123	451	0	1	932
12:45 PM	0	0	0	0	2	0	0	353	59	3	0	0	0	0	2	0	118	384	0	3	914
1:00 PM	0	0	0	0	1	0	0	332	51	7	0	0	0	0	1	0	116	408	0	1	907
1:15 PM	0	0	0	0	1	0	0	335	42	3	0	0	0	0	2	0	125	380	0	0	882
1:30 PM	0	0	0	0	3	0	0	318	68	4	0	0	0	0	0	0	117	368	0	4	871
1:45 PM	0	0	0	0	3	0	0	282	63	4	0	0	0	0	5	0	121	410	0	0	876
2:00 PM	0	0	0	0	4	0	0	331	45	11	0	0	0	0	1	0	105	340	0	3	821
2:15 PM	0	0	0	0	2	0	0	285	42	10	0	0	0	0	2	0	112	402	0	4	841
2:30 PM	0	0	0	0	6	0	0	409	51	5	0	0	0	0	7	0	105	362	0	0	927
2:45 PM	0	0	0	0	3	0	0	328	52	7	0	0	0	0	4	0	95	381	0	2	856
3:00 PM	0	0	0	0	2	0	0	369	38	3	0	0	0	0	2	0	113	398	0	4	918
3:15 PM	0	0	0	0	4	0	0	349	51	3	0	0	0	0	2	0	93	374	0	1	867
3:30 PM	0	0	0	0	1	0	0	360	50	4	0	0	0	0	0	0	90	360	0	0	860
3:45 PM	0	0	0	0	2	0	0	383	57	2	0	0	0	0	3	0	106	464	0	1	1010
4:00 PM	0	0	0	0	1	0	0	410	50	5	0	0	0	0	6	0	112	359	0	0	931
4:15 PM	0	0	0	0	1	0	0	422	57	3	0	0	0	0	2	0	114	393	0	1	986
4:30 PM	0	0	0	0	2	0	0	420	50	2	0	0	0	0	5	0	94	413	0	0	977
4:45 PM	0	0	0	0	0	0	0	454	70	8	0	0	0	0	3	0	122	416	0	3	1062
5:00 PM	0	0	0	0	1	0	0	450	76	4	0	0	0	0	3	0	136	444	0	2	1106
5:15 PM	0	0	0	0	1	0	0	467	74	0	0	0	0	0	0	0	110	441	0	0	1092
5:30 PM	0	0	0	0	3	0	0	403	54	3	0	0	0	0	2	0	125	457	0	1	1039
5:45 PM	0	0	0	0	0	0	0	304	48	2	0	0	0	0	0	0	117	444	0	0	913
6:00 PM	0	0	0	0	1	0	0	324	52	2	0	0	0	0	2	0	83	373	0	2	832
6:15 PM	0	0	0	0	1	0	0	272	45	5	0	0	0	0	0	0	103	323	0	1	743
6:30 PM	0	0	0	0	1	0	0	249	40	3	0	0	0	0	2	0	63	345	0	0	697
6:45 PM	0	0	0	0	3	0	0	228	43	2	0	0	0	0	0	0	69	292	0	3	632
7:00 PM	0	0	0	0	2	0	0	200	27	3	0	0	0	0	1	0	70	310	0	1	607
7:15 PM	0	0	0	0	0	0	0	214	30	0	0	0	0	0	0	0	64	282	0	4	590
Total	0	0	0	0	90	0	0	15,348	2,256	162	0	0	0	0	82	0	4,787	16,639	0	83	39,030

*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total" or graph below)





Turning Movement Count

C St & Northern Lights Blvd

Heavy Vehicles (15-Minute Periods)

All Data

Tuesday, October 10, 2017

7:15 AM to 7:30 PM

Start Time	C St (Northbound)				C St (Southbound)				Northern Lights Blvd (Eastbound)				Northern Lights Blvd (Westbound)				Period Total (Veh)
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	
7:15 AM	0	0	0	0	0	0	13	0	0	0	0	0	0	1	2	0	16
7:30 AM	0	0	0	0	0	0	11	0	0	0	0	0	0	2	4	0	17
7:45 AM	0	0	0	0	0	0	10	2	0	0	0	0	0	1	2	0	15
8:00 AM	0	0	0	0	0	0	11	1	0	0	0	0	0	0	1	0	13
8:15 AM	0	0	0	0	0	0	10	1	0	0	0	0	0	0	3	0	14
8:30 AM	0	0	0	0	0	0	12	0	0	0	0	0	0	0	2	0	14
8:45 AM	0	0	0	0	0	0	17	0	0	0	0	0	0	2	3	0	22
9:00 AM	0	0	0	0	0	0	10	0	0	0	0	0	0	1	3	0	14
9:15 AM	0	0	0	0	0	0	18	0	0	0	0	0	0	2	1	0	21
9:30 AM	0	0	0	0	0	0	9	1	0	0	0	0	0	1	5	0	16
9:45 AM	0	0	0	0	0	0	10	1	0	0	0	0	0	2	2	0	15
10:00 AM	0	0	0	0	0	0	17	0	0	0	0	0	0	2	6	0	25
10:15 AM	0	0	0	0	0	0	18	2	0	0	0	0	0	1	3	0	24
10:30 AM	0	0	0	0	0	0	13	1	0	0	0	0	0	2	3	0	19
10:45 AM	0	0	0	0	0	0	21	0	0	0	0	0	0	2	2	0	25
11:00 AM	0	0	0	0	0	0	38	0	0	0	0	0	0	2	3	0	43
11:15 AM	0	0	0	0	0	0	12	1	0	0	0	0	0	2	2	0	17
11:30 AM	0	0	0	0	0	0	15	0	0	0	0	0	0	2	6	0	23
11:45 AM	0	0	0	0	0	0	20	1	0	0	0	0	0	1	1	0	23
12:00 PM	0	0	0	0	0	0	12	1	0	0	0	0	0	3	2	0	18
12:15 PM	0	0	0	0	0	0	13	0	0	0	0	0	0	1	3	0	17
12:30 PM	0	0	0	0	0	0	9	1	0	0	0	0	0	1	7	0	18
12:45 PM	0	0	0	0	0	0	5	0	0	0	0	0	0	0	2	0	7
1:00 PM	0	0	0	0	0	0	13	1	0	0	0	0	0	0	4	0	18
1:15 PM	0	0	0	0	0	0	10	1	0	0	0	0	0	1	3	0	15
1:30 PM	0	0	0	0	0	0	18	2	0	0	0	0	0	1	11	0	32
1:45 PM	0	0	0	0	0	0	12	1	0	0	0	0	0	1	5	0	19
2:00 PM	0	0	0	0	0	0	16	0	0	0	0	0	0	2	4	0	22
2:15 PM	0	0	0	0	0	0	12	2	0	0	0	0	0	1	7	0	22
2:30 PM	0	0	0	0	0	0	14	1	0	0	0	0	0	2	3	0	20
2:45 PM	0	0	0	0	0	0	13	2	0	0	0	0	0	0	1	0	16
3:00 PM	0	0	0	0	0	0	24	2	0	0	0	0	0	1	6	0	33
3:15 PM	0	0	0	0	0	0	28	0	0	0	0	0	0	0	3	0	31
3:30 PM	0	0	0	0	0	0	22	0	0	0	0	0	0	0	1	0	23
3:45 PM	0	0	0	0	0	0	12	1	0	0	0	0	0	0	5	0	18
4:00 PM	0	0	0	0	0	0	11	0	0	0	0	0	0	2	1	0	14
4:15 PM	0	0	0	0	0	0	12	0	0	0	0	0	0	0	1	0	13
4:30 PM	0	0	0	0	0	0	9	0	0	0	0	0	0	0	4	0	13
4:45 PM	0	0	0	0	0	0	8	0	0	0	0	0	0	1	3	0	12
5:00 PM	0	0	0	0	0	0	6	0	0	0	0	0	0	1	3	0	10
5:15 PM	0	0	0	0	0	0	7	0	0	0	0	0	0	0	1	0	8
5:30 PM	0	0	0	0	0	0	10	0	0	0	0	0	0	0	1	0	11
5:45 PM	0	0	0	0	0	0	9	1	0	0	0	0	0	0	2	0	12
6:00 PM	0	0	0	0	0	0	6	0	0	0	0	0	0	0	1	0	7
6:15 PM	0	0	0	0	0	0	5	0	0	0	0	0	0	0	1	0	6
6:30 PM	0	0	0	0	0	0	3	1	0	0	0	0	0	0	1	0	5
6:45 PM	0	0	0	0	0	0	3	0	0	0	0	0	0	0	1	0	4
7:00 PM	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	4
7:15 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	0	612	28	0	0	0	0	0	44	141	0	825

DOWL

Turning Movement Count

C St & Northern Lights Blvd

Total Vehicles (15-Minute Periods)

AM Peak Hour

Tuesday, October 10, 2017

7:00 AM to 9:00 AM

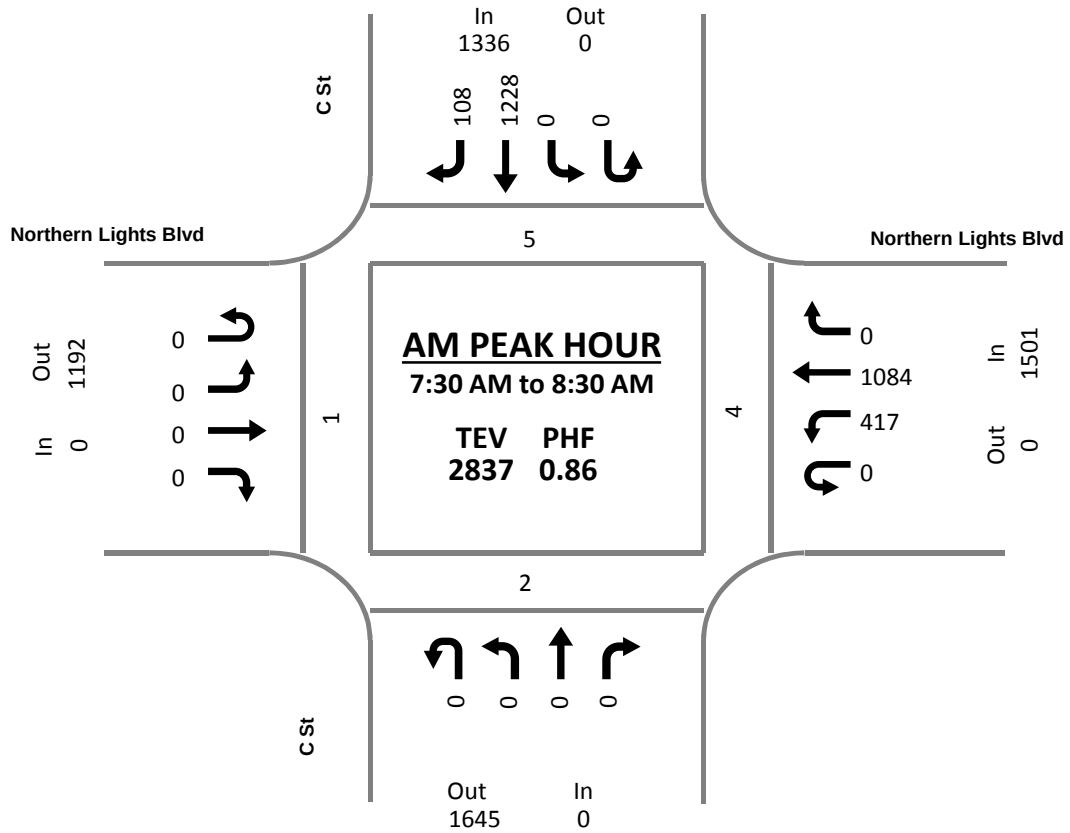
Start Time	C St (Northbound)					C St (Southbound)					Northern Lights Blvd (Eastbound)					Northern Lights Blvd (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	269	28	0	0	0	0	0	0	0	82	187	0	0	566
7:30 AM	0	0	0	0	0	0	0	306	20	1	0	0	0	0	0	0	105	234	0	0	665
7:45 AM	0	0	0	0	0	0	0	363	24	2	0	0	0	0	0	0	125	311	0	1	823
8:00 AM	0	0	0	0	0	0	0	293	35	2	0	0	0	0	0	0	104	260	0	1	692
8:15 AM	0	0	0	0	2	0	0	266	29	0	0	0	0	0	1	0	83	279	0	2	657
8:30 AM	0	0	0	0	2	0	0	241	27	1	0	0	0	0	1	0	88	276	0	0	632
8:45 AM	0	0	0	0	1	0	0	332	52	0	0	0	0	0	0	0	90	253	0	1	727
Total	0	0	0	0	5	0	0	2,070	215	6	0	0	0	0	2	0	677	1,800	0	5	4,762

*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total")

Peak Hour Summary

7:30 AM to 8:30 AM

Data Type	C St (Northbound)					C St (Southbound)					Northern Lights Blvd (Eastbound)					Northern Lights Blvd (Westbound)					Peak Hour Total
	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	
Volume	0	0	0	0	2	0	0	1228	108	5	0	0	0	0	1	0	417	1084	0	4	2837
%HV	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	3.4%	3.7%		0.0%	0.0%	0.0%	0.0%		0.0%	0.7%	0.9%	0.0%		2.1%
PHF	0.00	0.00	0.00	0.00	0.25	0.00	0.00	0.85	0.77	0.63	0.00	0.00	0.00	0.00	0.25	0.00	0.83	0.87	0.00	0.50	0.86
Volume			0					1336					0					1501			2837
%HV			0.0%					3.4%					0.0%					0.9%			2.1%
PHF			0.00					0.86					0.00					0.86			0.86



Turning Movement Count

C St & Northern Lights Blvd

Total Vehicles (15-Minute Periods)

PM Peak Hour

Tuesday, October 10, 2017

4:00 PM to 6:00 PM

Start Time	C St (Northbound)					C St (Southbound)					Northern Lights Blvd (Eastbound)					Northern Lights Blvd (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
4:00 PM	0	0	0	0	1	0	0	410	50	5	0	0	0	0	6	0	112	359	0	0	931
4:15 PM	0	0	0	0	1	0	0	422	57	3	0	0	0	0	2	0	114	393	0	1	986
4:30 PM	0	0	0	0	2	0	0	420	50	2	0	0	0	0	5	0	94	413	0	0	977
4:45 PM	0	0	0	0	0	0	0	454	70	8	0	0	0	0	3	0	122	416	0	3	1062
5:00 PM	0	0	0	0	1	0	0	450	76	4	0	0	0	0	3	0	136	444	0	2	1106
5:15 PM	0	0	0	0	1	0	0	467	74	0	0	0	0	0	0	0	110	441	0	0	1092
5:30 PM	0	0	0	0	3	0	0	403	54	3	0	0	0	0	2	0	125	457	0	1	1039
5:45 PM	0	0	0	0	0	0	0	304	48	2	0	0	0	0	0	0	117	444	0	0	913
Total	0	0	0	0	9	0	0	3,330	479	27	0	0	0	0	21	0	930	3,367	0	7	8,106

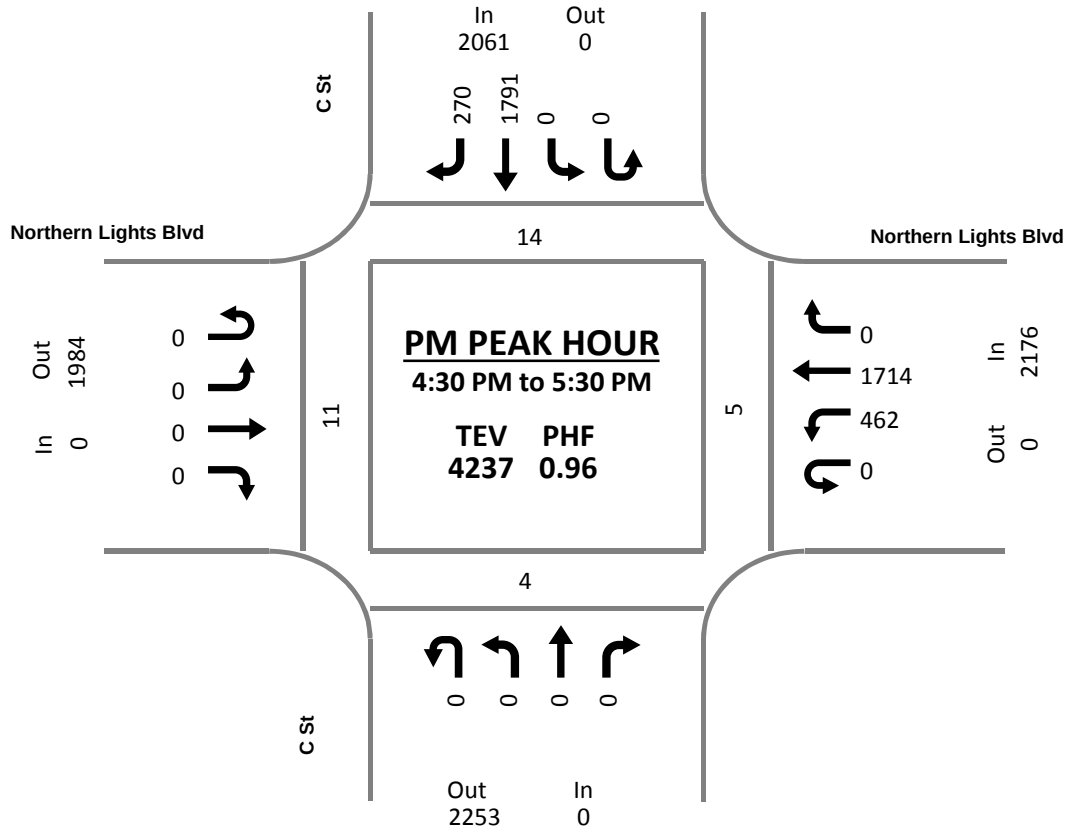
*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total")

Peak Hour Summary (System Peak*)

4:30 PM to 5:30 PM

Data Type	C St (Northbound)					C St (Southbound)					Northern Lights Blvd (Eastbound)					Northern Lights Blvd (Westbound)					Peak Hour Total
	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	
Volume	0	0	0	0	4	0	0	1791	270	14	0	0	0	0	11	0	462	1714	0	5	4237
%HV	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	1.7%	0.0%		0.0%	0.0%	0.0%	0.0%		0.0%	0.4%	0.6%	0.0%		1.0%
PHF	0.00	0.00	0.00	0.00	0.50	0.00	0.00	0.96	0.89	0.44	0.00	0.00	0.00	0.00	0.55	0.00	0.85	0.97	0.00	0.42	0.96
Volume			0					2061					0					2176			4237
%HV			0.0%					1.5%					0.0%					0.6%			1.0%
PHF			0.00					0.95					0.00					0.94			0.96

*System Peak is based on comparison of other study area counts rather than highest total entering volume at this intersection.



Traffic Camera Count and Placement Information

Intersection Name: C St & Benson Blvd

Intersection Location	
Northbound Street	C St
Southbound Street	C St
Eastbound Street	Benson Blvd
Westbound Street	Benson Blvd
City, State	Anchorage, AK

Project Information	
Name	Midtown Congestion Relief
Client	AK DOT&PF
Project #	1124.62458.01, Phase 02
PM/Traffic Lead	Steve Noble/Brad Coy

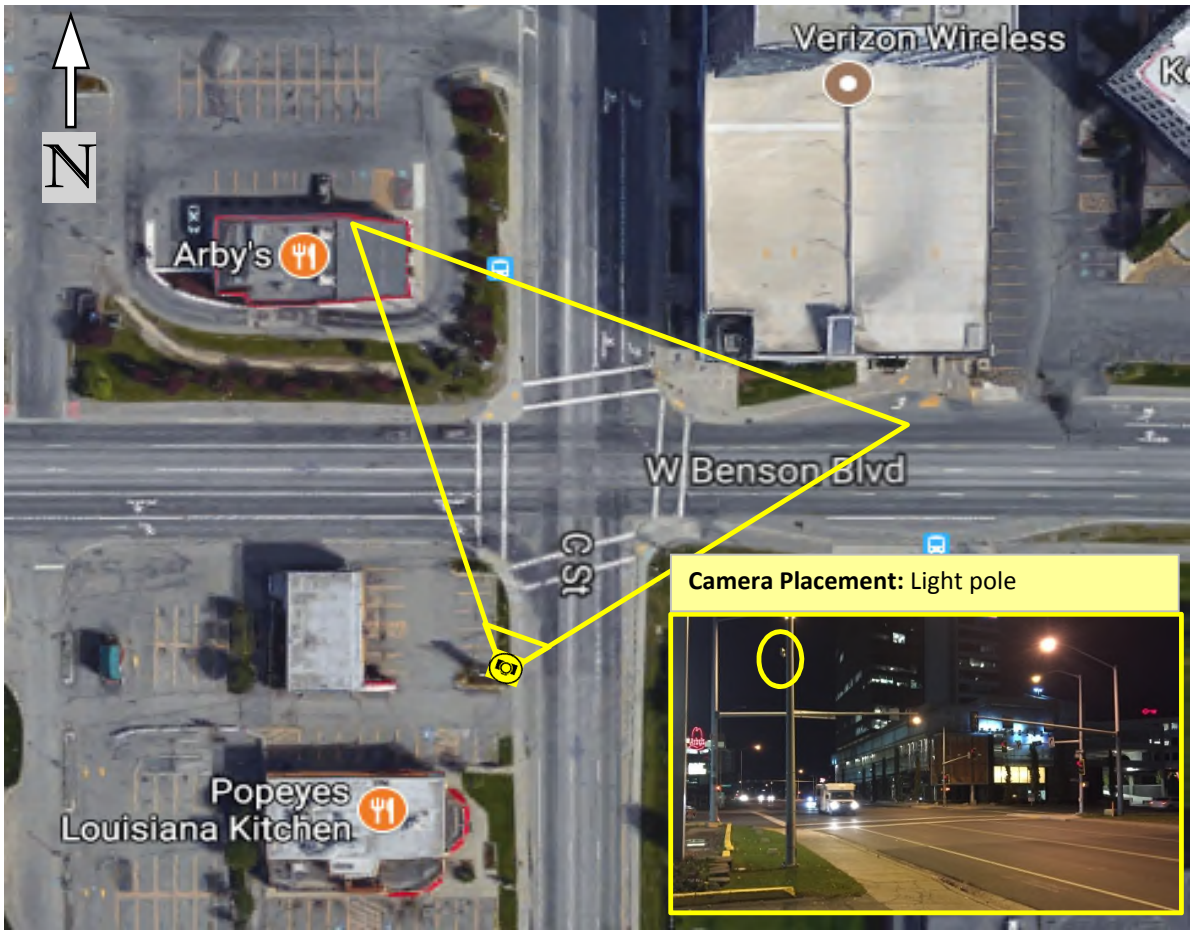
Count Description (e.g., day(s) of week, time periods, other related counts also occuring, etc.)

1 weekday (Tue, Wed, or Thu); AM/PM peak periods are priority, but midday is also desirable; do at same time as C St corridor

Camera Setup/Video Footage	
Staff Responsible	Brad Coy
Setup Time	10/10/2017 7:18 AM
Take Down Time	10/10/2017 7:40 PM
Duration (hours)	12.37
Camera # (2-digit)	d7

Count Date, Time, Vendor	
Date	10/10/2017 (Tuesday)
Start Time	7:30 AM
End Time	7:30 PM
Duration (hours)	12.00
Count Vendor	CountingCars.com

Camera Placement



Other Notes (Before, During, or After Count)

Was delayed while setting up prior camera at C & Northern Lights, which resulted in this one being after 7:15 a.m.

Turning Movement Count

C St & Benson Blvd

Total Vehicles (15-Minute Periods)

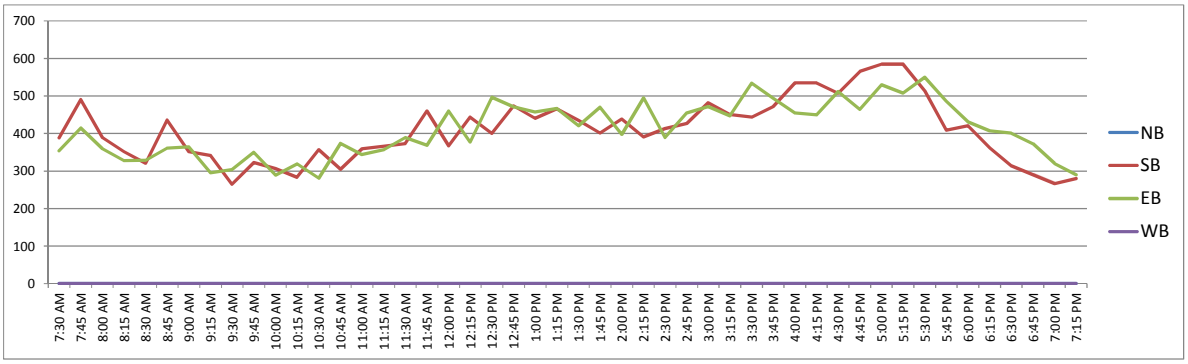
All Data

Tuesday, October 10, 2017

7:30 AM to 7:30 PM

Start Time	C St (Northbound)					C St (Southbound)					Benson Blvd (Eastbound)					Benson Blvd (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
7:30 AM	0	0	0	0	0	0	57	331	0	0	0	0	326	28	0	0	0	0	0	0	742
7:45 AM	0	0	0	0	0	0	67	424	0	0	0	0	375	40	0	0	0	0	0	0	906
8:00 AM	0	0	0	0	2	0	69	320	0	0	0	0	321	38	0	0	0	0	0	0	748
8:15 AM	0	0	0	0	2	0	60	292	0	0	0	0	294	34	3	0	0	0	0	1	680
8:30 AM	0	0	0	0	3	0	53	268	0	1	0	0	298	31	1	0	0	0	0	1	650
8:45 AM	0	0	0	0	2	0	88	348	0	0	0	0	324	37	1	0	0	0	0	1	797
9:00 AM	0	0	0	0	1	0	59	293	0	0	0	0	330	34	1	0	0	0	0	1	716
9:15 AM	0	0	0	0	2	0	64	277	0	1	0	0	266	29	0	0	0	0	0	0	636
9:30 AM	0	0	0	0	0	0	66	199	0	3	0	0	267	37	1	0	0	0	0	1	569
9:45 AM	0	0	0	0	2	0	80	243	0	2	0	0	306	44	1	0	0	0	0	0	673
10:00 AM	0	0	0	0	1	0	66	240	0	3	0	0	243	46	2	0	0	0	0	1	595
10:15 AM	0	0	0	0	1	0	67	216	0	0	0	0	283	36	2	0	0	0	0	2	602
10:30 AM	0	0	0	0	4	0	88	269	0	3	0	0	244	37	2	0	0	0	0	3	638
10:45 AM	0	0	0	0	0	0	65	240	0	3	0	0	329	45	1	0	0	0	0	2	679
11:00 AM	0	0	0	0	1	0	69	290	0	0	0	0	293	51	2	0	0	0	0	0	703
11:15 AM	0	0	0	0	2	0	92	274	0	1	0	0	303	54	1	0	0	0	0	1	723
11:30 AM	0	0	0	0	2	0	81	292	0	4	0	0	341	48	8	0	0	0	0	1	762
11:45 AM	0	0	0	0	0	0	108	352	0	1	0	0	321	48	6	0	0	0	0	1	829
12:00 PM	0	0	0	0	6	0	103	264	0	1	0	0	394	66	3	0	0	0	0	1	827
12:15 PM	0	0	0	0	2	0	115	329	0	3	0	0	319	58	1	0	0	0	0	0	821
12:30 PM	0	0	0	0	7	0	94	306	0	1	0	0	426	71	3	0	0	0	0	1	897
12:45 PM	0	0	0	0	5	0	108	366	0	1	0	0	407	64	0	0	0	0	0	2	945
1:00 PM	0	0	0	0	0	0	105	335	0	2	0	0	385	72	4	0	0	0	0	1	897
1:15 PM	0	0	0	0	4	0	117	349	0	5	0	0	403	64	5	0	0	0	0	1	933
1:30 PM	0	0	0	0	2	0	112	323	0	2	0	0	360	61	0	0	0	0	0	4	856
1:45 PM	0	0	0	0	0	0	92	309	0	4	0	0	407	63	3	0	0	0	0	2	871
2:00 PM	0	0	0	0	5	0	105	334	0	2	0	0	359	39	2	0	0	0	0	1	837
2:15 PM	0	0	0	0	4	0	88	303	0	2	0	0	445	50	2	0	0	0	0	2	886
2:30 PM	0	0	0	0	4	0	105	308	0	5	0	0	347	42	2	0	0	0	0	5	802
2:45 PM	0	0	0	0	5	0	108	319	0	4	0	0	395	60	5	0	0	0	0	1	882
3:00 PM	0	0	0	0	8	0	126	356	0	6	0	0	424	48	6	0	0	0	0	4	954
3:15 PM	0	0	0	0	2	0	115	336	0	4	0	0	404	43	4	0	0	0	0	3	898
3:30 PM	0	0	0	0	4	0	104	340	0	4	0	0	481	53	2	0	0	0	0	3	978
3:45 PM	0	0	0	0	4	0	105	367	0	7	0	0	442	52	8	0	0	0	0	3	966
4:00 PM	0	0	0	0	1	0	124	411	0	3	0	0	416	39	5	0	0	0	0	1	990
4:15 PM	0	0	0	0	4	0	116	419	0	4	0	0	400	50	0	0	0	0	0	0	985
4:30 PM	0	0	0	0	4	0	139	369	0	4	0	0	466	46	8	0	0	0	0	2	1020
4:45 PM	0	0	0	0	5	0	131	435	0	3	0	0	407	57	6	0	0	0	0	2	1030
5:00 PM	0	0	0	0	2	0	153	432	0	4	0	0	484	46	4	0	0	0	0	3	1115
5:15 PM	0	0	0	0	2	0	144	441	0	3	0	0	459	49	3	0	0	0	0	0	1093
5:30 PM	0	0	0	0	2	0	132	382	0	2	0	0	502	48	5	0	0	0	0	1	1064
5:45 PM	0	0	0	0	6	0	99	310	0	1	0	0	454	32	2	0	0	0	0	0	895
6:00 PM	0	0	0	0	1	0	108	313	0	1	0	0	395	36	2	0	0	0	0	2	852
6:15 PM	0	0	0	0	1	0	92	270	0	3	0	0	375	32	3	0	0	0	0	3	769
6:30 PM	0	0	0	0	2	0	82	232	0	1	0	0	363	38	3	0	0	0	0	0	715
6:45 PM	0	0	0	0	3	0	77	213	0	3	0	0	332	41	2	0	0	0	0	5	663
7:00 PM	0	0	0	0	2	0	86	180	0	1	0	0	293	27	1	0	0	0	0	2	586
7:15 PM	0	0	0	0	3	0	65	215	0	3	0	0	265	25	1	0	0	0	0	2	570
Total	0	0	0	0	125	0	4,549	15,034	0	111	0	0	17,473	2,189	127	0	0	0	0	73	39,245

*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total" or graph below)



DOWL

Turning Movement Count

C St & Benson Blvd

Heavy Vehicles (15-Minute Periods)

All Data

Tuesday, October 10, 2017

7:30 AM to 7:30 PM

Start Time	C St (Northbound)				C St (Southbound)				Benson Blvd (Eastbound)				Benson Blvd (Westbound)				Period Total (Veh)
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	
7:30 AM	0	0	0	0	0	3	9	0	0	0	3	1	0	0	0	0	16
7:45 AM	0	0	0	0	0	0	12	0	0	0	3	1	0	0	0	0	16
8:00 AM	0	0	0	0	0	2	12	0	0	0	4	0	0	0	0	0	18
8:15 AM	0	0	0	0	0	1	10	0	0	0	3	0	0	0	0	0	14
8:30 AM	0	0	0	0	0	3	10	0	0	0	4	0	0	0	0	0	17
8:45 AM	0	0	0	0	0	2	18	0	0	0	1	0	0	0	0	0	21
9:00 AM	0	0	0	0	0	2	10	0	0	0	6	0	0	0	0	0	18
9:15 AM	0	0	0	0	0	3	16	0	0	0	3	1	0	0	0	0	23
9:30 AM	0	0	0	0	0	2	13	0	0	0	7	1	0	0	0	0	23
9:45 AM	0	0	0	0	0	0	12	0	0	0	1	3	0	0	0	0	16
10:00 AM	0	0	0	0	0	2	28	0	0	0	7	1	0	0	0	0	38
10:15 AM	0	0	0	0	0	2	17	0	0	0	4	0	0	0	0	0	23
10:30 AM	0	0	0	0	0	3	12	0	0	0	3	0	0	0	0	0	18
10:45 AM	0	0	0	0	0	1	23	0	0	0	7	1	0	0	0	0	32
11:00 AM	0	0	0	0	0	0	15	0	0	0	4	0	0	0	0	0	19
11:15 AM	0	0	0	0	0	0	13	0	0	0	9	0	0	0	0	0	22
11:30 AM	0	0	0	0	0	3	14	0	0	0	8	2	0	0	0	0	27
11:45 AM	0	0	0	0	0	2	18	0	0	0	6	1	0	0	0	0	27
12:00 PM	0	0	0	0	0	3	15	0	0	0	5	2	0	0	0	0	25
12:15 PM	0	0	0	0	0	1	16	0	0	0	5	1	0	0	0	0	23
12:30 PM	0	0	0	0	0	2	9	0	0	0	7	0	0	0	0	0	18
12:45 PM	0	0	0	0	0	2	6	0	0	0	3	2	0	0	0	0	13
1:00 PM	0	0	0	0	0	0	13	0	0	0	9	3	0	0	0	0	25
1:15 PM	0	0	0	0	0	1	16	0	0	0	4	1	0	0	0	0	22
1:30 PM	0	0	0	0	0	2	18	0	0	0	6	1	0	0	0	0	27
1:45 PM	0	0	0	0	0	0	15	0	0	0	10	1	0	0	0	0	26
2:00 PM	0	0	0	0	0	1	18	0	0	0	7	1	0	0	0	0	27
2:15 PM	0	0	0	0	0	2	11	0	0	0	6	0	0	0	0	0	19
2:30 PM	0	0	0	0	0	0	15	0	0	0	6	2	0	0	0	0	23
2:45 PM	0	0	0	0	0	2	14	0	0	0	7	2	0	0	0	0	25
3:00 PM	0	0	0	0	0	0	26	0	0	0	8	2	0	0	0	0	36
3:15 PM	0	0	0	0	0	1	27	0	0	0	2	1	0	0	0	0	31
3:30 PM	0	0	0	0	0	0	24	0	0	0	6	0	0	0	0	0	30
3:45 PM	0	0	0	0	0	3	8	0	0	0	7	0	0	0	0	0	18
4:00 PM	0	0	0	0	0	0	13	0	0	0	7	1	0	0	0	0	21
4:15 PM	0	0	0	0	0	0	17	0	0	0	8	1	0	0	0	0	26
4:30 PM	0	0	0	0	0	0	9	0	0	0	4	0	0	0	0	0	13
4:45 PM	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	0	10
5:00 PM	0	0	0	0	0	2	6	0	0	0	2	0	0	0	0	0	10
5:15 PM	0	0	0	0	0	0	10	0	0	0	1	0	0	0	0	0	11
5:30 PM	0	0	0	0	0	2	10	0	0	0	4	0	0	0	0	0	16
5:45 PM	0	0	0	0	0	2	10	0	0	0	2	0	0	0	0	0	14
6:00 PM	0	0	0	0	0	1	6	0	0	0	2	1	0	0	0	0	10
6:15 PM	0	0	0	0	0	1	4	0	0	0	2	0	0	0	0	0	7
6:30 PM	0	0	0	0	0	1	2	0	0	0	2	0	0	0	0	0	5
6:45 PM	0	0	0	0	0	2	3	0	0	0	1	1	0	0	0	0	7
7:00 PM	0	0	0	0	0	0	3	0	0	0	1	0	0	0	0	0	4
7:15 PM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2
Total	0	0	0	0	0	62	618	0	0	0	217	35	0	0	0	0	932

DOWL

Turning Movement Count

C St & Benson Blvd

Total Vehicles (15-Minute Periods)

AM Peak Hour

Tuesday, October 10, 2017

7:00 AM to 9:00 AM

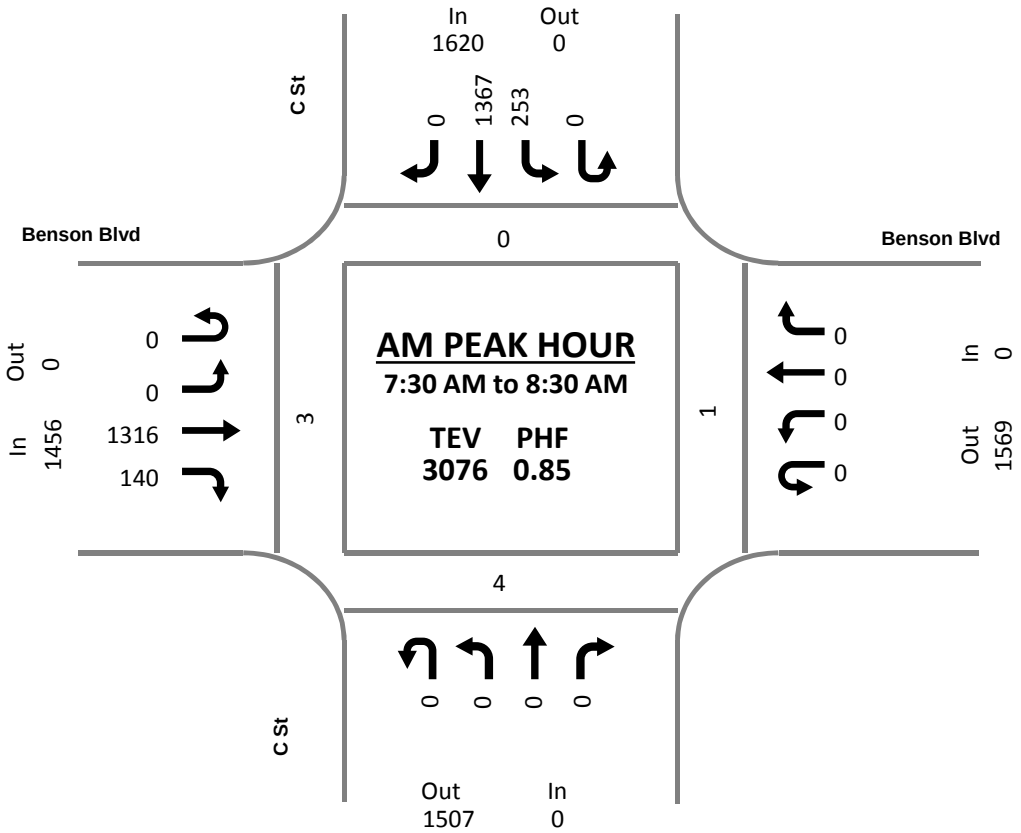
Start Time	C St (Northbound)					C St (Southbound)					Benson Blvd (Eastbound)					Benson Blvd (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	57	331	0	0	0	0	326	28	0	0	0	0	0	0	742
7:45 AM	0	0	0	0	0	0	67	424	0	0	0	0	375	40	0	0	0	0	0	0	906
8:00 AM	0	0	0	0	2	0	69	320	0	0	0	0	321	38	0	0	0	0	0	0	748
8:15 AM	0	0	0	0	2	0	60	292	0	0	0	0	294	34	3	0	0	0	0	1	680
8:30 AM	0	0	0	0	3	0	53	268	0	1	0	0	298	31	1	0	0	0	0	1	650
8:45 AM	0	0	0	0	2	0	88	348	0	0	0	0	324	37	1	0	0	0	0	1	797
Total	0	0	0	0	9	0	394	1,983	0	1	0	0	1,938	208	5	0	0	0	0	3	4,523

*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total")

Peak Hour Summary

7:30 AM to 8:30 AM

Data Type	C St (Northbound)					C St (Southbound)					Benson Blvd (Eastbound)					Benson Blvd (Westbound)					Peak Hour Total
	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	
Volume	0	0	0	0	4	0	253	1367	0	0	0	0	1316	140	3	0	0	0	0	1	3076
%HV	0.0%	0.0%	0.0%	0.0%		0.0%	2.4%	3.1%	0.0%		0.0%	0.0%	1.0%	1.4%		0.0%	0.0%	0.0%	0.0%		2.1%
PHF	0.00	0.00	0.00	0.00	0.50	0.00	0.92	0.81	0.00	0.00	0.00	0.00	0.88	0.88	0.25	0.00	0.00	0.00	0.00	0.25	0.85
Volume			0					1620					1456					0			3076
%HV			0.0%					3.0%					1.0%					0.0%			2.1%
PHF			0.00					0.82					0.88					0.00			0.85



Turning Movement Count

C St & Benson Blvd

Total Vehicles (15-Minute Periods)

PM Peak Hour

Tuesday, October 10, 2017

4:00 PM to 6:00 PM

Start Time	C St (Northbound)					C St (Southbound)					Benson Blvd (Eastbound)					Benson Blvd (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
4:00 PM	0	0	0	0	1	0	124	411	0	3	0	0	416	39	5	0	0	0	0	1	990
4:15 PM	0	0	0	0	4	0	116	419	0	4	0	0	400	50	0	0	0	0	0	0	985
4:30 PM	0	0	0	0	4	0	139	369	0	4	0	0	466	46	8	0	0	0	0	2	1020
4:45 PM	0	0	0	0	5	0	131	435	0	3	0	0	407	57	6	0	0	0	0	2	1030
5:00 PM	0	0	0	0	2	0	153	432	0	4	0	0	484	46	4	0	0	0	0	3	1115
5:15 PM	0	0	0	0	2	0	144	441	0	3	0	0	459	49	3	0	0	0	0	0	1093
5:30 PM	0	0	0	0	2	0	132	382	0	2	0	0	502	48	5	0	0	0	0	1	1064
5:45 PM	0	0	0	0	6	0	99	310	0	1	0	0	454	32	2	0	0	0	0	0	895
Total	0	0	0	0	26	0	1,038	3,199	0	24	0	0	3,588	367	33	0	0	0	0	9	8,192

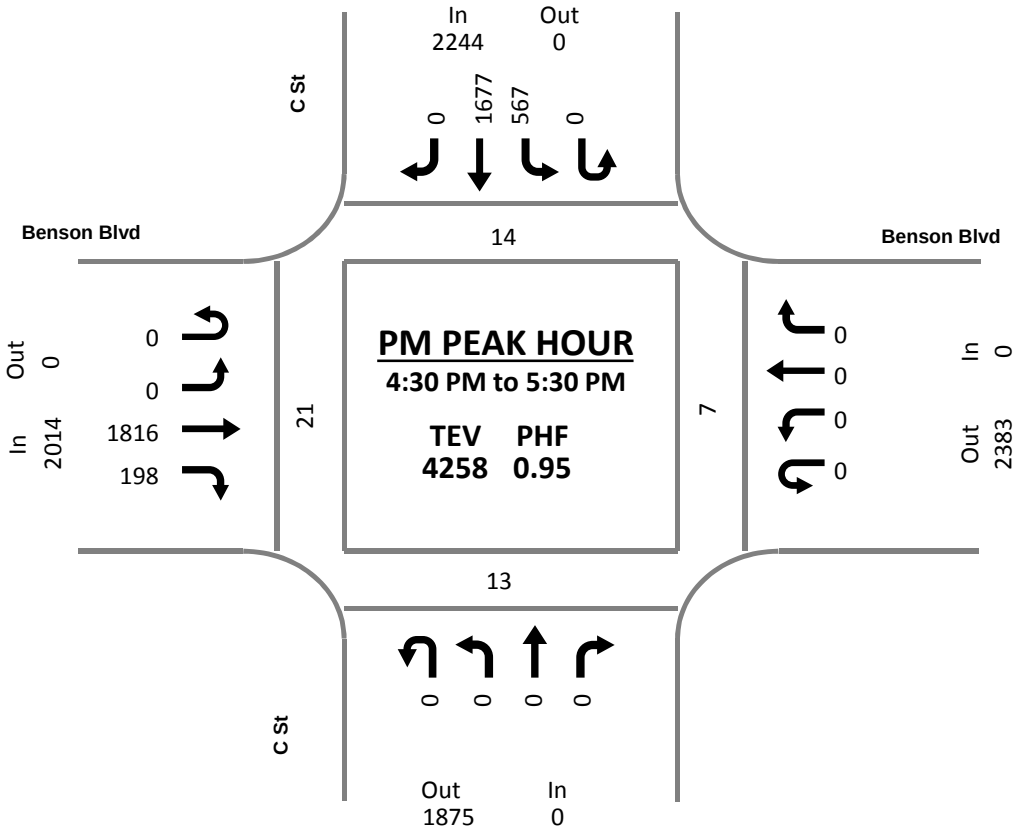
*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total")

Peak Hour Summary (System Peak*)

4:30 PM to 5:30 PM

Data Type	C St (Northbound)					C St (Southbound)					Benson Blvd (Eastbound)					Benson Blvd (Westbound)					Peak Hour Total
	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	
Volume	0	0	0	0	13	0	567	1677	0	14	0	0	1816	198	21	0	0	0	0	7	4258
%HV	0.0%	0.0%	0.0%	0.0%		0.0%	0.4%	2.1%	0.0%		0.0%	0.0%	0.4%	0.0%		0.0%	0.0%	0.0%	0.0%		1.0%
PHF	0.00	0.00	0.00	0.00	0.65	0.00	0.93	0.95	0.00	0.88	0.00	0.00	0.94	0.87	0.66	0.00	0.00	0.00	0.00	0.58	0.95
Volume			0					2244					2014					0			4258
%HV			0.0%					1.6%					0.3%					0.0%			1.0%
PHF			0.00					0.96					0.95					0.00			0.95

*System Peak is based on comparison of other study area counts rather than highest total entering volume at this intersection.



Traffic Camera Count and Placement Information

Intersection Name: C St & 36th Ave

Intersection Location	
Northbound Street	N/A
Southbound Street	C St
Eastbound Street	36th Ave
Westbound Street	36th Ave
City, State	Anchorage, AK

Project Information	
Name	Midtown Congestion Relief
Client	AK DOT&PF
Project #	1124.62458.01, Phase 02
PM/Traffic Lead	Steve Noble/Brad Coy

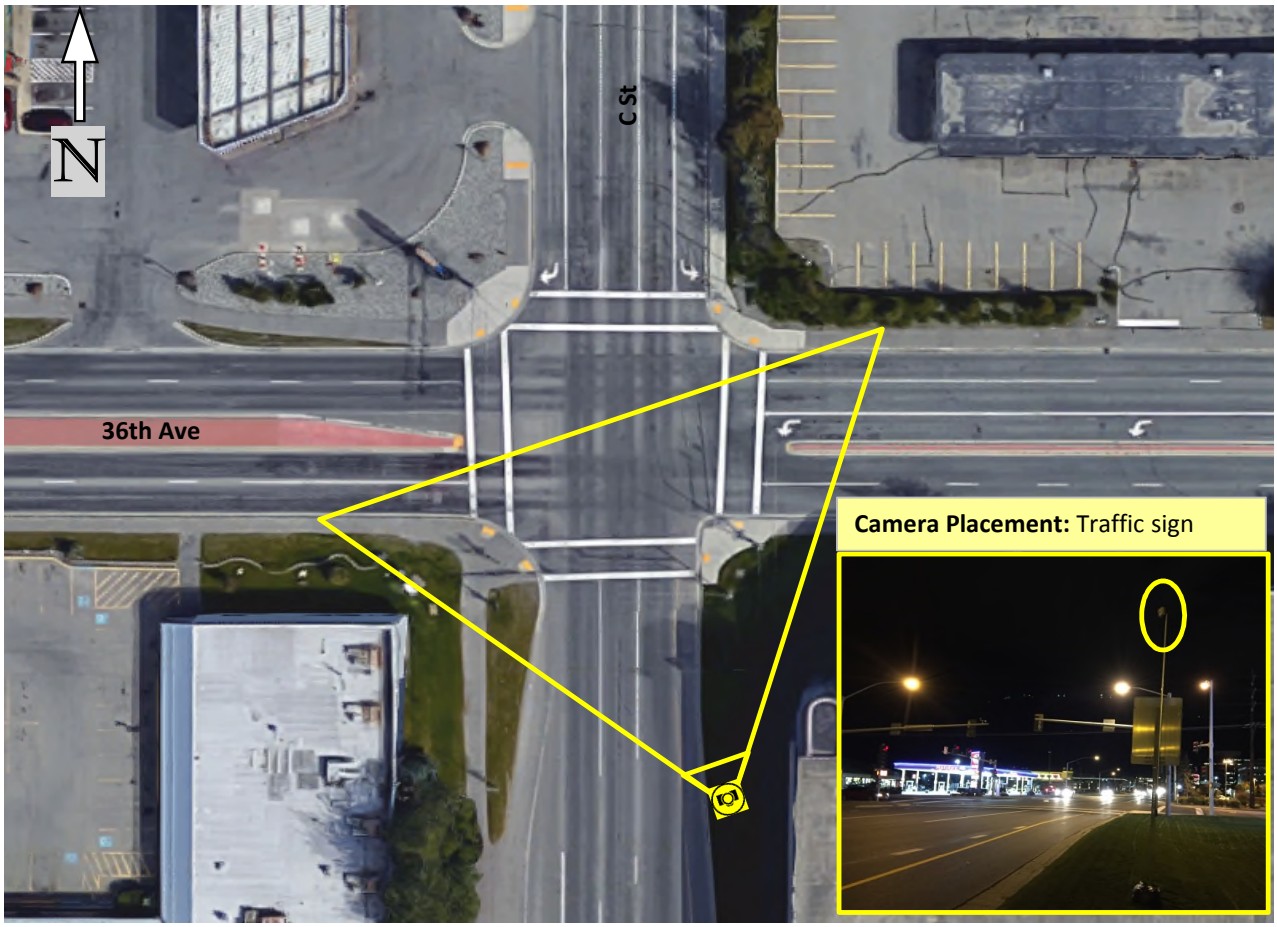
Count Description (e.g., day(s) of week, time periods, other related counts also occuring, etc.)

1 weekday (Tue, Wed, or Thu), with other 36th Ave intersections

Camera Setup/Video Footage	
Staff Responsible	Brad Coy
Setup Time	10/18/2017 6:45 AM
Take Down Time	10/18/2017 9:25 PM
Duration (hours)	14.67
Camera # (2-digit)	79

Count Date, Time, Vendor	
Date	10/18/2017 (Wednesday)
Start Time	7:00 AM
End Time	8:00 PM
Duration (hours)	13.00
Count Vendor	CountingCars.com

Camera Placement



Other Notes (Before, During, or After Count)

DOWL

Turning Movement Count

C St & 36th Ave

Total Vehicles (15-Minute Periods)

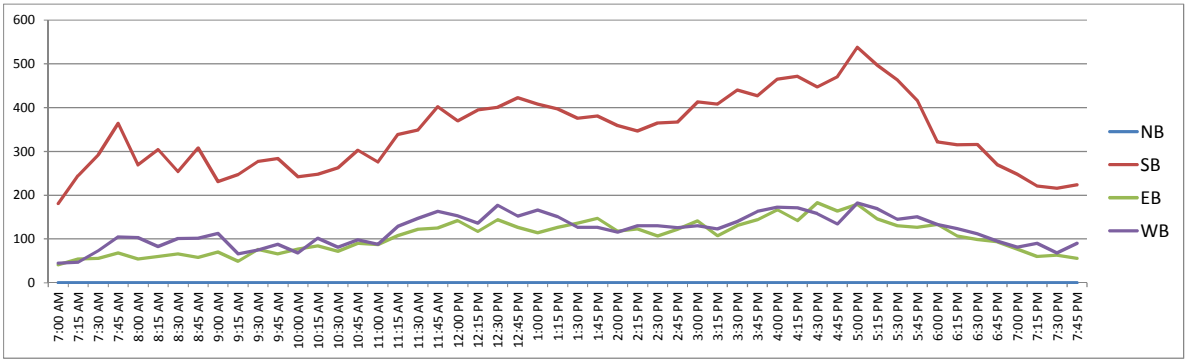
All Data

Wednesday, October 18, 2017

7:00 AM to 8:00 PM

Start Time	N/A (Northbound)					C St (Southbound)					36th Ave (Eastbound)					36th Ave (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
7:00 AM	0	0	0	0	0	0	18	130	33	0	0	0	37	4	0	0	13	32	0	0	267
7:15 AM	0	0	0	0	0	0	27	184	34	0	0	0	45	9	0	0	8	39	0	0	346
7:30 AM	0	0	0	0	2	0	44	225	24	0	0	0	49	7	0	0	13	60	0	0	422
7:45 AM	0	0	0	0	0	0	60	269	35	0	0	0	58	10	0	0	25	80	0	0	537
8:00 AM	0	0	0	0	0	0	25	203	41	0	0	0	50	4	0	0	24	79	0	0	426
8:15 AM	0	0	0	0	1	0	39	240	25	2	0	0	54	6	0	0	24	59	0	0	447
8:30 AM	0	0	0	0	0	0	29	203	22	0	0	0	60	6	1	0	24	77	0	0	421
8:45 AM	0	0	0	0	1	0	44	225	39	0	0	0	51	7	0	0	20	82	0	0	468
9:00 AM	0	0	0	0	1	0	26	179	26	1	0	0	62	8	1	0	26	87	0	0	414
9:15 AM	0	0	0	0	1	0	38	189	20	0	0	0	45	4	1	0	13	53	0	0	362
9:30 AM	0	0	0	0	0	0	38	215	24	1	0	0	65	11	0	0	17	58	0	0	428
9:45 AM	0	0	0	0	0	0	36	216	32	1	0	0	56	10	1	1	15	72	0	0	438
10:00 AM	0	0	0	0	1	0	32	185	25	1	0	0	61	16	1	0	14	54	0	0	387
10:15 AM	0	0	0	0	0	0	47	180	21	0	0	0	73	11	0	1	23	78	0	1	434
10:30 AM	0	0	0	0	2	0	37	201	25	0	0	0	60	12	2	0	13	68	0	0	416
10:45 AM	0	0	0	0	2	0	44	233	26	0	0	0	84	6	1	1	27	70	0	0	491
11:00 AM	0	0	0	0	0	0	50	206	20	3	0	0	79	8	2	0	21	67	0	1	451
11:15 AM	0	0	0	0	2	0	54	260	25	1	0	0	96	12	4	0	27	102	0	0	576
11:30 AM	0	0	0	0	5	0	65	249	35	1	0	0	101	21	4	1	28	118	0	0	618
11:45 AM	0	0	0	0	3	0	65	304	33	1	0	0	105	20	0	1	33	129	0	0	690
12:00 PM	0	0	0	0	0	0	56	272	42	1	0	0	128	14	0	0	35	118	0	0	665
12:15 PM	0	0	0	0	1	0	66	284	45	1	0	0	97	20	1	0	29	107	0	0	648
12:30 PM	0	0	0	0	3	0	77	283	41	1	0	0	129	15	1	0	36	141	0	0	722
12:45 PM	0	0	0	0	0	0	79	298	46	0	0	0	108	19	1	0	44	108	0	0	702
1:00 PM	0	0	0	0	1	0	71	293	44	3	0	0	97	17	2	0	31	135	0	0	688
1:15 PM	0	0	0	0	5	0	70	290	37	2	0	0	109	18	3	0	36	115	0	0	675
1:30 PM	0	0	0	0	5	0	59	283	34	0	0	0	116	20	1	0	31	96	0	0	639
1:45 PM	0	0	0	0	4	0	51	291	39	4	0	0	128	19	0	0	37	90	0	0	655
2:00 PM	0	0	0	0	1	0	60	271	28	2	0	0	102	16	2	0	22	94	0	0	593
2:15 PM	0	0	0	0	0	0	56	264	27	2	0	0	110	13	3	0	31	99	0	0	600
2:30 PM	0	0	0	0	0	0	59	277	29	6	0	0	84	23	1	0	25	105	0	0	602
2:45 PM	0	0	0	0	4	0	56	284	27	2	0	0	107	15	1	0	23	103	0	0	615
3:00 PM	0	0	0	0	1	0	74	301	38	1	0	0	120	21	3	1	23	106	0	0	684
3:15 PM	0	0	0	0	1	0	46	333	29	1	0	0	92	16	2	0	19	104	0	0	639
3:30 PM	0	0	0	0	12	0	68	346	26	4	0	0	121	10	8	0	35	105	0	0	711
3:45 PM	0	0	0	0	4	0	55	347	25	4	0	0	124	20	2	1	33	129	0	1	734
4:00 PM	0	0	0	0	0	0	55	381	29	9	0	0	146	21	3	0	43	130	0	0	805
4:15 PM	0	0	0	0	1	0	67	370	35	1	0	0	118	24	0	0	39	132	0	0	785
4:30 PM	0	0	0	0	2	0	53	370	25	4	0	0	165	18	2	0	40	118	0	0	789
4:45 PM	0	0	0	0	9	0	67	379	25	4	0	0	146	18	4	0	33	102	0	1	770
5:00 PM	0	0	0	0	1	0	78	419	41	3	0	0	160	19	2	0	40	142	0	2	899
5:15 PM	0	0	0	0	2	0	70	402	25	5	0	0	126	20	1	0	62	107	0	3	812
5:30 PM	0	0	0	0	0	0	67	370	27	2	0	0	116	14	0	0	39	106	0	2	739
5:45 PM	0	0	0	0	2	0	52	339	26	1	0	0	118	9	0	0	30	121	0	0	695
6:00 PM	0	0	0	0	1	0	43	245	34	2	0	0	111	22	0	0	40	93	0	0	588
6:15 PM	0	0	0	0	2	0	42	255	18	2	0	0	90	17	1	0	29	95	0	2	546
6:30 PM	0	0	0	0	3	0	34	252	30	0	0	0	91	8	1	0	30	82	0	1	527
6:45 PM	0	0	0	0	1	0	35	211	24	3	0	0	84	10	0	1	24	70	0	0	459
7:00 PM	0	0	0	0	2	0	35	194	19	0	0	0	64	13	0	0	19	62	0	0	406
7:15 PM	0	0	0	0	0	0	25	183	13	0	0	0	56	4	0	0	28	62	0	0	371
7:30 PM	0	0	0	0	2	0	31	170	15	0	0	0	47	16	0	0	16	52	0	0	347
7:45 PM	0	0	0	0	1	0	24	182	18	1	0	0	51	5	0	0	16	74	0	0	370
Total	0	0	0	0	92	0	2,599	13,735	1,526	83	0	0	4,752	706	63	8	1,426	4,767	0	14	29,519

*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total" or graph below)





Turning Movement Count

C St & 36th Ave

Heavy Vehicles (15-Minute Periods)

All Data

Wednesday, October 18, 2017

7:00 AM to 8:00 PM

Start Time	N/A (Northbound)				C St (Southbound)				36th Ave (Eastbound)				36th Ave (Westbound)				Period Total (Veh)
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	
7:00 AM	0	0	0	0	0	1	0	0	0	0	2	0	0	0	1	0	4
7:15 AM	0	0	0	0	0	1	4	0	0	0	0	1	0	0	1	0	7
7:30 AM	0	0	0	0	0	1	7	0	0	0	1	0	0	0	0	0	9
7:45 AM	0	0	0	0	0	2	6	0	0	0	0	0	0	0	2	0	10
8:00 AM	0	0	0	0	0	0	5	0	0	0	1	0	0	1	1	0	8
8:15 AM	0	0	0	0	0	0	7	0	0	0	1	0	0	0	3	0	11
8:30 AM	0	0	0	0	0	1	10	0	0	0	2	1	0	1	0	0	15
8:45 AM	0	0	0	0	0	3	7	0	0	0	1	0	0	1	1	0	13
9:00 AM	0	0	0	0	0	0	9	1	0	0	0	0	0	0	1	0	11
9:15 AM	0	0	0	0	0	0	11	1	0	0	0	0	0	0	3	0	15
9:30 AM	0	0	0	0	0	0	7	0	0	0	2	0	0	0	0	0	9
9:45 AM	0	0	0	0	0	1	10	1	0	0	0	0	0	0	1	0	13
10:00 AM	0	0	0	0	0	0	5	0	0	0	2	1	0	0	1	0	9
10:15 AM	0	0	0	0	0	0	10	0	0	0	1	0	0	1	1	0	13
10:30 AM	0	0	0	0	0	1	8	0	0	0	0	1	0	2	1	0	13
10:45 AM	0	0	0	0	0	1	10	0	0	0	4	0	0	1	2	0	18
11:00 AM	0	0	0	0	0	0	17	0	0	0	0	1	0	0	2	0	20
11:15 AM	0	0	0	0	0	2	10	1	0	0	0	2	0	0	1	0	16
11:30 AM	0	0	0	0	0	0	14	1	0	0	2	1	0	0	3	0	21
11:45 AM	0	0	0	0	0	1	9	0	0	0	0	1	0	0	2	0	13
12:00 PM	0	0	0	0	0	0	13	0	0	0	1	0	0	0	3	0	17
12:15 PM	0	0	0	0	0	0	7	0	0	0	0	2	0	0	1	0	10
12:30 PM	0	0	0	0	0	1	7	0	0	0	2	0	0	1	0	0	11
12:45 PM	0	0	0	0	0	1	10	1	0	0	0	0	0	1	1	0	14
1:00 PM	0	0	0	0	0	1	13	1	0	0	0	0	0	0	0	0	15
1:15 PM	0	0	0	0	0	0	5	0	0	0	0	0	0	0	1	0	6
1:30 PM	0	0	0	0	0	0	13	0	0	0	2	1	0	0	0	0	16
1:45 PM	0	0	0	0	0	1	10	0	0	0	2	0	0	0	2	0	15
2:00 PM	0	0	0	0	0	0	16	0	0	0	0	0	0	1	1	0	18
2:15 PM	0	0	0	0	0	2	13	1	0	0	0	0	0	0	1	0	17
2:30 PM	0	0	0	0	0	0	12	1	0	0	2	0	0	1	1	0	17
2:45 PM	0	0	0	0	0	3	22	0	0	0	2	1	0	2	1	0	31
3:00 PM	0	0	0	0	0	2	21	2	0	0	0	3	0	1	1	0	30
3:15 PM	0	0	0	0	0	1	19	0	0	0	1	2	0	0	1	0	24
3:30 PM	0	0	0	0	0	1	14	0	0	0	2	0	0	0	1	0	18
3:45 PM	0	0	0	0	0	1	11	0	0	0	2	0	0	0	0	0	14
4:00 PM	0	0	0	0	0	1	14	0	0	0	0	0	0	0	0	0	15
4:15 PM	0	0	0	0	0	1	15	0	0	0	0	1	0	1	1	0	19
4:30 PM	0	0	0	0	0	0	10	1	0	0	0	1	0	0	0	0	12
4:45 PM	0	0	0	0	0	1	14	0	0	0	1	0	0	0	0	0	16
5:00 PM	0	0	0	0	0	0	4	0	0	0	1	0	0	0	1	0	6
5:15 PM	0	0	0	0	0	1	9	0	0	0	0	0	0	0	0	0	10
5:30 PM	0	0	0	0	0	0	8	0	0	0	1	0	0	0	1	0	10
5:45 PM	0	0	0	0	0	1	5	0	0	0	0	0	0	0	0	0	6
6:00 PM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2
6:15 PM	0	0	0	0	0	0	5	0	0	0	0	0	0	0	1	0	6
6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 PM	0	0	0	0	0	1	8	0	0	0	1	0	0	0	0	0	10
7:00 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
7:15 PM	0	0	0	0	0	0	3	0	0	0	0	0	0	0	1	0	4
7:30 PM	0	0	0	0	0	0	2	0	0	0	1	0	0	0	0	0	3
7:45 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	36	472	12	0	0	40	20	0	15	47	0	642

Turning Movement Count

C St & 36th Ave

Total Vehicles (15-Minute Periods)

AM Peak Hour

Wednesday, October 18, 2017

7:00 AM to 9:00 AM

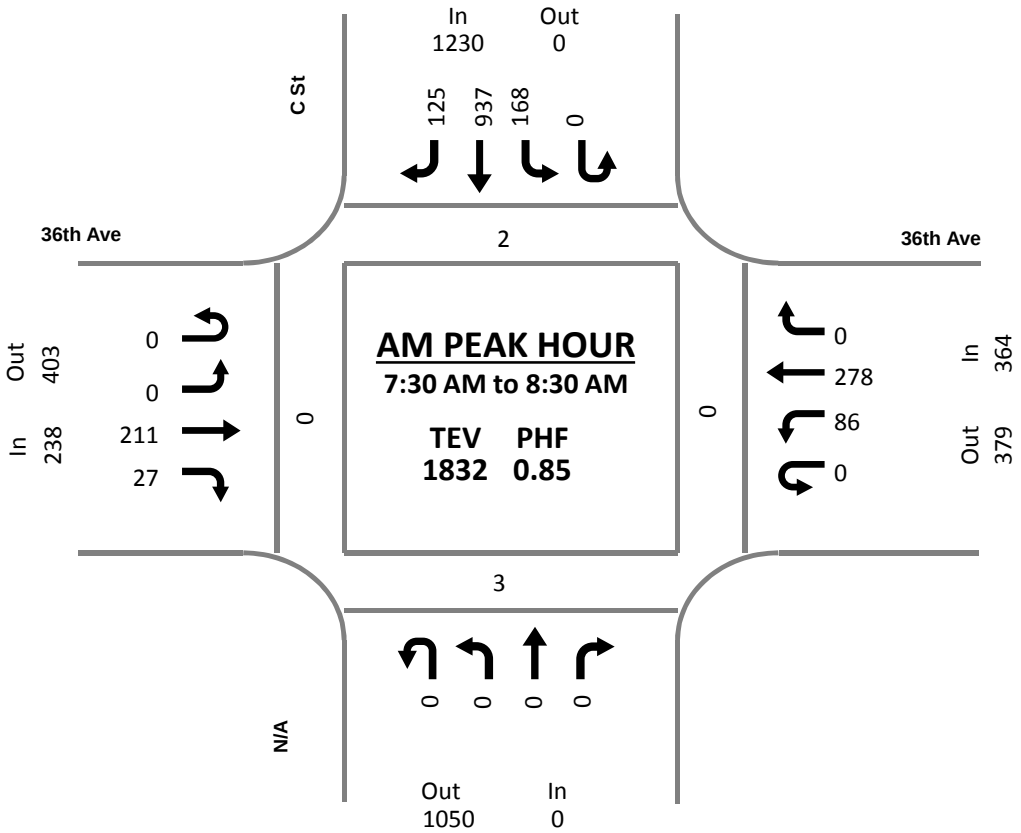
Start Time	N/A (Northbound)					C St (Southbound)					36th Ave (Eastbound)					36th Ave (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
7:00 AM	0	0	0	0	0	0	18	130	33	0	0	0	37	4	0	0	13	32	0	0	267
7:15 AM	0	0	0	0	0	0	27	184	34	0	0	0	45	9	0	0	8	39	0	0	346
7:30 AM	0	0	0	0	2	0	44	225	24	0	0	0	49	7	0	0	13	60	0	0	422
7:45 AM	0	0	0	0	0	0	60	269	35	0	0	0	58	10	0	0	25	80	0	0	537
8:00 AM	0	0	0	0	0	0	25	203	41	0	0	0	50	4	0	0	24	79	0	0	426
8:15 AM	0	0	0	0	1	0	39	240	25	2	0	0	54	6	0	0	24	59	0	0	447
8:30 AM	0	0	0	0	0	0	29	203	22	0	0	0	60	6	1	0	24	77	0	0	421
8:45 AM	0	0	0	0	1	0	44	225	39	0	0	0	51	7	0	0	20	82	0	0	468
Total	0	0	0	0	4	0	286	1,679	253	2	0	0	404	53	1	0	151	508	0	0	3,334

*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total")

Peak Hour Summary

7:30 AM to 8:30 AM

Data Type	N/A (Northbound)					C St (Southbound)					36th Ave (Eastbound)					36th Ave (Westbound)					Peak Hour Total
	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	
Volume	0	0	0	0	3	0	168	937	125	2	0	0	211	27	0	0	86	278	0	0	1832
%HV	0.0%	0.0%	0.0%	0.0%		0.0%	1.8%	2.7%	0.0%		0.0%	0.0%	1.4%	0.0%		0.0%	1.2%	2.2%	0.0%		2.1%
PHF	0.00	0.00	0.00	0.00	0.38	0.00	0.70	0.87	0.76	0.25	0.00	0.00	0.91	0.68	0.00	0.00	0.86	0.87	0.00	0.00	0.85
Volume			0					1230					238					364			1832
%HV			0.0%					2.3%					1.3%					1.9%			2.1%
PHF			0.00					0.84					0.88					0.87			0.85



Turning Movement Count

C St & 36th Ave

Total Vehicles (15-Minute Periods)

PM Peak Hour

Wednesday, October 18, 2017

4:00 PM to 6:00 PM

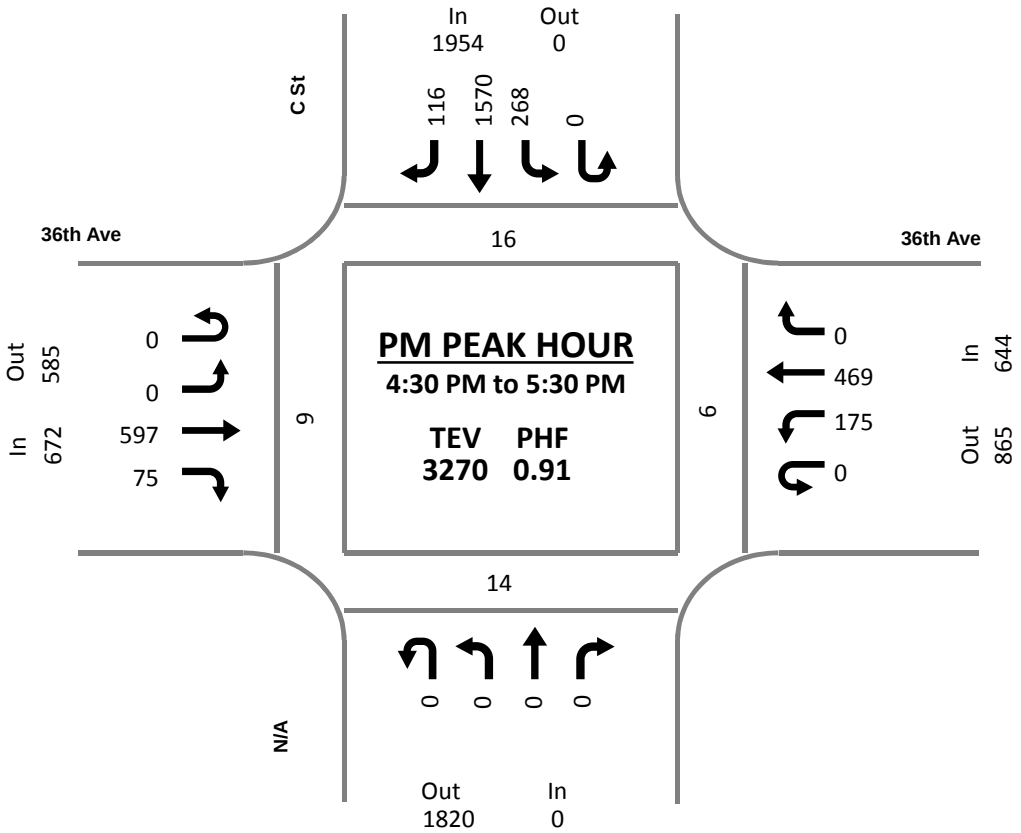
Start Time	N/A (Northbound)					C St (Southbound)					36th Ave (Eastbound)					36th Ave (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
4:00 PM	0	0	0	0	0	0	55	381	29	9	0	0	146	21	3	0	43	130	0	0	805
4:15 PM	0	0	0	0	1	0	67	370	35	1	0	0	118	24	0	0	39	132	0	0	785
4:30 PM	0	0	0	0	2	0	53	370	25	4	0	0	165	18	2	0	40	118	0	0	789
4:45 PM	0	0	0	0	9	0	67	379	25	4	0	0	146	18	4	0	33	102	0	1	770
5:00 PM	0	0	0	0	1	0	78	419	41	3	0	0	160	19	2	0	40	142	0	2	899
5:15 PM	0	0	0	0	2	0	70	402	25	5	0	0	126	20	1	0	62	107	0	3	812
5:30 PM	0	0	0	0	0	0	67	370	27	2	0	0	116	14	0	0	39	106	0	2	739
5:45 PM	0	0	0	0	2	0	52	339	26	1	0	0	118	9	0	0	30	121	0	0	695
Total	0	0	0	0	17	0	509	3,030	233	29	0	0	1,095	143	12	0	326	958	0	8	6,294

*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total")

Peak Hour Summary

4:30 PM to 5:30 PM

Data Type	N/A (Northbound)					C St (Southbound)					36th Ave (Eastbound)					36th Ave (Westbound)					Peak Hour Total
	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	
Volume	0	0	0	0	14	0	268	1570	116	16	0	0	597	75	9	0	175	469	0	6	3270
%HV	0.0%	0.0%	0.0%	0.0%		0.0%	0.7%	2.4%	0.9%		0.0%	0.0%	0.3%	1.3%		0.0%	0.0%	0.2%	0.0%		1.3%
PHF	0.00	0.00	0.00	0.00	0.39	0.00	0.86	0.94	0.71	0.80	0.00	0.00	0.90	0.94	0.56	0.00	0.71	0.83	0.00	0.50	0.91
Volume			0					1954					672					644			3270
%HV			0.0%					2.0%					0.4%					0.2%			1.3%
PHF			0.00					0.91					0.92					0.88			0.91



Traffic Camera Count and Placement Information

Intersection Name: Tudor Rd & C St

Intersection Location	
Northbound Street	C St
Southbound Street	C St
Eastbound Street	Tudor Rd
Westbound Street	Tudor Rd
City, State	Anchorage, AK

Project Information	
Name	Midtown Congestion Relief
Client	AK DOT&PF
Project #	1124.62458.01, Phase 02
PM/Traffic Lead	Steve Noble/Brad Coy

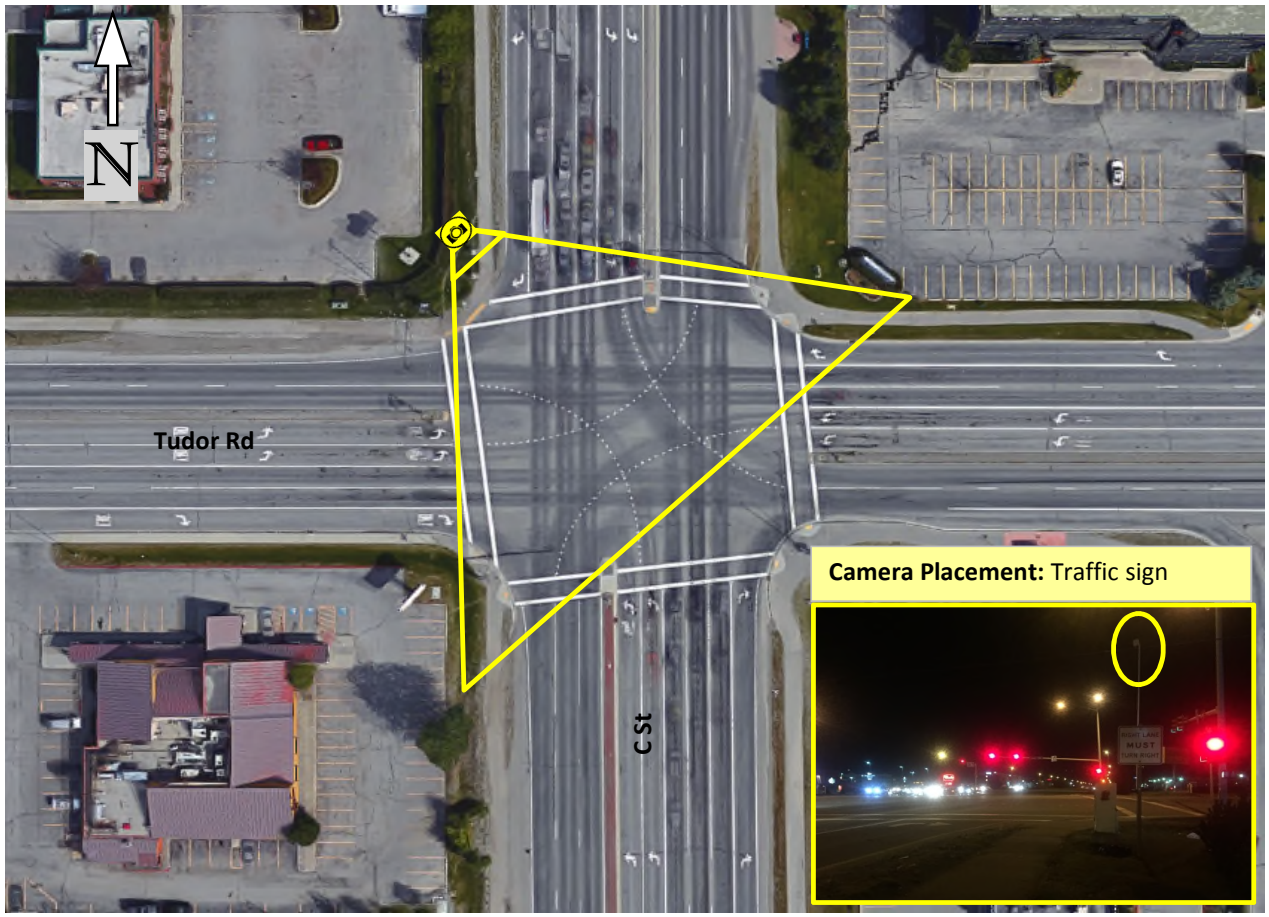
Count Description (e.g., day(s) of week, time periods, other related counts also occuring, etc.)

1 weekday (Tue, Wed, or Thu), simultaneous as Tudor & Seward Hwy Ramps

Camera Setup/Video Footage	
Staff Responsible	Brad Coy
Setup Time	10/17/2017 7:02 AM
Take Down Time	10/17/2017 8:30 PM
Duration (hours)	13.47
Camera # (2-digit)	c3

Count Date, Time, Vendor	
Date	10/17/2017 (Tuesday)
Start Time	7:15 AM
End Time	8:00 PM
Duration (hours)	12.75
Count Vendor	CountingCars.com

Camera Placement



Other Notes (Before, During, or After Count)

DOWL

Turning Movement Count

Tudor Rd & C St

Total Vehicles (15-Minute Periods)

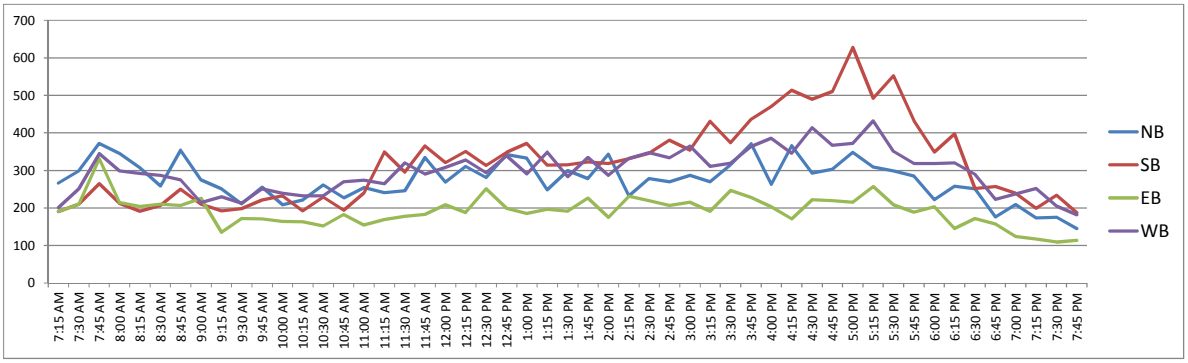
All Data

Tuesday, October 17, 2017

7:15 AM to 8:00 PM

Start Time	C St (Northbound)					C St (Southbound)					Tudor Rd (Eastbound)					Tudor Rd (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
7:15 AM	1	13	201	51	0	0	48	133	9	0	0	36	150	4	0	2	33	111	55	3	847
7:30 AM	1	24	209	65	0	0	37	159	14	1	3	49	149	9	1	2	50	138	61	2	970
7:45 AM	1	24	274	73	0	0	54	196	15	2	2	84	233	12	1	7	53	207	78	1	1313
8:00 AM	1	31	270	44	0	0	41	155	17	1	4	32	162	16	1	7	71	151	70	3	1072
8:15 AM	3	24	220	60	0	1	30	146	14	1	1	42	153	8	0	7	45	167	73	1	994
8:30 AM	0	24	192	43	0	0	49	135	23	2	2	46	159	3	0	6	56	162	63	4	963
8:45 AM	0	28	278	48	0	0	55	175	20	1	6	40	150	11	0	8	68	163	36	0	1086
9:00 AM	1	19	191	64	2	1	61	132	16	0	8	37	166	14	0	2	39	141	32	0	924
9:15 AM	1	17	177	56	0	0	44	131	17	0	2	16	111	6	0	4	48	130	48	1	808
9:30 AM	0	11	151	49	2	0	58	121	19	1	6	22	130	14	1	5	41	139	28	1	794
9:45 AM	1	19	173	62	0	0	45	150	26	0	3	26	134	8	0	9	64	135	43	1	898
10:00 AM	1	23	141	43	0	1	45	166	20	0	4	30	114	16	0	6	51	123	59	1	843
10:15 AM	0	15	156	50	0	0	44	129	19	0	3	28	115	17	0	5	50	135	42	4	808
10:30 AM	1	19	188	53	0	1	59	150	19	3	6	28	109	9	2	5	40	139	48	2	874
10:45 AM	1	18	157	51	3	0	44	137	13	1	4	32	138	9	0	11	41	176	42	0	874
11:00 AM	1	26	167	60	0	1	64	151	24	1	3	32	107	13	1	6	51	167	50	2	923
11:15 AM	1	22	169	49	1	1	86	219	43	0	6	34	116	13	0	5	43	167	50	2	1024
11:30 AM	3	22	171	50	0	0	77	188	30	0	11	38	102	27	0	14	79	193	34	1	1039
11:45 AM	3	31	246	55	1	1	106	223	35	1	5	33	129	16	0	8	65	171	46	3	1173
12:00 PM	1	25	193	50	2	0	74	194	53	0	6	51	128	23	0	5	63	190	50	1	1106
12:15 PM	0	26	219	66	2	0	79	228	44	2	3	29	135	21	1	11	74	181	62	0	1178
12:30 PM	1	17	207	56	1	0	61	221	31	1	5	61	160	25	1	5	66	171	52	0	1139
12:45 PM	4	29	241	68	1	1	80	231	36	1	4	57	118	20	1	2	74	193	70	2	1228
1:00 PM	3	22	253	55	4	0	74	257	41	2	4	44	115	22	0	4	75	153	59	2	1181
1:15 PM	1	21	180	46	6	0	74	210	30	3	4	38	135	19	2	6	90	194	59	3	1107
1:30 PM	1	25	218	56	1	1	76	212	26	3	5	37	128	21	1	4	73	162	44	2	1089
1:45 PM	1	21	205	51	1	0	75	212	36	2	6	39	164	17	3	5	67	201	62	0	1162
2:00 PM	4	32	244	63	0	1	76	216	25	1	3	36	122	14	0	12	69	153	53	1	1123
2:15 PM	5	19	154	54	0	1	79	214	37	1	5	37	168	21	1	8	71	193	60	1	1126
2:30 PM	2	24	198	54	2	1	73	233	39	4	1	38	163	17	2	13	81	207	46	5	1190
2:45 PM	1	19	189	61	1	1	104	230	46	2	2	39	155	11	2	5	73	210	46	1	1192
3:00 PM	0	25	207	55	1	0	84	212	58	5	8	40	149	18	1	9	80	230	46	2	1221
3:15 PM	0	20	200	50	3	0	89	285	57	2	1	29	149	12	0	11	63	202	35	4	1203
3:30 PM	4	24	214	73	1	0	93	245	36	2	5	46	172	24	1	3	64	193	59	2	1255
3:45 PM	0	35	263	73	0	0	99	287	50	2	2	49	158	19	1	8	90	218	48	1	1399
4:00 PM	1	23	193	46	1	0	116	302	52	0	7	46	134	16	2	12	86	229	59	3	1322
4:15 PM	4	30	269	63	1	1	101	343	69	5	1	35	123	12	1	7	92	206	41	5	1397
4:30 PM	5	22	223	43	1	2	107	307	74	0	2	53	147	20	1	9	92	249	64	2	1419
4:45 PM	2	25	223	53	3	0	104	347	59	2	5	49	139	26	0	4	79	237	47	2	1399
5:00 PM	1	32	268	47	1	0	123	416	89	1	2	57	133	23	1	9	97	226	40	5	1563
5:15 PM	3	26	233	47	0	1	101	314	76	0	5	69	158	25	0	10	116	261	45	2	1490
5:30 PM	4	22	234	39	1	1	108	365	78	1	2	36	157	13	2	9	74	218	50	3	1410
5:45 PM	2	32	206	45	2	0	96	283	54	3	2	32	134	21	1	12	61	215	30	2	1225
6:00 PM	1	20	154	47	1	0	78	225	46	2	1	26	158	18	1	6	59	212	41	0	1092
6:15 PM	3	25	181	49	0	1	102	240	55	2	3	25	103	14	0	9	54	223	34	3	1121
6:30 PM	4	29	166	52	0	0	62	157	33	1	4	30	125	13	0	6	60	188	35	2	964
6:45 PM	2	19	120	35	1	0	63	158	36	1	4	29	114	10	0	5	35	156	27	3	813
7:00 PM	0	20	146	43	0	0	65	135	39	3	1	17	98	8	1	5	59	136	37	1	809
7:15 PM	0	21	124	28	1	0	43	126	30	0	1	19	82	15	1	5	45	177	25	0	741
7:30 PM	0	16	129	30	1	1	58	144	31	0	0	17	86	6	2	11	27	141	26	1	723
7:45 PM	0	14	106	25	1	0	51	109	27	2	1	19	87	7	0	10	37	104	31	1	628
Total	81	1,170	10,091	2,649	50	20	3,715	10,654	1,886	71	184	1,914	6,924	776	37	359	3,234	9,144	2,441	94	55,242

*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total" or graph below)



DOWL

Turning Movement Count

Tudor Rd & C St

Heavy Vehicles (15-Minute Periods)

All Data

Tuesday, October 17, 2017

7:15 AM to 8:00 PM

Start Time	C St (Northbound)				C St (Southbound)				Tudor Rd (Eastbound)				Tudor Rd (Westbound)				Period Total (Veh)
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	
7:15 AM	0	0	4	1	0	2	4	0	0	0	0	0	0	0	2	0	13
7:30 AM	0	0	3	4	0	3	6	0	0	0	0	0	0	1	2	3	22
7:45 AM	0	0	10	3	0	3	7	2	0	2	2	0	0	0	4	2	35
8:00 AM	0	2	7	2	0	3	4	0	0	0	0	2	0	1	3	3	27
8:15 AM	0	0	13	3	0	2	9	2	0	2	3	1	0	0	4	2	41
8:30 AM	0	1	11	1	0	3	7	0	0	4	2	0	0	0	5	6	40
8:45 AM	0	0	17	1	0	2	10	0	0	1	7	0	0	3	4	1	46
9:00 AM	0	2	9	4	0	4	11	1	0	1	5	0	0	2	3	1	43
9:15 AM	0	1	13	4	0	4	13	0	0	1	2	0	0	3	8	3	52
9:30 AM	0	0	7	1	0	1	8	0	1	2	0	0	0	3	5	2	30
9:45 AM	0	1	7	4	0	2	17	2	0	1	3	0	0	5	5	5	52
10:00 AM	0	0	8	0	0	6	14	4	0	0	3	0	0	2	5	2	44
10:15 AM	0	1	8	0	0	4	12	1	0	1	2	2	0	2	6	1	40
10:30 AM	0	1	11	5	0	2	9	1	0	1	3	0	0	3	7	1	44
10:45 AM	0	0	11	3	0	3	6	0	0	1	3	0	0	2	5	0	34
11:00 AM	0	1	12	1	0	3	11	0	0	3	6	1	0	0	7	1	46
11:15 AM	0	1	11	4	0	3	16	2	0	0	0	1	0	5	4	4	51
11:30 AM	0	0	14	3	0	3	9	2	0	2	0	0	0	1	5	2	41
11:45 AM	0	0	15	1	0	2	9	1	0	0	3	0	0	2	5	0	38
12:00 PM	0	1	11	2	0	2	10	2	0	0	3	1	0	6	5	2	45
12:15 PM	0	1	9	4	0	2	14	1	0	1	0	1	0	6	4	2	45
12:30 PM	0	1	10	1	0	1	12	0	0	6	5	0	0	0	3	1	40
12:45 PM	0	2	11	0	0	3	17	0	0	1	0	0	0	2	4	0	40
1:00 PM	0	0	13	3	0	0	13	2	0	1	3	0	0	5	7	1	48
1:15 PM	0	0	9	0	0	4	11	1	0	0	5	0	0	8	9	3	50
1:30 PM	0	1	10	7	0	4	12	1	1	3	3	1	0	3	3	1	50
1:45 PM	0	2	15	4	0	3	8	0	0	0	4	1	0	3	5	4	49
2:00 PM	0	1	11	1	0	2	14	1	0	0	2	0	0	3	4	2	41
2:15 PM	0	1	7	5	0	4	17	1	0	2	3	1	0	3	4	0	48
2:30 PM	0	1	14	4	0	3	13	1	0	2	7	0	0	1	2	2	50
2:45 PM	0	1	10	1	0	4	12	1	0	0	3	0	0	2	6	1	41
3:00 PM	0	1	11	2	0	2	12	2	0	1	3	0	0	4	4	2	44
3:15 PM	0	0	9	3	0	3	18	1	0	0	2	1	0	3	4	2	46
3:30 PM	0	0	8	2	0	0	10	2	0	1	5	0	0	0	1	3	32
3:45 PM	0	0	7	1	0	3	9	1	0	1	3	0	0	3	1	0	29
4:00 PM	0	0	4	2	0	1	11	0	0	1	0	0	0	2	2	5	28
4:15 PM	0	0	7	0	0	7	14	1	0	1	1	0	0	1	2	1	35
4:30 PM	0	0	13	1	0	1	12	1	0	1	3	0	0	1	1	4	38
4:45 PM	0	0	7	0	0	1	14	0	0	0	2	2	0	1	3	0	30
5:00 PM	0	0	7	0	0	2	8	2	0	2	0	0	0	3	0	0	24
5:15 PM	0	0	15	1	0	1	8	0	0	1	0	0	0	4	4	1	35
5:30 PM	0	0	4	1	0	0	4	1	0	1	1	1	0	1	2	1	17
5:45 PM	0	0	4	0	0	0	4	2	0	0	0	0	0	1	2	0	13
6:00 PM	0	0	2	0	0	0	7	0	0	0	2	0	0	0	3	0	14
6:15 PM	0	0	6	0	0	2	4	0	0	0	1	0	0	0	1	0	14
6:30 PM	0	0	8	0	0	0	4	0	0	0	0	0	0	0	1	1	14
6:45 PM	0	0	1	1	0	1	1	1	0	0	0	0	0	1	1	0	7
7:00 PM	0	0	0	1	0	0	3	0	0	0	1	0	0	0	4	0	9
7:15 PM	0	0	0	0	0	2	4	0	0	0	0	0	0	0	2	1	9
7:30 PM	0	0	0	0	0	3	1	0	0	0	0	0	0	0	0	0	4
7:45 PM	0	0	4	1	0	0	0	0	0	0	0	0	0	0	1	1	7
Total	0	24	438	93	0	116	483	43	2	48	106	16	0	102	184	80	1,735

Turning Movement Count

Tudor Rd & C St

Total Vehicles (15-Minute Periods)

AM Peak Hour

Tuesday, October 17, 2017

7:00 AM to 9:00 AM

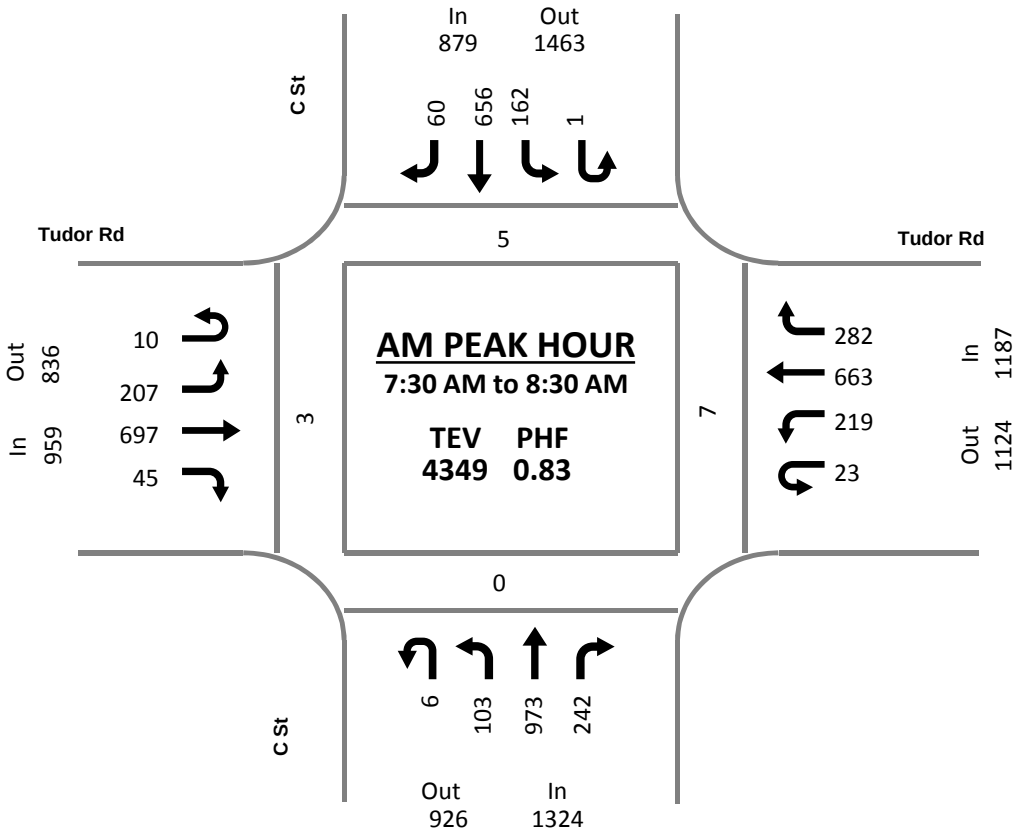
Start Time	C St (Northbound)					C St (Southbound)					Tudor Rd (Eastbound)					Tudor Rd (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	1	13	201	51	0	0	48	133	9	0	0	36	150	4	0	2	33	111	55	3	847
7:30 AM	1	24	209	65	0	0	37	159	14	1	3	49	149	9	1	2	50	138	61	2	970
7:45 AM	1	24	274	73	0	0	54	196	15	2	2	84	233	12	1	7	53	207	78	1	1313
8:00 AM	1	31	270	44	0	0	41	155	17	1	4	32	162	16	1	7	71	151	70	3	1072
8:15 AM	3	24	220	60	0	1	30	146	14	1	1	42	153	8	0	7	45	167	73	1	994
8:30 AM	0	24	192	43	0	0	49	135	23	2	2	46	159	3	0	6	56	162	63	4	963
8:45 AM	0	28	278	48	0	0	55	175	20	1	6	40	150	11	0	8	68	163	36	0	1086
Total	7	168	1,644	384	0	1	314	1,099	112	8	18	329	1,156	63	3	39	376	1,099	436	14	7,245

*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total")

Peak Hour Summary

7:30 AM to 8:30 AM

Data Type	C St (Northbound)					C St (Southbound)					Tudor Rd (Eastbound)					Tudor Rd (Westbound)					Peak Hour Total
	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	
Volume	6	103	973	242	0	1	162	656	60	5	10	207	697	45	3	23	219	663	282	7	4349
%HV	0.0%	1.9%	3.4%	5.0%		0.0%	6.8%	4.0%	6.7%		0.0%	1.9%	0.7%	6.7%		0.0%	0.9%	2.0%	3.5%		2.9%
PHF	0.50	0.83	0.89	0.83	0.00	0.25	0.75	0.84	0.88	0.63	0.63	0.62	0.75	0.70	0.75	0.82	0.77	0.80	0.90	0.58	0.83
Volume			1324					879					959					1187			4349
%HV			3.5%					4.7%					1.3%					2.1%			2.9%
PHF			0.89					0.83					0.72					0.86			0.83



DOWL

Turning Movement Count

Tudor Rd & C St

Total Vehicles (15-Minute Periods)

PM Peak Hour

Tuesday, October 17, 2017

4:00 PM to 6:00 PM

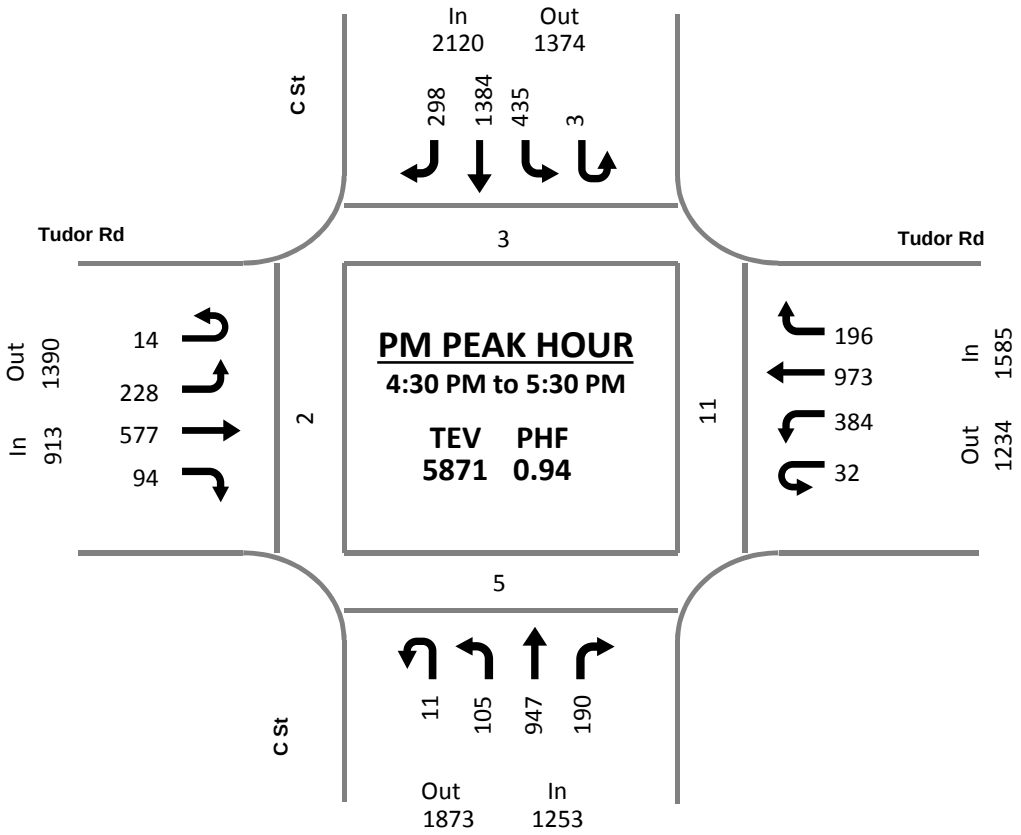
Start Time	C St (Northbound)					C St (Southbound)					Tudor Rd (Eastbound)					Tudor Rd (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
4:00 PM	1	23	193	46	1	0	116	302	52	0	7	46	134	16	2	12	86	229	59	3	1322
4:15 PM	4	30	269	63	1	1	101	343	69	5	1	35	123	12	1	7	92	206	41	5	1397
4:30 PM	5	22	223	43	1	2	107	307	74	0	2	53	147	20	1	9	92	249	64	2	1419
4:45 PM	2	25	223	53	3	0	104	347	59	2	5	49	139	26	0	4	79	237	47	2	1399
5:00 PM	1	32	268	47	1	0	123	416	89	1	2	57	133	23	1	9	97	226	40	5	1563
5:15 PM	3	26	233	47	0	1	101	314	76	0	5	69	158	25	0	10	116	261	45	2	1490
5:30 PM	4	22	234	39	1	1	108	365	78	1	2	36	157	13	2	9	74	218	50	3	1410
5:45 PM	2	32	206	45	2	0	96	283	54	3	2	32	134	21	1	12	61	215	30	2	1225
Total	22	212	1,849	383	10	5	856	2,677	551	12	26	377	1,125	156	8	72	697	1,841	376	24	11,225

*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total")

Peak Hour Summary

4:30 PM to 5:30 PM

Data Type	C St (Northbound)					C St (Southbound)					Tudor Rd (Eastbound)					Tudor Rd (Westbound)					Peak Hour Total
	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	
Volume	11	105	947	190	5	3	435	1384	298	3	14	228	577	94	2	32	384	973	196	11	5871
%HV	0.0%	0.0%	4.4%	1.1%		0.0%	1.1%	3.0%	1.0%		0.0%	1.8%	0.9%	2.1%		0.0%	2.3%	0.8%	2.6%		2.2%
PHF	0.55	0.82	0.88	0.90	0.42	0.38	0.88	0.83	0.84	0.38	0.70	0.83	0.91	0.90	0.50	0.80	0.83	0.93	0.77	0.55	0.94
Volume			1253					2120					913					1585			5871
%HV			3.5%					2.4%					1.2%					1.4%			2.2%
PHF			0.90					0.84					0.89					0.92			0.94



Traffic Camera Count and Placement Information

Intersection Name: A St & Fireweed Ln

Intersection Location	
Northbound Street	A St
Southbound Street	A St
Eastbound Street	Fireweed Ln
Westbound Street	Fireweed Ln
City, State	Anchorage, AK

Project Information	
Name	Midtown Congestion Relief
Client	AK DOT&PF
Project #	1124.62458.01, Phase 02
PM/Traffic Lead	Steve Noble/Brad Coy

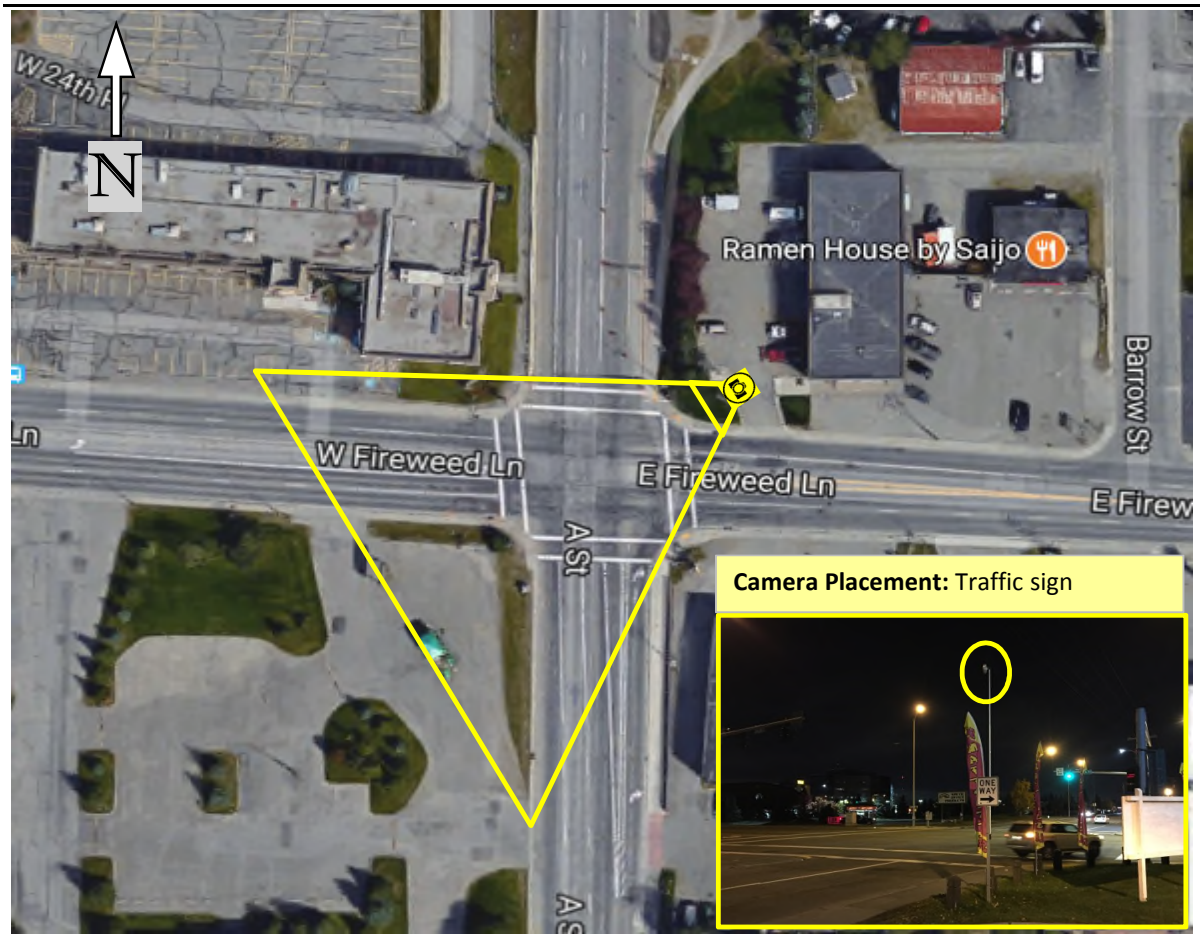
Count Description (e.g., day(s) of week, time periods, other related counts also occuring, etc.)

1 weekday (Tue, Wed, or Thu); AM/PM peak periods are priority, but midday is also desirable; do at same time as A St corridor

Camera Setup/Video Footage	
Staff Responsible	Brad Coy
Setup Time	10/12/2017 6:45 AM
Take Down Time	10/12/2017 8:50 PM
Duration (hours)	14.08
Camera # (2-digit)	79

Count Date, Time, Vendor	
Date	10/12/2017 (Thursday)
Start Time	7:00 AM
End Time	7:30 PM
Duration (hours)	12.50
Count Vendor	CountingCars.com

Camera Placement



Other Notes (Before, During, or After Count)

DOWL

Turning Movement Count

A St & Fireweed Ln

Total Vehicles (15-Minute Periods)

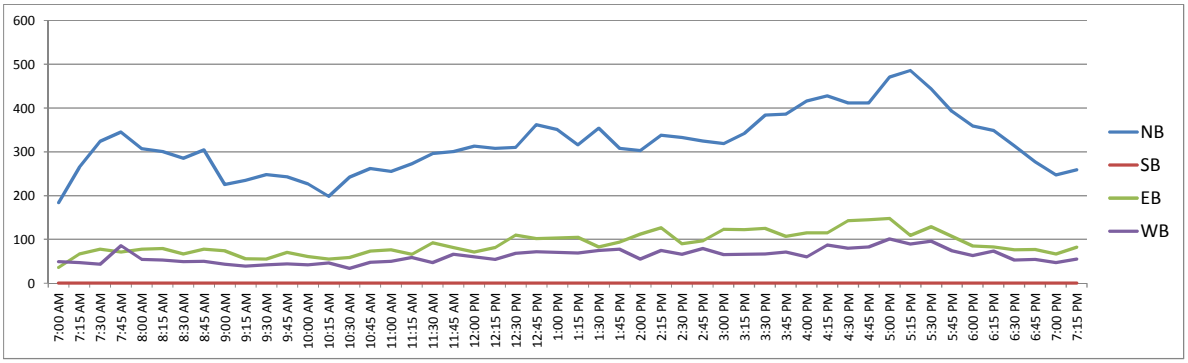
All Data

Thursday, October 12, 2017

7:00 AM to 7:30 PM

Start Time	A St (Northbound)					A St (Southbound)					Fireweed Ln (Eastbound)					Fireweed Ln (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
7:00 AM	0	15	148	21	0	0	0	0	0	0	1	7	28	0	0	0	0	36	13	0	269
7:15 AM	0	16	229	20	2	0	0	0	0	0	0	15	52	0	0	0	0	27	20	1	379
7:30 AM	0	18	272	34	0	0	0	0	0	2	0	17	61	0	0	0	0	30	13	1	445
7:45 AM	0	25	284	36	0	0	0	0	0	3	1	14	56	0	0	0	0	52	34	3	502
8:00 AM	0	22	256	29	1	0	0	0	0	1	0	17	61	0	0	0	0	29	25	1	439
8:15 AM	0	18	241	42	0	0	0	0	0	0	1	8	70	0	0	0	0	37	16	0	433
8:30 AM	0	19	245	21	0	0	0	0	0	0	0	12	55	0	0	0	0	35	14	0	401
8:45 AM	0	25	239	40	0	0	0	0	0	0	0	12	66	0	1	0	0	29	21	0	432
9:00 AM	0	18	185	22	1	0	0	0	0	0	0	17	57	0	0	0	0	27	16	2	342
9:15 AM	0	23	192	20	0	0	0	0	0	0	1	7	48	0	0	0	0	23	16	1	330
9:30 AM	0	24	203	21	0	0	0	0	0	1	1	7	47	0	0	0	0	27	15	1	345
9:45 AM	0	16	190	37	0	0	0	0	0	0	0	19	51	0	0	0	0	25	19	2	357
10:00 AM	0	24	183	20	0	0	0	0	0	0	1	16	44	0	0	0	0	24	18	0	330
10:15 AM	0	16	159	23	0	0	0	0	0	0	1	15	39	0	0	0	0	32	14	1	299
10:30 AM	0	24	194	24	1	0	0	0	0	1	2	5	52	0	0	0	0	26	8	2	335
10:45 AM	0	21	201	40	1	0	0	0	0	1	0	9	64	0	0	0	0	31	17	0	383
11:00 AM	0	23	200	32	0	0	0	0	0	0	0	16	60	0	0	0	0	33	17	1	381
11:15 AM	0	28	214	31	2	0	0	0	0	1	0	10	56	0	1	0	0	45	14	0	398
11:30 AM	0	19	238	39	0	0	0	0	0	0	0	14	78	0	0	0	0	30	17	2	435
11:45 AM	0	37	221	43	0	0	0	0	0	0	0	16	65	0	1	0	0	50	16	0	448
12:00 PM	0	30	240	43	0	0	0	0	0	0	0	8	63	0	1	0	0	45	15	4	444
12:15 PM	0	35	223	50	1	0	0	0	0	0	2	15	64	0	0	0	0	39	15	2	443
12:30 PM	0	31	228	51	1	0	0	0	0	5	3	14	93	0	0	0	0	47	21	3	488
12:45 PM	0	36	280	46	1	0	0	0	0	0	3	19	80	0	0	0	0	40	32	1	536
1:00 PM	0	39	277	35	0	0	0	0	0	0	0	11	92	0	3	0	0	46	24	1	524
1:15 PM	0	32	236	48	1	0	0	0	0	2	1	18	86	0	1	0	0	50	19	3	490
1:30 PM	0	37	266	51	1	0	0	0	0	1	1	13	69	0	1	0	0	54	21	1	512
1:45 PM	0	37	237	34	0	0	0	0	0	3	0	16	78	0	1	0	0	57	21	1	480
2:00 PM	0	28	229	46	0	0	0	0	0	0	0	20	92	0	0	0	0	45	10	4	470
2:15 PM	0	29	270	39	0	0	0	0	0	1	1	17	109	0	1	0	0	59	16	1	540
2:30 PM	0	23	268	42	0	0	0	0	0	0	0	12	78	0	0	0	0	56	10	2	489
2:45 PM	0	21	259	45	1	0	0	0	0	0	1	16	80	0	0	0	0	60	19	0	501
3:00 PM	0	31	243	45	4	0	0	0	0	0	0	24	99	0	3	0	0	46	19	0	507
3:15 PM	0	34	282	26	0	0	0	0	0	1	0	23	99	0	0	0	0	50	16	0	530
3:30 PM	0	40	303	41	0	0	0	0	0	1	1	25	99	0	0	0	0	42	25	1	576
3:45 PM	0	25	317	44	0	0	0	0	0	1	0	17	90	0	0	0	0	50	21	3	564
4:00 PM	0	33	350	33	0	0	0	0	0	1	0	19	96	0	1	0	0	39	21	4	591
4:15 PM	0	39	344	45	0	0	0	0	0	2	0	24	91	0	1	0	0	57	30	4	630
4:30 PM	0	44	320	48	3	0	0	0	0	2	1	27	115	0	0	0	0	58	22	2	635
4:45 PM	0	39	329	44	0	0	0	0	0	0	0	17	128	0	0	0	0	61	22	1	640
5:00 PM	0	42	381	48	0	0	0	0	0	3	1	35	112	0	0	0	0	75	26	0	720
5:15 PM	0	41	397	48	1	0	0	0	0	1	1	17	91	0	0	0	0	61	28	1	684
5:30 PM	0	34	358	52	0	0	0	0	0	0	1	21	107	0	0	0	0	64	32	3	669
5:45 PM	0	31	326	36	1	0	0	0	0	1	0	25	82	0	1	0	0	50	24	0	574
6:00 PM	0	28	284	47	1	0	0	0	0	5	0	19	66	0	0	0	0	42	21	0	507
6:15 PM	0	33	271	45	0	0	0	0	0	0	1	14	68	0	0	0	0	49	24	3	505
6:30 PM	0	18	268	28	0	0	0	0	0	0	0	11	65	0	1	0	0	36	17	1	443
6:45 PM	0	22	230	25	0	0	0	0	0	0	1	6	70	0	0	0	0	41	13	2	408
7:00 PM	0	18	206	23	0	0	0	0	0	1	0	8	59	0	0	0	0	32	15	1	361
7:15 PM	0	23	196	40	0	0	0	0	0	0	1	12	69	0	0	0	0	34	21	1	396
Total	0	1,384	12,712	1,843	24	0	0	0	0	41	29	776	3,700	0	18	0	0	2,133	963	68	23,540

*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total" or graph below)





Turning Movement Count

A St & Fireweed Ln

Heavy Vehicles (15-Minute Periods)

All Data

Thursday, October 12, 2017

7:00 AM to 7:30 PM

Start Time	A St (Northbound)				A St (Southbound)				Fireweed Ln (Eastbound)				Fireweed Ln (Westbound)				Period Total (Veh)
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	
7:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	4	1	6
7:15 AM	0	0	6	1	0	0	0	0	0	0	1	0	0	0	0	0	8
7:30 AM	0	1	13	1	0	0	0	0	0	2	2	0	0	0	0	0	19
7:45 AM	0	2	12	0	0	0	0	0	0	0	2	0	0	0	1	0	17
8:00 AM	0	0	13	1	0	0	0	0	0	0	2	0	0	0	0	1	17
8:15 AM	0	0	11	2	0	0	0	0	0	2	5	0	0	0	0	1	21
8:30 AM	0	2	21	1	0	0	0	0	0	1	2	0	0	0	1	0	28
8:45 AM	0	0	10	1	0	0	0	0	0	0	3	0	0	0	3	0	17
9:00 AM	0	1	7	0	0	0	0	0	0	0	3	0	0	0	0	0	11
9:15 AM	0	3	10	1	0	0	0	0	0	0	1	0	0	0	0	0	15
9:30 AM	0	3	19	1	0	0	0	0	0	0	0	0	0	0	0	1	24
9:45 AM	0	1	12	2	0	0	0	0	0	0	2	0	0	0	0	1	18
10:00 AM	0	1	13	0	0	0	0	0	0	1	2	0	0	0	1	0	18
10:15 AM	0	1	12	0	0	0	0	0	0	0	2	0	0	0	1	0	16
10:30 AM	0	1	13	2	0	0	0	0	0	0	3	0	0	0	2	0	21
10:45 AM	0	1	12	1	0	0	0	0	0	3	1	0	0	0	1	0	19
11:00 AM	0	0	7	0	0	0	0	0	0	1	1	0	0	0	1	0	10
11:15 AM	0	1	9	0	0	0	0	0	0	1	1	0	0	0	1	0	13
11:30 AM	0	2	11	2	0	0	0	0	0	1	5	0	0	0	0	0	21
11:45 AM	0	1	7	1	0	0	0	0	0	0	1	0	0	0	1	0	11
12:00 PM	0	0	11	0	0	0	0	0	0	0	1	0	0	0	1	0	13
12:15 PM	0	2	10	1	0	0	0	0	0	0	1	0	0	0	0	0	14
12:30 PM	0	1	13	2	0	0	0	0	0	0	1	0	0	0	1	1	19
12:45 PM	0	1	10	0	0	0	0	0	0	0	0	0	0	0	1	0	12
1:00 PM	0	3	18	1	0	0	0	0	0	0	2	0	0	0	0	0	24
1:15 PM	0	0	10	2	0	0	0	0	0	1	3	0	0	0	1	0	17
1:30 PM	0	1	9	0	0	0	0	0	0	2	2	0	0	0	0	0	14
1:45 PM	0	0	17	0	0	0	0	0	0	0	0	0	0	0	0	0	17
2:00 PM	0	0	15	1	0	0	0	0	0	0	3	0	0	0	1	0	20
2:15 PM	0	1	16	0	0	0	0	0	0	1	4	0	0	0	1	1	24
2:30 PM	0	1	17	0	0	0	0	0	0	0	0	0	0	0	1	0	19
2:45 PM	0	1	14	0	0	0	0	0	0	0	1	0	0	0	3	1	20
3:00 PM	0	1	9	0	0	0	0	0	0	1	1	0	0	0	0	0	12
3:15 PM	0	1	12	1	0	0	0	0	0	0	2	0	0	0	1	1	18
3:30 PM	0	3	9	1	0	0	0	0	0	2	2	0	0	0	2	0	19
3:45 PM	0	0	14	0	0	0	0	0	0	3	3	0	0	0	2	1	23
4:00 PM	0	1	15	1	0	0	0	0	0	0	4	0	0	0	1	0	22
4:15 PM	0	0	14	0	0	0	0	0	0	1	3	0	0	0	1	2	21
4:30 PM	0	0	5	0	0	0	0	0	0	0	1	0	0	0	0	0	6
4:45 PM	0	0	6	0	0	0	0	0	0	0	1	0	0	0	1	0	8
5:00 PM	0	0	6	0	0	0	0	0	0	1	0	0	0	0	0	0	7
5:15 PM	0	1	6	1	0	0	0	0	0	0	2	0	0	0	0	1	11
5:30 PM	0	0	3	0	0	0	0	0	0	0	2	0	0	0	0	0	5
5:45 PM	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
6:00 PM	0	0	3	0	0	0	0	0	0	0	0	0	0	0	1	0	4
6:15 PM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
6:30 PM	0	0	2	0	0	0	0	0	0	0	2	0	0	0	0	0	4
6:45 PM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	1	0	3
7:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
7:15 PM	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Total	0	39	494	28	0	0	0	0	0	24	81	0	0	0	37	13	716

DOWL

Turning Movement Count

A St & Fireweed Ln

Total Vehicles (15-Minute Periods)

AM Peak Hour

Thursday, October 12, 2017

7:00 AM to 9:00 AM

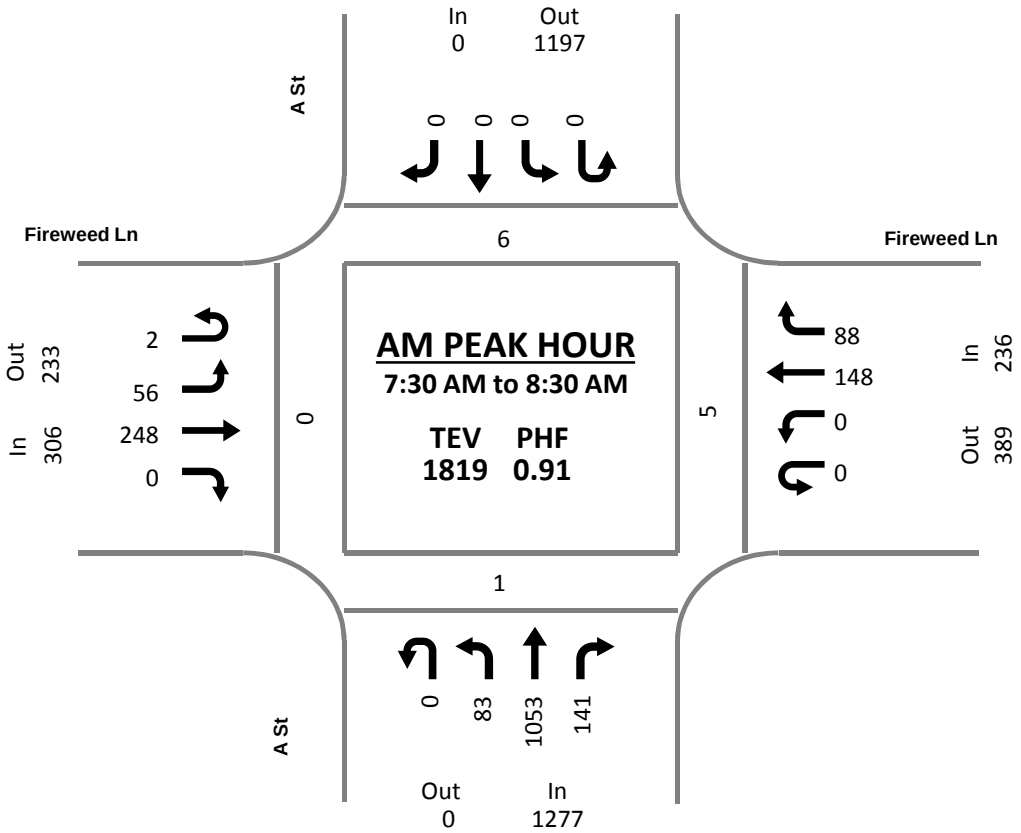
Start Time	A St (Northbound)					A St (Southbound)					Fireweed Ln (Eastbound)					Fireweed Ln (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
7:00 AM	0	15	148	21	0	0	0	0	0	0	1	7	28	0	0	0	0	36	13	0	269
7:15 AM	0	16	229	20	2	0	0	0	0	0	0	15	52	0	0	0	0	27	20	1	379
7:30 AM	0	18	272	34	0	0	0	0	0	2	0	17	61	0	0	0	0	30	13	1	445
7:45 AM	0	25	284	36	0	0	0	0	0	3	1	14	56	0	0	0	0	52	34	3	502
8:00 AM	0	22	256	29	1	0	0	0	0	1	0	17	61	0	0	0	0	29	25	1	439
8:15 AM	0	18	241	42	0	0	0	0	0	0	1	8	70	0	0	0	0	37	16	0	433
8:30 AM	0	19	245	21	0	0	0	0	0	0	0	12	55	0	0	0	0	35	14	0	401
8:45 AM	0	25	239	40	0	0	0	0	0	0	0	12	66	0	1	0	0	29	21	0	432
Total	0	158	1,914	243	3	0	0	0	0	6	3	102	449	0	1	0	0	275	156	6	3,300

*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Peak Total")

Peak Hour Summary

7:30 AM to 8:30 AM

Data Type	A St (Northbound)					A St (Southbound)					Fireweed Ln (Eastbound)					Fireweed Ln (Westbound)					Peak Hour Total
	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	
Volume	0	83	1053	141	1	0	0	0	0	6	2	56	248	0	0	0	0	148	88	5	1819
%HV	0.0%	3.6%	4.7%	2.8%		0.0%	0.0%	0.0%	0.0%		0.0%	7.1%	4.4%	0.0%		0.0%	0.0%	0.7%	2.3%		4.1%
PHF	0.00	0.83	0.93	0.84	0.25	0.00	0.00	0.00	0.00	0.50	0.50	0.82	0.89	0.00	0.00	0.00	0.00	0.71	0.65	0.42	0.91
Volume			1277					0					306					236			1819
%HV			4.4%					0.0%					4.9%					1.3%			4.1%
PHF			0.93					0.00					0.97					0.69			0.91



Turning Movement Count

A St & Fireweed Ln

Total Vehicles (15-Minute Periods)

PM Peak Hour

Thursday, October 12, 2017

4:00 PM to 6:00 PM

Start Time	A St (Northbound)					A St (Southbound)					Fireweed Ln (Eastbound)					Fireweed Ln (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
4:00 PM	0	33	350	33	0	0	0	0	0	1	0	19	96	0	1	0	0	39	21	4	591
4:15 PM	0	39	344	45	0	0	0	0	0	2	0	24	91	0	1	0	0	57	30	4	630
4:30 PM	0	44	320	48	3	0	0	0	0	2	1	27	115	0	0	0	0	58	22	2	635
4:45 PM	0	39	329	44	0	0	0	0	0	0	0	17	128	0	0	0	0	61	22	1	640
5:00 PM	0	42	381	48	0	0	0	0	0	3	1	35	112	0	0	0	0	75	26	0	720
5:15 PM	0	41	397	48	1	0	0	0	0	1	1	17	91	0	0	0	0	61	28	1	684
5:30 PM	0	34	358	52	0	0	0	0	0	0	1	21	107	0	0	0	0	64	32	3	669
5:45 PM	0	31	326	36	1	0	0	0	0	1	0	25	82	0	1	0	0	50	24	0	574
Total	0	303	2,805	354	5	0	0	0	0	10	4	185	822	0	3	0	0	465	205	15	5,143

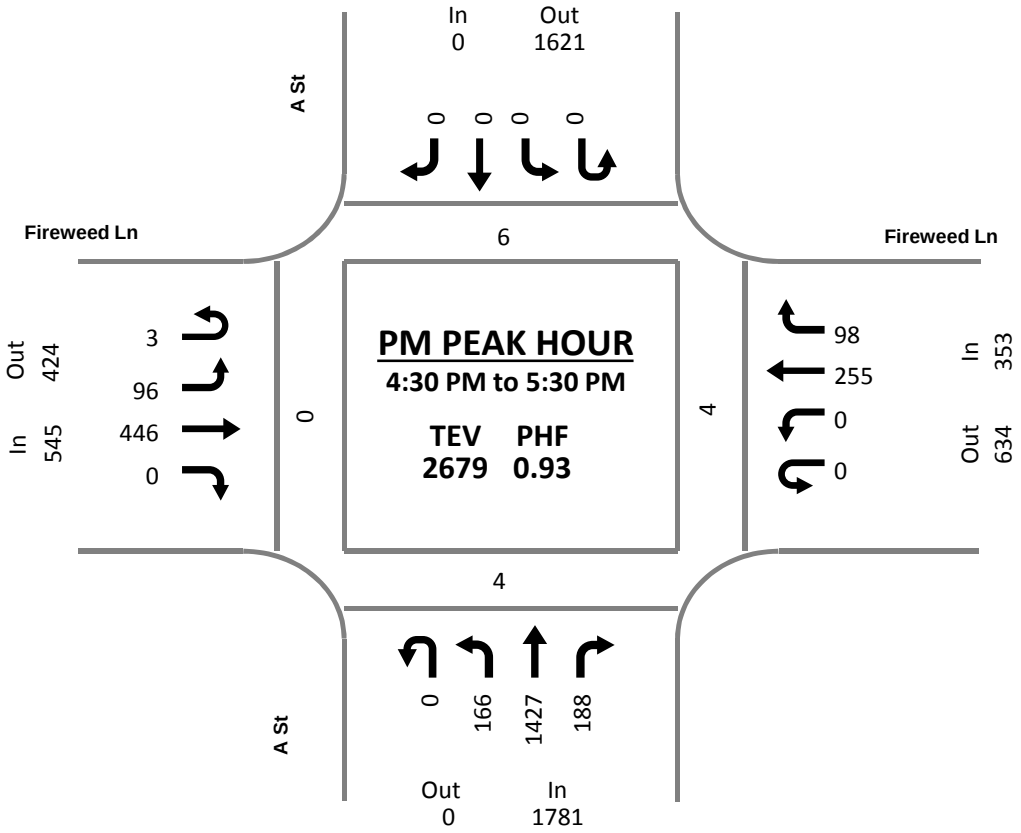
*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total")

Peak Hour Summary (System Peak*)

4:30 PM to 5:30 PM

Data Type	A St (Northbound)					A St (Southbound)					Fireweed Ln (Eastbound)					Fireweed Ln (Westbound)					Peak Hour Total
	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	
Volume	0	166	1427	188	4	0	0	0	0	6	3	96	446	0	0	0	0	255	98	4	2679
%HV	0.0%	0.6%	1.6%	0.5%		0.0%	0.0%	0.0%	0.0%		0.0%	1.0%	0.9%	0.0%		0.0%	0.0%	0.4%	1.0%		1.2%
PHF	0.00	0.94	0.90	0.98	0.33	0.00	0.00	0.00	0.00	0.50	0.75	0.69	0.87	0.00	0.00	0.00	0.00	0.85	0.88	0.50	0.93
Volume			1781					0					545					353			2679
%HV			1.4%					0.0%					0.9%					0.6%			1.2%
PHF			0.92					0.00					0.92					0.87			0.93

*System Peak is based on comparison of other study area counts rather than highest total entering volume at this intersection.



Traffic Camera Count and Placement Information

Intersection Name: A St & Northern Lights Blvd

Intersection Location	
Northbound Street	A St
Southbound Street	N/A
Eastbound Street	N/A
Westbound Street	Northern Lights Blvd
City, State	Anchorage, AK

Project Information	
Name	Midtown Congestion Relief
Client	AK DOT&PF
Project #	1124.62458.01, Phase 02
PM/Traffic Lead	Steve Noble/Brad Coy

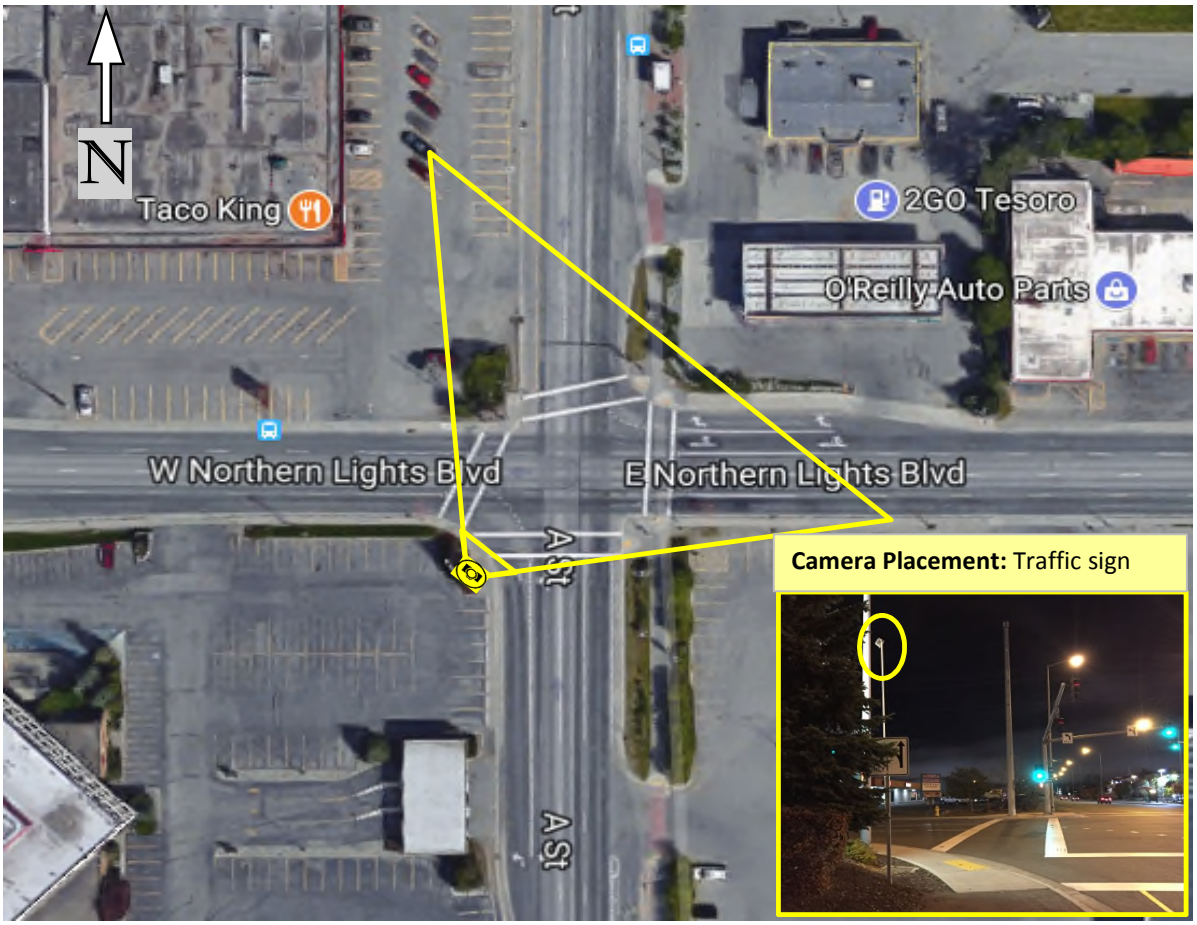
Count Description (e.g., day(s) of week, time periods, other related counts also occuring, etc.)

1 weekday (Tue, Wed, or Thu); AM/PM peak periods are priority, but midday is also desirable; do at same time as A St corridor

Camera Setup/Video Footage	
Staff Responsible	Brad Coy
Setup Time	10/12/2017 6:28 AM
Take Down Time	10/12/2017 9:15 PM
Duration (hours)	14.78
Camera # (2-digit)	a1

Count Date, Time, Vendor	
Date	10/12/2017 (Thursday)
Start Time	6:30 AM
End Time	7:30 PM
Duration (hours)	13.00
Count Vendor	CountingCars.com

Camera Placement



Other Notes (Before, During, or After Count)

DOWL

Turning Movement Count

A St & Northern Lights Blvd

Total Vehicles (15-Minute Periods)

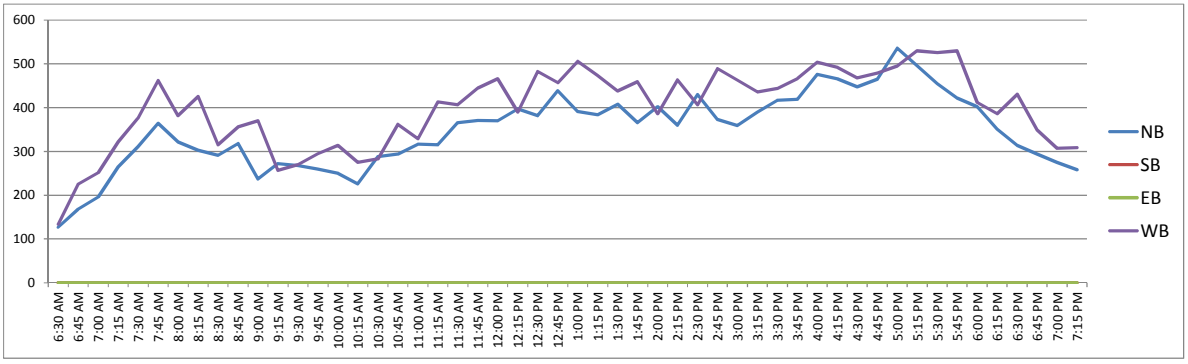
All Data

Thursday, October 12, 2017

6:30 AM to 7:30 PM

Start Time	A St (Northbound)					N/A (Southbound)					N/A (Eastbound)					Northern Lights Blvd (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
6:30 AM	0	13	114	0	1	0	0	0	0	2	0	0	0	0	0	0	0	107	27	2	261
6:45 AM	0	10	158	0	0	0	0	0	0	0	0	0	0	0	0	0	0	196	29	0	393
7:00 AM	0	29	167	0	0	0	0	0	0	1	0	0	0	0	1	0	0	208	44	1	448
7:15 AM	0	42	223	0	0	0	0	0	0	0	0	0	0	0	0	0	0	272	50	2	587
7:30 AM	0	27	284	0	0	0	0	0	0	0	0	0	0	0	0	0	0	304	72	2	687
7:45 AM	0	43	321	0	0	0	0	0	0	3	0	0	0	0	0	0	0	393	69	6	826
8:00 AM	0	47	275	0	0	0	0	0	0	1	0	0	0	0	0	0	0	321	61	4	704
8:15 AM	0	54	249	0	2	0	0	0	0	5	0	0	0	0	0	0	0	359	67	0	729
8:30 AM	0	40	251	0	0	0	0	0	0	1	0	0	0	0	0	0	0	267	48	2	606
8:45 AM	0	54	264	0	1	0	0	0	0	0	0	0	0	0	0	0	0	298	58	6	674
9:00 AM	0	41	196	0	2	0	0	0	0	0	0	0	0	0	0	0	0	322	48	1	607
9:15 AM	0	47	225	0	0	0	0	0	0	0	0	0	0	0	0	0	0	222	35	0	529
9:30 AM	0	47	221	0	0	0	0	0	0	3	0	0	0	0	0	0	0	235	35	2	538
9:45 AM	0	56	204	0	1	0	0	0	0	1	0	0	0	0	0	0	0	247	48	3	555
10:00 AM	0	55	195	0	0	0	0	0	0	1	0	0	0	0	0	0	0	274	40	1	564
10:15 AM	0	53	173	0	1	0	0	0	0	1	0	0	0	0	0	0	0	254	21	0	501
10:30 AM	0	68	220	0	1	0	0	0	0	5	0	0	0	0	0	0	0	249	34	2	571
10:45 AM	0	62	232	0	0	0	0	0	0	3	0	0	0	0	2	0	0	310	52	2	656
11:00 AM	0	77	240	0	1	0	0	0	0	0	0	0	0	0	0	0	0	299	30	3	646
11:15 AM	0	89	226	0	1	0	0	0	0	6	0	0	0	0	0	0	0	367	46	14	728
11:30 AM	0	107	259	0	1	0	0	0	0	3	0	0	0	0	2	0	0	355	52	1	773
11:45 AM	0	107	264	0	2	0	0	0	0	2	0	0	0	0	1	0	0	391	54	1	816
12:00 PM	0	110	260	0	7	0	0	0	0	2	0	0	0	0	1	0	0	416	50	3	836
12:15 PM	0	109	288	0	2	0	0	0	0	1	0	0	0	0	1	0	0	344	46	4	787
12:30 PM	0	117	265	0	2	0	0	0	0	2	0	0	0	0	0	0	0	424	59	2	865
12:45 PM	0	117	322	0	0	0	0	0	0	0	0	0	0	0	0	0	0	392	65	1	896
1:00 PM	0	101	290	0	0	0	0	0	0	5	0	0	0	0	1	0	0	445	61	1	897
1:15 PM	0	104	280	0	2	0	0	0	0	4	0	0	0	0	1	0	0	393	81	3	858
1:30 PM	0	115	293	0	0	0	0	0	0	4	0	0	0	0	0	0	0	380	58	4	846
1:45 PM	0	102	264	0	1	0	0	0	0	7	0	0	0	0	2	0	0	398	61	5	825
2:00 PM	0	106	296	0	2	0	0	0	0	4	0	0	0	0	0	0	0	341	45	7	788
2:15 PM	0	70	290	0	1	0	0	0	0	2	0	0	0	0	1	0	0	406	58	2	824
2:30 PM	0	113	317	0	0	0	0	0	0	6	0	0	0	0	0	0	0	360	47	5	837
2:45 PM	0	102	271	0	4	0	0	0	0	0	0	0	0	0	2	0	1	422	66	5	862
3:00 PM	0	72	287	0	6	0	0	0	0	2	0	0	0	0	0	0	0	408	55	11	822
3:15 PM	0	84	306	0	8	0	0	0	0	2	0	0	0	0	1	0	0	387	49	5	826
3:30 PM	0	100	317	0	1	0	0	0	0	1	0	0	0	0	1	0	0	379	65	1	861
3:45 PM	0	98	321	0	2	0	0	0	0	5	0	0	0	0	0	0	0	408	59	7	886
4:00 PM	0	104	372	0	0	0	0	0	0	1	0	0	0	0	0	0	0	432	72	5	980
4:15 PM	0	108	358	0	0	0	0	0	0	2	0	0	0	0	1	0	0	432	60	5	958
4:30 PM	0	94	354	0	1	0	0	0	0	2	0	0	0	0	2	0	0	409	59	1	916
4:45 PM	0	97	368	0	2	0	0	0	0	1	0	0	0	0	1	0	0	428	51	1	944
5:00 PM	0	117	419	0	2	0	0	0	0	1	0	0	0	0	0	0	0	439	56	0	1031
5:15 PM	0	104	392	0	1	0	0	0	0	2	0	0	0	0	0	0	0	460	70	4	1026
5:30 PM	0	88	367	0	4	0	0	0	0	2	0	0	0	0	0	0	0	463	63	5	981
5:45 PM	0	97	325	0	3	0	0	0	0	0	0	0	0	0	0	0	0	470	60	1	952
6:00 PM	0	71	331	0	2	0	0	0	0	2	0	0	0	0	1	0	0	362	50	2	814
6:15 PM	0	70	281	0	1	0	0	0	0	0	0	0	0	0	0	0	0	344	42	1	737
6:30 PM	0	55	259	0	0	0	0	0	0	3	0	0	0	0	0	0	0	368	63	4	745
6:45 PM	0	62	232	0	2	0	0	0	0	2	0	0	0	0	1	0	0	305	44	3	643
7:00 PM	0	56	219	0	2	0	0	0	0	2	0	0	0	0	1	0	0	267	40	3	582
7:15 PM	0	42	216	0	0	0	0	0	0	2	0	0	0	0	1	0	0	267	42	2	567
Total	0	3,953	14,121	0	72	0	0	0	0	107	0	0	0	0	25	0	1	17,999	2,717	158	38,791

*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total" or graph below)





Turning Movement Count

A St & Northern Lights Blvd

Heavy Vehicles (15-Minute Periods)

All Data

Thursday, October 12, 2017

6:30 AM to 7:30 PM

Start Time	A St (Northbound)				N/A (Southbound)				N/A (Eastbound)				Northern Lights Blvd (Westbound)				Period Total (Veh)
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	
6:30 AM	0	2	4	0	0	0	0	0	0	0	0	0	0	0	2	0	8
6:45 AM	0	2	5	0	0	0	0	0	0	0	0	0	0	0	2	1	10
7:00 AM	0	3	2	0	0	0	0	0	0	0	0	0	0	0	1	0	6
7:15 AM	0	5	9	0	0	0	0	0	0	0	0	0	0	0	3	0	17
7:30 AM	0	1	15	0	0	0	0	0	0	0	0	0	0	0	5	0	21
7:45 AM	0	0	15	0	0	0	0	0	0	0	0	0	0	0	2	0	17
8:00 AM	0	4	12	0	0	0	0	0	0	0	0	0	0	0	2	2	20
8:15 AM	0	2	12	0	0	0	0	0	0	0	0	0	0	0	2	0	16
8:30 AM	0	0	18	0	0	0	0	0	0	0	0	0	0	0	2	1	21
8:45 AM	0	1	11	0	0	0	0	0	0	0	0	0	0	0	4	0	16
9:00 AM	0	0	7	0	0	0	0	0	0	0	0	0	0	0	6	1	14
9:15 AM	0	0	11	0	0	0	0	0	0	0	0	0	0	0	3	1	15
9:30 AM	0	0	14	0	0	0	0	0	0	0	0	0	0	0	2	2	18
9:45 AM	0	0	11	0	0	0	0	0	0	0	0	0	0	0	4	2	17
10:00 AM	0	2	13	0	0	0	0	0	0	0	0	0	0	0	4	0	19
10:15 AM	0	2	11	0	0	0	0	0	0	0	0	0	0	0	5	0	18
10:30 AM	0	3	14	0	0	0	0	0	0	0	0	0	0	0	4	0	21
10:45 AM	0	1	9	0	0	0	0	0	0	0	0	0	0	0	2	2	14
11:00 AM	0	0	6	0	0	0	0	0	0	0	0	0	0	0	5	0	11
11:15 AM	0	2	9	0	0	0	0	0	0	0	0	0	0	0	4	0	15
11:30 AM	0	0	13	0	0	0	0	0	0	0	0	0	0	0	8	0	21
11:45 AM	0	0	6	0	0	0	0	0	0	0	0	0	0	0	4	1	11
12:00 PM	0	3	9	0	0	0	0	0	0	0	0	0	0	0	2	0	14
12:15 PM	0	2	12	0	0	0	0	0	0	0	0	0	0	0	8	3	25
12:30 PM	0	1	13	0	0	0	0	0	0	0	0	0	0	0	2	1	17
12:45 PM	0	1	10	0	0	0	0	0	0	0	0	0	0	0	6	1	18
1:00 PM	0	0	16	0	0	0	0	0	0	0	0	0	0	0	11	1	28
1:15 PM	0	0	10	0	0	0	0	0	0	0	0	0	0	0	7	2	19
1:30 PM	0	1	9	0	0	0	0	0	0	0	0	0	0	0	11	1	22
1:45 PM	0	2	15	0	0	0	0	0	0	0	0	0	0	0	2	0	19
2:00 PM	0	3	15	0	0	0	0	0	0	0	0	0	0	0	7	1	26
2:15 PM	0	1	14	0	0	0	0	0	0	0	0	0	0	0	6	1	22
2:30 PM	0	1	14	0	0	0	0	0	0	0	0	0	0	0	5	2	22
2:45 PM	0	1	13	0	0	0	0	0	0	0	0	0	0	0	8	0	22
3:00 PM	0	0	9	0	0	0	0	0	0	0	0	0	0	0	7	2	18
3:15 PM	0	2	13	0	0	0	0	0	0	0	0	0	0	0	1	2	18
3:30 PM	0	3	10	0	0	0	0	0	0	0	0	0	0	0	1	0	14
3:45 PM	0	0	14	0	0	0	0	0	0	0	0	0	0	0	4	1	19
4:00 PM	0	0	14	0	0	0	0	0	0	0	0	0	0	0	2	2	18
4:15 PM	0	1	14	0	0	0	0	0	0	0	0	0	0	0	1	0	16
4:30 PM	0	0	4	0	0	0	0	0	0	0	0	0	0	0	2	1	7
4:45 PM	0	2	8	0	0	0	0	0	0	0	0	0	0	0	2	0	12
5:00 PM	0	0	6	0	0	0	0	0	0	0	0	0	0	0	2	0	8
5:15 PM	0	0	8	0	0	0	0	0	0	0	0	0	0	0	1	0	9
5:30 PM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	1	0	3
5:45 PM	0	0	4	0	0	0	0	0	0	0	0	0	0	0	2	0	6
6:00 PM	0	0	3	0	0	0	0	0	0	0	0	0	0	0	3	0	6
6:15 PM	0	1	2	0	0	0	0	0	0	0	0	0	0	0	1	0	4
6:30 PM	0	0	3	0	0	0	0	0	0	0	0	0	0	0	4	0	7
6:45 PM	0	0	3	0	0	0	0	0	0	0	0	0	0	0	1	0	4
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 PM	0	0	4	0	0	0	0	0	0	0	0	0	0	0	2	0	6
Total	0	55	498	0	0	0	0	0	0	0	0	0	0	0	188	34	775

Turning Movement Count

A St & Northern Lights Blvd

Total Vehicles (15-Minute Periods)

AM Peak Hour

Thursday, October 12, 2017

7:00 AM to 9:00 AM

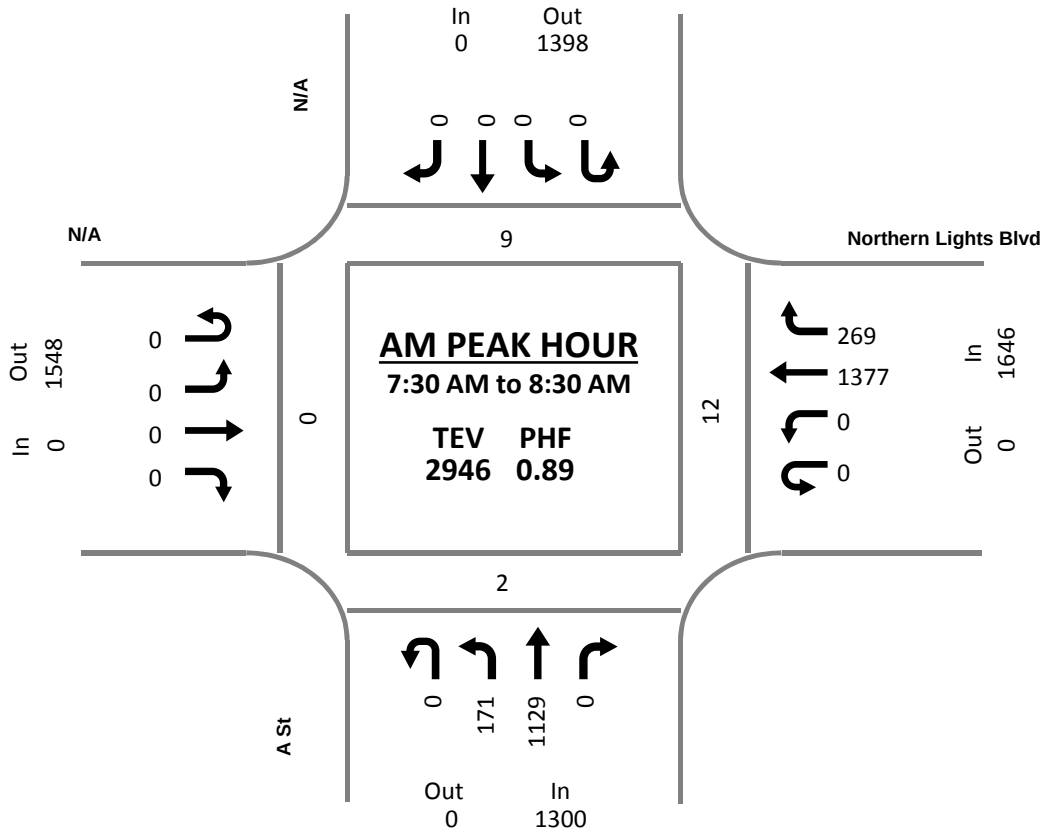
Start Time	A St (Northbound)					N/A (Southbound)					N/A (Eastbound)					Northern Lights Blvd (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
7:00 AM	0	29	167	0	0	0	0	0	0	1	0	0	0	0	1	0	0	208	44	1	448
7:15 AM	0	42	223	0	0	0	0	0	0	0	0	0	0	0	0	0	0	272	50	2	587
7:30 AM	0	27	284	0	0	0	0	0	0	0	0	0	0	0	0	0	0	304	72	2	687
7:45 AM	0	43	321	0	0	0	0	0	0	3	0	0	0	0	0	0	0	393	69	6	826
8:00 AM	0	47	275	0	0	0	0	0	0	1	0	0	0	0	0	0	0	321	61	4	704
8:15 AM	0	54	249	0	2	0	0	0	0	5	0	0	0	0	0	0	0	359	67	0	729
8:30 AM	0	40	251	0	0	0	0	0	0	1	0	0	0	0	0	0	0	267	48	2	606
8:45 AM	0	54	264	0	1	0	0	0	0	0	0	0	0	0	0	0	0	298	58	6	674
Total	0	336	2,034	0	3	0	0	0	0	11	0	0	0	0	1	0	0	2,422	469	23	5,261

*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total")

Peak Hour Summary

7:30 AM to 8:30 AM

Data Type	A St (Northbound)					N/A (Southbound)					N/A (Eastbound)					Northern Lights Blvd (Westbound)					Peak Hour Total
	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	
Volume	0	171	1129	0	2	0	0	0	0	9	0	0	0	0	0	0	0	1377	269	12	2946
%HV	0.0%	4.1%	4.8%	0.0%		0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.8%	0.7%		2.5%
PHF	0.00	0.79	0.88	0.00	0.25	0.00	0.00	0.00	0.00	0.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.88	0.93	0.50	0.89
Volume			1300					0					0					1646			2946
%HV			4.7%					0.0%					0.0%					0.8%			2.5%
PHF			0.89					0.00					0.00					0.89			0.89



Turning Movement Count

A St & Northern Lights Blvd

Total Vehicles (15-Minute Periods)

PM Peak Hour

Thursday, October 12, 2017

4:00 PM to 6:00 PM

Start Time	A St (Northbound)					N/A (Southbound)					N/A (Eastbound)					Northern Lights Blvd (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
4:00 PM	0	104	372	0	0	0	0	0	0	1	0	0	0	0	0	0	0	432	72	5	980
4:15 PM	0	108	358	0	0	0	0	0	0	2	0	0	0	0	1	0	0	432	60	5	958
4:30 PM	0	94	354	0	1	0	0	0	0	2	0	0	0	0	2	0	0	409	59	1	916
4:45 PM	0	97	368	0	2	0	0	0	0	1	0	0	0	0	1	0	0	428	51	1	944
5:00 PM	0	117	419	0	2	0	0	0	0	1	0	0	0	0	0	0	0	439	56	0	1031
5:15 PM	0	104	392	0	1	0	0	0	0	2	0	0	0	0	0	0	0	460	70	4	1026
5:30 PM	0	88	367	0	4	0	0	0	0	2	0	0	0	0	0	0	0	463	63	5	981
5:45 PM	0	97	325	0	3	0	0	0	0	0	0	0	0	0	0	0	0	470	60	1	952
Total	0	809	2,955	0	13	0	0	0	0	11	0	0	0	0	4	0	0	3,533	491	22	7,788

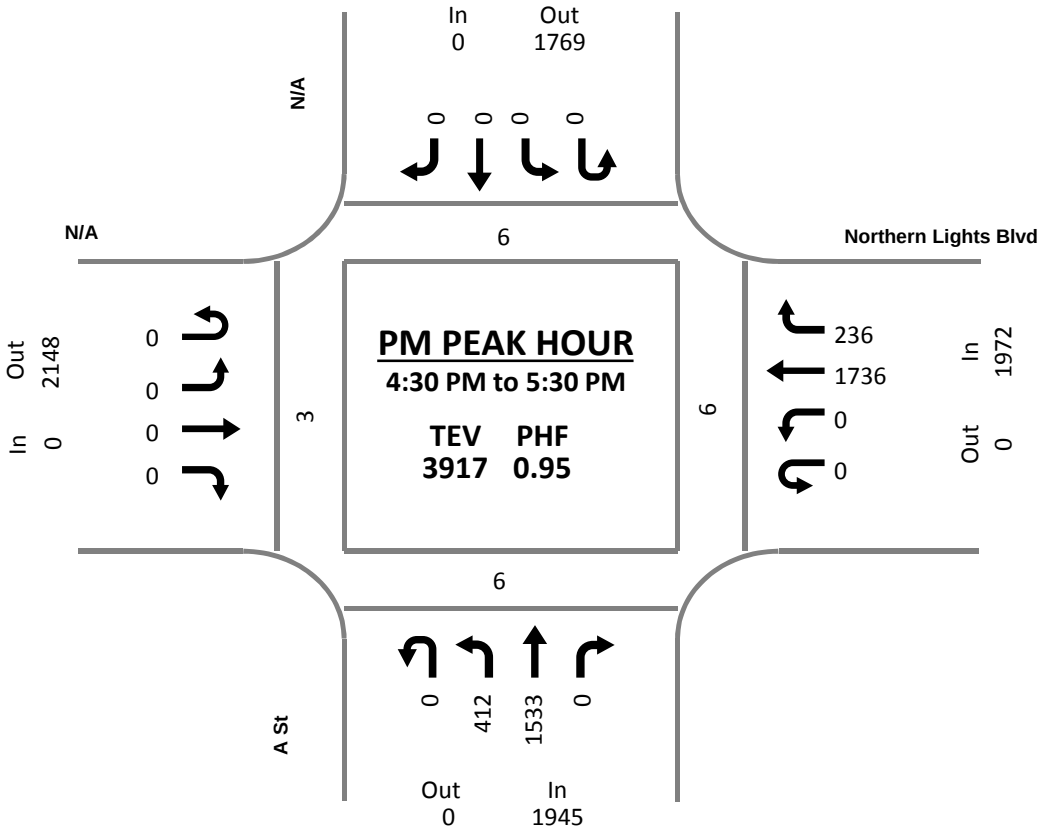
*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total")

Peak Hour Summary (System Peak*)

4:30 PM to 5:30 PM

Data Type	A St (Northbound)					N/A (Southbound)					N/A (Eastbound)					Northern Lights Blvd (Westbound)					Peak Hour Total
	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	
Volume	0	412	1533	0	6	0	0	0	0	6	0	0	0	0	3	0	0	1736	236	6	3917
%HV	0.0%	0.5%	1.7%	0.0%		0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.4%	0.4%		0.9%
PHF	0.00	0.88	0.91	0.00	0.75	0.00	0.00	0.00	0.00	0.75	0.00	0.00	0.00	0.00	0.38	0.00	0.00	0.94	0.84	0.38	0.95
Volume			1945					0					0					1972			3917
%HV			1.4%					0.0%					0.0%					0.4%			0.9%
PHF			0.91					0.00					0.00					0.93			0.95

*System Peak is based on comparison of other study area counts rather than highest total entering volume at this intersection.



Traffic Camera Count and Placement Information

Intersection Name: A St & Benson Blvd

Intersection Location	
Northbound Street	A St
Southbound Street	N/A
Eastbound Street	Benson Blvd
Westbound Street	N/A
City, State	Anchorage, AK

Project Information	
Name	Midtown Congestion Relief
Client	AK DOT&PF
Project #	1124.62458.01, Phase 02
PM/Traffic Lead	Steve Noble/Brad Coy

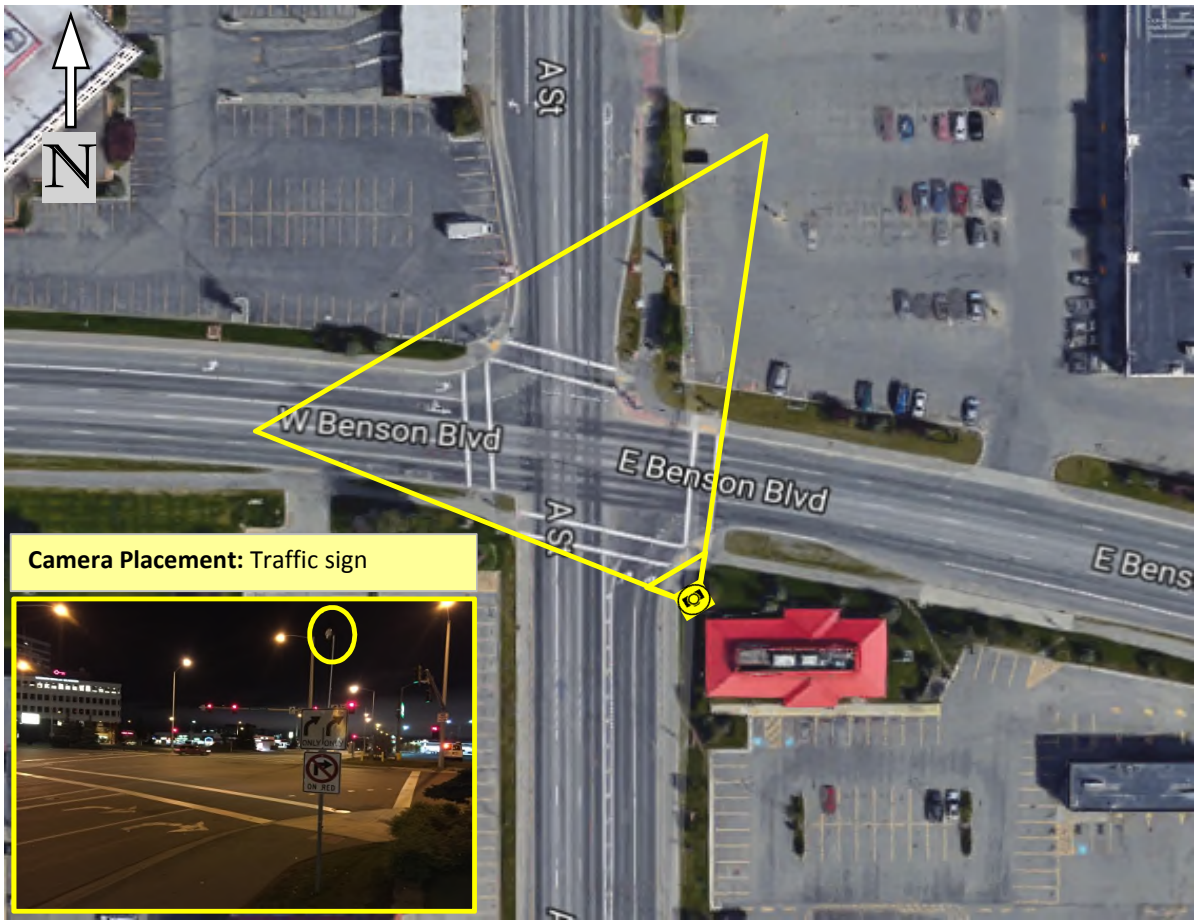
Count Description (e.g., day(s) of week, time periods, other related counts also occuring, etc.)

1 weekday (Tue, Wed, or Thu); AM/PM peak periods are priority, but midday is also desirable; do at same time as A St corridor

Camera Setup/Video Footage	
Staff Responsible	Brad Coy
Setup Time	10/12/2017 6:17 AM
Take Down Time	10/12/2017 9:00 PM
Duration (hours)	14.72
Camera # (2-digit)	c3

Count Date, Time, Vendor	
Date	10/12/2017 (Thursday)
Start Time	6:30 AM
End Time	7:30 PM
Duration (hours)	13.00
Count Vendor	CountingCars.com

Camera Placement



Other Notes (Before, During, or After Count)

Turning Movement Count

A St & Benson Blvd

Total Vehicles (15-Minute Periods)

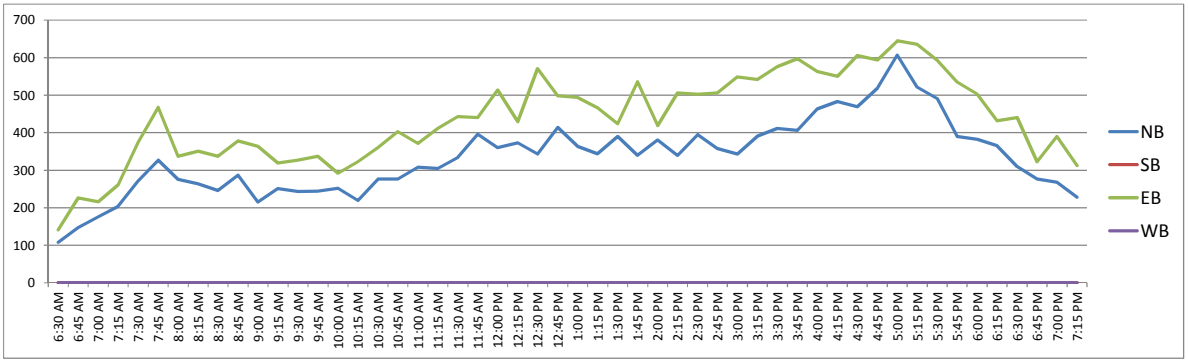
All Data

Thursday, October 12, 2017

6:30 AM to 7:30 PM

Start Time	A St (Northbound)					N/A (Southbound)					Benson Blvd (Eastbound)					N/A (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
6:30 AM	0	0	96	12	1	0	0	0	0	0	0	27	114	0	0	0	0	0	0	4	249
6:45 AM	0	0	132	15	0	0	0	0	0	0	0	35	191	0	0	0	0	0	0	0	373
7:00 AM	0	0	157	19	0	0	0	0	0	1	0	42	174	0	0	0	0	0	0	0	392
7:15 AM	0	0	184	20	0	0	0	0	0	0	0	69	192	0	0	0	0	0	0	5	465
7:30 AM	0	0	236	35	1	0	0	0	0	0	0	79	295	0	0	0	0	0	0	3	645
7:45 AM	0	0	278	49	1	0	0	0	0	2	0	90	378	0	0	0	0	0	0	6	795
8:00 AM	0	0	247	29	4	0	0	0	0	0	0	59	278	0	0	0	0	0	0	5	613
8:15 AM	0	0	237	27	0	0	0	0	0	1	0	59	292	0	0	0	0	0	0	2	615
8:30 AM	0	0	207	39	0	0	0	0	0	1	0	77	260	0	0	0	0	0	0	2	583
8:45 AM	0	0	240	47	3	0	0	0	0	0	0	68	310	0	0	0	0	0	0	2	665
9:00 AM	0	0	179	36	1	0	0	0	0	2	0	62	302	0	1	0	0	0	0	0	579
9:15 AM	0	0	206	45	1	0	0	0	0	3	0	61	258	0	0	0	0	0	0	0	570
9:30 AM	0	0	198	45	2	0	0	0	0	3	0	61	266	0	2	0	0	0	0	2	570
9:45 AM	0	0	199	45	0	0	0	0	0	1	0	58	279	0	0	0	0	0	0	2	581
10:00 AM	0	0	199	53	2	0	0	0	0	1	0	50	242	0	0	0	0	0	0	0	544
10:15 AM	0	0	178	41	3	0	0	0	0	1	0	48	275	0	1	0	0	0	0	0	542
10:30 AM	0	0	227	50	2	0	0	0	0	2	0	53	307	0	2	0	0	0	0	1	637
10:45 AM	0	0	221	56	4	0	0	0	0	3	0	80	323	0	0	0	0	0	0	2	680
11:00 AM	0	0	244	64	4	0	0	0	0	0	0	54	317	0	0	0	0	0	0	3	679
11:15 AM	0	0	248	57	4	0	0	0	0	0	0	68	343	0	1	0	0	0	0	0	716
11:30 AM	0	0	271	63	1	0	0	0	0	1	0	80	363	0	0	0	0	0	0	6	777
11:45 AM	0	0	323	73	2	0	0	0	0	1	0	66	374	0	1	0	0	0	0	5	836
12:00 PM	0	0	296	64	0	0	0	0	0	1	0	91	423	0	2	0	0	0	0	0	874
12:15 PM	0	0	298	75	2	0	0	0	0	3	0	68	361	0	0	0	0	0	0	1	802
12:30 PM	0	0	278	65	5	0	0	0	0	1	0	117	454	0	1	0	0	0	0	4	914
12:45 PM	0	0	339	75	4	0	0	0	0	0	0	74	424	0	0	0	0	0	0	0	912
1:00 PM	0	0	295	69	5	0	0	0	0	0	0	89	405	0	1	0	0	0	0	2	858
1:15 PM	0	0	278	66	5	0	0	0	0	1	0	90	377	0	0	0	0	0	0	2	811
1:30 PM	0	0	330	60	4	0	0	0	0	2	0	74	350	0	2	0	0	0	0	2	814
1:45 PM	0	0	278	62	3	0	0	0	0	1	0	82	454	0	3	0	0	0	0	8	876
2:00 PM	0	0	309	72	2	0	0	0	0	1	0	62	357	0	0	0	0	0	0	3	800
2:15 PM	0	0	285	55	1	0	0	0	0	0	0	81	425	0	0	0	0	0	0	2	846
2:30 PM	0	0	332	63	1	0	0	0	0	1	0	86	417	0	0	0	0	0	0	2	898
2:45 PM	0	0	291	67	0	0	0	0	0	3	0	75	431	0	0	0	0	0	0	5	864
3:00 PM	0	0	268	75	3	0	0	0	0	2	0	72	477	0	1	0	0	0	0	3	892
3:15 PM	0	0	318	73	2	0	0	0	0	0	0	61	481	0	0	0	0	0	0	3	933
3:30 PM	0	0	328	83	3	0	0	0	0	3	0	94	482	0	0	0	0	0	0	2	987
3:45 PM	0	0	337	69	2	0	0	0	0	0	0	90	507	0	0	0	0	0	0	5	1003
4:00 PM	0	0	377	86	8	0	0	0	0	5	0	81	482	0	2	0	0	0	0	4	1026
4:15 PM	0	0	385	98	6	0	0	0	0	0	0	77	473	0	0	0	0	0	0	4	1033
4:30 PM	0	0	357	112	6	0	0	0	0	3	0	83	523	0	0	0	0	0	0	1	1075
4:45 PM	0	0	397	122	1	0	0	0	0	1	0	66	528	0	0	0	0	0	0	2	1113
5:00 PM	0	0	462	145	7	0	0	0	0	0	0	85	560	0	1	0	0	0	0	2	1252
5:15 PM	0	0	408	113	3	0	0	0	0	1	0	85	551	0	0	0	0	0	0	0	1157
5:30 PM	0	0	382	109	4	0	0	0	0	0	0	84	509	0	0	0	0	0	0	2	1084
5:45 PM	0	0	314	76	1	0	0	0	0	5	0	86	449	0	2	0	0	0	0	4	925
6:00 PM	0	0	308	74	3	0	0	0	0	1	0	77	426	0	0	0	0	0	0	5	885
6:15 PM	0	0	296	69	3	0	0	0	0	0	0	53	379	0	0	0	0	0	0	0	797
6:30 PM	0	0	251	59	0	0	0	0	0	2	0	66	374	0	0	0	0	0	0	2	750
6:45 PM	0	0	227	50	0	0	0	0	0	0	0	56	267	0	0	0	0	0	0	2	600
7:00 PM	0	0	229	39	1	0	0	0	0	2	0	53	337	0	0	0	0	0	0	3	658
7:15 PM	0	0	165	63	3	0	0	0	0	1	0	93	219	0	0	0	0	0	0	2	540
Total	0	0	14,125	3,228	124	0	0	0	0	63	0	3,697	19,035	0	23	0	0	0	0	127	40,085

*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total" or graph below)





Turning Movement Count

A St & Benson Blvd

Heavy Vehicles (15-Minute Periods)

All Data

Thursday, October 12, 2017

6:30 AM to 7:30 PM

Start Time	A St (Northbound)				N/A (Southbound)				Benson Blvd (Eastbound)				N/A (Westbound)				Period Total (Veh)
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	
6:30 AM	0	0	6	1	0	0	0	0	0	0	3	0	0	0	0	0	10
6:45 AM	0	0	7	0	0	0	0	0	0	0	5	0	0	0	0	0	12
7:00 AM	0	0	6	0	0	0	0	0	0	0	2	0	0	0	0	0	8
7:15 AM	0	0	12	2	0	0	0	0	0	0	2	0	0	0	0	0	16
7:30 AM	0	0	15	1	0	0	0	0	0	2	7	0	0	0	0	0	25
7:45 AM	0	0	16	0	0	0	0	0	0	0	2	0	0	0	0	0	18
8:00 AM	0	0	15	1	0	0	0	0	0	2	5	0	0	0	0	0	23
8:15 AM	0	0	14	1	0	0	0	0	0	1	5	0	0	0	0	0	21
8:30 AM	0	0	15	3	0	0	0	0	0	2	6	0	0	0	0	0	26
8:45 AM	0	0	12	1	0	0	0	0	0	2	2	0	0	0	0	0	17
9:00 AM	0	0	8	1	0	0	0	0	0	0	4	0	0	0	0	0	13
9:15 AM	0	0	11	1	0	0	0	0	0	3	4	0	0	0	0	0	19
9:30 AM	0	0	12	1	0	0	0	0	0	2	6	0	0	0	0	0	21
9:45 AM	0	0	10	1	0	0	0	0	0	2	4	0	0	0	0	0	17
10:00 AM	0	0	14	4	0	0	0	0	0	0	3	0	0	0	0	0	21
10:15 AM	0	0	10	1	0	0	0	0	0	3	9	0	0	0	0	0	23
10:30 AM	0	0	14	0	0	0	0	0	0	2	8	0	0	0	0	0	24
10:45 AM	0	0	11	0	0	0	0	0	0	1	4	0	0	0	0	0	16
11:00 AM	0	0	6	0	0	0	0	0	0	0	5	0	0	0	0	0	11
11:15 AM	0	0	8	1	0	0	0	0	0	1	2	0	0	0	0	0	12
11:30 AM	0	0	11	2	0	0	0	0	0	0	8	0	0	0	0	0	21
11:45 AM	0	0	6	0	0	0	0	0	0	1	5	0	0	0	0	0	12
12:00 PM	0	0	11	1	0	0	0	0	0	2	6	0	0	0	0	0	20
12:15 PM	0	0	15	0	0	0	0	0	0	0	2	0	0	0	0	0	17
12:30 PM	0	0	14	1	0	0	0	0	0	2	3	0	0	0	0	0	20
12:45 PM	0	0	9	0	0	0	0	0	0	2	2	0	0	0	0	0	13
1:00 PM	0	0	13	1	0	0	0	0	0	2	3	0	0	0	0	0	19
1:15 PM	0	0	9	1	0	0	0	0	0	2	1	0	0	0	0	0	13
1:30 PM	0	0	9	1	0	0	0	0	0	1	2	0	0	0	0	0	13
1:45 PM	0	0	16	2	0	0	0	0	0	1	5	0	0	0	0	0	24
2:00 PM	0	0	20	0	0	0	0	0	0	1	4	0	0	0	0	0	25
2:15 PM	0	0	16	2	0	0	0	0	0	1	2	0	0	0	0	0	21
2:30 PM	0	0	14	2	0	0	0	0	0	1	3	0	0	0	0	0	20
2:45 PM	0	0	13	2	0	0	0	0	0	3	7	0	0	0	0	0	25
3:00 PM	0	0	10	0	0	0	0	0	0	0	4	0	0	0	0	0	14
3:15 PM	0	0	15	1	0	0	0	0	0	2	3	0	0	0	0	0	21
3:30 PM	0	0	12	3	0	0	0	0	0	2	6	0	0	0	0	0	23
3:45 PM	0	0	13	1	0	0	0	0	0	2	5	0	0	0	0	0	21
4:00 PM	0	0	11	1	0	0	0	0	0	4	7	0	0	0	0	0	23
4:15 PM	0	0	14	0	0	0	0	0	0	1	8	0	0	0	0	0	23
4:30 PM	0	0	4	2	0	0	0	0	0	0	4	0	0	0	0	0	10
4:45 PM	0	0	10	1	0	0	0	0	0	0	3	0	0	0	0	0	14
5:00 PM	0	0	6	0	0	0	0	0	0	0	2	0	0	0	0	0	8
5:15 PM	0	0	10	1	0	0	0	0	0	1	6	0	0	0	0	0	18
5:30 PM	0	0	3	0	0	0	0	0	0	0	2	0	0	0	0	0	5
5:45 PM	0	0	4	0	0	0	0	0	0	0	1	0	0	0	0	0	5
6:00 PM	0	0	3	1	0	0	0	0	0	0	1	0	0	0	0	0	5
6:15 PM	0	0	3	0	0	0	0	0	0	0	1	0	0	0	0	0	4
6:30 PM	0	0	3	0	0	0	0	0	0	0	2	0	0	0	0	0	5
6:45 PM	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3
7:00 PM	0	0	1	0	0	0	0	0	0	0	4	0	0	0	0	0	5
7:15 PM	0	0	4	1	0	0	0	0	0	0	0	0	0	0	0	0	5
Total	0	0	527	47	0	0	0	0	0	54	200	0	0	0	0	0	828

Turning Movement Count

A St & Benson Blvd

Total Vehicles (15-Minute Periods)

AM Peak Hour

Thursday, October 12, 2017

7:00 AM to 9:00 AM

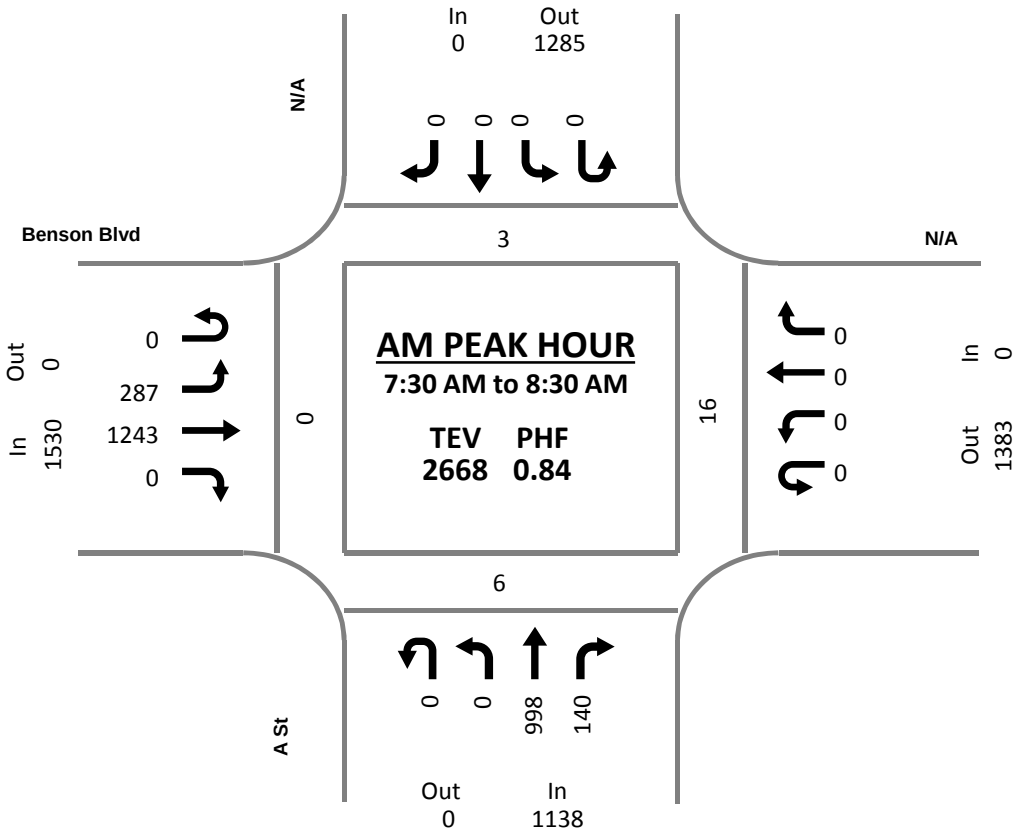
Start Time	A St (Northbound)					N/A (Southbound)					Benson Blvd (Eastbound)					N/A (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
7:00 AM	0	0	157	19	0	0	0	0	0	1	0	42	174	0	0	0	0	0	0	0	392
7:15 AM	0	0	184	20	0	0	0	0	0	0	0	69	192	0	0	0	0	0	0	5	465
7:30 AM	0	0	236	35	1	0	0	0	0	0	0	79	295	0	0	0	0	0	0	3	645
7:45 AM	0	0	278	49	1	0	0	0	0	2	0	90	378	0	0	0	0	0	0	6	795
8:00 AM	0	0	247	29	4	0	0	0	0	0	0	59	278	0	0	0	0	0	0	5	613
8:15 AM	0	0	237	27	0	0	0	0	0	1	0	59	292	0	0	0	0	0	0	2	615
8:30 AM	0	0	207	39	0	0	0	0	0	1	0	77	260	0	0	0	0	0	0	2	583
8:45 AM	0	0	240	47	3	0	0	0	0	0	0	68	310	0	0	0	0	0	0	2	665
Total	0	0	1,786	265	9	0	0	0	0	5	0	543	2,179	0	0	0	0	0	0	25	4,773

*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total")

Peak Hour Summary

7:30 AM to 8:30 AM

Data Type	A St (Northbound)					N/A (Southbound)					Benson Blvd (Eastbound)					N/A (Westbound)					Peak Hour Total
	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	
Volume	0	0	998	140	6	0	0	0	0	3	0	287	1243	0	0	0	0	0	0	16	2668
%HV	0.0%	0.0%	6.0%	2.1%		0.0%	0.0%	0.0%	0.0%		0.0%	1.7%	1.5%	0.0%		0.0%	0.0%	0.0%	0.0%		3.3%
PHF	0.00	0.00	0.90	0.71	0.38	0.00	0.00	0.00	0.00	0.38	0.00	0.80	0.82	0.00	0.00	0.00	0.00	0.00	0.00	0.67	0.84
Volume			1138					0					1530					0			2668
%HV			5.5%					0.0%					1.6%					0.0%			3.3%
PHF			0.87					0.00					0.82					0.00			0.84



Turning Movement Count

A St & Benson Blvd

Total Vehicles (15-Minute Periods)

PM Peak Hour

Thursday, October 12, 2017

4:00 PM to 6:00 PM

Start Time	A St (Northbound)					N/A (Southbound)					Benson Blvd (Eastbound)					N/A (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
4:00 PM	0	0	377	86	8	0	0	0	0	5	0	81	482	0	2	0	0	0	0	4	1026
4:15 PM	0	0	385	98	6	0	0	0	0	0	0	77	473	0	0	0	0	0	0	4	1033
4:30 PM	0	0	357	112	6	0	0	0	0	3	0	83	523	0	0	0	0	0	0	1	1075
4:45 PM	0	0	397	122	1	0	0	0	0	1	0	66	528	0	0	0	0	0	0	2	1113
5:00 PM	0	0	462	145	7	0	0	0	0	0	0	85	560	0	1	0	0	0	0	2	1252
5:15 PM	0	0	408	113	3	0	0	0	0	1	0	85	551	0	0	0	0	0	0	0	1157
5:30 PM	0	0	382	109	4	0	0	0	0	0	0	84	509	0	0	0	0	0	0	2	1084
5:45 PM	0	0	314	76	1	0	0	0	0	5	0	86	449	0	2	0	0	0	0	4	925
Total	0	0	3,082	861	36	0	0	0	0	15	0	647	4,075	0	5	0	0	0	0	19	8,665

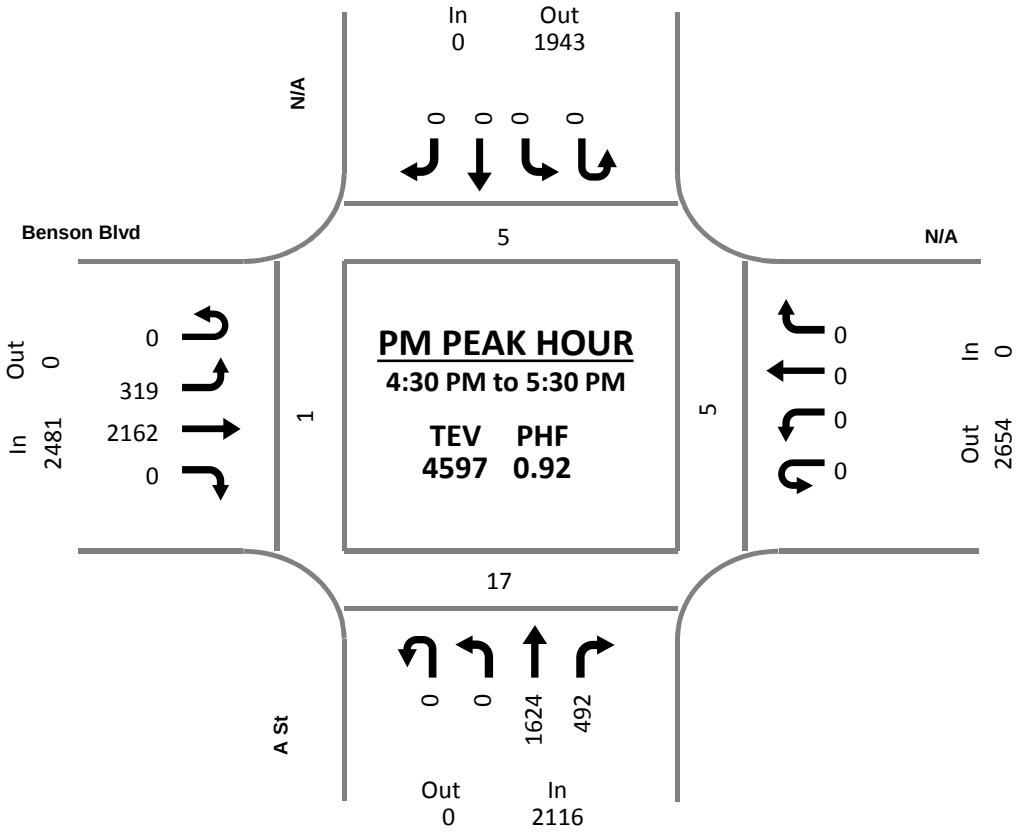
*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total")

Peak Hour Summary (System Peak*)

4:30 PM to 5:30 PM

Data Type	A St (Northbound)					N/A (Southbound)					Benson Blvd (Eastbound)					N/A (Westbound)					Peak Hour Total
	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	
Volume	0	0	1624	492	17	0	0	0	0	5	0	319	2162	0	1	0	0	0	0	5	4597
%HV	0.0%	0.0%	1.8%	0.8%		0.0%	0.0%	0.0%	0.0%		0.0%	0.3%	0.7%	0.0%		0.0%	0.0%	0.0%	0.0%		1.1%
PHF	0.00	0.00	0.88	0.85	0.61	0.00	0.00	0.00	0.00	0.42	0.00	0.94	0.97	0.00	0.25	0.00	0.00	0.00	0.00	0.63	0.92
Volume			2116					0					2481					0			4597
%HV			1.6%					0.0%					0.6%					0.0%			1.1%
PHF			0.87					0.00					0.96					0.00			0.92

*System Peak is based on comparison of other study area counts rather than highest total entering volume at this intersection.



Traffic Camera Count and Placement Information

Intersection Name: A St & 36th Ave

Intersection Location	
Northbound Street	A St
Southbound Street	N/A
Eastbound Street	36th Ave
Westbound Street	36th Ave
City, State	Anchorage, AK

Project Information	
Name	Midtown Congestion Relief
Client	AK DOT&PF
Project #	1124.62458.01, Phase 02
PM/Traffic Lead	Steve Noble/Brad Coy

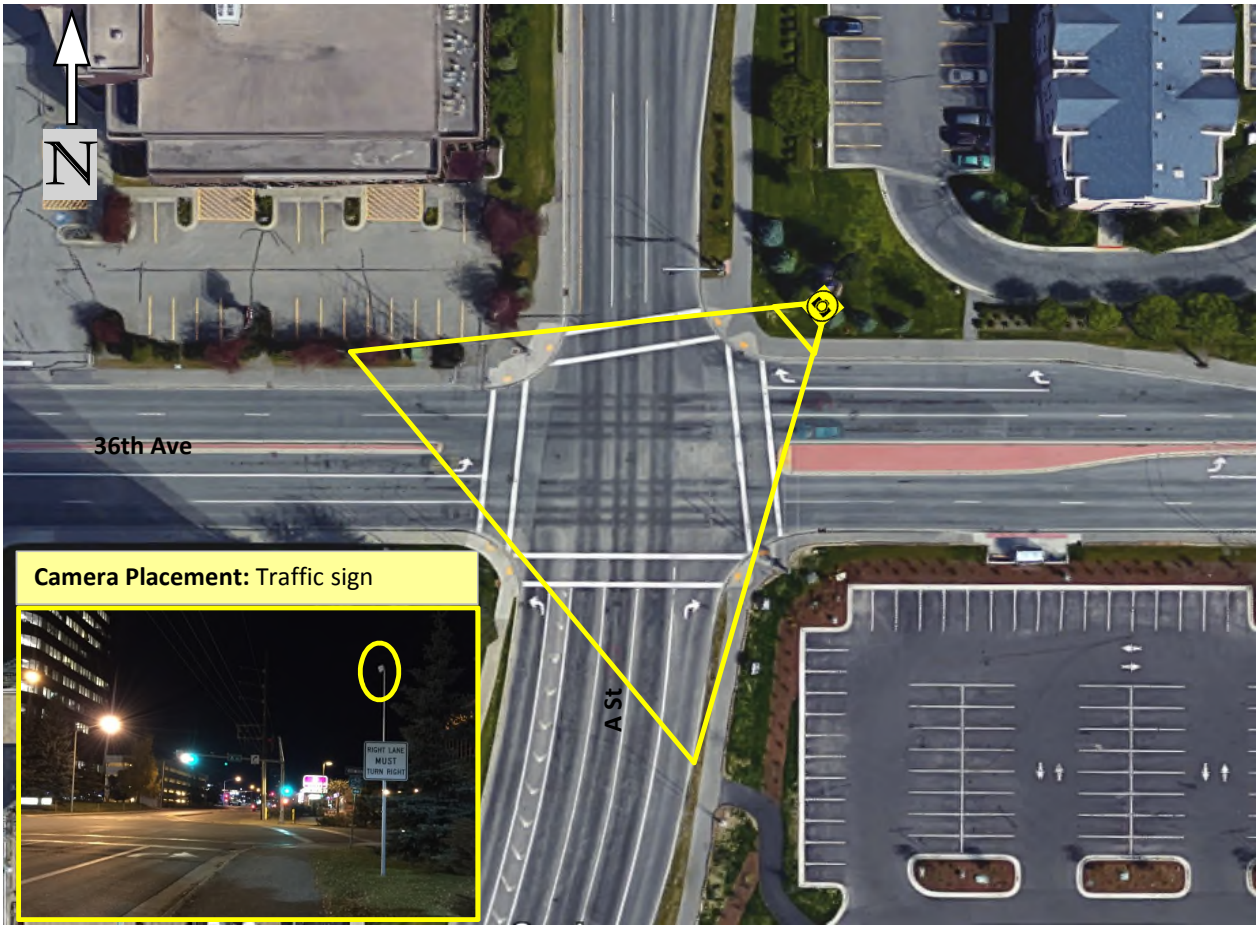
Count Description (e.g., day(s) of week, time periods, other related counts also occuring, etc.)

1 weekday (Tue, Wed, or Thu), with other 36th Ave intersections

Camera Setup/Video Footage	
Staff Responsible	Brad Coy
Setup Time	10/18/2017 6:29 AM
Take Down Time	10/18/2017 9:15 PM
Duration (hours)	14.77
Camera # (2-digit)	a1

Count Date, Time, Vendor	
Date	10/18/2017 (Wednesday)
Start Time	7:00 AM
End Time	8:00 PM
Duration (hours)	13.00
Count Vendor	CountingCars.com

Camera Placement



Other Notes (Before, During, or After Count)

DOWL

Turning Movement Count

A St & 36th Ave

Total Vehicles (15-Minute Periods)

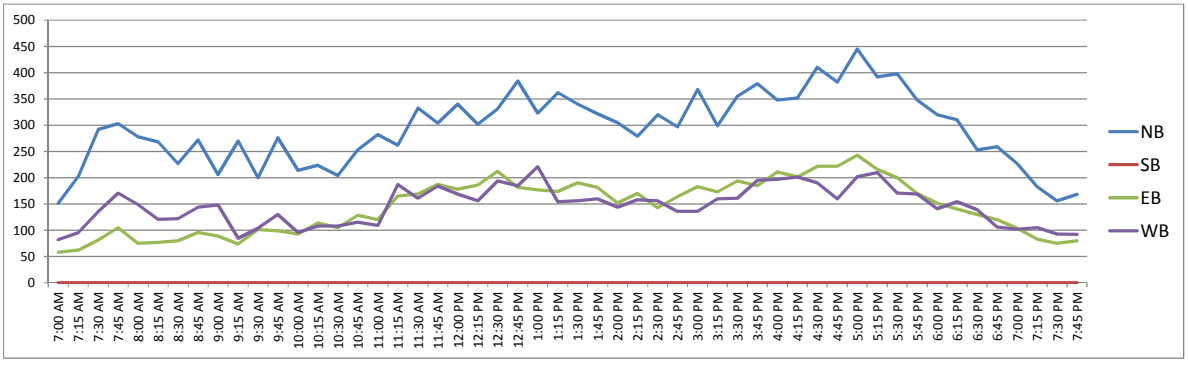
All Data

Wednesday, October 18, 2017

7:00 AM to 8:00 PM

Start Time	A St (Northbound)					N/A (Southbound)					36th Ave (Eastbound)					36th Ave (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
7:00 AM	0	4	135	12	0	0	0	0	0	1	0	4	54	0	0	0	0	57	25	0	291
7:15 AM	0	11	173	18	0	0	0	0	0	0	0	12	50	0	1	0	0	55	40	2	359
7:30 AM	0	14	254	24	0	0	0	0	0	0	0	15	67	0	0	0	0	86	50	0	510
7:45 AM	0	19	256	28	2	0	0	0	0	1	0	14	91	0	1	0	0	104	67	2	579
8:00 AM	0	18	235	25	1	0	0	0	0	1	0	14	61	0	2	0	0	93	56	1	502
8:15 AM	0	18	229	21	3	0	0	0	0	8	0	13	64	0	0	0	0	79	42	4	466
8:30 AM	0	13	193	21	0	0	0	0	0	3	0	13	67	0	0	0	0	79	43	1	429
8:45 AM	0	10	247	15	1	0	0	0	0	0	0	10	86	0	0	0	0	92	52	2	512
9:00 AM	0	14	175	17	0	0	0	0	0	0	0	18	71	0	0	0	0	102	46	0	443
9:15 AM	0	15	221	34	2	0	0	0	0	1	0	14	60	0	0	0	0	43	42	1	429
9:30 AM	0	15	161	24	2	0	0	0	0	4	0	14	87	0	0	0	0	70	34	1	405
9:45 AM	0	15	230	31	0	0	0	0	0	1	2	13	84	0	1	0	0	76	54	1	505
10:00 AM	0	5	182	27	3	0	0	0	0	0	0	25	68	0	0	0	0	65	31	0	403
10:15 AM	0	21	178	25	0	0	0	0	0	1	0	17	97	0	0	0	0	83	25	0	446
10:30 AM	0	11	174	19	5	0	0	0	0	1	2	19	84	0	0	0	0	68	40	2	417
10:45 AM	0	16	211	26	3	0	0	0	0	0	1	24	104	0	0	0	0	85	30	2	497
11:00 AM	0	20	235	27	4	0	0	0	0	4	0	22	98	0	1	0	0	70	39	3	511
11:15 AM	0	20	212	30	3	0	0	0	0	4	0	26	139	0	4	0	0	136	51	1	614
11:30 AM	0	29	267	37	3	0	0	0	0	0	1	21	147	0	0	0	0	113	48	3	663
11:45 AM	0	41	229	34	1	0	0	0	0	3	0	29	158	0	1	0	0	126	58	2	675
12:00 PM	0	31	267	42	9	0	0	0	0	2	0	41	137	0	2	0	0	112	57	2	687
12:15 PM	0	32	243	27	8	0	0	0	0	0	0	36	150	0	1	0	0	108	48	2	644
12:30 PM	0	25	269	37	6	0	0	0	0	3	0	43	169	0	1	0	0	152	42	0	737
12:45 PM	0	23	330	31	1	0	0	0	0	1	0	30	152	0	0	0	0	136	49	5	751
1:00 PM	0	30	263	30	10	0	0	0	0	3	0	26	151	0	2	0	0	163	58	2	721
1:15 PM	0	23	307	32	5	0	0	0	0	1	0	37	137	0	0	0	0	108	46	3	690
1:30 PM	0	24	282	34	7	0	0	0	0	2	0	37	153	0	2	0	0	113	43	6	686
1:45 PM	0	31	256	35	3	0	0	0	0	2	0	30	152	0	0	0	0	92	68	5	664
2:00 PM	0	26	255	24	1	0	0	0	0	1	0	27	125	0	2	0	0	90	54	0	601
2:15 PM	0	16	237	26	1	0	0	0	0	8	0	31	139	0	0	0	0	110	48	7	607
2:30 PM	0	22	266	32	1	0	0	0	0	3	0	29	114	0	0	0	0	105	51	6	619
2:45 PM	0	25	249	23	2	0	0	0	0	2	2	37	125	0	0	0	0	96	40	6	597
3:00 PM	0	21	317	30	2	0	0	0	0	1	2	32	149	0	0	0	0	90	46	0	687
3:15 PM	0	24	243	32	1	0	0	0	0	0	1	32	140	0	0	0	0	105	55	5	632
3:30 PM	0	25	292	38	9	0	0	0	0	0	0	36	158	0	1	0	0	122	39	4	710
3:45 PM	0	24	317	38	7	0	0	0	0	3	0	37	148	0	3	0	0	148	47	7	759
4:00 PM	0	28	288	32	3	0	0	0	0	6	0	55	156	0	2	0	0	132	65	3	756
4:15 PM	0	31	295	26	2	0	0	0	0	2	0	29	173	0	2	0	0	151	50	1	755
4:30 PM	0	35	340	35	3	0	0	0	0	3	0	45	177	0	0	0	0	127	63	4	822
4:45 PM	0	18	325	39	7	0	0	0	0	1	0	48	174	0	2	0	0	117	43	2	764
5:00 PM	0	34	375	36	6	0	0	0	0	0	0	60	183	0	2	0	0	136	66	3	890
5:15 PM	0	18	343	31	4	0	0	0	0	3	0	45	171	0	1	0	0	147	63	4	818
5:30 PM	0	25	334	39	3	0	0	0	0	0	0	46	154	0	4	0	0	120	51	3	769
5:45 PM	0	26	288	34	2	0	0	0	0	1	0	32	138	0	1	0	0	121	48	4	687
6:00 PM	0	26	267	27	1	0	0	0	0	2	0	23	128	0	0	0	0	98	43	0	612
6:15 PM	0	20	259	31	1	0	0	0	0	0	0	35	105	0	0	0	0	113	41	2	604
6:30 PM	0	16	210	27	4	0	0	0	0	1	0	21	109	0	0	0	0	96	43	1	522
6:45 PM	0	24	211	24	3	0	0	0	0	0	0	19	101	0	0	0	0	72	34	4	485
7:00 PM	0	13	192	22	1	0	0	0	0	2	0	24	80	0	0	0	0	65	37	2	433
7:15 PM	0	16	147	20	0	0	0	0	0	1	1	16	66	0	0	0	0	74	31	1	371
7:30 PM	0	13	131	12	1	0	0	0	0	2	0	22	53	0	0	0	0	63	30	2	324
7:45 PM	0	15	141	12	1	0	0	0	0	3	0	20	60	0	1	0	0	69	23	2	340
Total	0	1,089	12,736	1,453	148	0	0	0	0	92	12	1,418	6,064	0	40	0	0	5,233	2,395	126	30,400

*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total" or graph below)





Turning Movement Count

A St & 36th Ave

Heavy Vehicles (15-Minute Periods)

All Data

Wednesday, October 18, 2017

7:00 AM to 8:00 PM

Start Time	A St (Northbound)				N/A (Southbound)				36th Ave (Eastbound)				36th Ave (Westbound)				Period Total (Veh)
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	
7:00 AM	0	0	5	1	0	0	0	0	0	0	3	0	0	0	1	0	10
7:15 AM	0	0	4	0	0	0	0	0	0	0	0	0	0	0	1	2	7
7:30 AM	0	1	7	0	0	0	0	0	0	0	2	0	0	0	0	0	10
7:45 AM	0	1	18	0	0	0	0	0	0	0	2	0	0	0	2	0	23
8:00 AM	0	1	12	2	0	0	0	0	0	0	1	0	0	0	3	0	19
8:15 AM	0	1	21	1	0	0	0	0	0	1	0	0	0	0	2	1	27
8:30 AM	0	0	14	0	0	0	0	0	0	0	3	0	0	0	3	1	21
8:45 AM	0	0	10	0	0	0	0	0	0	0	3	0	0	0	2	0	15
9:00 AM	0	0	18	2	0	0	0	0	0	0	1	0	0	0	2	0	23
9:15 AM	0	0	9	0	0	0	0	0	0	0	0	0	0	0	2	1	12
9:30 AM	0	1	11	1	0	0	0	0	0	0	3	0	0	0	1	1	18
9:45 AM	0	0	18	0	0	0	0	0	0	0	1	0	0	0	2	1	22
10:00 AM	0	0	12	0	0	0	0	0	0	0	3	0	0	0	1	1	17
10:15 AM	0	0	15	2	0	0	0	0	0	0	1	0	0	0	2	1	21
10:30 AM	0	1	13	0	0	0	0	0	0	0	1	0	0	0	2	1	18
10:45 AM	0	1	11	1	0	0	0	0	0	0	5	0	0	0	3	2	23
11:00 AM	0	1	16	0	0	0	0	0	0	0	0	0	0	0	2	1	20
11:15 AM	0	0	19	0	0	0	0	0	0	0	2	0	0	0	2	1	24
11:30 AM	0	0	14	0	0	0	0	0	0	0	2	0	0	0	3	2	21
11:45 AM	0	2	11	0	0	0	0	0	0	0	1	0	0	0	1	0	15
12:00 PM	0	2	18	0	0	0	0	0	0	1	0	0	0	0	1	0	22
12:15 PM	0	0	10	0	0	0	0	0	0	1	0	0	0	0	1	1	13
12:30 PM	0	0	14	0	0	0	0	0	0	0	2	0	0	0	2	3	21
12:45 PM	0	1	12	1	0	0	0	0	0	0	1	0	0	0	2	0	17
1:00 PM	0	0	13	0	0	0	0	0	0	0	1	0	0	0	0	0	14
1:15 PM	0	0	13	0	0	0	0	0	0	0	0	0	0	0	2	2	17
1:30 PM	0	0	10	0	0	0	0	0	0	0	2	0	0	0	0	0	12
1:45 PM	0	0	10	1	0	0	0	0	0	0	3	0	0	0	2	0	16
2:00 PM	0	0	13	0	0	0	0	0	0	0	0	0	0	0	2	1	16
2:15 PM	0	0	7	0	0	0	0	0	0	0	1	0	0	0	1	1	10
2:30 PM	0	0	26	1	0	0	0	0	0	1	1	0	0	0	2	0	31
2:45 PM	0	0	13	0	0	0	0	0	0	0	5	0	0	0	4	0	22
3:00 PM	0	0	16	1	0	0	0	0	0	0	1	0	0	0	2	0	20
3:15 PM	0	0	5	0	0	0	0	0	0	0	3	0	0	0	1	3	12
3:30 PM	0	0	11	0	0	0	0	0	0	0	3	0	0	0	1	0	15
3:45 PM	0	0	17	1	0	0	0	0	0	0	3	0	0	0	2	2	25
4:00 PM	0	0	14	0	0	0	0	0	0	0	2	0	0	0	0	0	16
4:15 PM	0	0	11	0	0	0	0	0	0	0	1	0	0	0	2	3	17
4:30 PM	0	0	10	1	0	0	0	0	0	0	0	0	0	0	0	1	12
4:45 PM	0	0	14	0	0	0	0	0	0	0	1	0	0	0	0	1	16
5:00 PM	0	0	6	0	0	0	0	0	0	0	2	0	0	0	1	1	10
5:15 PM	0	0	9	0	0	0	0	0	0	0	1	0	0	0	0	1	11
5:30 PM	0	0	8	0	0	0	0	0	0	0	1	0	0	0	1	2	12
5:45 PM	0	0	8	0	0	0	0	0	0	1	1	0	0	0	0	2	12
6:00 PM	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	8
6:15 PM	0	0	6	0	0	0	0	0	0	0	0	0	0	0	1	1	8
6:30 PM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	1	0	3
6:45 PM	0	0	2	0	0	0	0	0	0	0	2	0	0	0	0	0	4
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1	3
7:30 PM	0	0	2	0	0	0	0	0	0	0	1	0	0	0	0	0	3
7:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
Total	0	13	567	16	0	0	0	0	0	5	73	0	0	0	69	42	785

Turning Movement Count

A St & 36th Ave

Total Vehicles (15-Minute Periods)

AM Peak Hour

Wednesday, October 18, 2017

7:00 AM to 9:00 AM

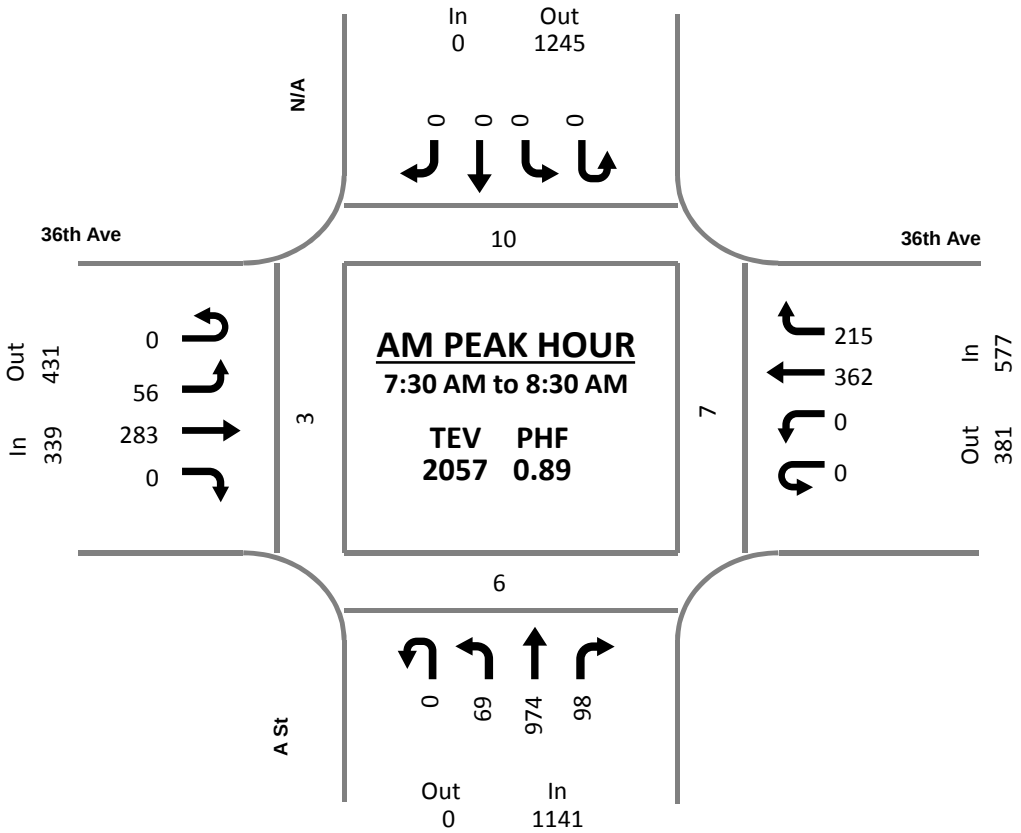
Start Time	A St (Northbound)					N/A (Southbound)					36th Ave (Eastbound)					36th Ave (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
7:00 AM	0	4	135	12	0	0	0	0	0	1	0	4	54	0	0	0	0	57	25	0	291
7:15 AM	0	11	173	18	0	0	0	0	0	0	0	12	50	0	1	0	0	55	40	2	359
7:30 AM	0	14	254	24	0	0	0	0	0	0	0	15	67	0	0	0	0	86	50	0	510
7:45 AM	0	19	256	28	2	0	0	0	0	1	0	14	91	0	1	0	0	104	67	2	579
8:00 AM	0	18	235	25	1	0	0	0	0	1	0	14	61	0	2	0	0	93	56	1	502
8:15 AM	0	18	229	21	3	0	0	0	0	8	0	13	64	0	0	0	0	79	42	4	466
8:30 AM	0	13	193	21	0	0	0	0	0	3	0	13	67	0	0	0	0	79	43	1	429
8:45 AM	0	10	247	15	1	0	0	0	0	0	0	10	86	0	0	0	0	92	52	2	512
Total	0	107	1,722	164	7	0	0	0	0	14	0	95	540	0	4	0	0	645	375	12	3,648

*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total")

Peak Hour Summary

7:30 AM to 8:30 AM

Data Type	A St (Northbound)					N/A (Southbound)					36th Ave (Eastbound)					36th Ave (Westbound)					Peak Hour Total
	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	
Volume	0	69	974	98	6	0	0	0	0	10	0	56	283	0	3	0	0	362	215	7	2057
%HV	0.0%	5.8%	6.0%	3.1%		0.0%	0.0%	0.0%	0.0%		0.0%	1.8%	1.8%	0.0%		0.0%	0.0%	1.9%	0.5%		3.8%
PHF	0.00	0.91	0.95	0.88	0.50	0.00	0.00	0.00	0.00	0.31	0.00	0.93	0.78	0.00	0.38	0.00	0.00	0.87	0.80	0.44	0.89
Volume			1141					0					339					577			2057
%HV			5.7%					0.0%					1.8%					1.4%			3.8%
PHF			0.94					0.00					0.81					0.84			0.89



Turning Movement Count

A St & 36th Ave

Total Vehicles (15-Minute Periods)

PM Peak Hour

Wednesday, October 18, 2017

4:00 PM to 6:00 PM

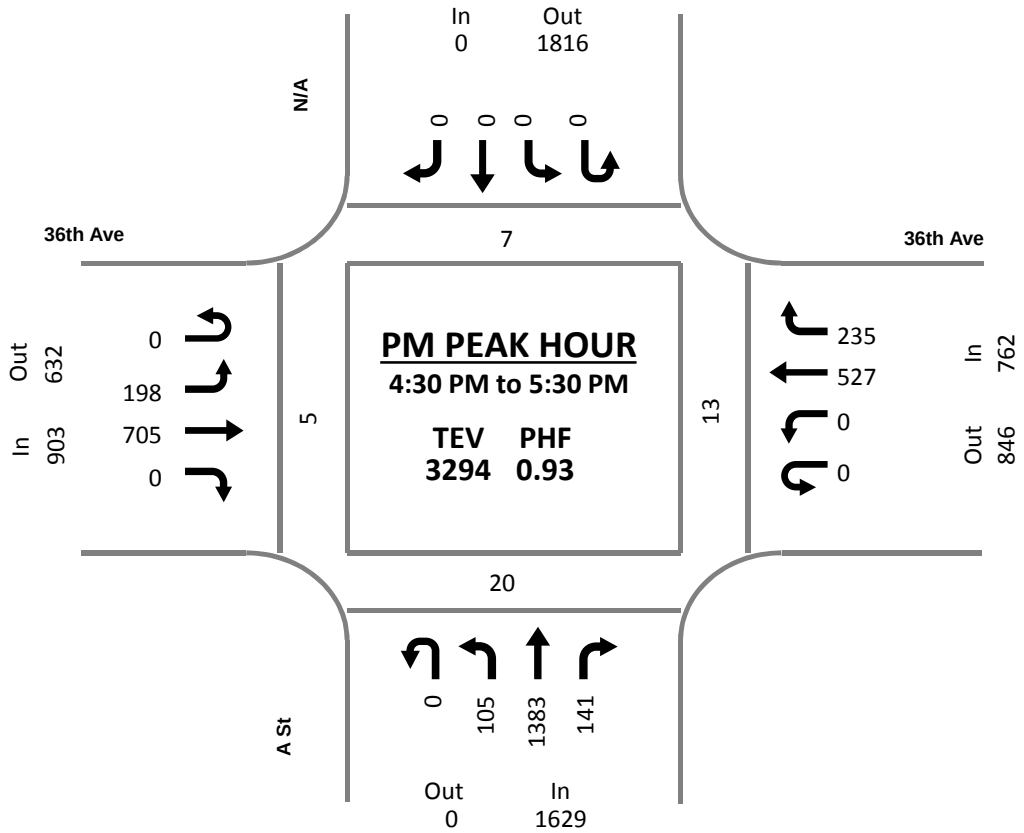
Start Time	A St (Northbound)					N/A (Southbound)					36th Ave (Eastbound)					36th Ave (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
4:00 PM	0	28	288	32	3	0	0	0	0	6	0	55	156	0	2	0	0	132	65	3	756
4:15 PM	0	31	295	26	2	0	0	0	0	2	0	29	173	0	2	0	0	151	50	1	755
4:30 PM	0	35	340	35	3	0	0	0	0	3	0	45	177	0	0	0	0	127	63	4	822
4:45 PM	0	18	325	39	7	0	0	0	0	1	0	48	174	0	2	0	0	117	43	2	764
5:00 PM	0	34	375	36	6	0	0	0	0	0	0	60	183	0	2	0	0	136	66	3	890
5:15 PM	0	18	343	31	4	0	0	0	0	3	0	45	171	0	1	0	0	147	63	4	818
5:30 PM	0	25	334	39	3	0	0	0	0	0	0	46	154	0	4	0	0	120	51	3	769
5:45 PM	0	26	288	34	2	0	0	0	0	1	0	32	138	0	1	0	0	121	48	4	687
Total	0	215	2,588	272	30	0	0	0	0	16	0	360	1,326	0	14	0	0	1,051	449	24	6,261

*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total")

Peak Hour Summary

4:30 PM to 5:30 PM

Data Type	A St (Northbound)					N/A (Southbound)					36th Ave (Eastbound)					36th Ave (Westbound)					Peak Hour Total
	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	
Volume	0	105	1383	141	20	0	0	0	0	7	0	198	705	0	5	0	0	527	235	13	3294
%HV	0.0%	0.0%	2.8%	0.7%		0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.6%	0.0%		0.0%	0.0%	0.2%	1.7%		1.5%
PHF	0.00	0.75	0.92	0.90	0.71	0.00	0.00	0.00	0.00	0.58	0.00	0.83	0.96	0.00	0.63	0.00	0.00	0.90	0.89	0.81	0.93
Volume			1629					0					903					762			3294
%HV			2.5%					0.0%					0.4%					0.7%			1.5%
PHF			0.92					0.00					0.93					0.91			0.93



Traffic Camera Count and Placement Information

Intersection Name: Fireweed Ln & Denali St

Intersection Location	
Northbound Street	Denali St
Southbound Street	N/A
Eastbound Street	Fireweed Ln
Westbound Street	Fireweed Ln
City, State	Anchorage, AK

Project Information	
Name	Midtown Congestion Relief
Client	AK DOT&PF
Project #	1124.62458.01, Phase 02
PM/Traffic Lead	Steve Noble/Brad Coy

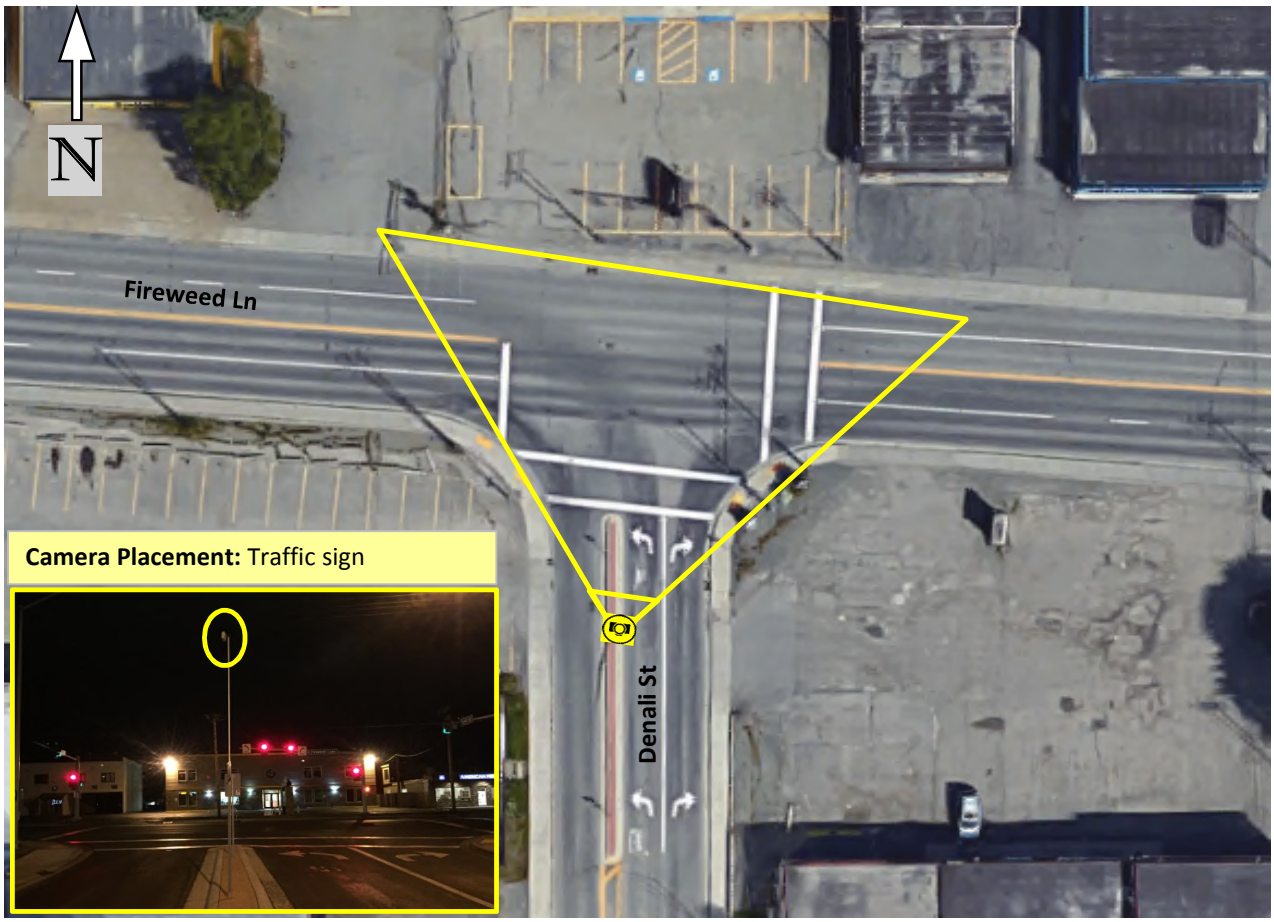
Count Description (e.g., day(s) of week, time periods, other related counts also occuring, etc.)

1 weekday (Tue, Wed, or Thu), with other Denali St intersections

Camera Setup/Video Footage	
Staff Responsible	Brad Coy
Setup Time	10/26/2017 6:50 AM
Take Down Time	10/26/2017 9:10 PM
Duration (hours)	14.33
Camera # (2-digit)	d7

Count Date, Time, Vendor	
Date	10/26/2017 (Thursday)
Start Time	7:00 AM
End Time	7:00 PM
Duration (hours)	12.00
Count Vendor	CountingCars.com

Camera Placement



Other Notes (Before, During, or After Count)

DOWL

Turning Movement Count

Fireweed Ln & Denali St

Total Vehicles (15-Minute Periods)

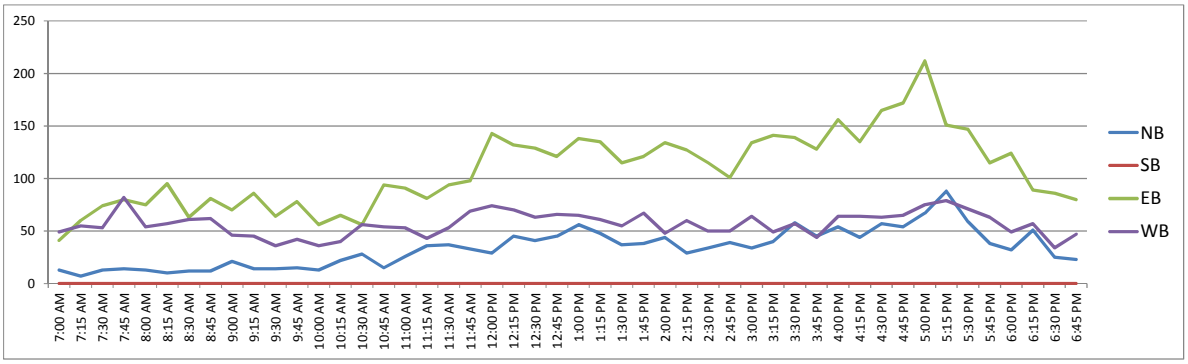
All Data

Thursday, October 26, 2017

7:00 AM to 7:00 PM

Start Time	Denali St (Northbound)					N/A (Southbound)					Fireweed Ln (Eastbound)					Fireweed Ln (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
7:00 AM	0	2	0	11	0	0	0	0	0	0	0	0	37	4	0	0	9	40	0	0	103
7:15 AM	0	3	0	4	2	0	0	0	0	0	0	0	56	4	0	0	10	45	0	0	122
7:30 AM	0	6	0	7	0	0	0	0	0	0	0	0	69	5	0	0	9	44	0	0	140
7:45 AM	0	6	0	8	0	0	0	0	0	0	0	0	74	6	0	0	18	64	0	1	176
8:00 AM	0	4	0	9	0	0	0	0	0	0	0	0	69	6	0	0	11	43	0	0	142
8:15 AM	0	5	0	5	0	0	0	0	0	0	0	0	84	11	0	0	8	49	0	0	162
8:30 AM	0	5	0	7	1	0	0	0	0	0	0	0	55	8	0	0	11	50	0	0	136
8:45 AM	0	2	0	10	0	0	0	0	0	0	0	0	68	13	0	0	12	50	0	0	155
9:00 AM	0	8	0	13	0	0	0	0	0	0	0	0	63	7	0	0	10	36	0	0	137
9:15 AM	0	4	0	10	1	0	0	0	0	0	0	0	80	6	0	0	8	37	0	0	145
9:30 AM	0	3	0	11	0	0	0	0	0	0	0	0	57	7	0	0	9	27	0	0	114
9:45 AM	0	3	0	12	1	0	0	0	0	0	0	0	70	8	0	0	13	29	0	0	135
10:00 AM	0	6	0	7	1	0	0	0	0	0	0	0	52	4	0	0	0	36	0	0	105
10:15 AM	0	10	0	12	0	0	0	0	0	0	0	0	56	9	0	0	10	30	0	0	127
10:30 AM	0	9	0	19	0	0	0	0	0	0	0	0	45	11	0	1	4	51	0	0	140
10:45 AM	0	5	0	10	0	0	0	0	0	0	0	0	81	13	0	0	12	42	0	0	163
11:00 AM	0	7	0	19	0	0	0	0	0	0	0	0	86	5	0	0	4	49	0	0	170
11:15 AM	0	12	0	24	1	0	0	0	0	0	0	0	72	9	0	0	7	36	0	0	160
11:30 AM	1	17	0	19	0	0	0	0	0	0	0	0	87	7	0	0	4	49	0	2	184
11:45 AM	0	13	0	20	0	0	0	0	0	0	0	0	90	8	0	0	6	63	0	1	200
12:00 PM	0	11	0	18	3	0	0	0	0	0	0	0	126	17	0	0	10	64	0	0	246
12:15 PM	0	20	0	25	2	0	0	0	0	0	0	0	114	18	0	0	6	64	0	0	247
12:30 PM	0	14	0	27	2	0	0	0	0	0	0	0	112	17	0	0	10	53	0	0	233
12:45 PM	0	16	0	29	0	0	0	0	0	0	0	0	102	19	0	0	10	56	0	0	232
1:00 PM	0	18	0	38	2	0	0	0	0	0	0	0	118	20	0	0	15	50	0	0	259
1:15 PM	0	20	0	28	0	0	0	0	0	0	0	0	122	13	0	0	8	53	0	0	244
1:30 PM	0	9	0	28	3	0	0	0	0	0	0	0	95	20	0	0	4	51	0	1	207
1:45 PM	0	14	0	24	1	0	0	0	0	0	0	0	113	8	0	0	7	60	0	0	226
2:00 PM	0	16	0	28	1	0	0	0	0	0	0	0	115	19	0	0	6	42	0	1	226
2:15 PM	0	9	0	20	0	0	0	0	0	0	0	0	114	13	0	0	7	53	0	1	216
2:30 PM	0	13	0	21	0	0	0	0	0	0	0	0	100	15	0	0	5	45	0	3	199
2:45 PM	0	12	0	27	0	0	0	0	0	0	0	0	94	7	0	0	6	44	0	0	190
3:00 PM	0	8	0	26	0	0	0	0	0	0	0	0	121	13	0	0	9	55	0	0	232
3:15 PM	0	19	0	21	0	0	0	0	0	0	0	0	128	13	0	0	1	48	0	0	230
3:30 PM	0	16	0	42	2	0	0	0	0	0	0	0	126	13	0	0	6	51	0	1	254
3:45 PM	0	15	0	30	0	0	0	0	0	0	0	0	117	11	0	0	5	39	0	0	217
4:00 PM	0	13	0	41	0	0	0	0	0	0	0	0	145	11	0	0	6	58	0	2	274
4:15 PM	0	16	0	28	1	0	0	0	0	0	0	0	120	15	0	0	5	59	0	1	243
4:30 PM	0	19	0	38	1	0	0	0	0	0	0	0	150	15	0	0	5	58	0	1	285
4:45 PM	0	16	0	38	0	0	0	0	0	0	0	0	161	11	0	0	9	56	0	0	291
5:00 PM	0	18	0	49	0	0	0	0	0	0	0	0	199	13	0	0	13	62	0	0	354
5:15 PM	0	28	0	60	0	0	0	0	0	0	0	0	135	16	0	0	15	64	0	0	318
5:30 PM	0	24	0	35	1	0	0	0	0	0	0	0	140	7	0	0	9	62	0	0	277
5:45 PM	0	11	0	27	0	0	0	0	0	0	0	0	107	8	0	0	4	59	0	0	216
6:00 PM	0	12	0	20	0	0	0	0	0	0	0	0	114	10	0	0	2	47	0	0	205
6:15 PM	0	18	0	33	1	0	0	0	0	0	0	0	87	2	0	0	1	56	0	0	197
6:30 PM	0	10	0	15	2	0	0	0	0	0	0	0	86	0	0	0	1	33	0	0	145
6:45 PM	0	6	0	17	0	0	0	0	0	0	0	0	75	5	0	0	2	45	0	1	150
Total	1	551	0	1,070	29	0	0	0	0	0	0	0	4,687	500	0	1	362	2,357	0	16	9,529

*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total" or graph below)





Turning Movement Count

Fireweed Ln & Denali St

Heavy Vehicles (15-Minute Periods)

All Data

Thursday, October 26, 2017

7:00 AM to 7:00 PM

Start Time	Denali St (Northbound)				N/A (Southbound)				Fireweed Ln (Eastbound)				Fireweed Ln (Westbound)				Period Total (Veh)
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	
7:00 AM	0	0	0	3	0	0	0	0	0	0	1	0	0	0	8	0	12
7:15 AM	0	0	0	0	0	0	0	0	0	0	2	1	0	0	4	0	7
7:30 AM	0	0	0	1	0	0	0	0	0	0	2	0	0	0	0	0	3
7:45 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	2
8:00 AM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	2
8:15 AM	0	0	0	0	0	0	0	0	0	0	6	0	0	1	1	0	8
8:30 AM	0	1	0	0	0	0	0	0	0	0	2	0	0	0	0	0	3
8:45 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
9:00 AM	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	5
9:15 AM	0	1	0	0	0	0	0	0	0	0	2	0	0	0	0	0	3
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	3
9:45 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
10:00 AM	0	0	0	0	0	0	0	0	0	0	5	1	0	0	2	0	8
10:15 AM	0	2	0	0	0	0	0	0	0	0	1	0	0	1	0	0	4
10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:45 AM	0	0	0	0	0	0	0	0	0	0	4	1	0	0	0	0	5
11:00 AM	0	0	0	0	0	0	0	0	0	0	4	0	0	0	4	0	8
11:15 AM	0	0	0	1	0	0	0	0	0	0	1	1	0	0	0	0	3
11:30 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2	0	3
11:45 AM	0	1	0	1	0	0	0	0	0	0	1	0	0	0	2	0	5
12:00 PM	0	1	0	0	0	0	0	0	0	0	3	0	0	0	1	0	5
12:15 PM	0	0	0	0	0	0	0	0	0	0	4	0	0	0	2	0	6
12:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	2
12:45 PM	0	0	0	0	0	0	0	0	0	0	3	2	0	0	1	0	6
1:00 PM	0	0	0	1	0	0	0	0	0	0	4	0	0	0	0	0	5
1:15 PM	0	0	0	1	0	0	0	0	0	0	3	1	0	0	1	0	6
1:30 PM	0	1	0	0	0	0	0	0	0	0	2	0	0	0	1	0	4
1:45 PM	0	1	0	1	0	0	0	0	0	0	1	0	0	0	0	0	3
2:00 PM	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	2
2:15 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	4
2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
2:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	2
3:00 PM	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	3
3:15 PM	0	0	0	1	0	0	0	0	0	0	2	0	0	0	1	0	4
3:30 PM	0	0	0	1	0	0	0	0	0	0	2	0	0	0	1	0	4
3:45 PM	0	1	0	0	0	0	0	0	0	0	2	1	0	0	1	0	5
4:00 PM	0	0	0	0	0	0	0	0	0	0	4	0	0	1	1	0	6
4:15 PM	0	0	0	0	0	0	0	0	0	0	3	0	0	0	2	0	5
4:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
5:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:30 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	2
Total	0	12	0	13	0	0	0	0	0	0	83	10	0	4	45	0	167

DOWL

Turning Movement Count

Fireweed Ln & Denali St

Total Vehicles (15-Minute Periods)

AM Peak Hour

Thursday, October 26, 2017

7:00 AM to 9:00 AM

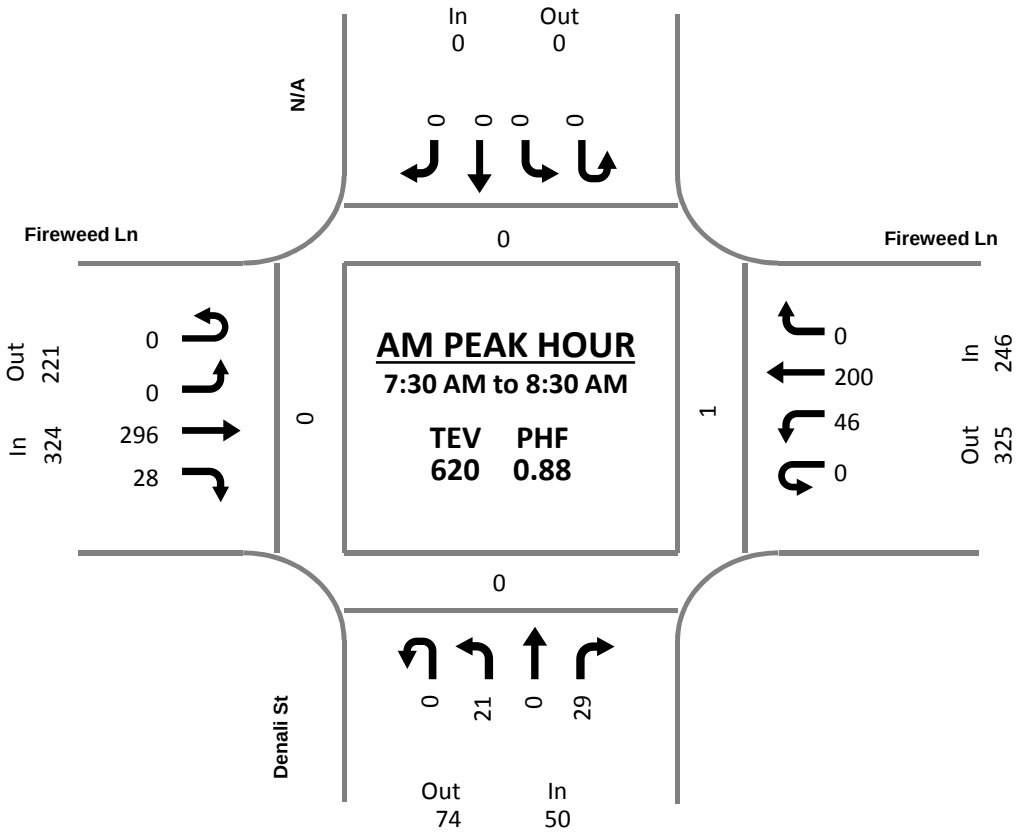
Start Time	Denali St (Northbound)					N/A (Southbound)					Fireweed Ln (Eastbound)					Fireweed Ln (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
7:00 AM	0	2	0	11	0	0	0	0	0	0	0	0	37	4	0	0	9	40	0	0	103
7:15 AM	0	3	0	4	2	0	0	0	0	0	0	0	56	4	0	0	10	45	0	0	122
7:30 AM	0	6	0	7	0	0	0	0	0	0	0	0	69	5	0	0	9	44	0	0	140
7:45 AM	0	6	0	8	0	0	0	0	0	0	0	0	74	6	0	0	18	64	0	1	176
8:00 AM	0	4	0	9	0	0	0	0	0	0	0	0	69	6	0	0	11	43	0	0	142
8:15 AM	0	5	0	5	0	0	0	0	0	0	0	0	84	11	0	0	8	49	0	0	162
8:30 AM	0	5	0	7	1	0	0	0	0	0	0	0	55	8	0	0	11	50	0	0	136
8:45 AM	0	2	0	10	0	0	0	0	0	0	0	0	68	13	0	0	12	50	0	0	155
Total	0	33	0	61	3	0	0	0	0	0	0	0	512	57	0	0	88	385	0	1	1,136

*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Peak Total")

Peak Hour Summary

7:30 AM to 8:30 AM

Data Type	Denali St (Northbound)					N/A (Southbound)					Fireweed Ln (Eastbound)					Fireweed Ln (Westbound)					Peak Hour Total
	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	
Volume	0	21	0	29	0	0	0	0	0	0	0	0	296	28	0	0	46	200	0	1	620
%HV	0.0%	0.0%	0.0%	3.4%		0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	3.4%	3.6%		0.0%	2.2%	1.0%	0.0%		2.4%
PHF	0.00	0.88	0.00	0.81	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.88	0.64	0.00	0.00	0.64	0.78	0.00	0.25	0.88
Volume			50					0					324					246			620
%HV			2.0%					0.0%					3.4%					1.2%			2.4%
PHF			0.89					0.00					0.85					0.75			0.88



Turning Movement Count

Fireweed Ln & Denali St

Total Vehicles (15-Minute Periods)

PM Peak Hour

Thursday, October 26, 2017

4:00 PM to 6:00 PM

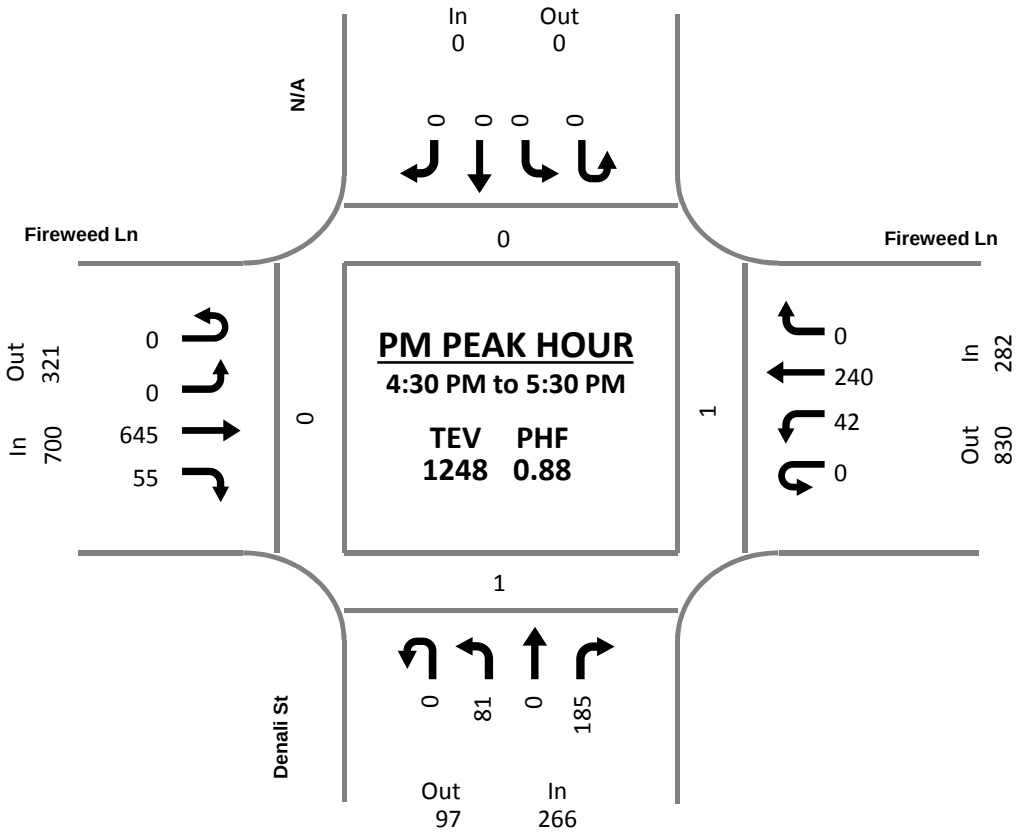
Start Time	Denali St (Northbound)					N/A (Southbound)					Fireweed Ln (Eastbound)					Fireweed Ln (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
4:00 PM	0	13	0	41	0	0	0	0	0	0	0	0	145	11	0	0	6	58	0	2	274
4:15 PM	0	16	0	28	1	0	0	0	0	0	0	0	120	15	0	0	5	59	0	1	243
4:30 PM	0	19	0	38	1	0	0	0	0	0	0	0	150	15	0	0	5	58	0	1	285
4:45 PM	0	16	0	38	0	0	0	0	0	0	0	0	161	11	0	0	9	56	0	0	291
5:00 PM	0	18	0	49	0	0	0	0	0	0	0	0	199	13	0	0	13	62	0	0	354
5:15 PM	0	28	0	60	0	0	0	0	0	0	0	0	135	16	0	0	15	64	0	0	318
5:30 PM	0	24	0	35	1	0	0	0	0	0	0	0	140	7	0	0	9	62	0	0	277
5:45 PM	0	11	0	27	0	0	0	0	0	0	0	0	107	8	0	0	4	59	0	0	216
Total	0	145	0	316	3	0	0	0	0	0	0	0	1,157	96	0	0	66	478	0	4	2,258

*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Peak Hour Total")

Peak Hour Summary

4:30 PM to 5:30 PM

Data Type	Denali St (Northbound)					N/A (Southbound)					Fireweed Ln (Eastbound)					Fireweed Ln (Westbound)					Peak Hour Total
	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	
Volume	0	81	0	185	1	0	0	0	0	0	0	0	645	55	0	0	42	240	0	1	1248
%HV	0.0%	2.5%	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.2%	0.0%		0.0%	0.0%	0.4%	0.0%		0.3%
PHF	0.00	0.72	0.00	0.77	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.81	0.86	0.00	0.00	0.70	0.94	0.00	0.25	0.88
Volume			266					0					700					282			1248
%HV			0.8%					0.0%					0.1%					0.4%			0.3%
PHF			0.76					0.00					0.83					0.89			0.88



Traffic Camera Count and Placement Information

Intersection Name: Northern Lights Blvd & Denali St

Intersection Location	
Northbound Street	Denali St
Southbound Street	Denali St
Eastbound Street	N/A
Westbound Street	Northern Lights Blvd
City, State	Anchorage, AK

Project Information	
Name	Midtown Congestion Relief
Client	AK DOT&PF
Project #	1124.62458.01, Phase 02
PM/Traffic Lead	Steve Noble/Brad Coy

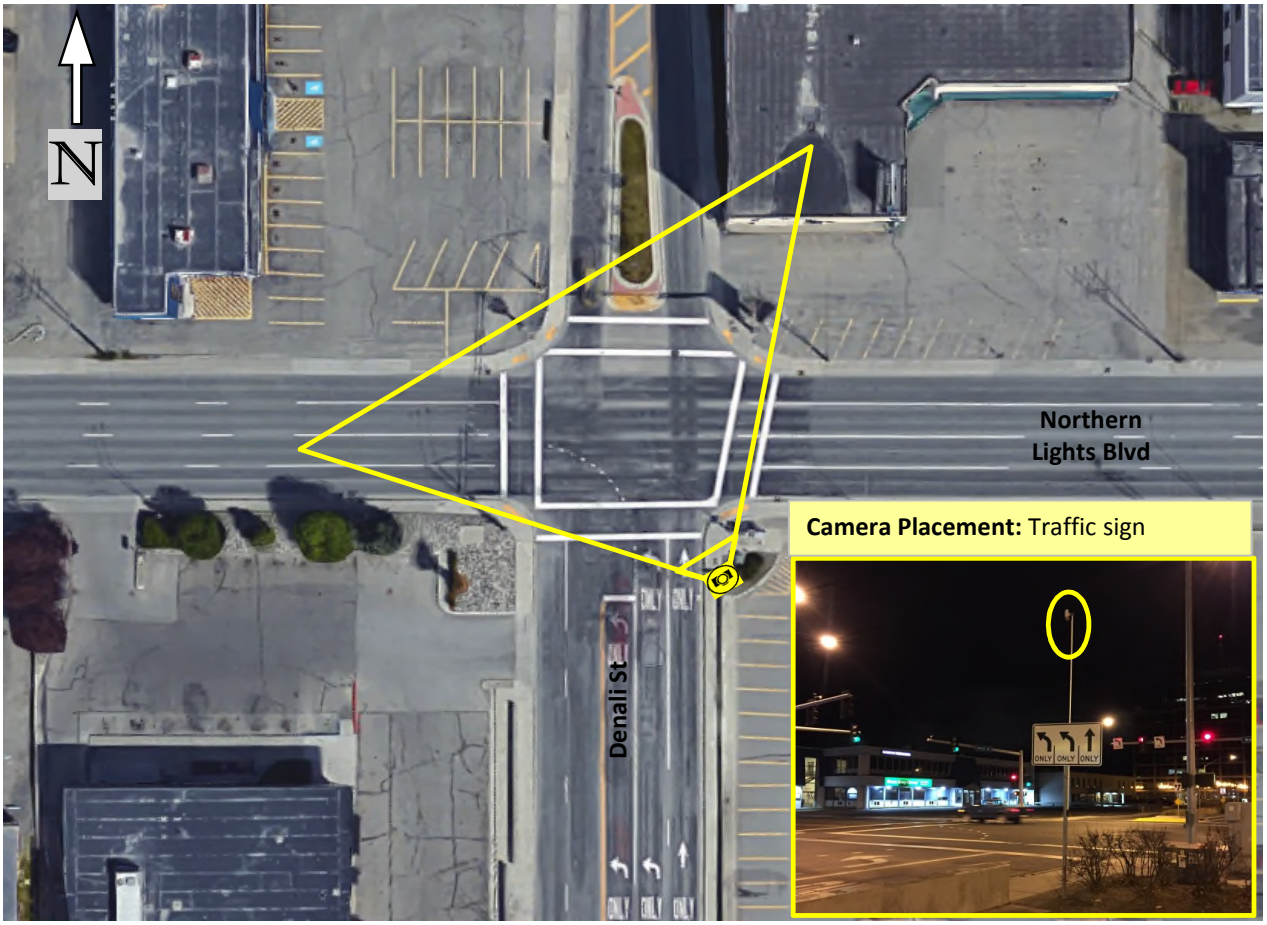
Count Description (e.g., day(s) of week, time periods, other related counts also occuring, etc.)

1 weekday (Tue, Wed, or Thu), with other Denali St intersections

Camera Setup/Video Footage	
Staff Responsible	Brad Coy
Setup Time	10/26/2017 6:38 AM
Take Down Time	10/26/2017 9:03 PM
Duration (hours)	14.42
Camera # (2-digit)	79

Count Date, Time, Vendor	
Date	10/26/2017 (Thursday)
Start Time	6:45 AM
End Time	7:30 PM
Duration (hours)	12.75
Count Vendor	CountingCars.com

Camera Placement



Other Notes (Before, During, or After Count)

Turning Movement Count

Northern Lights Blvd & Denali St

Total Vehicles (15-Minute Periods)

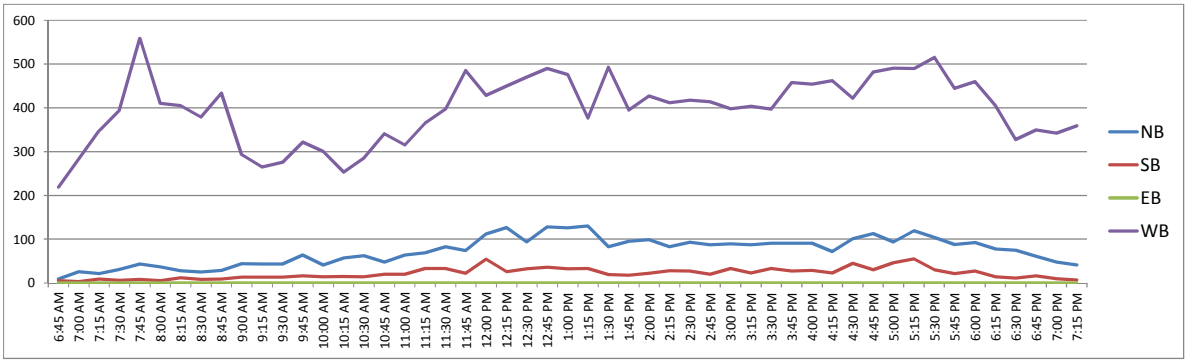
All Data

Thursday, October 26, 2017

6:45 AM to 7:30 PM

Start Time	Denali St (Northbound)					Denali St (Southbound)					N/A (Eastbound)					Northern Lights Blvd (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
6:45 AM	0	7	2	0	0	0	0	4	1	0	0	0	0	0	0	0	23	193	3	0	233
7:00 AM	0	10	16	0	0	0	0	3	0	1	0	0	0	0	0	0	22	250	11	0	312
7:15 AM	0	7	14	0	1	0	0	8	1	0	0	0	0	0	0	0	29	307	12	1	378
7:30 AM	0	11	20	0	0	0	0	6	0	0	0	0	0	0	0	0	55	318	22	0	432
7:45 AM	0	15	28	0	0	0	0	6	2	1	0	0	0	0	0	0	52	480	27	0	610
8:00 AM	0	15	22	0	0	0	0	2	3	1	0	0	0	0	0	0	33	362	15	0	452
8:15 AM	0	16	12	0	2	0	0	9	3	0	0	0	0	0	0	0	28	361	16	1	445
8:30 AM	0	12	13	0	0	0	0	4	4	0	0	0	0	0	0	0	24	329	26	1	412
8:45 AM	0	12	17	0	0	0	0	4	5	3	0	0	0	0	0	0	32	372	30	1	472
9:00 AM	0	22	22	0	0	0	0	8	5	0	0	0	0	0	0	0	22	262	9	1	350
9:15 AM	0	24	19	0	1	0	0	11	2	0	0	0	0	0	0	0	26	228	11	0	321
9:30 AM	0	24	19	0	0	0	0	9	4	0	0	0	0	0	0	0	24	238	14	0	332
9:45 AM	0	39	25	0	0	0	0	10	6	0	0	0	0	0	0	0	37	273	12	0	402
10:00 AM	0	28	13	0	0	0	0	10	4	1	0	0	0	0	0	0	41	253	7	0	356
10:15 AM	0	33	24	0	1	0	0	14	1	0	0	0	0	0	0	0	29	213	11	0	325
10:30 AM	0	38	24	0	0	0	0	11	3	2	0	0	0	0	0	0	37	242	6	4	361
10:45 AM	0	33	15	0	0	0	0	13	7	0	0	0	0	0	0	0	49	279	13	0	409
11:00 AM	0	37	27	0	0	0	0	14	6	4	0	0	0	0	0	0	41	271	3	2	399
11:15 AM	0	41	28	0	0	0	0	20	13	3	0	0	0	0	0	0	43	316	6	1	467
11:30 AM	0	52	31	0	1	0	0	28	5	3	0	0	0	0	0	0	43	345	9	1	513
11:45 AM	0	51	23	0	1	0	0	12	10	1	0	0	0	0	0	0	74	405	7	3	582
12:00 PM	0	75	37	0	2	0	0	43	11	1	0	0	0	0	0	0	48	368	13	0	595
12:15 PM	0	86	41	0	3	0	0	22	4	5	0	0	0	0	0	0	66	373	11	1	603
12:30 PM	0	57	37	0	1	0	0	24	8	1	0	0	0	0	0	0	64	395	11	1	596
12:45 PM	0	73	55	0	1	0	0	28	8	1	0	0	0	0	0	0	60	407	23	1	654
1:00 PM	0	78	48	0	0	0	0	25	7	4	0	0	0	0	0	0	60	403	13	1	634
1:15 PM	0	77	53	0	0	0	0	26	7	3	0	0	0	0	0	0	56	316	5	2	540
1:30 PM	0	47	36	0	2	0	0	17	2	0	0	0	0	0	0	0	62	422	9	2	595
1:45 PM	0	55	40	0	0	0	0	15	3	1	0	0	0	0	0	0	48	337	10	3	508
2:00 PM	0	63	36	0	1	0	0	13	9	0	0	0	0	0	0	0	68	352	7	1	548
2:15 PM	0	52	31	0	0	0	0	22	6	0	0	0	0	0	0	0	59	345	8	2	523
2:30 PM	0	60	33	0	0	0	0	23	4	3	0	0	0	0	0	0	52	354	12	1	538
2:45 PM	0	54	33	0	3	0	0	13	7	4	0	0	0	0	0	0	36	364	14	2	521
3:00 PM	0	60	29	0	1	0	0	24	9	2	0	0	0	0	0	0	55	340	3	0	520
3:15 PM	0	51	36	0	0	0	0	19	4	2	0	0	0	0	0	0	49	343	12	1	514
3:30 PM	0	47	44	0	0	0	0	26	7	3	0	0	0	0	0	0	48	341	8	1	521
3:45 PM	0	54	37	0	1	0	0	19	8	2	0	0	0	0	0	0	50	397	11	3	576
4:00 PM	0	52	39	0	1	0	0	25	4	1	0	0	0	0	0	0	61	385	8	2	574
4:15 PM	0	44	28	0	0	0	0	18	5	1	0	0	0	0	0	0	48	401	13	1	557
4:30 PM	0	56	45	0	2	0	0	34	11	3	0	0	0	0	0	0	44	372	6	1	568
4:45 PM	0	65	48	0	1	0	0	20	10	2	0	0	0	0	0	0	61	413	8	2	625
5:00 PM	0	65	29	0	3	0	0	41	5	0	0	0	0	0	0	0	66	419	6	1	631
5:15 PM	0	65	54	0	0	0	0	41	14	6	0	0	0	0	0	0	52	426	12	4	664
5:30 PM	0	67	37	0	0	0	0	25	5	1	0	0	0	0	0	0	70	437	9	4	650
5:45 PM	0	60	28	0	2	0	0	15	6	1	0	0	0	0	0	0	47	392	6	2	554
6:00 PM	0	69	23	0	3	0	0	21	6	1	0	0	0	0	0	0	51	403	6	4	579
6:15 PM	0	38	40	0	0	0	0	12	2	2	0	0	0	0	0	0	42	361	2	1	497
6:30 PM	0	51	24	0	0	0	0	6	5	3	0	0	0	0	0	0	36	288	4	1	414
6:45 PM	0	43	18	0	0	0	0	11	5	4	0	0	0	0	0	0	29	316	5	0	427
7:00 PM	0	34	14	0	0	0	0	10	0	3	0	0	0	0	0	0	24	317	1	2	400
7:15 PM	0	31	10	0	0	0	0	5	2	1	0	0	0	0	0	0	34	320	5	0	407
Total	0	2,256	1,477	0	34	0	0	849	269	81	0	0	0	0	0	0	2,310	17,404	531	63	25,096

*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total" or graph below)





Turning Movement Count

Northern Lights Blvd & Denali St

Heavy Vehicles (15-Minute Periods)

All Data

Thursday, October 26, 2017

6:45 AM to 7:30 PM

Start Time	Denali St (Northbound)				Denali St (Southbound)				N/A (Eastbound)				Northern Lights Blvd (Westbound)				Period Total (Veh)
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
7:00 AM	0	0	3	0	0	0	0	0	0	0	0	0	0	0	3	1	7
7:15 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	3	0	4
7:30 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	1	3	0	6
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	4
8:15 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	3	0	4
8:30 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	5	0	6
8:45 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	0	5	0	7
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	3	6	0	9
9:15 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	1	4	0	6
9:30 AM	0	2	0	0	0	0	1	0	0	0	0	0	0	1	7	1	12
9:45 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	5	0	7
10:00 AM	0	0	1	0	0	0	1	0	0	0	0	0	0	0	6	0	8
10:15 AM	0	0	3	0	0	0	0	0	0	0	0	0	0	0	6	1	10
10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	1	7
10:45 AM	0	1	0	0	0	0	1	0	0	0	0	0	0	0	8	0	10
11:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	1	7	0	9
11:15 AM	0	1	1	0	0	0	0	1	0	0	0	0	0	0	7	0	10
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	0	11
11:45 AM	0	2	2	0	0	0	0	0	0	0	0	0	0	1	5	0	10
12:00 PM	0	2	1	0	0	0	0	0	0	0	0	0	0	0	8	0	11
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	6	0	7
12:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	8	1	10
12:45 PM	0	1	1	0	0	0	1	0	0	0	0	0	0	0	5	0	8
1:00 PM	0	1	1	0	0	0	0	0	0	0	0	0	0	0	9	0	11
1:15 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	1	6	0	8
1:30 PM	0	2	1	0	0	0	1	0	0	0	0	0	0	1	7	0	12
1:45 PM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	13	0	15
2:00 PM	0	2	1	0	0	0	1	0	0	0	0	0	0	2	8	1	15
2:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	8	0	9
2:30 PM	0	1	1	0	0	0	1	0	0	0	0	0	0	1	8	1	13
2:45 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	3	0	4
3:00 PM	0	3	0	0	0	0	0	1	0	0	0	0	0	0	9	0	13
3:15 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	8	0	9
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	3
3:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	4	0	5
4:00 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	5	0	6
4:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	1	5	0	7
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	1	5
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	4
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3
5:15 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	7	0	8
5:30 PM	0	1	1	0	0	0	0	0	0	0	0	0	0	1	2	0	5
5:45 PM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	3	0	5
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	5
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	4
6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	3
7:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	4
Total	0	30	26	0	0	0	11	2	0	0	0	0	0	17	272	9	367

Turning Movement Count

Northern Lights Blvd & Denali St

Total Vehicles (15-Minute Periods)

AM Peak Hour

Thursday, October 26, 2017

7:00 AM to 9:00 AM

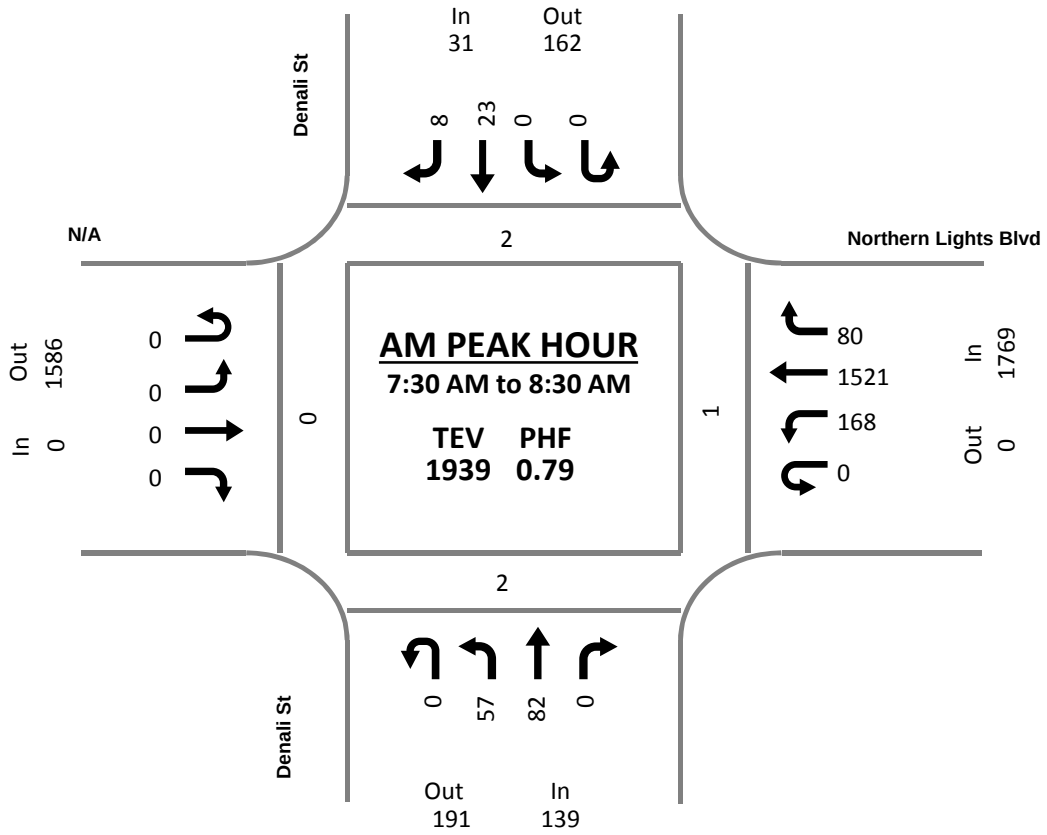
Start Time	Denali St (Northbound)					Denali St (Southbound)					N/A (Eastbound)					Northern Lights Blvd (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
7:00 AM	0	10	16	0	0	0	0	3	0	1	0	0	0	0	0	0	22	250	11	0	312
7:15 AM	0	7	14	0	1	0	0	8	1	0	0	0	0	0	0	0	29	307	12	1	378
7:30 AM	0	11	20	0	0	0	0	6	0	0	0	0	0	0	0	0	55	318	22	0	432
7:45 AM	0	15	28	0	0	0	0	6	2	1	0	0	0	0	0	0	52	480	27	0	610
8:00 AM	0	15	22	0	0	0	0	2	3	1	0	0	0	0	0	0	33	362	15	0	452
8:15 AM	0	16	12	0	2	0	0	9	3	0	0	0	0	0	0	0	28	361	16	1	445
8:30 AM	0	12	13	0	0	0	0	4	4	0	0	0	0	0	0	0	24	329	26	1	412
8:45 AM	0	12	17	0	0	0	0	4	5	3	0	0	0	0	0	0	32	372	30	1	472
Total	0	98	142	0	3	0	0	42	18	6	0	0	0	0	0	0	275	2,779	159	4	3,513

*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Peak Total")

Peak Hour Summary

7:30 AM to 8:30 AM

Data Type	Denali St (Northbound)					Denali St (Southbound)					N/A (Eastbound)					Northern Lights Blvd (Westbound)					Peak Hour Total
	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	
Volume	0	57	82	0	2	0	0	23	8	2	0	0	0	0	0	0	168	1521	80	1	1939
%HV	0.0%	1.8%	1.2%	0.0%		0.0%	0.0%	4.3%	0.0%		0.0%	0.0%	0.0%	0.0%		0.0%	0.6%	0.7%	0.0%		0.8%
PHF	0.00	0.89	0.73	0.00	0.25	0.00	0.00	0.64	0.67	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.76	0.79	0.74	0.25	0.79
Volume			139					31					0					1769			1939
%HV			1.4%					3.2%					0.0%					0.7%			0.8%
PHF			0.81					0.65					0.00					0.79			0.79



Turning Movement Count

Northern Lights Blvd & Denali St

Total Vehicles (15-Minute Periods)

PM Peak Hour

Thursday, October 26, 2017

4:00 PM to 6:00 PM

Start Time	Denali St (Northbound)					Denali St (Southbound)					N/A (Eastbound)					Northern Lights Blvd (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
4:00 PM	0	52	39	0	1	0	0	25	4	1	0	0	0	0	0	0	61	385	8	2	574
4:15 PM	0	44	28	0	0	0	0	18	5	1	0	0	0	0	0	0	48	401	13	1	557
4:30 PM	0	56	45	0	2	0	0	34	11	3	0	0	0	0	0	0	44	372	6	1	568
4:45 PM	0	65	48	0	1	0	0	20	10	2	0	0	0	0	0	0	61	413	8	2	625
5:00 PM	0	65	29	0	3	0	0	41	5	0	0	0	0	0	0	0	66	419	6	1	631
5:15 PM	0	65	54	0	0	0	0	41	14	6	0	0	0	0	0	0	52	426	12	4	664
5:30 PM	0	67	37	0	0	0	0	25	5	1	0	0	0	0	0	0	70	437	9	4	650
5:45 PM	0	60	28	0	2	0	0	15	6	1	0	0	0	0	0	0	47	392	6	2	554
Total	0	474	308	0	9	0	0	219	60	15	0	0	0	0	0	0	449	3,245	68	17	4,823

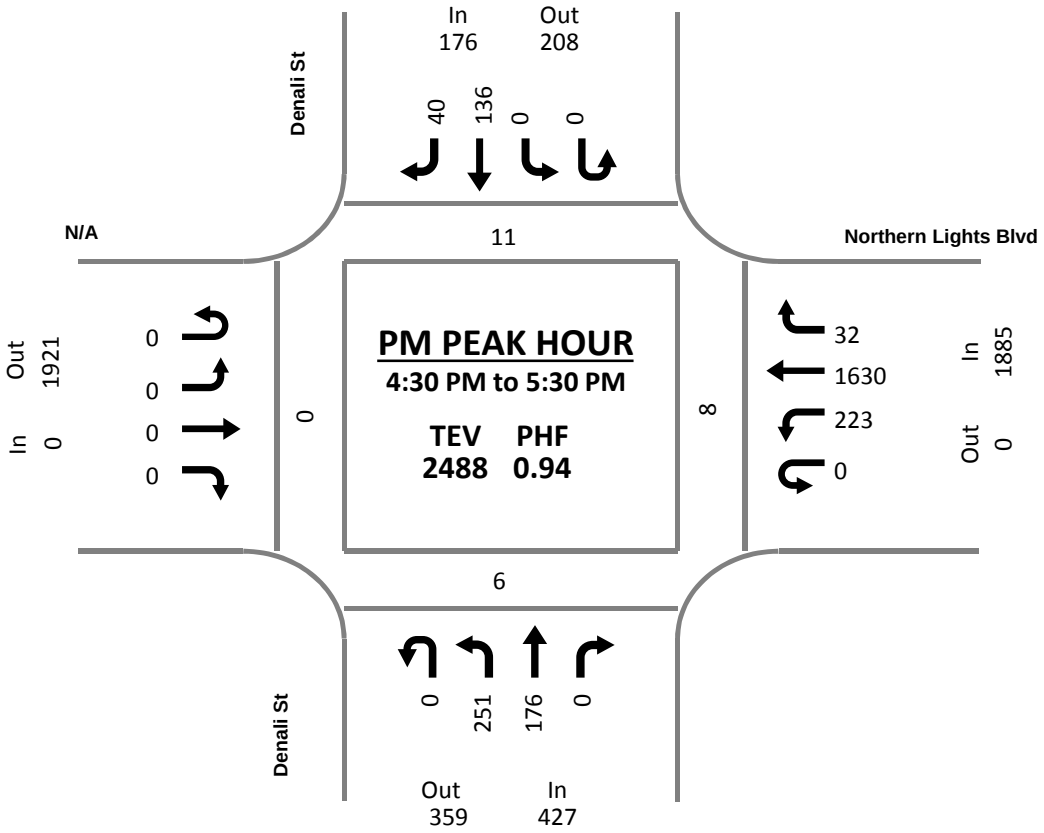
*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total")

Peak Hour Summary (System Peak*)

4:30 PM to 5:30 PM

Data Type	Denali St (Northbound)					Denali St (Southbound)					N/A (Eastbound)					Northern Lights Blvd (Westbound)					Peak Hour Total
	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	
Volume	0	251	176	0	6	0	0	136	40	11	0	0	0	0	0	0	223	1630	32	8	2488
%HV	0.0%	0.0%	0.6%	0.0%		0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	1.1%	3.1%		0.8%
PHF	0.00	0.97	0.81	0.00	0.50	0.00	0.00	0.83	0.71	0.46	0.00	0.00	0.00	0.00	0.00	0.00	0.84	0.96	0.67	0.50	0.94
Volume			427					176					0					1885			2488
%HV			0.2%					0.0%					0.0%					1.0%			0.8%
PHF			0.90					0.80					0.00					0.96			0.94

*System Peak is based on comparison of other study area counts rather than highest total entering volume at this intersection.



Traffic Camera Count and Placement Information

Intersection Name: Benson Blvd & Denali St

Intersection Location	
Northbound Street	Denali St
Southbound Street	Denali St
Eastbound Street	Benson Blvd
Westbound Street	N/A
City, State	Anchorage, AK

Project Information	
Name	Midtown Congestion Relief
Client	AK DOT&PF
Project #	1124.62458.01, Phase 02
PM/Traffic Lead	Steve Noble/Brad Coy

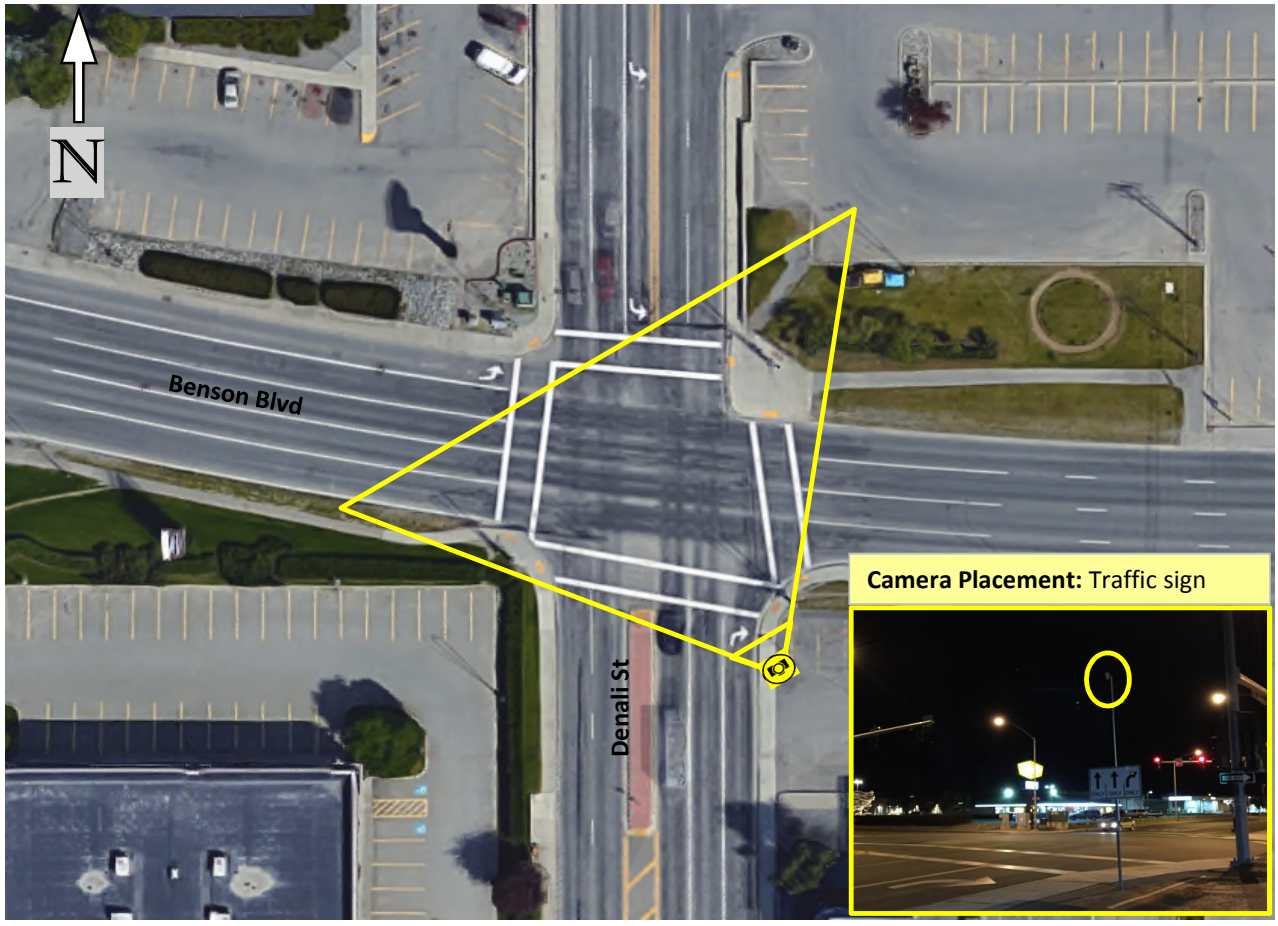
Count Description (e.g., day(s) of week, time periods, other related counts also occuring, etc.)

1 weekday (Tue, Wed, or Thu), with other Denali St intersections

Camera Setup/Video Footage	
Staff Responsible	Brad Coy
Setup Time	10/26/2017 6:25 AM
Take Down Time	10/26/2017 8:55 PM
Duration (hours)	14.50
Camera # (2-digit)	c3

Count Date, Time, Vendor	
Date	10/26/2017 (Thursday)
Start Time	6:30 AM
End Time	7:30 PM
Duration (hours)	13.00
Count Vendor	CountingCars.com

Camera Placement



Other Notes (Before, During, or After Count)

DOWL

Turning Movement Count

Benson Blvd & Denali St

Total Vehicles (15-Minute Periods)

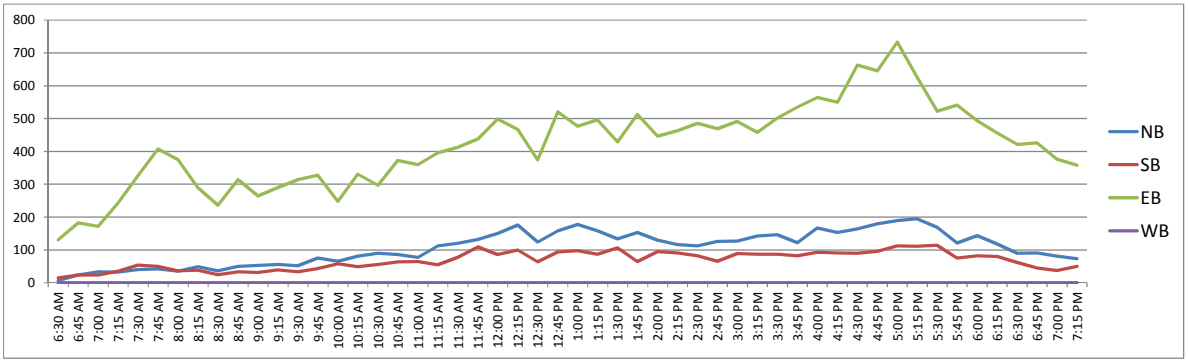
All Data

Thursday, October 26, 2017

6:30 AM to 7:30 PM

Start Time	Denali St (Northbound)					Denali St (Southbound)					Benson Blvd (Eastbound)					N/A (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
6:30 AM	0	0	3	4	2	0	6	9	0	0	0	3	123	5	0	0	0	0	0	0	153
6:45 AM	0	0	10	14	0	0	6	18	0	1	0	0	171	12	0	0	0	0	0	0	231
7:00 AM	0	0	26	7	3	0	11	13	0	1	0	3	161	8	2	0	0	0	0	0	229
7:15 AM	0	0	19	13	1	0	8	27	0	0	0	7	218	18	1	0	0	0	0	0	310
7:30 AM	0	0	22	18	2	0	14	40	0	1	0	11	294	21	1	0	0	0	0	0	420
7:45 AM	0	0	26	16	0	0	9	41	0	1	0	15	355	38	0	0	0	0	0	0	500
8:00 AM	0	0	23	12	3	0	8	28	0	0	0	18	331	27	1	0	0	0	0	0	447
8:15 AM	0	0	29	20	2	0	6	32	0	0	0	7	258	24	2	0	0	0	0	0	376
8:30 AM	0	0	20	16	0	0	6	19	0	0	0	7	215	14	2	0	0	0	0	0	297
8:45 AM	0	0	30	20	1	0	7	26	0	1	0	10	279	25	2	0	0	0	0	0	397
9:00 AM	0	0	25	28	2	0	10	21	0	1	0	21	219	24	1	0	0	0	0	0	348
9:15 AM	0	0	30	26	2	0	14	25	0	2	0	14	251	25	2	0	0	0	0	0	385
9:30 AM	0	0	30	22	2	0	12	21	0	1	0	13	279	22	0	0	0	0	0	0	399
9:45 AM	0	0	49	26	4	0	12	31	0	1	0	16	289	23	2	0	0	0	0	0	446
10:00 AM	0	0	42	24	3	0	15	43	0	1	0	24	202	22	3	0	0	0	0	0	372
10:15 AM	0	0	49	32	3	0	13	36	0	0	0	19	288	24	1	0	0	0	0	0	461
10:30 AM	0	0	57	33	2	0	19	37	0	1	0	12	260	25	2	0	0	0	0	0	443
10:45 AM	0	0	50	36	3	0	15	49	0	1	0	16	327	30	2	0	0	0	0	0	523
11:00 AM	0	0	36	41	6	0	21	44	0	1	0	27	304	29	3	0	0	0	0	0	502
11:15 AM	0	0	68	44	4	0	15	40	0	5	0	25	340	31	5	0	0	0	0	0	563
11:30 AM	0	0	76	44	2	0	28	49	0	0	0	19	350	44	1	0	0	0	0	0	610
11:45 AM	0	0	79	53	4	0	44	65	0	2	0	27	365	46	5	0	0	0	0	0	679
12:00 PM	0	0	84	66	4	0	25	61	0	6	0	31	419	49	5	0	0	0	0	0	735
12:15 PM	0	0	105	71	0	0	36	64	0	1	0	30	402	35	2	0	0	0	0	0	743
12:30 PM	0	0	82	42	0	0	18	46	0	3	0	18	333	24	0	0	0	0	0	0	563
12:45 PM	0	0	107	51	0	0	35	59	0	4	0	24	438	59	3	0	0	0	0	0	773
1:00 PM	0	0	115	63	8	0	36	62	0	0	0	42	385	50	0	0	0	0	0	0	753
1:15 PM	0	0	97	61	3	0	22	65	0	0	0	29	408	59	3	0	0	0	0	0	741
1:30 PM	0	0	85	49	6	0	28	78	0	1	0	32	352	45	3	0	0	0	0	0	669
1:45 PM	0	0	84	69	8	0	26	39	0	0	0	31	429	53	1	0	0	0	0	0	731
2:00 PM	0	0	80	50	3	0	33	62	0	0	0	15	401	31	3	0	0	0	0	0	672
2:15 PM	0	0	60	56	8	0	26	65	0	2	0	38	398	27	0	0	0	0	0	0	670
2:30 PM	0	0	72	40	6	0	27	55	0	2	0	28	410	48	3	0	0	0	0	0	680
2:45 PM	0	0	90	36	7	0	23	43	0	1	0	27	399	43	1	0	0	0	0	0	661
3:00 PM	0	0	72	55	5	0	32	57	0	1	0	25	429	38	3	0	0	0	0	0	708
3:15 PM	0	0	82	61	7	0	35	52	0	3	0	26	399	33	4	0	0	0	0	0	688
3:30 PM	0	0	84	62	5	0	31	56	0	4	0	22	433	46	4	0	0	0	0	0	734
3:45 PM	0	0	73	49	6	0	25	57	0	1	0	39	464	32	1	0	0	0	0	0	739
4:00 PM	0	0	73	94	8	0	31	62	0	3	0	17	514	34	6	0	0	0	0	0	825
4:15 PM	0	0	84	69	5	0	32	59	0	2	0	25	486	39	5	0	0	0	0	0	794
4:30 PM	0	0	81	83	3	0	37	53	0	1	0	24	600	39	4	0	0	0	0	0	917
4:45 PM	0	0	98	82	1	0	31	65	0	0	0	29	562	55	2	0	0	0	0	0	922
5:00 PM	0	0	86	103	4	0	45	67	0	0	0	35	657	41	3	0	0	0	0	0	1034
5:15 PM	0	0	107	88	1	0	44	67	0	0	0	41	546	39	0	0	0	0	0	0	932
5:30 PM	0	0	95	74	3	0	46	68	0	5	0	25	463	35	6	0	0	0	0	0	806
5:45 PM	0	0	70	51	4	0	27	48	0	1	0	26	482	33	1	0	0	0	0	0	737
6:00 PM	0	0	77	67	5	0	28	54	0	2	0	22	445	27	2	0	0	0	0	0	720
6:15 PM	0	0	71	47	5	0	27	53	0	1	0	23	402	31	3	0	0	0	0	0	654
6:30 PM	0	0	52	38	6	0	23	39	0	1	0	21	373	27	0	0	0	0	0	0	573
6:45 PM	0	0	46	45	2	0	17	28	0	1	0	16	380	30	1	0	0	0	0	0	562
7:00 PM	0	0	42	39	6	0	16	21	0	1	0	17	337	23	1	0	0	0	0	0	495
7:15 PM	0	0	28	45	3	0	16	34	0	1	0	11	329	18	1	0	0	0	0	0	481
Total	0	0	3,181	2,355	183	0	1,177	2,353	0	69	0	1,103	18,954	1,680	109	0	0	0	0	0	30,803

*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total" or graph below)





Turning Movement Count

Benson Blvd & Denali St

Heavy Vehicles (15-Minute Periods)

All Data

Thursday, October 26, 2017

6:30 AM to 7:30 PM

Start Time	Denali St (Northbound)				Denali St (Southbound)				Benson Blvd (Eastbound)				N/A (Westbound)				Period Total (Veh)
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	
6:30 AM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2
6:45 AM	0	0	0	2	0	0	0	0	0	0	4	0	0	0	0	0	6
7:00 AM	0	0	3	0	0	0	0	0	0	0	3	1	0	0	0	0	7
7:15 AM	0	0	0	0	0	0	1	0	0	0	5	2	0	0	0	0	8
7:30 AM	0	0	1	0	0	0	1	0	0	0	8	0	0	0	0	0	10
7:45 AM	0	0	1	0	0	0	0	0	0	0	6	0	0	0	0	0	7
8:00 AM	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	4
8:15 AM	0	0	0	0	0	0	1	0	0	0	6	0	0	0	0	0	7
8:30 AM	0	0	1	1	0	0	0	0	0	0	3	0	0	0	0	0	5
8:45 AM	0	0	1	0	0	0	0	0	0	1	5	0	0	0	0	0	7
9:00 AM	0	0	0	0	0	0	2	0	0	0	11	1	0	0	0	0	14
9:15 AM	0	0	1	2	0	0	3	0	0	1	16	1	0	0	0	0	24
9:30 AM	0	0	1	0	0	1	0	0	0	0	14	0	0	0	0	0	16
9:45 AM	0	0	1	0	0	0	0	0	0	0	6	0	0	0	0	0	7
10:00 AM	0	0	0	1	0	0	2	0	0	0	2	0	0	0	0	0	5
10:15 AM	0	0	3	1	0	0	0	0	0	0	6	0	0	0	0	0	10
10:30 AM	0	0	1	0	0	0	0	0	0	0	10	0	0	0	0	0	11
10:45 AM	0	0	0	1	0	0	0	0	0	0	10	0	0	0	0	0	11
11:00 AM	0	0	1	3	0	0	2	0	0	0	1	1	0	0	0	0	8
11:15 AM	0	0	3	0	0	0	1	0	0	0	7	0	0	0	0	0	11
11:30 AM	0	0	0	1	0	0	0	0	0	1	8	0	0	0	0	0	10
11:45 AM	0	0	4	1	0	0	2	0	0	0	5	0	0	0	0	0	12
12:00 PM	0	0	0	1	0	0	0	0	0	1	10	2	0	0	0	0	14
12:15 PM	0	0	0	2	0	0	0	0	0	0	4	0	0	0	0	0	6
12:30 PM	0	0	0	2	0	0	0	0	0	1	6	0	0	0	0	0	9
12:45 PM	0	0	1	1	0	1	0	0	0	1	5	0	0	0	0	0	9
1:00 PM	0	0	3	1	0	0	2	0	0	0	7	2	0	0	0	0	15
1:15 PM	0	0	0	1	0	0	1	0	0	0	11	0	0	0	0	0	13
1:30 PM	0	0	3	1	0	0	4	0	0	0	7	0	0	0	0	0	15
1:45 PM	0	0	0	1	0	1	0	0	0	1	4	1	0	0	0	0	8
2:00 PM	0	0	1	0	0	1	2	0	0	0	6	0	0	0	0	0	10
2:15 PM	0	0	1	2	0	0	0	0	0	0	3	0	0	0	0	0	6
2:30 PM	0	0	1	1	0	0	0	0	0	1	9	1	0	0	0	0	13
2:45 PM	0	0	1	0	0	0	0	0	0	0	5	1	0	0	0	0	7
3:00 PM	0	0	0	1	0	0	0	0	0	0	5	2	0	0	0	0	8
3:15 PM	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	7
3:30 PM	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	8
3:45 PM	0	0	1	0	0	0	0	0	0	0	7	0	0	0	0	0	8
4:00 PM	0	0	0	0	0	1	0	0	0	0	8	1	0	0	0	0	10
4:15 PM	0	0	0	1	0	0	1	0	0	0	4	0	0	0	0	0	6
4:30 PM	0	0	0	0	0	0	0	0	0	1	5	1	0	0	0	0	7
4:45 PM	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	5
5:00 PM	0	0	0	1	0	0	0	0	0	0	3	0	0	0	0	0	4
5:15 PM	0	0	0	2	0	0	0	0	0	1	5	0	0	0	0	0	8
5:30 PM	0	0	0	1	0	0	1	0	0	1	4	0	0	0	0	0	7
5:45 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2
6:00 PM	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	4
6:15 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2
6:30 PM	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3
6:45 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	2
7:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
7:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
Total	0	0	34	32	0	5	26	0	0	11	294	18	0	0	0	0	420

DOWL

Turning Movement Count

Benson Blvd & Denali St

Total Vehicles (15-Minute Periods)

AM Peak Hour

Thursday, October 26, 2017

7:00 AM to 9:00 AM

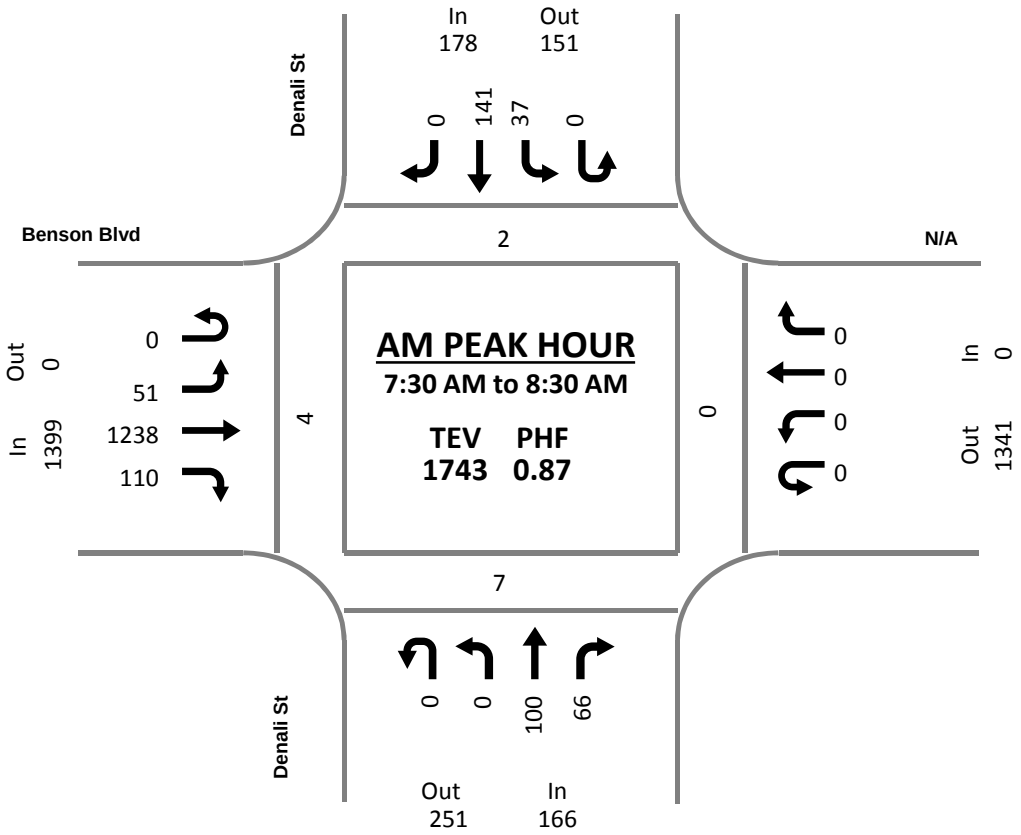
Start Time	Denali St (Northbound)					Denali St (Southbound)					Benson Blvd (Eastbound)					N/A (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
7:00 AM	0	0	26	7	3	0	11	13	0	1	0	3	161	8	2	0	0	0	0	0	229
7:15 AM	0	0	19	13	1	0	8	27	0	0	0	7	218	18	1	0	0	0	0	0	310
7:30 AM	0	0	22	18	2	0	14	40	0	1	0	11	294	21	1	0	0	0	0	0	420
7:45 AM	0	0	26	16	0	0	9	41	0	1	0	15	355	38	0	0	0	0	0	0	500
8:00 AM	0	0	23	12	3	0	8	28	0	0	0	18	331	27	1	0	0	0	0	0	447
8:15 AM	0	0	29	20	2	0	6	32	0	0	0	7	258	24	2	0	0	0	0	0	376
8:30 AM	0	0	20	16	0	0	6	19	0	0	0	7	215	14	2	0	0	0	0	0	297
8:45 AM	0	0	30	20	1	0	7	26	0	1	0	10	279	25	2	0	0	0	0	0	397
Total	0	0	195	122	12	0	69	226	0	4	0	78	2,111	175	11	0	0	0	0	0	2,976

*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total")

Peak Hour Summary

7:30 AM to 8:30 AM

Data Type	Denali St (Northbound)					Denali St (Southbound)					Benson Blvd (Eastbound)					N/A (Westbound)					Peak Hour Total
	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	
Volume	0	0	100	66	7	0	37	141	0	2	0	51	1238	110	4	0	0	0	0	0	1743
%HV	0.0%	0.0%	2.0%	0.0%		0.0%	0.0%	1.4%	0.0%		0.0%	0.0%	1.9%	0.0%		0.0%	0.0%	0.0%	0.0%		1.6%
PHF	0.00	0.00	0.86	0.83	0.58	0.00	0.66	0.86	0.00	0.50	0.00	0.71	0.87	0.72	0.50	0.00	0.00	0.00	0.00	0.00	0.87
Volume			166					178					1399					0			1743
%HV			1.2%					1.1%					1.7%					0.0%			1.6%
PHF			0.85					0.82					0.86					0.00			0.87



Turning Movement Count

Benson Blvd & Denali St

Total Vehicles (15-Minute Periods)

PM Peak Hour

Thursday, October 26, 2017

4:00 PM to 6:00 PM

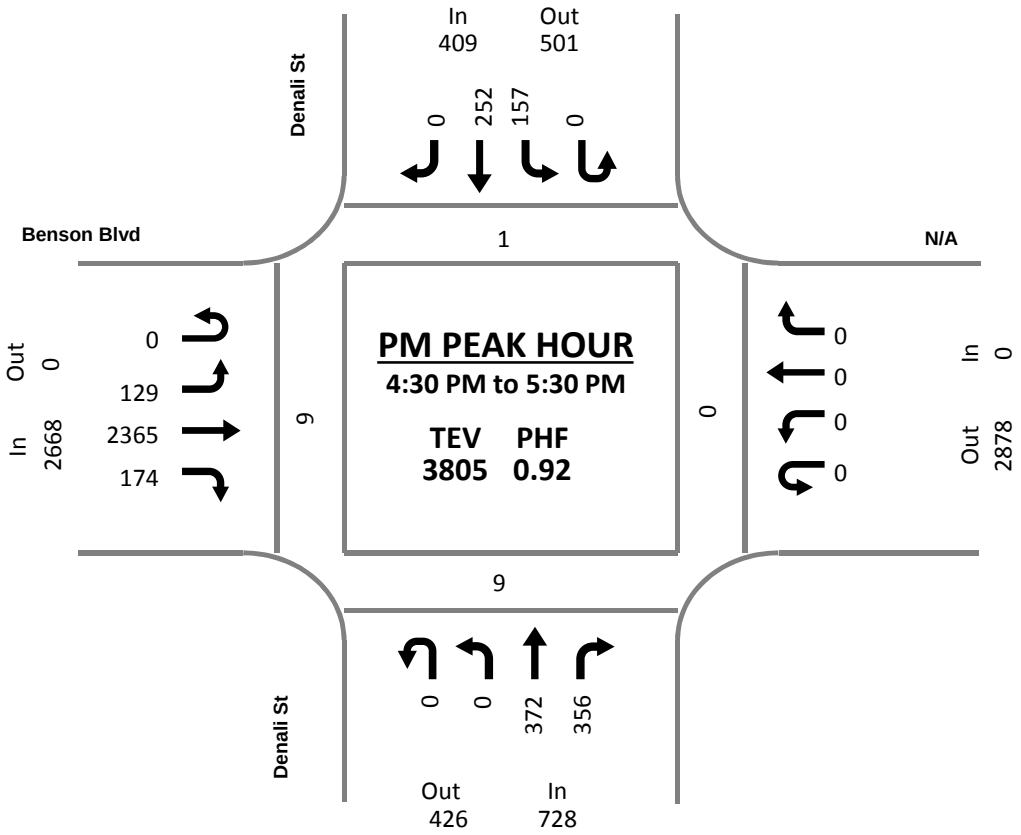
Start Time	Denali St (Northbound)					Denali St (Southbound)					Benson Blvd (Eastbound)					N/A (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
4:00 PM	0	0	73	94	8	0	31	62	0	3	0	17	514	34	6	0	0	0	0	0	825
4:15 PM	0	0	84	69	5	0	32	59	0	2	0	25	486	39	5	0	0	0	0	0	794
4:30 PM	0	0	81	83	3	0	37	53	0	1	0	24	600	39	4	0	0	0	0	0	917
4:45 PM	0	0	98	82	1	0	31	65	0	0	0	29	562	55	2	0	0	0	0	0	922
5:00 PM	0	0	86	103	4	0	45	67	0	0	0	35	657	41	3	0	0	0	0	0	1034
5:15 PM	0	0	107	88	1	0	44	67	0	0	0	41	546	39	0	0	0	0	0	0	932
5:30 PM	0	0	95	74	3	0	46	68	0	5	0	25	463	35	6	0	0	0	0	0	806
5:45 PM	0	0	70	51	4	0	27	48	0	1	0	26	482	33	1	0	0	0	0	0	737
Total	0	0	694	644	29	0	293	489	0	12	0	222	4,310	315	27	0	0	0	0	0	6,967

*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total")

Peak Hour Summary

4:30 PM to 5:30 PM

Data Type	Denali St (Northbound)					Denali St (Southbound)					Benson Blvd (Eastbound)					N/A (Westbound)					Peak Hour Total
	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	
Volume	0	0	372	356	9	0	157	252	0	1	0	129	2365	174	9	0	0	0	0	0	3805
%HV	0.0%	0.0%	0.0%	0.8%		0.0%	0.0%	0.0%	0.0%		0.0%	1.6%	0.8%	0.6%		0.0%	0.0%	0.0%	0.0%		0.6%
PHF	0.00	0.00	0.87	0.86	0.56	0.00	0.87	0.94	0.00	0.25	0.00	0.79	0.90	0.79	0.56	0.00	0.00	0.00	0.00	0.00	0.92
Volume			728					409					2668					0			3805
%HV			0.4%					0.0%					0.8%					0.0%			0.6%
PHF			0.93					0.91					0.91					0.00			0.92



Traffic Camera Count and Placement Information

Intersection Name: 36th Ave & Denali St

Intersection Location	
Northbound Street	Denali St
Southbound Street	Denali St
Eastbound Street	36th Ave
Westbound Street	36th Ave
City, State	Anchorage, AK

Project Information	
Name	Midtown Congestion Relief
Client	AK DOT&PF
Project #	1124.62458.01, Phase 02
PM/Traffic Lead	Steve Noble/Brad Coy

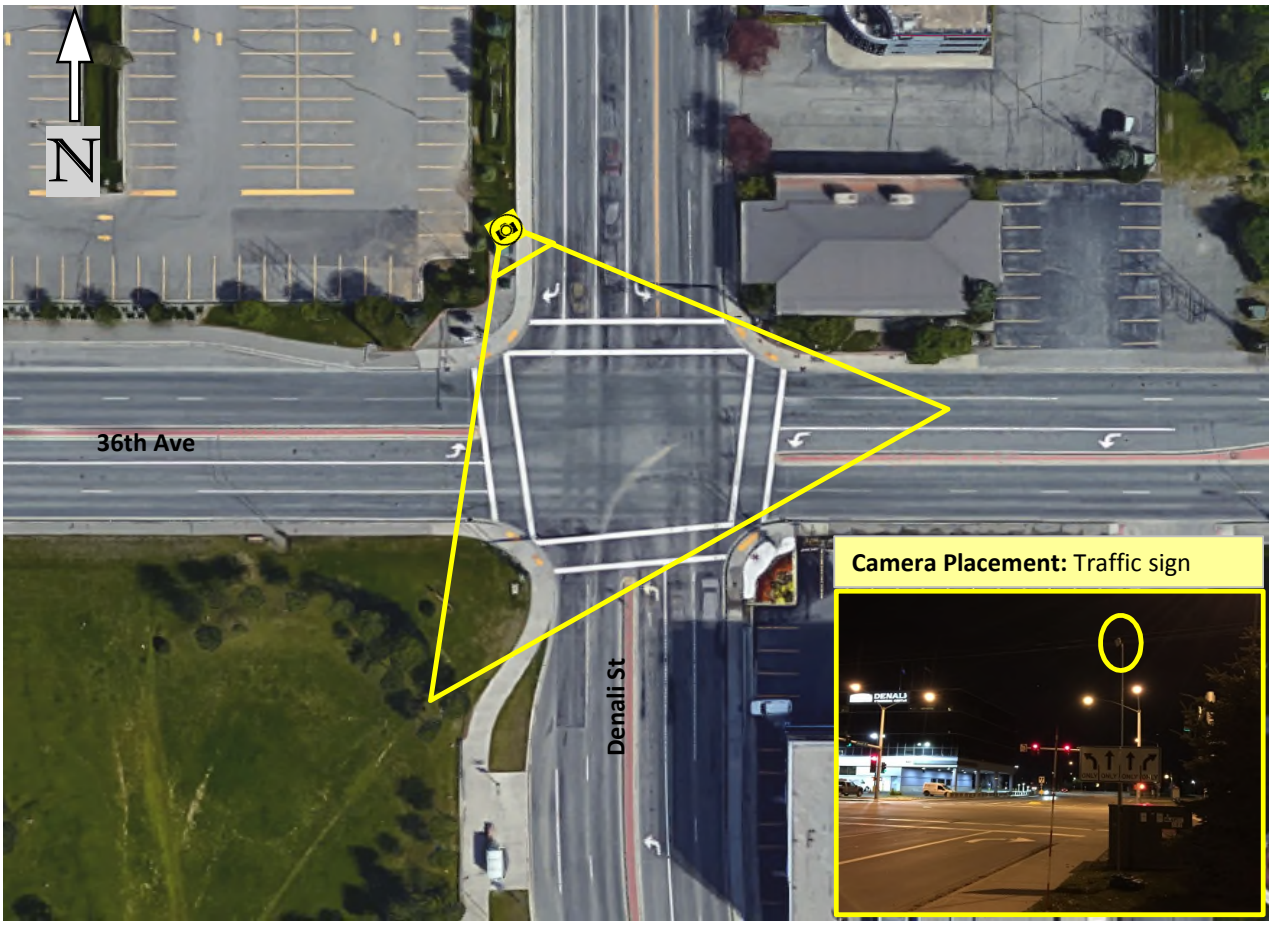
Count Description (e.g., day(s) of week, time periods, other related counts also occuring, etc.)

1 weekday (Tue, Wed, or Thu), with other 36th Ave intersections

Camera Setup/Video Footage	
Staff Responsible	Brad Coy
Setup Time	10/18/2017 6:58 AM
Take Down Time	10/18/2017 9:05 PM
Duration (hours)	14.12
Camera # (2-digit)	49

Count Date, Time, Vendor	
Date	10/18/2017 (Wednesday)
Start Time	7:00 AM
End Time	8:00 PM
Duration (hours)	13.00
Count Vendor	CountingCars.com

Camera Placement



Other Notes (Before, During, or After Count)

DOWL

Turning Movement Count

36th Ave & Denali St

Total Vehicles (15-Minute Periods)

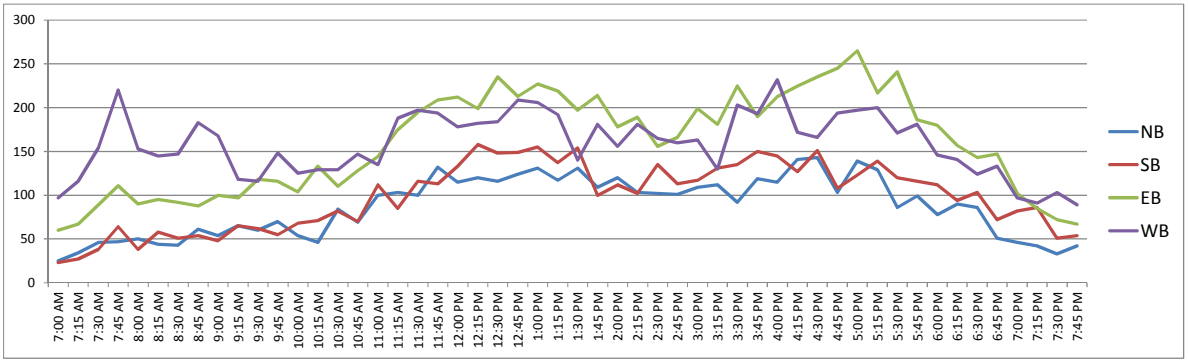
All Data

Wednesday, October 18, 2017

7:00 AM to 8:00 PM

Start Time	Denali St (Northbound)					Denali St (Southbound)					36th Ave (Eastbound)					36th Ave (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
7:00 AM	0	4	21	0	0	0	4	12	7	1	0	12	45	3	0	0	4	85	8	0	205
7:15 AM	0	8	24	2	1	0	4	16	7	1	0	13	45	9	1	0	6	94	16	0	244
7:30 AM	0	13	30	3	0	0	5	17	16	0	0	13	71	5	0	0	8	122	24	0	327
7:45 AM	0	16	27	4	1	0	6	36	22	0	0	17	86	8	2	0	10	178	32	0	442
8:00 AM	0	11	35	4	0	0	7	21	10	1	0	15	65	10	0	0	6	128	19	0	331
8:15 AM	0	9	32	3	0	0	7	28	23	0	0	14	71	10	1	0	7	119	19	0	342
8:30 AM	0	9	26	8	2	0	11	22	18	0	0	18	68	6	0	1	5	123	18	0	333
8:45 AM	0	11	44	6	2	0	7	30	17	0	0	11	70	7	1	0	15	134	34	2	386
9:00 AM	0	17	35	2	0	0	8	24	16	0	0	19	73	8	0	0	6	135	27	2	370
9:15 AM	0	13	46	6	0	0	8	46	11	0	0	24	63	10	1	0	11	83	24	1	345
9:30 AM	0	16	40	4	2	0	15	33	14	2	0	17	84	17	1	0	7	86	23	1	356
9:45 AM	0	14	46	10	2	0	9	24	22	1	0	18	86	12	2	1	7	115	25	0	389
10:00 AM	0	15	34	5	3	0	12	38	18	1	0	18	76	10	0	0	13	88	24	0	351
10:15 AM	0	12	30	4	1	0	11	41	19	0	1	24	95	13	0	0	11	93	25	0	379
10:30 AM	0	29	46	9	3	0	16	45	21	0	0	18	76	16	2	1	12	84	32	0	405
10:45 AM	0	9	57	3	0	0	11	40	19	0	0	22	90	16	0	0	9	104	34	0	414
11:00 AM	2	16	67	15	5	0	22	56	34	0	0	29	100	15	3	0	10	96	29	0	491
11:15 AM	0	40	56	7	1	0	22	38	25	0	0	35	117	23	5	1	8	147	32	0	551
11:30 AM	0	32	62	6	2	0	26	48	42	0	0	43	122	30	1	0	12	140	45	0	608
11:45 AM	0	38	85	9	0	0	22	58	33	0	0	45	130	34	2	0	11	141	42	1	648
12:00 PM	0	33	72	10	1	0	30	55	48	0	1	40	139	32	2	0	9	131	38	0	638
12:15 PM	0	28	77	15	0	0	28	80	50	2	1	46	119	33	1	0	15	125	42	0	659
12:30 PM	0	40	68	8	1	0	27	69	52	1	0	42	156	37	1	0	11	141	32	0	683
12:45 PM	0	34	82	8	3	0	38	67	44	0	0	42	141	30	2	0	13	161	35	0	695
1:00 PM	0	46	69	16	2	0	32	72	51	2	0	39	148	40	2	0	19	150	37	0	719
1:15 PM	0	28	85	4	3	0	30	76	31	0	1	48	131	39	0	0	15	137	40	0	665
1:30 PM	0	30	90	11	5	0	28	93	33	1	1	42	130	24	3	0	6	106	28	0	622
1:45 PM	0	37	64	8	0	0	24	47	29	2	1	34	157	22	2	0	14	127	40	0	604
2:00 PM	0	36	69	15	1	0	28	58	26	1	0	29	130	19	8	0	10	115	31	0	566
2:15 PM	0	25	67	11	1	0	19	57	26	0	2	37	132	18	0	0	7	136	38	2	575
2:30 PM	0	23	72	7	3	0	35	71	29	1	0	18	117	21	3	0	7	120	38	1	558
2:45 PM	0	27	63	11	2	0	28	58	27	1	0	27	121	18	4	0	10	113	37	2	540
3:00 PM	1	30	72	6	2	0	31	54	32	2	0	36	142	21	6	0	5	129	29	0	588
3:15 PM	0	38	65	9	2	0	23	74	34	0	1	33	129	18	4	0	7	91	32	1	554
3:30 PM	0	19	69	4	1	0	26	70	39	0	1	26	168	30	1	0	21	141	41	1	655
3:45 PM	0	30	83	6	0	0	38	73	39	3	0	41	126	23	2	1	16	142	34	2	652
4:00 PM	0	34	75	6	0	0	43	70	32	1	0	25	158	30	3	1	13	173	45	0	705
4:15 PM	0	36	87	18	2	0	27	61	39	1	0	32	167	26	5	0	13	135	24	1	665
4:30 PM	0	36	95	12	9	0	34	77	40	2	0	43	170	22	2	0	9	135	22	3	695
4:45 PM	0	28	69	6	1	0	26	48	34	0	1	37	192	15	2	0	11	140	43	2	650
5:00 PM	0	29	99	11	0	0	27	71	25	0	2	44	186	33	4	1	4	148	44	1	724
5:15 PM	0	38	80	11	2	0	24	83	32	1	0	28	160	29	6	0	17	149	34	2	685
5:30 PM	0	28	53	5	1	0	31	56	33	0	0	42	179	20	1	0	14	124	33	0	618
5:45 PM	0	27	63	9	0	0	26	57	33	2	0	37	128	21	0	1	8	142	30	1	582
6:00 PM	0	20	46	12	0	0	30	40	42	0	0	26	142	12	4	0	4	109	33	1	516
6:15 PM	0	25	60	5	1	0	26	42	26	3	1	32	112	12	4	0	5	112	24	2	482
6:30 PM	0	27	50	9	1	0	34	40	29	1	1	26	110	6	2	0	2	106	16	0	456
6:45 PM	0	16	28	7	0	0	18	39	15	0	0	26	112	9	1	0	5	100	28	0	403
7:00 PM	0	16	29	1	2	0	23	38	21	0	1	23	72	6	0	0	2	76	19	1	327
7:15 PM	0	10	30	2	1	0	22	43	21	0	0	15	66	4	1	0	3	74	14	1	304
7:30 PM	0	10	22	1	0	0	10	26	15	0	0	11	56	5	0	0	2	82	19	0	259
7:45 PM	0	6	32	4	3	0	10	23	21	0	0	11	53	3	6	1	1	76	11	0	252
Total	3	1,222	2,928	378	75	0	1,109	2,561	1,442	34	16	1,463	5,882	940	104	9	476	6,241	1,543	31	26,213

*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total" or graph below)





Turning Movement Count

36th Ave & Denali St

Heavy Vehicles (15-Minute Periods)

All Data

Wednesday, October 18, 2017

7:00 AM to 8:00 PM

Start Time	Denali St (Northbound)				Denali St (Southbound)				36th Ave (Eastbound)				36th Ave (Westbound)				Period Total (Veh)
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	
7:00 AM	0	1	1	0	0	0	0	0	0	1	3	0	0	0	1	0	7
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
7:30 AM	0	0	1	0	0	0	1	0	0	0	1	0	0	0	0	1	4
7:45 AM	0	0	0	0	0	0	0	0	0	0	4	0	0	1	2	0	7
8:00 AM	0	0	2	0	0	0	0	0	0	1	2	0	0	0	2	0	7
8:15 AM	0	0	1	0	0	0	0	1	0	1	0	1	0	0	3	0	7
8:30 AM	0	0	0	1	0	0	2	2	0	0	3	0	0	0	2	0	10
8:45 AM	0	0	3	1	0	0	0	1	0	0	2	1	0	1	1	1	11
9:00 AM	0	1	1	0	0	0	0	0	0	2	1	0	0	0	0	0	5
9:15 AM	0	0	1	0	0	0	0	1	0	0	0	0	0	0	2	0	4
9:30 AM	0	0	0	0	0	0	2	0	0	0	2	0	0	0	2	2	8
9:45 AM	0	1	1	0	0	0	1	0	0	0	0	0	0	0	1	0	4
10:00 AM	0	0	0	0	0	1	0	0	0	0	3	0	0	1	3	0	8
10:15 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	2	0	3
10:30 AM	0	1	0	0	0	1	4	0	0	0	1	0	0	0	4	0	11
10:45 AM	0	1	2	0	0	0	0	2	0	0	3	0	0	0	1	1	10
11:00 AM	0	0	0	1	0	0	0	0	0	0	2	0	0	0	3	0	6
11:15 AM	0	0	1	0	0	0	0	0	0	0	1	0	0	0	3	0	5
11:30 AM	0	1	1	1	0	0	3	1	0	1	2	0	0	1	2	2	15
11:45 AM	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	4
12:00 PM	0	0	2	1	0	1	1	1	0	0	0	0	0	0	0	0	6
12:15 PM	0	0	1	0	0	1	0	0	0	0	1	0	0	0	2	0	5
12:30 PM	0	3	1	1	0	0	2	1	0	0	0	1	0	0	0	0	9
12:45 PM	0	1	1	0	0	0	0	0	0	1	2	0	0	0	1	0	6
1:00 PM	0	0	2	1	0	1	0	0	0	0	2	1	0	1	0	0	8
1:15 PM	0	0	2	0	0	0	2	1	0	0	1	0	0	0	3	0	9
1:30 PM	0	0	1	0	0	0	1	0	0	0	2	0	0	0	0	0	4
1:45 PM	0	0	1	0	0	1	1	2	0	0	3	0	0	0	1	0	9
2:00 PM	0	1	0	0	0	0	1	0	0	0	1	0	0	0	1	1	5
2:15 PM	0	0	0	0	0	1	0	0	0	0	1	0	0	0	3	0	5
2:30 PM	0	1	1	0	0	0	1	0	0	0	2	0	0	0	3	0	8
2:45 PM	0	0	1	0	0	0	1	1	0	0	4	1	0	0	3	2	13
3:00 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	3	0	5
3:15 PM	0	1	0	1	0	0	1	0	0	0	2	0	0	0	3	0	8
3:30 PM	0	0	0	0	0	0	2	0	0	1	2	0	0	1	1	1	8
3:45 PM	0	0	2	0	0	0	1	1	0	1	1	0	0	1	4	0	11
4:00 PM	0	0	0	0	0	1	1	0	0	0	5	0	0	0	1	0	8
4:15 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	4	0	5
4:30 PM	0	0	0	0	0	0	2	0	0	0	2	0	0	0	1	0	5
4:45 PM	0	0	1	0	0	0	0	0	0	0	1	0	0	0	1	0	3
5:00 PM	0	0	1	0	0	0	1	0	0	0	2	0	0	0	2	0	6
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	3
5:30 PM	0	0	0	0	0	0	1	0	0	0	1	0	0	0	2	0	4
5:45 PM	0	0	1	0	0	0	0	0	0	0	2	0	0	0	2	0	5
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2	0	3
6:30 PM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	2
6:45 PM	0	0	1	0	0	0	0	0	0	0	2	0	0	0	0	0	3
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
7:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	2
7:30 PM	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	2
7:45 PM	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	2
Total	0	13	38	8	0	9	35	16	0	9	75	5	0	8	84	11	311

Turning Movement Count

36th Ave & Denali St

Total Vehicles (15-Minute Periods)

AM Peak Hour

Wednesday, October 18, 2017

7:00 AM to 9:00 AM

Start Time	Denali St (Northbound)					Denali St (Southbound)					36th Ave (Eastbound)					36th Ave (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
7:00 AM	0	4	21	0	0	0	4	12	7	1	0	12	45	3	0	0	4	85	8	0	205
7:15 AM	0	8	24	2	1	0	4	16	7	1	0	13	45	9	1	0	6	94	16	0	244
7:30 AM	0	13	30	3	0	0	5	17	16	0	0	13	71	5	0	0	8	122	24	0	327
7:45 AM	0	16	27	4	1	0	6	36	22	0	0	17	86	8	2	0	10	178	32	0	442
8:00 AM	0	11	35	4	0	0	7	21	10	1	0	15	65	10	0	0	6	128	19	0	331
8:15 AM	0	9	32	3	0	0	7	28	23	0	0	14	71	10	1	0	7	119	19	0	342
8:30 AM	0	9	26	8	2	0	11	22	18	0	0	18	68	6	0	1	5	123	18	0	333
8:45 AM	0	11	44	6	2	0	7	30	17	0	0	11	70	7	1	0	15	134	34	2	386
Total	0	81	239	30	6	0	51	182	120	3	0	113	521	58	5	1	61	983	170	2	2,610

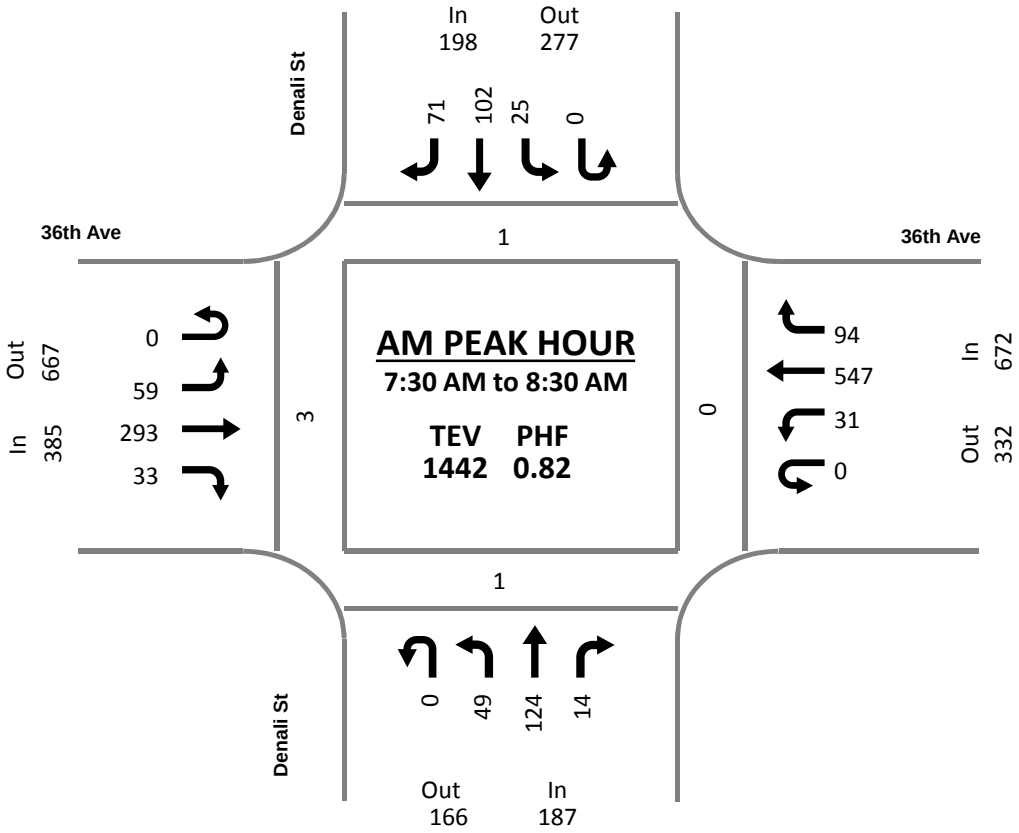
*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total")

Peak Hour Summary (System Peak*)

7:30 AM to 8:30 AM

Data Type	Denali St (Northbound)					Denali St (Southbound)					36th Ave (Eastbound)					36th Ave (Westbound)					Peak Hour Total
	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	
Volume	0	49	124	14	1	0	25	102	71	1	0	59	293	33	3	0	31	547	94	0	1442
%HV	0.0%	0.0%	3.2%	0.0%		0.0%	0.0%	1.0%	1.4%		0.0%	3.4%	2.4%	3.0%		0.0%	3.2%	1.3%	1.1%		1.7%
PHF	0.00	0.77	0.89	0.88	0.25	0.00	0.89	0.71	0.77	0.25	0.00	0.87	0.85	0.83	0.38	0.00	0.78	0.77	0.73	0.00	0.82
Volume			187					198					385					672			1442
%HV			2.1%					1.0%					2.6%					1.3%			1.7%
PHF			0.94					0.77					0.87					0.76			0.82

*System Peak is based on comparison of other study area counts rather than highest total entering volume at this intersection.



Turning Movement Count

36th Ave & Denali St

Total Vehicles (15-Minute Periods)

PM Peak Hour

Wednesday, October 18, 2017

4:00 PM to 6:00 PM

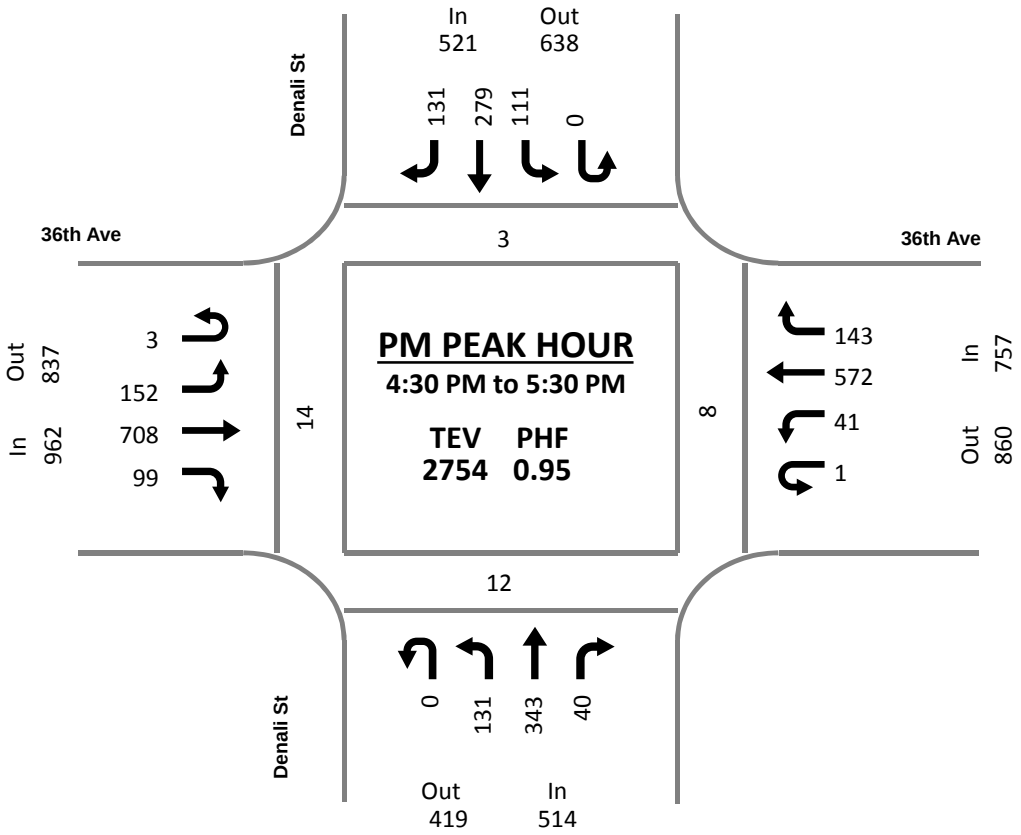
Start Time	Denali St (Northbound)					Denali St (Southbound)					36th Ave (Eastbound)					36th Ave (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
4:00 PM	0	34	75	6	0	0	43	70	32	1	0	25	158	30	3	1	13	173	45	0	705
4:15 PM	0	36	87	18	2	0	27	61	39	1	0	32	167	26	5	0	13	135	24	1	665
4:30 PM	0	36	95	12	9	0	34	77	40	2	0	43	170	22	2	0	9	135	22	3	695
4:45 PM	0	28	69	6	1	0	26	48	34	0	1	37	192	15	2	0	11	140	43	2	650
5:00 PM	0	29	99	11	0	0	27	71	25	0	2	44	186	33	4	1	4	148	44	1	724
5:15 PM	0	38	80	11	2	0	24	83	32	1	0	28	160	29	6	0	17	149	34	2	685
5:30 PM	0	28	53	5	1	0	31	56	33	0	0	42	179	20	1	0	14	124	33	0	618
5:45 PM	0	27	63	9	0	0	26	57	33	2	0	37	128	21	0	1	8	142	30	1	582
Total	0	256	621	78	15	0	238	523	268	7	3	288	1,340	196	23	3	89	1,146	275	10	5,324

*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total")

Peak Hour Summary

4:30 PM to 5:30 PM

Data Type	Denali St (Northbound)					Denali St (Southbound)					36th Ave (Eastbound)					36th Ave (Westbound)					Peak Hour Total
	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	
Volume	0	131	343	40	12	0	111	279	131	3	3	152	708	99	14	1	41	572	143	8	2754
%HV	0.0%	0.0%	0.6%	0.0%		0.0%	0.0%	1.1%	0.0%		0.0%	0.0%	0.7%	0.0%		0.0%	2.4%	1.0%	0.0%		0.6%
PHF	0.00	0.86	0.87	0.83	0.33	0.00	0.82	0.84	0.82	0.38	0.38	0.86	0.92	0.75	0.58	0.25	0.60	0.96	0.81	0.67	0.95
Volume			514					521					962					757			2754
%HV			0.4%					0.6%					0.5%					0.9%			0.6%
PHF			0.90					0.86					0.91					0.95			0.95



Traffic Camera Count and Placement Information

Intersection Name: Tudor Rd & Denali St

Intersection Location	
Northbound Street	N/A
Southbound Street	Denali St
Eastbound Street	Tudor Rd
Westbound Street	Tudor Rd
City, State	Anchorage, AK

Project Information	
Name	Midtown Congestion Relief
Client	AK DOT&PF
Project #	1124.62458.01, Phase 02
PM/Traffic Lead	Steve Noble/Brad Coy

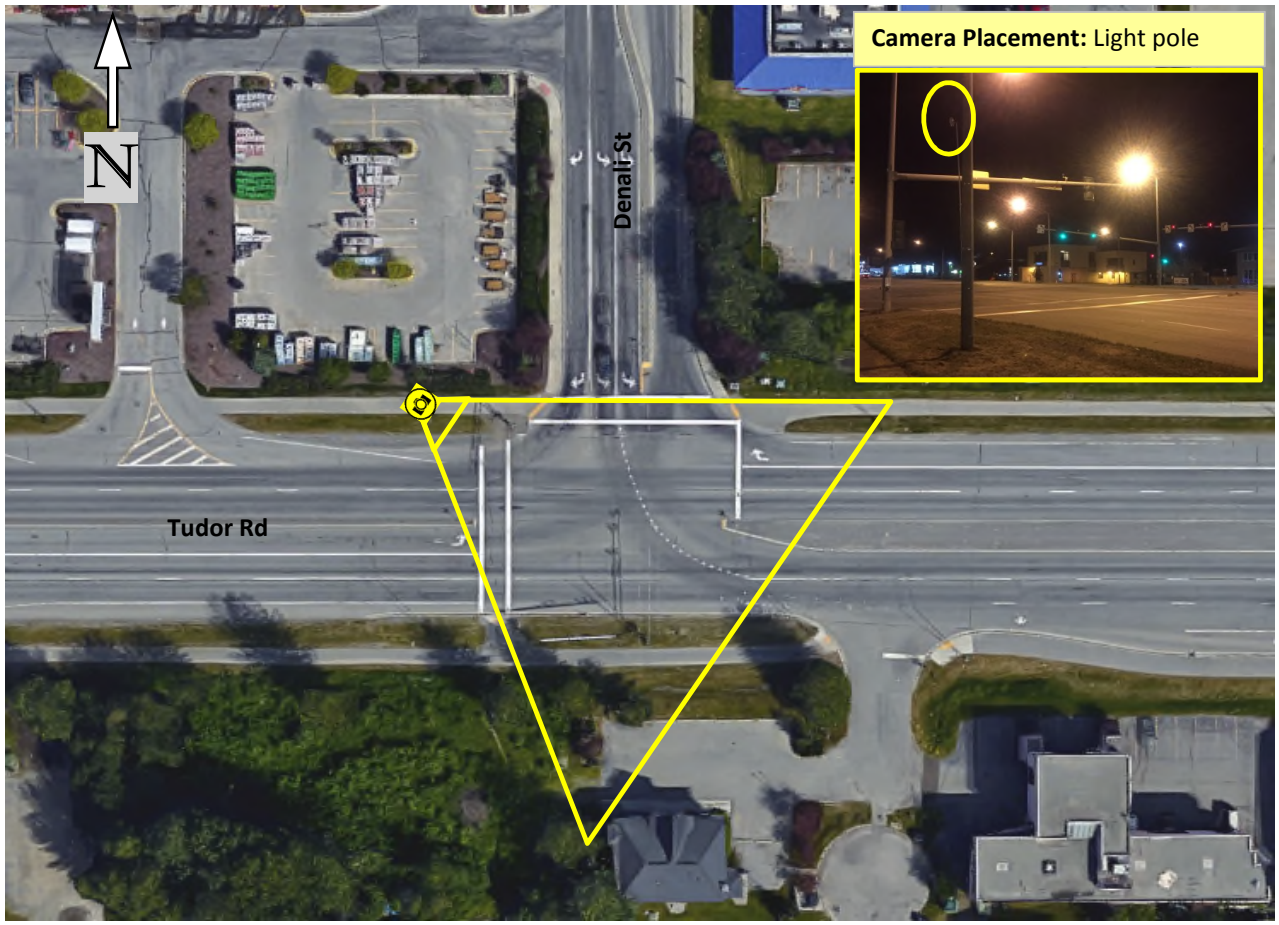
Count Description (e.g., day(s) of week, time periods, other related counts also occuring, etc.)

1 weekday (Tue, Wed, or Thu), simultaneous as Tudor & Seward Hwy Ramps

Camera Setup/Video Footage	
Staff Responsible	Brad Coy
Setup Time	10/17/2017 6:53 AM
Take Down Time	10/17/2017 8:20 PM
Duration (hours)	13.45
Camera # (2-digit)	79

Count Date, Time, Vendor	
Date	10/17/2017 (Tuesday)
Start Time	7:00 AM
End Time	8:00 PM
Duration (hours)	13.00
Count Vendor	CountingCars.com

Camera Placement



Other Notes (Before, During, or After Count)

Turning Movement Count

Tudor Rd & Denali St

Total Vehicles (15-Minute Periods)

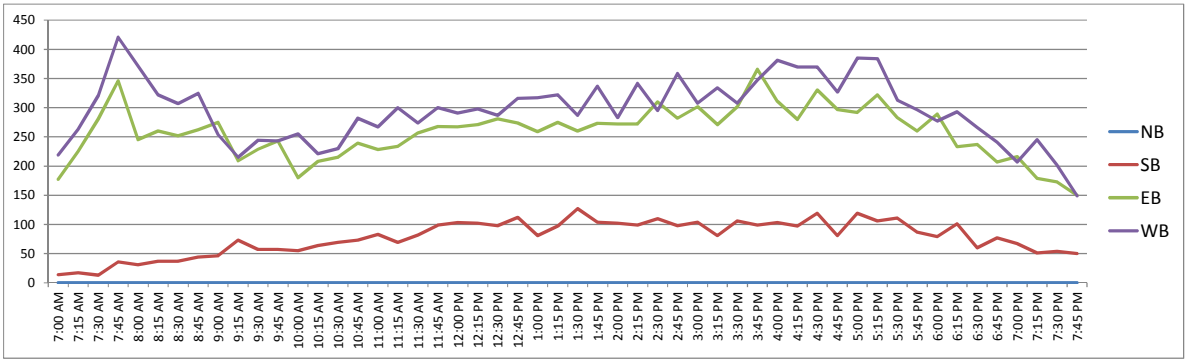
All Data

Tuesday, October 17, 2017

7:00 AM to 8:00 PM

Start Time	N/A (Northbound)					Denali St (Southbound)					Tudor Rd (Eastbound)					Tudor Rd (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
7:00 AM	0	0	0	0	1	0	3	0	11	0	0	17	160	0	0	0	0	208	11	0	410
7:15 AM	0	0	0	0	0	0	9	0	8	2	0	26	199	0	0	0	0	248	15	0	505
7:30 AM	0	0	0	0	0	0	4	0	9	0	0	37	244	0	1	0	0	302	19	0	615
7:45 AM	0	0	0	0	0	0	14	0	22	0	0	40	306	0	2	0	0	392	29	0	803
8:00 AM	0	0	0	0	0	0	12	0	19	0	0	29	216	0	0	0	0	347	25	0	648
8:15 AM	0	0	0	0	0	0	16	0	21	2	0	37	223	0	1	0	0	303	19	0	619
8:30 AM	0	0	0	0	0	0	21	0	16	0	0	37	215	0	0	0	0	292	15	0	596
8:45 AM	0	0	0	0	0	0	24	0	20	0	0	53	209	0	0	0	0	303	22	0	631
9:00 AM	0	0	0	0	0	0	19	0	27	0	1	51	223	0	0	0	0	233	21	0	575
9:15 AM	0	0	0	0	0	1	28	0	44	0	0	32	177	0	0	0	0	191	24	0	497
9:30 AM	0	0	0	0	0	0	27	0	30	0	0	40	189	0	0	0	0	223	21	0	530
9:45 AM	0	0	0	0	0	0	29	0	28	0	2	43	198	0	0	0	0	224	19	0	543
10:00 AM	0	0	0	0	0	0	29	0	26	1	0	37	143	0	0	0	0	229	26	0	490
10:15 AM	0	0	0	0	0	0	27	0	37	0	0	34	174	0	0	0	0	199	22	0	493
10:30 AM	0	0	0	0	0	0	37	0	32	0	0	33	182	0	0	0	0	209	21	0	514
10:45 AM	0	0	0	0	0	0	35	0	38	2	0	50	189	0	0	0	0	254	28	0	594
11:00 AM	0	0	0	0	0	0	46	0	37	0	0	33	195	0	1	0	0	235	32	0	578
11:15 AM	0	0	0	0	0	0	36	0	33	1	0	42	192	0	0	0	0	272	28	0	603
11:30 AM	0	0	0	0	0	0	40	0	42	0	0	56	201	0	0	0	0	242	32	0	613
11:45 AM	0	0	0	0	0	0	55	0	44	0	1	55	212	0	0	0	0	273	27	0	667
12:00 PM	0	0	0	0	0	0	45	0	58	0	1	51	215	0	0	0	0	268	23	0	661
12:15 PM	0	0	0	0	0	0	51	0	51	0	0	61	210	0	3	0	0	268	30	0	671
12:30 PM	0	0	0	0	0	1	43	0	54	0	0	57	224	0	0	0	0	263	24	0	666
12:45 PM	0	0	0	0	0	0	54	0	58	0	0	60	214	0	0	0	0	284	32	0	702
1:00 PM	0	0	0	0	0	0	36	0	45	1	0	57	202	0	0	0	0	288	29	0	657
1:15 PM	0	0	0	0	0	0	44	0	53	0	0	52	223	0	2	0	0	301	21	0	694
1:30 PM	0	0	0	0	0	0	66	0	61	0	0	44	216	0	1	0	0	251	36	0	674
1:45 PM	0	0	0	0	0	1	56	0	47	0	1	39	233	0	0	1	0	291	45	0	714
2:00 PM	0	0	0	0	0	0	60	0	42	0	0	55	217	0	4	1	0	252	30	0	657
2:15 PM	0	0	0	0	0	0	51	0	48	2	0	53	219	0	1	0	0	315	27	0	713
2:30 PM	0	0	0	0	0	0	57	0	53	0	1	42	267	0	1	0	0	269	26	0	715
2:45 PM	0	0	0	0	0	0	47	0	51	1	0	47	235	0	1	0	0	327	32	0	739
3:00 PM	0	0	0	0	0	0	46	0	58	2	0	55	247	0	0	0	0	282	26	0	714
3:15 PM	0	0	0	0	0	0	46	0	35	0	0	43	228	0	0	0	0	304	30	0	686
3:30 PM	0	0	0	0	0	0	62	0	44	3	0	44	258	0	2	0	0	289	19	0	716
3:45 PM	0	0	0	0	0	0	47	0	52	0	0	62	304	0	0	0	0	325	22	0	812
4:00 PM	0	0	0	0	0	0	46	0	57	0	0	52	259	0	0	0	0	357	24	0	795
4:15 PM	0	0	0	0	0	0	45	0	52	1	1	52	227	0	1	0	0	342	28	0	747
4:30 PM	0	0	0	0	0	0	61	0	58	0	0	38	292	0	0	0	0	349	21	0	819
4:45 PM	0	0	0	0	0	0	35	0	46	2	0	39	258	0	1	0	0	303	24	0	705
5:00 PM	0	0	0	0	0	0	56	0	63	1	0	52	240	0	0	0	0	347	38	0	796
5:15 PM	0	0	0	0	0	0	46	0	60	0	0	54	268	0	1	0	0	360	24	0	812
5:30 PM	0	0	0	0	0	1	46	0	64	0	0	45	238	0	1	0	0	289	24	0	707
5:45 PM	0	0	0	0	0	0	33	0	54	0	0	27	233	0	0	0	0	274	23	0	644
6:00 PM	0	0	0	0	0	0	42	0	37	1	1	30	258	0	1	0	0	261	16	0	645
6:15 PM	0	0	0	0	0	0	51	0	50	1	0	30	203	0	2	0	0	266	27	2	627
6:30 PM	0	0	0	0	0	0	26	0	34	0	0	27	210	0	0	0	0	251	15	0	563
6:45 PM	0	0	0	0	0	0	38	0	39	0	0	19	188	0	1	0	0	218	23	0	525
7:00 PM	0	0	0	0	0	0	33	0	34	0	0	30	186	0	1	0	0	187	20	0	490
7:15 PM	0	0	0	0	0	0	25	0	26	0	0	26	153	0	0	0	0	230	15	0	475
7:30 PM	0	0	0	0	0	0	30	0	24	3	0	20	153	0	1	0	0	186	16	0	429
7:45 PM	0	0	0	0	1	0	22	0	28	0	0	12	138	0	3	0	0	139	10	0	349
Total	0	0	0	0	2	4	1,957	0	2,080	26	9	2,157	11,263	0	33	2	0	14,115	1,256	2	32,843

*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total" or graph below)





Turning Movement Count

Tudor Rd & Denali St

Heavy Vehicles (15-Minute Periods)

All Data

Tuesday, October 17, 2017

7:00 AM to 8:00 PM

Start Time	N/A (Northbound)				Denali St (Southbound)				Tudor Rd (Eastbound)				Tudor Rd (Westbound)				Period Total (Veh)
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	
7:00 AM	0	0	0	0	0	0	0	0	0	0	5	0	0	0	4	0	9
7:15 AM	0	0	0	0	0	1	0	0	0	0	4	0	0	0	3	2	10
7:30 AM	0	0	0	0	0	0	0	1	0	0	9	0	0	0	6	1	17
7:45 AM	0	0	0	0	0	0	0	1	0	0	9	0	0	0	6	1	17
8:00 AM	0	0	0	0	0	0	0	2	0	0	5	0	0	0	6	1	14
8:15 AM	0	0	0	0	0	0	0	1	0	1	9	0	0	0	5	0	16
8:30 AM	0	0	0	0	0	0	0	0	0	2	7	0	0	0	11	0	20
8:45 AM	0	0	0	0	0	1	0	0	0	1	10	0	0	0	7	1	20
9:00 AM	0	0	0	0	0	0	0	0	0	1	13	0	0	0	7	0	21
9:15 AM	0	0	0	0	0	2	0	1	0	1	9	0	0	0	13	1	27
9:30 AM	0	0	0	0	0	1	0	1	0	1	6	0	0	0	9	0	18
9:45 AM	0	0	0	0	0	2	0	1	0	1	12	0	0	0	10	3	29
10:00 AM	0	0	0	0	0	1	0	1	0	0	9	0	0	0	10	2	23
10:15 AM	0	0	0	0	0	2	0	1	0	1	6	0	0	0	9	1	20
10:30 AM	0	0	0	0	0	1	0	1	0	3	10	0	0	0	11	1	27
10:45 AM	0	0	0	0	0	2	0	0	0	0	9	0	0	0	4	1	16
11:00 AM	0	0	0	0	0	1	0	0	0	2	6	0	0	0	10	0	19
11:15 AM	0	0	0	0	0	1	0	2	0	1	9	0	0	0	10	0	23
11:30 AM	0	0	0	0	0	0	0	1	0	1	7	0	0	0	9	0	18
11:45 AM	0	0	0	0	0	2	0	0	0	1	5	0	0	0	7	0	15
12:00 PM	0	0	0	0	0	0	0	0	0	0	7	0	0	0	14	0	21
12:15 PM	0	0	0	0	0	2	0	1	0	1	3	0	0	0	6	2	15
12:30 PM	0	0	0	0	0	0	0	0	0	2	9	0	0	0	5	1	17
12:45 PM	0	0	0	0	0	2	0	2	0	3	3	0	0	0	4	0	14
1:00 PM	0	0	0	0	0	0	0	0	0	1	5	0	0	0	19	0	25
1:15 PM	0	0	0	0	0	2	0	1	0	2	7	0	0	0	18	0	30
1:30 PM	0	0	0	0	0	3	0	0	0	2	8	0	0	0	6	1	20
1:45 PM	0	0	0	0	0	1	0	1	0	0	8	0	0	0	10	0	20
2:00 PM	0	0	0	0	0	1	0	1	0	0	6	0	0	0	5	1	14
2:15 PM	0	0	0	0	0	1	0	0	0	1	12	0	0	0	7	0	21
2:30 PM	0	0	0	0	0	0	0	0	0	1	8	0	0	0	5	0	14
2:45 PM	0	0	0	0	0	0	0	1	0	0	9	0	0	0	6	0	16
3:00 PM	0	0	0	0	0	0	0	0	0	1	8	0	0	0	9	0	18
3:15 PM	0	0	0	0	0	2	0	1	0	2	5	0	0	0	6	2	18
3:30 PM	0	0	0	0	0	0	0	0	0	1	3	0	0	0	3	0	7
3:45 PM	0	0	0	0	0	0	0	1	0	1	9	0	0	0	5	0	16
4:00 PM	0	0	0	0	0	1	0	0	0	0	2	0	0	0	5	0	8
4:15 PM	0	0	0	0	0	1	0	0	0	1	4	0	0	0	5	0	11
4:30 PM	0	0	0	0	0	1	0	0	0	0	8	0	0	0	5	0	14
4:45 PM	0	0	0	0	0	1	0	0	0	0	3	0	0	0	5	0	9
5:00 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	4
5:15 PM	0	0	0	0	0	2	0	1	0	0	2	0	0	0	7	0	12
5:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	3	0	4
5:45 PM	0	0	0	0	0	0	0	0	0	0	4	0	0	0	3	0	7
6:00 PM	0	0	0	0	0	1	0	0	0	0	2	0	0	0	3	0	6
6:15 PM	0	0	0	0	0	1	0	0	0	1	2	0	0	0	1	0	5
6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
6:45 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	4
7:00 PM	0	0	0	0	0	1	0	0	0	0	1	0	0	0	3	1	6
7:15 PM	0	0	0	0	0	1	0	0	0	0	3	0	0	0	3	0	7
7:30 PM	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3
7:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
Total	0	0	0	0	0	41	0	24	0	37	308	0	0	0	336	23	769

Turning Movement Count

Tudor Rd & Denali St

Total Vehicles (15-Minute Periods)

AM Peak Hour

Tuesday, October 17, 2017

7:00 AM to 9:00 AM

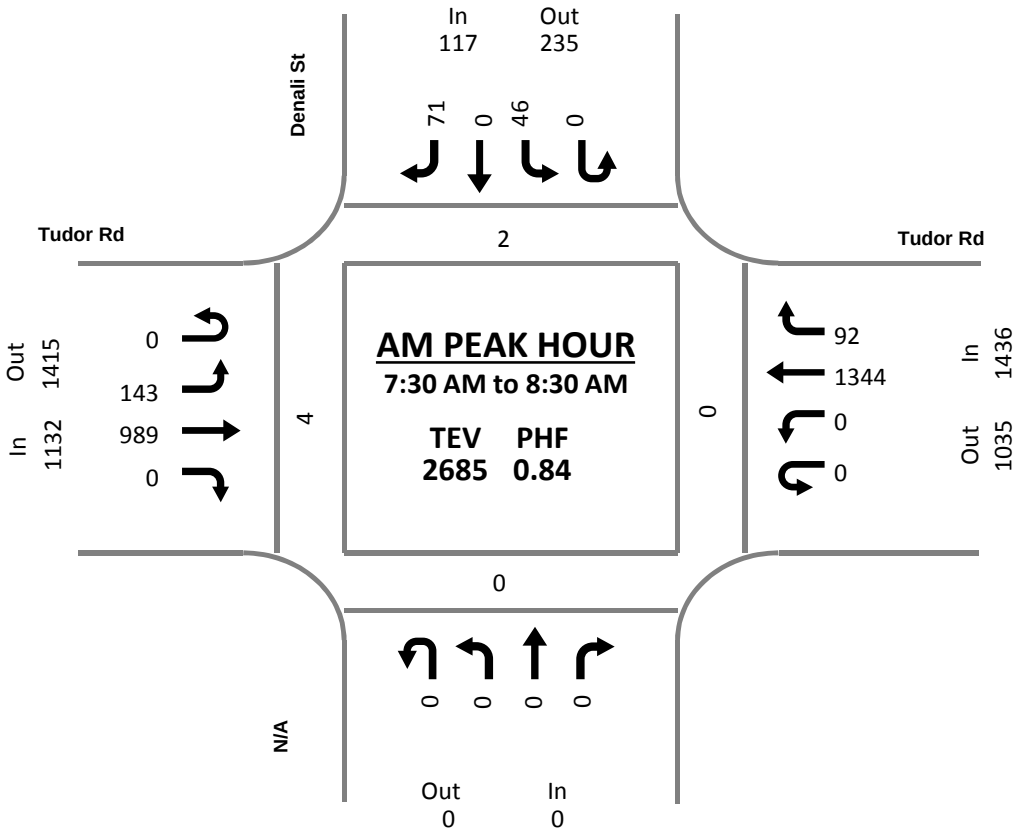
Start Time	N/A (Northbound)					Denali St (Southbound)					Tudor Rd (Eastbound)					Tudor Rd (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
7:00 AM	0	0	0	0	1	0	3	0	11	0	0	17	160	0	0	0	0	208	11	0	410
7:15 AM	0	0	0	0	0	0	9	0	8	2	0	26	199	0	0	0	0	248	15	0	505
7:30 AM	0	0	0	0	0	0	4	0	9	0	0	37	244	0	1	0	0	302	19	0	615
7:45 AM	0	0	0	0	0	0	14	0	22	0	0	40	306	0	2	0	0	392	29	0	803
8:00 AM	0	0	0	0	0	0	12	0	19	0	0	29	216	0	0	0	0	347	25	0	648
8:15 AM	0	0	0	0	0	0	16	0	21	2	0	37	223	0	1	0	0	303	19	0	619
8:30 AM	0	0	0	0	0	0	21	0	16	0	0	37	215	0	0	0	0	292	15	0	596
8:45 AM	0	0	0	0	0	0	24	0	20	0	0	53	209	0	0	0	0	303	22	0	631
Total	0	0	0	0	1	0	103	0	126	4	0	276	1,772	0	4	0	0	2,395	155	0	4,827

*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total")

Peak Hour Summary

7:30 AM to 8:30 AM

Data Type	N/A (Northbound)					Denali St (Southbound)					Tudor Rd (Eastbound)					Tudor Rd (Westbound)					Peak Hour Total
	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	
Volume	0	0	0	0	0	0	46	0	71	2	0	143	989	0	4	0	0	1344	92	0	2685
%HV	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%	7.0%		0.0%	0.7%	3.2%	0.0%		0.0%	0.0%	1.7%	3.3%		2.4%
PHF	0.00	0.00	0.00	0.00	0.00	0.00	0.72	0.00	0.81	0.25	0.00	0.89	0.81	0.00	0.50	0.00	0.00	0.86	0.79	0.00	0.84
Volume			0					117					1132					1436			2685
%HV			0.0%					4.3%					2.9%					1.8%			2.4%
PHF			0.00					0.79					0.82					0.85			0.84



Turning Movement Count

Tudor Rd & Denali St

Total Vehicles (15-Minute Periods)

PM Peak Hour

Tuesday, October 17, 2017

4:00 PM to 6:00 PM

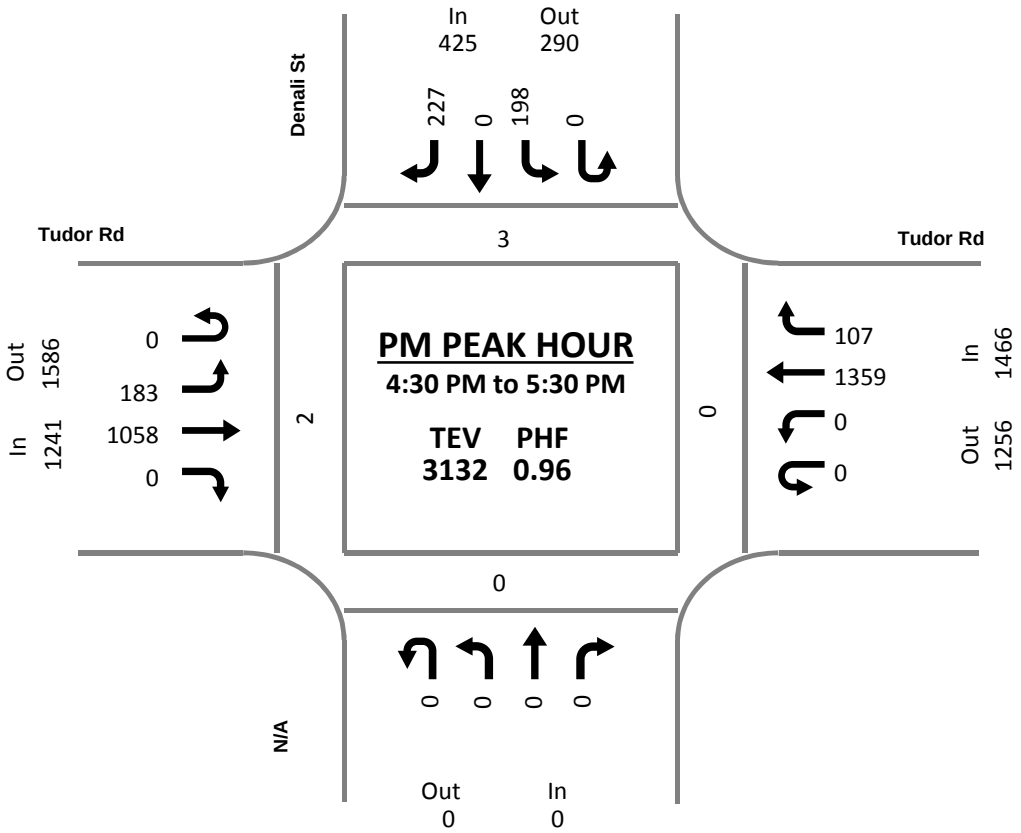
Start Time	N/A (Northbound)					Denali St (Southbound)					Tudor Rd (Eastbound)					Tudor Rd (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
4:00 PM	0	0	0	0	0	0	46	0	57	0	0	52	259	0	0	0	0	357	24	0	795
4:15 PM	0	0	0	0	0	0	45	0	52	1	1	52	227	0	1	0	0	342	28	0	747
4:30 PM	0	0	0	0	0	0	61	0	58	0	0	38	292	0	0	0	0	349	21	0	819
4:45 PM	0	0	0	0	0	0	35	0	46	2	0	39	258	0	1	0	0	303	24	0	705
5:00 PM	0	0	0	0	0	0	56	0	63	1	0	52	240	0	0	0	0	347	38	0	796
5:15 PM	0	0	0	0	0	0	46	0	60	0	0	54	268	0	1	0	0	360	24	0	812
5:30 PM	0	0	0	0	0	1	46	0	64	0	0	45	238	0	1	0	0	289	24	0	707
5:45 PM	0	0	0	0	0	0	33	0	54	0	0	27	233	0	0	0	0	274	23	0	644
Total	0	0	0	0	0	1	368	0	454	4	1	359	2,015	0	4	0	0	2,621	206	0	6,025

*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total")

Peak Hour Summary

4:30 PM to 5:30 PM

Data Type	N/A (Northbound)					Denali St (Southbound)					Tudor Rd (Eastbound)					Tudor Rd (Westbound)					Peak Hour Total
	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	
Volume	0	0	0	0	0	0	198	0	227	3	0	183	1058	0	2	0	0	1359	107	0	3132
%HV	0.0%	0.0%	0.0%	0.0%		0.0%	2.0%	0.0%	0.4%		0.0%	0.0%	1.4%	0.0%		0.0%	0.0%	1.4%	0.0%		1.2%
PHF	0.00	0.00	0.00	0.00	0.00	0.00	0.81	0.00	0.90	0.38	0.00	0.85	0.91	0.00	0.50	0.00	0.00	0.94	0.70	0.00	0.96
Volume			0					425					1241					1466			3132
%HV			0.0%					1.2%					1.2%					1.3%			1.2%
PHF			0.00					0.89					0.94					0.95			0.96



Traffic Camera Count and Placement Information

Intersection Name: Old Seward Hwy & 36th Ave

Intersection Location	
Northbound Street	Old Seward Hwy
Southbound Street	Old Seward Hwy
Eastbound Street	36th Ave
Westbound Street	36th Ave
City, State	Anchorage, AK

Project Information	
Name	Midtown Congestion Relief
Client	AK DOT&PF
Project #	1124.62458.01, Phase 02
PM/Traffic Lead	Steve Noble/Brad Coy

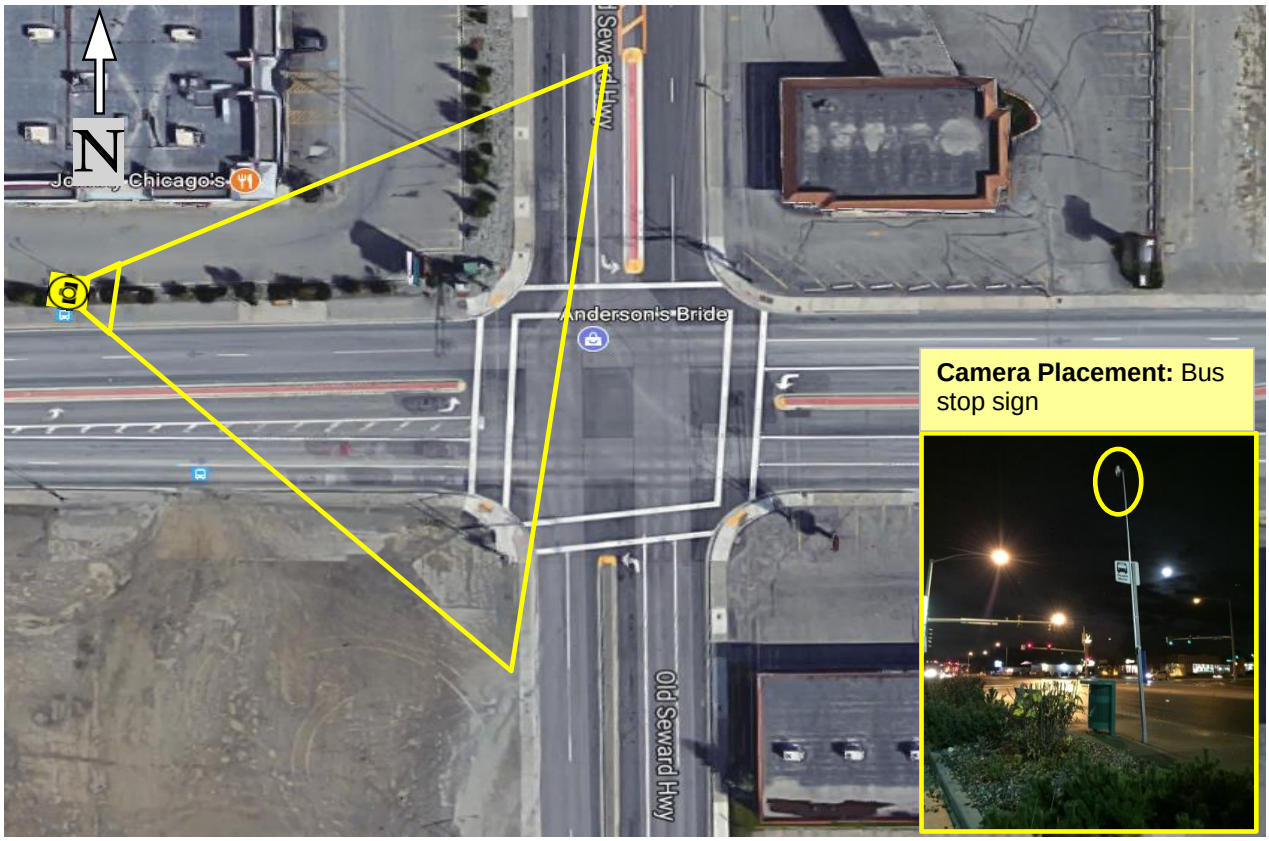
Count Description (e.g., day(s) of week, time periods, other related counts also occuring, etc.)

1 weekday (Tue, Wed, or Thu), simultaneous as Seward Hwy/36th Ave

Camera Setup/Video Footage	
Staff Responsible	Brad Coy
Setup Time	10/4/2017 10:00 PM
Take Down Time	10/5/2017 9:00 PM
Duration (hours)	23.00
Camera # (2-digit)	d7

Count Date, Time, Vendor	
Date	10/5/2017 (Thursday)
Start Time	6:00 AM
End Time	7:00 PM
Duration (hours)	13.00
Count Vendor	CountingCars.com

Camera Placement



Other Notes (Before, During, or After Count)

DOWL

Turning Movement Count

Old Seward Hwy & 36th Ave

Total Vehicles (15-Minute Periods)

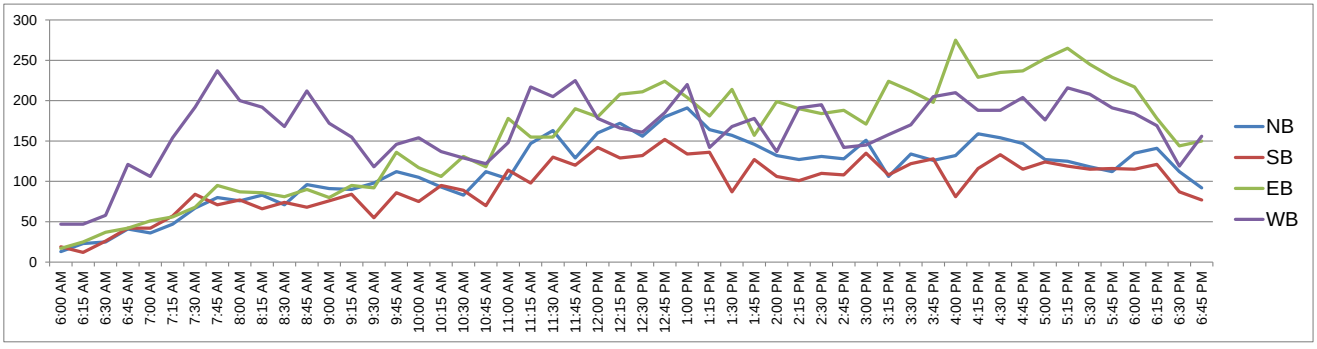
All Data

Thursday, October 05, 2017

6:00 AM to 7:00 PM

Start Time	Old Seward Hwy (Northbound)					Old Seward Hwy (Southbound)					36th Ave (Eastbound)					36th Ave (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
6:00 AM	0	7	2	4	0	0	4	8	7	0	0	3	10	4	0	0	8	33	6	1	96
6:15 AM	0	10	1	12	0	0	2	8	2	0	0	0	23	2	0	0	14	30	3	0	107
6:30 AM	0	10	2	13	0	0	2	17	7	0	0	0	28	9	0	0	23	34	1	0	146
6:45 AM	0	17	5	19	0	0	3	30	9	0	1	0	33	8	1	0	25	88	8	0	246
7:00 AM	0	16	3	17	0	0	8	27	7	0	1	0	42	8	1	0	16	83	7	0	235
7:15 AM	0	24	8	15	0	0	11	30	16	0	0	2	45	9	1	0	36	112	6	0	314
7:30 AM	0	31	7	29	0	0	11	56	17	0	2	2	55	9	0	1	36	149	6	1	411
7:45 AM	0	32	14	34	0	0	10	46	15	0	1	1	83	10	0	0	30	189	18	0	483
8:00 AM	0	33	10	33	1	0	8	55	14	0	2	4	70	11	0	0	31	155	14	0	440
8:15 AM	0	20	15	48	0	0	11	42	13	0	1	3	69	13	1	0	25	146	21	1	427
8:30 AM	0	20	12	39	1	0	6	57	11	0	1	2	69	9	1	1	31	126	10	0	394
8:45 AM	0	33	12	51	0	0	7	50	11	0	1	3	73	13	0	0	39	150	23	0	466
9:00 AM	0	27	13	51	0	0	13	50	13	1	0	1	70	9	0	0	30	134	8	1	419
9:15 AM	0	18	16	56	0	0	13	58	13	0	1	4	68	22	0	1	29	110	15	1	424
9:30 AM	0	25	15	58	0	0	9	41	5	1	0	2	71	19	0	0	22	87	9	0	363
9:45 AM	0	47	13	52	0	0	13	57	16	1	1	7	106	22	0	0	28	107	11	0	480
10:00 AM	0	29	16	60	0	0	16	51	8	1	1	9	90	17	2	0	34	111	9	1	451
10:15 AM	0	36	10	47	0	0	27	54	14	1	0	7	81	18	1	0	28	100	9	0	431
10:30 AM	0	26	15	42	1	0	11	59	19	0	2	5	90	34	2	1	21	98	9	0	432
10:45 AM	0	48	20	44	0	0	6	50	14	0	0	4	95	19	1	0	25	86	11	0	422
11:00 AM	0	36	13	54	1	0	12	84	18	0	0	10	134	34	5	1	22	110	15	0	543
11:15 AM	1	51	23	72	1	0	17	67	14	0	1	13	117	24	2	1	38	152	26	0	617
11:30 AM	0	58	30	75	0	0	24	88	18	1	1	11	119	24	1	0	52	140	13	0	653
11:45 AM	1	46	23	59	0	0	21	80	19	3	9	7	138	36	0	0	53	146	26	0	664
12:00 PM	0	58	20	82	6	0	32	87	23	0	9	12	129	30	3	2	38	114	24	0	660
12:15 PM	0	62	31	79	0	0	18	89	22	0	2	15	156	35	0	0	26	126	14	0	675
12:30 PM	0	59	12	85	0	0	35	67	30	0	2	21	153	35	0	1	26	113	21	0	660
12:45 PM	0	61	35	84	0	1	23	92	36	0	9	17	160	38	0	1	28	137	19	1	741
1:00 PM	0	66	31	94	1	0	28	90	16	0	3	8	160	33	0	0	30	153	37	0	749
1:15 PM	0	55	31	78	0	0	37	77	22	0	1	9	139	32	1	0	35	105	2	0	623
1:30 PM	0	53	22	82	1	0	19	52	16	2	9	7	156	42	1	0	34	126	8	4	626
1:45 PM	0	52	20	74	2	0	34	72	21	1	7	11	119	20	3	1	37	124	16	2	608
2:00 PM	0	51	19	62	0	0	20	72	14	0	2	6	154	37	0	0	31	91	15	0	574
2:15 PM	0	46	10	71	1	0	22	61	18	0	5	12	138	35	5	0	43	130	18	1	609
2:30 PM	0	39	23	69	1	0	20	77	13	0	5	9	149	21	4	0	44	134	17	1	620
2:45 PM	0	43	18	67	0	1	27	66	14	1	3	11	140	34	0	0	30	97	15	1	566
3:00 PM	0	52	20	79	1	0	35	75	25	3	2	4	139	26	4	2	26	104	13	0	602
3:15 PM	0	42	13	51	1	0	26	60	22	2	3	9	173	39	3	2	36	110	10	1	596
3:30 PM	0	44	22	68	0	0	27	75	20	0	2	7	178	25	3	0	34	120	16	1	638
3:45 PM	0	49	23	54	0	0	24	89	15	3	1	9	154	34	3	0	39	136	30	0	657
4:00 PM	0	47	27	58	1	0	12	51	18	1	1	10	230	34	2	0	35	152	23	1	698
4:15 PM	1	42	47	69	1	0	28	77	11	2	5	8	178	38	4	2	37	130	19	1	692
4:30 PM	0	53	37	64	1	0	34	82	17	0	3	9	195	28	6	0	24	142	22	0	710
4:45 PM	0	53	34	60	2	0	28	71	16	0	1	15	196	25	1	0	27	140	37	0	703
5:00 PM	0	55	44	28	3	0	30	80	14	0	2	7	223	20	3	0	21	134	21	3	679
5:15 PM	1	50	32	42	2	0	28	78	13	0	3	6	236	20	3	0	34	152	30	0	725
5:30 PM	0	35	21	62	3	0	25	75	15	1	2	9	204	30	0	0	34	150	24	0	686
5:45 PM	0	33	25	54	1	0	29	72	15	0	2	9	191	27	2	0	30	124	37	0	648
6:00 PM	0	41	26	68	0	0	37	64	14	1	2	8	181	26	3	0	20	143	21	2	651
6:15 PM	1	43	25	72	7	0	44	61	16	0	4	5	146	23	1	1	29	121	18	1	609
6:30 PM	1	36	22	53	2	0	22	49	16	0	2	2	122	18	6	0	15	86	18	1	462
6:45 PM	2	23	21	46	2	0	16	46	15	0	4	5	123	18	0	0	21	114	21	0	475
Total	8	2,043	1,009	2,839	44	2	1,025	3,172	807	26	122	360	6,401	1,206	80	18	1,560	6,184	850	27	27,606

*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total" or graph below)



DOWL

Turning Movement Count

Old Seward Hwy & 36th Ave

Heavy Vehicles (15-Minute Periods)

All Data

Thursday, October 05, 2017

6:00 AM to 7:00 PM

Start Time	Old Seward Hwy (Northbound)				Old Seward Hwy (Southbound)				36th Ave (Eastbound)				36th Ave (Westbound)				Period Total (Veh)
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	
6:00 AM	0	0	0	0	0	0	1	0	0	0	1	0	0	0	2	0	4
6:15 AM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	2
6:30 AM	0	0	1	1	0	0	1	0	0	0	4	1	0	0	3	0	11
6:45 AM	0	2	0	3	0	0	1	0	0	0	5	0	0	0	1	0	12
7:00 AM	0	1	0	1	0	0	0	0	0	0	2	1	0	0	2	0	7
7:15 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2	0	3
7:30 AM	0	1	0	1	0	0	1	1	0	0	2	1	0	0	1	0	8
7:45 AM	0	0	1	4	0	0	2	0	0	0	3	0	0	1	2	0	13
8:00 AM	0	0	1	6	0	0	3	0	0	0	0	0	0	0	2	0	12
8:15 AM	0	0	1	1	0	0	0	0	0	0	1	2	0	1	4	0	10
8:30 AM	0	2	0	3	0	0	4	0	0	1	2	2	0	1	0	0	15
8:45 AM	0	0	2	0	0	0	2	0	0	1	1	0	0	1	2	0	9
9:00 AM	0	2	0	4	0	3	2	0	0	0	5	0	0	0	0	0	16
9:15 AM	0	0	1	5	0	0	0	0	0	0	0	1	0	3	2	0	12
9:30 AM	0	0	0	3	0	0	1	0	0	0	1	1	0	0	0	1	7
9:45 AM	0	2	0	0	0	0	0	1	0	0	1	1	0	1	0	0	6
10:00 AM	0	1	0	4	0	1	1	0	0	0	4	0	0	3	2	1	17
10:15 AM	0	0	0	1	0	1	3	1	0	0	2	0	0	2	3	0	13
10:30 AM	0	2	0	1	0	0	3	2	0	0	2	0	0	1	0	0	11
10:45 AM	0	1	0	0	0	0	1	0	0	1	4	0	0	1	2	1	11
11:00 AM	0	0	0	2	0	0	2	0	0	0	2	1	0	0	2	0	9
11:15 AM	0	0	2	0	0	0	0	0	0	0	3	0	0	1	3	0	9
11:30 AM	0	0	0	2	0	0	1	0	0	0	3	0	0	0	1	0	7
11:45 AM	0	1	0	2	0	0	1	0	0	0	1	1	0	1	0	0	7
12:00 PM	0	0	0	2	0	0	2	0	0	0	3	2	0	1	0	0	10
12:15 PM	0	1	1	2	0	0	1	0	0	0	2	0	0	3	3	0	13
12:30 PM	0	0	0	4	0	0	1	0	0	0	1	1	0	0	2	1	10
12:45 PM	0	0	0	2	0	0	3	0	0	0	2	0	0	1	0	0	8
1:00 PM	0	0	0	7	0	0	2	0	0	0	1	2	0	0	2	0	14
1:15 PM	0	1	1	4	0	0	1	0	0	0	0	1	0	2	2	0	12
1:30 PM	0	3	1	3	0	1	1	0	0	0	4	0	0	3	0	0	16
1:45 PM	0	0	0	1	0	0	3	0	0	0	1	0	0	1	1	0	7
2:00 PM	0	0	1	1	0	0	2	0	0	0	2	1	0	1	1	0	9
2:15 PM	0	0	0	1	0	0	2	0	0	0	0	1	0	1	4	2	11
2:30 PM	0	0	0	2	0	0	5	0	0	0	2	0	0	2	1	0	12
2:45 PM	0	0	0	2	0	0	2	0	0	0	2	2	0	1	1	0	10
3:00 PM	0	0	0	4	0	0	1	0	0	0	1	1	0	1	0	0	8
3:15 PM	0	0	0	1	0	0	1	0	0	0	1	0	0	1	4	1	9
3:30 PM	0	0	0	2	0	0	0	0	0	0	2	0	0	1	1	0	6
3:45 PM	0	1	1	1	0	0	5	0	0	0	2	0	0	1	3	0	14
4:00 PM	0	1	0	2	0	0	1	1	0	0	2	0	0	1	0	0	8
4:15 PM	0	0	1	0	0	0	0	0	0	1	0	1	0	1	4	0	8
4:30 PM	0	1	0	1	0	0	3	0	0	0	2	2	0	0	1	2	12
4:45 PM	0	0	0	0	0	1	2	0	0	1	1	0	0	1	4	1	11
5:00 PM	0	0	0	0	0	1	4	0	0	0	1	0	0	1	1	0	8
5:15 PM	0	0	1	1	0	0	1	0	0	0	3	0	0	0	2	0	8
5:30 PM	0	0	0	0	0	0	1	0	0	0	1	0	0	1	1	0	4
5:45 PM	0	0	0	4	0	0	0	0	0	0	3	0	0	0	2	0	9
6:00 PM	0	0	0	0	0	0	1	0	0	0	2	0	0	0	2	0	5
6:15 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	1	1	0	3
6:30 PM	0	0	0	0	0	0	2	0	0	0	1	0	0	0	1	0	4
6:45 PM	0	0	0	0	0	0	1	0	0	0	1	0	0	1	0	0	3
Total	0	23	17	92	0	8	78	6	0	5	93	27	0	44	80	10	483

Turning Movement Count

Old Seward Hwy & 36th Ave

Total Vehicles (15-Minute Periods)

AM Peak Hour

Thursday, October 05, 2017

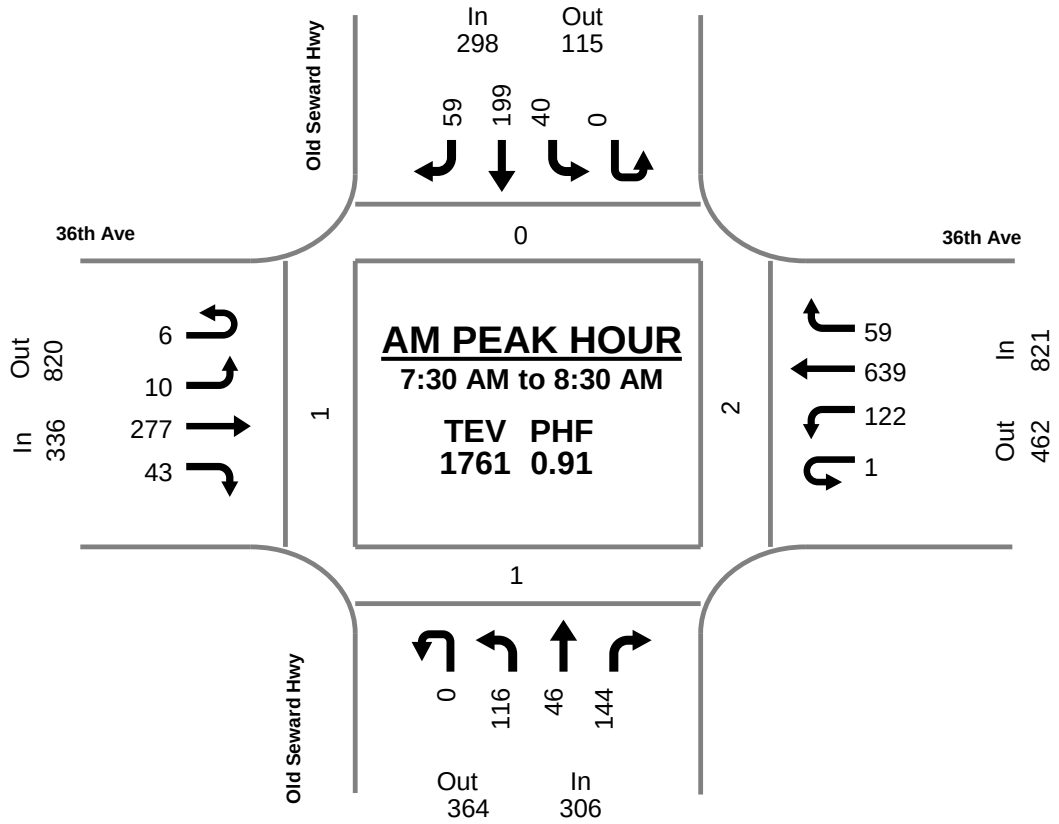
7:00 AM to 9:00 AM

Start Time	Old Seward Hwy (Northbound)					Old Seward Hwy (Southbound)					36th Ave (Eastbound)					36th Ave (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
7:00 AM	0	16	3	17	0	0	8	27	7	0	1	0	42	8	1	0	16	83	7	0	235
7:15 AM	0	24	8	15	0	0	11	30	16	0	0	2	45	9	1	0	36	112	6	0	314
7:30 AM	0	31	7	29	0	0	11	56	17	0	2	2	55	9	0	1	36	149	6	1	411
7:45 AM	0	32	14	34	0	0	10	46	15	0	1	1	83	10	0	0	30	189	18	0	483
8:00 AM	0	33	10	33	1	0	8	55	14	0	2	4	70	11	0	0	31	155	14	0	440
8:15 AM	0	20	15	48	0	0	11	42	13	0	1	3	69	13	1	0	25	146	21	1	427
8:30 AM	0	20	12	39	1	0	6	57	11	0	1	2	69	9	1	1	31	126	10	0	394
8:45 AM	0	33	12	51	0	0	7	50	11	0	1	3	73	13	0	0	39	150	23	0	466
Total	0	209	81	266	2	0	72	363	104	0	9	17	506	82	4	2	244	1,110	105	2	3,170

*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total")

Peak Hour Summary
7:30 AM to 8:30 AM

Data Type	Old Seward Hwy (Northbound)					Old Seward Hwy (Southbound)					36th Ave (Eastbound)					36th Ave (Westbound)					Peak Hour Total
	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	
Volume	0	116	46	144	1	0	40	199	59	0	6	10	277	43	1	1	122	639	59	2	1761
%HV	0.0%	0.9%	6.5%	8.3%		0.0%	0.0%	3.0%	1.7%		0.0%	0.0%	2.2%	7.0%		0.0%	1.6%	1.4%	0.0%		2.4%
PHF	0.00	0.88	0.77	0.75	0.25	0.00	0.91	0.89	0.87	0.00	0.75	0.63	0.83	0.83	0.25	0.25	0.85	0.85	0.70	0.50	0.91
Volume	306					298					336					821					1761
%HV	5.2%					2.3%					2.7%					1.3%					2.4%
PHF	0.92					0.89					0.88					0.87					0.91



Turning Movement Count

Old Seward Hwy & 36th Ave

Total Vehicles (15-Minute Periods)

PM Peak Hour

Thursday, October 05, 2017

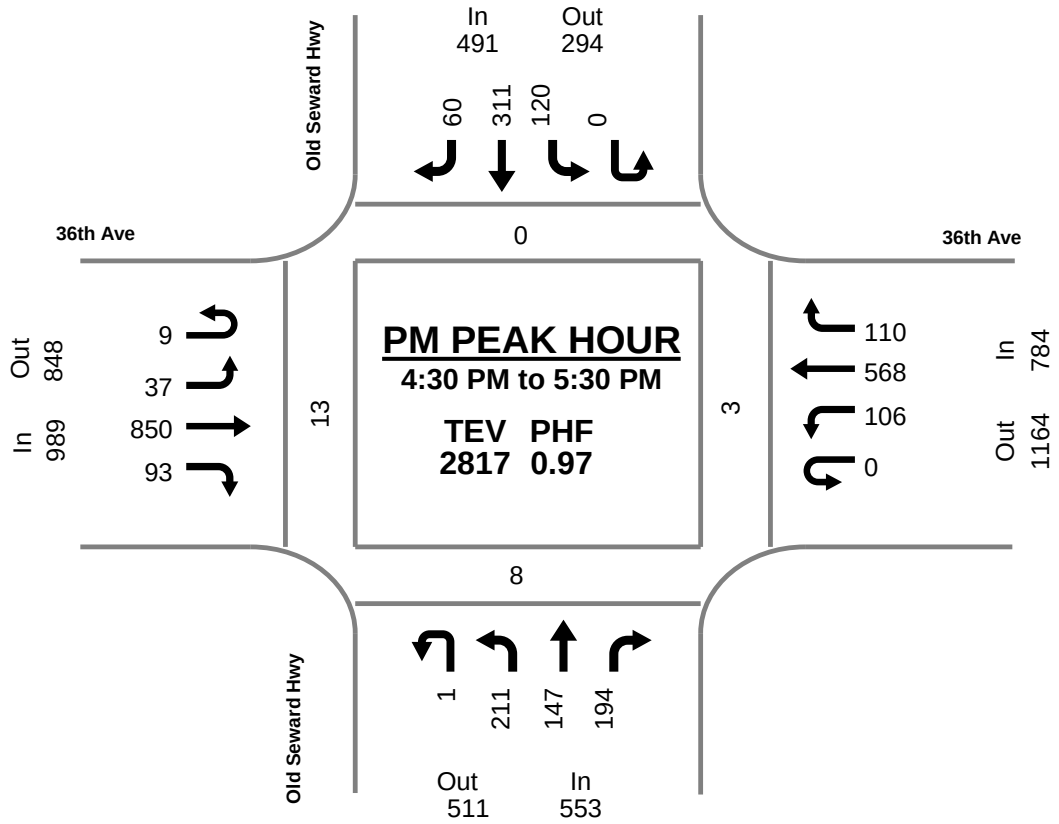
4:00 PM to 6:00 PM

Start Time	Old Seward Hwy (Northbound)					Old Seward Hwy (Southbound)					36th Ave (Eastbound)					36th Ave (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
4:00 PM	0	47	27	58	1	0	12	51	18	1	1	10	230	34	2	0	35	152	23	1	698
4:15 PM	1	42	47	69	1	0	28	77	11	2	5	8	178	38	4	2	37	130	19	1	692
4:30 PM	0	53	37	64	1	0	34	82	17	0	3	9	195	28	6	0	24	142	22	0	710
4:45 PM	0	53	34	60	2	0	28	71	16	0	1	15	196	25	1	0	27	140	37	0	703
5:00 PM	0	55	44	28	3	0	30	80	14	0	2	7	223	20	3	0	21	134	21	3	679
5:15 PM	1	50	32	42	2	0	28	78	13	0	3	6	236	20	3	0	34	152	30	0	725
5:30 PM	0	35	21	62	3	0	25	75	15	1	2	9	204	30	0	0	34	150	24	0	686
5:45 PM	0	33	25	54	1	0	29	72	15	0	2	9	191	27	2	0	30	124	37	0	648
Total	2	368	267	437	14	0	214	586	119	4	19	73	1,653	222	21	2	242	1,124	213	5	5,541

*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total")

Peak Hour Summary
4:30 PM to 5:30 PM

Data Type	Old Seward Hwy (Northbound)					Old Seward Hwy (Southbound)					36th Ave (Eastbound)					36th Ave (Westbound)					Peak Hour Total
	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	
Volume	1	211	147	194	8	0	120	311	60	0	9	37	850	93	13	0	106	568	110	3	2817
%HV	0.0%	0.5%	0.7%	1.0%		0.0%	1.7%	3.2%	0.0%		0.0%	2.7%	0.8%	2.2%		0.0%	1.9%	1.4%	2.7%		1.4%
PHF	0.25	0.96	0.84	0.76	0.67	0.00	0.88	0.95	0.88	0.00	0.75	0.62	0.90	0.83	0.54	0.00	0.78	0.93	0.74	0.25	0.97
Volume	553					491					989					784					2817
%HV	0.7%					2.4%					1.0%					1.7%					1.4%
PHF	0.90					0.92					0.93					0.91					0.97



Traffic Camera Count and Placement Information

Intersection Name: Tudor Rd & Old Seward Hwy

Intersection Location	
Northbound Street	Old Seward Hwy
Southbound Street	Old Seward Hwy
Eastbound Street	Tudor Rd
Westbound Street	Tudor Rd
City, State	Anchorage, AK

Project Information	
Name	Midtown Congestion Relief
Client	AK DOT&PF
Project #	1124.62458.01, Phase 02
PM/Traffic Lead	Steve Noble/Brad Coy

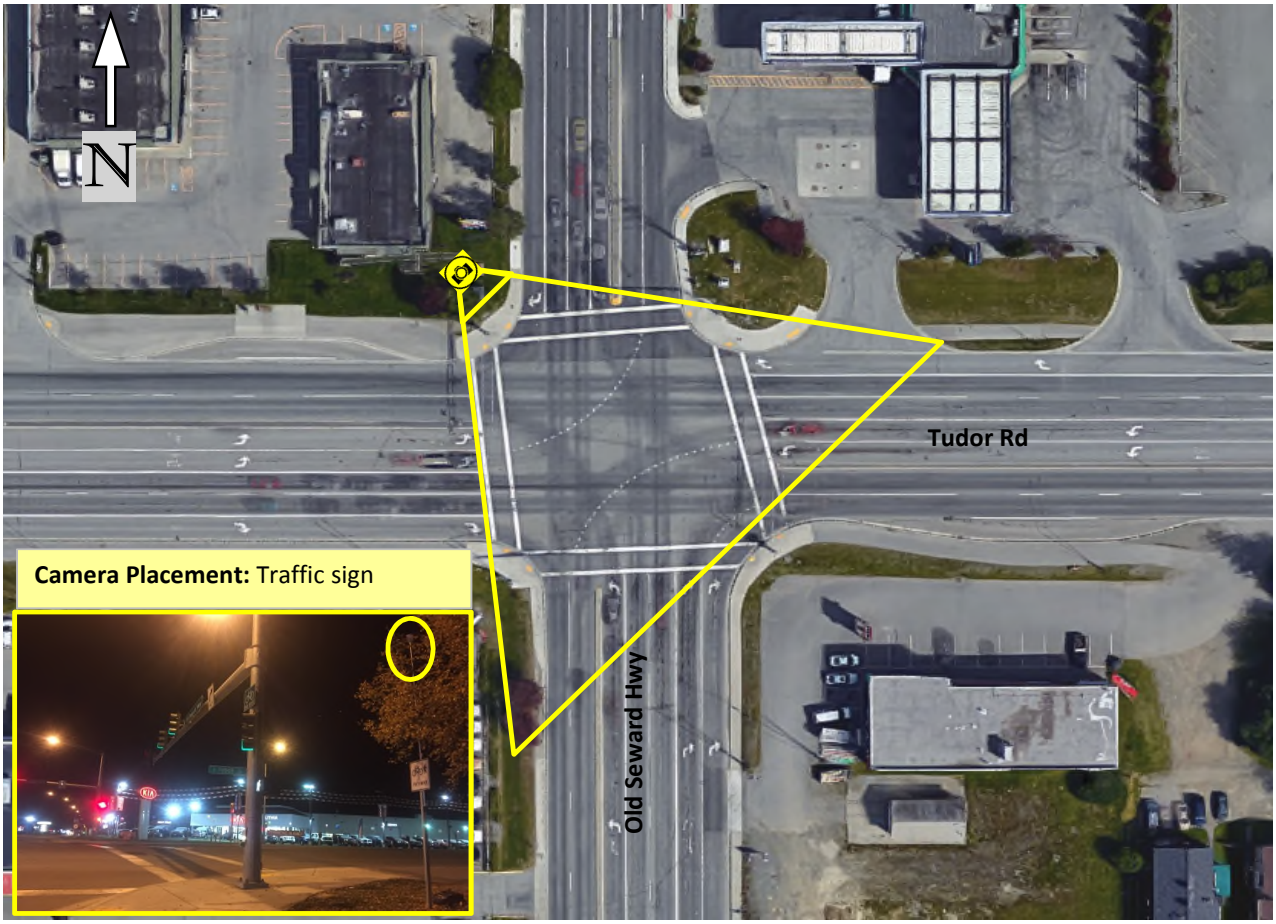
Count Description (e.g., day(s) of week, time periods, other related counts also occuring, etc.)

1 weekday (Tue, Wed, or Thu), simultaneous as Tudor & Seward Hwy Ramps

Camera Setup/Video Footage	
Staff Responsible	Brad Coy
Setup Time	10/17/2017 6:38 AM
Take Down Time	10/17/2017 8:15 PM
Duration (hours)	13.62
Camera # (2-digit)	49

Count Date, Time, Vendor	
Date	10/17/2017 (Tuesday)
Start Time	6:45 AM
End Time	7:30 PM
Duration (hours)	12.75
Count Vendor	CountingCars.com

Camera Placement



Other Notes (Before, During, or After Count)

Camera having trouble . . . Not connecting to computer or to iPhone

Turning Movement Count

Tudor Rd & Old Seward Hwy

Total Vehicles (15-Minute Periods)

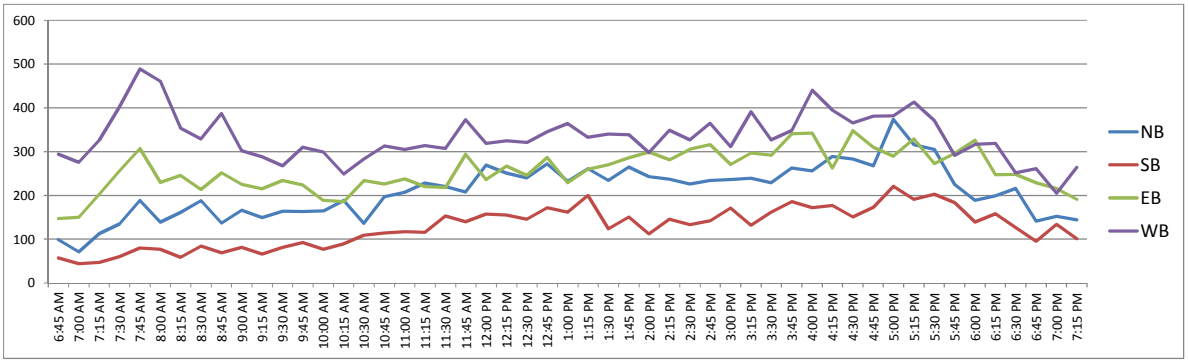
All Data

Tuesday, October 17, 2017

6:45 AM to 7:30 PM

Start Time	Old Seward Hwy (Northbound)					Old Seward Hwy (Southbound)					Tudor Rd (Eastbound)					Tudor Rd (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
6:45 AM	0	18	44	37	0	0	6	35	16	0	0	9	126	12	0	0	89	195	10	1	597
7:00 AM	0	14	29	28	0	0	5	34	5	0	0	6	124	20	0	0	51	213	12	1	541
7:15 AM	0	14	52	47	1	0	7	32	8	0	0	10	176	17	1	0	70	240	16	0	689
7:30 AM	0	31	44	60	0	0	8	43	9	1	0	14	231	11	2	0	72	303	27	0	853
7:45 AM	0	44	77	68	0	0	8	54	18	0	0	23	259	25	0	0	91	362	36	4	1065
8:00 AM	0	29	52	58	0	0	11	53	13	2	0	10	202	18	0	0	92	337	32	1	907
8:15 AM	0	43	58	60	0	0	12	36	11	2	0	12	211	23	0	1	44	283	26	1	820
8:30 AM	0	33	76	79	3	0	18	51	15	1	0	14	178	22	0	0	47	263	19	2	815
8:45 AM	0	30	58	49	2	0	6	51	12	0	0	13	215	24	1	0	71	290	26	0	845
9:00 AM	0	27	66	73	1	0	16	55	10	0	0	19	178	28	1	0	61	227	14	3	774
9:15 AM	0	33	43	73	0	0	19	34	13	0	0	23	160	32	0	1	60	191	36	5	718
9:30 AM	0	33	58	73	0	0	22	52	7	2	1	8	195	30	1	0	39	209	20	1	747
9:45 AM	0	31	68	64	1	0	19	67	6	1	1	23	163	37	0	0	64	217	29	0	789
10:00 AM	1	32	60	72	1	0	20	40	17	1	0	16	137	36	0	0	51	220	28	2	730
10:15 AM	0	35	83	71	0	0	20	58	11	0	0	14	132	40	0	1	52	175	21	2	713
10:30 AM	0	28	54	54	0	0	26	71	12	1	0	25	171	38	0	0	63	201	19	0	762
10:45 AM	0	43	76	78	0	0	26	73	15	1	0	25	157	44	0	0	57	226	30	1	850
11:00 AM	0	43	88	76	1	0	26	76	15	0	0	25	166	47	0	0	64	224	17	0	867
11:15 AM	0	38	102	88	0	0	19	77	20	2	2	22	158	38	0	0	67	228	19	1	878
11:30 AM	0	40	107	73	1	0	36	104	13	3	0	24	140	54	0	0	54	232	21	2	898
11:45 AM	0	40	88	80	0	0	31	90	19	0	0	35	177	82	0	0	74	255	44	0	1015
12:00 PM	0	51	118	100	1	0	48	84	25	0	0	31	132	73	0	0	80	212	27	0	981
12:15 PM	0	42	104	105	0	1	35	93	26	0	0	59	125	83	0	0	51	251	23	1	998
12:30 PM	2	45	99	94	1	0	35	93	18	1	0	58	105	83	1	0	68	229	24	2	953
12:45 PM	0	39	122	111	1	2	30	110	30	0	1	70	123	93	0	0	63	264	19	0	1077
1:00 PM	0	45	102	86	1	0	33	97	32	1	0	39	125	65	2	0	75	260	29	0	988
1:15 PM	0	48	120	93	1	0	47	123	30	1	0	43	129	88	0	0	62	244	27	1	1054
1:30 PM	0	41	120	73	0	0	24	83	17	1	0	45	131	94	0	0	60	262	18	0	968
1:45 PM	0	46	114	105	0	0	27	100	24	0	0	49	130	107	0	0	72	251	16	1	1041
2:00 PM	0	44	97	102	0	0	29	64	19	1	0	31	220	48	0	0	57	217	24	0	952
2:15 PM	0	38	88	111	0	0	33	90	23	4	0	17	216	49	0	0	67	259	23	1	1014
2:30 PM	0	50	81	95	1	0	35	80	18	1	1	31	213	61	0	1	66	239	21	0	992
2:45 PM	0	46	84	104	2	0	34	88	20	0	1	26	237	52	0	0	48	289	28	1	1057
3:00 PM	0	51	83	102	2	0	55	99	17	0	0	20	199	52	3	0	57	241	14	0	990
3:15 PM	1	43	76	119	3	0	40	77	15	0	0	25	210	62	2	0	74	295	22	3	1059
3:30 PM	0	37	68	124	1	0	47	93	22	1	0	14	233	45	1	0	60	243	24	6	1010
3:45 PM	0	43	97	123	0	0	44	102	40	5	0	20	260	61	2	0	70	259	19	2	1138
4:00 PM	0	39	66	151	0	0	58	95	19	0	0	28	262	52	1	0	89	331	20	8	1210
4:15 PM	0	42	87	160	0	0	57	97	23	1	0	13	213	37	1	0	81	298	16	4	1124
4:30 PM	0	48	92	143	4	0	40	91	20	0	0	18	267	63	0	0	68	287	11	7	1148
4:45 PM	1	45	84	138	0	0	64	85	24	0	0	21	245	44	1	0	88	269	24	1	1132
5:00 PM	0	46	110	218	0	1	83	113	24	0	0	21	209	60	0	0	65	291	26	0	1267
5:15 PM	0	40	91	185	1	0	68	95	28	1	0	19	227	83	4	0	77	310	26	2	1249
5:30 PM	0	42	98	165	1	0	71	108	24	0	1	13	195	64	1	0	87	260	24	1	1152
5:45 PM	0	30	83	112	1	0	56	99	29	2	0	19	239	38	0	0	59	215	18	0	997
6:00 PM	0	30	61	98	0	0	63	60	16	0	0	18	257	51	0	0	61	233	23	2	971
6:15 PM	0	33	70	96	0	0	55	80	23	1	1	15	190	41	0	0	58	244	17	1	923
6:30 PM	0	28	79	109	0	0	32	76	19	1	0	10	211	27	0	0	34	205	13	1	843
6:45 PM	0	19	55	67	0	0	39	39	17	0	0	14	184	31	0	0	38	208	15	0	726
7:00 PM	0	22	55	75	0	0	27	64	43	0	1	14	179	22	0	2	34	155	14	2	707
7:15 PM	0	17	71	56	1	1	20	52	28	1	0	6	167	18	1	1	33	215	15	1	700
Total	5	1,869	4,058	4,781	33	5	1,690	3,816	978	40	10	1,177	9,489	2,425	26	7	3,235	12,627	1,122	75	47,294

*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total" or graph below)





Turning Movement Count

Tudor Rd & Old Seward Hwy

Heavy Vehicles (15-Minute Periods)

All Data

Tuesday, October 17, 2017

6:45 AM to 7:30 PM

Start Time	Old Seward Hwy (Northbound)				Old Seward Hwy (Southbound)				Tudor Rd (Eastbound)				Tudor Rd (Westbound)				Period Total (Veh)
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	
6:45 AM	0	2	4	0	0	1	0	1	0	1	4	0	0	0	2	0	15
7:00 AM	0	2	2	2	0	1	1	0	0	0	6	1	0	0	2	0	17
7:15 AM	0	1	0	1	0	0	0	0	0	0	4	1	0	1	2	0	10
7:30 AM	0	2	3	4	0	0	1	1	0	1	7	0	0	1	3	1	24
7:45 AM	0	3	2	2	0	1	2	0	0	1	7	1	0	2	4	0	25
8:00 AM	0	1	2	3	0	1	1	0	0	0	2	1	0	1	4	0	16
8:15 AM	0	1	3	3	0	4	1	1	0	0	6	2	0	2	2	0	25
8:30 AM	0	4	7	5	0	2	3	0	0	1	2	2	0	1	4	2	33
8:45 AM	0	2	3	2	0	0	0	0	0	0	13	0	0	2	5	1	28
9:00 AM	0	3	2	3	0	0	0	0	0	0	10	0	0	2	3	0	23
9:15 AM	0	0	1	5	0	0	1	1	0	1	10	3	0	1	13	1	37
9:30 AM	0	1	4	2	0	1	2	2	0	0	3	0	0	0	4	0	19
9:45 AM	0	4	3	3	0	0	2	0	0	0	10	1	0	1	9	0	33
10:00 AM	0	4	5	4	0	2	0	1	0	1	6	3	0	2	5	0	33
10:15 AM	0	2	4	9	0	1	4	0	0	0	6	1	0	4	8	0	39
10:30 AM	0	1	3	4	0	0	9	0	0	1	8	1	0	4	13	0	44
10:45 AM	0	3	3	2	0	0	2	0	0	2	8	2	0	0	1	0	23
11:00 AM	0	0	2	5	0	0	3	0	0	1	5	0	0	1	7	0	24
11:15 AM	0	1	4	2	0	0	4	0	0	1	7	0	0	3	8	0	30
11:30 AM	0	0	4	2	0	0	2	0	0	2	5	1	0	1	7	1	25
11:45 AM	0	1	1	2	0	1	4	0	0	0	4	2	0	2	6	1	24
12:00 PM	0	1	1	1	0	1	1	0	0	4	1	1	0	4	9	0	24
12:15 PM	0	0	3	5	0	0	2	2	0	1	3	1	0	2	5	0	24
12:30 PM	0	2	1	1	0	0	3	0	0	3	4	2	0	1	5	0	22
12:45 PM	0	0	2	3	0	0	3	1	0	0	4	1	0	1	3	0	18
1:00 PM	0	5	1	4	0	0	3	0	0	1	2	0	0	0	13	1	30
1:15 PM	0	2	2	3	0	0	0	0	0	1	3	2	0	1	13	0	27
1:30 PM	0	3	6	5	0	3	2	0	0	0	2	4	0	1	2	0	28
1:45 PM	0	1	2	4	0	0	9	0	0	1	6	4	0	1	8	0	36
2:00 PM	0	1	0	2	0	0	0	1	0	0	7	3	0	2	2	0	18
2:15 PM	0	1	2	4	0	0	2	0	0	1	5	3	0	0	4	0	22
2:30 PM	0	0	3	1	0	1	8	0	0	0	5	5	0	5	5	0	33
2:45 PM	0	0	2	7	0	0	2	0	0	0	6	2	0	0	4	1	24
3:00 PM	0	1	2	6	0	0	4	0	0	0	5	1	0	4	8	1	32
3:15 PM	0	0	3	3	0	0	1	0	0	1	6	0	0	2	6	1	23
3:30 PM	0	0	1	1	0	0	3	0	0	0	4	0	0	5	2	1	17
3:45 PM	0	2	3	5	0	2	3	0	0	1	5	0	0	1	4	0	26
4:00 PM	0	0	0	6	0	0	2	0	0	0	2	0	0	0	2	1	13
4:15 PM	0	0	3	4	0	2	0	0	0	0	2	1	0	2	4	1	19
4:30 PM	0	1	1	3	0	0	4	1	0	0	5	0	0	1	2	0	18
4:45 PM	0	1	1	5	0	0	1	0	0	1	3	1	0	1	3	0	17
5:00 PM	0	0	0	1	0	0	1	0	0	0	1	0	0	2	1	0	6
5:15 PM	0	0	0	0	0	0	0	0	0	1	3	1	0	1	6	2	14
5:30 PM	0	0	1	1	0	0	2	0	0	0	1	0	0	2	4	0	11
5:45 PM	0	0	1	2	0	0	0	0	0	0	2	0	0	1	2	0	8
6:00 PM	0	1	2	0	0	0	2	0	0	0	1	1	0	0	2	0	9
6:15 PM	0	0	0	0	0	0	0	0	0	0	3	1	0	1	1	1	7
6:30 PM	0	0	0	1	0	0	1	0	0	0	0	0	0	2	2	0	6
6:45 PM	0	0	2	1	0	1	2	0	0	0	1	1	0	1	2	0	11
7:00 PM	0	1	0	0	0	0	0	0	0	0	1	0	0	0	2	0	4
7:15 PM	0	0	0	0	0	1	0	0	0	0	3	0	0	0	2	0	6
Total	0	61	107	144	0	26	103	12	0	29	229	57	0	75	240	17	1,100

Turning Movement Count

Tudor Rd & Old Seward Hwy

Total Vehicles (15-Minute Periods)

AM Peak Hour

Tuesday, October 17, 2017

7:00 AM to 9:00 AM

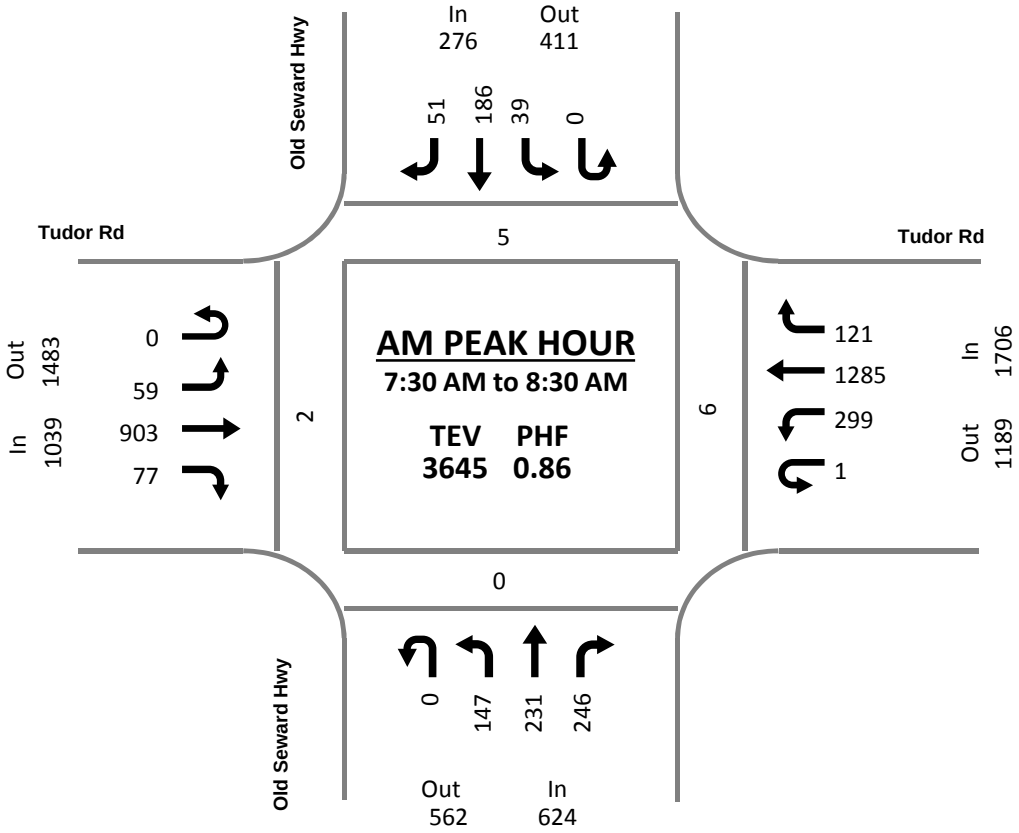
Start Time	Old Seward Hwy (Northbound)					Old Seward Hwy (Southbound)					Tudor Rd (Eastbound)					Tudor Rd (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
7:00 AM	0	14	29	28	0	0	5	34	5	0	0	6	124	20	0	0	51	213	12	1	541
7:15 AM	0	14	52	47	1	0	7	32	8	0	0	10	176	17	1	0	70	240	16	0	689
7:30 AM	0	31	44	60	0	0	8	43	9	1	0	14	231	11	2	0	72	303	27	0	853
7:45 AM	0	44	77	68	0	0	8	54	18	0	0	23	259	25	0	0	91	362	36	4	1065
8:00 AM	0	29	52	58	0	0	11	53	13	2	0	10	202	18	0	0	92	337	32	1	907
8:15 AM	0	43	58	60	0	0	12	36	11	2	0	12	211	23	0	1	44	283	26	1	820
8:30 AM	0	33	76	79	3	0	18	51	15	1	0	14	178	22	0	0	47	263	19	2	815
8:45 AM	0	30	58	49	2	0	6	51	12	0	0	13	215	24	1	0	71	290	26	0	845
Total	0	238	446	449	6	0	75	354	91	6	0	102	1,596	160	4	1	538	2,291	194	9	6,535

*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total")

Peak Hour Summary

7:30 AM to 8:30 AM

Data Type	Old Seward Hwy (Northbound)					Old Seward Hwy (Southbound)					Tudor Rd (Eastbound)					Tudor Rd (Westbound)					Peak Hour Total
	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	
Volume	0	147	231	246	0	0	39	186	51	5	0	59	903	77	2	1	299	1285	121	6	3645
%HV	0.0%	4.8%	4.3%	4.9%		0.0%	15.4%	2.7%	3.9%		0.0%	3.4%	2.4%	5.2%		0.0%	2.0%	1.0%	0.8%		2.5%
PHF	0.00	0.84	0.75	0.90	0.00	0.00	0.81	0.86	0.71	0.63	0.00	0.64	0.87	0.77	0.25	0.25	0.81	0.89	0.84	0.38	0.86
Volume			624					276					1039					1706			3645
%HV			4.6%					4.7%					2.7%					1.2%			2.5%
PHF			0.83					0.86					0.85					0.87			0.86



Turning Movement Count

Tudor Rd & Old Seward Hwy

Total Vehicles (15-Minute Periods)

PM Peak Hour

Tuesday, October 17, 2017

4:00 PM to 6:00 PM

Start Time	Old Seward Hwy (Northbound)					Old Seward Hwy (Southbound)					Tudor Rd (Eastbound)					Tudor Rd (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
4:00 PM	0	39	66	151	0	0	58	95	19	0	0	28	262	52	1	0	89	331	20	8	1210
4:15 PM	0	42	87	160	0	0	57	97	23	1	0	13	213	37	1	0	81	298	16	4	1124
4:30 PM	0	48	92	143	4	0	40	91	20	0	0	18	267	63	0	0	68	287	11	7	1148
4:45 PM	1	45	84	138	0	0	64	85	24	0	0	21	245	44	1	0	88	269	24	1	1132
5:00 PM	0	46	110	218	0	1	83	113	24	0	0	21	209	60	0	0	65	291	26	0	1267
5:15 PM	0	40	91	185	1	0	68	95	28	1	0	19	227	83	4	0	77	310	26	2	1249
5:30 PM	0	42	98	165	1	0	71	108	24	0	1	13	195	64	1	0	87	260	24	1	1152
5:45 PM	0	30	83	112	1	0	56	99	29	2	0	19	239	38	0	0	59	215	18	0	997
Total	1	332	711	1,272	7	1	497	783	191	4	1	152	1,857	441	8	0	614	2,261	165	23	9,279

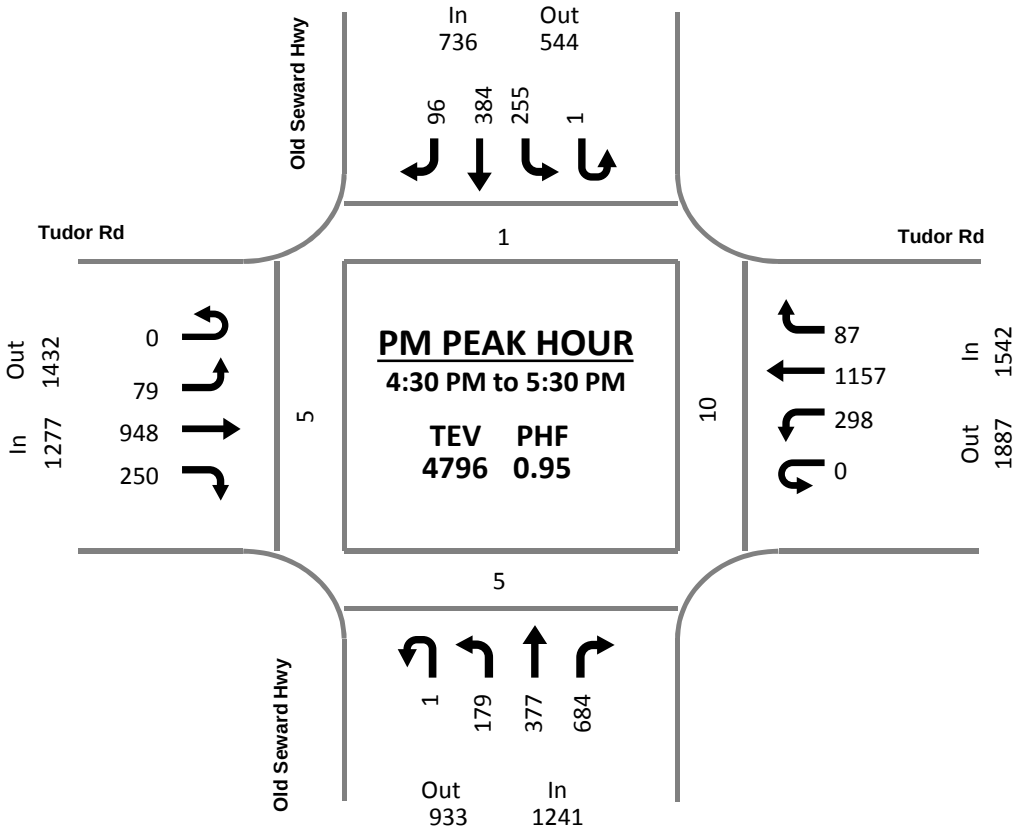
*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total")

Peak Hour Summary (System Peak*)

4:30 PM to 5:30 PM

Data Type	Old Seward Hwy (Northbound)					Old Seward Hwy (Southbound)					Tudor Rd (Eastbound)					Tudor Rd (Westbound)					Peak Hour Total
	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	
Volume	1	179	377	684	5	1	255	384	96	1	0	79	948	250	5	0	298	1157	87	10	4796
%HV	0.0%	1.1%	0.5%	1.3%		0.0%	0.0%	1.6%	1.0%		0.0%	2.5%	1.3%	0.8%		0.0%	1.7%	1.0%	2.3%		1.1%
PHF	0.25	0.93	0.86	0.78	0.31	0.25	0.77	0.85	0.86	0.25	0.00	0.94	0.89	0.75	0.31	0.00	0.85	0.93	0.84	0.36	0.95
Volume			1241					736					1277					1542			4796
%HV			1.0%					1.0%					1.3%					1.2%			1.1%
PHF			0.83					0.83					0.92					0.93			0.95

*System Peak is based on comparison of other study area counts rather than highest total entering volume at this intersection.



Traffic Camera Count and Placement Information

Intersection Name: Northern Lights Blvd & Latouche St

Intersection Location	
Northbound Street	Latouche St
Southbound Street	Latouche St
Eastbound Street	N/A
Westbound Street	Northern Lights Blvd
City, State	Anchorage, AK

Project Information	
Name	Midtown Congestion Relief
Client	AK DOT&PF
Project #	1124.62458.01, Phase 02
PM/Traffic Lead	Steve Noble/Brad Coy

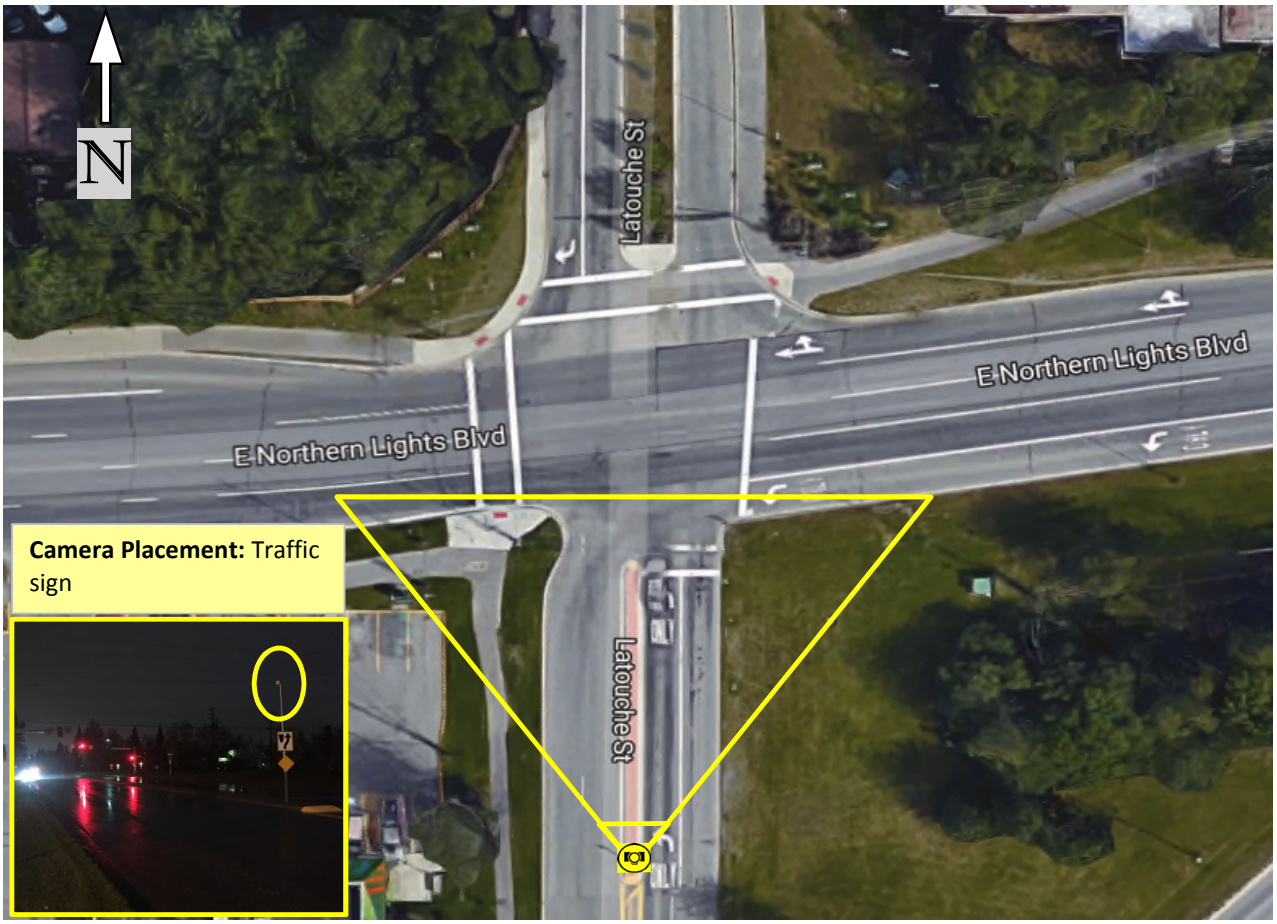
Count Description (e.g., day(s) of week, time periods, other related counts also occuring, etc.)

1 weekday (Tue, Wed, or Thu), simultaneous as Seward Hwy/Nortern Lights Blvd

Camera Setup/Video Footage	
Staff Responsible	Brad Coy
Setup Time	10/4/2017 7:20 AM
Take Down Time	10/4/2017 8:15 PM
Duration (hours)	12.92
Camera # (2-digit)	49

Count Date, Time, Vendor	
Date	10/4/2017 (Wednesday)
Start Time	7:30 AM
End Time	7:30 PM
Duration (hours)	12.00
Count Vendor	CountingCars.com

Camera Placement



Other Notes (Before, During, or After Count)

Difficulty with setup = ready just after 7 a.m.

DOWL

Turning Movement Count

Northern Lights Blvd & Latouche St

Total Vehicles (15-Minute Periods)

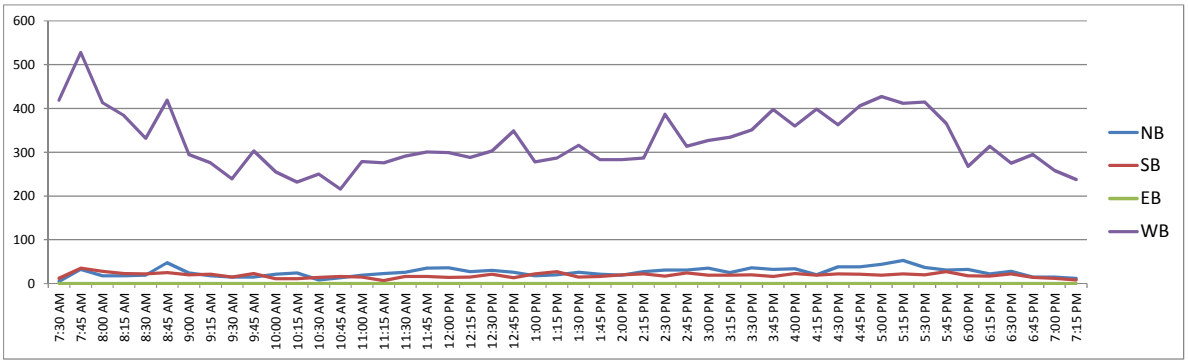
All Data

Wednesday, October 04, 2017

7:30 AM to 7:30 PM

Start Time	Latouche St (Northbound)					Latouche St (Southbound)					N/A (Eastbound)					Northern Lights Blvd (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
7:30 AM	0	3	2	0	0	0	0	5	7	0	0	0	0	0	0	0	23	392	4	0	436
7:45 AM	0	23	9	0	0	0	0	9	26	2	0	0	0	0	0	0	19	506	3	0	595
8:00 AM	0	15	3	0	0	0	0	5	23	1	0	0	0	0	1	0	19	390	4	0	459
8:15 AM	0	12	6	0	0	0	0	8	15	1	0	0	0	0	0	0	8	373	3	0	425
8:30 AM	0	12	7	0	0	0	0	9	13	0	0	0	0	0	1	0	10	319	3	1	373
8:45 AM	0	36	12	0	0	0	0	8	17	0	0	0	0	0	0	0	28	386	5	0	492
9:00 AM	0	22	2	0	0	0	0	3	17	0	0	0	0	0	0	0	5	286	4	0	339
9:15 AM	0	11	7	0	0	0	0	5	16	0	0	0	0	0	0	0	7	267	2	0	315
9:30 AM	0	9	6	0	0	0	0	6	9	0	0	0	0	0	0	0	10	227	2	0	269
9:45 AM	0	11	4	0	0	0	0	5	18	0	0	0	0	0	0	0	11	290	2	0	341
10:00 AM	0	15	6	0	0	0	0	3	8	0	0	0	0	0	0	0	10	244	1	0	287
10:15 AM	0	18	6	0	0	0	0	1	10	0	0	0	0	0	0	0	8	223	1	0	267
10:30 AM	0	8	0	0	0	0	0	3	11	0	0	0	0	0	0	0	7	240	3	0	272
10:45 AM	0	12	1	0	0	0	0	3	13	1	0	0	0	0	1	0	7	208	1	0	245
11:00 AM	0	15	4	0	0	0	0	2	13	1	0	0	0	0	0	0	6	269	4	0	313
11:15 AM	0	18	5	0	0	0	0	2	5	1	0	0	0	0	1	0	3	269	4	0	306
11:30 AM	0	19	7	0	0	0	0	5	11	2	0	0	0	0	2	0	5	285	1	1	333
11:45 AM	0	25	10	0	0	0	0	6	10	1	0	0	0	0	0	0	13	287	1	0	352
12:00 PM	0	29	7	0	0	0	0	3	11	0	0	0	0	0	4	0	9	284	6	0	349
12:15 PM	0	18	9	0	0	0	0	4	11	5	0	0	0	0	4	0	6	280	2	0	330
12:30 PM	0	24	6	0	0	0	0	4	17	0	0	0	0	0	1	0	11	289	3	1	354
12:45 PM	0	17	9	0	0	0	0	4	9	0	0	0	0	0	3	0	8	340	1	0	388
1:00 PM	0	12	6	0	0	0	0	4	18	0	0	0	0	0	1	0	3	274	1	0	318
1:15 PM	0	12	8	0	0	0	0	3	24	0	0	0	0	0	1	0	5	282	0	0	334
1:30 PM	0	24	2	0	0	0	0	4	11	0	0	0	0	0	2	0	12	304	0	0	357
1:45 PM	0	16	5	0	0	0	0	5	11	2	0	0	0	0	0	0	8	273	2	0	320
2:00 PM	0	12	7	0	0	0	0	5	15	1	0	0	0	0	2	0	9	272	2	0	322
2:15 PM	0	19	8	0	0	0	0	9	13	0	0	0	0	0	0	0	6	281	0	0	336
2:30 PM	0	24	7	0	0	0	0	6	11	0	0	0	0	0	0	0	10	372	5	0	435
2:45 PM	0	21	10	0	0	0	0	6	18	0	0	0	0	0	0	0	10	301	3	0	369
3:00 PM	0	30	5	0	0	0	0	9	10	0	0	0	0	0	0	0	8	313	6	0	381
3:15 PM	0	20	5	0	0	0	0	9	10	1	0	0	0	0	1	0	9	322	3	0	378
3:30 PM	0	26	10	0	0	0	0	5	15	0	0	0	0	0	1	0	6	338	7	0	407
3:45 PM	0	24	8	0	0	0	0	6	10	0	0	0	0	0	0	0	8	389	1	0	446
4:00 PM	0	29	5	0	0	0	0	6	17	1	0	0	0	0	1	0	11	344	5	0	417
4:15 PM	0	14	6	0	0	0	0	6	13	0	0	0	0	0	0	0	6	389	4	0	438
4:30 PM	0	29	9	0	0	0	0	8	14	2	0	0	0	0	2	0	8	355	0	0	423
4:45 PM	0	28	10	0	0	0	0	11	10	1	0	0	0	0	3	0	9	392	5	0	465
5:00 PM	0	35	9	0	0	0	0	6	13	1	0	0	0	0	0	0	5	417	5	0	490
5:15 PM	0	40	13	0	0	0	0	10	12	1	0	0	0	0	1	0	5	401	6	0	487
5:30 PM	0	29	8	0	0	0	0	7	13	0	0	0	0	0	2	0	9	398	8	0	472
5:45 PM	0	23	8	0	0	0	0	9	18	0	0	0	0	0	2	0	8	348	10	0	424
6:00 PM	0	20	12	0	0	0	0	9	9	0	0	0	0	0	1	0	6	261	1	0	318
6:15 PM	0	16	6	0	0	0	0	4	13	0	0	0	0	0	0	0	9	302	3	0	353
6:30 PM	0	22	6	0	0	0	0	6	16	0	0	0	0	0	1	0	9	266	0	0	325
6:45 PM	0	6	9	0	0	0	0	3	11	0	0	0	0	0	0	0	5	289	1	0	324
7:00 PM	0	11	4	0	0	0	0	4	8	2	0	0	0	0	4	0	2	254	2	0	285
7:15 PM	0	6	6	0	0	0	0	3	5	0	0	0	0	0	0	0	10	225	3	0	258
Total	0	920	320	0	0	0	0	266	628	27	0	0	0	0	43	0	429	15,016	143	3	17,722

*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total" or graph below)





Turning Movement Count

Northern Lights Blvd & Latouche St

Heavy Vehicles (15-Minute Periods)

All Data

Wednesday, October 04, 2017

7:30 AM to 7:30 PM

Start Time	Latouche St (Northbound)				Latouche St (Southbound)				N/A (Eastbound)				Northern Lights Blvd (Westbound)				Period Total (Veh)
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	5
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	4
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	4
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	4
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	5
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	5
9:15 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	8	0	9
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
9:45 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	4	1	6
10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3
10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	5
10:30 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	5	0	6
10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
11:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	6
11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	5
11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	5
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	5
12:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	4	0	5
12:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	7
12:30 PM	0	2	0	0	0	0	0	0	0	0	0	0	0	1	4	0	7
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0	8
1:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	3	0	4
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	6
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
2:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	7	0	8
2:15 PM	0	1	1	0	0	0	0	0	0	0	0	0	0	0	5	0	7
2:30 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	9	0	10
2:45 PM	0	0	1	0	0	0	0	1	0	0	0	0	0	0	6	0	8
3:00 PM	0	1	0	0	0	0	1	0	0	0	0	0	0	0	3	0	5
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3
4:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	5	0	6
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	4
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	4
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	4
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
7:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	11	2	0	0	0	2	2	0	0	0	0	0	1	172	1	191

Turning Movement Count

Northern Lights Blvd & Latouche St

Total Vehicles (15-Minute Periods)

AM Peak Hour

Wednesday, October 04, 2017

7:00 AM to 9:00 AM

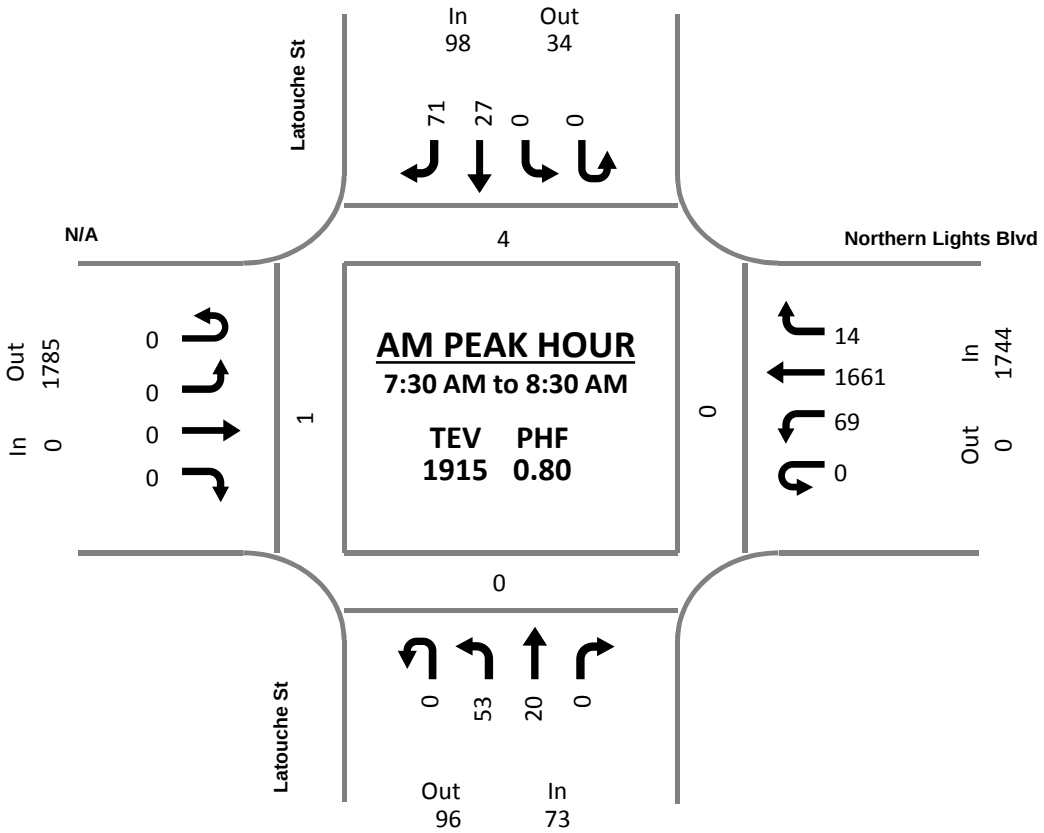
Start Time	Latouche St (Northbound)					Latouche St (Southbound)					N/A (Eastbound)					Northern Lights Blvd (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	3	2	0	0	0	0	5	7	0	0	0	0	0	0	0	23	392	4	0	436
7:45 AM	0	23	9	0	0	0	0	9	26	2	0	0	0	0	0	0	19	506	3	0	595
8:00 AM	0	15	3	0	0	0	0	5	23	1	0	0	0	0	1	0	19	390	4	0	459
8:15 AM	0	12	6	0	0	0	0	8	15	1	0	0	0	0	0	0	8	373	3	0	425
8:30 AM	0	12	7	0	0	0	0	9	13	0	0	0	0	0	1	0	10	319	3	1	373
8:45 AM	0	36	12	0	0	0	0	8	17	0	0	0	0	0	0	0	28	386	5	0	492
Total	0	101	39	0	0	0	0	44	101	4	0	0	0	0	2	0	107	2,366	22	1	2,780

*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Peak Total")

Peak Hour Summary

7:30 AM to 8:30 AM

Data Type	Latouche St (Northbound)					Latouche St (Southbound)					N/A (Eastbound)					Northern Lights Blvd (Westbound)					Peak Hour Total
	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	
Volume	0	53	20	0	0	0	0	27	71	4	0	0	0	0	1	0	69	1661	14	0	1915
%HV	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	1.0%	0.0%		0.8%
PHF	0.00	0.58	0.56	0.00	0.00	0.00	0.00	0.75	0.68	0.50	0.00	0.00	0.00	0.00	0.25	0.00	0.75	0.82	0.88	0.00	0.80
Volume			73					98					0					1744			1915
%HV			0.0%					0.0%					0.0%					0.9%			0.8%
PHF			0.57					0.70					0.00					0.83			0.80



Turning Movement Count

Northern Lights Blvd & Latouche St

Total Vehicles (15-Minute Periods)

PM Peak Hour

Wednesday, October 04, 2017

4:00 PM to 6:00 PM

Start Time	Latouche St (Northbound)					Latouche St (Southbound)					N/A (Eastbound)					Northern Lights Blvd (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
4:00 PM	0	29	5	0	0	0	0	6	17	1	0	0	0	0	1	0	11	344	5	0	417
4:15 PM	0	14	6	0	0	0	0	6	13	0	0	0	0	0	0	0	6	389	4	0	438
4:30 PM	0	29	9	0	0	0	0	8	14	2	0	0	0	0	2	0	8	355	0	0	423
4:45 PM	0	28	10	0	0	0	0	11	10	1	0	0	0	0	3	0	9	392	5	0	465
5:00 PM	0	35	9	0	0	0	0	6	13	1	0	0	0	0	0	0	5	417	5	0	490
5:15 PM	0	40	13	0	0	0	0	10	12	1	0	0	0	0	1	0	5	401	6	0	487
5:30 PM	0	29	8	0	0	0	0	7	13	0	0	0	0	0	2	0	9	398	8	0	472
5:45 PM	0	23	8	0	0	0	0	9	18	0	0	0	0	0	2	0	8	348	10	0	424
Total	0	227	68	0	0	0	0	63	110	6	0	0	0	0	11	0	61	3,044	43	0	3,616

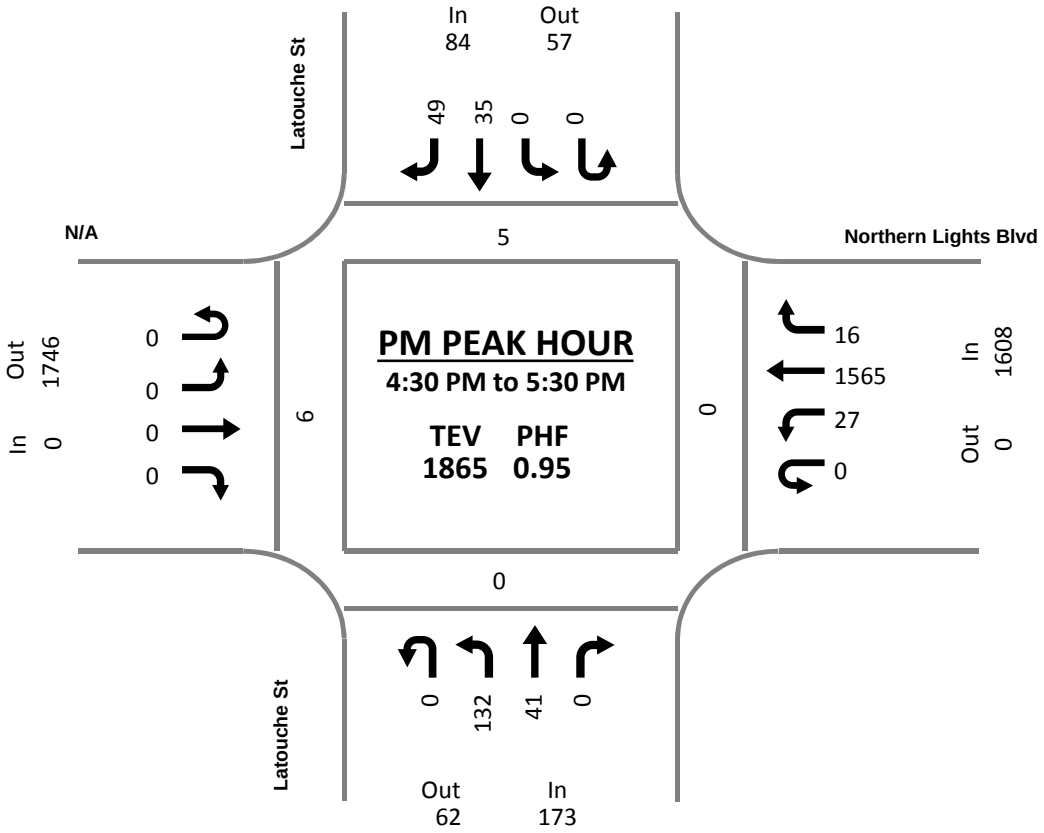
*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total")

Peak Hour Summary (System Peak*)

4:30 PM to 5:30 PM

Data Type	Latouche St (Northbound)					Latouche St (Southbound)					N/A (Eastbound)					Northern Lights Blvd (Westbound)					Peak Hour Total
	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	
Volume	0	132	41	0	0	0	0	35	49	5	0	0	0	0	6	0	27	1565	16	0	1865
%HV	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.7%	0.0%		0.6%
PHF	0.00	0.83	0.79	0.00	0.00	0.00	0.00	0.80	0.88	0.63	0.00	0.00	0.00	0.00	0.50	0.00	0.75	0.94	0.67	0.00	0.95
Volume			173					84					0					1608			1865
%HV			0.0%					0.0%					0.0%					0.7%			0.6%
PHF			0.82					0.95					0.00					0.94			0.95

*System Peak is based on comparison of other study area counts rather than highest total entering volume at this intersection.



Traffic Camera Count and Placement Information

Intersection Name: Benson Blvd & Latouche St

Intersection Location	
Northbound Street	Latouche St
Southbound Street	Latouche St
Eastbound Street	Benson Blvd
Westbound Street	N/A
City, State	Anchorage, AK

Project Information	
Name	Midtown Congestion Relief
Client	AK DOT&PF
Project #	1124.62458.01, Phase 02
PM/Traffic Lead	Steve Noble/Brad Coy

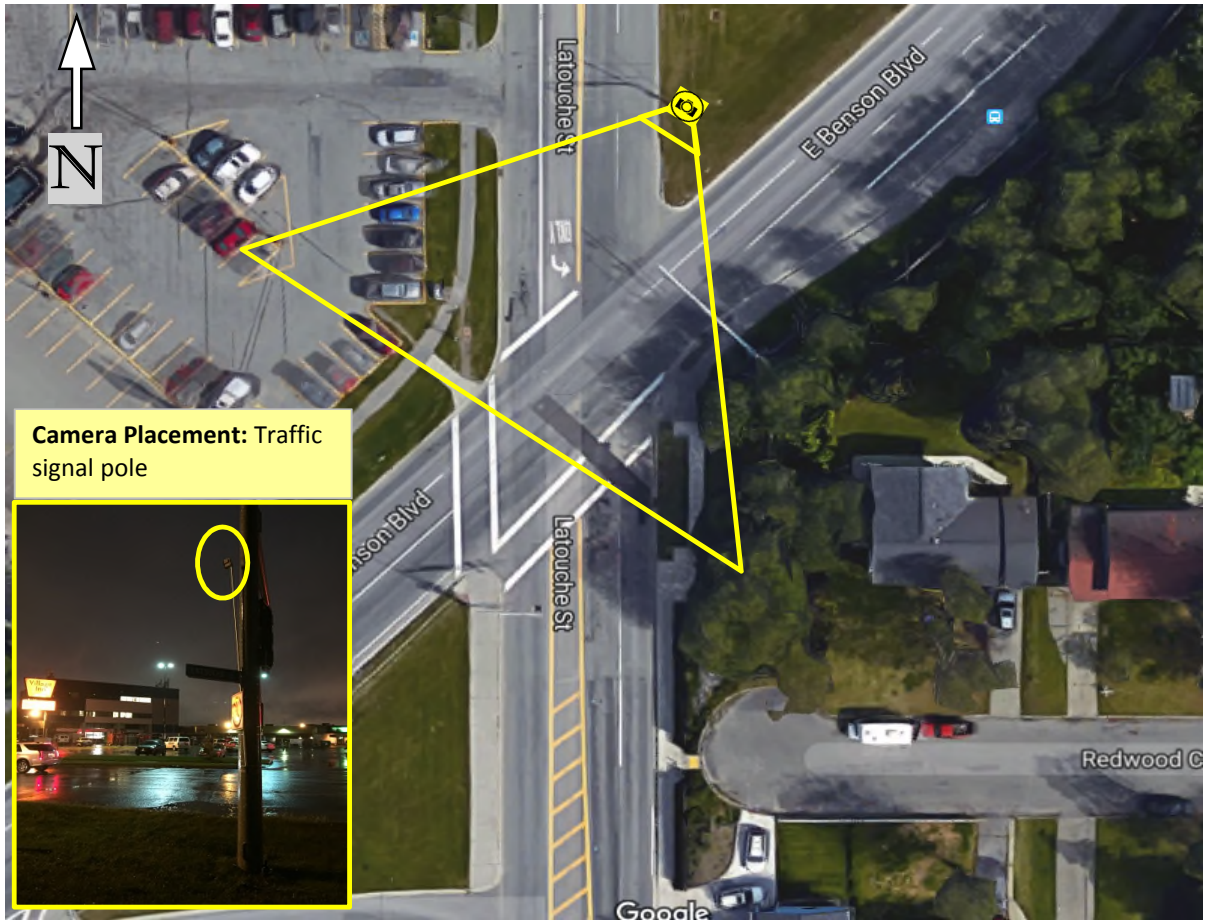
Count Description (e.g., day(s) of week, time periods, other related counts also occuring, etc.)

1 weekday (Tue, Wed, or Thu), simultaneous as Seward Hwy/Benson Blvd

Camera Setup/Video Footage	
Staff Responsible	Brad Coy
Setup Time	10/4/2017 7:10 AM
Take Down Time	10/4/2017 8:10 PM
Duration (hours)	13.00
Camera # (2-digit)	d7

Count Date, Time, Vendor	
Date	10/4/2017 (Wednesday)
Start Time	7:15 AM
End Time	7:30 PM
Duration (hours)	12.25
Count Vendor	CountingCars.com

Camera Placement



Other Notes (Before, During, or After Count)

Difficulty with setup = ready just after 7 a.m.

DOWL

Turning Movement Count

Benson Blvd & Latouche St

Total Vehicles (15-Minute Periods)

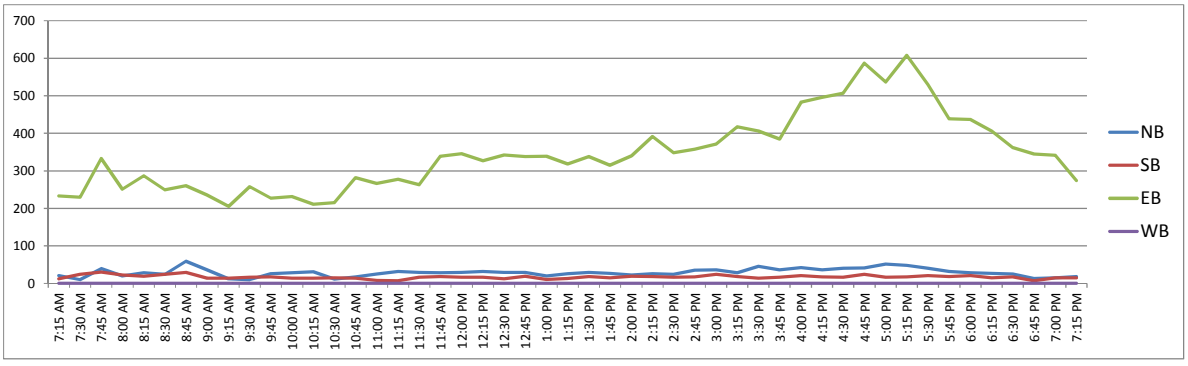
All Data

Wednesday, October 04, 2017

7:15 AM to 7:30 PM

Start Time	Latouche St (Northbound)					Latouche St (Southbound)					Benson Blvd (Eastbound)					N/A (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
7:15 AM	0	0	16	5	0	0	2	10	0	0	0	7	209	17	0	0	0	0	0	0	266
7:30 AM	0	0	4	6	1	0	7	17	0	0	0	2	212	16	1	0	0	0	0	0	264
7:45 AM	0	0	29	10	1	0	9	21	0	0	0	11	294	28	1	0	0	0	0	0	402
8:00 AM	0	0	16	4	1	0	4	18	0	0	0	5	215	31	1	0	0	0	0	0	293
8:15 AM	0	0	21	7	1	0	7	12	0	0	0	11	250	26	0	0	0	0	0	0	334
8:30 AM	0	0	15	9	1	0	12	12	0	0	0	7	217	25	2	0	0	0	0	0	297
8:45 AM	0	0	51	8	0	0	10	19	0	0	0	4	232	24	0	0	0	0	0	0	348
9:00 AM	0	0	22	14	1	0	0	14	0	0	0	10	197	29	0	0	0	0	0	0	286
9:15 AM	0	0	10	2	1	0	6	8	0	0	0	12	173	20	1	0	0	0	0	0	231
9:30 AM	0	0	7	3	0	0	5	11	0	0	0	11	219	28	0	0	0	0	0	0	284
9:45 AM	0	0	16	10	0	0	5	12	0	0	0	19	191	17	0	0	0	0	0	0	270
10:00 AM	0	0	16	12	1	0	5	9	0	0	0	15	195	21	0	0	0	0	0	0	273
10:15 AM	0	0	18	13	0	0	7	7	0	0	0	12	178	21	0	0	0	0	0	0	256
10:30 AM	0	0	5	6	0	0	5	10	0	0	0	5	193	17	1	0	0	0	0	0	241
10:45 AM	0	0	10	7	0	0	5	9	0	0	0	13	241	28	1	0	0	0	0	0	313
11:00 AM	0	0	11	14	0	0	3	5	0	0	0	17	212	37	1	0	0	0	0	0	299
11:15 AM	0	0	18	14	0	0	3	4	0	0	0	7	234	36	3	0	0	0	0	0	316
11:30 AM	0	0	21	8	0	0	9	7	0	0	0	14	214	35	1	0	0	0	0	0	308
11:45 AM	0	0	15	13	0	0	5	13	0	0	0	28	278	33	0	0	0	0	0	0	385
12:00 PM	0	0	19	10	0	0	5	11	0	0	0	44	278	24	2	0	0	0	0	0	391
12:15 PM	0	0	23	9	5	0	7	9	0	0	0	14	275	38	3	0	0	0	0	0	375
12:30 PM	0	0	16	13	0	0	4	8	0	0	0	19	281	42	1	0	0	0	0	1	383
12:45 PM	0	0	19	10	0	0	11	8	0	0	0	10	289	39	2	0	0	0	0	0	386
1:00 PM	0	0	10	10	2	0	6	4	0	0	0	13	291	35	3	0	0	0	0	0	369
1:15 PM	0	0	11	15	1	0	4	9	0	0	0	14	268	36	2	0	0	0	0	0	357
1:30 PM	0	0	20	9	0	0	6	12	0	0	0	7	298	33	0	0	0	0	0	0	385
1:45 PM	0	0	13	14	2	0	8	7	0	0	0	15	258	42	2	0	0	0	0	0	357
2:00 PM	0	0	11	11	4	0	10	9	0	0	0	12	292	36	4	0	0	0	0	0	381
2:15 PM	0	0	17	9	0	0	8	10	0	0	0	12	343	37	1	0	0	0	0	0	436
2:30 PM	0	0	18	6	0	0	5	11	0	0	0	16	297	35	1	0	0	0	0	0	388
2:45 PM	0	0	19	16	0	0	6	11	0	0	0	13	310	35	1	0	0	0	0	0	410
3:00 PM	0	0	23	13	0	0	10	14	0	0	0	15	308	48	2	0	0	0	0	0	431
3:15 PM	0	0	13	15	3	0	10	8	0	0	0	15	358	44	4	0	0	0	0	0	463
3:30 PM	0	0	30	15	0	0	5	9	0	0	0	14	341	51	1	0	0	0	0	0	465
3:45 PM	0	0	18	18	0	0	9	7	0	0	0	14	321	50	0	0	0	0	0	0	437
4:00 PM	0	0	20	22	0	0	9	12	0	0	0	14	402	67	1	0	0	0	0	2	546
4:15 PM	0	0	15	21	0	0	12	5	0	0	0	13	427	56	1	0	0	0	0	0	549
4:30 PM	0	0	25	15	1	0	5	11	0	0	0	18	416	73	2	0	0	0	0	0	563
4:45 PM	0	0	25	16	2	0	11	13	0	0	0	23	487	77	2	0	0	0	0	0	652
5:00 PM	0	0	31	20	5	0	11	5	0	0	0	13	437	87	5	0	0	0	0	0	604
5:15 PM	0	0	36	12	1	0	8	9	0	0	0	22	503	83	6	0	0	0	0	0	673
5:30 PM	0	0	23	17	1	0	11	10	0	0	0	23	440	67	0	0	0	0	0	0	591
5:45 PM	0	0	19	13	2	0	8	10	0	0	0	21	346	72	3	0	0	0	0	0	489
6:00 PM	0	0	20	8	0	0	12	9	0	0	0	19	365	53	4	0	0	0	0	0	486
6:15 PM	0	0	16	11	0	0	9	6	0	0	0	11	350	45	2	0	0	0	0	0	448
6:30 PM	0	0	18	7	0	0	6	11	0	0	0	13	301	48	2	0	0	0	0	0	404
6:45 PM	0	0	8	5	1	0	3	4	0	0	0	9	288	48	1	0	0	0	0	0	365
7:00 PM	0	0	6	9	1	0	11	4	0	0	0	16	291	34	3	0	0	0	0	0	371
7:15 PM	0	0	7	11	0	0	8	7	0	0	0	9	247	18	2	0	0	0	0	0	307
Total	0	0	870	545	39	0	347	481	0	0	0	681	14,262	1,942	76	0	0	0	0	3	19,128

*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total" or graph below)





Turning Movement Count

Benson Blvd & Latouche St

Heavy Vehicles (15-Minute Periods)

All Data

Wednesday, October 04, 2017

7:15 AM to 7:30 PM

Start Time	Latouche St (Northbound)				Latouche St (Southbound)				Benson Blvd (Eastbound)				N/A (Westbound)				Period Total (Veh)
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	
7:15 AM	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	7
7:30 AM	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	8
7:45 AM	0	0	0	0	0	1	0	0	0	1	6	0	0	0	0	0	8
8:00 AM	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	4
8:15 AM	0	0	0	0	0	0	0	0	0	0	6	1	0	0	0	0	7
8:30 AM	0	0	0	0	0	0	0	0	0	1	2	2	0	0	0	0	5
8:45 AM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2
9:00 AM	0	0	0	2	0	0	0	0	0	0	6	0	0	0	0	0	8
9:15 AM	0	0	0	0	0	0	0	0	0	1	4	0	0	0	0	0	5
9:30 AM	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	6
9:45 AM	0	0	1	1	0	0	0	0	0	0	4	0	0	0	0	0	6
10:00 AM	0	0	0	0	0	0	0	0	0	0	3	1	0	0	0	0	4
10:15 AM	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	4
10:30 AM	0	0	0	0	0	0	0	0	0	1	6	1	0	0	0	0	8
10:45 AM	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	6
11:00 AM	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	4
11:15 AM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2
11:30 AM	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	5
11:45 AM	0	0	0	0	0	0	0	0	0	1	6	0	0	0	0	0	7
12:00 PM	0	0	0	0	0	0	1	0	0	0	4	0	0	0	0	0	5
12:15 PM	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	3
12:30 PM	0	0	0	0	0	0	1	0	0	2	6	0	0	0	0	0	9
12:45 PM	0	0	0	0	0	1	0	0	0	0	3	0	0	0	0	0	4
1:00 PM	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0	0	10
1:15 PM	0	0	0	0	0	0	0	0	0	1	6	1	0	0	0	0	8
1:30 PM	0	0	0	1	0	0	0	0	0	0	9	0	0	0	0	0	10
1:45 PM	0	0	0	1	0	0	0	0	0	0	6	0	0	0	0	0	7
2:00 PM	0	0	0	0	0	0	0	0	0	0	4	2	0	0	0	0	6
2:15 PM	0	0	1	0	0	0	0	0	0	0	4	0	0	0	0	0	5
2:30 PM	0	0	1	0	0	0	2	0	0	1	6	1	0	0	0	0	11
2:45 PM	0	0	0	1	0	0	0	0	0	1	5	0	0	0	0	0	7
3:00 PM	0	0	0	0	0	0	1	0	0	1	1	0	0	0	0	0	3
3:15 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2
3:30 PM	0	0	1	0	0	0	0	0	0	0	6	1	0	0	0	0	8
3:45 PM	0	0	0	1	0	0	0	0	0	0	1	1	0	0	0	0	3
4:00 PM	0	0	1	0	0	0	0	0	0	0	2	0	0	0	0	0	3
4:15 PM	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3
4:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3
5:00 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2
5:15 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2
5:30 PM	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3
5:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
6:00 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2
6:15 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2
6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2
7:00 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2
7:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
Total	0	0	5	7	0	2	5	0	0	11	190	14	0	0	0	0	234

Turning Movement Count

Benson Blvd & Latouche St

Total Vehicles (15-Minute Periods)

AM Peak Hour

Wednesday, October 04, 2017

7:00 AM to 9:00 AM

Start Time	Latouche St (Northbound)					Latouche St (Southbound)					Benson Blvd (Eastbound)					N/A (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	16	5	0	0	2	10	0	0	0	7	209	17	0	0	0	0	0	0	266
7:30 AM	0	0	4	6	1	0	7	17	0	0	0	2	212	16	1	0	0	0	0	0	264
7:45 AM	0	0	29	10	1	0	9	21	0	0	0	11	294	28	1	0	0	0	0	0	402
8:00 AM	0	0	16	4	1	0	4	18	0	0	0	5	215	31	1	0	0	0	0	0	293
8:15 AM	0	0	21	7	1	0	7	12	0	0	0	11	250	26	0	0	0	0	0	0	334
8:30 AM	0	0	15	9	1	0	12	12	0	0	0	7	217	25	2	0	0	0	0	0	297
8:45 AM	0	0	51	8	0	0	10	19	0	0	0	4	232	24	0	0	0	0	0	0	348
Total	0	0	152	49	5	0	51	109	0	0	0	47	1,629	167	5	0	0	0	0	0	2,204

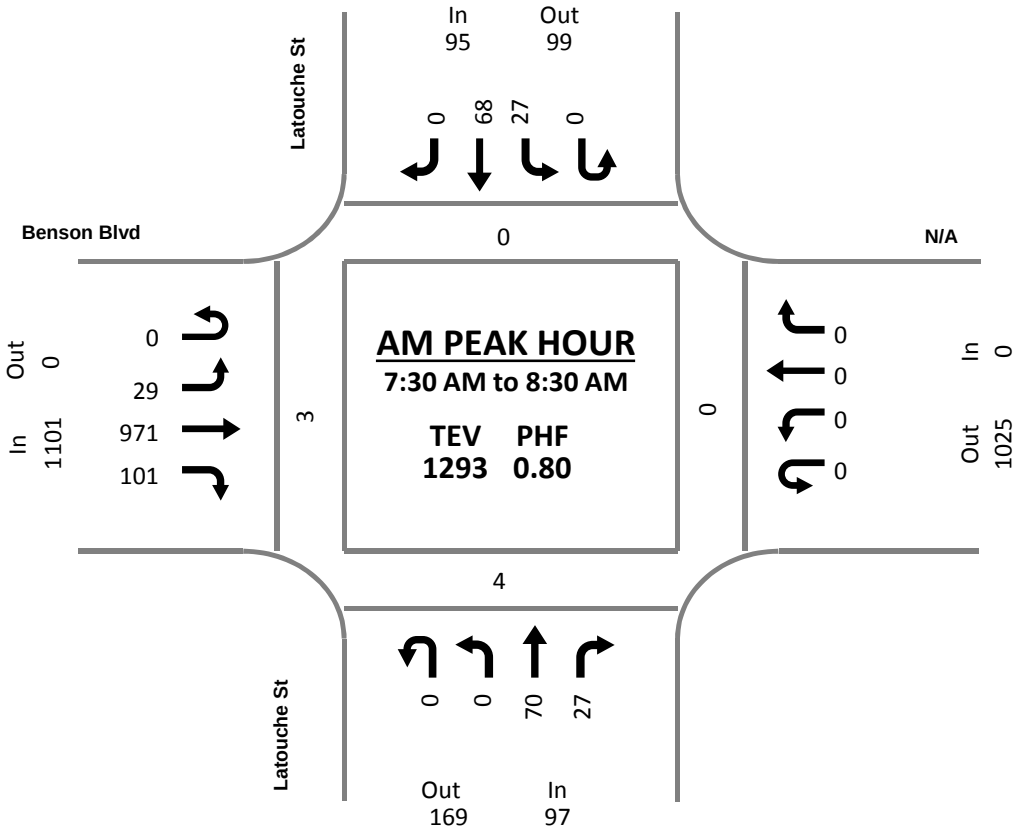
*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total")

Peak Hour Summary (System Peak*)

7:30 AM to 8:30 AM

Data Type	Latouche St (Northbound)					Latouche St (Southbound)					Benson Blvd (Eastbound)					N/A (Westbound)					Peak Hour Total
	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	
Volume	0	0	70	27	4	0	27	68	0	0	0	29	971	101	3	0	0	0	0	0	1293
%HV	0.0%	0.0%	0.0%	0.0%		0.0%	3.7%	0.0%	0.0%		0.0%	3.4%	2.3%	3.0%		0.0%	0.0%	0.0%	0.0%		2.1%
PHF	0.00	0.00	0.60	0.68	1.00	0.00	0.75	0.81	0.00	0.00	0.00	0.66	0.83	0.81	0.75	0.00	0.00	0.00	0.00	0.00	0.80
Volume			97					95					1101					0			1293
%HV			0.0%					1.1%					2.4%					0.0%			2.1%
PHF			0.62					0.79					0.83					0.00			0.80

*System Peak is based on comparison of other study area counts rather than highest total entering volume at this intersection.



Turning Movement Count

Benson Blvd & Latouche St

Total Vehicles (15-Minute Periods)

PM Peak Hour

Wednesday, October 04, 2017

4:00 PM to 6:00 PM

Start Time	Latouche St (Northbound)					Latouche St (Southbound)					Benson Blvd (Eastbound)					N/A (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
4:00 PM	0	0	20	22	0	0	9	12	0	0	0	14	402	67	1	0	0	0	0	2	546
4:15 PM	0	0	15	21	0	0	12	5	0	0	0	13	427	56	1	0	0	0	0	0	549
4:30 PM	0	0	25	15	1	0	5	11	0	0	0	18	416	73	2	0	0	0	0	0	563
4:45 PM	0	0	25	16	2	0	11	13	0	0	0	23	487	77	2	0	0	0	0	0	652
5:00 PM	0	0	31	20	5	0	11	5	0	0	0	13	437	87	5	0	0	0	0	0	604
5:15 PM	0	0	36	12	1	0	8	9	0	0	0	22	503	83	6	0	0	0	0	0	673
5:30 PM	0	0	23	17	1	0	11	10	0	0	0	23	440	67	0	0	0	0	0	0	591
5:45 PM	0	0	19	13	2	0	8	10	0	0	0	21	346	72	3	0	0	0	0	0	489
Total	0	0	194	136	12	0	75	75	0	0	0	147	3,458	582	20	0	0	0	0	2	4,667

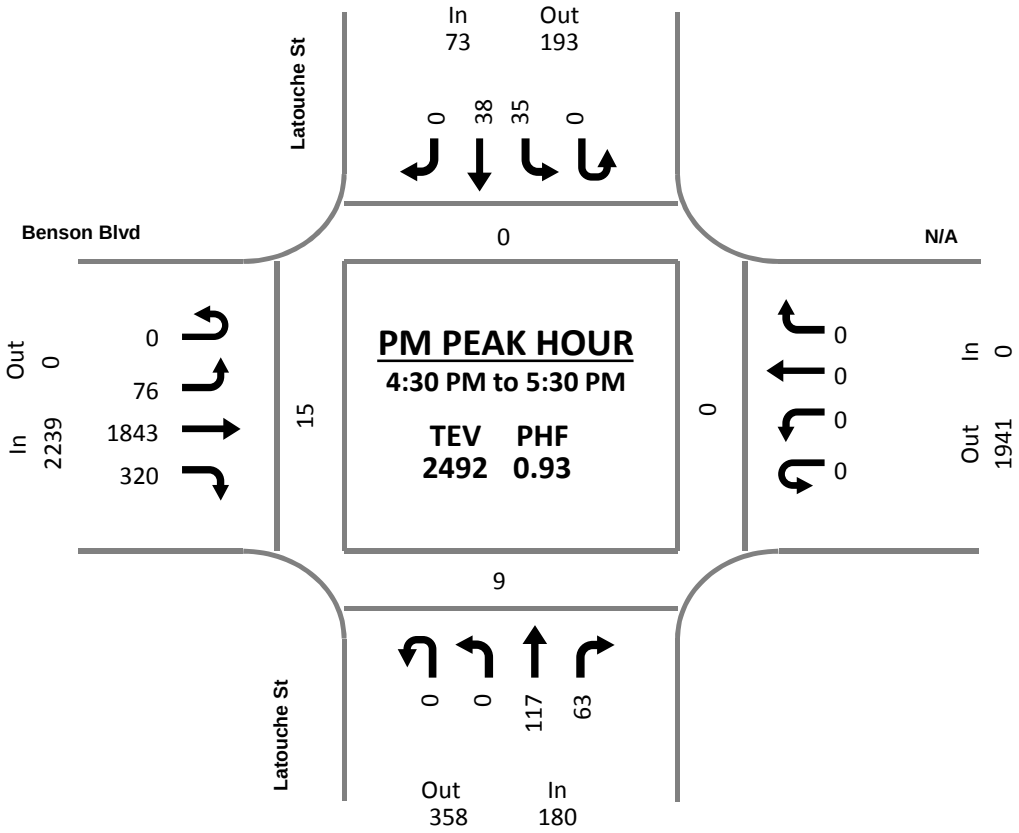
*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total")

Peak Hour Summary (System Peak*)

4:30 PM to 5:30 PM

Data Type	Latouche St (Northbound)					Latouche St (Southbound)					Benson Blvd (Eastbound)					N/A (Westbound)					Peak Hour Total
	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	
Volume	0	0	117	63	9	0	35	38	0	0	0	76	1843	320	15	0	0	0	0	0	2492
%HV	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.4%	0.0%		0.0%	0.0%	0.0%	0.0%		0.3%
PHF	0.00	0.00	0.81	0.79	0.45	0.00	0.80	0.73	0.00	0.00	0.00	0.83	0.92	0.92	0.63	0.00	0.00	0.00	0.00	0.00	0.93
Volume			180					73					2239					0			2492
%HV			0.0%					0.0%					0.4%					0.0%			0.3%
PHF			0.88					0.76					0.92					0.00			0.93

*System Peak is based on comparison of other study area counts rather than highest total entering volume at this intersection.



Traffic Camera Count and Placement Information

Intersection Name: 36th Ave & Latouche St

Intersection Location	
Northbound Street	Latouche St
Southbound Street	Latouche St
Eastbound Street	36th Ave
Westbound Street	36th Ave
City, State	Anchorage, AK

Project Information	
Name	Midtown Congestion Relief
Client	AK DOT&PF
Project #	1124.62458.01, Phase 02
PM/Traffic Lead	Steve Noble/Brad Coy

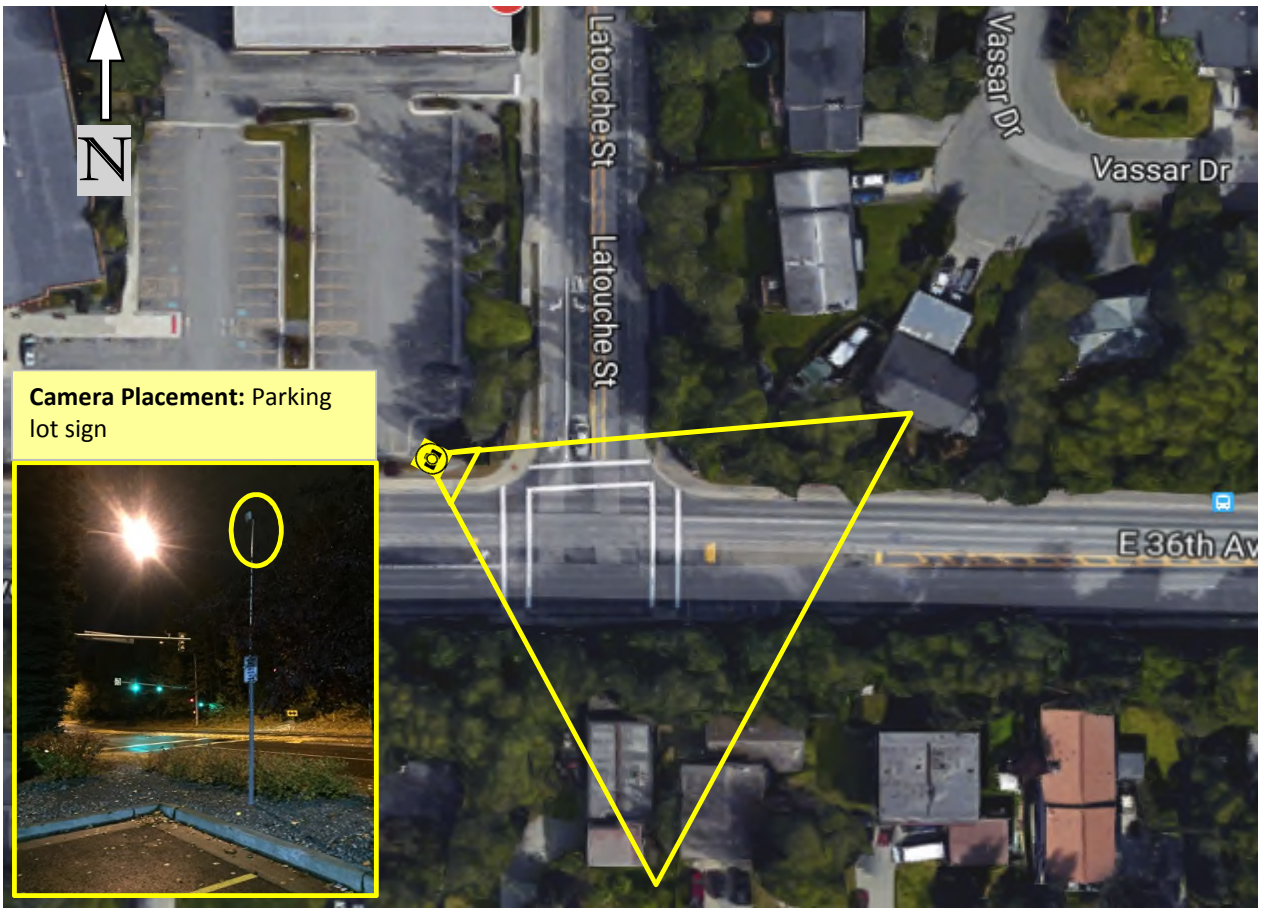
Count Description (e.g., day(s) of week, time periods, other related counts also occuring, etc.)

1 weekday (Tue, Wed, or Thu), simultaneous as Seward Hwy/36th Ave

Camera Setup/Video Footage	
Staff Responsible	Brad Coy
Setup Time	10/5/2017 6:35 AM
Take Down Time	10/5/2017 8:50 PM
Duration (hours)	14.25
Camera # (2-digit)	c3

Count Date, Time, Vendor	
Date	10/5/2017 (Thursday)
Start Time	6:45 AM
End Time	7:30 PM
Duration (hours)	12.75
Count Vendor	CountingCars.com

Camera Placement



Other Notes (Before, During, or After Count)

DOWL

Turning Movement Count

36th Ave & Latouche St

Total Vehicles (15-Minute Periods)

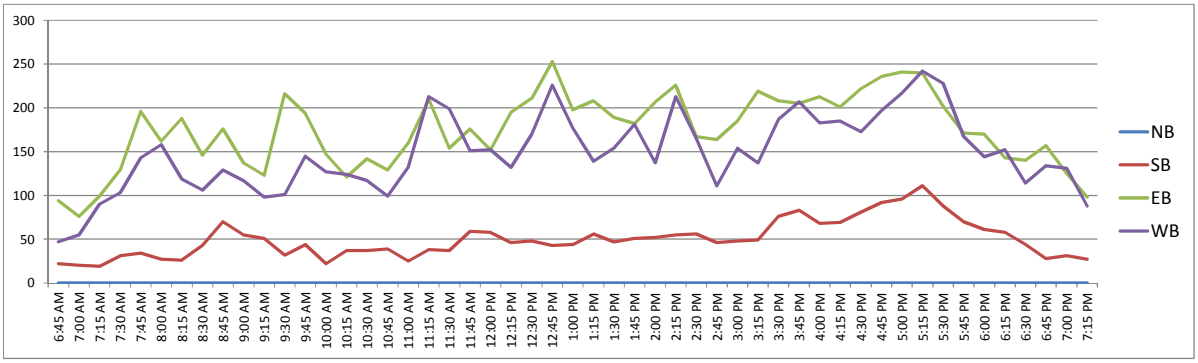
All Data

Thursday, October 05, 2017

6:45 AM to 7:30 PM

Start Time	Latouche St (Northbound)					Latouche St (Southbound)					36th Ave (Eastbound)					36th Ave (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
6:45 AM	0	0	0	0	0	0	13	0	9	0	0	7	87	0	0	0	0	42	5	0	163
7:00 AM	0	0	0	0	0	0	6	0	14	0	0	7	69	0	0	0	0	51	4	0	151
7:15 AM	0	0	0	0	0	0	9	0	10	0	0	6	93	0	0	0	0	84	6	0	208
7:30 AM	0	0	0	0	0	0	15	0	16	1	0	8	121	0	0	0	0	100	3	0	263
7:45 AM	0	0	0	0	0	0	21	0	13	1	0	7	189	0	2	0	0	139	4	0	373
8:00 AM	0	0	0	0	0	0	15	0	12	0	0	11	151	0	0	0	0	145	13	0	347
8:15 AM	0	0	0	0	0	0	10	0	16	1	0	14	174	0	0	0	0	109	10	0	333
8:30 AM	0	0	0	0	0	0	18	0	25	0	0	28	118	0	1	0	0	95	11	0	295
8:45 AM	0	0	0	0	0	0	26	0	44	0	0	28	148	0	2	0	0	118	11	0	375
9:00 AM	0	0	0	0	0	0	16	0	39	1	0	15	122	0	1	0	0	112	5	0	309
9:15 AM	0	0	0	0	0	0	21	0	30	0	0	10	113	0	0	0	0	95	3	0	272
9:30 AM	0	0	0	0	0	0	14	0	18	0	0	11	205	0	0	0	0	97	4	0	349
9:45 AM	0	0	0	0	0	0	25	0	19	1	0	13	181	0	0	0	0	136	9	0	383
10:00 AM	0	0	0	0	1	0	16	0	6	1	0	11	136	0	0	0	0	120	7	0	296
10:15 AM	0	0	0	0	0	0	14	0	23	0	0	12	109	0	0	0	0	112	12	0	282
10:30 AM	0	0	0	0	0	0	22	0	15	1	0	15	127	0	0	0	0	102	15	0	296
10:45 AM	0	0	0	0	0	0	22	0	17	0	0	13	116	0	0	0	0	93	6	0	267
11:00 AM	0	0	0	0	0	0	11	0	14	1	0	7	153	0	0	0	0	118	14	0	317
11:15 AM	0	0	0	0	0	0	23	0	15	2	0	10	200	0	0	0	0	206	7	0	461
11:30 AM	0	0	0	0	0	0	14	0	23	5	1	18	135	0	0	0	0	195	4	0	390
11:45 AM	0	0	0	0	0	0	23	0	36	0	0	10	166	0	0	0	0	143	8	1	386
12:00 PM	0	0	0	0	0	0	30	0	28	0	0	14	138	0	0	0	0	139	13	0	362
12:15 PM	0	0	0	0	0	0	25	0	21	0	0	14	181	0	0	0	0	125	7	0	373
12:30 PM	0	0	0	0	0	0	33	0	15	1	0	19	192	0	0	0	0	159	11	0	429
12:45 PM	0	0	0	0	0	0	23	0	20	0	0	25	228	0	0	0	0	214	12	0	522
1:00 PM	0	0	0	0	0	0	18	0	26	0	0	19	179	0	0	0	0	170	7	0	419
1:15 PM	0	0	0	0	0	0	24	0	32	0	0	25	183	0	0	0	0	129	10	0	403
1:30 PM	0	0	0	0	0	0	25	0	22	0	0	19	170	0	1	0	0	147	7	0	390
1:45 PM	0	0	0	0	0	0	30	0	21	1	0	16	166	0	0	0	0	174	7	0	414
2:00 PM	0	0	0	0	0	0	29	0	23	0	0	11	196	0	1	0	0	128	9	0	396
2:15 PM	0	0	0	0	0	0	28	0	27	2	0	25	201	0	0	0	0	204	9	0	494
2:30 PM	0	0	0	0	1	0	33	0	23	0	0	13	154	0	1	0	0	158	7	0	388
2:45 PM	0	0	0	0	0	0	24	0	22	0	1	20	143	0	0	0	0	103	8	0	321
3:00 PM	0	0	0	0	0	0	25	0	23	0	0	22	163	0	1	0	0	138	16	0	387
3:15 PM	0	0	0	0	0	0	24	0	25	0	0	28	191	0	0	0	0	129	8	1	405
3:30 PM	0	0	0	0	1	0	33	0	43	0	1	16	191	0	0	0	0	180	7	0	471
3:45 PM	0	0	0	0	0	0	45	0	38	1	1	19	185	0	0	0	0	201	6	0	495
4:00 PM	0	0	0	0	0	0	27	0	41	2	1	12	200	0	1	0	0	177	6	0	464
4:15 PM	0	0	0	0	1	0	27	0	42	0	0	19	182	0	0	0	0	173	12	0	455
4:30 PM	0	0	0	0	0	0	25	0	56	2	0	17	205	0	0	0	0	163	10	0	476
4:45 PM	0	0	0	0	0	0	36	0	56	1	0	34	202	0	0	0	0	188	9	0	525
5:00 PM	0	0	0	0	1	0	41	0	55	0	0	27	214	0	0	0	0	200	17	0	554
5:15 PM	0	0	0	0	0	0	67	0	44	0	1	21	218	0	0	0	0	234	8	0	593
5:30 PM	0	0	0	0	1	0	44	0	44	1	0	15	187	0	0	0	0	216	12	0	518
5:45 PM	0	0	0	0	0	0	29	0	41	0	0	15	156	0	0	0	0	159	8	0	408
6:00 PM	0	0	0	0	0	0	21	0	40	0	0	23	147	0	0	0	0	132	12	0	375
6:15 PM	0	0	0	0	0	0	34	0	24	1	0	14	129	0	0	0	0	150	2	0	353
6:30 PM	0	0	0	0	0	0	27	0	17	0	0	11	129	0	0	0	0	108	6	0	298
6:45 PM	0	0	0	0	0	0	16	0	12	0	0	18	139	0	0	0	0	129	5	0	319
7:00 PM	0	0	0	0	0	0	22	0	9	0	0	9	116	0	0	0	0	124	7	0	287
7:15 PM	0	0	0	0	0	0	12	0	15	0	0	6	92	0	0	0	0	85	3	0	213
Total	0	0	0	0	6	0	1,231	0	1,319	27	6	807	8,090	0	11	0	0	7,148	422	2	19,023

*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total" or graph below)





Turning Movement Count

36th Ave & Latouche St

Heavy Vehicles (15-Minute Periods)

All Data

Thursday, October 05, 2017

6:45 AM to 7:30 PM

Start Time	Latouche St (Northbound)				Latouche St (Southbound)				36th Ave (Eastbound)				36th Ave (Westbound)				Period Total (Veh)
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	
6:45 AM	0	0	0	0	0	0	0	0	0	1	4	0	0	0	0	1	6
7:00 AM	0	0	0	0	0	0	0	0	0	2	3	0	0	0	4	0	9
7:15 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2	1	4
7:30 AM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	3
7:45 AM	0	0	0	0	0	0	0	0	0	0	9	0	0	0	3	0	12
8:00 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	3	0	4
8:15 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	3	0	4
8:30 AM	0	0	0	0	0	1	0	1	0	1	3	0	0	0	1	0	7
8:45 AM	0	0	0	0	0	1	0	0	0	4	1	0	0	0	6	1	13
9:00 AM	0	0	0	0	0	1	0	2	0	0	5	0	0	0	4	0	12
9:15 AM	0	0	0	0	0	0	0	1	0	0	3	0	0	0	3	0	7
9:30 AM	0	0	0	0	0	0	0	0	0	1	4	0	0	0	0	0	5
9:45 AM	0	0	0	0	0	1	0	0	0	0	2	0	0	0	2	0	5
10:00 AM	0	0	0	0	0	0	0	0	0	0	5	0	0	0	5	0	10
10:15 AM	0	0	0	0	0	0	0	0	0	1	1	0	0	0	3	0	5
10:30 AM	0	0	0	0	0	0	0	1	0	0	4	0	0	0	3	0	8
10:45 AM	0	0	0	0	0	0	0	0	0	0	5	0	0	0	4	0	9
11:00 AM	0	0	0	0	0	0	0	0	0	0	3	0	0	0	3	0	6
11:15 AM	0	0	0	0	0	1	0	0	0	1	1	0	0	0	3	1	7
11:30 AM	0	0	0	0	0	1	0	0	0	0	3	0	0	0	3	0	7
11:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
12:00 PM	0	0	0	0	0	1	0	0	0	0	4	0	0	0	1	0	6
12:15 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	4	0	6
12:30 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	3
12:45 PM	0	0	0	0	0	1	0	0	0	0	5	0	0	0	2	0	8
1:00 PM	0	0	0	0	0	0	0	1	0	1	7	0	0	0	1	0	10
1:15 PM	0	0	0	0	0	0	0	1	0	0	3	0	0	0	5	0	9
1:30 PM	0	0	0	0	0	0	0	0	0	1	2	0	0	0	3	0	6
1:45 PM	0	0	0	0	0	0	0	0	0	0	6	0	0	0	2	0	8
2:00 PM	0	0	0	0	0	0	0	1	0	1	2	0	0	0	1	0	5
2:15 PM	0	0	0	0	0	0	0	1	0	1	1	0	0	0	4	0	7
2:30 PM	0	0	0	0	0	0	0	0	0	1	5	0	0	0	1	0	7
2:45 PM	0	0	0	0	0	0	0	0	0	1	2	0	0	0	3	0	6
3:00 PM	0	0	0	0	0	1	0	0	0	1	5	0	0	0	3	0	10
3:15 PM	0	0	0	0	0	0	0	0	0	1	3	0	0	0	6	0	10
3:30 PM	0	0	0	0	0	2	0	0	0	1	4	0	0	0	2	0	9
3:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	5	0	6
4:00 PM	0	0	0	0	0	2	0	0	0	0	2	0	0	0	0	0	4
4:15 PM	0	0	0	0	0	0	0	1	0	0	1	0	0	0	4	0	6
4:30 PM	0	0	0	0	0	0	0	1	0	0	3	0	0	0	0	0	4
4:45 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	3	1	6
5:00 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2
5:15 PM	0	0	0	0	0	0	0	0	0	0	3	0	0	0	4	0	7
5:30 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	3
5:45 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	4
6:00 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	4
6:15 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2	0	3
6:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
6:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	2
7:00 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	4
7:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
Total	0	0	0	0	0	14	0	11	0	21	137	0	0	0	124	5	312

Turning Movement Count

36th Ave & Latouche St

Total Vehicles (15-Minute Periods)

AM Peak Hour

Thursday, October 05, 2017

7:00 AM to 9:00 AM

Start Time	Latouche St (Northbound)					Latouche St (Southbound)					36th Ave (Eastbound)					36th Ave (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
7:00 AM	0	0	0	0	0	0	6	0	14	0	0	7	69	0	0	0	0	51	4	0	151
7:15 AM	0	0	0	0	0	0	9	0	10	0	0	6	93	0	0	0	0	84	6	0	208
7:30 AM	0	0	0	0	0	0	15	0	16	1	0	8	121	0	0	0	0	100	3	0	263
7:45 AM	0	0	0	0	0	0	21	0	13	1	0	7	189	0	2	0	0	139	4	0	373
8:00 AM	0	0	0	0	0	0	15	0	12	0	0	11	151	0	0	0	0	145	13	0	347
8:15 AM	0	0	0	0	0	0	10	0	16	1	0	14	174	0	0	0	0	109	10	0	333
8:30 AM	0	0	0	0	0	0	18	0	25	0	0	28	118	0	1	0	0	95	11	0	295
8:45 AM	0	0	0	0	0	0	26	0	44	0	0	28	148	0	2	0	0	118	11	0	375
Total	0	0	0	0	0	0	120	0	150	3	0	109	1,063	0	5	0	0	841	62	0	2,345

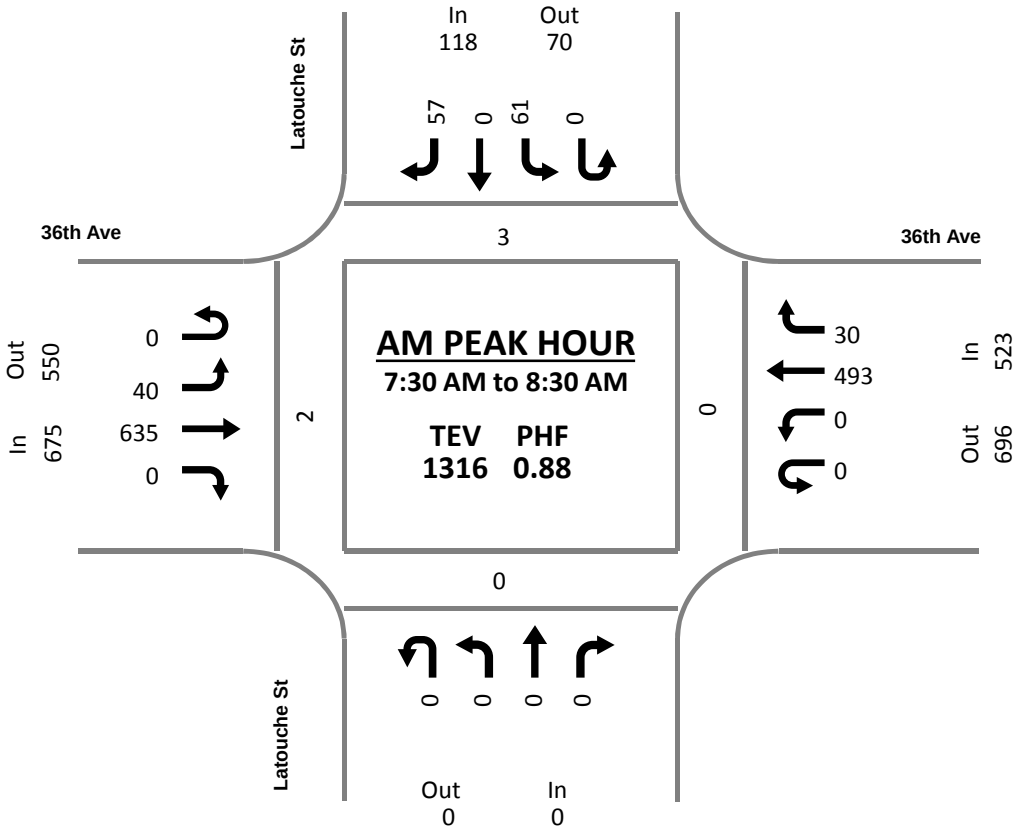
*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total")

Peak Hour Summary

7:30 AM to 8:30 AM

Data Type	Latouche St (Northbound)					Latouche St (Southbound)					36th Ave (Eastbound)					36th Ave (Westbound)					Peak Hour Total
	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	
Volume	0	0	0	0	0	0	61	0	57	3	0	40	635	0	2	0	0	493	30	0	1316
%HV	0.0%	0.0%	0.0%	0.0%		0.0%	1.6%	0.0%	0.0%		0.0%	0.0%	1.9%	0.0%		0.0%	0.0%	2.0%	0.0%		1.7%
PHF	0.00	0.00	0.00	0.00	0.00	0.00	0.73	0.00	0.89	0.75	0.00	0.71	0.84	0.00	0.25	0.00	0.00	0.85	0.58	0.00	0.88
Volume			0					118					675					523			1316
%HV			0.0%					0.8%					1.8%					1.9%			1.7%
PHF			0.00					0.87					0.86					0.83			0.88

*System Peak is based on comparison of other study area counts rather than highest total entering volume at this intersection.



Turning Movement Count

36th Ave & Latouche St

Total Vehicles (15-Minute Periods)

PM Peak Hour

Thursday, October 05, 2017

4:00 PM to 6:00 PM

Start Time	Latouche St (Northbound)					Latouche St (Southbound)					36th Ave (Eastbound)					36th Ave (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
4:00 PM	0	0	0	0	0	0	27	0	41	2	1	12	200	0	1	0	0	177	6	0	464
4:15 PM	0	0	0	0	1	0	27	0	42	0	0	19	182	0	0	0	0	173	12	0	455
4:30 PM	0	0	0	0	0	0	25	0	56	2	0	17	205	0	0	0	0	163	10	0	476
4:45 PM	0	0	0	0	0	0	36	0	56	1	0	34	202	0	0	0	0	188	9	0	525
5:00 PM	0	0	0	0	1	0	41	0	55	0	0	27	214	0	0	0	0	200	17	0	554
5:15 PM	0	0	0	0	0	0	67	0	44	0	1	21	218	0	0	0	0	234	8	0	593
5:30 PM	0	0	0	0	1	0	44	0	44	1	0	15	187	0	0	0	0	216	12	0	518
5:45 PM	0	0	0	0	0	0	29	0	41	0	0	15	156	0	0	0	0	159	8	0	408
Total	0	0	0	0	3	0	296	0	379	6	2	160	1,564	0	1	0	0	1,510	82	0	3,993

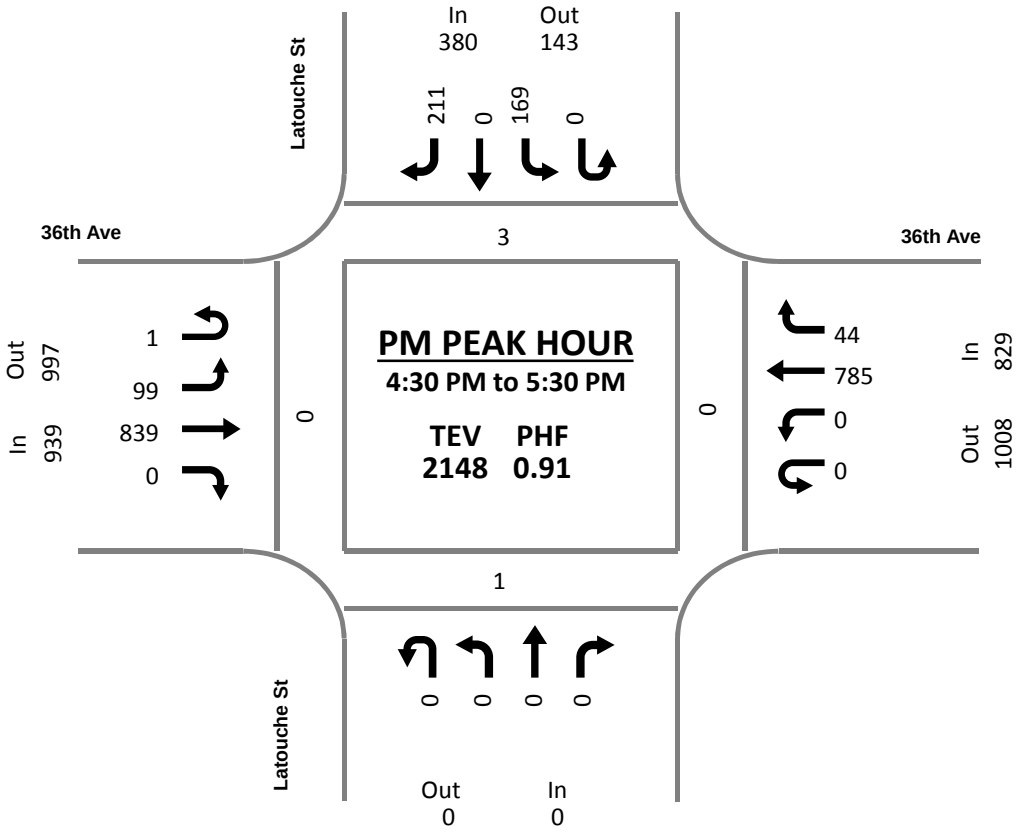
*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total")

Peak Hour Summary (System Peak*)

4:30 PM to 5:30 PM

Data Type	Latouche St (Northbound)					Latouche St (Southbound)					36th Ave (Eastbound)					36th Ave (Westbound)					Peak Hour Total
	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	
Volume	0	0	0	0	1	0	169	0	211	3	1	99	839	0	0	0	0	785	44	0	2148
%HV	0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	0.0%	0.5%		0.0%	0.0%	1.2%	0.0%		0.0%	0.0%	0.9%	2.3%		0.9%
PHF	0.00	0.00	0.00	0.00	0.25	0.00	0.63	0.00	0.94	0.38	0.25	0.73	0.96	0.00	0.00	0.00	0.00	0.84	0.65	0.00	0.91
Volume			0					380					939					829			2148
%HV			0.0%					0.3%					1.1%					1.0%			0.9%
PHF			0.00					0.86					0.97					0.86			0.91

*System Peak is based on comparison of other study area counts rather than highest total entering volume at this intersection.



Traffic Camera Count and Placement Information

Intersection Name: Lake Otis Pkwy & Debarr Rd

Intersection Location	
Northbound Street	Lake Otis Pkwy
Southbound Street	Merill Field Dr
Eastbound Street	E 15th Ave
Westbound Street	Debarr Rd
City, State	Anchorage, AK

Project Information	
Name	Midtown Congestion Relief
Client	AK DOT&PF
Project #	1124.62458.01, Phase 02
PM/Traffic Lead	Steve Noble/Brad Coy

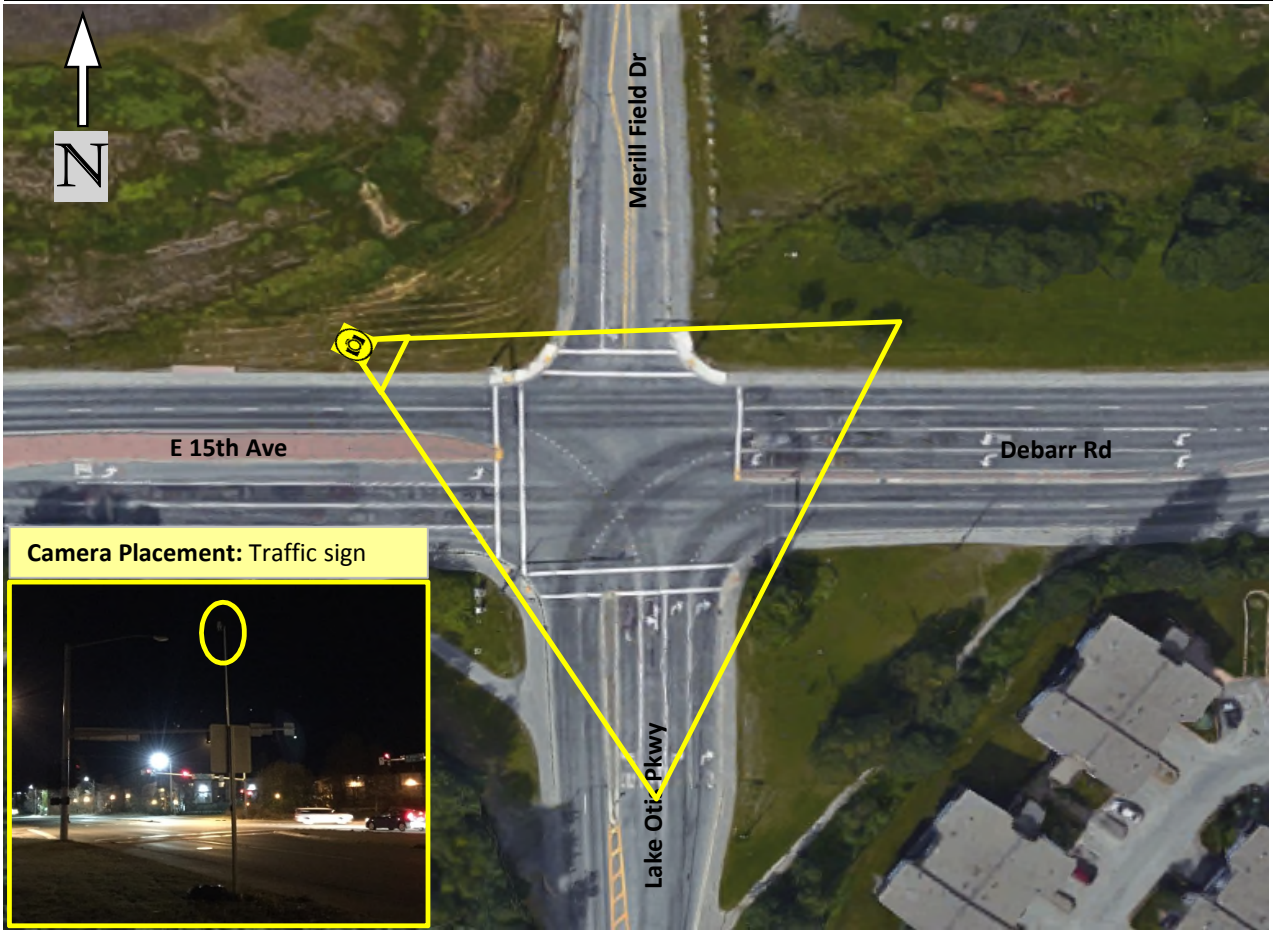
Count Description (e.g., day(s) of week, time periods, other related counts also occuring, etc.)

1 weekday (Tue, Wed, or Thu)

Camera Setup/Video Footage	
Staff Responsible	Brad Coy
Setup Time	10/19/2017 6:40 AM
Take Down Time	10/19/2017 10:00 PM
Duration (hours)	15.33
Camera # (2-digit)	a1

Count Date, Time, Vendor	
Date	10/19/2017 (Thursday)
Start Time	6:45 AM
End Time	7:45 PM
Duration (hours)	13.00
Count Vendor	CountingCars.com

Camera Placement



Other Notes (Before, During, or After Count)

DOWL

Turning Movement Count

Lake Otis Pkwy & Debarr Rd

Total Vehicles (15-Minute Periods)

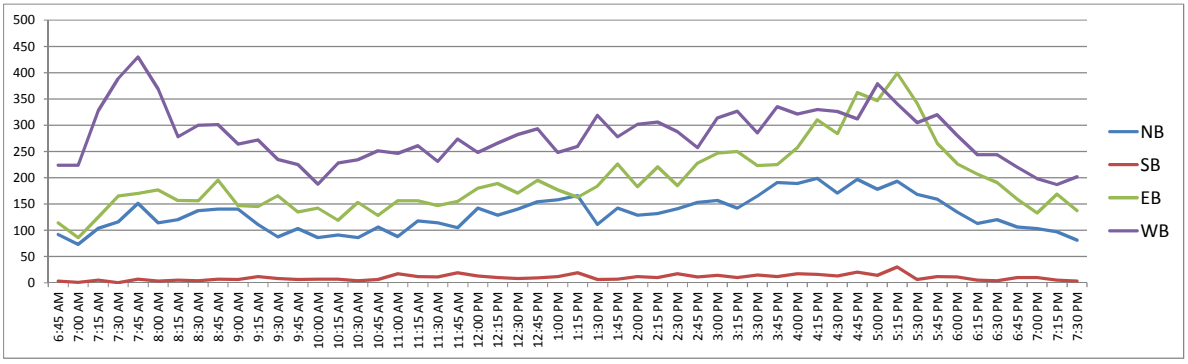
All Data

Thursday, October 19, 2017

6:45 AM to 7:45 PM

Start Time	Lake Otis Pkwy (Northbound)					Merill Field Dr (Southbound)					E 15th Ave (Eastbound)					Debarr Rd (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
6:45 AM	0	15	2	75	0	0	0	1	2	0	0	6	89	19	0	0	89	133	2	0	433
7:00 AM	0	22	5	46	0	0	0	0	1	0	0	4	62	20	0	0	71	153	0	0	384
7:15 AM	0	29	5	70	0	0	0	4	1	1	0	4	97	24	1	0	108	220	0	0	562
7:30 AM	0	30	5	81	0	0	0	0	0	0	0	3	123	39	0	0	133	254	2	0	670
7:45 AM	0	46	7	98	0	0	2	1	4	1	1	7	128	34	1	0	156	274	0	0	758
8:00 AM	0	34	6	74	0	0	0	2	1	0	0	4	132	41	0	0	84	283	2	0	663
8:15 AM	0	36	3	81	0	0	0	1	4	0	0	7	109	41	0	0	118	160	0	0	560
8:30 AM	0	49	5	83	0	0	0	1	3	0	0	4	112	40	0	0	103	197	0	0	597
8:45 AM	0	35	9	96	0	0	0	4	3	0	0	4	152	40	0	0	107	194	0	0	644
9:00 AM	0	36	8	96	0	0	0	4	2	0	0	8	104	35	0	0	82	180	2	0	557
9:15 AM	0	25	5	81	0	0	1	7	4	0	0	5	105	35	0	0	89	179	4	0	540
9:30 AM	0	18	5	64	0	0	0	2	6	0	0	2	123	41	0	0	82	152	1	0	496
9:45 AM	0	28	5	70	0	0	0	2	4	0	0	8	101	26	0	0	93	132	0	0	469
10:00 AM	0	30	3	53	0	0	0	2	5	0	0	2	112	28	0	0	65	122	1	0	423
10:15 AM	0	25	7	59	0	0	1	4	2	0	0	4	91	24	0	0	88	138	2	0	445
10:30 AM	0	19	4	63	0	0	0	1	3	0	0	4	121	28	0	0	84	149	1	0	477
10:45 AM	0	19	5	82	0	0	0	4	2	0	0	1	101	26	0	0	88	162	1	0	491
11:00 AM	0	23	5	60	0	0	0	11	6	0	0	4	121	31	0	0	77	168	1	0	507
11:15 AM	0	31	8	79	0	0	0	9	3	0	0	9	114	33	0	0	94	166	1	0	547
11:30 AM	0	28	7	79	0	0	0	3	8	0	0	5	115	27	0	0	68	162	1	0	503
11:45 AM	0	38	4	63	1	0	2	8	9	0	0	4	114	37	0	0	111	162	1	1	553
12:00 PM	0	35	7	100	0	0	2	5	6	0	0	6	140	34	0	0	103	141	4	0	583
12:15 PM	0	27	7	95	0	0	1	5	4	0	0	3	148	38	0	0	77	187	2	0	594
12:30 PM	0	39	8	93	0	0	2	4	2	0	0	5	135	31	0	0	99	183	0	0	601
12:45 PM	0	36	12	106	0	0	0	6	3	0	0	2	163	30	0	0	107	184	2	0	651
1:00 PM	0	42	6	110	0	0	0	7	5	0	0	4	131	42	0	0	82	166	0	0	595
1:15 PM	0	40	2	124	0	0	1	8	10	0	0	2	127	34	0	0	111	149	0	0	608
1:30 PM	0	27	4	80	1	0	0	4	2	0	0	13	142	29	0	0	130	188	1	0	620
1:45 PM	0	30	8	104	0	0	1	2	4	1	0	8	174	44	0	0	91	184	3	0	653
2:00 PM	0	23	5	101	0	0	0	6	6	0	0	5	135	43	0	0	106	195	1	0	626
2:15 PM	0	32	7	93	0	0	0	9	1	0	0	4	181	36	0	0	113	193	0	0	669
2:30 PM	0	37	5	99	0	0	0	10	7	0	0	0	150	35	0	0	89	195	4	0	631
2:45 PM	0	33	2	118	0	0	0	6	5	0	0	6	184	38	0	0	101	155	1	0	649
3:00 PM	0	25	3	129	0	0	0	7	7	0	0	4	193	50	0	0	117	196	1	0	732
3:15 PM	0	37	4	101	0	0	0	4	6	2	0	4	201	45	0	0	129	197	1	0	729
3:30 PM	0	38	12	115	0	0	1	8	6	0	0	5	179	39	0	1	92	190	2	0	688
3:45 PM	0	48	5	138	0	0	1	7	4	0	0	5	172	48	0	0	113	220	2	0	763
4:00 PM	0	39	5	145	0	0	0	8	9	1	0	3	204	50	0	0	125	195	1	0	784
4:15 PM	0	45	3	151	0	0	3	8	5	2	2	6	255	47	0	0	117	212	1	0	855
4:30 PM	0	25	3	143	0	0	0	9	4	1	1	3	247	33	0	0	117	208	1	0	794
4:45 PM	0	36	4	157	0	0	1	10	9	0	1	4	293	64	0	0	117	195	0	0	891
5:00 PM	0	43	3	132	0	0	0	10	4	0	0	1	279	67	0	0	161	218	0	0	918
5:15 PM	0	55	5	133	0	0	1	22	7	0	0	3	310	86	0	0	125	214	2	0	963
5:30 PM	0	44	5	119	0	0	0	3	3	0	0	2	266	74	0	0	110	195	0	0	821
5:45 PM	0	37	1	121	0	0	1	5	6	0	0	7	211	47	1	0	125	195	0	0	756
6:00 PM	0	35	3	97	1	0	2	2	7	0	0	0	186	41	0	0	105	176	0	0	654
6:15 PM	0	17	1	95	0	0	0	3	2	0	0	1	182	24	0	0	73	171	0	0	569
6:30 PM	0	30	1	89	0	0	1	1	2	0	0	1	149	41	0	0	67	177	0	0	559
6:45 PM	0	22	0	84	0	0	1	5	4	2	0	1	127	31	1	0	74	146	0	0	495
7:00 PM	0	27	2	74	0	0	0	6	4	0	0	2	105	26	0	0	68	130	0	0	444
7:15 PM	0	30	0	67	0	0	0	4	1	0	1	2	144	22	0	0	65	122	0	0	458
7:30 PM	0	20	0	61	0	0	1	1	1	1	0	0	115	22	0	0	72	129	1	0	423
Total	0	1,670	246	4,927	3	0	26	266	219	12	6	211	7,954	1,960	4	1	5,171	9,346	52	1	32,055

*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total" or graph below)





Turning Movement Count

Lake Otis Pkwy & Debarr Rd

Heavy Vehicles (15-Minute Periods)

All Data

Thursday, October 19, 2017

6:45 AM to 7:45 PM

Start Time	Lake Otis Pkwy (Northbound)				Merill Field Dr (Southbound)				E 15th Ave (Eastbound)				Debarr Rd (Westbound)				Period Total (Veh)
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	
6:45 AM	0	0	0	2	0	0	0	0	0	0	4	0	0	0	4	0	10
7:00 AM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	3
7:15 AM	0	0	0	1	0	0	0	0	0	0	5	0	0	0	2	0	8
7:30 AM	0	0	0	2	0	0	0	0	0	0	2	0	0	0	2	0	6
7:45 AM	0	1	0	0	0	0	0	0	0	0	3	0	0	5	7	0	16
8:00 AM	0	0	0	2	0	0	0	0	0	0	4	1	0	1	5	0	13
8:15 AM	0	0	0	4	0	0	0	0	0	0	6	0	0	4	4	0	18
8:30 AM	0	0	0	1	0	0	0	0	0	0	2	1	0	2	3	0	9
8:45 AM	0	0	1	3	0	0	0	0	0	0	6	2	0	0	4	0	16
9:00 AM	0	0	1	2	0	0	0	0	0	1	1	0	0	3	3	0	11
9:15 AM	0	1	0	3	0	0	1	1	0	0	3	2	0	2	6	0	19
9:30 AM	0	1	0	0	0	0	0	0	0	0	4	1	0	4	1	0	11
9:45 AM	0	1	0	3	0	0	0	0	0	0	3	0	0	1	3	0	11
10:00 AM	0	0	0	3	0	0	0	0	0	0	3	1	0	0	2	0	9
10:15 AM	0	1	0	2	0	0	0	0	0	0	4	0	0	4	9	0	20
10:30 AM	0	0	0	3	0	0	0	0	0	0	3	2	0	0	1	0	9
10:45 AM	0	1	0	2	0	0	0	0	0	0	2	2	0	1	5	0	13
11:00 AM	0	1	1	1	0	0	2	0	0	0	4	1	0	1	3	0	14
11:15 AM	0	0	0	0	0	0	0	1	0	0	7	0	0	0	3	0	11
11:30 AM	0	1	0	1	0	0	1	0	0	0	2	3	0	1	2	0	11
11:45 AM	0	0	0	1	0	0	0	0	0	0	1	1	0	1	6	0	10
12:00 PM	0	1	0	2	0	0	0	0	0	1	3	0	0	1	0	0	8
12:15 PM	0	0	0	1	0	0	0	0	0	0	4	0	0	1	0	0	6
12:30 PM	0	1	1	2	0	0	0	0	0	0	1	1	0	1	1	0	8
12:45 PM	0	0	0	1	0	0	1	0	0	0	2	1	0	2	5	0	12
1:00 PM	0	0	1	2	0	0	0	0	0	0	3	0	0	1	1	0	8
1:15 PM	0	2	0	2	0	0	1	0	0	0	4	0	0	3	4	0	16
1:30 PM	0	0	0	1	0	0	0	0	0	0	2	0	0	1	3	0	7
1:45 PM	0	0	0	1	0	0	0	0	0	0	6	0	0	2	5	0	14
2:00 PM	0	0	0	3	0	0	0	0	0	0	2	0	0	2	3	0	10
2:15 PM	0	1	0	1	0	0	0	0	0	0	1	2	0	5	4	0	14
2:30 PM	0	0	0	0	0	0	0	1	0	0	3	1	0	1	6	0	12
2:45 PM	0	2	0	0	0	0	0	0	0	0	4	1	0	1	1	0	9
3:00 PM	0	1	0	1	0	0	0	0	0	0	4	2	0	3	5	0	16
3:15 PM	0	1	0	1	0	0	0	0	0	0	3	0	0	1	3	1	10
3:30 PM	0	1	0	3	0	0	0	0	0	0	1	0	0	2	3	0	10
3:45 PM	0	0	1	0	0	0	0	0	0	0	4	1	0	0	4	0	10
4:00 PM	0	2	0	1	0	0	1	0	0	0	0	3	0	1	4	0	12
4:15 PM	0	0	0	0	0	0	0	0	0	0	2	1	0	0	3	0	6
4:30 PM	0	0	0	2	0	0	1	0	0	0	7	0	0	1	2	0	13
4:45 PM	0	1	0	0	0	0	0	0	0	0	2	0	0	0	2	0	5
5:00 PM	0	1	0	0	0	0	0	0	0	0	1	0	0	1	2	0	5
5:15 PM	0	1	0	0	0	0	0	0	0	0	3	0	0	1	1	0	6
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	3
5:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	1	2	0	4
6:00 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	2
6:15 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2
6:30 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2	0	3
6:45 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2	0	3
7:00 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2	0	3
7:15 PM	0	0	0	0	0	0	0	0	0	0	4	0	0	1	1	0	6
7:30 PM	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
Total	0	23	7	61	0	0	9	4	0	3	141	30	0	66	148	1	493

Turning Movement Count

Lake Otis Pkwy & Debarr Rd

Total Vehicles (15-Minute Periods)

AM Peak Hour

Thursday, October 19, 2017

7:00 AM to 9:00 AM

Start Time	Lake Otis Pkwy (Northbound)					Merill Field Dr (Southbound)					E 15th Ave (Eastbound)					Debarr Rd (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
7:00 AM	0	22	5	46	0	0	0	0	1	0	0	4	62	20	0	0	71	153	0	0	384
7:15 AM	0	29	5	70	0	0	0	4	1	1	0	4	97	24	1	0	108	220	0	0	562
7:30 AM	0	30	5	81	0	0	0	0	0	0	0	3	123	39	0	0	133	254	2	0	670
7:45 AM	0	46	7	98	0	0	2	1	4	1	1	7	128	34	1	0	156	274	0	0	758
8:00 AM	0	34	6	74	0	0	0	2	1	0	0	4	132	41	0	0	84	283	2	0	663
8:15 AM	0	36	3	81	0	0	0	1	4	0	0	7	109	41	0	0	118	160	0	0	560
8:30 AM	0	49	5	83	0	0	0	1	3	0	0	4	112	40	0	0	103	197	0	0	597
8:45 AM	0	35	9	96	0	0	0	4	3	0	0	4	152	40	0	0	107	194	0	0	644
Total	0	281	45	629	0	0	2	13	17	2	1	37	915	279	2	0	880	1,735	4	0	4,838

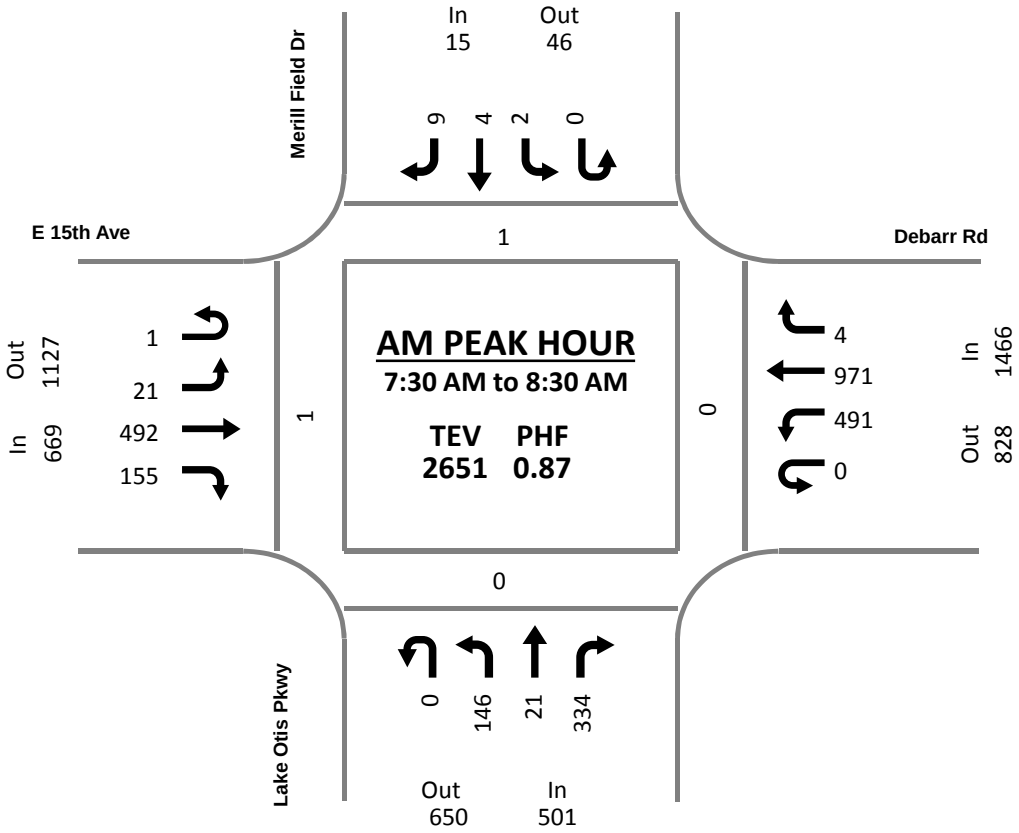
*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total")

Peak Hour Summary (System Peak*)

7:30 AM to 8:30 AM

Data Type	Lake Otis Pkwy (Northbound)					Merill Field Dr (Southbound)					E 15th Ave (Eastbound)					Debarr Rd (Westbound)					Peak Hour Total
	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	
Volume	0	146	21	334	0	0	2	4	9	1	1	21	492	155	1	0	491	971	4	0	2651
%HV	0.0%	0.7%	0.0%	2.4%		0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	3.0%	0.6%		0.0%	2.0%	1.9%	0.0%		2.0%
PHF	0.00	0.79	0.75	0.85	0.00	0.00	0.25	0.50	0.56	0.25	0.25	0.75	0.93	0.95	0.25	0.00	0.79	0.86	0.50	0.00	0.87
Volume			501					15					669					1466			2651
%HV			1.8%					0.0%					2.4%					1.9%			2.0%
PHF			0.83					0.54					0.94					0.85			0.87

*System Peak is based on comparison of other study area counts rather than highest total entering volume at this intersection.



Turning Movement Count

Lake Otis Pkwy & Debarr Rd

Total Vehicles (15-Minute Periods)

PM Peak Hour

Thursday, October 19, 2017

4:00 PM to 6:00 PM

Start Time	Lake Otis Pkwy (Northbound)					Merill Field Dr (Southbound)					E 15th Ave (Eastbound)					Debarr Rd (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
4:00 PM	0	39	5	145	0	0	0	8	9	1	0	3	204	50	0	0	125	195	1	0	784
4:15 PM	0	45	3	151	0	0	3	8	5	2	2	6	255	47	0	0	117	212	1	0	855
4:30 PM	0	25	3	143	0	0	0	9	4	1	1	3	247	33	0	0	117	208	1	0	794
4:45 PM	0	36	4	157	0	0	1	10	9	0	1	4	293	64	0	0	117	195	0	0	891
5:00 PM	0	43	3	132	0	0	0	10	4	0	0	1	279	67	0	0	161	218	0	0	918
5:15 PM	0	55	5	133	0	0	1	22	7	0	0	3	310	86	0	0	125	214	2	0	963
5:30 PM	0	44	5	119	0	0	0	3	3	0	0	2	266	74	0	0	110	195	0	0	821
5:45 PM	0	37	1	121	0	0	1	5	6	0	0	7	211	47	1	0	125	195	0	0	756
Total	0	324	29	1,101	0	0	6	75	47	4	4	29	2,065	468	1	0	997	1,632	5	0	6,782

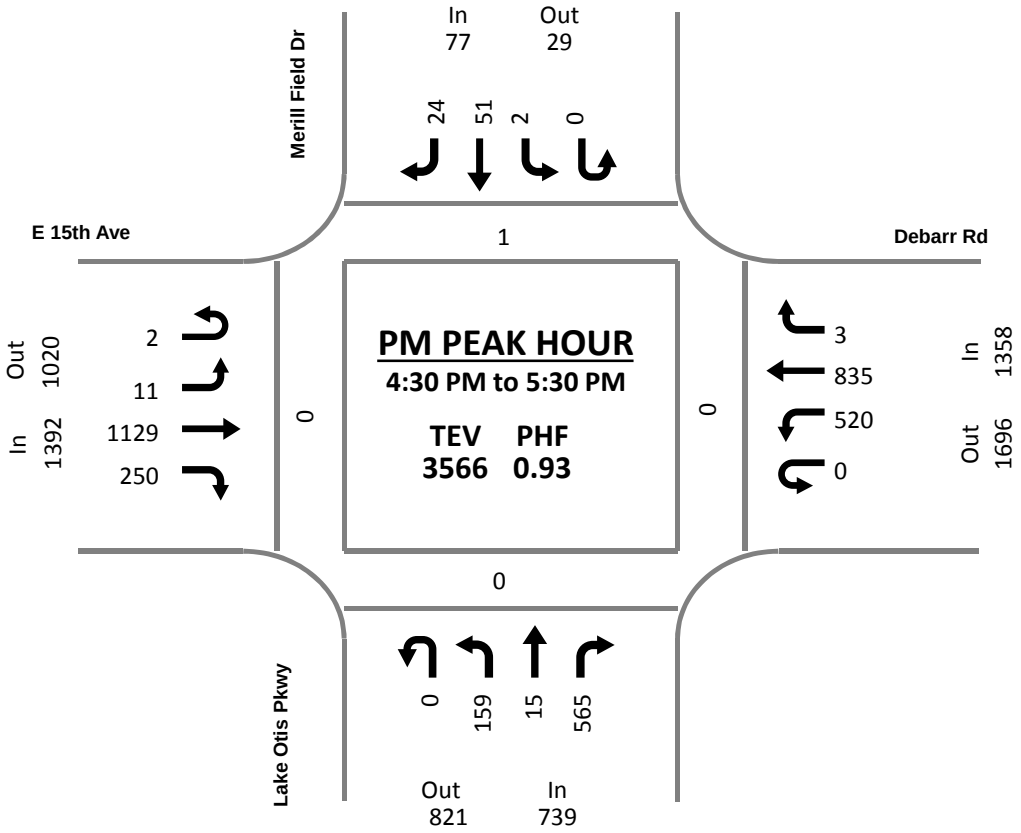
*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total")

Peak Hour Summary (System Peak*)

4:30 PM to 5:30 PM

Data Type	Lake Otis Pkwy (Northbound)					Merill Field Dr (Southbound)					E 15th Ave (Eastbound)					Debarr Rd (Westbound)					Peak Hour Total
	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	
Volume	0	159	15	565	0	0	2	51	24	1	2	11	1129	250	0	0	520	835	3	0	3566
%HV	0.0%	1.9%	0.0%	0.4%		0.0%	0.0%	2.0%	0.0%		0.0%	0.0%	1.2%	0.0%		0.0%	0.6%	0.8%	0.0%		0.8%
PHF	0.00	0.72	0.75	0.90	0.00	0.00	0.50	0.58	0.67	0.25	0.50	0.69	0.91	0.73	0.00	0.00	0.81	0.96	0.38	0.00	0.93
Volume			739					77					1392					1358			3566
%HV			0.7%					1.3%					0.9%					0.7%			0.8%
PHF			0.94					0.64					0.87					0.90			0.93

*System Peak is based on comparison of other study area counts rather than highest total entering volume at this intersection.



Traffic Camera Count and Placement Information

Intersection Name: Lake Otis Pkwy & Northern Lights Blvd

Intersection Location	
Northbound Street	Lake Otis Pkwy
Southbound Street	Lake Otis Pkwy
Eastbound Street	Northern Lights Blvd
Westbound Street	Northern Lights Blvd
City, State	Anchorage, AK

Project Information	
Name	Midtown Congestion Relief
Client	AK DOT&PF
Project #	1124.62458.01, Phase 02
PM/Traffic Lead	Steve Noble/Brad Coy

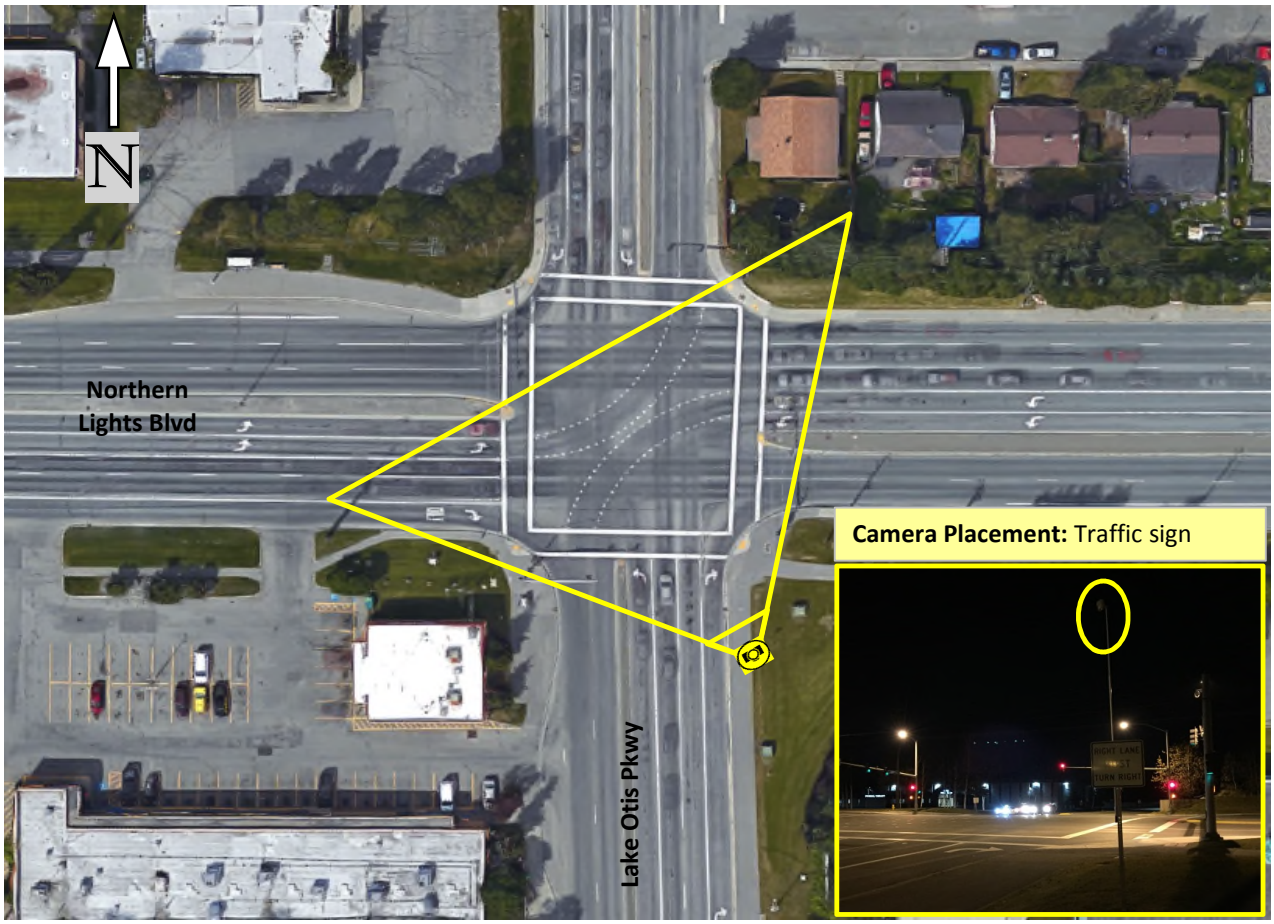
Count Description (e.g., day(s) of week, time periods, other related counts also occuring, etc.)

1 weekday (Tue, Wed, or Thu), with other Lake Otis Pwky intersections

Camera Setup/Video Footage	
Staff Responsible	Brad Coy
Setup Time	10/19/2017 6:20 AM
Take Down Time	10/19/2017 9:50 PM
Duration (hours)	15.50
Camera # (2-digit)	c3

Count Date, Time, Vendor	
Date	10/19/2017 (Thursday)
Start Time	6:30 AM
End Time	7:30 PM
Duration (hours)	13.00
Count Vendor	CountingCars.com

Camera Placement



Other Notes (Before, During, or After Count)

DOWL

Turning Movement Count

Lake Otis Pkwy & Northern Lights Blvd

Total Vehicles (15-Minute Periods)

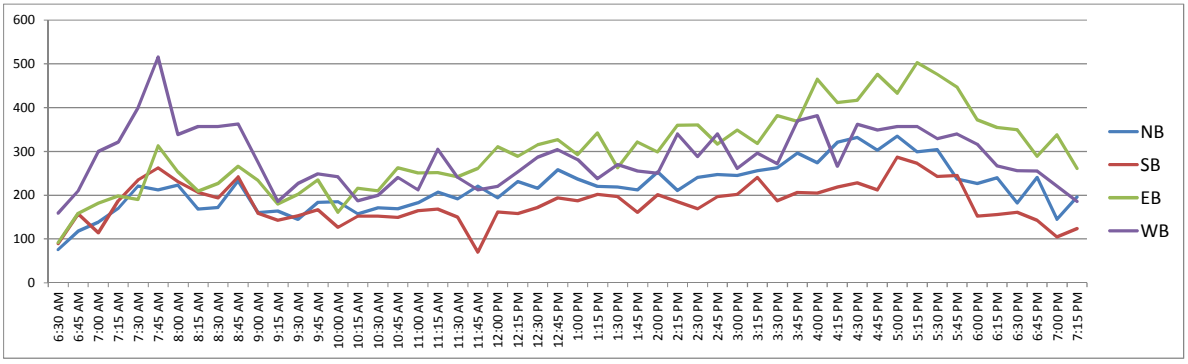
All Data

Thursday, October 19, 2017

6:30 AM to 7:30 PM

Start Time	Lake Otis Pkwy (Northbound)					Lake Otis Pkwy (Southbound)					Northern Lights Blvd (Eastbound)					Northern Lights Blvd (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
6:30 AM	1	8	47	20	0	0	8	59	22	0	3	10	66	13	0	0	29	125	5	0	416
6:45 AM	0	8	76	34	0	0	15	93	49	0	5	26	105	23	0	0	35	172	3	0	644
7:00 AM	0	12	55	71	0	2	11	67	34	0	4	20	131	27	0	0	48	242	10	0	734
7:15 AM	0	28	79	63	2	1	18	120	48	0	4	23	140	31	0	0	75	238	8	1	876
7:30 AM	0	58	107	56	1	2	37	143	53	0	5	18	143	24	0	0	72	320	8	2	1046
7:45 AM	0	45	97	70	0	3	32	149	79	0	12	24	222	55	0	0	102	401	13	1	1304
8:00 AM	1	61	103	58	0	2	36	125	68	0	7	23	191	32	0	0	69	263	7	0	1046
8:15 AM	0	39	78	51	0	2	28	117	59	0	5	27	132	45	1	0	73	272	12	0	940
8:30 AM	0	53	86	33	0	2	26	98	68	0	7	38	156	26	0	0	65	275	17	0	950
8:45 AM	1	53	112	67	0	1	25	145	71	0	16	44	177	29	0	0	80	277	6	1	1104
9:00 AM	0	35	87	38	0	1	19	91	48	0	9	29	165	31	0	0	53	214	8	0	828
9:15 AM	0	41	85	38	0	0	22	85	36	1	6	24	125	25	0	0	38	142	6	0	673
9:30 AM	0	36	64	45	1	0	22	100	31	1	7	26	125	44	1	0	38	181	8	0	727
9:45 AM	1	59	82	42	0	0	26	102	39	0	7	34	154	40	0	0	46	193	10	0	835
10:00 AM	0	52	85	48	2	0	11	87	29	0	6	16	118	21	1	0	59	170	13	0	715
10:15 AM	1	40	79	37	2	0	11	98	43	0	7	37	145	27	0	0	36	143	8	0	712
10:30 AM	0	55	75	41	0	1	18	99	34	0	12	35	136	27	0	0	46	145	9	0	733
10:45 AM	1	39	81	48	0	2	16	82	49	1	7	32	186	38	0	0	42	189	10	3	822
11:00 AM	0	56	80	47	1	0	20	104	41	0	9	22	173	47	0	0	54	150	8	0	811
11:15 AM	1	66	86	54	0	1	20	102	45	0	5	37	170	40	0	0	56	230	19	0	932
11:30 AM	1	59	86	46	0	3	16	76	55	1	6	31	175	30	0	0	48	180	13	0	825
11:45 AM	0	52	104	65	0	0	15	17	38	0	8	39	168	46	0	0	33	172	7	0	764
12:00 PM	1	52	96	45	0	0	17	99	46	0	7	46	227	31	0	0	38	173	9	1	887
12:15 PM	0	60	107	64	1	1	25	89	43	1	9	45	196	39	0	0	50	196	7	0	931
12:30 PM	1	44	101	70	0	0	16	109	47	0	9	43	214	49	0	1	64	202	20	0	990
12:45 PM	2	75	116	65	0	2	29	107	56	0	9	48	211	59	0	0	66	226	12	1	1083
1:00 PM	0	56	127	54	2	2	24	117	44	1	7	35	207	44	0	0	60	208	14	2	999
1:15 PM	1	69	88	62	0	1	26	123	52	0	7	59	241	35	0	0	42	186	10	0	1002
1:30 PM	2	58	100	59	0	0	17	126	54	0	10	36	188	29	0	0	67	195	8	0	949
1:45 PM	1	47	95	69	0	1	16	105	39	0	4	46	235	37	0	0	50	199	6	0	950
2:00 PM	0	71	113	69	0	0	26	122	53	1	2	44	208	45	0	0	62	182	6	0	1003
2:15 PM	2	63	81	65	0	1	19	112	53	0	4	46	252	58	0	0	85	247	8	0	1096
2:30 PM	2	57	108	74	0	0	16	107	46	0	5	52	248	56	0	0	64	214	10	0	1059
2:45 PM	2	49	119	77	0	0	34	109	54	0	2	52	208	55	0	0	86	244	10	0	1101
3:00 PM	0	50	107	88	0	0	16	127	59	0	1	61	254	33	0	0	48	203	10	1	1057
3:15 PM	2	58	129	67	0	2	24	164	51	2	3	38	243	34	0	0	65	228	3	1	1111
3:30 PM	1	61	129	72	0	2	18	109	58	0	5	67	273	37	0	0	58	207	7	0	1104
3:45 PM	1	62	148	85	0	1	25	131	49	0	6	50	263	50	0	0	78	278	14	0	1241
4:00 PM	2	68	117	87	1	3	27	118	57	0	5	76	335	49	0	0	82	292	8	1	1326
4:15 PM	1	69	157	94	0	4	28	134	53	0	4	78	280	50	0	0	51	211	4	1	1218
4:30 PM	0	56	158	118	0	2	23	142	61	3	2	69	298	48	1	0	66	284	12	2	1339
4:45 PM	0	71	134	98	0	1	38	120	53	0	3	90	332	51	0	1	60	275	13	1	1340
5:00 PM	1	57	162	115	0	2	42	175	68	0	1	79	298	55	0	0	67	267	23	0	1412
5:15 PM	1	60	140	98	0	3	41	166	63	0	1	78	339	85	0	0	68	273	16	0	1432
5:30 PM	1	76	147	80	0	3	28	138	74	1	1	81	330	64	1	0	56	240	33	1	1352
5:45 PM	2	40	122	73	0	1	38	143	63	0	1	74	324	48	0	0	58	269	13	1	1269
6:00 PM	0	55	101	71	0	1	13	94	44	0	1	64	259	48	0	0	52	255	10	0	1068
6:15 PM	3	50	110	77	0	0	7	96	53	0	1	55	260	39	0	0	43	218	6	0	1018
6:30 PM	0	39	88	55	0	0	15	101	45	0	2	51	247	50	0	0	60	185	11	0	949
6:45 PM	2	57	113	69	0	0	8	75	60	0	1	42	194	52	0	0	54	191	10	0	928
7:00 PM	4	37	65	39	0	0	12	64	29	0	4	49	253	32	0	0	38	174	9	1	809
7:15 PM	2	50	83	61	0	0	7	74	43	1	0	28	194	39	0	1	40	136	9	1	767
Total	45	2,672	5,295	3,292	13	56	1,127	5,655	2,609	14	274	2,297	10,914	2,122	5	3	2,975	11,352	539	23	51,227

*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total" or graph below)



DOWL

Turning Movement Count

Lake Otis Pkwy & Northern Lights Blvd

Heavy Vehicles (15-Minute Periods)

All Data

Thursday, October 19, 2017

6:30 AM to 7:30 PM

Start Time	Lake Otis Pkwy (Northbound)				Lake Otis Pkwy (Southbound)				Northern Lights Blvd (Eastbound)				Northern Lights Blvd (Westbound)				Period Total (Veh)
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	
6:30 AM	0	0	1	0	0	0	0	0	0	0	3	1	0	0	0	0	5
6:45 AM	0	1	2	3	0	0	1	0	0	2	3	0	0	0	1	0	13
7:00 AM	0	0	1	6	0	0	0	0	0	0	2	1	0	1	4	0	15
7:15 AM	0	0	1	0	0	0	2	0	0	0	6	1	0	5	1	0	16
7:30 AM	0	1	3	1	0	0	3	0	0	0	7	1	0	2	5	0	23
7:45 AM	0	1	0	5	0	4	1	0	0	0	4	1	0	1	3	0	20
8:00 AM	0	3	2	3	0	2	2	0	0	1	0	0	0	2	4	0	19
8:15 AM	0	1	3	1	0	0	3	1	0	0	1	2	0	0	2	1	15
8:30 AM	0	1	7	0	0	0	3	0	0	1	4	2	0	1	5	0	24
8:45 AM	0	1	1	3	0	1	5	1	0	1	2	1	0	0	5	1	22
9:00 AM	0	2	2	0	0	0	3	1	0	1	4	2	0	0	6	0	21
9:15 AM	0	0	4	0	0	1	2	1	0	0	6	0	0	2	2	1	19
9:30 AM	0	1	1	0	0	1	5	0	0	0	6	0	0	3	6	0	23
9:45 AM	0	1	3	0	0	1	2	1	0	0	3	1	0	0	4	0	16
10:00 AM	0	4	2	1	0	0	1	0	0	0	1	1	0	0	3	0	13
10:15 AM	0	0	4	1	0	0	4	1	0	0	5	1	0	0	2	0	18
10:30 AM	0	1	4	1	0	0	1	0	0	0	6	3	0	2	5	0	23
10:45 AM	0	0	1	1	0	0	3	0	0	0	2	2	0	2	2	2	15
11:00 AM	0	2	3	3	0	2	0	1	0	1	3	1	0	2	1	0	19
11:15 AM	0	1	0	0	0	0	2	0	0	0	2	0	0	2	3	0	10
11:30 AM	0	1	2	0	0	1	5	0	0	1	1	0	0	1	5	0	17
11:45 AM	0	0	2	0	0	0	2	0	0	1	1	2	0	1	1	1	11
12:00 PM	0	1	3	1	0	0	1	0	0	0	3	0	0	1	2	0	12
12:15 PM	0	1	2	1	0	1	0	0	0	0	3	3	0	1	4	0	16
12:30 PM	0	0	2	2	0	1	2	0	0	0	2	1	0	1	2	0	13
12:45 PM	0	1	1	1	0	1	1	1	0	2	5	1	0	0	3	0	17
1:00 PM	0	3	1	2	0	0	3	0	1	0	2	1	0	1	6	0	20
1:15 PM	0	0	6	4	0	1	3	1	0	0	8	2	0	1	0	0	26
1:30 PM	0	2	2	1	0	0	3	1	0	0	3	1	0	1	5	0	19
1:45 PM	0	1	1	3	0	0	2	0	0	0	1	0	0	0	3	0	11
2:00 PM	0	3	3	2	0	0	4	0	0	1	5	0	0	0	2	0	20
2:15 PM	0	0	1	0	0	2	5	0	0	0	2	1	0	10	7	1	29
2:30 PM	0	1	1	2	0	0	3	2	0	0	4	3	0	1	2	0	19
2:45 PM	0	1	2	1	0	0	1	0	0	2	4	0	0	0	2	1	14
3:00 PM	0	2	2	0	0	0	3	0	0	0	4	0	0	2	4	0	17
3:15 PM	0	1	2	1	0	0	5	0	0	0	0	1	0	0	4	0	14
3:30 PM	0	1	5	5	0	0	3	0	0	1	6	2	0	0	5	0	28
3:45 PM	0	1	2	1	0	0	1	1	0	1	2	1	0	1	3	0	14
4:00 PM	0	1	0	0	0	1	4	0	0	2	1	0	0	0	5	0	14
4:15 PM	0	0	0	1	0	0	2	0	0	0	5	1	0	1	1	1	12
4:30 PM	0	3	3	2	0	1	6	0	0	0	3	0	0	0	5	0	23
4:45 PM	0	0	2	1	0	1	2	2	0	0	2	1	0	0	1	1	13
5:00 PM	0	1	1	1	0	1	2	0	0	0	2	1	0	0	4	0	13
5:15 PM	0	0	0	1	0	0	0	0	0	0	3	1	0	0	1	0	6
5:30 PM	0	1	2	0	0	0	3	1	0	0	2	0	0	0	1	0	10
5:45 PM	0	0	0	0	0	1	0	0	0	0	3	2	0	1	2	1	10
6:00 PM	0	1	0	0	0	1	1	0	0	1	3	1	0	0	1	0	9
6:15 PM	0	0	1	0	0	0	0	0	0	0	1	1	0	0	0	0	3
6:30 PM	0	2	2	0	0	0	1	0	0	0	0	1	0	0	0	0	6
6:45 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	2
7:00 PM	0	0	0	0	0	1	0	0	0	0	2	0	0	0	1	0	4
7:15 PM	0	0	0	1	0	0	1	0	0	0	0	1	0	0	1	0	4
Total	0	50	96	63	0	26	113	16	1	19	153	50	0	49	148	11	795

Turning Movement Count

Lake Otis Pkwy & Northern Lights Blvd

Total Vehicles (15-Minute Periods)

AM Peak Hour

Thursday, October 19, 2017

7:00 AM to 9:00 AM

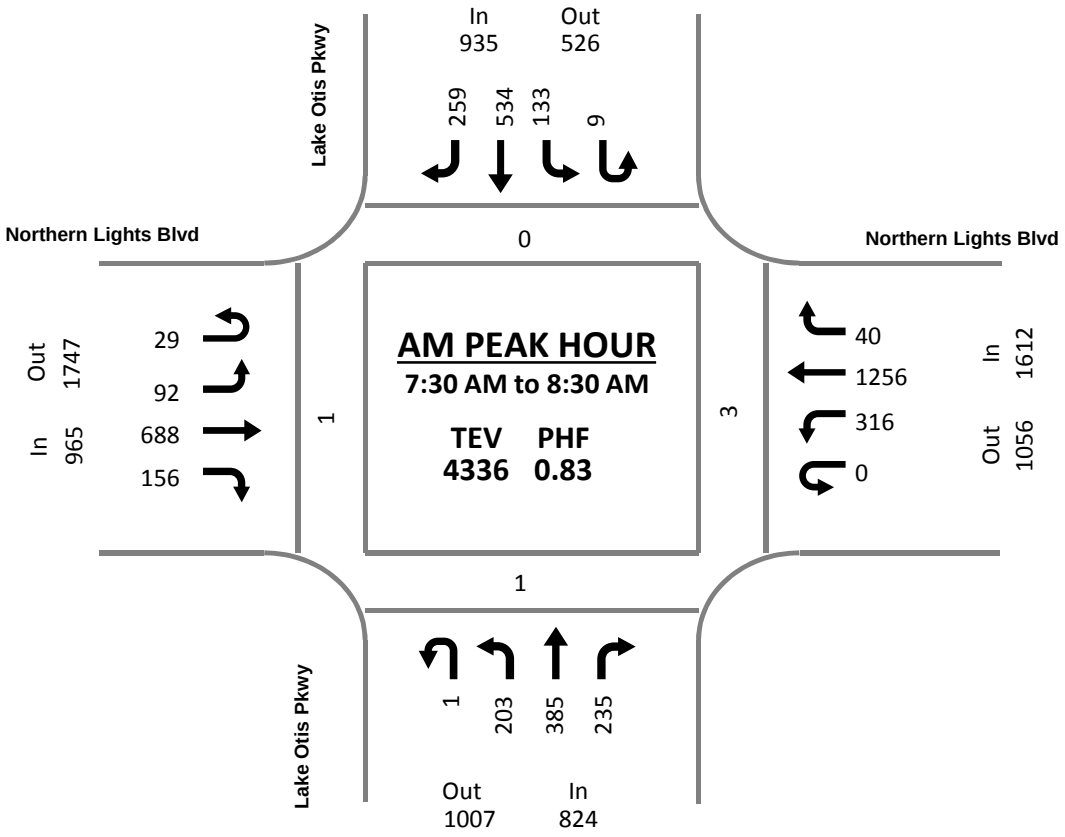
Start Time	Lake Otis Pkwy (Northbound)					Lake Otis Pkwy (Southbound)					Northern Lights Blvd (Eastbound)					Northern Lights Blvd (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
7:00 AM	0	12	55	71	0	2	11	67	34	0	4	20	131	27	0	0	48	242	10	0	734
7:15 AM	0	28	79	63	2	1	18	120	48	0	4	23	140	31	0	0	75	238	8	1	876
7:30 AM	0	58	107	56	1	2	37	143	53	0	5	18	143	24	0	0	72	320	8	2	1046
7:45 AM	0	45	97	70	0	3	32	149	79	0	12	24	222	55	0	0	102	401	13	1	1304
8:00 AM	1	61	103	58	0	2	36	125	68	0	7	23	191	32	0	0	69	263	7	0	1046
8:15 AM	0	39	78	51	0	2	28	117	59	0	5	27	132	45	1	0	73	272	12	0	940
8:30 AM	0	53	86	33	0	2	26	98	68	0	7	38	156	26	0	0	65	275	17	0	950
8:45 AM	1	53	112	67	0	1	25	145	71	0	16	44	177	29	0	0	80	277	6	1	1104
Total	2	349	717	469	3	15	213	964	480	0	60	217	1,292	269	1	0	584	2,288	81	5	8,000

*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total")

Peak Hour Summary

7:30 AM to 8:30 AM

Data Type	Lake Otis Pkwy (Northbound)					Lake Otis Pkwy (Southbound)					Northern Lights Blvd (Eastbound)					Northern Lights Blvd (Westbound)					Peak Hour Total
	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	
Volume	1	203	385	235	1	9	133	534	259	0	29	92	688	156	1	0	316	1256	40	3	4336
%HV	0.0%	3.0%	2.1%	4.3%		0.0%	4.5%	1.7%	0.4%		0.0%	1.1%	1.7%	2.6%		0.0%	1.6%	1.1%	2.5%		1.8%
PHF	0.25	0.83	0.90	0.84	0.25	0.75	0.90	0.90	0.82	0.00	0.60	0.85	0.77	0.71	0.25	0.00	0.77	0.78	0.77	0.38	0.83
Volume			824					935					965					1612			4336
%HV			2.9%					1.7%					1.8%					1.2%			1.8%
PHF			0.92					0.89					0.77					0.78			0.83



Turning Movement Count

Lake Otis Pkwy & Northern Lights Blvd

Total Vehicles (15-Minute Periods)

PM Peak Hour

Thursday, October 19, 2017

4:00 PM to 6:00 PM

Start Time	Lake Otis Pkwy (Northbound)					Lake Otis Pkwy (Southbound)					Northern Lights Blvd (Eastbound)					Northern Lights Blvd (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
4:00 PM	2	68	117	87	1	3	27	118	57	0	5	76	335	49	0	0	82	292	8	1	1326
4:15 PM	1	69	157	94	0	4	28	134	53	0	4	78	280	50	0	0	51	211	4	1	1218
4:30 PM	0	56	158	118	0	2	23	142	61	3	2	69	298	48	1	0	66	284	12	2	1339
4:45 PM	0	71	134	98	0	1	38	120	53	0	3	90	332	51	0	1	60	275	13	1	1340
5:00 PM	1	57	162	115	0	2	42	175	68	0	1	79	298	55	0	0	67	267	23	0	1412
5:15 PM	1	60	140	98	0	3	41	166	63	0	1	78	339	85	0	0	68	273	16	0	1432
5:30 PM	1	76	147	80	0	3	28	138	74	1	1	81	330	64	1	0	56	240	33	1	1352
5:45 PM	2	40	122	73	0	1	38	143	63	0	1	74	324	48	0	0	58	269	13	1	1269
Total	8	497	1,137	763	1	19	265	1,136	492	4	18	625	2,536	450	2	1	508	2,111	122	7	10,688

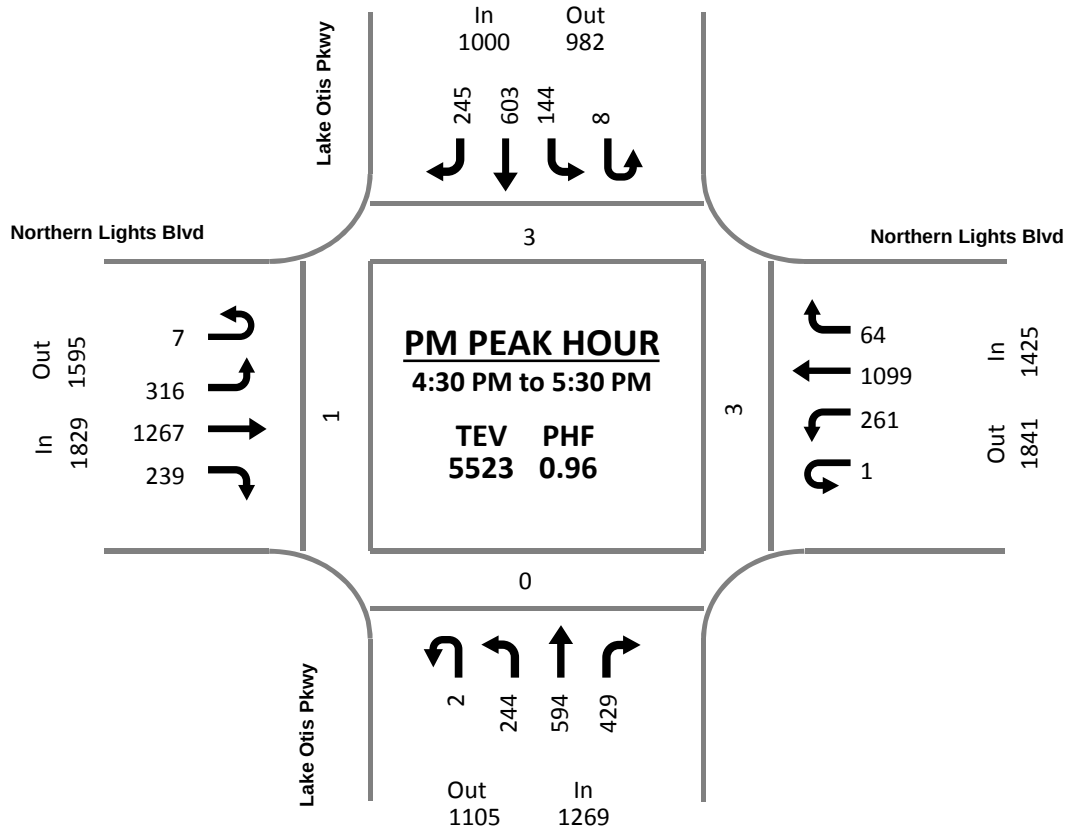
*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total")

Peak Hour Summary (System Peak*)

4:30 PM to 5:30 PM

Data Type	Lake Otis Pkwy (Northbound)					Lake Otis Pkwy (Southbound)					Northern Lights Blvd (Eastbound)					Northern Lights Blvd (Westbound)					Peak Hour Total
	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	
Volume	2	244	594	429	0	8	144	603	245	3	7	316	1267	239	1	1	261	1099	64	3	5523
%HV	0.0%	1.6%	1.0%	1.2%		0.0%	2.1%	1.7%	0.8%		0.0%	0.0%	0.8%	1.3%		0.0%	0.0%	1.0%	1.6%		1.0%
PHF	0.50	0.86	0.92	0.91	0.00	0.67	0.86	0.86	0.90	0.25	0.58	0.88	0.93	0.70	0.25	0.25	0.96	0.97	0.70	0.38	0.96
Volume			1269					1000					1829					1425			5523
%HV			1.2%					1.5%					0.7%					0.8%			1.0%
PHF			0.95					0.87					0.91					0.98			0.96

*System Peak is based on comparison of other study area counts rather than highest total entering volume at this intersection.



Traffic Camera Count and Placement Information

Intersection Name: Lake Otis Pkwy & 36th Ave

Intersection Location	
Northbound Street	Lake Otis Pkwy
Southbound Street	Lake Otis Pkwy
Eastbound Street	36th Ave
Westbound Street	36th Ave
City, State	Anchorage, AK

Project Information	
Name	Midtown Congestion Relief
Client	AK DOT&PF
Project #	1124.62458.01, Phase 02
PM/Traffic Lead	Steve Noble/Brad Coy

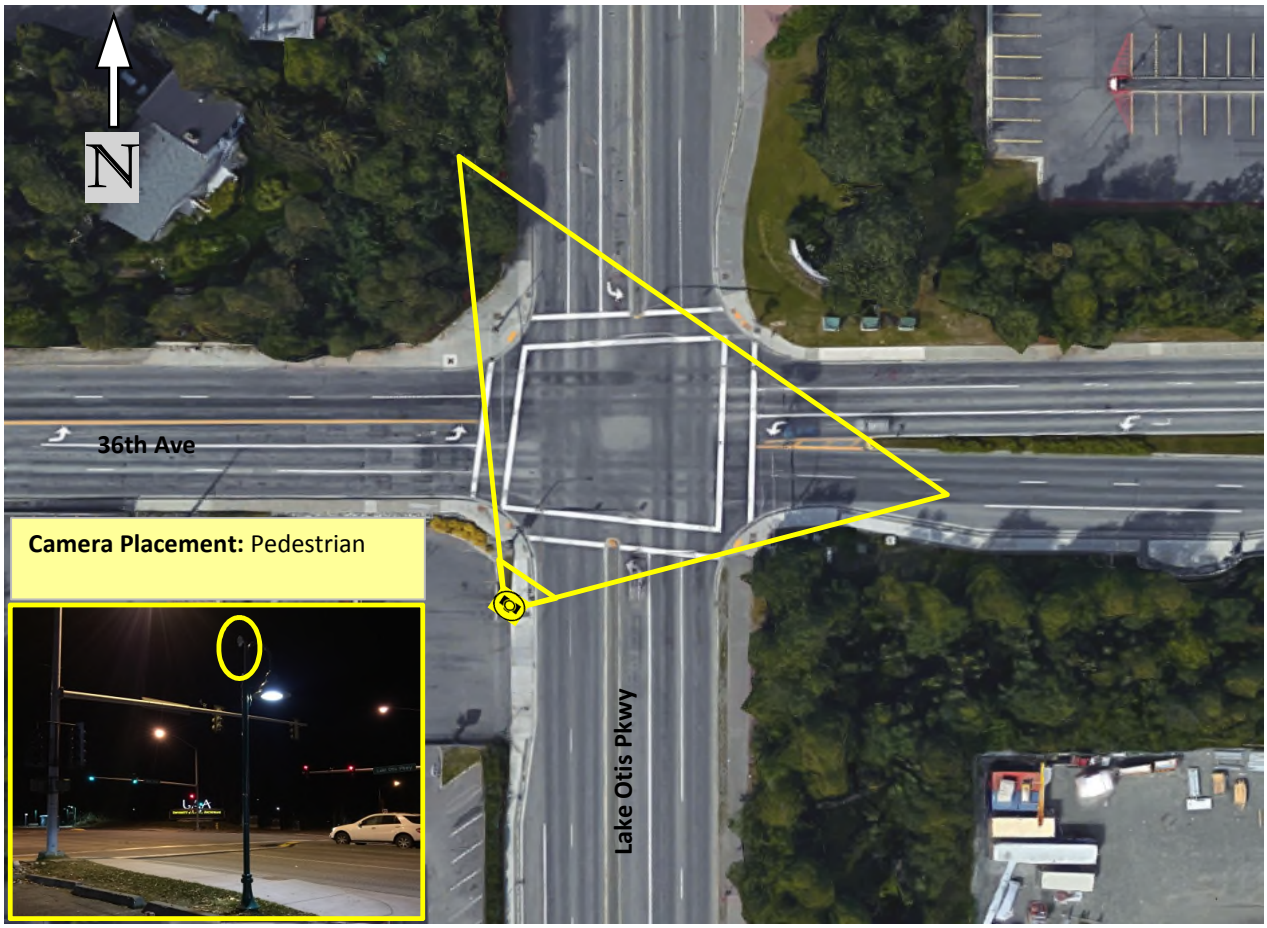
Count Description (e.g., day(s) of week, time periods, other related counts also occuring, etc.)

1 weekday (Tue, Wed, or Thu), with other Lake Otis Pwky intersections

Camera Setup/Video Footage	
Staff Responsible	Brad Coy
Setup Time	10/19/2017 6:08 AM
Take Down Time	10/19/2017 9:40 PM
Duration (hours)	15.53
Camera # (2-digit)	79

Count Date, Time, Vendor	
Date	10/19/2017 (Thursday)
Start Time	6:15 AM
End Time	7:15 PM
Duration (hours)	13.00
Count Vendor	CountingCars.com

Camera Placement



Other Notes (Before, During, or After Count)

DOWL

Turning Movement Count

Lake Otis Pkwy & 36th Ave

Total Vehicles (15-Minute Periods)

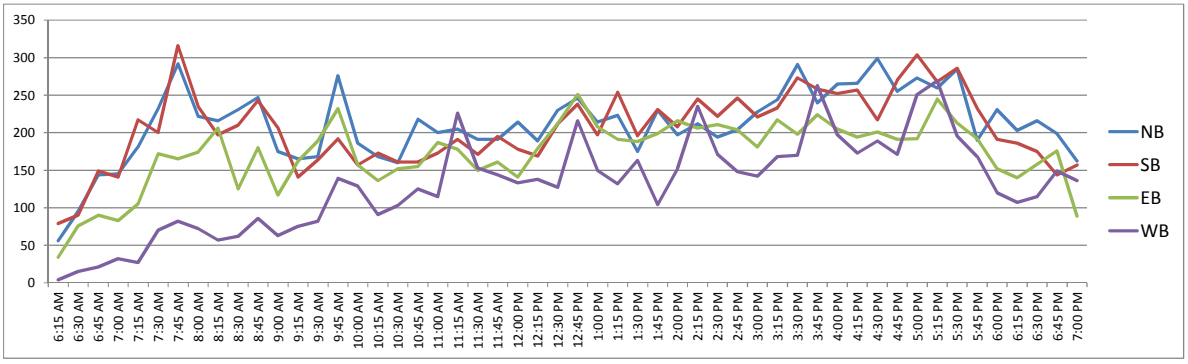
All Data

Thursday, October 19, 2017

6:15 AM to 7:15 PM

Start Time	Lake Otis Pkwy (Northbound)					Lake Otis Pkwy (Southbound)					36th Ave (Eastbound)					36th Ave (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
6:15 AM	0	1	45	10	1	0	7	61	11	0	0	7	21	6	0	0	0	2	2	1	173
6:30 AM	0	7	70	18	0	0	16	71	3	0	0	16	55	5	0	0	2	10	3	0	276
6:45 AM	0	11	111	22	2	0	16	118	15	0	0	26	55	9	0	0	2	13	6	2	404
7:00 AM	0	9	123	13	0	0	15	106	20	0	0	20	50	13	0	0	6	20	6	4	401
7:15 AM	0	15	148	18	0	0	24	172	21	2	0	20	76	9	9	0	2	16	9	3	530
7:30 AM	0	13	192	27	1	0	25	151	24	0	0	40	108	24	0	0	15	42	13	1	674
7:45 AM	0	36	227	29	1	0	36	243	37	1	0	46	94	25	0	2	17	44	19	0	855
8:00 AM	0	23	159	40	1	0	30	178	27	0	0	38	115	21	1	0	20	40	12	0	703
8:15 AM	0	16	164	36	2	0	26	152	19	0	0	46	123	37	0	0	14	30	13	0	676
8:30 AM	1	16	189	25	1	0	23	167	20	1	0	27	72	26	1	0	13	33	16	2	628
8:45 AM	2	35	184	26	3	0	28	187	28	1	0	41	112	27	0	0	13	54	19	0	756
9:00 AM	0	15	146	14	0	0	29	151	27	2	0	22	72	23	3	0	8	39	16	2	562
9:15 AM	0	19	125	21	1	0	10	118	13	8	0	37	97	28	0	0	5	60	10	1	543
9:30 AM	0	15	120	33	2	0	29	120	15	2	0	46	111	32	0	1	16	53	12	2	603
9:45 AM	0	25	188	63	7	0	25	144	23	0	0	48	149	35	2	2	40	68	29	1	839
10:00 AM	0	27	134	25	1	0	16	119	22	4	0	27	99	31	2	0	30	77	22	0	629
10:15 AM	0	20	125	23	2	0	23	137	13	1	0	25	78	33	0	1	10	58	22	0	568
10:30 AM	1	28	115	16	0	0	30	111	20	1	0	27	84	41	1	0	15	71	17	1	576
10:45 AM	0	36	153	29	0	0	19	120	22	3	0	39	73	43	0	0	26	83	16	0	659
11:00 AM	0	26	134	40	0	0	24	134	15	1	0	50	102	35	3	1	24	69	21	0	675
11:15 AM	1	21	146	37	5	0	28	137	26	0	0	39	106	33	2	2	58	137	29	4	800
11:30 AM	0	24	147	20	0	0	17	135	19	0	0	39	71	40	1	0	22	101	30	0	665
11:45 AM	1	28	148	14	2	0	26	143	26	0	0	25	89	47	0	1	19	101	23	3	691
12:00 PM	1	30	157	26	1	0	16	146	16	0	0	52	63	26	1	0	16	92	25	2	666
12:15 PM	0	23	152	14	1	0	19	128	22	2	0	41	95	43	2	0	22	90	26	0	675
12:30 PM	0	19	173	38	2	1	25	163	23	1	0	39	127	46	0	0	18	73	36	1	781
12:45 PM	0	33	173	40	1	0	32	183	23	1	0	53	148	50	1	1	60	130	25	2	951
1:00 PM	0	36	156	22	1	0	26	143	28	0	0	44	117	47	1	0	28	92	30	0	769
1:15 PM	0	31	166	26	0	0	28	192	34	2	0	49	112	30	1	1	25	86	20	0	800
1:30 PM	0	30	123	22	0	0	34	145	17	1	0	37	97	54	1	0	30	92	41	0	722
1:45 PM	0	28	177	25	0	0	31	170	30	2	0	40	119	40	3	0	17	66	21	2	764
2:00 PM	0	27	146	24	2	0	27	159	22	2	0	54	113	49	0	0	33	94	25	0	773
2:15 PM	0	31	153	28	3	0	31	193	21	4	0	44	118	44	2	1	46	146	42	1	898
2:30 PM	0	24	155	15	2	0	26	171	25	0	0	49	110	52	0	0	42	108	21	1	798
2:45 PM	0	28	163	13	1	0	31	193	22	0	0	42	91	71	2	0	26	90	32	0	802
3:00 PM	0	21	185	22	3	0	20	177	24	0	0	65	75	41	2	1	24	90	27	7	772
3:15 PM	0	34	187	23	2	0	26	182	25	1	0	47	112	58	0	0	28	103	37	2	862
3:30 PM	0	35	225	31	3	0	23	213	37	0	0	49	113	36	3	1	47	100	22	0	932
3:45 PM	1	28	179	32	2	0	32	197	29	0	0	52	128	44	2	2	48	178	35	5	985
4:00 PM	0	40	197	28	0	0	25	197	30	3	0	61	93	51	0	0	41	117	39	2	919
4:15 PM	0	36	209	21	1	0	24	213	20	3	0	51	89	54	2	0	39	103	31	0	890
4:30 PM	0	34	242	23	3	0	16	180	21	0	0	48	93	60	0	4	31	123	31	3	906
4:45 PM	0	38	201	16	1	0	31	215	24	1	0	60	91	40	1	0	33	98	40	1	887
5:00 PM	0	27	223	23	1	0	35	242	27	1	0	47	97	48	1	2	45	156	48	4	1020
5:15 PM	0	37	196	27	5	0	34	211	23	4	0	75	114	56	2	0	59	169	41	2	1042
5:30 PM	0	47	219	19	6	0	36	213	37	0	0	49	109	55	1	0	35	123	38	5	980
5:45 PM	0	39	132	19	0	0	26	179	27	1	0	49	96	47	4	1	26	109	32	0	782
6:00 PM	0	26	179	26	3	0	19	156	16	0	0	45	76	31	1	1	22	79	18	0	694
6:15 PM	0	20	164	19	1	0	23	142	21	1	0	48	65	27	1	1	23	64	19	0	636
6:30 PM	0	25	148	43	1	0	19	139	17	1	0	46	82	30	0	0	29	62	24	0	664
6:45 PM	0	15	143	41	3	0	23	103	18	0	0	44	107	25	3	1	30	104	14	1	668
7:00 PM	0	10	130	22	0	0	7	136	14	0	0	17	42	30	0	1	25	85	25	0	544
Total	8	1,318	8,346	1,327	81	1	1,267	8,256	1,159	58	0	2,148	4,904	1,908	62	28	1,325	4,243	1,230	68	37,468

*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total" or graph below)



DOWL

Turning Movement Count

Lake Otis Pkwy & 36th Ave

Heavy Vehicles (15-Minute Periods)

All Data

Thursday, October 19, 2017

6:15 AM to 7:15 PM

Start Time	Lake Otis Pkwy (Northbound)				Lake Otis Pkwy (Southbound)				36th Ave (Eastbound)				36th Ave (Westbound)				Period Total (Veh)
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
6:30 AM	0	1	0	0	0	1	0	0	0	0	2	0	0	1	2	1	8
6:45 AM	0	0	4	0	0	0	1	0	0	1	2	1	0	0	0	1	10
7:00 AM	0	2	5	1	0	0	1	0	0	0	1	0	0	1	1	1	13
7:15 AM	0	1	2	0	0	1	8	0	0	0	1	1	0	0	1	0	15
7:30 AM	0	1	4	0	0	0	2	1	0	1	1	0	0	1	2	2	15
7:45 AM	0	0	8	1	0	3	3	0	0	1	2	1	0	1	2	0	22
8:00 AM	0	2	1	0	0	1	0	0	0	0	2	1	0	2	3	1	13
8:15 AM	0	0	4	0	0	1	5	1	0	1	0	1	0	2	2	0	17
8:30 AM	0	1	7	0	0	1	4	0	0	0	1	1	0	2	1	2	20
8:45 AM	0	0	2	1	0	1	4	0	0	3	3	0	0	0	2	1	17
9:00 AM	0	0	2	0	0	1	6	0	0	0	1	2	0	1	2	1	16
9:15 AM	0	1	3	1	0	0	3	1	0	1	0	0	0	0	1	1	12
9:30 AM	0	0	0	1	0	1	6	0	0	0	2	0	0	2	0	2	14
9:45 AM	0	1	4	1	0	2	2	0	0	0	1	1	0	0	1	0	13
10:00 AM	0	0	2	5	0	0	1	0	0	0	1	1	0	0	4	1	15
10:15 AM	0	0	5	1	0	3	4	1	0	1	2	1	0	0	2	1	21
10:30 AM	0	0	3	0	0	3	3	0	0	0	2	2	0	1	5	2	21
10:45 AM	0	1	4	0	0	0	3	0	0	1	1	1	0	0	6	0	17
11:00 AM	0	1	3	3	0	0	3	0	0	0	1	2	0	1	2	2	18
11:15 AM	0	0	1	0	0	1	4	0	0	0	0	0	0	0	1	0	7
11:30 AM	0	0	2	3	0	4	2	0	0	1	2	1	0	1	1	2	19
11:45 AM	0	1	1	1	0	2	3	0	0	1	1	0	0	0	2	0	12
12:00 PM	0	0	1	2	0	0	3	0	0	2	1	2	0	1	4	1	17
12:15 PM	0	1	3	0	0	2	0	2	0	0	0	0	0	0	3	2	13
12:30 PM	0	1	1	1	0	2	2	0	0	3	1	0	0	2	0	4	17
12:45 PM	0	0	3	1	0	1	1	0	0	0	1	1	0	2	1	0	11
1:00 PM	0	2	4	2	0	2	3	0	0	0	2	1	0	1	1	1	19
1:15 PM	0	0	10	0	0	2	5	0	0	2	0	0	0	0	2	0	21
1:30 PM	0	0	1	0	0	2	3	0	0	1	1	2	0	1	2	3	16
1:45 PM	0	0	5	1	0	1	3	0	0	0	4	0	0	0	1	1	16
2:00 PM	0	0	3	0	0	2	1	2	0	3	1	1	0	2	3	1	19
2:15 PM	0	1	1	0	0	1	10	2	0	0	2	0	0	0	2	0	19
2:30 PM	0	0	3	0	0	2	6	1	0	1	1	1	0	4	2	2	23
2:45 PM	0	0	1	0	0	2	1	0	0	2	4	0	0	5	1	1	17
3:00 PM	0	1	3	3	0	0	3	0	0	0	1	2	0	0	4	1	18
3:15 PM	0	2	1	0	0	1	1	1	0	4	0	1	0	0	4	1	16
3:30 PM	0	0	5	1	0	1	6	0	0	1	1	1	0	2	1	0	19
3:45 PM	0	1	0	0	0	1	2	1	0	1	2	1	0	1	2	2	14
4:00 PM	0	0	1	2	0	1	3	0	0	0	3	1	0	0	1	1	13
4:15 PM	0	1	2	1	0	1	1	0	0	1	0	0	0	1	3	1	12
4:30 PM	0	0	3	0	0	0	2	0	0	0	1	2	0	1	0	3	12
4:45 PM	0	1	3	0	0	2	3	0	0	0	1	1	0	0	2	0	13
5:00 PM	0	0	2	1	0	1	2	0	0	0	2	1	0	3	2	1	15
5:15 PM	0	1	1	0	0	1	0	0	0	0	1	0	0	0	2	0	6
5:30 PM	0	0	1	1	0	1	2	0	0	0	0	1	0	1	1	2	10
5:45 PM	0	0	0	0	0	2	0	0	0	0	2	0	0	0	2	0	6
6:00 PM	0	0	0	1	0	0	2	0	0	0	0	1	0	0	1	1	6
6:15 PM	0	1	1	1	0	1	1	0	0	0	0	1	0	0	1	0	7
6:30 PM	0	0	1	0	0	1	0	0	0	0	1	0	0	1	0	4	8
6:45 PM	0	0	0	0	0	1	0	0	0	0	1	0	0	0	1	0	3
7:00 PM	0	1	0	1	0	0	0	0	0	0	1	1	0	0	2	0	6
Total	0	27	127	38	0	60	134	13	0	33	64	39	0	44	94	55	728

Turning Movement Count

Lake Otis Pkwy & 36th Ave

Total Vehicles (15-Minute Periods)

AM Peak Hour

Thursday, October 19, 2017

7:00 AM to 9:00 AM

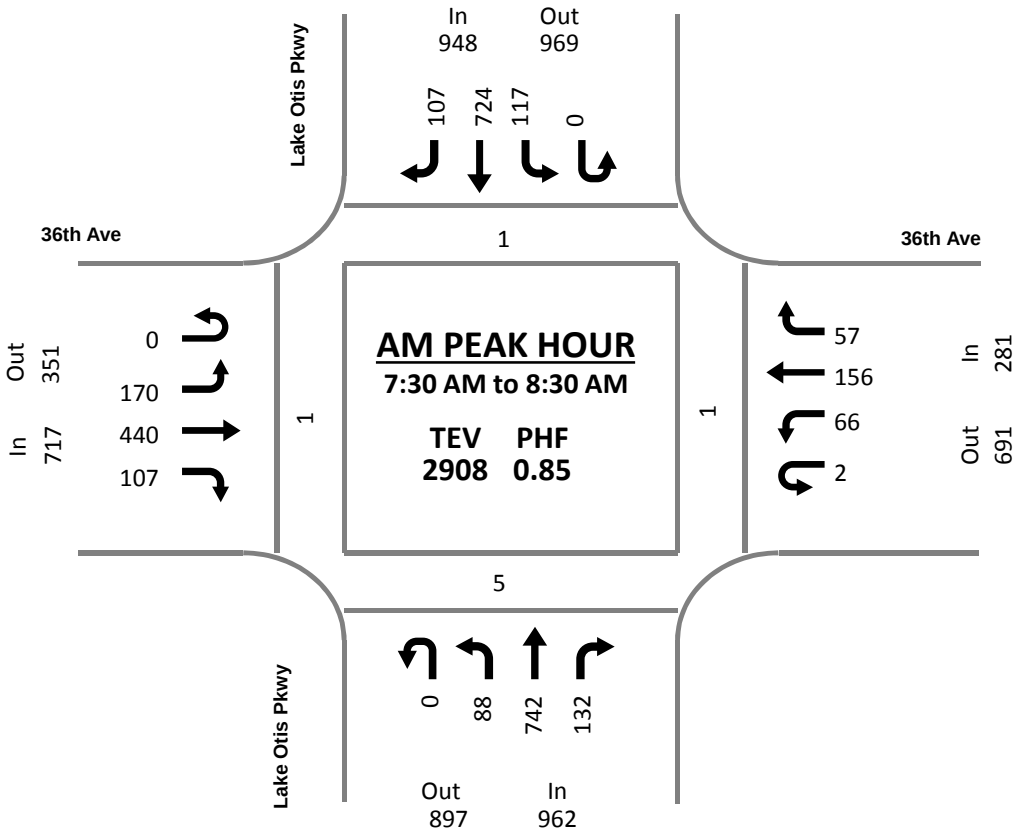
Start Time	Lake Otis Pkwy (Northbound)					Lake Otis Pkwy (Southbound)					36th Ave (Eastbound)					36th Ave (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
7:00 AM	0	9	123	13	0	0	15	106	20	0	0	20	50	13	0	0	6	20	6	4	401
7:15 AM	0	15	148	18	0	0	24	172	21	2	0	20	76	9	9	0	2	16	9	3	530
7:30 AM	0	13	192	27	1	0	25	151	24	0	0	40	108	24	0	0	15	42	13	1	674
7:45 AM	0	36	227	29	1	0	36	243	37	1	0	46	94	25	0	2	17	44	19	0	855
8:00 AM	0	23	159	40	1	0	30	178	27	0	0	38	115	21	1	0	20	40	12	0	703
8:15 AM	0	16	164	36	2	0	26	152	19	0	0	46	123	37	0	0	14	30	13	0	676
8:30 AM	1	16	189	25	1	0	23	167	20	1	0	27	72	26	1	0	13	33	16	2	628
8:45 AM	2	35	184	26	3	0	28	187	28	1	0	41	112	27	0	0	13	54	19	0	756
Total	3	163	1,386	214	9	0	207	1,356	196	5	0	278	750	182	11	2	100	279	107	10	5,223

*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total")

Peak Hour Summary

7:30 AM to 8:30 AM

Data Type	Lake Otis Pkwy (Northbound)					Lake Otis Pkwy (Southbound)					36th Ave (Eastbound)					36th Ave (Westbound)					Peak Hour Total
	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	
Volume	0	88	742	132	5	0	117	724	107	1	0	170	440	107	1	2	66	156	57	1	2908
%HV	0.0%	3.4%	2.3%	0.8%		0.0%	4.3%	1.4%	1.9%		0.0%	1.8%	1.1%	2.8%		0.0%	9.1%	5.8%	5.3%		2.3%
PHF	0.00	0.61	0.82	0.83	0.63	0.00	0.81	0.74	0.72	0.25	0.00	0.92	0.89	0.72	0.25	0.25	0.83	0.89	0.75	0.25	0.85
Volume			962					948					717					281			2908
%HV			2.2%					1.8%					1.5%					6.4%			2.3%
PHF			0.82					0.75					0.87					0.86			0.85



Turning Movement Count

Lake Otis Pkwy & 36th Ave

Total Vehicles (15-Minute Periods)

PM Peak Hour

Thursday, October 19, 2017

4:00 PM to 6:00 PM

Start Time	Lake Otis Pkwy (Northbound)					Lake Otis Pkwy (Southbound)					36th Ave (Eastbound)					36th Ave (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
4:00 PM	0	40	197	28	0	0	25	197	30	3	0	61	93	51	0	0	41	117	39	2	919
4:15 PM	0	36	209	21	1	0	24	213	20	3	0	51	89	54	2	0	39	103	31	0	890
4:30 PM	0	34	242	23	3	0	16	180	21	0	0	48	93	60	0	4	31	123	31	3	906
4:45 PM	0	38	201	16	1	0	31	215	24	1	0	60	91	40	1	0	33	98	40	1	887
5:00 PM	0	27	223	23	1	0	35	242	27	1	0	47	97	48	1	2	45	156	48	4	1020
5:15 PM	0	37	196	27	5	0	34	211	23	4	0	75	114	56	2	0	59	169	41	2	1042
5:30 PM	0	47	219	19	6	0	36	213	37	0	0	49	109	55	1	0	35	123	38	5	980
5:45 PM	0	39	132	19	0	0	26	179	27	1	0	49	96	47	4	1	26	109	32	0	782
Total	0	298	1,619	176	17	0	227	1,650	209	13	0	440	782	411	11	7	309	998	300	17	7,426

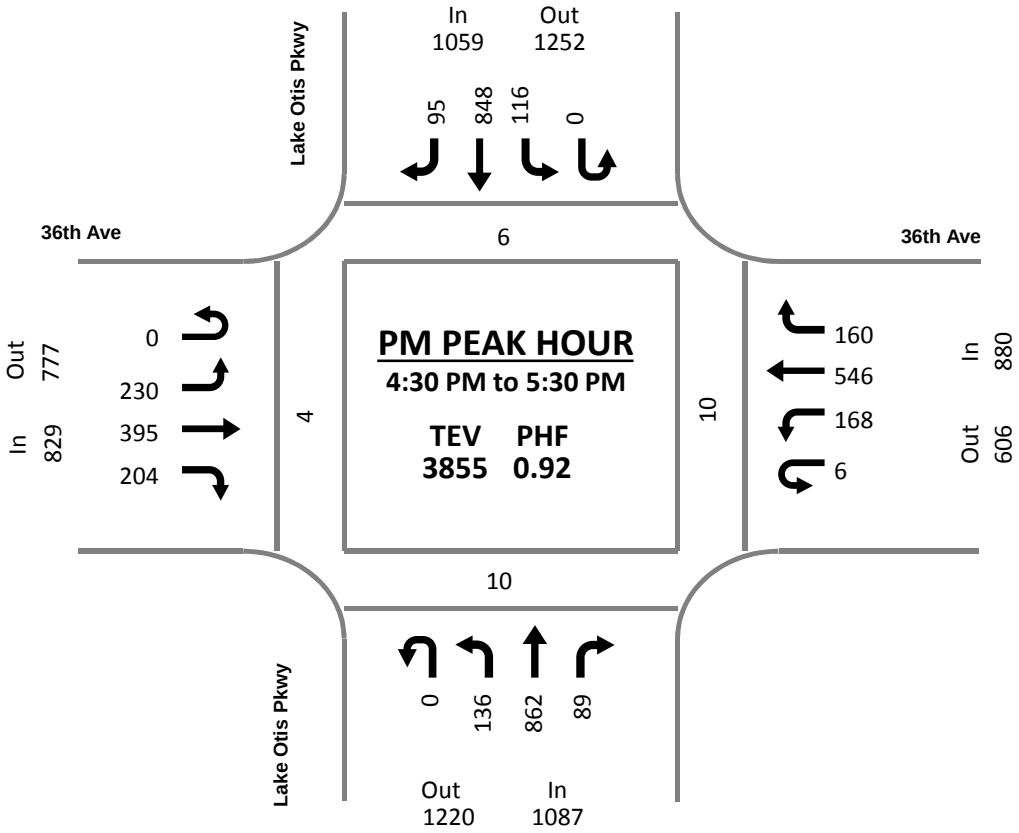
*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total")

Peak Hour Summary (System Peak*)

4:30 PM to 5:30 PM

Data Type	Lake Otis Pkwy (Northbound)					Lake Otis Pkwy (Southbound)					36th Ave (Eastbound)					36th Ave (Westbound)					Peak Hour Total
	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	
Volume	0	136	862	89	10	0	116	848	95	6	0	230	395	204	4	6	168	546	160	10	3855
%HV	0.0%	1.5%	1.0%	1.1%		0.0%	3.4%	0.8%	0.0%		0.0%	0.0%	1.3%	2.0%		0.0%	2.4%	1.1%	2.5%		1.2%
PHF	0.00	0.89	0.89	0.82	0.50	0.00	0.83	0.88	0.88	0.38	0.00	0.77	0.87	0.85	0.50	0.38	0.71	0.81	0.83	0.63	0.92
Volume			1087					1059					829					880			3855
%HV			1.1%					1.0%					1.1%					1.6%			1.2%
PHF			0.91					0.87					0.85					0.82			0.92

*System Peak is based on comparison of other study area counts rather than highest total entering volume at this intersection.



Traffic Camera Count and Placement Information

Intersection Name: Tudor Rd & Lake Otis Pkwy

Intersection Location	
Northbound Street	Lake Otis Pkwy
Southbound Street	Lake Otis Pkwy
Eastbound Street	Tudor Rd
Westbound Street	Tudor Rd
City, State	Anchorage, AK

Project Information	
Name	Midtown Congestion Relief
Client	AK DOT&PF
Project #	1124.62458.01, Phase 02
PM/Traffic Lead	Steve Noble/Brad Coy

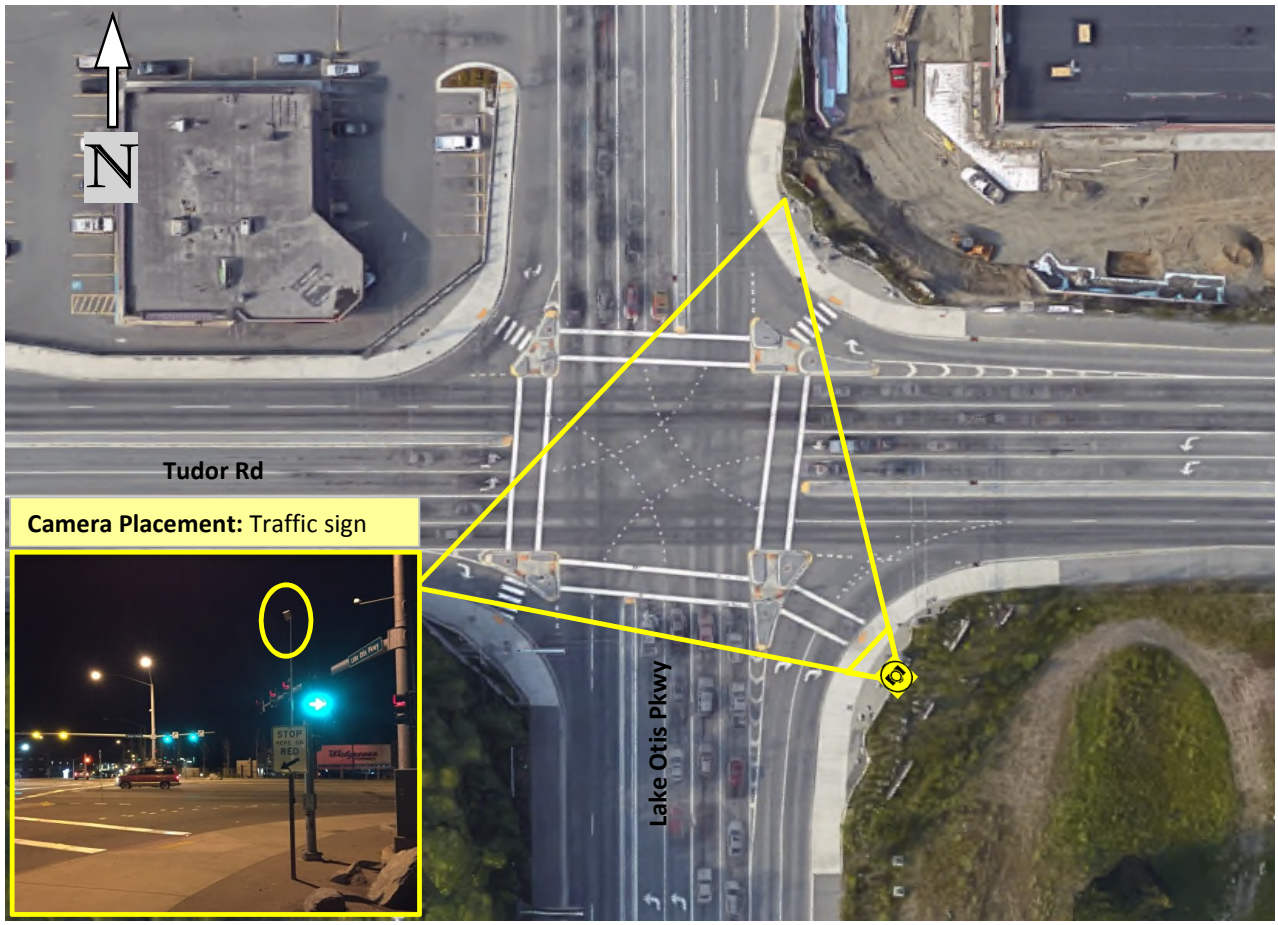
Count Description (e.g., day(s) of week, time periods, other related counts also occuring, etc.)

1 weekday (Tue, Wed, or Thu), with other Lake Otis Pwky intersections

Camera Setup/Video Footage	
Staff Responsible	Brad Coy
Setup Time	10/19/2017 5:50 AM
Take Down Time	10/19/2017 9:30 PM
Duration (hours)	15.67
Camera # (2-digit)	d7

Count Date, Time, Vendor	
Date	10/19/2017 (Thursday)
Start Time	6:00 AM
End Time	7:00 PM
Duration (hours)	13.00
Count Vendor	CountingCars.com

Camera Placement



Camera Placement: Traffic sign

Other Notes (Before, During, or After Count)

DOWL

Turning Movement Count

Tudor Rd & Lake Otis Pkwy

Total Vehicles (15-Minute Periods)

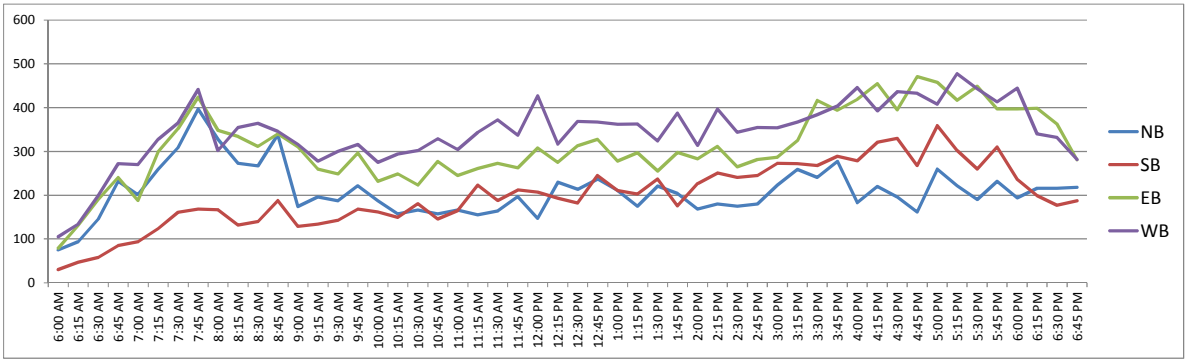
All Data

Thursday, October 19, 2017

6:00 AM to 7:00 PM

Start Time	Lake Otis Pkwy (Northbound)					Lake Otis Pkwy (Southbound)					Tudor Rd (Eastbound)					Tudor Rd (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
6:00 AM	0	18	35	22	0	0	4	15	11	0	0	18	61	0	2	0	9	89	7	0	289
6:15 AM	0	16	48	30	0	0	5	26	16	0	0	22	104	5	0	0	11	111	12	0	406
6:30 AM	0	32	79	35	0	0	6	34	18	1	0	43	144	3	0	0	18	167	14	0	593
6:45 AM	0	52	122	58	0	0	16	44	25	2	0	54	174	13	1	0	31	224	17	2	830
7:00 AM	0	45	111	45	0	0	9	57	28	0	0	46	130	12	0	0	17	236	17	0	753
7:15 AM	0	56	152	51	0	0	17	72	35	0	0	72	211	16	0	0	35	263	30	2	1010
7:30 AM	0	67	174	68	2	0	20	94	47	1	0	93	236	23	0	0	32	285	48	0	1187
7:45 AM	0	118	205	74	0	0	24	98	46	1	0	82	317	25	2	0	51	344	47	0	1431
8:00 AM	0	82	187	59	0	0	16	102	49	0	0	101	221	26	0	0	30	237	35	0	1145
8:15 AM	0	62	148	63	2	0	22	58	52	0	0	72	240	22	1	0	31	283	41	0	1094
8:30 AM	0	46	157	64	0	0	17	76	47	0	0	77	209	26	0	0	32	284	48	0	1083
8:45 AM	0	64	189	86	2	0	30	81	77	2	0	96	224	20	2	0	32	278	36	0	1213
9:00 AM	0	39	90	45	0	0	23	61	45	1	0	80	200	30	0	0	49	240	27	0	929
9:15 AM	0	42	103	51	0	0	26	57	51	2	0	64	176	20	1	0	34	213	31	1	868
9:30 AM	0	38	112	37	0	0	32	69	42	1	0	61	167	21	0	0	49	218	34	1	880
9:45 AM	0	28	143	51	0	0	27	83	58	1	0	82	187	28	1	0	35	241	40	0	1003
10:00 AM	0	38	104	45	2	0	22	86	54	0	0	56	150	26	0	0	35	206	34	1	856
10:15 AM	0	35	75	47	2	0	21	76	52	4	0	52	177	20	0	0	30	237	27	0	849
10:30 AM	0	32	99	35	1	0	36	84	61	0	0	60	141	22	1	0	37	234	31	1	872
10:45 AM	0	33	87	37	2	1	30	59	56	0	0	60	179	38	1	0	40	253	36	0	909
11:00 AM	0	28	99	39	0	0	27	81	57	3	0	66	155	24	0	0	41	227	36	0	880
11:15 AM	0	27	89	39	0	0	41	127	55	1	0	57	164	40	2	0	61	248	35	0	983
11:30 AM	0	33	81	50	1	1	34	95	58	1	0	68	187	18	1	0	51	286	35	1	997
11:45 AM	0	49	105	43	0	2	46	104	60	0	0	49	183	31	0	0	49	252	36	0	1009
12:00 PM	0	27	81	39	0	1	37	99	70	2	0	54	224	30	1	0	56	331	40	0	1089
12:15 PM	0	51	128	51	2	0	38	84	71	0	0	50	196	29	1	0	56	234	27	1	1015
12:30 PM	0	41	107	66	1	0	45	88	49	0	0	60	219	34	1	0	59	276	34	2	1078
12:45 PM	0	43	143	51	3	0	43	126	76	6	0	72	228	28	4	0	50	275	42	2	1177
1:00 PM	0	34	120	57	0	1	49	104	57	1	0	60	184	34	0	0	55	269	38	1	1062
1:15 PM	0	33	87	55	1	1	48	85	69	0	0	59	216	22	0	0	52	269	42	2	1038
1:30 PM	0	46	114	61	2	1	37	118	81	0	0	53	167	35	0	0	62	230	32	3	1037
1:45 PM	0	35	117	52	0	1	32	91	52	2	0	53	213	32	1	0	56	294	38	1	1066
2:00 PM	0	28	93	47	1	0	44	123	60	0	1	60	196	26	1	0	41	239	34	0	992
2:15 PM	0	36	93	51	2	0	43	137	71	2	0	58	207	47	0	0	76	280	41	1	1140
2:30 PM	0	30	94	51	3	0	33	127	81	0	0	64	165	36	1	0	50	247	47	0	1025
2:45 PM	0	24	100	56	0	0	34	139	72	5	0	44	208	30	0	0	53	266	36	1	1062
3:00 PM	0	36	127	60	0	1	53	154	65	2	0	47	214	26	1	0	68	256	30	3	1137
3:15 PM	0	50	147	62	0	0	43	158	71	3	0	56	219	50	1	0	72	255	40	0	1223
3:30 PM	0	43	132	66	2	0	39	157	72	0	0	69	300	48	0	0	62	289	33	3	1310
3:45 PM	0	50	144	83	1	0	51	153	85	5	0	73	270	51	0	0	79	293	32	4	1364
4:00 PM	0	36	90	57	0	0	29	166	84	3	0	64	306	49	0	0	78	337	31	3	1327
4:15 PM	0	38	138	44	2	0	35	189	97	3	0	91	309	55	1	0	61	299	33	2	1389
4:30 PM	0	40	113	43	0	0	49	178	103	1	0	66	251	78	0	0	83	322	32	1	1358
4:45 PM	0	28	101	33	0	1	26	158	83	1	0	84	309	78	3	0	79	332	22	4	1334
5:00 PM	0	47	150	63	1	0	30	205	124	1	0	87	290	81	4	0	91	297	20	2	1485
5:15 PM	0	38	131	53	0	0	29	185	88	3	0	66	278	73	2	0	104	347	27	0	1419
5:30 PM	0	32	113	45	1	0	23	177	60	0	0	56	317	76	1	0	87	322	34	0	1342
5:45 PM	0	48	121	63	1	0	40	197	73	2	0	53	274	70	0	0	93	294	26	0	1352
6:00 PM	0	41	93	60	0	0	43	134	59	4	0	56	279	62	0	0	77	341	27	0	1272
6:15 PM	0	39	117	60	0	0	30	120	49	3	0	60	280	59	0	0	58	253	29	0	1154
6:30 PM	0	38	118	60	0	0	27	115	35	0	0	59	248	56	0	0	63	248	21	0	1088
6:45 PM	0	31	130	57	0	1	37	105	44	2	0	52	187	42	0	0	49	211	22	2	968
Total	0	2,143	6,036	2,720	37	12	1,618	5,611	3,101	72	1	3,257	11,091	1,846	38	0	2,710	13,562	1,664	47	55,372

*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total" or graph below)





Turning Movement Count

Tudor Rd & Lake Otis Pkwy

Heavy Vehicles (15-Minute Periods)

All Data

Thursday, October 19, 2017

6:00 AM to 7:00 PM

Start Time	Lake Otis Pkwy (Northbound)				Lake Otis Pkwy (Southbound)				Tudor Rd (Eastbound)				Tudor Rd (Westbound)				Period Total (Veh)
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	
6:00 AM	0	0	1	0	0	0	1	1	0	0	1	0	0	0	2	0	6
6:15 AM	0	0	0	0	0	0	1	0	0	0	2	0	0	1	4	0	8
6:30 AM	0	1	1	1	0	1	1	0	0	0	2	0	0	2	5	0	14
6:45 AM	0	4	3	1	0	1	1	0	0	0	5	0	0	0	4	0	19
7:00 AM	0	0	4	1	0	0	0	2	0	3	3	1	0	0	5	0	19
7:15 AM	0	0	0	2	0	0	5	0	0	1	1	0	0	0	6	1	16
7:30 AM	0	0	2	3	0	0	4	0	0	0	5	0	0	0	4	0	18
7:45 AM	0	0	6	2	0	0	1	2	0	0	6	1	0	1	4	0	23
8:00 AM	0	2	1	0	0	1	4	0	0	0	5	1	0	0	5	1	20
8:15 AM	0	0	1	1	0	2	5	1	0	0	16	0	0	0	4	0	30
8:30 AM	0	2	6	1	0	2	2	1	0	0	5	3	0	1	11	2	36
8:45 AM	0	1	4	10	0	3	0	1	0	0	12	0	0	2	5	0	38
9:00 AM	0	1	2	0	0	5	6	1	0	0	12	0	0	1	9	0	37
9:15 AM	0	2	1	2	0	2	1	1	0	3	5	0	0	1	10	0	28
9:30 AM	0	1	1	0	0	3	4	1	0	1	9	1	0	1	1	0	23
9:45 AM	0	0	2	0	0	0	1	3	0	0	10	0	0	2	10	1	29
10:00 AM	0	1	3	1	0	0	1	2	0	1	6	0	0	3	13	1	32
10:15 AM	0	1	3	1	0	0	1	3	0	0	13	1	0	0	10	0	33
10:30 AM	0	0	1	1	0	2	4	0	0	1	7	3	0	1	14	0	34
10:45 AM	0	1	2	0	0	2	1	1	0	0	6	0	0	0	9	0	22
11:00 AM	0	0	5	0	0	0	5	2	0	2	10	3	0	0	6	0	33
11:15 AM	0	0	0	1	0	2	3	1	0	3	3	2	0	1	9	0	25
11:30 AM	0	1	2	1	0	0	3	2	0	3	7	0	0	0	10	0	29
11:45 AM	0	1	2	0	0	3	1	3	0	0	5	1	0	0	11	0	27
12:00 PM	0	0	2	0	0	1	3	5	0	2	8	0	0	0	10	1	32
12:15 PM	0	2	2	0	0	0	0	0	0	2	2	1	0	1	7	0	17
12:30 PM	0	1	0	1	0	0	3	2	0	0	2	0	0	1	7	0	17
12:45 PM	0	0	5	0	0	1	2	0	0	0	11	0	0	0	8	0	27
1:00 PM	0	1	3	0	0	5	2	1	0	1	4	0	0	1	7	0	25
1:15 PM	0	0	4	2	0	1	1	1	0	0	8	0	0	1	11	5	34
1:30 PM	0	0	1	0	0	1	3	2	0	1	6	0	0	0	13	0	27
1:45 PM	0	2	4	2	0	0	1	2	0	0	6	0	0	0	13	0	30
2:00 PM	0	1	2	0	0	0	3	2	0	0	3	0	0	0	9	0	20
2:15 PM	0	0	2	3	0	1	9	1	0	1	4	1	0	3	9	0	34
2:30 PM	0	1	1	4	0	0	9	2	0	1	4	0	0	3	11	1	37
2:45 PM	0	0	1	1	0	2	4	1	0	0	9	1	0	1	7	1	28
3:00 PM	0	0	2	4	0	1	3	0	0	1	3	1	0	2	9	1	27
3:15 PM	0	1	4	2	0	1	1	1	0	0	6	1	0	2	8	0	27
3:30 PM	0	1	1	1	0	0	4	2	0	2	6	0	0	1	6	0	24
3:45 PM	0	0	3	6	0	2	5	0	0	0	5	3	0	2	12	0	38
4:00 PM	0	0	2	9	0	1	3	2	0	1	9	0	0	0	14	0	41
4:15 PM	0	3	1	3	0	1	1	2	0	0	6	1	0	0	3	0	21
4:30 PM	0	0	2	0	0	1	5	0	0	0	2	1	0	1	6	0	18
4:45 PM	0	0	3	0	0	0	3	1	0	1	4	0	0	0	9	0	21
5:00 PM	0	0	2	0	0	0	3	1	0	0	2	0	0	0	5	0	13
5:15 PM	0	0	0	0	0	0	1	2	0	0	1	1	0	1	8	0	14
5:30 PM	0	0	0	0	0	0	0	0	0	0	4	0	0	0	9	0	13
5:45 PM	0	0	0	0	0	0	3	1	0	0	5	0	0	0	8	0	17
6:00 PM	0	0	2	0	0	2	1	0	0	0	2	0	0	0	4	0	11
6:15 PM	0	1	0	0	0	0	0	0	0	1	3	0	0	0	2	0	7
6:30 PM	0	0	1	0	0	0	1	0	0	0	2	0	0	0	2	0	6
6:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	1	1	0	3
Total	0	33	104	67	0	50	130	59	0	32	283	28	0	38	389	15	1,228

Turning Movement Count

Tudor Rd & Lake Otis Pkwy

Total Vehicles (15-Minute Periods)

AM Peak Hour

Thursday, October 19, 2017

7:00 AM to 9:00 AM

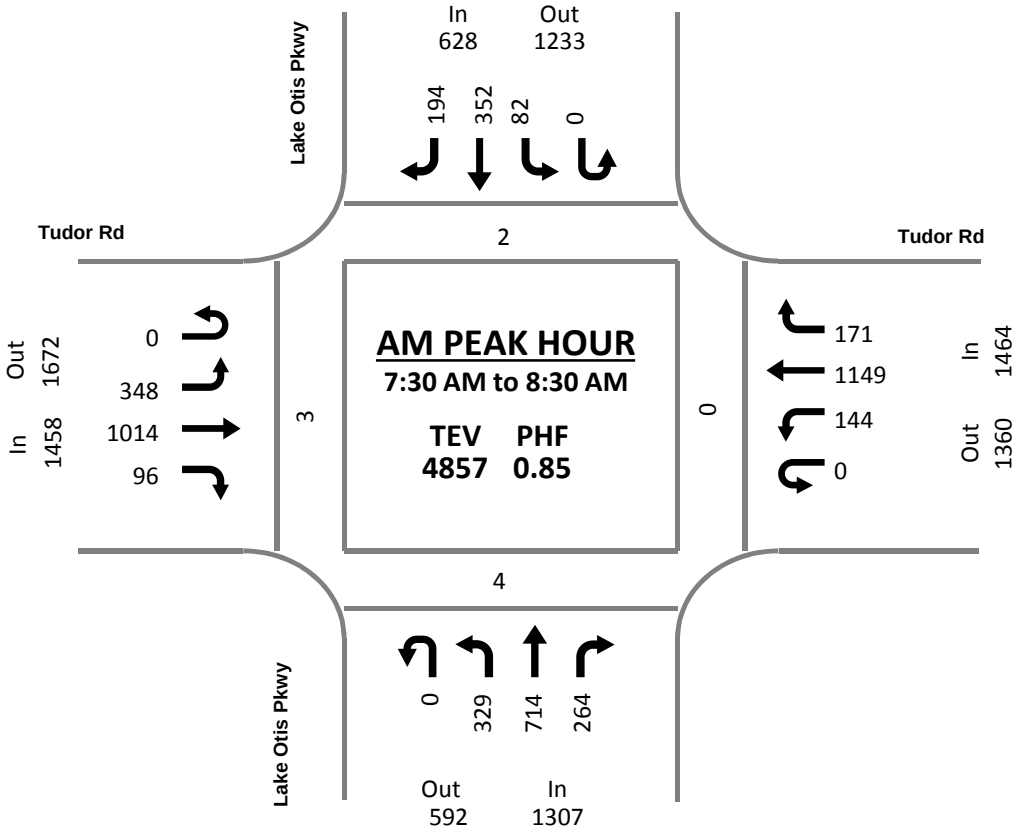
Start Time	Lake Otis Pkwy (Northbound)					Lake Otis Pkwy (Southbound)					Tudor Rd (Eastbound)					Tudor Rd (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
7:00 AM	0	45	111	45	0	0	9	57	28	0	0	46	130	12	0	0	17	236	17	0	753
7:15 AM	0	56	152	51	0	0	17	72	35	0	0	72	211	16	0	0	35	263	30	2	1010
7:30 AM	0	67	174	68	2	0	20	94	47	1	0	93	236	23	0	0	32	285	48	0	1187
7:45 AM	0	118	205	74	0	0	24	98	46	1	0	82	317	25	2	0	51	344	47	0	1431
8:00 AM	0	82	187	59	0	0	16	102	49	0	0	101	221	26	0	0	30	237	35	0	1145
8:15 AM	0	62	148	63	2	0	22	58	52	0	0	72	240	22	1	0	31	283	41	0	1094
8:30 AM	0	46	157	64	0	0	17	76	47	0	0	77	209	26	0	0	32	284	48	0	1083
8:45 AM	0	64	189	86	2	0	30	81	77	2	0	96	224	20	2	0	32	278	36	0	1213
Total	0	540	1,323	510	6	0	155	638	381	4	0	639	1,788	170	5	0	260	2,210	302	2	8,916

*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total")

Peak Hour Summary

7:30 AM to 8:30 AM

Data Type	Lake Otis Pkwy (Northbound)					Lake Otis Pkwy (Southbound)					Tudor Rd (Eastbound)					Tudor Rd (Westbound)					Peak Hour Total
	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	
Volume	0	329	714	264	4	0	82	352	194	2	0	348	1014	96	3	0	144	1149	171	0	4857
%HV	0.0%	0.6%	1.4%	2.3%		0.0%	3.7%	4.0%	1.5%		0.0%	0.0%	3.2%	2.1%		0.0%	0.7%	1.5%	0.6%		1.9%
PHF	0.00	0.70	0.87	0.89	0.50	0.00	0.85	0.86	0.93	0.50	0.00	0.86	0.80	0.92	0.38	0.00	0.71	0.84	0.89	0.00	0.85
Volume			1307					628					1458					1464			4857
%HV			1.4%					3.2%					2.3%					1.3%			1.9%
PHF			0.82					0.93					0.86					0.83			0.85



Turning Movement Count

Tudor Rd & Lake Otis Pkwy

Total Vehicles (15-Minute Periods)

PM Peak Hour

Thursday, October 19, 2017

4:00 PM to 6:00 PM

Start Time	Lake Otis Pkwy (Northbound)					Lake Otis Pkwy (Southbound)					Tudor Rd (Eastbound)					Tudor Rd (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
4:00 PM	0	36	90	57	0	0	29	166	84	3	0	64	306	49	0	0	78	337	31	3	1327
4:15 PM	0	38	138	44	2	0	35	189	97	3	0	91	309	55	1	0	61	299	33	2	1389
4:30 PM	0	40	113	43	0	0	49	178	103	1	0	66	251	78	0	0	83	322	32	1	1358
4:45 PM	0	28	101	33	0	1	26	158	83	1	0	84	309	78	3	0	79	332	22	4	1334
5:00 PM	0	47	150	63	1	0	30	205	124	1	0	87	290	81	4	0	91	297	20	2	1485
5:15 PM	0	38	131	53	0	0	29	185	88	3	0	66	278	73	2	0	104	347	27	0	1419
5:30 PM	0	32	113	45	1	0	23	177	60	0	0	56	317	76	1	0	87	322	34	0	1342
5:45 PM	0	48	121	63	1	0	40	197	73	2	0	53	274	70	0	0	93	294	26	0	1352
Total	0	307	957	401	5	1	261	1,455	712	14	0	567	2,334	560	11	0	676	2,550	225	12	11,006

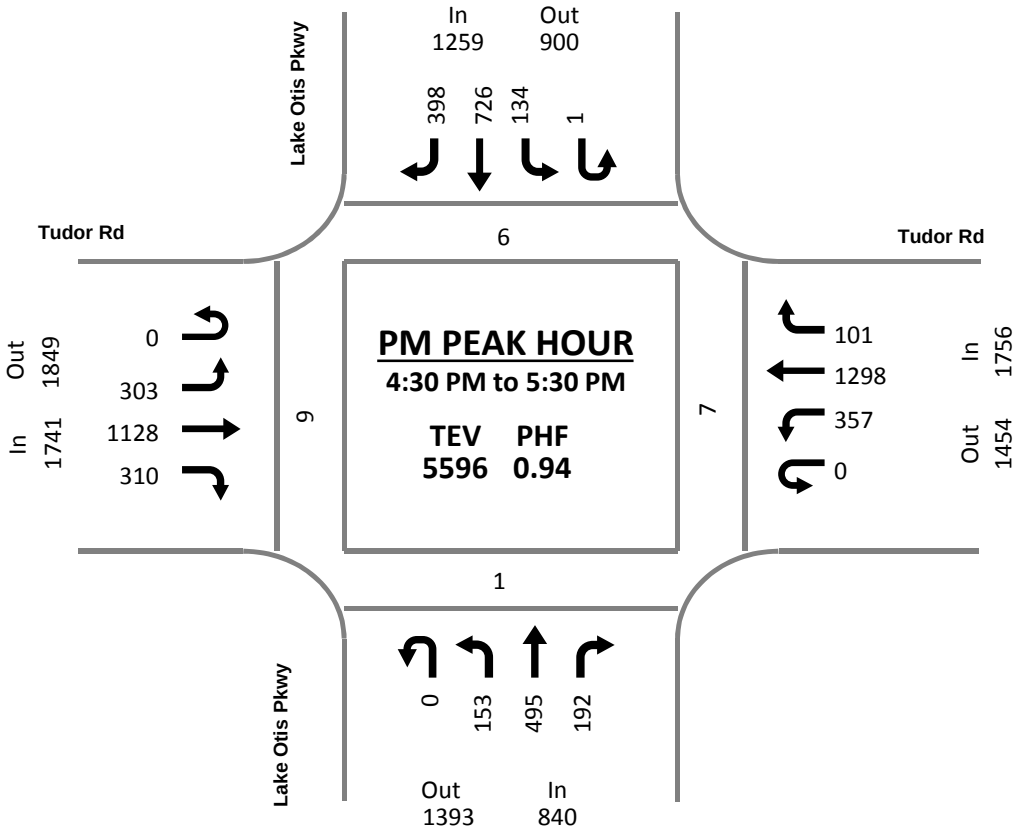
*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total")

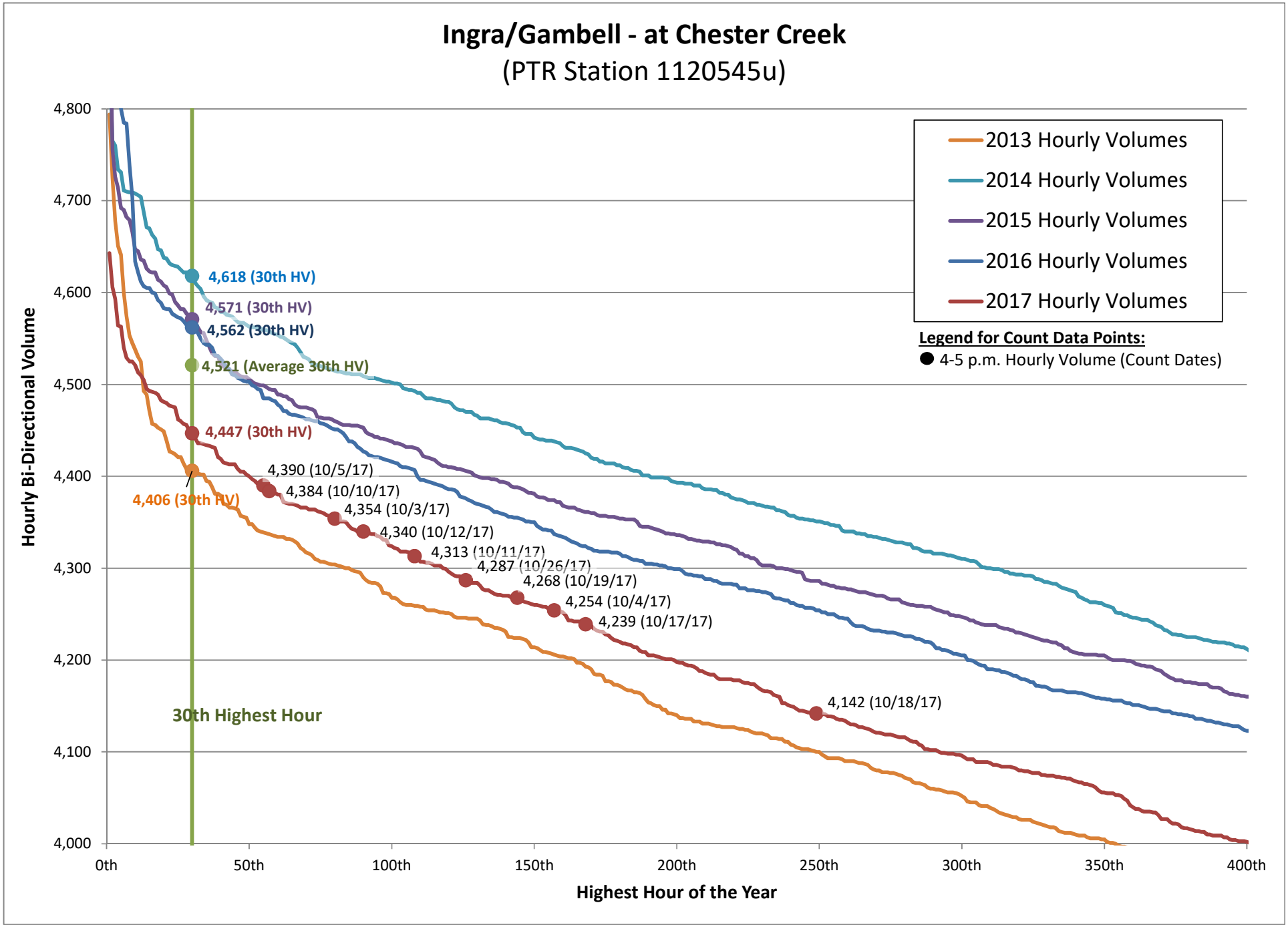
Peak Hour Summary (System Peak*)

4:30 PM to 5:30 PM

Data Type	Lake Otis Pkwy (Northbound)					Lake Otis Pkwy (Southbound)					Tudor Rd (Eastbound)					Tudor Rd (Westbound)					Peak Hour Total
	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	
Volume	0	153	495	192	1	1	134	726	398	6	0	303	1128	310	9	0	357	1298	101	7	5596
%HV	0.0%	0.0%	1.4%	0.0%		0.0%	0.7%	1.7%	1.0%		0.0%	0.3%	0.8%	0.6%		0.0%	0.6%	2.2%	0.0%		1.2%
PHF	0.00	0.81	0.83	0.76	0.25	0.25	0.68	0.89	0.80	0.50	0.00	0.87	0.91	0.96	0.56	0.00	0.86	0.94	0.79	0.44	0.94
Volume			840					1259					1741					1756			5596
%HV			0.8%					1.4%					0.7%					1.7%			1.2%
PHF			0.81					0.88					0.92					0.92			0.94

*System Peak is based on comparison of other study area counts rather than highest total entering volume at this intersection.




Ingra/Gambell - at Chester Creek
(PTR Station 1120545u)
Hourly Bi-Directional Volume
4,800
4,700
4,600
4,500
4,400
4,300
4,200
4,100
4,000
0th
50th
100th
150th
200th
250th
300th
350th
400th
Highest Hour of the Year
2013 Hourly Volumes
2014 Hourly Volumes
2015 Hourly Volumes
2016 Hourly Volumes
2017 Hourly Volumes
Legend for Count Data Points:
4-5 p.m. Hourly Volume (Count Dates)
4,618 (30th HV)
4,571 (30th HV)
4,562 (30th HV)
4,521 (Average 30th HV)
4,447 (30th HV)
4,406 (30th HV)
4,390 (10/5/17)
4,384 (10/10/17)
4,354 (10/3/17)
4,340 (10/12/17)
4,313 (10/11/17)
4,287 (10/26/17)
4,268 (10/19/17)
4,254 (10/4/17)
4,239 (10/17/17)
4,142 (10/18/17)
30th Highest Hour

Seasonal Factors (from Permanent Traffic Recorder data)

Apply to existing counts to adjust seasonally and also to facilitate balancing between intersections.

Year	30th HV (PM)	30th AM
2015	4571	3593.5
2016	4562	3631.5
2017	4447	3513
Average	**4527**	**3579**

PM (30th HV)

Count Date	Hourly Rank	Hourly Volume	30th Volume (PM)	Seasonal Factor
10/3/2017	80	4354	4527	1.040
10/4/2017	157	4254	4527	1.064
10/5/2017	55	4390	4527	1.031
10/10/2017	57	4384	4527	1.033
10/11/2017	108	4313	4527	1.050
10/12/2017	90	4340	4527	1.043
10/17/2017	168	4239	4527	1.068
10/18/2017	249	4142	4527	1.093
10/19/2017	144	4268	4527	1.061
10/26/2017	126	4287	4527	1.056

AM

Date	Hourly Rank	Hourly Volume	30th Volume (AM)	Seasonal Factor
10/3/2017	63	3411	3579	1.049
10/4/2017	113	3301.5	3579	1.084
10/5/2017	132	3268	3579	1.095
10/10/2017	91	3353.5	3579	1.067
10/11/2017	102	3330.5	3579	1.075
10/12/2017	90	3355	3579	1.067
10/17/2017	52	3440.5	3579	1.040
10/18/2017	178	3095	3579	1.156
10/19/2017	72	3390	3579	1.056
10/26/2017	150	3205.5	3579	1.117

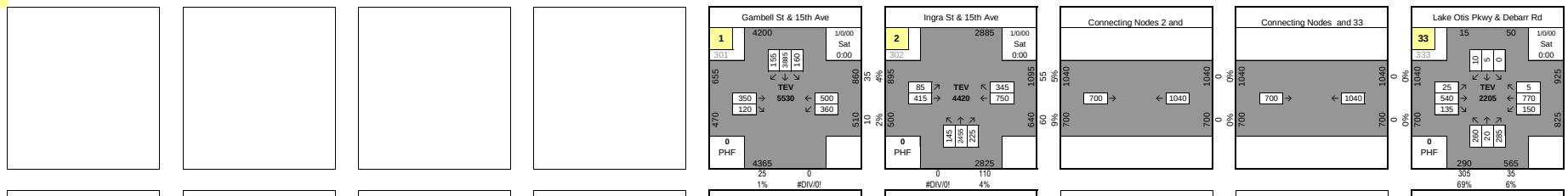
Study Intersection	Yearly Growth Rate for No-Build Condition (Based on 2048 No-Build Model)			
	N Leg	*S Leg*	*E Leg*	*W Leg*
Gambell St & 15th Ave	0.4%	0.4%	0.7%	0.7%
Ingra St & 15th Ave	0.4%	0.4%	0.4%	0.4%
Seward Hwy & 20th Ave	0.4%	0.4%	0.4%	0.4%
Seward Hwy & 22nd Ave	0.4%	0.4%	0.4%	0.4%
Seward Hwy & Fireweed Ln	0.4%	0.3%	0.9%	0.9%
Seward Hwy & Northern Lights Blvd	0.3%	0.3%	0.1%	0.8%
Seward Hwy & Sears/Fred Meyer Driveways	0.3%	0.3%	0.3%	0.3%
Seward Hwy & Benson Blvd	0.3%	0.1%	0.3%	0.5%
Seward Hwy & Energy Ct	0.1%	0.1%	0.1%	0.1%
Seward Hwy & 36th Ave	0.1%	0.5%	0.7%	0.7%
Tudor Rd & Seward Hwy SB Ramps	0.5%	0.8%	0.7%	0.6%
Tudor Rd & Seward Hwy NB Ramps	0.5%	0.8%	0.8%	0.7%
C St & Fireweed Ln	1.0%	0.9%	0.9%	0.9%
C St & Northern Lights Blvd	0.9%	0.9%	0.6%	0.4%
C St & Benson Blvd	0.9%	0.7%	0.4%	0.2%
C St & 36th Ave	0.7%	1.0%	0.7%	0.6%
Tudor Rd & C St	1.0%	1.2%	0.4%	0.2%
A St & Fireweed Ln	0.7%	0.7%	0.9%	0.9%
A St & Northern Lights Blvd	0.7%	0.7%	0.6%	0.6%
A St & Benson Blvd	0.7%	0.7%	0.4%	0.4%
A St & 36th Ave	0.7%	1.0%	0.7%	0.7%
Fireweed Ln & Denali St	0.7%	0.7%	0.9%	0.9%
Northern Lights Blvd & Denali St	0.7%	0.7%	0.6%	0.6%
Benson Blvd & Denali St	0.7%	0.7%	0.5%	0.4%
36th Ave & Denali St	0.7%	0.7%	0.7%	0.7%
Tudor Rd & Denali St	0.7%	0.7%	0.4%	0.4%
Old Seward Hwy & 34th Ave	0.7%	0.7%	0.4%	0.7%
Old Seward Hwy & 36th Ave	0.7%	0.7%	0.7%	0.7%
Tudor Rd & Old Seward Hwy	0.7%	0.7%	0.6%	0.4%
Northern Lights Blvd & Latouche St	0.9%	0.9%	0.1%	0.1%
Benson Blvd & Latouche St	0.9%	0.9%	0.1%	0.3%
36th Ave & Latouche St	0.9%	0.9%	0.6%	0.7%
Lake Otis Pkwy & Debarr Rd	0.9%	0.9%	0.9%	0.7%
Lake Otis Pkwy & Northern Lights Blvd	0.9%	1.2%	-0.1%	0.1%
Lake Otis Pkwy & 36th Ave	1.2%	1.0%	0.5%	0.6%
Tudor Rd & Lake Otis Pkwy	1.0%	0.8%	0.7%	0.8%

	2048 Post Processed Link Volumes (AM Peak Hr)							
	North Leg		West Leg		South Leg		East Leg	
Intersection	*NB Exit*	*SB Enter*	*WB Exit*	*EB Enter*	*SB Exit*	*NB Enter*	*EB Exit*	*WB Enter*
Gambell St & 15th Ave	0	4448	652	471	4568	0	503	841
Ingra St & 15th Ave	2892	0	841	503	0	2712	579	1097
Seward Hwy & 20th Ave	2784	4605	0	0	4605	2811	101	75
Seward Hwy & 22nd Ave	2811	4605	10	10	4605	2811	0	0
Seward Hwy & Fireweed Ln	2810	4600	1128	661	4924	3557	66	110
Seward Hwy & Northern Lights Blvd	3558	4905	2808	0	4947	4321	0	2084
Seward Hwy & Sears/Fred Meyer Driveways								
Seward Hwy & Benson Blvd	4306	4947	0	1272	5150	4701	1463	0
Seward Hwy & Energy Ct								
Seward Hwy & 36th Ave	4927	4290	989	668	3638	5666	1357	287
Tudor Rd & Seward Hwy SB Ramps	0	1137	2517	1361	235	0	1540	1794
Tudor Rd & Seward Hwy NB Ramps	796	0	1794	1540	0	770	1554	1834
C St & Fireweed Ln	0	1379	316	467	1208	0	647	325
C St & Northern Lights Blvd	0	1170	1803	0	1559	0	0	2191
C St & Benson Blvd	0	1534	0	1789	1420	0	1904	0
C St & 36th Ave	0	1254	606	344	1165	0	513	687
Tudor Rd & C St	1361	910	1117	997	1077	1401	1283	1531
A St & Fireweed Ln	1979	0	360	637	0	1458	712	955
A St & Northern Lights Blvd	1613	0	2243	0	0	1508	0	2349
A St & Benson Blvd	1493	0	0	1859	0	1074	1440	0
A St & 36th Ave	1310	0	799	463	0	1218	549	976
Fireweed Ln & Denali St	0	0	939	629	100	91	669	986
Northern Lights Blvd & Denali St	231	19	2378	0	227	158	0	2659
Benson Blvd & Denali St	161	204	0	1538	276	145	1451	0
36th Ave & Denali St	393	233	1071	559	206	190	480	1168
Tudor Rd & Denali St	212	143	1844	1270	0	0	1182	1827
Old Seward Hwy & 34th Ave	45	10	11	3	603	0	8	572
Old Seward Hwy & 36th Ave	4	602	1293	448	603	443	673	1034
Tudor Rd & Old Seward Hwy	493	367	1920	1141	967	746	1308	2433
Northern Lights Blvd & Latouche St	28	96	2047	0	114	46	0	2046
Benson Blvd & Latouche St	76	114	0	1390	172	110	1366	0
36th Ave & Latouche St	112	120	216	1037	0	0	1059	229
Lake Otis Pkwy & Debarr Rd	44	15	1056	697	287	566	816	924
Lake Otis Pkwy & Northern Lights Blvd	595	594	2010	1243	366	515	1076	1693
Lake Otis Pkwy & 36th Ave	680	247	150	1056	672	447	783	382
Tudor Rd & Lake Otis Pkwy	759	419	1732	1438	719	1314	1752	1791
Ingra-Gambell Split								
Seward Hwy & Tudor Rd interchange ramps					4579	4524		
Northern Lights-Benson Split								
A St-C St Split								
Seward Hwy & 34th Ave			913	29				

	2048 Post Processed Link Volumes (PM Peak Hr)							
	North Leg		West Leg		South Leg		East Leg	
Intersection	*NB Exit*	*SB Enter*	*WB Exit*	*EB Enter*	*SB Exit*	*NB Enter*	*EB Exit*	*WB Enter*
Gambell St & 15th Ave	0	4016	542	823	3912	0	1091	660
Ingra St & 15th Ave	4475	0	630	1101	0	4310	1142	837
Seward Hwy & 20th Ave	4310	3886	0	0	3886	4540	290	60
Seward Hwy & 22nd Ave	4540	3886	40	15	3844	4540	0	0
Seward Hwy & Fireweed Ln	4540	3926	790	1348	4673	4967	312	73
Seward Hwy & Northern Lights Blvd	4967	4669	2485	0	5146	5968	0	1961
Seward Hwy & Sears/Fred Meyer Driveways								
Seward Hwy & Benson Blvd	5888	5171	0	3698	5829	5581	2733	0
Seward Hwy & Energy Ct								
Seward Hwy & 36th Ave	5391	5219	961	1554	5258	5243	1494	1090
Tudor Rd & Seward Hwy SB Ramps	0	898	1767	2519	692	0	2663	1705
Tudor Rd & Seward Hwy NB Ramps	1267	0	1705	2663	0	841	2476	1943
C St & Fireweed Ln	0	2332	435	652	1984	0	1034	470
C St & Northern Lights Blvd	0	2015	2435	0	2260	0	0	2680
C St & Benson Blvd	0	2250	0	2811	1845	0	3215	0
C St & 36th Ave	0	2075	824	816	1890	0	1086	911
Tudor Rd & C St	1316	2186	1510	992	2153	1456	1469	1812
A St & Fireweed Ln	2379	0	495	1019	0	1911	957	901
A St & Northern Lights Blvd	1830	0	2675	0	0	1873	0	2634
A St & Benson Blvd	1873	0	0	3267	0	2238	3632	0
A St & 36th Ave	1917	0	907	1159	0	1717	1078	1025
Fireweed Ln & Denali St	0	0	851	1175	114	417	1454	825
Northern Lights Blvd & Denali St	248	140	2607	0	287	459	0	2545
Benson Blvd & Denali St	531	326	0	3341	399	731	3468	0
36th Ave & Denali St	746	567	1115	1208	496	502	1055	1134
Tudor Rd & Denali St	235	474	1863	1538	0	0	1589	1674
Old Seward Hwy & 34th Ave	205	90	8	13	469	102	25	499
Old Seward Hwy & 36th Ave	128	496	1172	1125	747	958	1559	1026
Tudor Rd & Old Seward Hwy	746	951	1637	1602	1262	1739	2440	1793
Northern Lights Blvd & Latouche St	43	79	1894	0	71	99	0	1830
Benson Blvd & Latouche St	119	81	0	2659	314	214	2520	0
36th Ave & Latouche St	166	350	901	1308	0	0	1379	789
Lake Otis Pkwy & Debarr Rd	29	79	928	1395	696	854	1673	999
Lake Otis Pkwy & Northern Lights Blvd	1129	902	1797	2410	677	947	2144	1489
Lake Otis Pkwy & 36th Ave	914	611	744	1189	1097	632	806	1130
Tudor Rd & Lake Otis Pkwy	463	1175	1892	2292	1552	880	2383	1944
Ingra-Gambell Split								
Seward Hwy & Tudor Rd interchange ramps					4579	4524		
Northern Lights-Benson Split								
A St-C St Split								
Seward Hwy & 34th Ave			913	29				

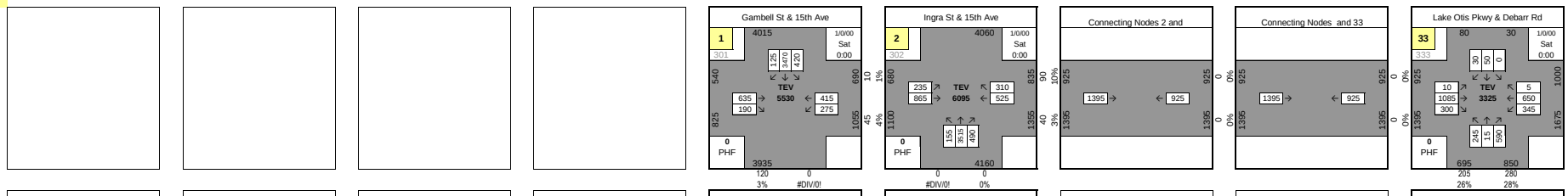
Post Processed Simplified Turn Movement Volumes (Balanced) - 2048 AM

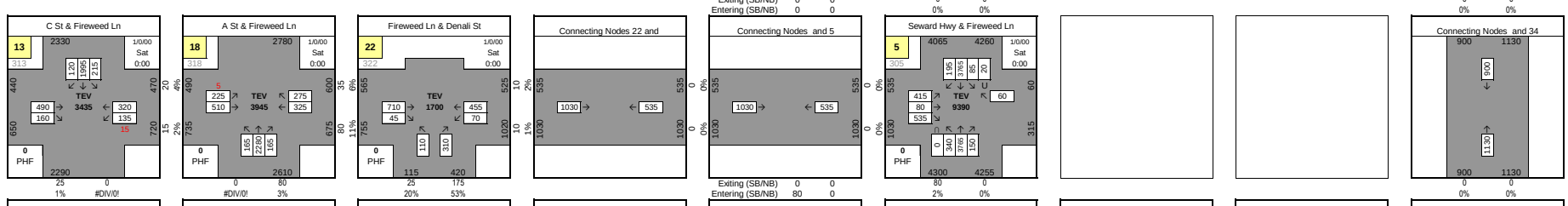
300

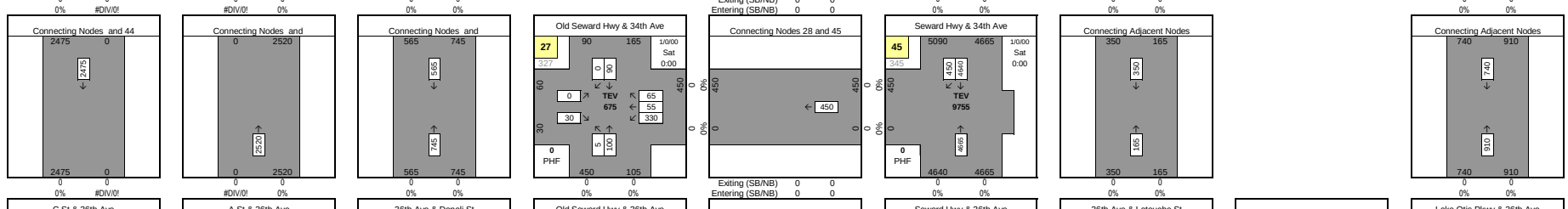


Post Processed Simplified Turn Movement Volumes (Balanced) - 2048 PM

300

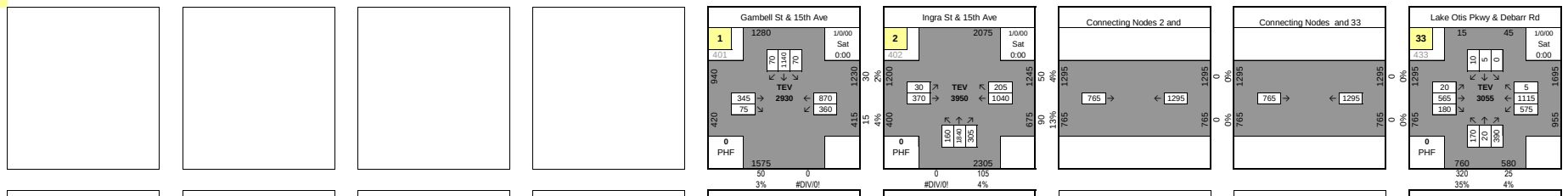






Post Processed Simplified Turn Movement Volumes (Balanced) - 2028 AM

400



Post Processed Simplified Turn Movement Volumes (Balanced) - 2028 PM

400

On Highway Entering	2180	2100
Exiting Traffic	**SB**	**NB**
Turning Traffic	1550	1825
Driveway Traffic	45	10
Total Exiting	1595	1835
Through Traffic	585	265

Traffic Camera Count and Placement Information

Intersection Name: Seward Hwy & 36th Ave

Intersection Location	
Northbound Street	Seward Hwy
Southbound Street	Seward Hwy
Eastbound Street	36th Ave
Westbound Street	36th Ave
City, State	Anchorage, AK

Project Information	
Name	Midtown Congestion Relief
Client	AK DOT&PF
Project #	1124.62458.01, Phase 02
PM/Traffic Lead	Steve Noble/Brad Coy

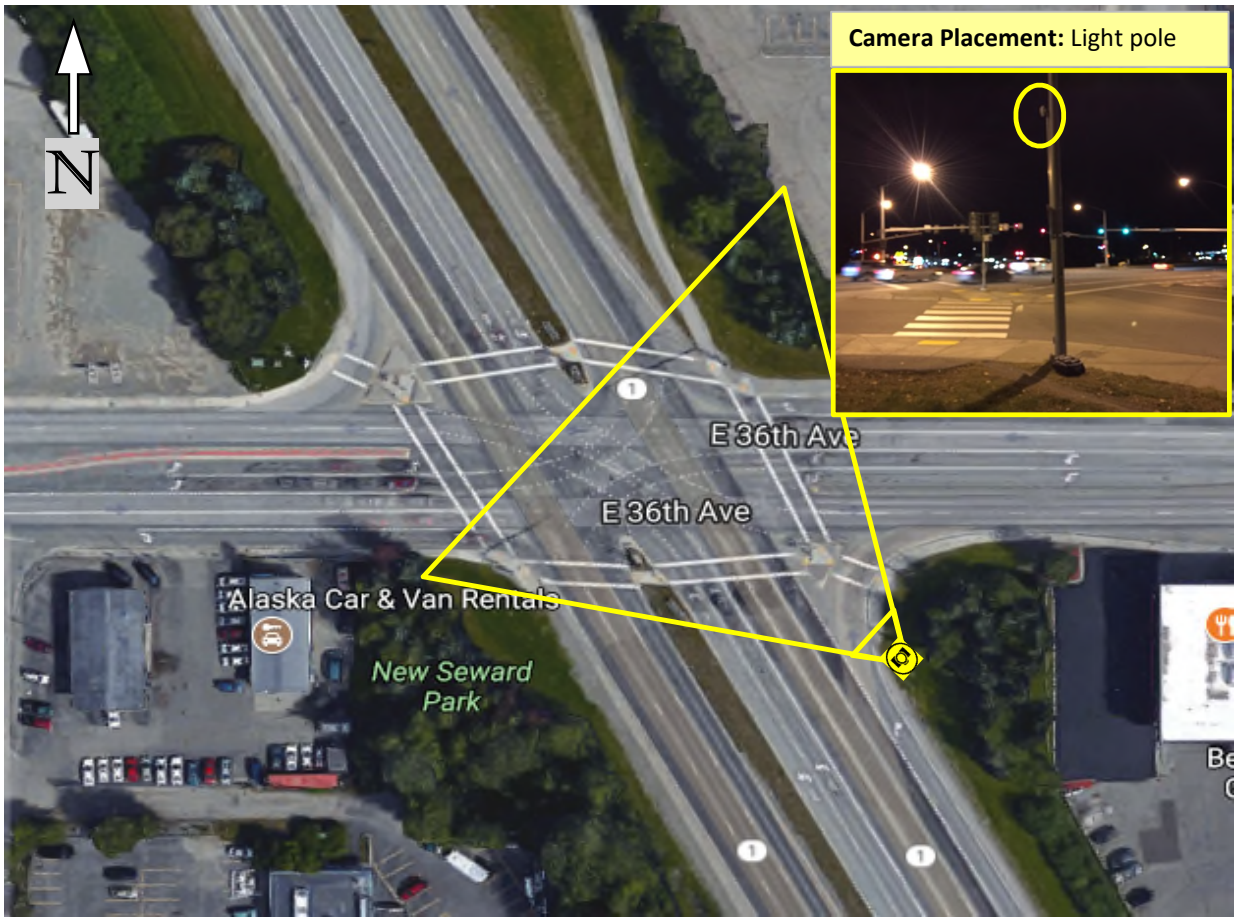
Count Description (e.g., day(s) of week, time periods, other related counts also occuring, etc.)

1 weekday (Tue, Wed, or Thu), setup while Seward Hwy was closed to capture results of detours (highway reopened overnight but no notices were sent to public so some detours still likely occuring)

Camera Setup/Video Footage	
Staff Responsible	Brad Coy
Setup Time	1/7/2019 6:00 PM
Take Down Time	1/9/2019 11:30 AM
Duration (hours)	41.50
Camera # (2-digit)	c3

Count Date, Time, Vendor	
Date	1/8/2019 (Tuesday)
Start Time	6:00 AM
End Time	7:00 PM
Duration (hours)	13.00
Count Vendor	CountingCars.com

Camera Placement



Other Notes (Before, During, or After Count)

Turning Movement Count

Seward Hwy & 36th Ave

Total Vehicles (15-Minute Periods)

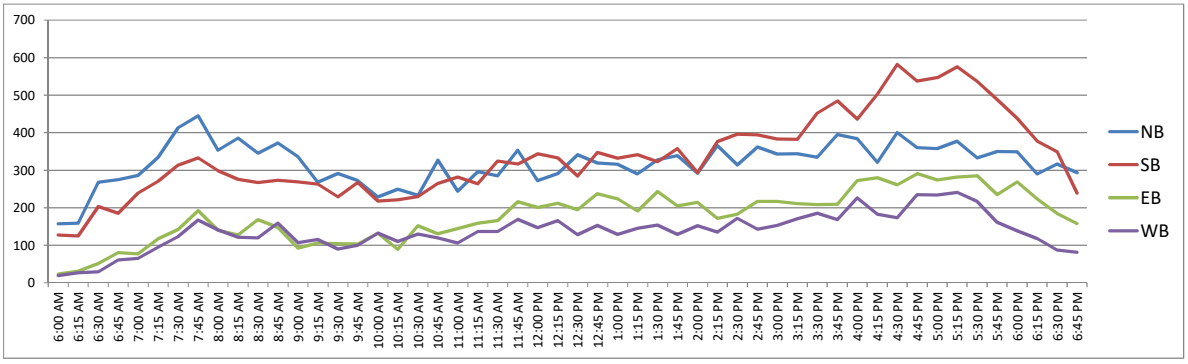
All Data

Tuesday, January 8, 2019

6:00 AM to 7:00 PM

Start Time	Seward Hwy (Northbound)					Seward Hwy (Southbound)					36th Ave (Eastbound)					36th Ave (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
6:00 AM	0	17	132	8	0	0	5	112	10	0	0	9	13	1	0	0	1	13	5	0	326
6:15 AM	0	16	122	21	0	0	7	107	11	0	0	14	16	1	0	0	6	12	9	0	342
6:30 AM	0	22	229	17	1	1	17	175	10	0	0	18	22	11	0	0	3	21	5	0	551
6:45 AM	0	30	214	31	0	1	15	156	13	0	0	35	36	9	0	0	11	27	23	0	601
7:00 AM	0	35	236	15	2	0	15	203	21	0	0	32	37	8	0	0	7	29	29	0	667
7:15 AM	0	30	272	33	0	0	30	223	18	0	0	47	61	9	0	0	13	51	31	0	818
7:30 AM	0	47	316	50	1	0	28	270	15	0	0	39	87	16	0	0	24	57	42	0	991
7:45 AM	0	68	339	38	0	0	37	269	27	0	0	49	132	11	0	0	31	89	47	0	1137
8:00 AM	0	43	274	36	1	0	39	231	29	1	0	44	78	18	0	0	22	81	38	0	933
8:15 AM	0	47	304	35	0	0	37	221	18	1	0	36	82	9	0	1	15	75	30	0	910
8:30 AM	0	47	269	30	1	0	23	234	10	2	0	63	90	15	0	0	28	59	33	0	901
8:45 AM	0	47	280	46	0	0	34	222	17	0	0	41	100	7	0	0	31	88	40	0	953
9:00 AM	0	54	250	32	1	1	33	225	10	0	0	22	59	11	0	0	27	49	31	0	804
9:15 AM	0	43	203	22	0	0	33	210	20	1	0	29	57	20	0	0	21	66	28	0	752
9:30 AM	0	33	240	18	0	0	21	200	8	0	0	40	53	11	0	0	19	44	27	0	714
9:45 AM	0	48	198	26	0	0	29	225	13	0	0	32	56	15	0	0	17	55	28	0	742
10:00 AM	0	30	176	23	0	0	19	193	6	0	0	42	76	14	0	0	37	68	27	0	711
10:15 AM	0	30	201	18	0	0	23	191	7	1	0	31	44	14	0	0	15	69	26	0	669
10:30 AM	0	23	192	18	2	1	29	192	8	1	0	51	75	26	1	0	20	79	31	0	745
10:45 AM	0	50	241	36	0	0	29	225	11	0	0	42	67	22	0	0	20	64	36	0	843
11:00 AM	0	24	199	21	0	1	28	243	10	0	0	51	61	32	0	0	23	55	28	2	776
11:15 AM	0	54	222	20	1	0	31	225	8	2	0	58	68	33	0	0	23	81	33	0	856
11:30 AM	0	37	223	25	1	3	34	278	9	0	0	51	88	27	0	0	17	80	40	0	912
11:45 AM	0	67	265	21	0	1	41	261	14	2	0	80	98	38	0	0	26	97	46	0	1055
12:00 PM	0	29	227	16	0	1	28	303	12	0	0	59	99	43	0	0	24	89	34	0	964
12:15 PM	0	49	217	25	0	1	38	281	13	0	0	79	91	42	0	0	28	89	49	0	1002
12:30 PM	0	45	261	35	0	0	30	246	8	0	0	61	85	49	0	0	23	75	30	0	948
12:45 PM	0	52	244	23	1	2	48	286	11	0	0	66	117	54	0	0	25	93	35	0	1056
1:00 PM	0	50	243	23	0	2	29	290	11	0	0	71	105	48	0	0	28	68	33	0	1001
1:15 PM	0	39	233	18	0	1	28	303	9	0	0	57	101	33	0	0	31	81	33	0	967
1:30 PM	0	42	257	29	2	0	49	265	9	0	0	75	103	65	0	0	31	92	31	0	1048
1:45 PM	0	39	266	34	0	1	42	305	10	0	0	59	106	40	0	0	16	81	32	0	1031
2:00 PM	0	26	228	38	0	1	34	249	10	0	0	79	93	42	0	0	32	85	35	0	952
2:15 PM	0	36	300	29	1	0	36	332	8	0	0	57	70	45	0	0	30	60	45	0	1048
2:30 PM	0	40	243	31	0	0	41	347	8	0	0	58	92	33	0	0	39	89	44	0	1065
2:45 PM	0	52	281	29	3	0	45	341	8	1	0	63	109	45	0	0	23	81	39	1	1116
3:00 PM	0	34	279	30	0	1	38	331	13	1	0	73	84	60	1	0	45	75	33	0	1096
3:15 PM	0	46	280	18	2	3	35	334	10	0	0	62	94	55	0	0	43	88	40	0	1108
3:30 PM	0	44	263	28	0	0	32	412	8	1	0	64	98	46	0	0	49	108	28	0	1180
3:45 PM	0	63	283	49	0	0	45	432	8	3	0	73	92	44	0	0	54	81	33	0	1257
4:00 PM	0	45	288	51	1	1	26	403	6	1	0	67	108	97	0	1	58	118	49	1	1318
4:15 PM	0	39	250	32	0	0	39	457	7	3	0	76	132	72	0	0	54	95	34	0	1287
4:30 PM	0	52	315	33	0	2	58	518	4	0	0	57	113	91	0	0	55	85	33	0	1416
4:45 PM	0	59	274	27	2	0	34	497	7	0	0	77	122	92	0	0	75	123	37	1	1424
5:00 PM	0	38	285	35	0	0	27	519	1	0	0	79	109	86	0	0	87	105	42	0	1413
5:15 PM	0	55	287	35	0	0	41	532	3	0	0	61	126	95	0	0	75	124	42	1	1476
5:30 PM	0	55	240	38	2	2	45	486	4	0	0	65	128	92	0	0	82	90	45	0	1372
5:45 PM	1	53	265	31	0	0	21	464	3	0	0	56	90	89	0	0	56	65	40	1	1234
6:00 PM	0	50	270	29	2	0	34	394	10	0	0	66	106	97	0	0	34	71	33	0	1194
6:15 PM	0	44	210	36	0	0	21	348	9	0	0	64	86	74	0	0	34	57	27	0	1010
6:30 PM	0	40	240	37	0	0	22	319	9	0	0	45	70	70	0	0	19	46	22	1	939
6:45 PM	0	38	227	29	0	0	15	216	8	0	0	47	67	44	0	1	21	39	20	0	772
Total	1	2,196	12,853	1,508	27	27	1,618	15,301	550	21	0	2,772	4,352	2,121	2	3	1,628	3,762	1,711	8	50,403

*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total" or graph below)



DOWL

Turning Movement Count

Seward Hwy & 36th Ave

Heavy Vehicles (15-Minute Periods)

All Data

Tuesday, January 8, 2019

6:00 AM to 7:00 PM

Start Time	Seward Hwy (Northbound)				Seward Hwy (Southbound)				36th Ave (Eastbound)				36th Ave (Westbound)				Period Total (Veh)
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	
6:00 AM	0	0	13	0	0	0	4	1	0	0	0	0	0	0	0	0	18
6:15 AM	0	0	5	0	0	0	2	0	0	1	1	0	0	0	0	0	9
6:30 AM	0	0	8	0	0	0	4	0	0	1	0	0	0	0	0	0	13
6:45 AM	0	0	12	1	0	0	6	0	0	1	0	0	0	0	0	1	21
7:00 AM	0	0	9	0	0	0	1	1	0	4	3	0	0	0	0	0	18
7:15 AM	0	0	6	0	0	2	4	0	0	4	0	0	0	0	0	1	17
7:30 AM	0	1	8	1	0	0	6	1	0	2	0	0	0	0	2	0	21
7:45 AM	0	0	5	1	0	0	6	2	0	1	1	0	0	0	0	0	16
8:00 AM	0	0	9	0	0	2	8	0	0	2	1	1	0	1	0	0	24
8:15 AM	0	1	9	2	0	0	6	0	0	6	1	0	0	0	0	0	25
8:30 AM	0	0	15	2	0	0	13	0	0	2	4	0	0	1	2	0	39
8:45 AM	0	0	4	1	0	0	12	0	0	1	0	0	0	3	2	1	24
9:00 AM	0	0	10	0	0	0	20	0	0	1	5	1	0	6	2	1	46
9:15 AM	0	0	5	0	0	1	9	1	0	0	0	0	0	1	0	0	17
9:30 AM	0	0	8	0	0	0	7	0	0	2	1	1	0	1	1	1	22
9:45 AM	0	0	9	0	0	3	13	1	0	2	0	0	0	2	1	1	32
10:00 AM	0	0	10	0	0	0	10	1	0	3	0	1	0	4	3	0	32
10:15 AM	0	0	17	0	0	0	6	0	0	1	3	0	0	1	2	1	31
10:30 AM	0	0	12	0	0	0	15	0	0	3	2	0	0	2	0	0	34
10:45 AM	0	1	11	0	0	0	11	0	0	0	0	1	0	0	0	0	24
11:00 AM	0	1	6	0	0	0	18	0	0	5	1	1	0	3	0	0	35
11:15 AM	0	0	16	0	0	0	14	0	0	2	3	0	0	0	0	0	35
11:30 AM	0	1	4	0	0	0	5	0	0	2	0	1	0	1	1	0	15
11:45 AM	0	2	15	1	0	1	11	0	0	3	2	0	0	1	2	0	38
12:00 PM	0	0	6	0	0	0	25	0	0	3	1	1	0	1	1	1	39
12:15 PM	0	1	4	1	0	0	12	1	0	1	1	0	0	0	0	2	23
12:30 PM	0	0	13	0	0	0	11	0	0	0	2	2	0	0	0	0	28
12:45 PM	0	0	10	0	0	2	12	0	0	1	0	0	0	0	1	1	27
1:00 PM	0	0	11	2	0	0	7	0	0	0	1	0	0	0	1	1	23
1:15 PM	0	0	12	1	0	0	13	0	0	1	1	0	0	1	1	0	30
1:30 PM	0	1	11	0	0	2	16	0	0	2	1	0	0	2	0	0	35
1:45 PM	0	0	14	2	0	0	21	0	0	2	0	0	0	0	1	0	40
2:00 PM	0	1	7	0	0	0	9	0	0	0	1	2	0	0	0	2	22
2:15 PM	0	0	15	1	0	0	17	0	0	0	0	0	0	1	1	1	36
2:30 PM	0	1	15	2	0	0	18	0	0	3	0	1	0	1	0	1	42
2:45 PM	0	0	8	2	0	0	11	0	0	0	2	0	0	0	0	0	23
3:00 PM	0	1	7	1	0	0	13	0	0	0	2	1	0	0	1	1	27
3:15 PM	0	0	7	1	0	0	9	0	0	0	0	0	0	0	0	2	19
3:30 PM	0	0	5	1	0	1	17	0	0	2	0	1	0	1	0	0	28
3:45 PM	0	0	8	1	0	0	14	1	0	0	1	0	0	0	0	0	25
4:00 PM	0	1	8	0	0	0	12	0	0	0	0	0	0	0	1	0	22
4:15 PM	0	0	7	0	0	0	10	0	0	1	0	0	0	3	0	0	21
4:30 PM	0	0	7	1	0	0	13	0	0	1	0	0	0	0	0	0	22
4:45 PM	0	1	12	0	0	0	6	0	0	1	1	1	0	0	0	0	22
5:00 PM	0	0	12	0	0	0	9	0	0	0	0	0	0	0	0	0	21
5:15 PM	0	0	5	0	0	0	5	0	0	0	1	0	0	1	0	1	13
5:30 PM	0	0	1	1	0	0	1	0	0	0	0	0	0	0	1	0	4
5:45 PM	0	0	3	0	0	1	6	1	0	0	0	0	0	0	1	0	12
6:00 PM	0	0	4	0	0	0	1	0	0	1	0	0	0	1	0	0	7
6:15 PM	0	0	4	0	0	0	3	0	0	0	0	0	0	0	0	0	7
6:30 PM	0	1	2	0	0	0	2	0	0	0	0	0	0	0	0	0	5
6:45 PM	0	0	2	0	0	0	3	0	0	0	0	0	0	0	0	0	5
Total	0	15	446	26	0	15	507	11	0	68	43	16	0	39	28	20	1,234

Turning Movement Count

Seward Hwy & 36th Ave

Total Vehicles (15-Minute Periods)

AM Peak Hour

Tuesday, January 8, 2019

7:00 AM to 9:00 AM

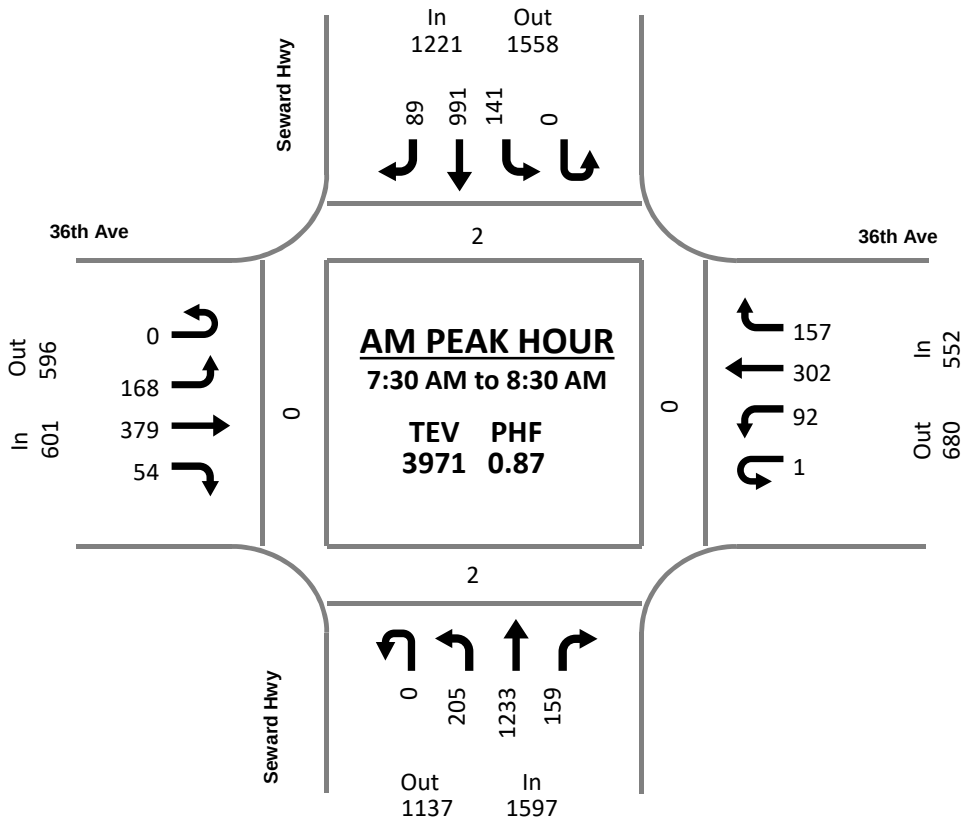
Start Time	Seward Hwy (Northbound)					Seward Hwy (Southbound)					36th Ave (Eastbound)					36th Ave (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
7:00 AM	0	35	236	15	2	0	15	203	21	0	0	32	37	8	0	0	7	29	29	0	667
7:15 AM	0	30	272	33	0	0	30	223	18	0	0	47	61	9	0	0	13	51	31	0	818
7:30 AM	0	47	316	50	1	0	28	270	15	0	0	39	87	16	0	0	24	57	42	0	991
7:45 AM	0	68	339	38	0	0	37	269	27	0	0	49	132	11	0	0	31	89	47	0	1137
8:00 AM	0	43	274	36	1	0	39	231	29	1	0	44	78	18	0	0	22	81	38	0	933
8:15 AM	0	47	304	35	0	0	37	221	18	1	0	36	82	9	0	1	15	75	30	0	910
8:30 AM	0	47	269	30	1	0	23	234	10	2	0	63	90	15	0	0	28	59	33	0	901
8:45 AM	0	47	280	46	0	0	34	222	17	0	0	41	100	7	0	0	31	88	40	0	953
Total	0	364	2,290	283	5	0	243	1,873	155	4	0	351	667	93	0	1	171	529	290	0	7,310

*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total")

Peak Hour Summary

7:30 AM to 8:30 AM

Data Type	Seward Hwy (Northbound)					Seward Hwy (Southbound)					36th Ave (Eastbound)					36th Ave (Westbound)					Peak Hour Total
	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	
Volume	0	205	1233	159	2	0	141	991	89	2	0	168	379	54	0	1	92	302	157	0	3971
%HV	0.0%	1.0%	2.5%	2.5%		0.0%	1.4%	2.6%	3.4%		0.0%	6.5%	0.8%	1.9%		0.0%	1.1%	0.7%	0.0%		2.2%
PHF	0.00	0.75	0.91	0.80	0.50	0.00	0.90	0.92	0.77	0.50	0.00	0.86	0.72	0.75	0.00	0.25	0.74	0.85	0.84	0.00	0.87
Volume			1597					1221					601					552			3971
%HV			2.3%					2.5%					2.5%					0.5%			2.2%
PHF			0.90					0.92					0.78					0.83			0.87



Turning Movement Count

Seward Hwy & 36th Ave

Total Vehicles (15-Minute Periods)

PM Peak Hour

Tuesday, January 2, 2019

4:00 PM to 6:00 PM

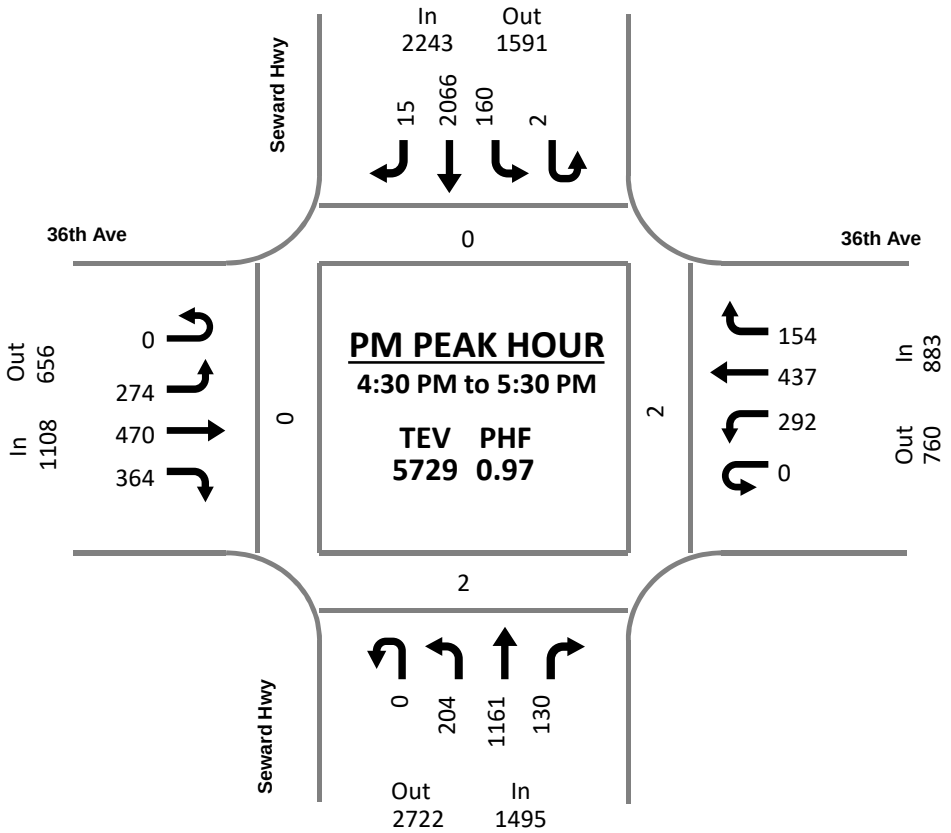
Start Time	Seward Hwy (Northbound)					Seward Hwy (Southbound)					36th Ave (Eastbound)					36th Ave (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
4:00 PM	0	45	288	51	1	1	26	403	6	1	0	67	108	97	0	1	58	118	49	1	1318
4:15 PM	0	39	250	32	0	0	39	457	7	3	0	76	132	72	0	0	54	95	34	0	1287
4:30 PM	0	52	315	33	0	2	58	518	4	0	0	57	113	91	0	0	55	85	33	0	1416
4:45 PM	0	59	274	27	2	0	34	497	7	0	0	77	122	92	0	0	75	123	37	1	1424
5:00 PM	0	38	285	35	0	0	27	519	1	0	0	79	109	86	0	0	87	105	42	0	1413
5:15 PM	0	55	287	35	0	0	41	532	3	0	0	61	126	95	0	0	75	124	42	1	1476
5:30 PM	0	55	240	38	2	2	45	486	4	0	0	65	128	92	0	0	82	90	45	0	1372
5:45 PM	1	53	265	31	0	0	21	464	3	0	0	56	90	89	0	0	56	65	40	1	1234
Total	1	396	2,204	282	5	5	291	3,876	35	4	0	538	928	714	0	1	542	805	322	4	10,940

*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total")

Peak Hour Summary

4:30 PM to 5:30 PM

Data Type	Seward Hwy (Northbound)					Seward Hwy (Southbound)					36th Ave (Eastbound)					36th Ave (Westbound)					Peak Hour Total
	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	
Volume	0	204	1161	130	2	2	160	2066	15	0	0	274	470	364	0	0	292	437	154	2	5729
%HV	0.0%	0.5%	3.1%	0.8%		0.0%	0.0%	1.6%	0.0%		0.0%	0.7%	0.4%	0.3%		0.0%	0.3%	0.0%	0.6%		1.4%
PHF	0.00	0.86	0.92	0.93	0.25	0.25	0.69	0.97	0.54	0.00	0.00	0.87	0.93	0.96	0.00	0.00	0.84	0.88	0.92	0.50	0.97
Volume			1495					2243					1108					883			5729
%HV			2.5%					1.5%					0.5%					0.2%			1.4%
PHF			0.93					0.96					0.95					0.92			0.97



Traffic Camera Count and Placement Information

Intersection Name: Tudor Rd & C St

Intersection Location	
Northbound Street	C St
Southbound Street	C St
Eastbound Street	Tudor Rd
Westbound Street	Tudor Rd
City, State	Anchorage, AK

Project Information	
Name	Midtown Congestion Relief
Client	AK DOT&PF
Project #	1124.62458.01, Phase 02
PM/Traffic Lead	Steve Noble/Brad Coy

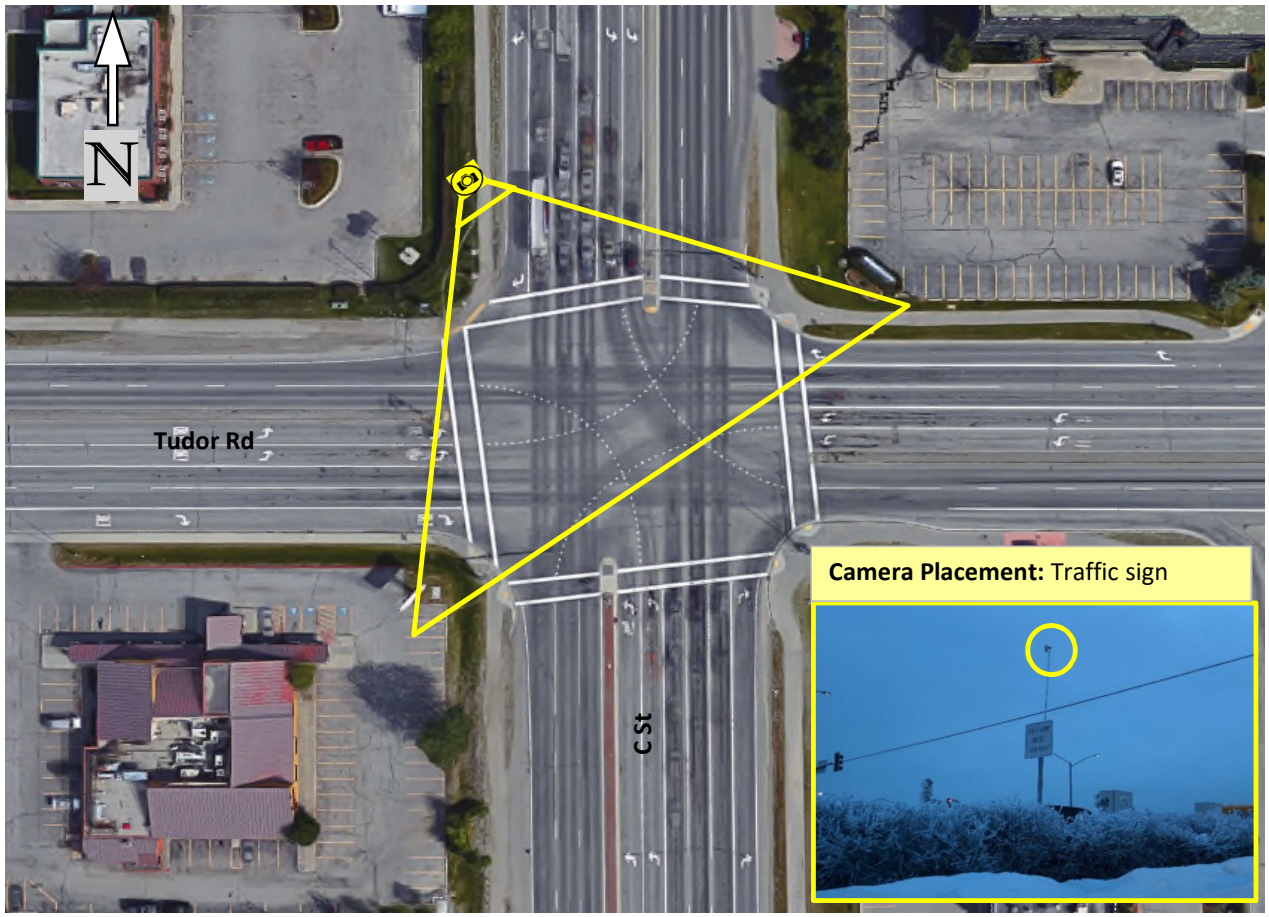
Count Description (e.g., day(s) of week, time periods, other related counts also occuring, etc.)

1 weekday (Tue, Wed, or Thu), setup while Seward Hwy was closed to capture results of detours (highway reopened overnight but no notices were sent to public so some detours still likely occuring)

Camera Setup/Video Footage	
Staff Responsible	Brad Coy
Setup Time	1/7/2019 4:20 PM
Take Down Time	1/9/2019 10:58 AM
Duration (hours)	42.63
Camera # (2-digit)	49

Count Date, Time, Vendor	
Date	1/8/2019 (Tuesday)
Start Time	6:00 AM
End Time	7:00 PM
Duration (hours)	13.00
Count Vendor	CountingCars.com

Camera Placement



Other Notes (Before, During, or After Count)

DOWL

Turning Movement Count

Tudor Rd & C St

Total Vehicles (15-Minute Periods)

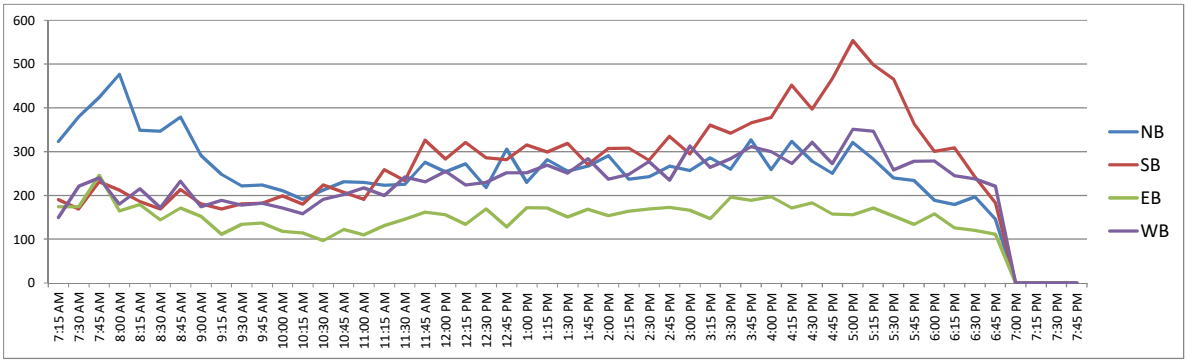
All Data

Tuesday, January 8, 2019

6:00 AM to 7:00 PM

Start Time	C St (Northbound)					C St (Southbound)					Tudor Rd (Eastbound)					Tudor Rd (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
7:15 AM	0	24	253	46	0	1	37	143	9	0	0	46	120	8	0	0	29	83	37	0	836
7:30 AM	0	34	304	42	1	0	26	130	13	1	1	51	116	6	1	0	50	112	59	1	944
7:45 AM	0	33	324	67	1	0	49	173	9	1	0	84	151	11	0	1	45	137	57	0	1141
8:00 AM	0	54	366	57	0	0	34	159	19	1	1	65	94	5	0	0	36	96	48	0	1034
8:15 AM	0	36	257	56	0	0	30	143	13	1	1	57	117	4	0	3	43	122	47	0	929
8:30 AM	0	32	265	50	0	0	30	122	17	0	4	39	98	3	0	4	18	109	41	0	832
8:45 AM	0	42	288	49	0	0	34	154	26	0	2	49	114	6	0	7	48	132	46	0	997
9:00 AM	0	16	227	48	0	0	34	126	21	1	1	38	101	12	0	2	40	100	32	0	798
9:15 AM	0	23	186	39	0	0	36	113	20	0	0	23	83	5	0	6	32	113	38	0	717
9:30 AM	2	18	169	33	0	0	30	135	16	0	2	26	102	4	0	9	27	101	41	0	715
9:45 AM	2	19	160	43	0	1	33	134	14	1	3	25	102	7	0	4	36	103	39	2	725
10:00 AM	0	19	165	27	0	1	39	142	17	0	0	18	90	10	0	6	32	99	34	0	699
10:15 AM	1	16	144	30	2	0	48	113	19	0	1	21	81	11	0	2	27	96	33	0	643
10:30 AM	2	17	164	29	0	1	44	157	22	0	2	20	68	7	0	3	52	88	48	0	724
10:45 AM	0	19	177	35	0	0	52	137	18	0	3	31	79	9	0	4	37	119	42	0	762
11:00 AM	2	18	165	45	0	0	32	136	23	0	0	25	71	14	0	9	45	124	39	0	748
11:15 AM	0	13	164	46	1	0	65	171	23	0	3	36	85	7	0	4	43	122	31	0	813
11:30 AM	2	26	157	40	0	0	56	158	20	0	4	29	92	21	0	10	54	143	35	0	847
11:45 AM	0	17	210	49	0	0	88	211	27	0	2	49	104	7	2	11	55	118	47	0	995
12:00 PM	0	21	194	39	2	0	74	181	28	1	3	38	99	16	0	9	45	163	38	1	948
12:15 PM	0	21	209	42	0	0	72	220	29	0	6	31	84	13	0	9	46	122	47	1	951
12:30 PM	4	19	155	40	0	0	66	191	29	2	2	45	117	5	0	9	40	133	48	1	903
12:45 PM	4	24	233	45	3	2	62	193	25	3	2	32	80	14	1	3	63	141	45	2	968
1:00 PM	1	19	171	39	1	0	76	213	26	2	6	42	106	18	0	5	69	141	37	1	969
1:15 PM	3	30	197	52	0	0	65	206	28	0	3	34	111	23	0	4	60	155	50	0	1021
1:30 PM	3	24	189	39	0	1	58	227	33	0	1	36	96	18	0	9	51	140	51	0	976
1:45 PM	1	23	197	46	0	0	64	185	22	5	1	29	129	9	0	7	62	155	60	0	990
2:00 PM	2	24	230	35	1	0	69	217	21	0	0	35	108	11	0	6	54	133	44	2	989
2:15 PM	1	15	179	42	0	2	74	191	41	1	1	41	115	7	0	0	55	156	37	2	957
2:30 PM	0	12	194	37	5	1	57	193	29	1	0	31	116	22	0	9	60	168	40	1	969
2:45 PM	3	19	200	45	1	0	71	237	27	1	5	44	109	15	0	5	51	134	45	1	1010
3:00 PM	2	26	183	46	3	1	57	204	33	1	4	33	117	12	1	8	70	184	51	0	1031
3:15 PM	3	22	221	40	0	1	88	216	56	0	1	38	99	9	1	7	58	155	44	1	1058
3:30 PM	2	21	191	46	0	2	69	223	48	0	0	38	144	14	3	8	49	180	47	0	1082
3:45 PM	3	24	245	55	0	0	62	257	47	0	5	49	116	19	0	5	64	181	62	0	1194
4:00 PM	2	21	196	40	0	0	86	237	55	1	4	54	123	16	0	5	71	178	46	2	1134
4:15 PM	0	28	257	38	1	0	85	302	65	0	4	33	121	13	0	2	68	161	42	2	1219
4:30 PM	0	25	223	30	0	0	76	268	53	2	1	43	114	25	0	3	72	199	48	0	1180
4:45 PM	0	27	183	40	0	1	73	322	71	1	3	36	104	14	0	4	45	180	44	0	1147
5:00 PM	1	35	267	18	0	0	91	374	89	0	12	44	85	15	0	3	97	194	57	0	1382
5:15 PM	2	31	216	34	0	0	86	340	73	1	2	53	102	14	1	4	70	235	38	0	1300
5:30 PM	3	19	195	23	0	1	90	316	59	1	3	39	94	17	2	5	53	152	48	0	1117
5:45 PM	2	19	184	29	0	0	65	238	61	0	2	24	95	13	0	8	52	180	38	0	1010
6:00 PM	1	22	142	24	0	0	59	199	43	0	1	26	114	17	0	6	57	176	40	0	927
6:15 PM	1	15	145	18	0	0	57	217	35	1	3	26	84	13	0	8	46	157	34	0	859
6:30 PM	1	14	153	29	0	0	22	168	52	1	3	23	92	2	0	8	39	158	33	0	797
6:45 PM	1	13	107	25	0	0	44	114	25	0	4	23	74	10	0	9	43	142	27	0	661
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	57	1,141	10,167	2,005	22	18	2,809	9,588	1,581	31	116	1,828	5,159	573	12	260	2,467	6,995	2,140	20	46,904

*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total" or graph below)



DOWL

Turning Movement Count

Tudor Rd & C St

Heavy Vehicles (15-Minute Periods)

All Data

Tuesday, January 8, 2019

6:00 AM to 7:00 PM

Start Time	C St (Northbound)				C St (Southbound)				Tudor Rd (Eastbound)				Tudor Rd (Westbound)				Period Total (Veh)
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	
7:15 AM	0	2	3	1	0	1	2	0	0	0	0	1	0	0	2	2	14
7:30 AM	0	1	7	2	0	2	3	0	0	1	1	1	0	0	1	2	21
7:45 AM	0	0	7	3	0	0	7	0	0	1	2	0	0	1	5	1	27
8:00 AM	0	1	9	6	0	2	8	0	0	3	1	0	0	1	1	1	33
8:15 AM	0	0	12	2	0	0	5	0	0	3	0	0	0	0	4	2	28
8:30 AM	0	1	12	2	0	1	6	2	0	1	2	1	0	0	1	1	30
8:45 AM	0	0	12	0	0	2	10	1	0	3	3	0	0	1	3	0	35
9:00 AM	0	1	12	0	0	3	7	2	0	1	5	3	0	1	1	2	38
9:15 AM	0	4	13	0	0	1	8	0	0	1	3	0	0	0	3	1	34
9:30 AM	0	2	7	1	0	2	11	1	0	3	8	0	0	2	7	3	47
9:45 AM	0	0	7	0	0	1	6	1	0	2	0	0	0	0	1	1	19
10:00 AM	0	0	9	0	0	4	11	0	0	1	2	1	0	0	2	3	33
10:15 AM	0	0	9	4	0	1	10	0	0	1	4	0	0	3	2	4	38
10:30 AM	0	3	15	1	0	1	5	0	0	1	0	1	0	1	3	1	32
10:45 AM	0	0	13	1	0	3	6	1	0	3	3	1	0	1	2	2	36
11:00 AM	0	0	8	1	0	3	11	0	0	1	2	1	0	1	4	3	35
11:15 AM	0	0	10	1	0	3	8	2	0	1	1	0	0	1	0	1	28
11:30 AM	0	0	6	1	0	3	7	0	0	2	2	1	0	4	3	2	31
11:45 AM	0	0	10	0	0	3	3	0	0	3	5	1	0	2	2	1	30
12:00 PM	0	0	6	0	0	0	16	2	0	0	2	1	0	3	2	0	32
12:15 PM	0	0	8	1	0	1	8	0	0	0	3	0	0	2	2	2	27
12:30 PM	0	1	9	2	0	3	5	3	0	2	3	0	0	1	1	0	30
12:45 PM	0	1	6	1	0	3	10	0	0	2	5	0	0	1	6	1	36
1:00 PM	0	1	7	2	0	2	18	0	0	0	2	1	0	6	2	2	43
1:15 PM	0	3	10	1	0	3	8	2	0	2	1	2	0	0	1	2	35
1:30 PM	0	0	10	0	0	2	15	0	0	2	4	1	0	3	1	3	41
1:45 PM	0	2	18	1	0	4	7	0	0	0	1	2	0	1	3	3	42
2:00 PM	0	1	13	0	0	5	15	0	0	0	1	1	0	3	2	2	43
2:15 PM	0	0	6	0	0	4	11	1	0	1	3	1	0	2	2	0	31
2:30 PM	0	1	7	2	0	1	11	0	0	0	3	1	0	1	4	4	35
2:45 PM	0	1	6	0	0	3	12	0	0	1	2	0	0	2	6	0	33
3:00 PM	0	0	13	1	0	2	13	1	0	2	3	1	0	2	5	3	46
3:15 PM	0	3	9	2	0	2	11	1	0	1	1	0	0	2	3	2	37
3:30 PM	0	1	11	0	0	2	10	0	0	1	4	0	0	2	2	0	33
3:45 PM	0	3	8	0	0	1	5	1	0	1	2	1	0	1	1	3	27
4:00 PM	0	1	7	0	0	3	7	1	0	0	2	0	0	2	4	0	27
4:15 PM	0	4	5	0	0	3	16	0	0	0	3	0	0	3	0	2	36
4:30 PM	0	1	10	1	0	5	2	0	0	1	2	0	0	1	2	1	26
4:45 PM	0	0	7	0	0	2	6	0	0	0	3	0	0	1	1	2	22
5:00 PM	0	2	3	0	0	1	5	0	0	1	2	0	0	0	1	2	17
5:15 PM	0	0	6	0	0	4	4	0	0	4	0	0	0	1	1	0	20
5:30 PM	0	0	1	0	0	2	4	0	0	1	0	0	0	1	1	1	11
5:45 PM	0	0	6	0	0	2	3	0	0	0	0	0	0	0	1	1	13
6:00 PM	0	0	2	0	0	1	2	0	0	0	1	0	0	0	0	1	7
6:15 PM	0	0	0	0	0	1	3	0	0	0	1	0	0	0	1	1	7
6:30 PM	0	0	2	1	0	0	2	1	0	0	1	0	0	0	2	2	11
6:45 PM	0	1	3	0	0	0	0	1	0	0	0	0	0	0	1	1	7
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	47	399	44	0	101	368	26	0	55	102	25	0	61	110	83	1,421

Turning Movement Count

Tudor Rd & C St

Total Vehicles (15-Minute Periods)

AM Peak Hour

Tuesday, January 8, 2019

7:00 AM to 9:00 AM

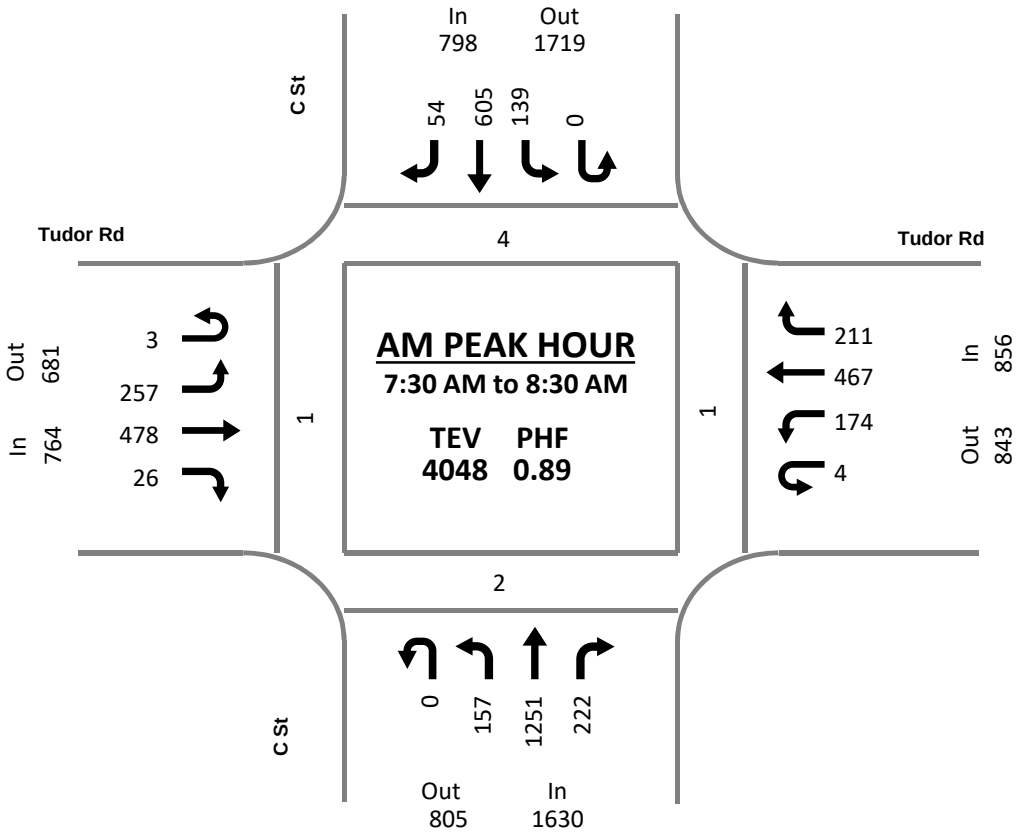
Start Time	C St (Northbound)					C St (Southbound)					Tudor Rd (Eastbound)					Tudor Rd (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
7:00 AM	0	17	144	28	0	0	23	90	11	0	4	29	97	8	0	0	28	92	29	0	600
7:15 AM	0	24	253	46	0	1	37	143	9	0	0	46	120	8	0	0	29	83	37	0	836
7:30 AM	0	34	304	42	1	0	26	130	13	1	1	51	116	6	1	0	50	112	59	1	944
7:45 AM	0	33	324	67	1	0	49	173	9	1	0	84	151	11	0	1	45	137	57	0	1141
8:00 AM	0	54	366	57	0	0	34	159	19	1	1	65	94	5	0	0	36	96	48	0	1034
8:15 AM	0	36	257	56	0	0	30	143	13	1	1	57	117	4	0	3	43	122	47	0	929
8:30 AM	0	32	265	50	0	0	30	122	17	0	4	39	98	3	0	4	18	109	41	0	832
8:45 AM	0	42	288	49	0	0	34	154	26	0	2	49	114	6	0	7	48	132	46	0	997
Total	0	272	2,201	395	2	1	263	1,114	117	4	13	420	907	51	1	15	297	883	364	1	7,313

*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total")

Peak Hour Summary

7:30 AM to 8:30 AM

Data Type	C St (Northbound)					C St (Southbound)					Tudor Rd (Eastbound)					Tudor Rd (Westbound)					Peak Hour Total
	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	
Volume	0	157	1251	222	2	0	139	605	54	4	3	257	478	26	1	4	174	467	211	1	4048
%HV	0.0%	1.3%	2.8%	5.9%		0.0%	2.9%	3.8%	0.0%		0.0%	3.1%	0.8%	3.8%		0.0%	1.1%	2.4%	2.8%		2.7%
PHF	0.00	0.73	0.85	0.83	0.50	0.00	0.71	0.87	0.71	1.00	0.75	0.76	0.79	0.59	0.25	0.33	0.87	0.85	0.89	0.25	0.89
Volume			1630					798					764					856			4048
%HV			3.1%					3.4%					1.7%					2.2%			2.7%
PHF			0.85					0.86					0.78					0.89			0.89



Turning Movement Count

Tudor Rd & C St

Total Vehicles (15-Minute Periods)

PM Peak Hour

Tuesday, January 8, 2019

4:00 PM to 6:00 PM

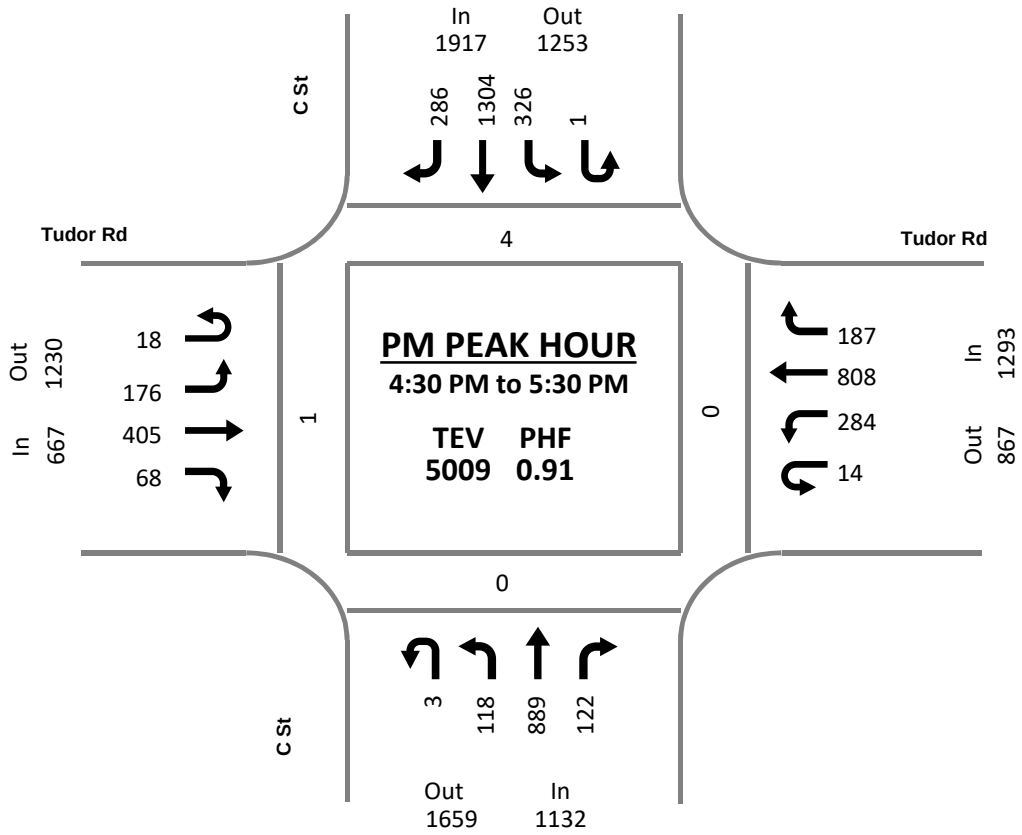
Start Time	C St (Northbound)					C St (Southbound)					Tudor Rd (Eastbound)					Tudor Rd (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
4:00 PM	2	21	196	40	0	0	86	237	55	1	4	54	123	16	0	5	71	178	46	2	1134
4:15 PM	0	28	257	38	1	0	85	302	65	0	4	33	121	13	0	2	68	161	42	2	1219
4:30 PM	0	25	223	30	0	0	76	268	53	2	1	43	114	25	0	3	72	199	48	0	1180
4:45 PM	0	27	183	40	0	1	73	322	71	1	3	36	104	14	0	4	45	180	44	0	1147
5:00 PM	1	35	267	18	0	0	91	374	89	0	12	44	85	15	0	3	97	194	57	0	1382
5:15 PM	2	31	216	34	0	0	86	340	73	1	2	53	102	14	1	4	70	235	38	0	1300
5:30 PM	3	19	195	23	0	1	90	316	59	1	3	39	94	17	2	5	53	152	48	0	1117
5:45 PM	2	19	184	29	0	0	65	238	61	0	2	24	95	13	0	8	52	180	38	0	1010
Total	10	205	1,721	252	1	2	652	2,397	526	6	31	326	838	127	3	34	528	1,479	361	4	9,489

*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total")

Peak Hour Summary

4:30 PM to 5:30 PM

Data Type	C St (Northbound)					C St (Southbound)					Tudor Rd (Eastbound)					Tudor Rd (Westbound)					Peak Hour Total
	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	
Volume	3	118	889	122	0	1	326	1304	286	4	18	176	405	68	1	14	284	808	187	0	5009
%HV	0.0%	2.5%	2.9%	0.8%		0.0%	3.7%	1.3%	0.0%		0.0%	3.4%	1.7%	0.0%		0.0%	1.1%	0.6%	2.7%		1.7%
PHF	0.38	0.84	0.83	0.76	0.00	0.25	0.90	0.87	0.80	0.50	0.38	0.83	0.89	0.68	0.25	0.88	0.73	0.86	0.82	0.00	0.91
Volume			1132					1917					667					1293			5009
%HV			2.7%					1.5%					1.9%					1.0%			1.7%
PHF			0.88					0.87					0.91					0.92			0.91



Traffic Camera Count and Placement Information

Intersection Name: Tudor Rd & Lake Otis Pkwy

Intersection Location	
Northbound Street	Lake Otis Pkwy
Southbound Street	Lake Otis Pkwy
Eastbound Street	Tudor Rd
Westbound Street	Tudor Rd
City, State	Anchorage, AK

Project Information	
Name	Midtown Congestion Relief
Client	AK DOT&PF
Project #	1124.62458.01, Phase 02
PM/Traffic Lead	Steve Noble/Brad Coy

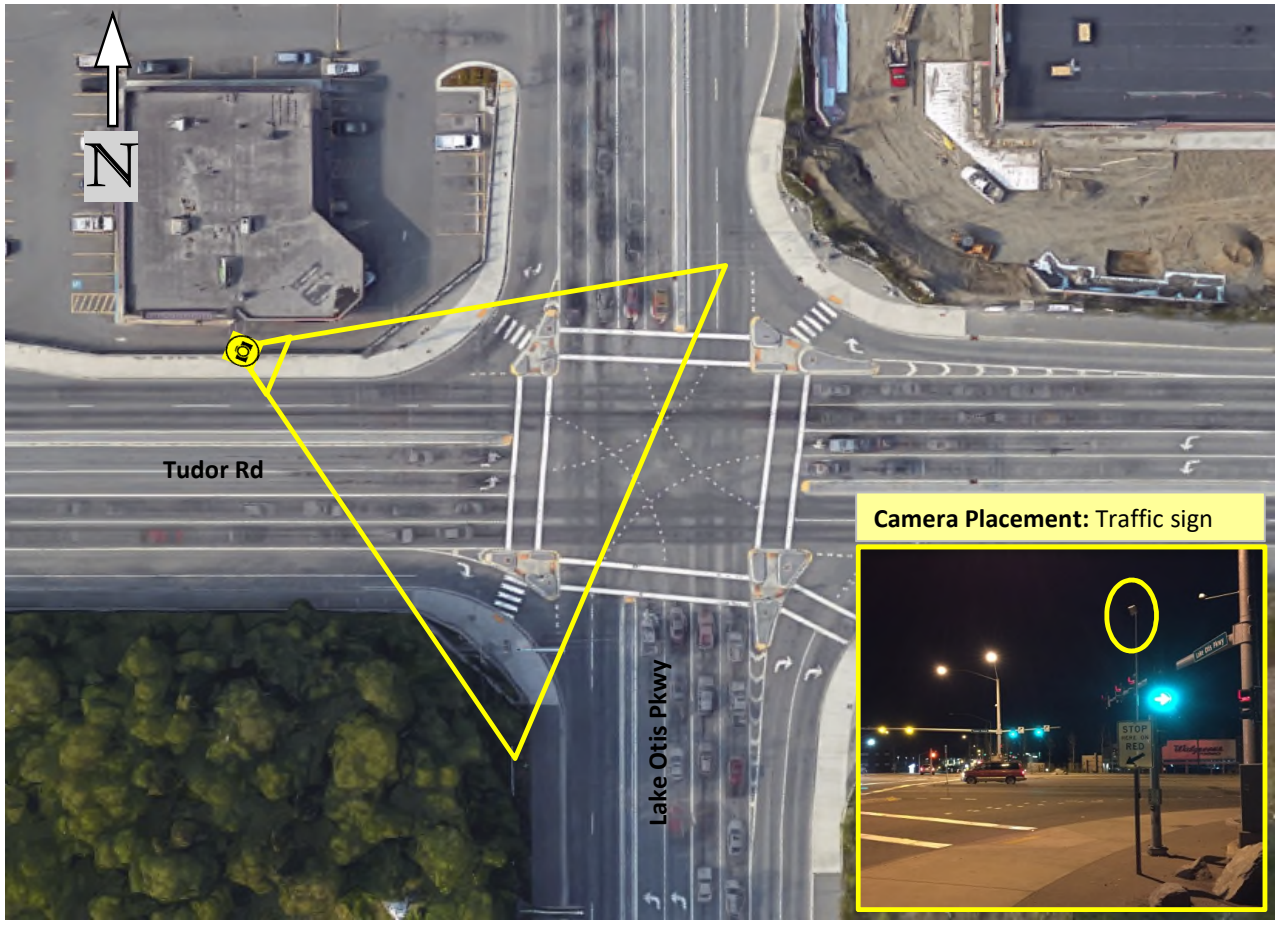
Count Description (e.g., day(s) of week, time periods, other related counts also occuring, etc.)

1 weekday (Tue, Wed, or Thu), setup while Seward Hwy was closed to capture results of detours (highway reopened overnight but no notices were sent to public so some detours still likely occuring)

Camera Setup/Video Footage	
Staff Responsible	Brad Coy
Setup Time	1/7/2019 5:52 PM
Take Down Time	1/9/2019 11:23 AM
Duration (hours)	41.52
Camera # (2-digit)	d7

Count Date, Time, Vendor	
Date	1/8/2019 (Tuesday)
Start Time	6:00 AM
End Time	7:00 PM
Duration (hours)	13.00
Count Vendor	CountingCars.com

Camera Placement



Other Notes (Before, During, or After Count)

DOWL

Turning Movement Count

Tudor Rd & Lake Otis Pkwy

Total Vehicles (15-Minute Periods)

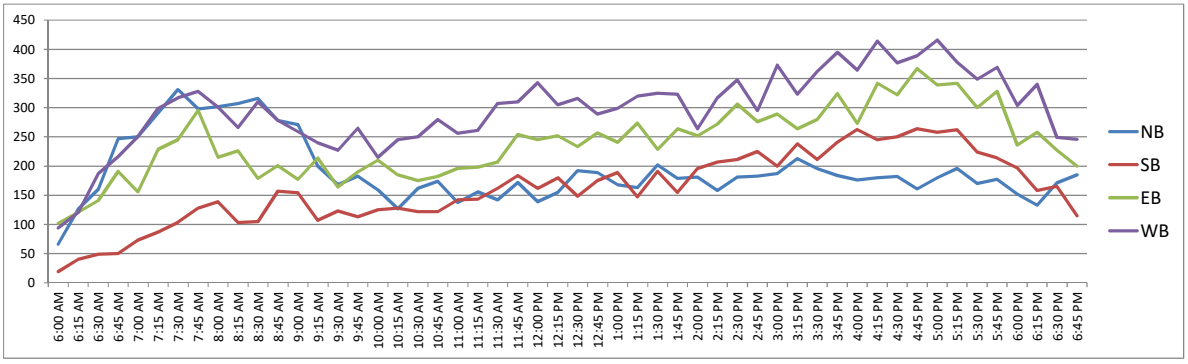
All Data

Tuesday, January 8, 2019

6:00 AM to 7:00 PM

Start Time	Lake Otis Pkwy (Northbound)					Lake Otis Pkwy (Southbound)					Tudor Rd (Eastbound)					Tudor Rd (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
6:00 AM	0	14	30	22	0	0	1	13	5	0	0	13	85	4	0	0	12	73	9	0	281
6:15 AM	0	20	68	38	0	0	4	27	9	0	0	24	93	4	0	0	9	93	18	0	407
6:30 AM	0	35	87	38	0	0	6	23	20	0	0	39	95	7	0	0	13	163	11	4	537
6:45 AM	0	63	124	60	0	0	9	26	15	1	0	50	139	2	1	0	23	166	27	2	704
7:00 AM	0	52	146	52	1	0	11	43	19	0	0	35	116	5	2	0	34	185	32	0	730
7:15 AM	0	47	185	59	0	0	12	57	18	0	0	57	163	9	0	0	19	262	18	0	906
7:30 AM	0	79	182	70	0	0	14	56	34	0	0	88	150	7	0	0	38	239	40	0	997
7:45 AM	0	64	160	74	0	0	14	82	32	0	0	75	196	24	1	0	41	253	34	1	1049
8:00 AM	0	43	172	87	0	0	11	94	34	0	0	52	143	20	0	0	43	217	41	1	957
8:15 AM	0	55	175	77	1	0	12	53	38	0	0	70	135	21	0	0	24	204	38	0	902
8:30 AM	0	61	170	85	0	0	15	54	36	0	0	44	116	19	0	0	43	226	41	0	910
8:45 AM	1	53	154	70	0	0	25	88	44	0	0	55	127	19	0	0	29	217	32	0	914
9:00 AM	0	61	152	58	0	0	21	98	35	0	0	46	119	12	0	0	56	175	28	0	861
9:15 AM	0	30	119	51	0	0	16	45	46	0	0	64	131	19	2	0	34	180	26	1	761
9:30 AM	0	35	100	33	0	0	29	60	34	0	0	48	109	7	0	0	35	168	24	0	682
9:45 AM	0	32	101	50	0	0	19	61	33	0	0	44	135	11	0	0	36	199	30	1	751
10:00 AM	0	24	92	43	2	1	24	64	36	0	0	60	138	12	2	1	34	150	30	1	709
10:15 AM	0	25	65	37	1	0	28	58	42	0	0	51	123	11	1	0	46	169	30	0	685
10:30 AM	0	24	102	36	0	0	18	62	42	0	0	51	107	17	0	0	41	168	41	0	709
10:45 AM	0	38	102	34	0	0	30	62	30	0	0	53	122	7	0	0	42	205	33	0	758
11:00 AM	0	24	70	44	0	0	22	73	47	0	0	48	138	10	1	0	46	179	31	0	732
11:15 AM	0	24	95	37	0	0	28	69	46	0	0	41	134	23	1	0	49	179	33	0	758
11:30 AM	0	31	72	39	0	0	35	62	65	0	0	45	147	15	0	0	47	227	33	0	818
11:45 AM	0	41	86	45	2	0	49	86	49	0	0	50	170	34	1	0	40	240	30	1	920
12:00 PM	0	33	72	34	1	0	40	83	39	0	0	45	178	22	1	0	47	247	49	0	889
12:15 PM	0	22	83	50	1	0	41	88	51	0	0	69	163	20	2	0	59	220	26	0	892
12:30 PM	0	40	97	55	0	0	34	70	44	6	0	46	163	24	0	0	55	218	43	0	889
12:45 PM	0	28	114	47	0	0	42	87	46	0	0	64	179	14	1	0	39	212	38	1	910
1:00 PM	0	32	95	41	1	0	44	101	44	0	0	56	168	17	0	0	45	216	38	2	897
1:15 PM	0	23	91	49	1	0	34	71	42	0	0	55	189	30	0	0	47	243	30	0	904
1:30 PM	0	34	113	55	1	0	31	91	69	0	0	57	150	22	1	0	48	234	43	0	947
1:45 PM	0	29	99	51	0	0	23	80	52	0	0	68	171	25	0	0	55	241	27	1	921
2:00 PM	0	33	94	54	1	0	31	107	58	0	0	72	158	22	0	0	50	183	31	0	893
2:15 PM	0	26	93	39	1	0	26	127	54	0	0	73	166	33	1	0	66	222	29	0	954
2:30 PM	0	30	86	65	0	0	36	117	58	0	0	76	201	29	0	0	66	249	33	0	1046
2:45 PM	0	29	112	42	0	0	40	122	63	0	0	60	176	40	0	0	71	201	23	1	979
3:00 PM	0	37	92	58	0	0	36	115	49	0	0	57	199	33	0	0	78	262	33	0	1049
3:15 PM	0	25	123	65	0	0	39	128	71	0	0	51	183	30	0	0	62	242	19	0	1038
3:30 PM	0	39	88	69	0	0	29	112	70	0	0	44	194	42	1	0	87	252	23	0	1049
3:45 PM	0	37	94	53	0	0	41	132	68	0	0	66	212	46	0	0	82	280	33	2	1144
4:00 PM	0	30	97	49	2	0	46	149	68	0	0	64	181	28	3	0	77	261	26	3	1076
4:15 PM	0	23	104	53	0	0	47	132	66	0	0	63	236	43	1	0	93	304	17	0	1181
4:30 PM	0	32	94	56	0	0	41	148	61	0	0	59	218	45	2	0	74	280	23	0	1131
4:45 PM	0	36	79	46	0	0	41	157	66	0	0	54	266	47	0	0	84	284	21	0	1181
5:00 PM	0	36	95	49	0	0	32	133	93	0	0	64	234	41	0	0	100	302	14	0	1193
5:15 PM	0	44	110	42	1	0	34	173	55	0	0	45	237	60	0	0	84	280	14	0	1178
5:30 PM	0	34	79	57	1	0	23	151	50	0	0	50	205	45	1	0	83	253	13	0	1043
5:45 PM	0	35	80	62	0	0	31	139	44	0	0	101	191	36	0	0	70	279	20	0	1088
6:00 PM	0	30	76	46	2	0	34	121	42	0	0	44	158	34	0	0	77	211	16	0	889
6:15 PM	0	27	66	40	1	0	42	87	29	0	0	44	184	30	0	0	71	249	20	0	889
6:30 PM	0	35	79	57	0	0	34	97	34	0	0	33	162	32	0	0	44	185	20	0	812
6:45 PM	0	36	87	62	1	0	26	57	32	0	0	39	133	28	1	0	46	190	10	0	746
Total	1	1,870	5,401	2,685	22	1	1,451	4,591	2,327	7	0	2,822	8,386	1,237	27	1	2,694	11,337	1,442	22	46,246

*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total" or graph below)





Turning Movement Count

Tudor Rd & Lake Otis Pkwy

Heavy Vehicles (15-Minute Periods)

All Data

Tuesday, January 8, 2019

6:00 AM to 7:00 PM

Start Time	Lake Otis Pkwy (Northbound)				Lake Otis Pkwy (Southbound)				Tudor Rd (Eastbound)				Tudor Rd (Westbound)				Period Total (Veh)
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	
6:00 AM	0	0	0	1	0	0	1	0	0	0	1	0	0	0	7	0	10
6:15 AM	0	0	1	2	0	0	0	0	0	0	1	0	0	1	5	0	10
6:30 AM	0	1	0	0	0	1	0	0	0	1	7	0	0	1	3	0	14
6:45 AM	0	1	1	3	0	0	0	0	0	3	1	0	0	1	0	1	11
7:00 AM	0	1	2	1	0	0	1	0	0	1	2	1	0	0	4	0	13
7:15 AM	0	0	2	0	0	0	4	3	0	2	4	1	0	0	2	0	18
7:30 AM	0	2	0	3	0	1	2	1	0	0	2	1	0	0	3	0	15
7:45 AM	0	0	2	2	0	1	4	1	0	3	8	0	0	1	3	1	26
8:00 AM	0	1	3	2	0	0	2	1	0	1	9	1	0	0	7	0	27
8:15 AM	0	0	2	2	0	2	4	0	0	0	8	1	0	1	3	2	25
8:30 AM	0	0	0	3	0	0	3	2	0	2	9	0	0	2	5	2	28
8:45 AM	0	0	5	4	0	4	1	0	0	1	3	0	0	0	2	0	20
9:00 AM	0	0	2	9	0	3	2	0	0	1	5	1	0	2	4	0	29
9:15 AM	0	0	1	2	0	0	2	1	0	4	7	2	0	0	8	1	28
9:30 AM	0	1	3	2	0	1	0	2	0	3	9	0	0	1	2	0	24
9:45 AM	0	0	4	1	0	0	2	1	0	0	3	0	0	1	6	0	18
10:00 AM	0	0	1	1	0	2	2	1	0	0	3	1	0	0	5	0	16
10:15 AM	0	0	0	1	0	0	1	0	0	0	8	4	0	2	6	0	22
10:30 AM	0	0	2	1	0	0	0	0	0	0	7	0	0	0	10	0	20
10:45 AM	0	1	3	2	0	1	0	0	0	0	7	0	0	1	5	0	20
11:00 AM	0	0	1	0	0	2	4	1	0	1	7	1	0	1	8	0	26
11:15 AM	0	1	3	1	0	1	1	0	0	4	4	1	0	0	4	0	20
11:30 AM	0	1	0	1	0	0	1	2	0	1	6	1	0	0	5	1	19
11:45 AM	0	0	5	0	0	0	2	1	0	0	8	2	0	0	6	0	24
12:00 PM	0	0	1	0	0	1	3	2	0	0	8	1	0	2	6	0	24
12:15 PM	0	0	1	1	0	1	1	2	0	3	6	0	0	1	8	0	24
12:30 PM	0	2	3	0	0	0	1	0	0	1	2	0	0	3	7	0	19
12:45 PM	0	0	2	4	0	2	0	0	0	0	3	0	0	1	4	0	16
1:00 PM	0	0	3	2	0	1	2	2	0	3	5	1	0	1	7	0	27
1:15 PM	0	0	0	1	0	0	2	0	0	0	7	0	0	1	5	2	18
1:30 PM	0	2	0	1	0	2	1	2	0	1	4	1	0	1	6	0	21
1:45 PM	0	0	4	1	0	0	0	3	0	3	5	0	0	0	7	0	23
2:00 PM	0	1	2	0	0	1	1	1	0	2	6	0	0	0	5	1	20
2:15 PM	0	0	2	2	0	2	3	1	0	1	6	0	0	1	10	1	29
2:30 PM	0	0	1	2	0	0	4	3	0	2	6	0	0	1	6	1	26
2:45 PM	0	1	1	0	0	0	1	2	0	2	7	1	0	1	8	1	25
3:00 PM	0	2	2	1	0	2	4	1	0	1	7	0	0	2	8	0	30
3:15 PM	0	0	1	1	0	0	3	1	0	1	7	2	0	1	9	0	26
3:30 PM	0	1	2	0	0	1	2	1	0	1	6	0	0	1	7	0	22
3:45 PM	0	0	2	1	0	2	4	1	0	0	6	1	0	2	6	0	25
4:00 PM	0	1	1	5	0	0	2	2	0	1	5	1	0	0	12	0	30
4:15 PM	0	1	2	3	0	0	2	1	0	0	6	1	0	2	5	0	23
4:30 PM	0	0	1	2	0	1	1	0	0	0	6	1	0	0	5	1	18
4:45 PM	0	0	1	1	0	0	1	0	0	0	6	0	0	0	2	0	11
5:00 PM	0	0	0	0	0	0	0	0	0	0	4	1	0	0	4	0	9
5:15 PM	0	1	0	1	0	0	1	0	0	0	4	0	0	0	3	0	10
5:30 PM	0	0	0	1	0	1	0	0	0	0	2	0	0	1	2	1	8
5:45 PM	0	0	1	0	0	2	0	0	0	2	6	0	0	0	2	0	13
6:00 PM	0	0	0	0	0	0	2	0	0	0	3	1	0	1	1	0	8
6:15 PM	0	2	0	0	0	1	1	0	0	1	3	0	0	0	5	0	13
6:30 PM	0	0	0	1	0	0	0	0	0	0	3	0	0	0	4	0	8
6:45 PM	0	0	1	0	0	1	0	0	0	0	2	1	0	0	2	0	7
Total	0	24	77	75	0	40	81	42	0	53	270	31	0	38	269	16	1,016

Turning Movement Count

Tudor Rd & Lake Otis Pkwy

Total Vehicles (15-Minute Periods)

AM Peak Hour

Tuesday, January 8, 2019

7:00 AM to 9:00 AM

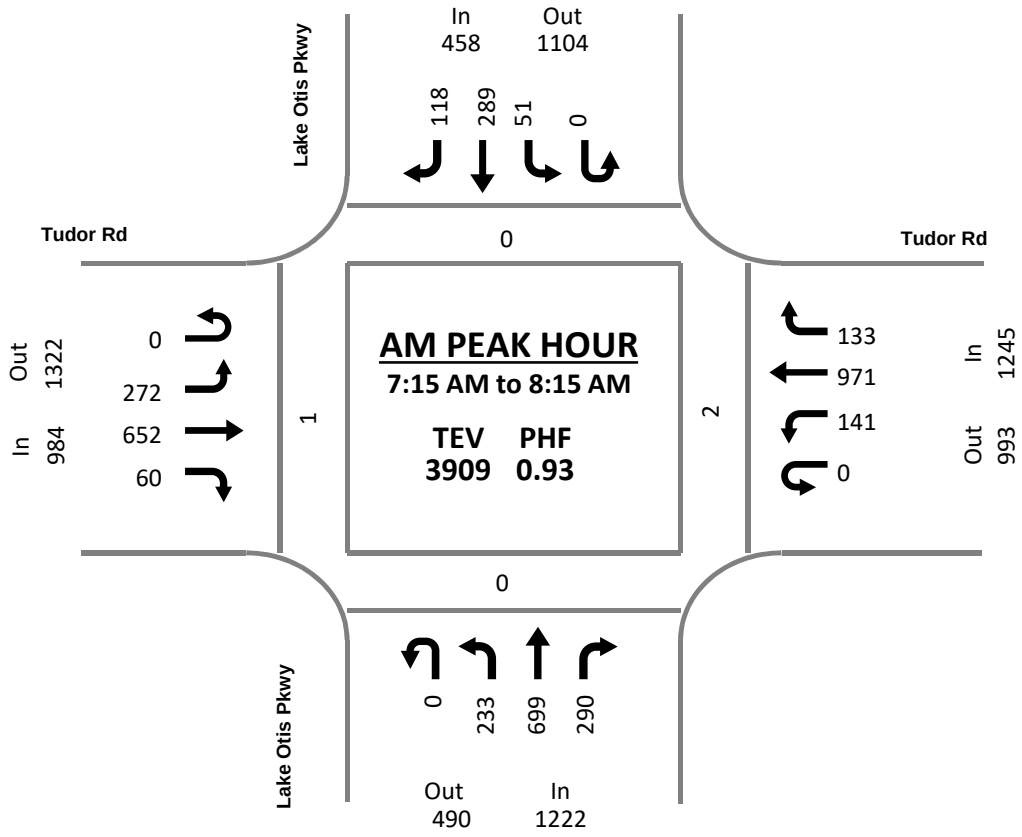
Start Time	Lake Otis Pkwy (Northbound)					Lake Otis Pkwy (Southbound)					Tudor Rd (Eastbound)					Tudor Rd (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
7:00 AM	0	52	146	52	1	0	11	43	19	0	0	35	116	5	2	0	34	185	32	0	730
7:15 AM	0	47	185	59	0	0	12	57	18	0	0	57	163	9	0	0	19	262	18	0	906
7:30 AM	0	79	182	70	0	0	14	56	34	0	0	88	150	7	0	0	38	239	40	0	997
7:45 AM	0	64	160	74	0	0	14	82	32	0	0	75	196	24	1	0	41	253	34	1	1049
8:00 AM	0	43	172	87	0	0	11	94	34	0	0	52	143	20	0	0	43	217	41	1	957
8:15 AM	0	55	175	77	1	0	12	53	38	0	0	70	135	21	0	0	24	204	38	0	902
8:30 AM	0	61	170	85	0	0	15	54	36	0	0	44	116	19	0	0	43	226	41	0	910
8:45 AM	1	53	154	70	0	0	25	88	44	0	0	55	127	19	0	0	29	217	32	0	914
Total	1	454	1,344	574	2	0	114	527	255	0	0	476	1,146	124	3	0	271	1,803	276	2	7,365

*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total")

Peak Hour Summary

7:15 AM to 8:15 AM

Data Type	Lake Otis Pkwy (Northbound)					Lake Otis Pkwy (Southbound)					Tudor Rd (Eastbound)					Tudor Rd (Westbound)					Peak Hour Total
	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	
Volume	0	233	699	290	0	0	51	289	118	0	0	272	652	60	1	0	141	971	133	2	3909
%HV	0.0%	1.3%	1.0%	2.4%		0.0%	3.9%	4.2%	5.1%		0.0%	2.2%	3.5%	5.0%		0.0%	0.7%	1.5%	0.8%		2.2%
PHF	0.00	0.74	0.94	0.83	0.00	0.00	0.91	0.77	0.87	0.00	0.00	0.77	0.83	0.63	0.25	0.00	0.82	0.93	0.81	0.50	0.93
Volume			1222					458					984					1245			3909
%HV			1.4%					4.4%					3.3%					1.4%			2.2%
PHF			0.92					0.82					0.83					0.95			0.93



Turning Movement Count

Tudor Rd & Lake Otis Pkwy

Total Vehicles (15-Minute Periods)

PM Peak Hour

Tuesday, January 8, 2019

4:00 PM to 6:00 PM

Start Time	Lake Otis Pkwy (Northbound)					Lake Otis Pkwy (Southbound)					Tudor Rd (Eastbound)					Tudor Rd (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
4:00 PM	0	30	97	49	2	0	46	149	68	0	0	64	181	28	3	0	77	261	26	3	1076
4:15 PM	0	23	104	53	0	0	47	132	66	0	0	63	236	43	1	0	93	304	17	0	1181
4:30 PM	0	32	94	56	0	0	41	148	61	0	0	59	218	45	2	0	74	280	23	0	1131
4:45 PM	0	36	79	46	0	0	41	157	66	0	0	54	266	47	0	0	84	284	21	0	1181
5:00 PM	0	36	95	49	0	0	32	133	93	0	0	64	234	41	0	0	100	302	14	0	1193
5:15 PM	0	44	110	42	1	0	34	173	55	0	0	45	237	60	0	0	84	280	14	0	1178
5:30 PM	0	34	79	57	1	0	23	151	50	0	0	50	205	45	1	0	83	253	13	0	1043
5:45 PM	0	35	80	62	0	0	31	139	44	0	0	101	191	36	0	0	70	279	20	0	1088
Total	0	270	738	414	4	0	295	1,182	503	0	0	500	1,768	345	7	0	665	2,243	148	3	9,071

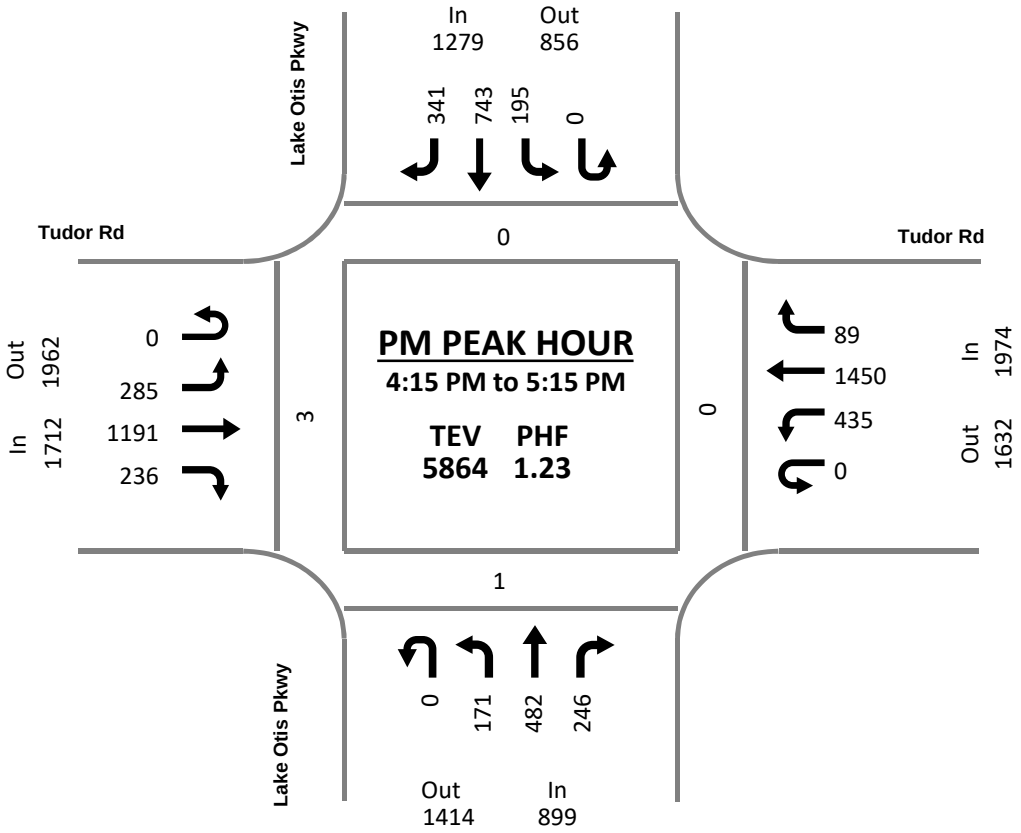
*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total")

Peak Hour Summary (System Peak*)

4:15 PM to 5:15 PM

Data Type	Lake Otis Pkwy (Northbound)					Lake Otis Pkwy (Southbound)					Tudor Rd (Eastbound)					Tudor Rd (Westbound)					Peak Hour Total
	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	
Volume	0	171	482	246	1	0	195	743	341	0	0	285	1191	236	3	0	435	1450	89	0	5864
%HV	0.0%	1.2%	0.8%	2.8%		0.0%	0.5%	0.7%	0.3%		0.0%	0.0%	2.2%	1.3%		0.0%	0.5%	1.3%	1.1%		1.2%
PHF	0.00	0.97	1.10	1.16	0.25	0.00	1.04	1.07	0.92	0.00	0.00	1.11	1.12	0.98	0.75	0.00	1.09	1.19	1.06	0.00	1.23
Volume			899					1279					1712					1974			5864
%HV			1.4%					0.5%					1.7%					1.1%			1.2%
PHF			1.15					1.21					1.17					1.19			1.23

*System Peak is based on comparison of other study area counts rather than highest total entering volume at this intersection.



Traffic Camera Count and Placement Information

Intersection Name: Tudor Rd & Old Seward Hwy

Intersection Location	
Northbound Street	Old Seward Hwy
Southbound Street	Old Seward Hwy
Eastbound Street	Tudor Rd
Westbound Street	Tudor Rd
City, State	Anchorage, AK

Project Information	
Name	Midtown Congestion Relief
Client	AK DOT&PF
Project #	1124.62458.01, Phase 02
PM/Traffic Lead	Steve Noble/Brad Coy

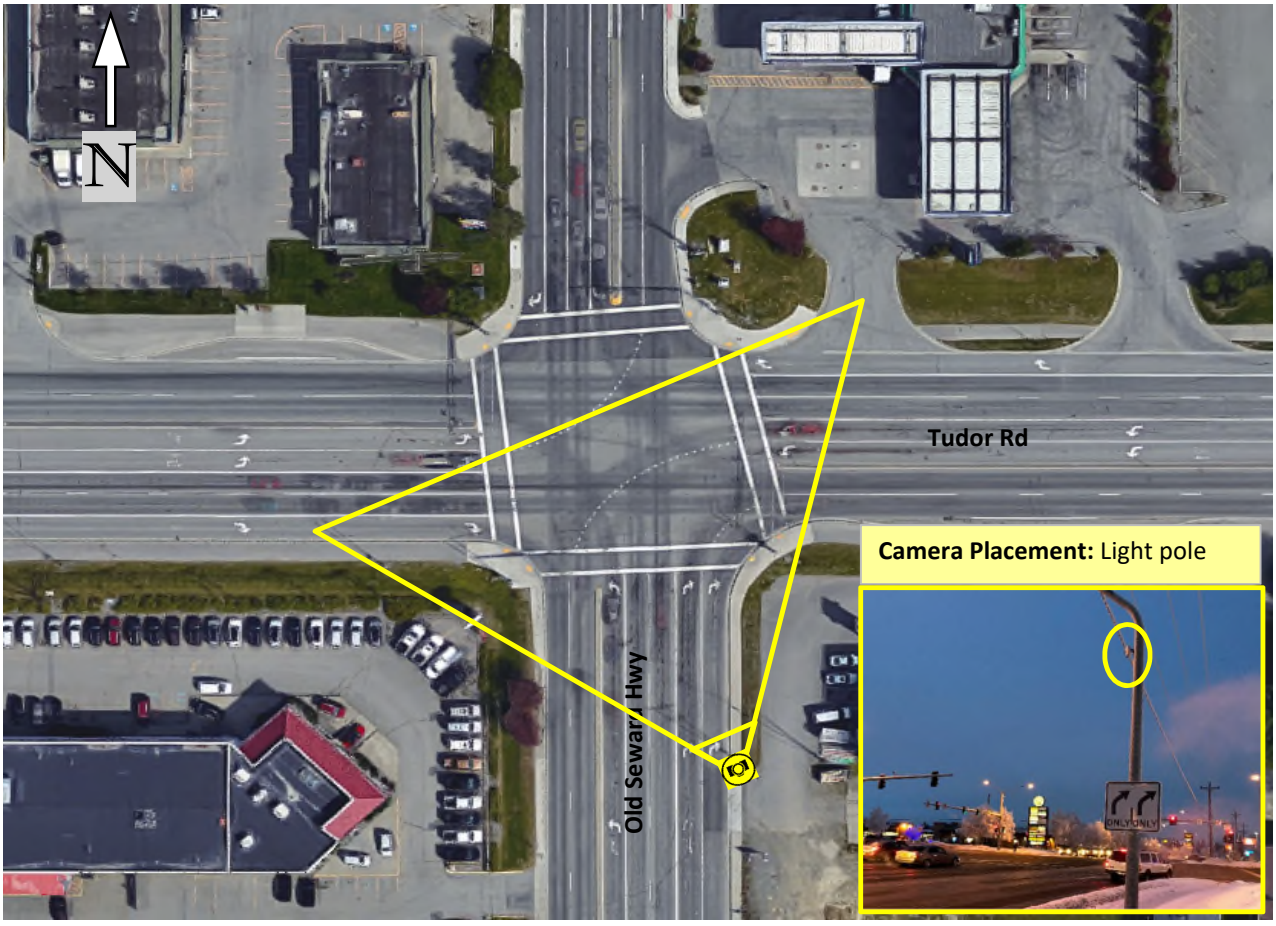
Count Description (e.g., day(s) of week, time periods, other related counts also occuring, etc.)

1 weekday (Tue, Wed, or Thu), setup while Seward Hwy was closed to capture results of detours (highway reopened overnight but no notices were sent to public so some detours still likely occuring)

Camera Setup/Video Footage	
Staff Responsible	Brad Coy
Setup Time	1/7/2019 4:40 PM
Take Down Time	1/9/2019 11:06 AM
Duration (hours)	42.43
Camera # (2-digit)	79

Count Date, Time, Vendor	
Date	1/8/2019 (Tuesday)
Start Time	6:00 AM
End Time	7:00 PM
Duration (hours)	13.00
Count Vendor	CountingCars.com

Camera Placement



Other Notes (Before, During, or After Count)

DOWL

Turning Movement Count

Tudor Rd & Old Seward Hwy

Total Vehicles (15-Minute Periods)

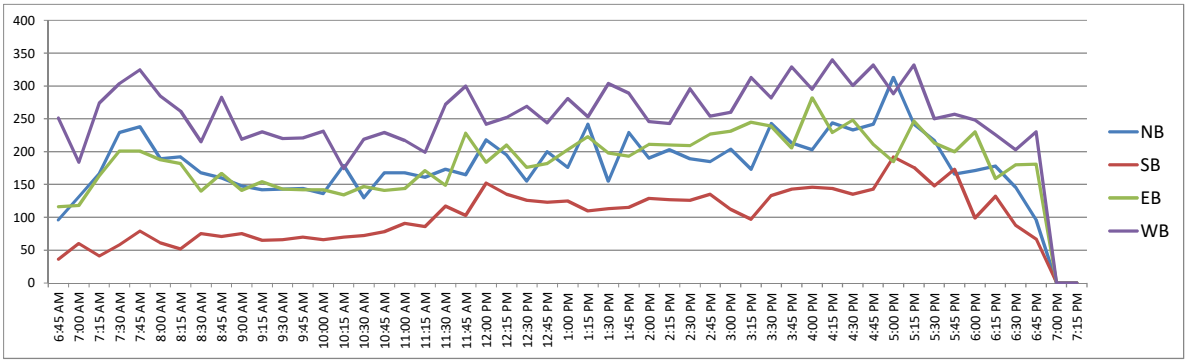
All Data

Tuesday, January 8, 2019

6:00 AM to 7:00 PM

Start Time	Old Seward Hwy (Northbound)					Old Seward Hwy (Southbound)					Tudor Rd (Eastbound)					Tudor Rd (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
6:45 AM	0	22	43	31	0	0	5	28	3	2	1	12	93	10	0	0	56	181	14	0	499
7:00 AM	0	29	73	29	0	0	7	46	7	0	0	5	105	8	2	0	43	129	12	0	493
7:15 AM	0	19	110	38	0	0	5	35	1	1	0	7	148	8	2	0	54	204	16	0	645
7:30 AM	0	32	135	62	0	0	9	39	10	1	1	12	174	14	3	0	48	233	23	0	792
7:45 AM	0	42	134	62	0	0	8	59	12	0	0	24	154	23	0	0	75	225	25	0	843
8:00 AM	0	35	115	39	0	0	8	46	7	1	0	6	153	29	2	0	54	211	20	0	723
8:15 AM	0	32	117	43	0	0	9	37	6	0	1	23	127	31	0	0	29	207	26	0	688
8:30 AM	0	32	91	45	1	0	10	53	12	0	0	23	96	21	1	0	47	152	16	0	598
8:45 AM	0	36	77	47	1	0	10	50	11	1	0	17	125	25	0	0	49	217	17	0	681
9:00 AM	0	32	65	51	0	0	13	49	13	0	1	14	103	23	0	0	35	169	15	1	583
9:15 AM	0	32	65	45	0	0	10	41	14	0	0	23	108	23	0	0	52	152	26	0	591
9:30 AM	0	25	60	58	0	0	8	49	9	1	0	9	112	22	1	0	40	159	21	0	572
9:45 AM	0	30	63	51	0	0	14	49	7	0	0	14	105	23	0	0	43	154	24	0	577
10:00 AM	0	27	54	55	0	0	15	41	10	0	0	12	113	17	0	0	46	160	25	0	575
10:15 AM	0	43	76	60	0	0	11	49	10	0	0	10	97	27	0	0	28	124	22	0	557
10:30 AM	0	32	62	36	0	0	16	47	9	1	0	12	106	29	1	0	44	155	20	0	568
10:45 AM	0	24	85	59	0	0	16	55	7	0	0	10	94	37	0	0	41	169	19	2	616
11:00 AM	0	35	71	62	0	0	23	54	14	0	0	18	99	27	0	0	39	161	17	0	620
11:15 AM	0	34	68	59	0	0	22	52	12	0	1	21	117	32	0	0	40	149	10	0	617
11:30 AM	0	37	77	59	0	0	23	78	16	0	0	20	106	23	0	0	56	192	24	0	711
11:45 AM	0	32	73	60	1	0	29	60	14	2	0	21	170	37	2	0	48	212	40	2	796
12:00 PM	1	44	104	69	0	0	28	103	21	0	0	28	113	43	0	1	65	154	22	0	796
12:15 PM	0	37	106	52	0	0	31	79	25	1	0	27	137	46	0	0	63	170	19	0	792
12:30 PM	0	29	67	59	0	0	35	79	12	1	0	13	134	29	1	0	63	187	19	0	726
12:45 PM	0	36	91	73	0	0	21	83	19	1	0	22	112	48	1	0	44	170	30	1	749
1:00 PM	0	35	76	65	0	0	27	80	18	0	0	21	133	49	0	1	63	196	21	0	785
1:15 PM	0	43	124	75	0	0	18	75	17	2	1	24	160	38	1	0	40	197	16	0	828
1:30 PM	2	31	67	55	0	0	24	73	16	4	1	17	142	38	1	0	62	220	22	0	770
1:45 PM	0	42	108	79	0	0	28	74	13	2	1	20	133	39	0	0	56	208	25	1	826
2:00 PM	0	31	79	80	0	0	32	78	19	1	1	26	148	36	0	0	39	183	24	0	776
2:15 PM	0	32	93	78	0	0	22	85	20	0	0	13	157	40	0	0	41	186	16	0	783
2:30 PM	0	39	71	79	0	0	44	64	18	1	0	19	138	52	0	1	72	205	18	0	820
2:45 PM	0	38	86	61	0	0	34	86	15	0	0	15	168	44	0	0	37	201	16	4	801
3:00 PM	0	47	68	89	0	0	31	71	10	0	1	30	159	41	2	0	50	191	19	0	807
3:15 PM	0	36	61	76	1	0	26	63	8	2	0	17	173	55	1	0	52	247	14	2	828
3:30 PM	0	44	94	105	0	0	38	78	17	0	0	27	166	46	0	0	60	206	16	1	897
3:45 PM	0	38	89	86	0	0	39	88	16	1	1	18	148	39	1	0	60	247	22	1	891
4:00 PM	0	31	76	96	1	0	43	95	8	1	1	30	195	56	2	0	42	231	22	1	926
4:15 PM	0	41	96	107	0	0	47	82	15	1	0	26	159	44	0	0	87	229	24	0	957
4:30 PM	0	44	93	96	0	0	41	79	15	0	0	13	191	44	0	0	40	234	27	0	917
4:45 PM	0	32	90	120	2	0	41	96	6	0	0	20	155	36	0	0	56	245	31	0	928
5:00 PM	0	50	98	165	1	0	67	104	21	0	0	14	135	36	1	0	49	212	27	1	978
5:15 PM	0	38	99	105	0	0	60	104	12	0	0	19	156	72	1	0	59	249	24	0	997
5:30 PM	0	39	68	110	1	0	54	87	7	0	0	27	142	44	1	0	46	185	19	0	828
5:45 PM	1	37	62	66	0	0	51	105	17	0	0	18	142	40	1	0	41	200	16	0	796
6:00 PM	0	31	52	88	1	0	35	57	7	2	0	15	185	30	1	1	37	196	14	0	748
6:15 PM	1	19	81	77	0	0	39	73	20	0	0	13	127	19	1	0	32	183	11	1	695
6:30 PM	0	21	69	56	1	0	32	51	5	1	0	10	149	21	0	0	26	165	12	1	617
6:45 PM	0	20	34	42	0	0	28	28	11	0	0	12	143	26	0	0	28	177	25	0	574
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	5	1,684	4,093	3,410	11	0	1,296	3,296	618	33	12	887	6,910	1,663	30	4	2,467	9,651	1,026	19	37,022

*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total" or graph below)





Turning Movement Count

Tudor Rd & Old Seward Hwy

Heavy Vehicles (15-Minute Periods)

All Data

Tuesday, January 8, 2019

6:00 AM to 7:00 PM

Start Time	Old Seward Hwy (Northbound)				Old Seward Hwy (Southbound)				Tudor Rd (Eastbound)				Tudor Rd (Westbound)				Period Total (Veh)
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	
6:45 AM	0	3	2	0	0	0	0	1	0	1	2	0	0	1	0	0	10
7:00 AM	0	0	7	2	0	0	0	0	0	1	1	0	0	0	2	0	13
7:15 AM	0	1	6	2	0	1	2	0	0	0	1	0	0	0	1	0	14
7:30 AM	0	0	2	2	0	0	1	0	0	2	3	2	0	0	4	0	16
7:45 AM	0	2	4	3	0	0	1	4	0	0	2	1	0	1	2	1	21
8:00 AM	0	1	5	3	0	0	2	0	0	0	6	0	0	2	2	1	22
8:15 AM	0	1	5	4	0	2	3	0	0	1	3	2	0	0	0	0	21
8:30 AM	0	0	2	3	0	0	2	0	0	1	2	0	0	2	2	0	14
8:45 AM	0	0	2	2	0	0	0	0	0	1	4	0	0	1	3	0	13
9:00 AM	0	0	0	3	0	1	0	0	0	0	4	2	0	0	2	0	12
9:15 AM	0	0	1	3	0	0	2	0	0	2	3	0	0	2	3	0	16
9:30 AM	0	1	3	2	0	0	1	1	0	1	4	4	0	1	4	0	22
9:45 AM	0	1	4	3	0	0	3	0	0	0	1	0	0	2	2	1	17
10:00 AM	0	1	4	2	0	0	2	0	0	0	3	2	0	1	4	0	19
10:15 AM	0	2	2	1	0	0	1	0	0	1	5	2	0	0	6	0	20
10:30 AM	0	1	3	0	0	0	2	0	0	0	1	2	0	3	3	0	15
10:45 AM	0	0	3	3	0	0	2	0	0	0	3	2	0	1	3	0	17
11:00 AM	0	1	4	2	0	0	3	0	0	0	4	1	0	1	3	1	20
11:15 AM	0	2	1	3	0	0	1	0	0	0	4	1	0	1	2	1	16
11:30 AM	0	3	5	3	0	1	3	3	0	2	0	1	0	1	6	0	28
11:45 AM	0	0	2	2	0	1	1	0	0	1	4	0	0	1	5	0	17
12:00 PM	0	2	4	0	0	1	3	2	0	0	3	0	0	1	2	0	18
12:15 PM	0	1	1	1	0	0	2	0	0	0	3	2	0	1	6	1	18
12:30 PM	0	0	4	1	0	0	2	0	0	0	0	1	0	1	3	0	12
12:45 PM	0	0	0	1	0	0	2	2	0	1	7	0	0	0	6	0	19
1:00 PM	0	1	3	1	0	0	3	0	0	0	2	4	0	1	5	0	20
1:15 PM	0	0	3	2	0	0	2	0	0	0	5	1	0	0	1	0	14
1:30 PM	0	2	0	1	0	1	1	0	0	2	3	2	0	2	6	0	20
1:45 PM	0	1	4	3	0	0	2	0	0	1	5	1	0	0	5	1	23
2:00 PM	0	0	3	0	0	0	1	0	0	0	3	1	0	0	2	0	10
2:15 PM	0	1	2	2	0	1	4	0	0	0	3	2	0	0	3	0	18
2:30 PM	0	1	2	1	0	0	2	0	0	1	2	1	0	1	7	0	18
2:45 PM	0	2	2	3	0	1	2	1	0	0	7	1	0	0	6	0	25
3:00 PM	0	1	1	3	0	0	1	0	0	0	2	0	0	1	5	0	14
3:15 PM	0	0	3	3	0	1	3	0	0	0	4	0	0	1	5	1	21
3:30 PM	0	0	4	1	0	0	3	0	0	1	2	0	0	1	4	1	17
3:45 PM	0	2	2	1	0	0	1	0	0	1	1	1	0	0	2	0	11
4:00 PM	0	0	1	2	0	0	2	0	0	1	3	1	0	3	4	1	18
4:15 PM	0	0	2	1	0	0	1	0	0	0	3	1	0	3	6	0	17
4:30 PM	0	1	2	2	0	0	1	0	0	0	6	1	0	0	3	0	16
4:45 PM	0	1	0	0	0	0	0	0	0	0	5	1	0	0	1	1	9
5:00 PM	0	0	1	3	0	0	3	0	0	0	1	0	0	0	3	0	11
5:15 PM	0	1	1	0	0	0	0	0	0	0	2	0	0	0	2	0	6
5:30 PM	0	0	2	1	0	0	0	0	0	0	2	1	0	0	2	0	8
5:45 PM	0	0	0	3	0	0	0	0	0	0	2	0	0	0	1	0	6
6:00 PM	0	0	2	0	0	0	1	0	0	0	1	1	0	0	2	0	7
6:15 PM	0	0	0	1	0	0	2	0	0	0	2	0	0	2	2	0	9
6:30 PM	0	0	0	1	0	0	1	0	0	0	1	0	0	1	2	0	6
6:45 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	4
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	38	121	87	0	12	78	14	0	22	146	46	0	40	166	12	782

Turning Movement Count

Tudor Rd & Old Seward Hwy

Total Vehicles (15-Minute Periods)

AM Peak Hour

Tuesday, January 8, 2019

7:00 AM to 9:00 AM

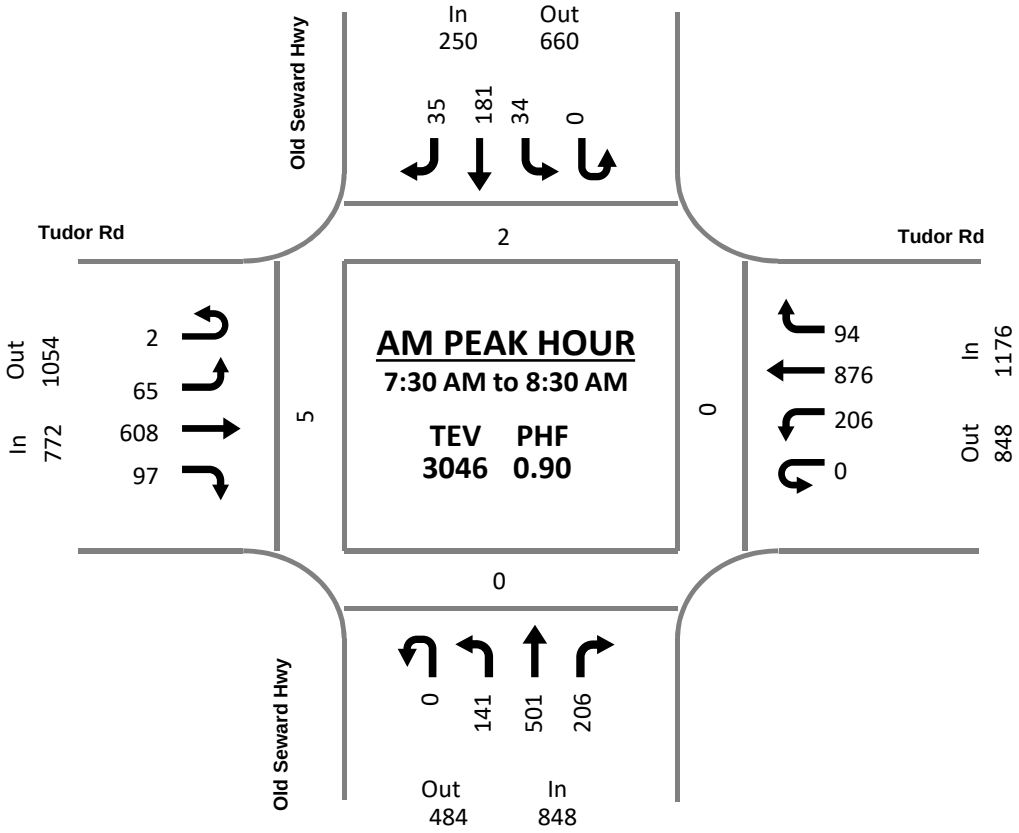
Start Time	Old Seward Hwy (Northbound)					Old Seward Hwy (Southbound)					Tudor Rd (Eastbound)					Tudor Rd (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
7:00 AM	0	29	73	29	0	0	7	46	7	0	0	5	105	8	2	0	43	129	12	0	493
7:15 AM	0	19	110	38	0	0	5	35	1	1	0	7	148	8	2	0	54	204	16	0	645
7:30 AM	0	32	135	62	0	0	9	39	10	1	1	12	174	14	3	0	48	233	23	0	792
7:45 AM	0	42	134	62	0	0	8	59	12	0	0	24	154	23	0	0	75	225	25	0	843
8:00 AM	0	35	115	39	0	0	8	46	7	1	0	6	153	29	2	0	54	211	20	0	723
8:15 AM	0	32	117	43	0	0	9	37	6	0	1	23	127	31	0	0	29	207	26	0	688
8:30 AM	0	32	91	45	1	0	10	53	12	0	0	23	96	21	1	0	47	152	16	0	598
8:45 AM	0	36	77	47	1	0	10	50	11	1	0	17	125	25	0	0	49	217	17	0	681
Total	0	257	852	365	2	0	66	365	66	4	2	117	1,082	159	10	0	399	1,578	155	0	5,463

*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total")

Peak Hour Summary

7:30 AM to 8:30 AM

Data Type	Old Seward Hwy (Northbound)					Old Seward Hwy (Southbound)					Tudor Rd (Eastbound)					Tudor Rd (Westbound)					Peak Hour Total
	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	
Volume	0	141	501	206	0	0	34	181	35	2	2	65	608	97	5	0	206	876	94	0	3046
%HV	0.0%	2.8%	3.2%	5.8%		0.0%	5.9%	3.9%	11.4%		0.0%	4.6%	2.3%	5.2%		0.0%	1.5%	0.9%	2.1%		2.6%
PHF	0.00	0.84	0.93	0.83	0.00	0.00	0.94	0.77	0.73	0.50	0.50	0.68	0.87	0.78	0.42	0.00	0.69	0.94	0.90	0.00	0.90
Volume			848					250					772					1176			3046
%HV			3.8%					5.2%					2.8%					1.1%			2.6%
PHF			0.89					0.79					0.96					0.90			0.90



Turning Movement Count

Tudor Rd & Old Seward Hwy

Total Vehicles (15-Minute Periods)

PM Peak Hour

Tuesday, January 8, 2019

4:00 PM to 6:00 PM

Start Time	Old Seward Hwy (Northbound)					Old Seward Hwy (Southbound)					Tudor Rd (Eastbound)					Tudor Rd (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
4:00 PM	0	31	76	96	1	0	43	95	8	1	1	30	195	56	2	0	42	231	22	1	926
4:15 PM	0	41	96	107	0	0	47	82	15	1	0	26	159	44	0	0	87	229	24	0	957
4:30 PM	0	44	93	96	0	0	41	79	15	0	0	13	191	44	0	0	40	234	27	0	917
4:45 PM	0	32	90	120	2	0	41	96	6	0	0	20	155	36	0	0	56	245	31	0	928
5:00 PM	0	50	98	165	1	0	67	104	21	0	0	14	135	36	1	0	49	212	27	1	978
5:15 PM	0	38	99	105	0	0	60	104	12	0	0	19	156	72	1	0	59	249	24	0	997
5:30 PM	0	39	68	110	1	0	54	87	7	0	0	27	142	44	1	0	46	185	19	0	828
5:45 PM	1	37	62	66	0	0	51	105	17	0	0	18	142	40	1	0	41	200	16	0	796
Total	1	312	682	865	5	0	404	752	101	2	1	167	1,275	372	6	0	420	1,785	190	2	7,327

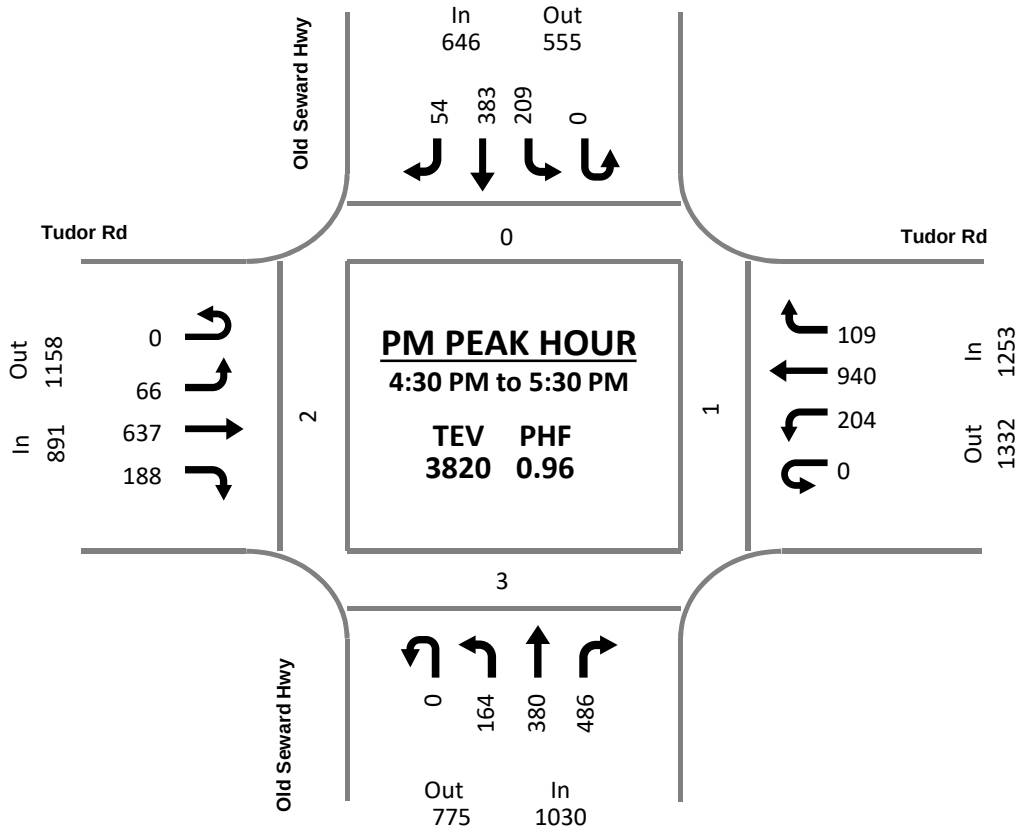
*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total")

Peak Hour Summary (System Peak*)

4:30 PM to 5:30 PM

Data Type	Old Seward Hwy (Northbound)					Old Seward Hwy (Southbound)					Tudor Rd (Eastbound)					Tudor Rd (Westbound)					Peak Hour Total
	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	
Volume	0	164	380	486	3	0	209	383	54	0	0	66	637	188	2	0	204	940	109	1	3820
%HV	0.0%	1.8%	1.1%	1.0%		0.0%	0.0%	1.0%	0.0%		0.0%	0.0%	2.2%	1.1%		0.0%	0.0%	1.0%	0.9%		1.1%
PHF	0.00	0.82	0.96	0.74	0.38	0.00	0.78	0.92	0.64	0.00	0.00	0.83	0.83	0.65	0.50	0.00	0.86	0.94	0.88	0.25	0.96
Volume			1030					646					891					1253			3820
%HV			1.2%					0.6%					1.8%					0.8%			1.1%
PHF			0.82					0.84					0.90					0.94			0.96

*System Peak is based on comparison of other study area counts rather than highest total entering volume at this intersection.



Traffic Camera Count and Placement Information

Intersection Name: Tudor Rd & Seward Hwy NB Ramps

Intersection Location	
Northbound Street	Seward Hwy NB Off-Ramp
Southbound Street	Seward Hwy NB On-Ramp
Eastbound Street	Tudor Rd
Westbound Street	Tudor Rd
City, State	Anchorage, AK

Project Information	
Name	Midtown Congestion Relief
Client	AK DOT&PF
Project #	1124.62458.01, Phase 02
PM/Traffic Lead	Steve Noble/Brad Coy

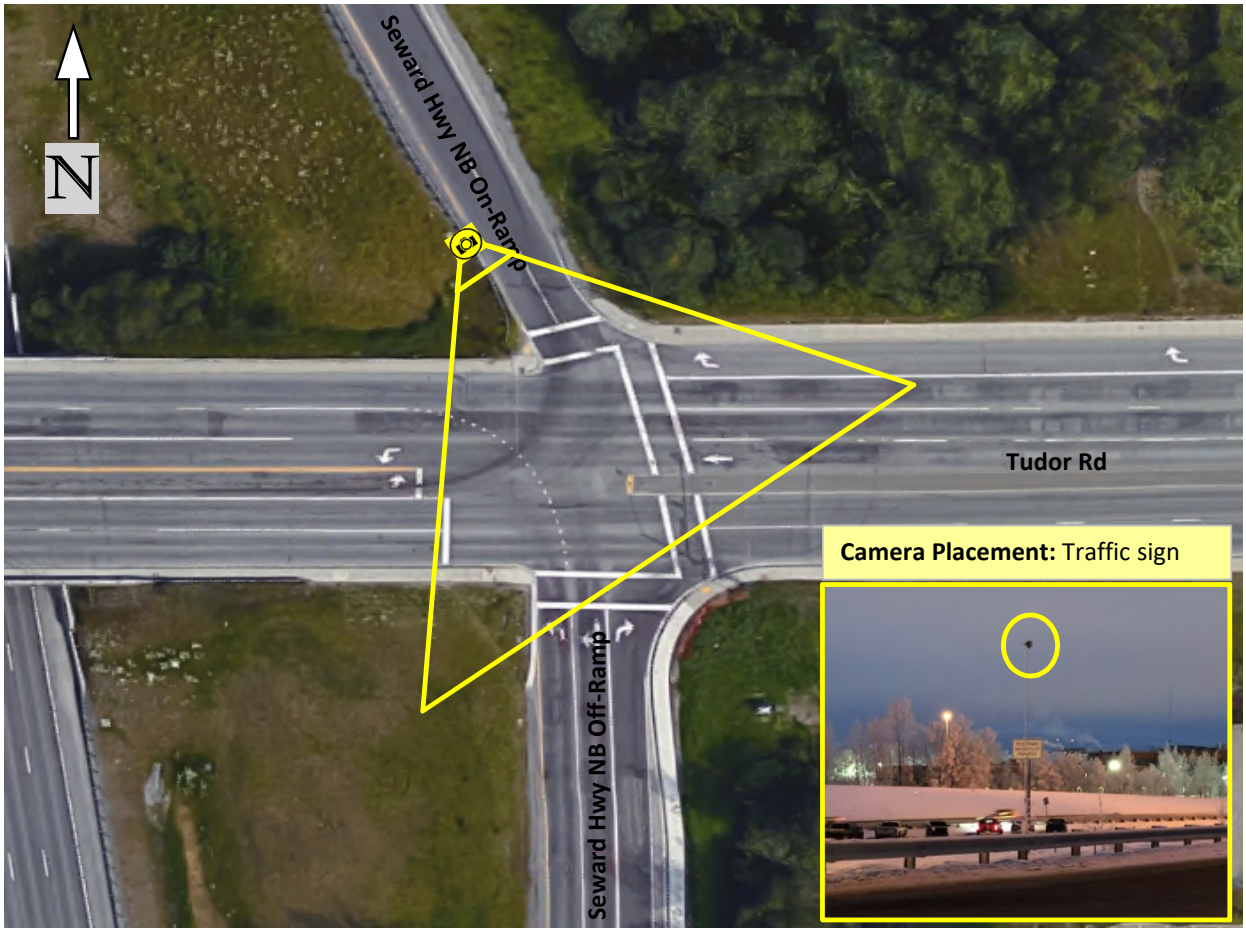
Count Description (e.g., day(s) of week, time periods, other related counts also occuring, etc.)

1 weekday (Tue, Wed, or Thu), setup while Seward Hwy was closed to capture results of detours (highway reopened overnight but no notices were sent to public so some detours still likely occuring)

Camera Setup/Video Footage	
Staff Responsible	Brad Coy
Setup Time	1/7/2019 5:00 PM
Take Down Time	1/9/2019 11:17 AM
Duration (hours)	42.28
Camera # (2-digit)	a1

Count Date, Time, Vendor	
Date	1/8/2019 (Tuesday)
Start Time	6:00 AM
End Time	7:00 PM
Duration (hours)	13.00
Count Vendor	CountingCars.com

Camera Placement



Other Notes (Before, During, or After Count)

DOWL

Turning Movement Count

Tudor Rd & Seward Hwy NB Ramps

Total Vehicles (15-Minute Periods)

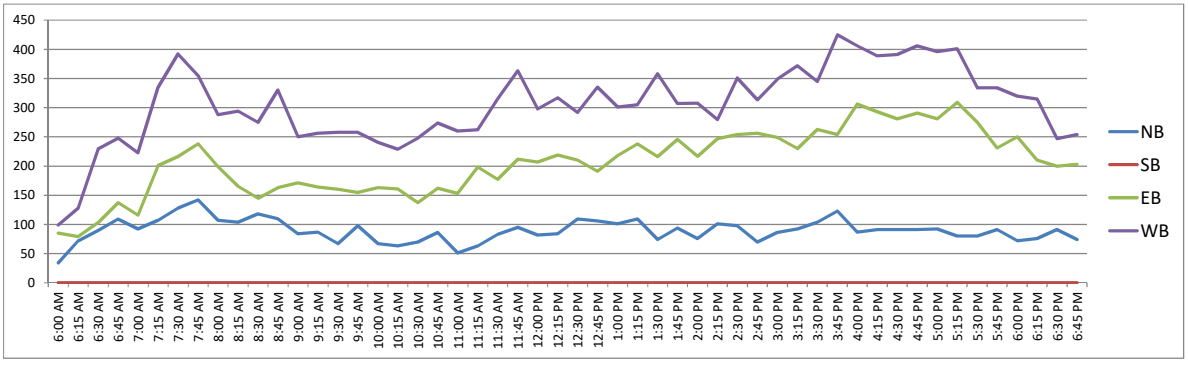
All Data

Tuesday, January 8, 2019

6:00 AM to 7:00 PM

Start Time	Seward Hwy NB Off-Ramp (Northbound)					Seward Hwy NB On-Ramp (Southbound)					Tudor Rd (Eastbound)					Tudor Rd (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
6:00 AM	0	7	5	22	0	0	0	0	0	1	0	1	84	0	0	0	0	83	16	1	218
6:15 AM	0	19	8	45	0	0	0	0	0	1	0	0	79	0	0	0	0	108	20	1	279
6:30 AM	0	27	9	54	0	0	0	0	0	1	0	0	103	0	0	0	0	201	29	1	423
6:45 AM	0	30	11	68	0	0	0	0	0	0	0	0	137	0	0	0	0	213	35	0	494
7:00 AM	0	25	17	50	0	0	0	0	0	0	0	1	115	0	0	0	0	177	46	0	431
7:15 AM	0	39	13	55	0	0	0	0	0	1	0	0	201	0	0	0	0	274	61	1	643
7:30 AM	0	45	22	61	0	0	0	0	0	0	0	0	216	0	0	0	0	327	65	0	736
7:45 AM	0	64	13	65	0	0	0	0	0	1	0	0	238	0	0	0	0	277	78	1	735
8:00 AM	0	44	10	53	0	0	0	0	0	1	0	0	199	0	0	0	0	246	42	0	594
8:15 AM	0	42	8	54	0	0	0	0	0	2	0	0	165	0	0	0	0	249	45	0	563
8:30 AM	0	38	19	61	0	0	0	0	0	0	0	1	144	0	0	0	0	222	53	0	538
8:45 AM	0	36	20	54	0	0	0	0	0	1	0	0	163	0	0	0	0	266	64	0	603
9:00 AM	0	39	10	35	0	0	0	0	0	0	0	3	168	0	0	0	0	215	35	0	505
9:15 AM	0	39	5	43	0	0	0	0	0	1	0	1	163	0	0	0	0	214	42	0	507
9:30 AM	0	19	5	43	0	0	0	0	0	1	0	1	159	0	0	0	0	224	34	0	485
9:45 AM	0	47	4	47	0	0	0	0	0	0	0	1	154	0	0	0	0	211	47	0	511
10:00 AM	0	21	2	44	0	0	0	0	0	0	0	0	163	0	0	0	0	208	33	0	471
10:15 AM	0	19	5	39	0	0	0	0	0	0	0	1	160	0	0	0	0	195	34	0	453
10:30 AM	0	24	5	41	0	0	0	0	0	1	0	0	137	0	0	0	0	207	41	1	455
10:45 AM	0	30	9	47	0	0	0	0	0	1	0	0	162	0	0	0	0	236	38	0	522
11:00 AM	0	15	2	34	0	0	0	0	0	0	0	0	153	0	0	0	0	232	28	0	464
11:15 AM	0	19	5	39	0	0	0	0	0	1	0	0	198	0	0	0	0	217	45	1	523
11:30 AM	0	35	4	44	0	0	0	0	0	0	0	1	176	0	0	0	0	275	40	0	575
11:45 AM	0	33	8	54	0	0	0	0	0	0	0	0	212	0	0	0	0	303	60	0	670
12:00 PM	0	22	6	54	0	0	0	0	0	2	0	0	207	0	0	0	0	254	44	1	587
12:15 PM	0	30	6	48	0	0	0	0	0	0	0	1	218	0	0	0	0	257	60	0	620
12:30 PM	0	45	5	59	0	0	0	0	0	1	0	3	207	0	0	0	0	250	42	0	611
12:45 PM	0	28	14	64	0	0	0	0	0	2	0	1	190	0	0	0	0	282	53	0	632
1:00 PM	0	46	2	53	0	0	0	0	0	0	0	2	216	0	0	0	0	254	47	0	620
1:15 PM	0	45	9	55	0	0	0	0	0	0	0	0	238	0	0	0	0	259	46	0	652
1:30 PM	0	29	9	36	3	0	0	0	0	2	0	0	216	0	0	0	0	306	52	1	648
1:45 PM	0	40	9	45	1	0	0	0	0	3	0	0	246	0	0	0	0	266	41	2	647
2:00 PM	0	27	9	40	1	0	0	0	0	1	0	0	217	0	0	0	0	264	44	2	601
2:15 PM	0	27	12	62	1	0	0	0	0	4	0	1	246	0	0	0	0	242	38	0	628
2:30 PM	0	36	5	57	0	0	0	0	0	1	0	0	254	0	0	0	0	319	32	0	703
2:45 PM	0	20	8	42	0	0	0	0	0	0	0	0	256	0	0	0	0	271	43	0	640
3:00 PM	0	36	5	45	0	0	0	0	0	2	0	1	248	0	0	0	0	292	57	0	684
3:15 PM	0	28	4	60	0	0	0	0	0	0	0	0	230	0	0	0	0	336	36	0	694
3:30 PM	0	48	6	50	0	0	0	0	0	0	0	1	262	0	0	0	0	297	48	0	712
3:45 PM	0	49	10	64	1	0	0	0	0	0	0	0	254	0	0	0	0	355	70	0	802
4:00 PM	0	38	4	45	1	0	0	0	0	1	0	1	305	0	0	0	0	348	58	0	799
4:15 PM	0	37	11	43	0	0	0	0	0	1	0	0	293	0	0	0	0	338	51	0	773
4:30 PM	0	35	13	43	0	0	0	0	0	1	0	0	281	0	0	0	0	339	52	0	763
4:45 PM	0	36	2	53	0	0	0	0	0	0	0	0	291	0	0	0	0	363	43	0	788
5:00 PM	0	33	10	49	0	0	0	0	0	2	0	0	281	0	0	0	0	349	47	1	769
5:15 PM	0	27	9	44	0	0	0	0	0	2	0	1	308	0	0	0	0	362	39	0	790
5:30 PM	0	18	14	48	0	0	0	0	0	2	0	0	275	0	0	0	0	293	41	0	689
5:45 PM	0	27	12	52	0	0	0	0	0	1	0	0	231	0	0	0	0	300	34	0	656
6:00 PM	0	23	9	40	0	0	0	0	0	2	0	0	250	0	0	0	0	279	41	1	642
6:15 PM	0	25	5	46	0	0	0	0	0	1	0	0	210	0	0	0	0	278	37	0	601
6:30 PM	0	32	11	48	0	0	0	0	0	2	0	0	200	0	0	0	0	220	27	1	538
6:45 PM	0	29	7	38	0	0	0	0	0	0	0	0	203	0	0	0	0	219	35	0	531
Total	0	1,672	445	2,535	8	0	0	0	0	47	0	23	10,682	0	0	0	0	13,572	2,289	16	31,218

*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total" or graph below)



DOWL

Turning Movement Count

Tudor Rd & Seward Hwy NB Ramps

Heavy Vehicles (15-Minute Periods)

All Data

Tuesday, January 8, 2019

6:00 AM to 7:00 PM

Start Time	Seward Hwy NB Off-Ramp (Northbound)				Seward Hwy NB On-Ramp (Southbound)				Tudor Rd (Eastbound)				Tudor Rd (Westbound)				Period Total (Veh)
	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	
6:00 AM	0	0	0	0	0	0	0	0	0	0	4	0	0	0	3	2	9
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	2	8
6:30 AM	0	0	0	2	0	0	0	0	0	0	6	0	0	0	1	1	10
6:45 AM	0	0	2	1	0	0	0	0	0	0	2	0	0	0	0	1	6
7:00 AM	0	0	0	2	0	0	0	0	0	0	3	0	0	0	3	2	10
7:15 AM	0	0	0	1	0	0	0	0	0	0	4	0	0	0	4	0	9
7:30 AM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	4	1	7
7:45 AM	0	0	0	2	0	0	0	0	0	0	9	0	0	0	4	1	16
8:00 AM	0	1	0	0	0	0	0	0	0	0	10	0	0	0	6	1	18
8:15 AM	0	0	1	1	0	0	0	0	0	0	7	0	0	0	2	2	13
8:30 AM	0	0	0	2	0	0	0	0	0	0	8	0	0	0	5	1	16
8:45 AM	0	0	0	1	0	0	0	0	0	0	3	0	0	0	5	0	9
9:00 AM	0	0	0	0	0	0	0	0	0	0	9	0	0	0	4	0	13
9:15 AM	0	2	0	0	0	0	0	0	0	0	8	0	0	0	7	1	18
9:30 AM	0	0	0	2	0	0	0	0	0	0	10	0	0	0	8	0	20
9:45 AM	0	1	0	1	0	0	0	0	0	0	4	0	0	0	5	1	12
10:00 AM	0	0	0	0	0	0	0	0	0	0	3	0	0	0	8	1	12
10:15 AM	0	2	1	0	0	0	0	0	0	0	10	0	0	0	5	2	20
10:30 AM	0	2	0	1	0	0	0	0	0	0	2	0	0	0	7	1	13
10:45 AM	0	1	0	1	0	0	0	0	0	0	7	0	0	0	2	0	11
11:00 AM	0	1	0	2	0	0	0	0	0	0	7	0	0	0	10	0	20
11:15 AM	0	1	0	0	0	0	0	0	0	0	10	0	0	0	4	1	16
11:30 AM	0	0	0	2	0	0	0	0	0	0	4	0	0	0	7	1	14
11:45 AM	0	2	0	1	0	0	0	0	0	0	5	0	0	0	7	0	15
12:00 PM	0	0	0	2	0	0	0	0	0	0	8	0	0	0	6	0	16
12:15 PM	0	1	0	1	0	0	0	0	0	0	7	0	0	0	7	0	16
12:30 PM	0	0	0	1	0	0	0	0	0	0	3	0	0	0	8	0	12
12:45 PM	0	1	0	0	0	0	0	0	0	0	4	0	0	0	8	0	13
1:00 PM	0	2	0	2	0	0	0	0	0	0	4	0	0	0	6	0	14
1:15 PM	0	0	0	0	0	0	0	0	0	0	7	0	0	0	4	0	11
1:30 PM	0	1	0	1	0	0	0	0	0	0	3	0	0	0	10	1	16
1:45 PM	0	0	0	1	0	0	0	0	0	0	8	0	0	0	6	0	15
2:00 PM	0	0	0	1	0	0	0	0	0	0	4	0	0	0	6	0	11
2:15 PM	0	1	0	1	0	0	0	0	0	0	5	0	0	0	6	0	13
2:30 PM	0	1	0	1	0	0	0	0	0	0	4	0	0	0	10	1	17
2:45 PM	0	0	0	4	0	0	0	0	0	0	4	0	0	0	9	3	20
3:00 PM	0	1	0	1	0	0	0	0	0	0	5	0	0	0	10	0	17
3:15 PM	0	0	0	2	0	0	0	0	0	0	6	0	0	0	8	0	16
3:30 PM	0	0	0	0	0	0	0	0	0	0	5	0	0	0	7	2	14
3:45 PM	0	1	0	2	0	0	0	0	0	0	2	0	0	0	5	2	12
4:00 PM	0	1	0	0	0	0	0	0	0	0	5	0	0	0	12	0	18
4:15 PM	0	1	0	3	0	0	0	0	0	0	3	0	0	0	5	1	13
4:30 PM	0	0	0	1	0	0	0	0	0	0	7	0	0	0	4	0	12
4:45 PM	0	0	0	1	0	0	0	0	0	0	3	0	0	0	1	1	6
5:00 PM	0	0	0	0	0	0	0	0	0	0	4	0	0	0	3	0	7
5:15 PM	0	0	0	0	0	0	0	0	0	0	4	0	0	0	3	0	7
5:30 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	3	0	5
5:45 PM	0	0	0	2	0	0	0	0	0	0	6	0	0	0	0	0	8
6:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	3	1	5
6:15 PM	0	0	0	0	0	0	0	0	0	0	4	0	0	0	5	1	10
6:30 PM	0	0	0	1	0	0	0	0	0	0	2	0	0	0	4	0	7
6:45 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	3	0	5
Total	0	24	4	50	0	0	0	0	0	0	259	0	0	0	279	35	651

Turning Movement Count

Tudor Rd & Seward Hwy NB Ramps

Total Vehicles (15-Minute Periods)

AM Peak Hour

Tuesday, January 8, 2019

7:00 AM to 9:00 AM

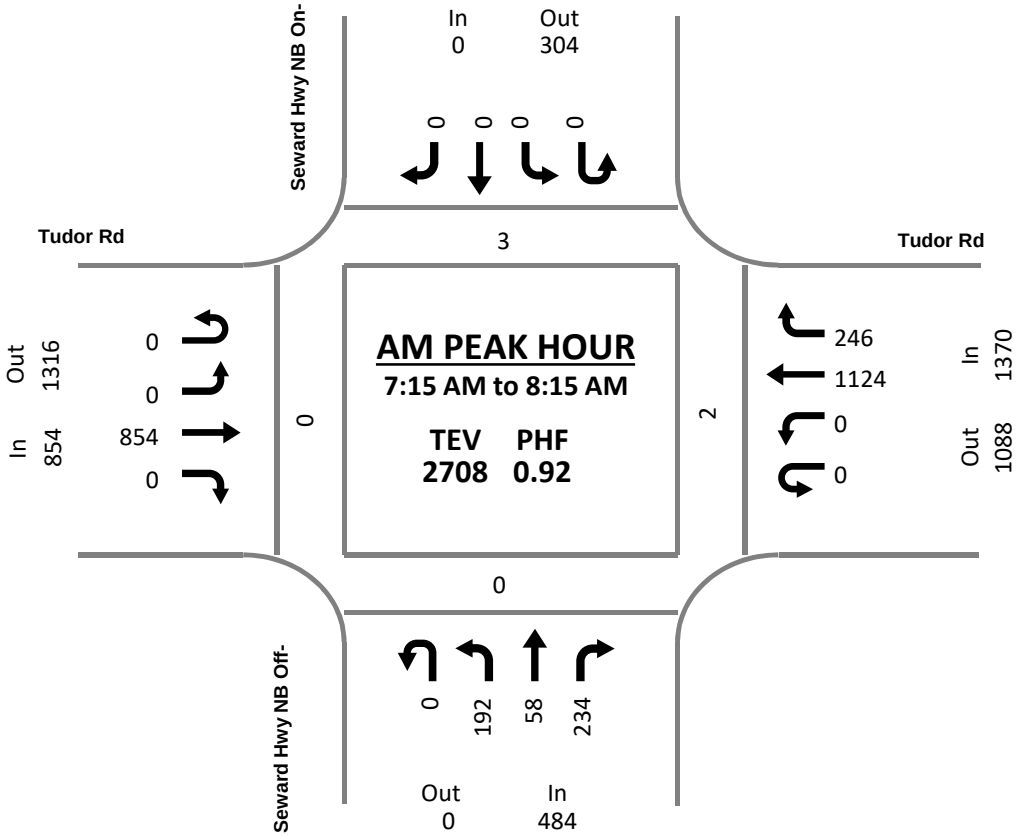
Start Time	Seward Hwy NB Off-Ramp (Northbound)					Seward Hwy NB On-Ramp (Southbound)					Tudor Rd (Eastbound)					Tudor Rd (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
7:00 AM	0	25	17	50	0	0	0	0	0	0	0	1	115	0	0	0	0	177	46	0	431
7:15 AM	0	39	13	55	0	0	0	0	0	1	0	0	201	0	0	0	0	274	61	1	643
7:30 AM	0	45	22	61	0	0	0	0	0	0	0	0	216	0	0	0	0	327	65	0	736
7:45 AM	0	64	13	65	0	0	0	0	0	1	0	0	238	0	0	0	0	277	78	1	735
8:00 AM	0	44	10	53	0	0	0	0	0	1	0	0	199	0	0	0	0	246	42	0	594
8:15 AM	0	42	8	54	0	0	0	0	0	2	0	0	165	0	0	0	0	249	45	0	563
8:30 AM	0	38	19	61	0	0	0	0	0	0	0	1	144	0	0	0	0	222	53	0	538
8:45 AM	0	36	20	54	0	0	0	0	0	1	0	0	163	0	0	0	0	266	64	0	603
Total	0	333	122	453	0	0	0	0	0	6	0	2	1,441	0	0	0	0	2,038	454	2	4,843

*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total")

Peak Hour Summary

7:15 AM to 8:15 AM

Data Type	Seward Hwy NB Off-Ramp (Northbound)					Seward Hwy NB On-Ramp (Southbound)					Tudor Rd (Eastbound)					Tudor Rd (Westbound)					Peak Hour Total
	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	
Volume	0	192	58	234	0	0	0	0	0	3	0	0	854	0	0	0	0	1124	246	2	2708
%HV	0.0%	0.5%	0.0%	1.3%		0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	2.9%	0.0%		0.0%	0.0%	1.6%	1.2%		1.8%
PHF	0.00	0.75	0.66	0.90	0.00	0.00	0.00	0.00	0.00	0.75	0.00	0.00	0.90	0.00	0.00	0.00	0.00	0.86	0.79	0.50	0.92
Volume			484					0					854					1370			2708
%HV			0.8%					0.0%					2.9%					1.5%			1.8%
PHF			0.85					0.00					0.90					0.87			0.92



Turning Movement Count

Tudor Rd & Seward Hwy NB Ramps

Total Vehicles (15-Minute Periods)

PM Peak Hour

Tuesday, January 8, 2019

4:00 PM to 6:00 PM

Start Time	Seward Hwy NB Off-Ramp (Northbound)					Seward Hwy NB On-Ramp (Southbound)					Tudor Rd (Eastbound)					Tudor Rd (Westbound)					Period Total (Veh)
	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	U	L	T	R	Peds*	
4:00 PM	0	38	4	45	1	0	0	0	0	1	0	1	305	0	0	0	0	348	58	0	799
4:15 PM	0	37	11	43	0	0	0	0	0	1	0	0	293	0	0	0	0	338	51	0	773
4:30 PM	0	35	13	43	0	0	0	0	0	1	0	0	281	0	0	0	0	339	52	0	763
4:45 PM	0	36	2	53	0	0	0	0	0	0	0	0	291	0	0	0	0	363	43	0	788
5:00 PM	0	33	10	49	0	0	0	0	0	2	0	0	281	0	0	0	0	349	47	1	769
5:15 PM	0	27	9	44	0	0	0	0	0	2	0	1	308	0	0	0	0	362	39	0	790
5:30 PM	0	18	14	48	0	0	0	0	0	2	0	0	275	0	0	0	0	293	41	0	689
5:45 PM	0	27	12	52	0	0	0	0	0	1	0	0	231	0	0	0	0	300	34	0	656
Total	0	251	75	377	1	0	0	0	0	10	0	2	2,265	0	0	0	0	2,692	365	1	6,027

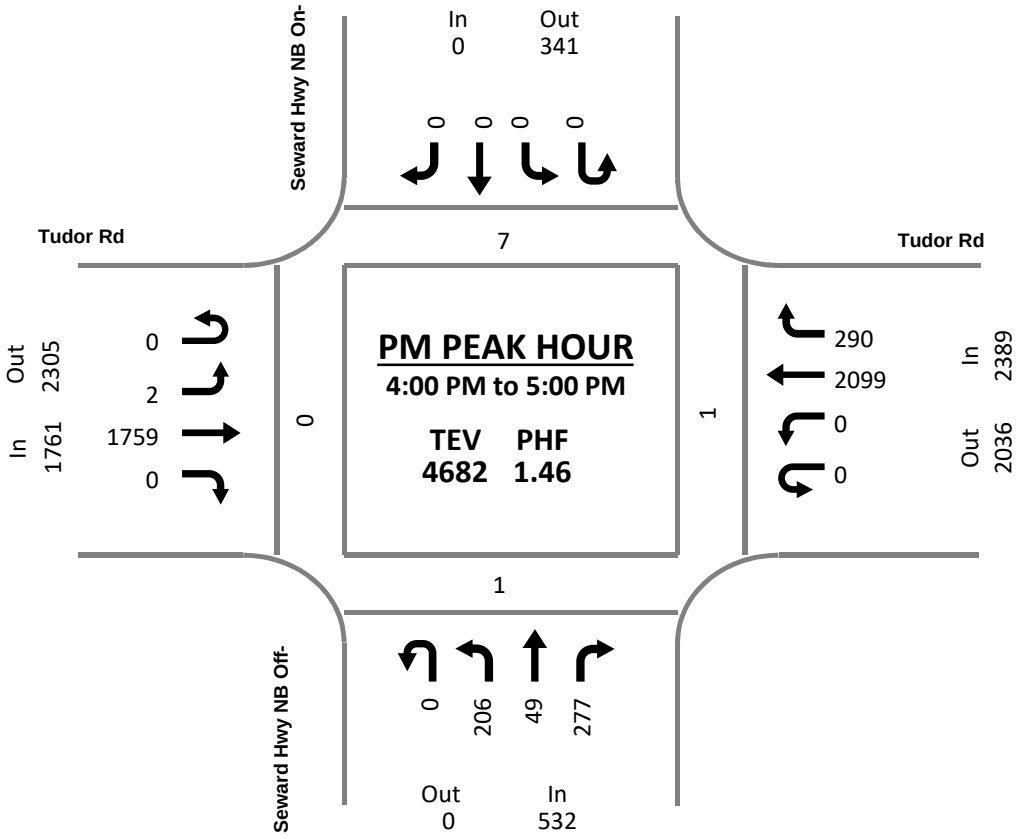
*Peds = Pedestrian and bicycle crossing counts using crosswalk on corresponding approach (volumes not included in "Period Total")

Peak Hour Summary (System Peak*)

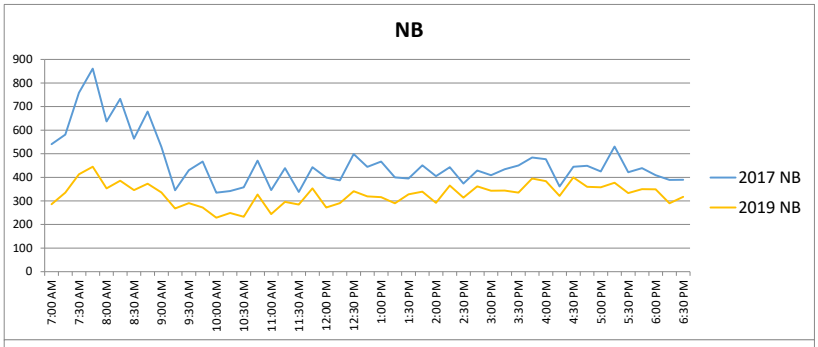
4:00 PM to 5:00 PM

Data Type	Seward Hwy NB Off-Ramp (Northbound)					Seward Hwy NB On-Ramp (Southbound)					Tudor Rd (Eastbound)					Tudor Rd (Westbound)					Peak Hour Total
	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	U	L	T	R	Peds	
Volume	0	206	49	277	1	0	0	0	0	7	0	2	1759	0	0	0	0	2099	290	1	4682
%HV	0.0%	1.0%	0.0%	1.8%		0.0%	0.0%	0.0%	0.0%		0.0%	0.0%	1.5%	0.0%		0.0%	0.0%	1.3%	0.7%		1.3%
PHF	0.00	1.36	1.11	1.41	0.25	0.00	0.00	0.00	0.00	0.88	0.00	0.50	1.43	0.00	0.00	0.00	0.00	1.45	1.25	0.25	1.46
Volume			532					0					1761					2389			4682
%HV			1.3%					0.0%					1.5%					1.3%			1.3%
PHF			1.45					0.00					1.42					1.47			1.46

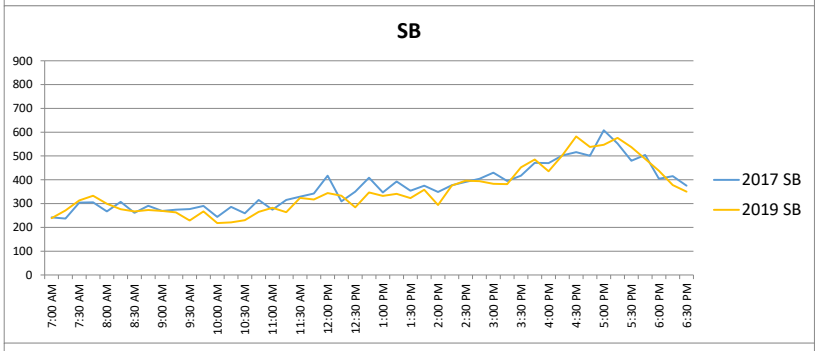
*System Peak is based on comparison of other study area counts rather than highest total entering volume at this intersection.



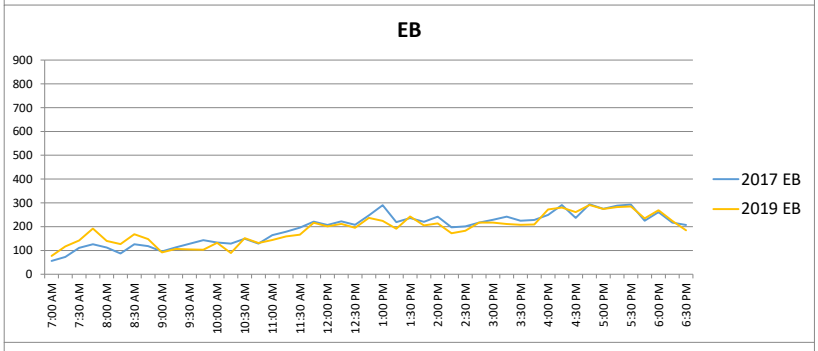
Seward & 36th



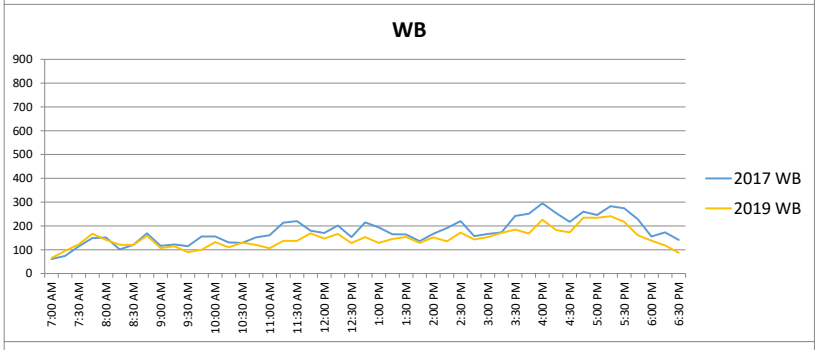
	Difference	Perecent
AM Peak 2-Hr	-2418	-45.15%
PM Peak 2-Hr	-666	-18.77%



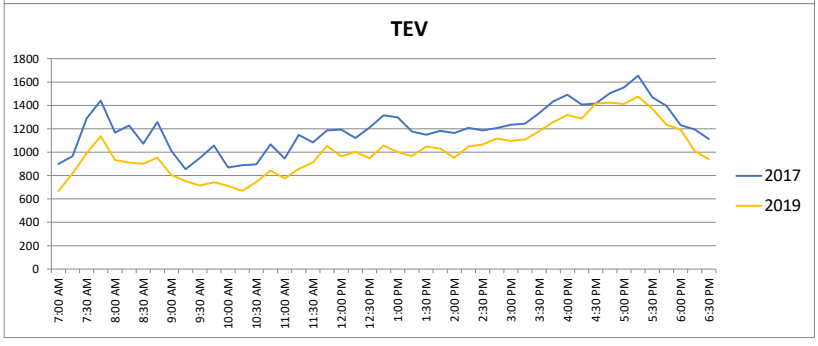
	Difference	Perecent
AM Peak 2-Hr	57	2.57%
PM Peak 2-Hr	74	1.79%



	Difference	Perecent
AM Peak 2-Hr	302	37.33%
PM Peak 2-Hr	28	1.30%

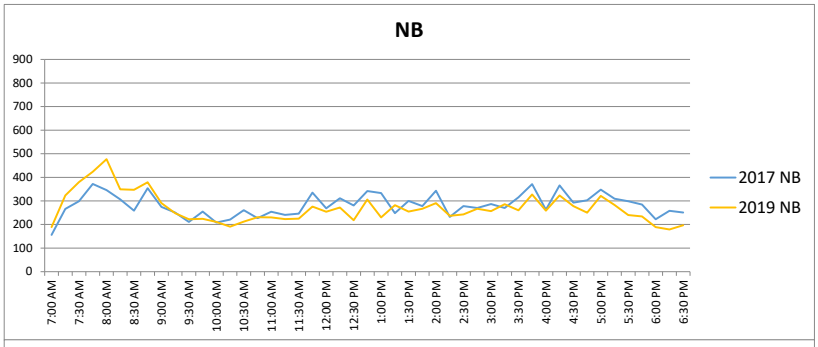


	Difference	Perecent
AM Peak 2-Hr	51	5.43%
PM Peak 2-Hr	-387	-18.81%

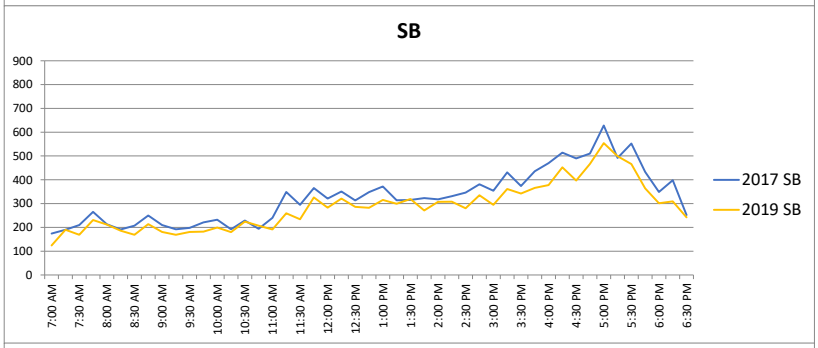


	Difference	Perecent
AM Peak 2-Hr	-2008	-21.55%
PM Peak 2-Hr	-951	-8.00%

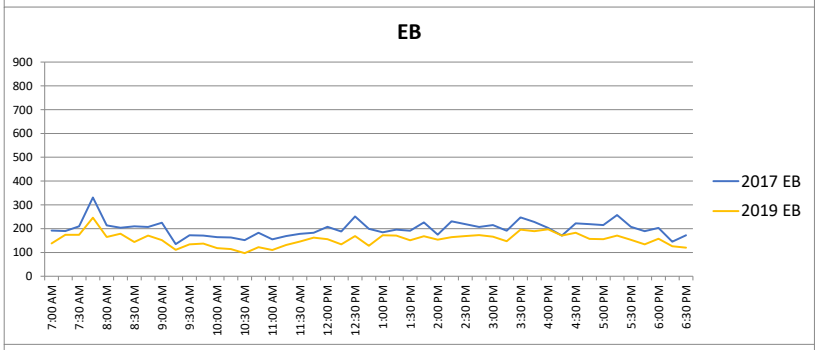
Tudor & C



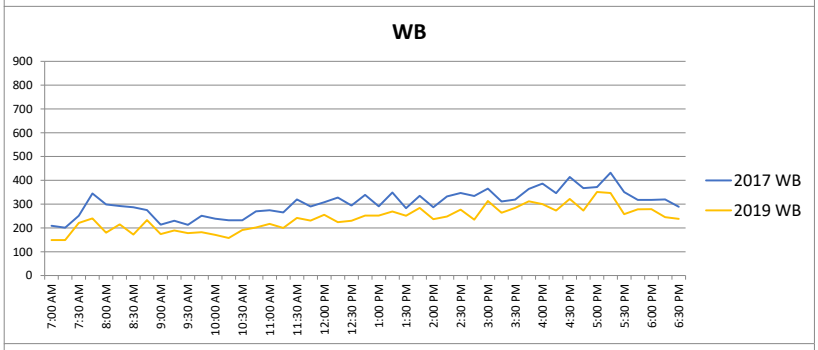
	Difference	Perecent
AM Peak 2-Hr	509	21.58%
PM Peak 2-Hr	-278	-11.27%



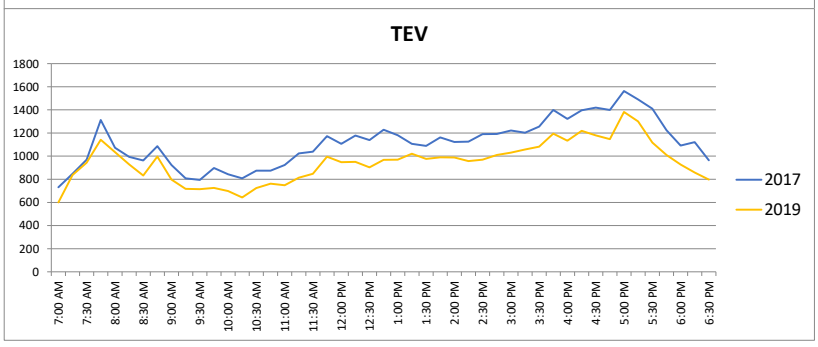
	Difference	Perecent
AM Peak 2-Hr	-205	-12.06%
PM Peak 2-Hr	-512	-12.52%



	Difference	Perecent
AM Peak 2-Hr	-367	-20.88%
PM Peak 2-Hr	-362	-21.50%

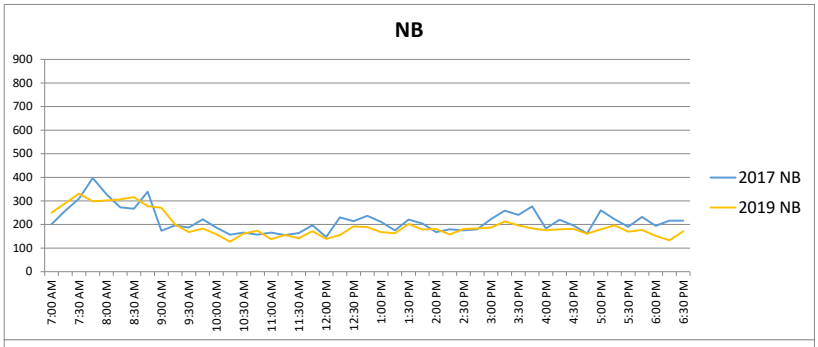


	Difference	Perecent
AM Peak 2-Hr	-600	-27.79%
PM Peak 2-Hr	-584	-19.56%

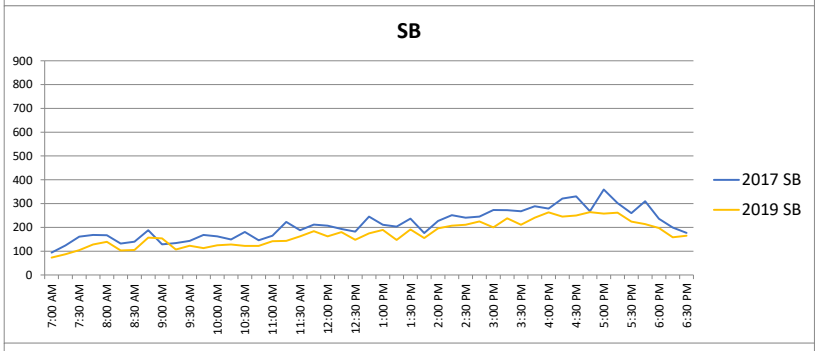


	Difference	Perecent
AM Peak 2-Hr	-663	-8.31%
PM Peak 2-Hr	-1736	-15.47%

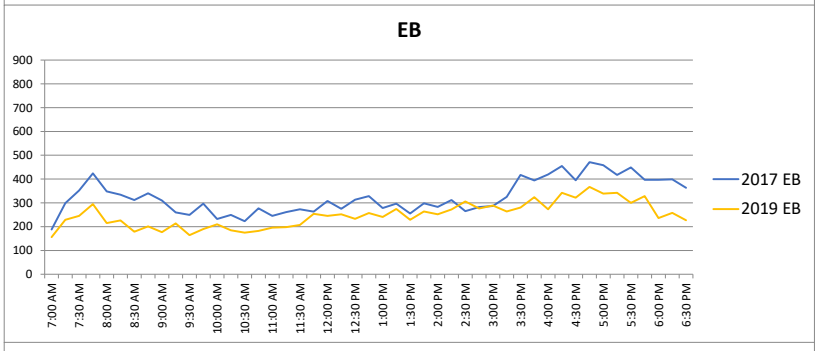
Tudor & Lake Otis



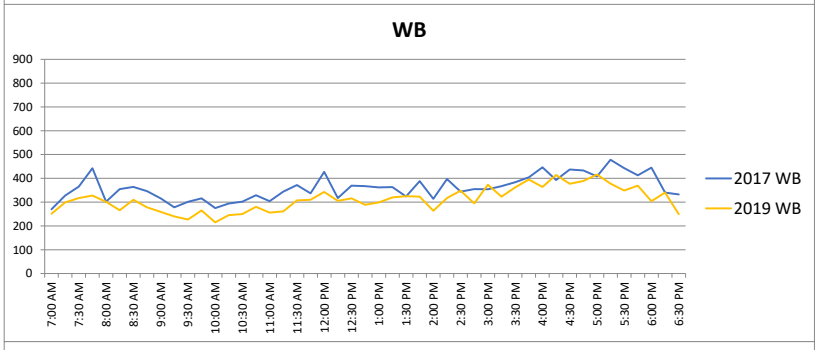
	Difference	Perecent
AM Peak 2-Hr	0	0.00%
PM Peak 2-Hr	-243	-14.59%



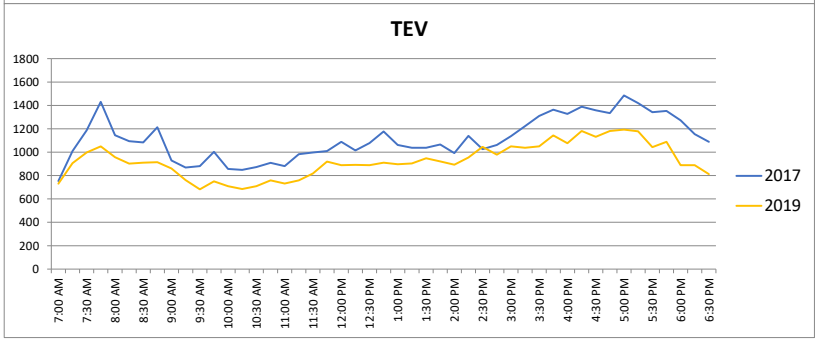
	Difference	Perecent
AM Peak 2-Hr	-278	-23.68%
PM Peak 2-Hr	-449	-18.48%



	Difference	Perecent
AM Peak 2-Hr	-851	-32.77%
PM Peak 2-Hr	-848	-24.50%

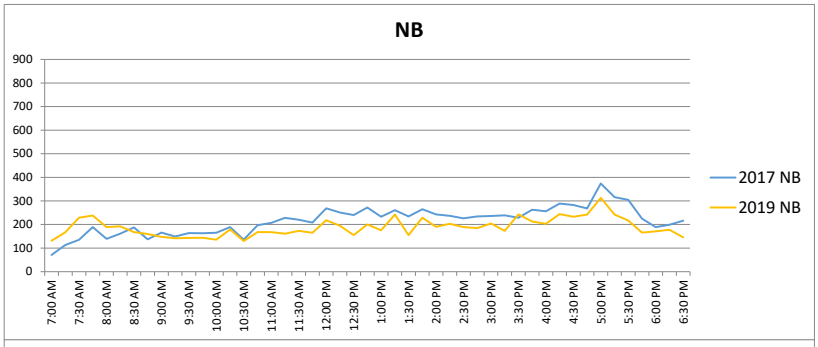


	Difference	Perecent
AM Peak 2-Hr	-422	-15.22%
PM Peak 2-Hr	-395	-11.45%

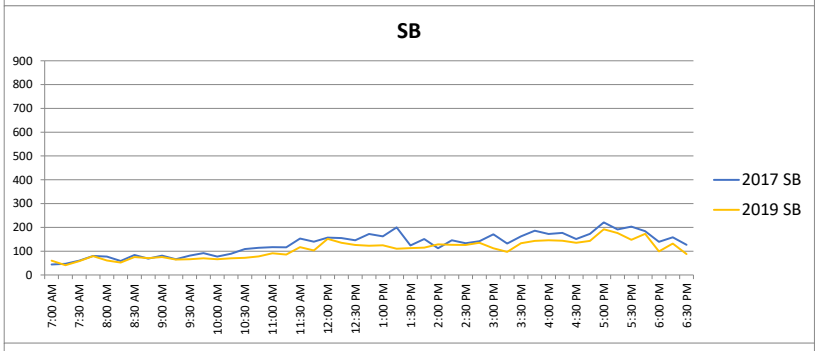


	Difference	Perecent
AM Peak 2-Hr	-1551	-17.40%
PM Peak 2-Hr	-1935	-17.58%

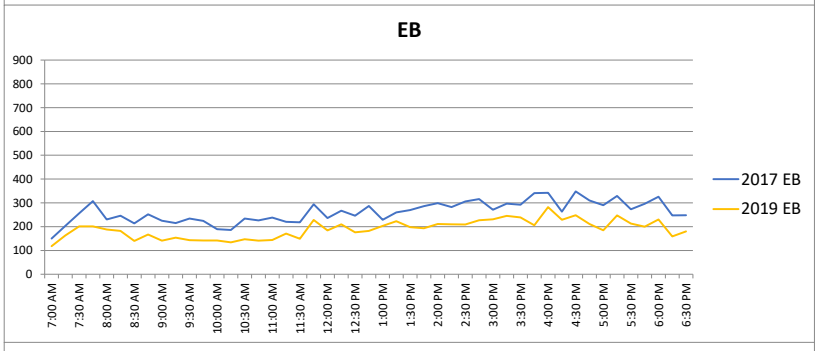
Tudor & Old Seward



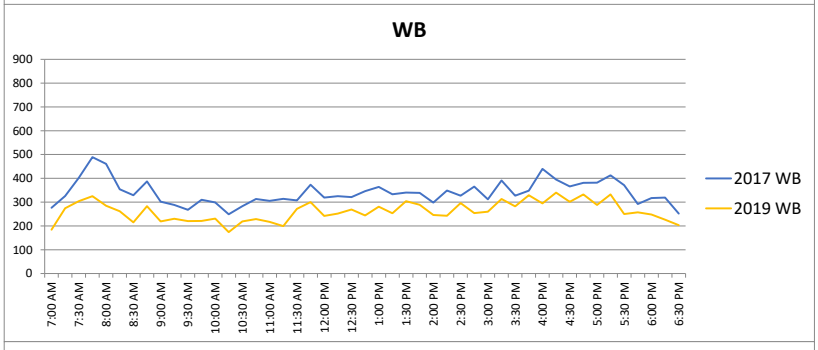
	Difference	Perecent
AM Peak 2-Hr	341	30.10%
PM Peak 2-Hr	-456	-19.69%



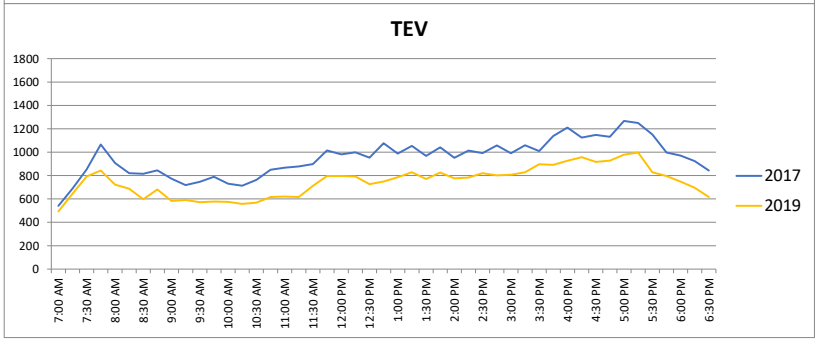
	Difference	Perecent
AM Peak 2-Hr	-23	-4.42%
PM Peak 2-Hr	-214	-14.55%



	Difference	Perecent
AM Peak 2-Hr	-498	-26.80%
PM Peak 2-Hr	-635	-25.92%

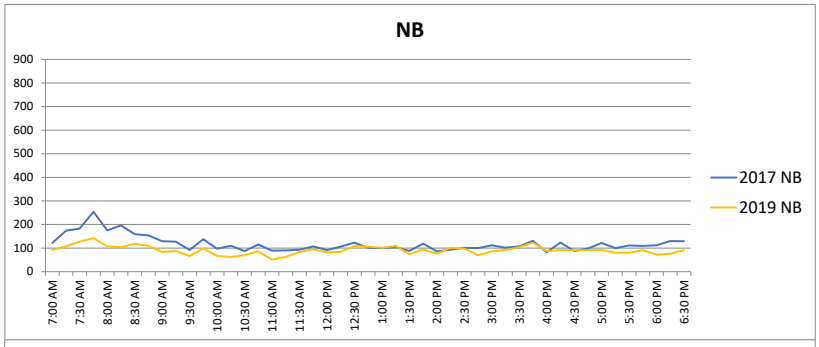


	Difference	Perecent
AM Peak 2-Hr	-892	-29.50%
PM Peak 2-Hr	-645	-21.22%

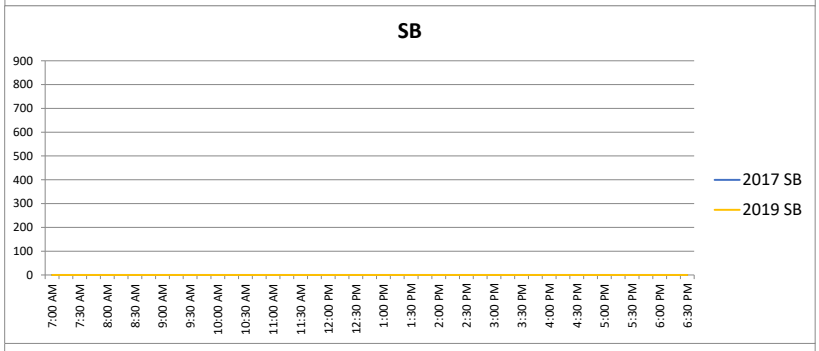


	Difference	Perecent
AM Peak 2-Hr	-1072	-16.40%
PM Peak 2-Hr	-1950	-21.02%

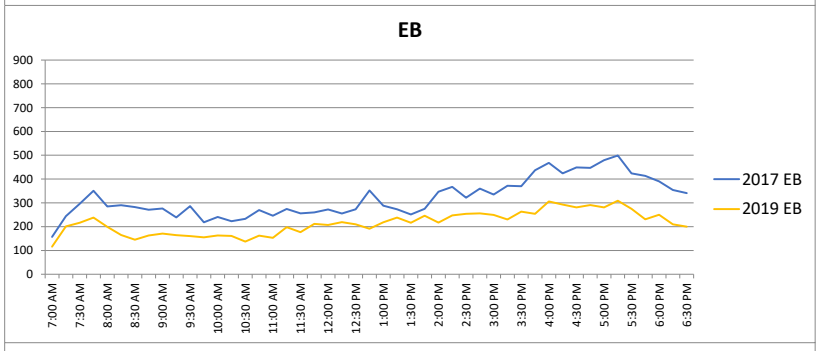
Tudor & Seward Hwy NB Ramps



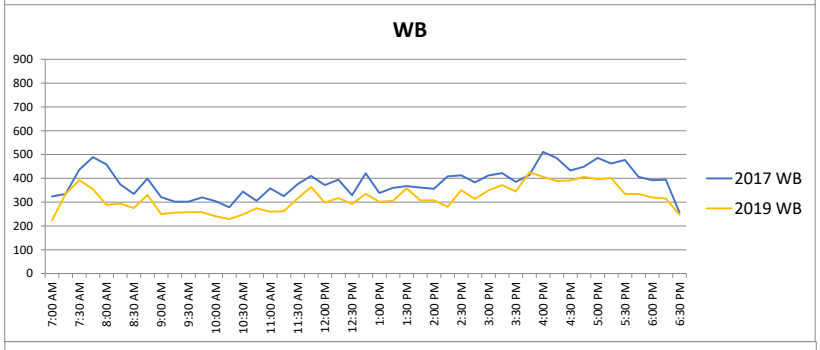
	Difference	Perecent
AM Peak 2-Hr	-509	-35.92%
PM Peak 2-Hr	-131	-15.71%



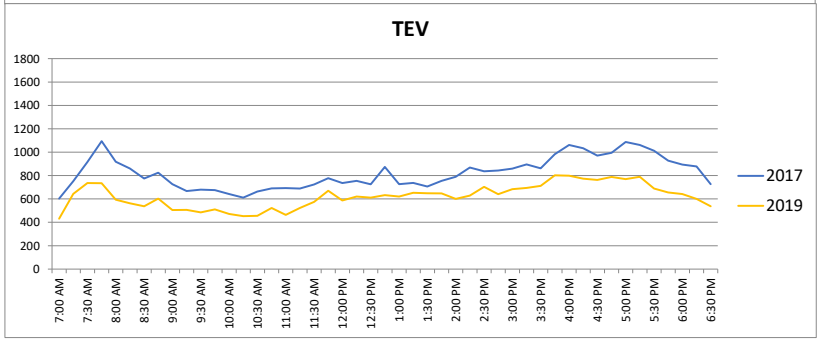
	Difference	Perecent
AM Peak 2-Hr	0	0.00%
PM Peak 2-Hr	0	0.00%



	Difference	Perecent
AM Peak 2-Hr	-733	-33.69%
PM Peak 2-Hr	-1336	-37.08%

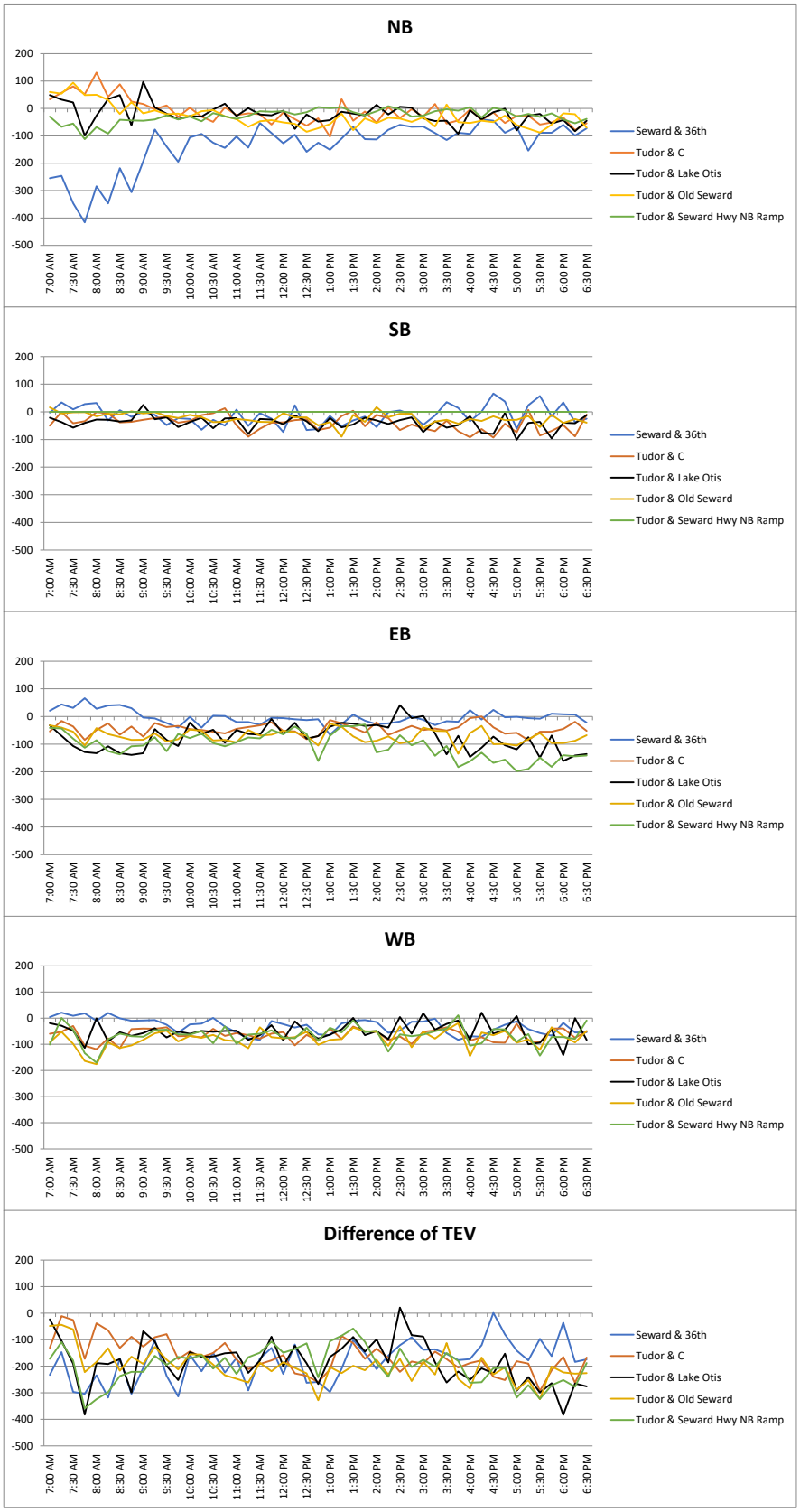


	Difference	Perecent
AM Peak 2-Hr	-656	-20.84%
PM Peak 2-Hr	-652	-17.58%

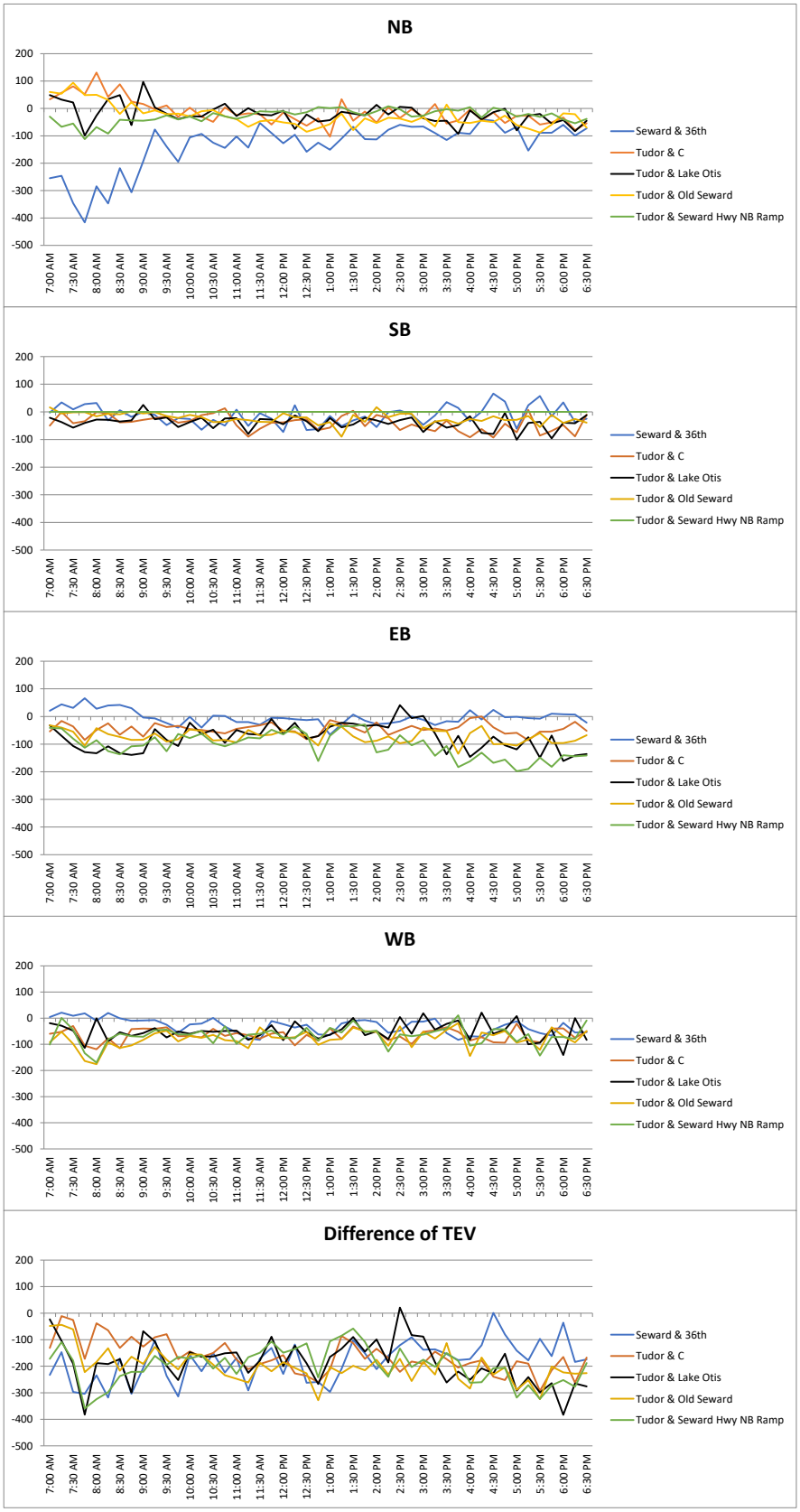


	Difference	Perecent
AM Peak 2-Hr	-1898	-28.16%
PM Peak 2-Hr	-2119	-26.01%

Difference


NB
SB
EB
WB
Difference of TEV
200
100
0
-100
-200
-300
-400
-500
7:00 AM
7:30 AM
8:00 AM
8:30 AM
9:00 AM
9:30 AM
10:00 AM
10:30 AM
11:00 AM
11:30 AM
12:00 PM
12:30 PM
1:00 PM
1:30 PM
2:00 PM
2:30 PM
3:00 PM
3:30 PM
4:00 PM
4:30 PM
5:00 PM
5:30 PM
6:00 PM
6:30 PM
Seward & 36th
Tudor & C
Tudor & Lake Otis
Tudor & Old Seward
Tudor & Seward Hwy NB Ramp

Difference


NB
SB
EB
WB
Difference of TEV
200
100
0
-100
-200
-300
-400
-500
7:00 AM
7:30 AM
8:00 AM
8:30 AM
9:00 AM
9:30 AM
10:00 AM
10:30 AM
11:00 AM
11:30 AM
12:00 PM
12:30 PM
1:00 PM
1:30 PM
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3:00 PM
3:30 PM
4:00 PM
4:30 PM
5:00 PM
5:30 PM
6:00 PM
6:30 PM
Seward & 36th
Tudor & C
Tudor & Lake Otis
Tudor & Old Seward
Tudor & Seward Hwy NB Ramp

ATTACHMENT C – EXISTING CRASH DATA ASSESSMENT SUMMARY MEMO

KITTELSON & ASSOCIATES
1600 A STREET, SUITE 105
ANCHORAGE, AK 99501
P 907.646.7995

TECHNICAL MEMORANDUM

Seward Highway: Midtown Congestion Relief

Existing Crash Data Assessment Summary

Date: August 16, 2018 Project #: 21302
To: Steve Noble, PE, DOWL
From: Andrew Ooms, PE and Wende Wilber, AICP, PTP, Ly Nguyen, EIT,

This memorandum documents the existing safety conditions assessment for the Seward Highway Midtown Congestion Relief (MCR) project. The content of this memorandum is intended to be incorporated into the Planning and Environmental Linkage report.

Crash records were obtained from DOT&PF for January 1, 2009 through December 31, 2014. Intersection crash rates and overall patterns were developed for the study area while a detailed assessment was completed at intersections along the Seward Highway corridor. Crash histories were reviewed for trends and patterns and used to calculate critical crash rates by intersection type and number of conflict points. Any identified issues were noted and will be considered through the concept development. A summary of the crash data over the five-year period is provided in Table 1.

Table 1. Seward Highway Intersection Crash Summary (2010-2014)

Intersection	Collision Type							Severity			Total Crashes
	Angle	Side-swipe	Rear End	Head On	Fixed Object	Ped / Bike	Other / Unknown	PDO	Injury	Fatality	
20th Avenue/ Seward Highway (Ingra Street)	7	1	10	0	2	1	4	16	9	0	**25**
Fireweed Lane/ Seward Highway	35	6	85	2	3	6	12	108	41	0	**149**
Northern Lights Boulevard/ Seward Highway	70	16	79	3	5	13	25	145	66	0	**211**
Benson Boulevard/ Seward Highway	95	24	112	3	6	4	36	204	76	0	**280**
36th Avenue/ Seward Highway	65	10	153	5	11	4	29	204	73	0	**277**
Tudor Road/NB Seward Highway Ramps	26	4	37	2	3	2	19	59	34	0	**93**
Tudor Road/SB Seward Highway Ramps	15	3	28	1	3	5	10	49	15	1	**65**

The Benson Boulevard/Seward Highway intersection had 280 reported crashes, the most of any study intersection. The majority of these crashes were either rear end crashes (112) or angle crashes (95). Nearly 50 percent of the rear end crashes were in the northbound direction. Of the 76 reported injuries, 1 was a major injury.

The 36th Avenue/Seward Highway intersection had 277 reported crashes. Rear end crashes were the most common crash type, with 153 crashes, 76 of which occurred on the northbound travel direction of Seward Highway. Of the 73 injury crashes, 3 included a major injury.

The Northern Lights Boulevard/Seward Highway intersection included 211 reported crashes, of which 79 were classified as rear ends. Over 70 percent of these rear end crashes were attributed to the Seward Highway approaches.

There were a total of 27 pedestrian and 22 bicycle crashes reported along the Seward Highway within the study boundary and 18 of the pedestrian crashes and 17 of the bicycle crashes occurred at intersections.

- The Northern Lights/Seward Highway intersection accounted for 7 pedestrian and 6 bicycle crashes.
- At least 13 of the 22 bicycle crashes involved right turning vehicles with an additional 5 vehicle actions not reported in the data.,
- 10 of the 27 pedestrian crashes occurred between 5:00 and 8:00 p.m.
- 65 percent of the nonmotorized crashes occurred during daylight conditions.

Of the 49 total corridor pedestrian and bicycle crashes, 36 involved injuries, including 11 serious injuries and one pedestrian fatality at the Tudor Road/NB Seward Highway Ramp intersection.

DOT&PF provided statewide average crash rates at a variety of intersection configurations based on the number of approaches and traffic control types. This average crash rate was used to calculate the critical crash rate for each study intersection based on the DOT&PF HSIP Manual methodology. Table 2 reports the observed crashes, million entering vehicles (MEV), the observed crash rate per MEV, the statewide average crash rate, and the critical crash rate for intersections along the Seward Highway.

Table 2. Intersection Crash Rate Analysis (2010-2014)

Intersection	Total Crashes	Total Million Entering Vehicles (MEVs)	Crash Rate (per MEV)	DOT&PF Average Crash Rate (per MEV)	Critical Crash Rate
20th Avenue/Seward Highway (Ingra Street)	25	10.1	0.50	0.19	0.30
Fireweed Lane/ Seward Highway	149	20.8	1.43	1.45	1.65
Northern Lights Boulevard/ Seward Highway	211	26.2	1.61	1.13	1.29
Benson Boulevard/ Seward Highway	280	28.9	1.94	1.13	1.28
36th Avenue/ Seward Highway	277	25.7	2.15	1.41	1.59
Tudor Road/NB Seward Highway Ramps	93	16.7	1.11	1.13	1.33
Tudor Road/SB Seward Highway Ramps	65	17.0	0.76	1.13	1.33

Crash rates at the Seward Highway intersections at 20th Avenue, Northern Lights Boulevard, Benson Boulevard, and 36th Avenue exceed statewide averages with a high degree of confidence. The Fireweed Lane/Seward Highway and Tudor Road/NB Seward Highway Ramp intersection crash rates are approximately equal to statewide averages for similar intersection types.

The crash rates compared to statewide averages for all major intersections within the study boundary are shown in Figure 1. A number of major intersections on routes parallel to the Seward Highway also exceed the statewide averages.

Figure 1. Study Area Crash Rates Compared to Statewide Averages (Source: DOWL)



ATTACHMENT D – CONCEPT FIGURES

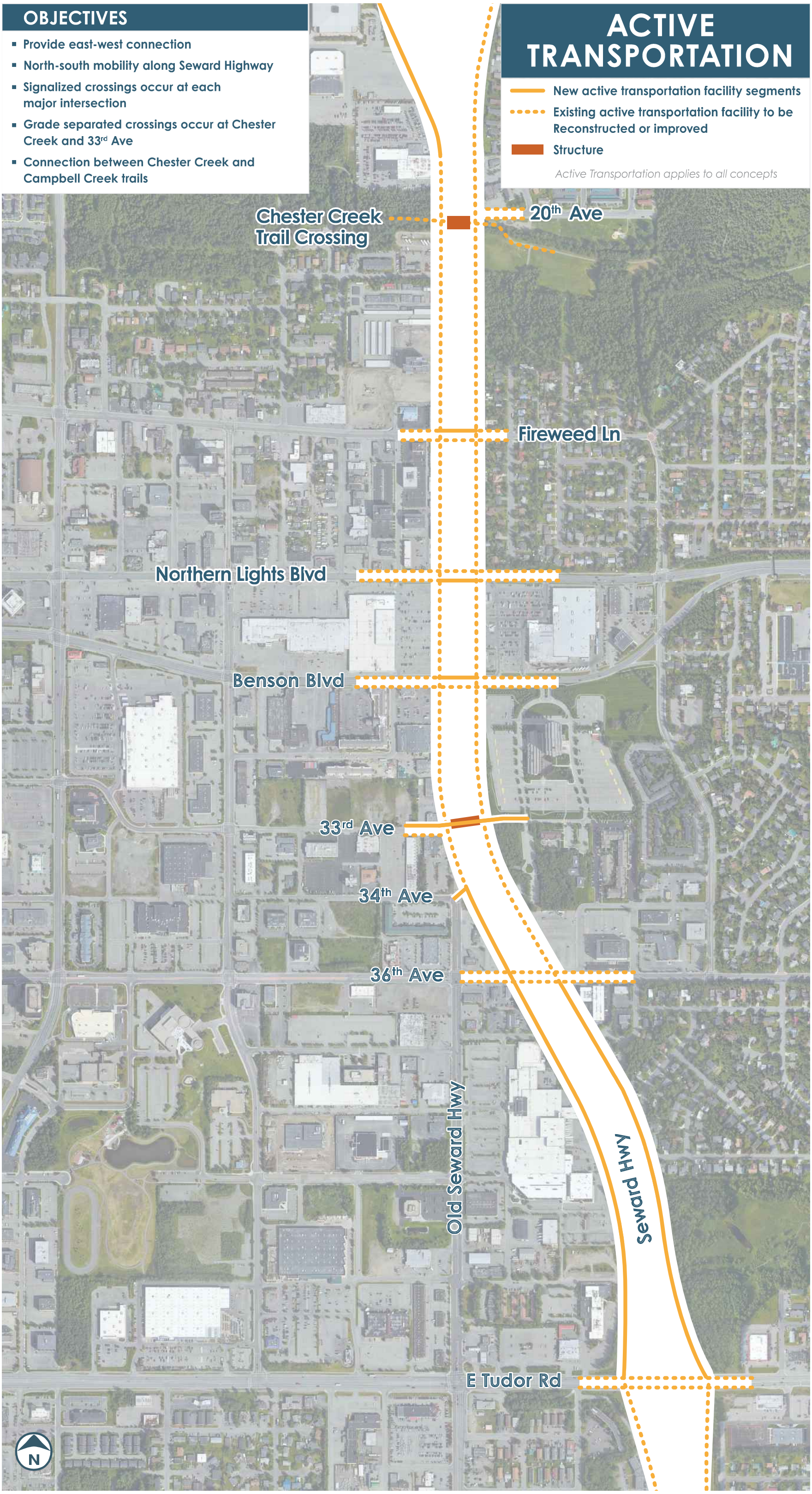
OBJECTIVES

- Provide east-west connection
- North-south mobility along Seward Highway
- Signalized crossings occur at each major intersection
- Grade separated crossings occur at Chester Creek and 33rd Ave
- Connection between Chester Creek and Campbell Creek trails

ACTIVE TRANSPORTATION

- New active transportation facility segments
- Existing active transportation facility to be Reconstructed or improved
- Structure

Active Transportation applies to all concepts



CONCEPT A

KEY FEATURES

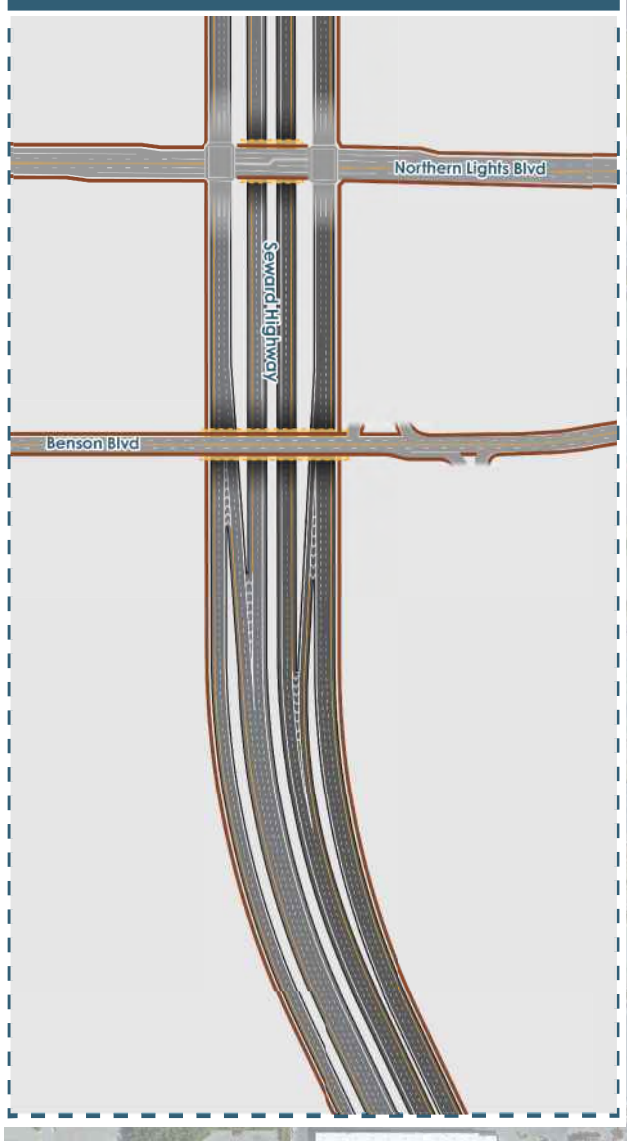
- Mainline could be over or under cross streets
- Accommodates future southbound off and northbound on ramps north of Fireweed Lane
- Includes redesign of Benson Blvd/Northern Lights Blvd to be two-way roads east of A Street to accommodate ramp spacing
- Benson Blvd is free-flowing crossing with greater focus on commercial access
- Active transportation free-flow crossing at Benson Blvd

Seward Highway – Freeway Mainline
Freeway Ramp
Street/Frontage Network and Direction of Traffic
Future Ramp
Optional Secondary Road Improvement
Number of Lanes and Direction of Traffic
Structure
Active Transportation (🚲/🚶)

See active transportation schematic
Alignment/footprint to be determined

Transition to Existing
EXIT TO MIDTOWN
20th Ave
FREEWAY ENTRANCE
Fireweed Ln
Northern Lights Blvd
Benson Blvd
EXIT TO NORTHERN LIGHTS BLVD
33rd Ave
Rhone St
36th Ave
EXIT TO TUDOR RD
FREEWAY ENTRANCE
EXIT TO 36TH AVE
Old Seward Hwy
E Tudor Rd
Transition to Existing
N

RAMP DETAIL



CONCEPT B

- Seward Highway – Freeway Mainline
- Freeway Ramp
- Street/Frontage Network and Direction of Traffic
- Future Ramp
- Optional Secondary Road Improvement
- Number of Lanes and Direction of Traffic
- Structure
- Active Transportation (🚲/🚶)

See active transportation schematic
Alignment/footprint to be determined

Transition to Existing

EXIT TO MIDTOWN

20th Ave

EXIT TO MIDTOWN

Fireweed Ln

FREEWAY ENTRANCE

Northern Lights Blvd

Benson Blvd

FREEWAY ENTRANCE

33rd Ave

34th Ave

EXIT TO MIDTOWN

36th Ave

FREEWAY ENTRANCE

EXIT TO 36TH AVE

Old Seward Hwy

EXIT TO TUDOR RD

FREEWAY ENTRANCE

E Tudor Rd

FREEWAY ENTRANCE

EXIT TO TUDOR RD

Transition to Existing

N

KEY FEATURES

- Benson Blvd, Northern Lights Blvd, and Fireweed Lane operate as a split diamond
- Full access is provided to 36th Ave
- Accommodates future southbound off and northbound on ramps north of Fireweed Lane
- Manages volume on frontage roads north of Northern Lights Blvd

CONCEPT C1

- Seward Highway – Freeway Mainline
- Freeway Ramp
- Street/Frontage Network and Direction of Traffic
- Future Ramp
- Optional Secondary Road Improvement
- Number of Lanes and Direction of Traffic
- Structure
- Active Transportation (🚲/🚶)

See active transportation schematic
Alignment/footprint to be determined

Transition to Existing

EXIT TO MIDTOWN

FREEWAY ENTRANCE

Benson Blvd

EXIT TO 36th AVE

EXIT TO MIDTOWN

FREEWAY ENTRANCE

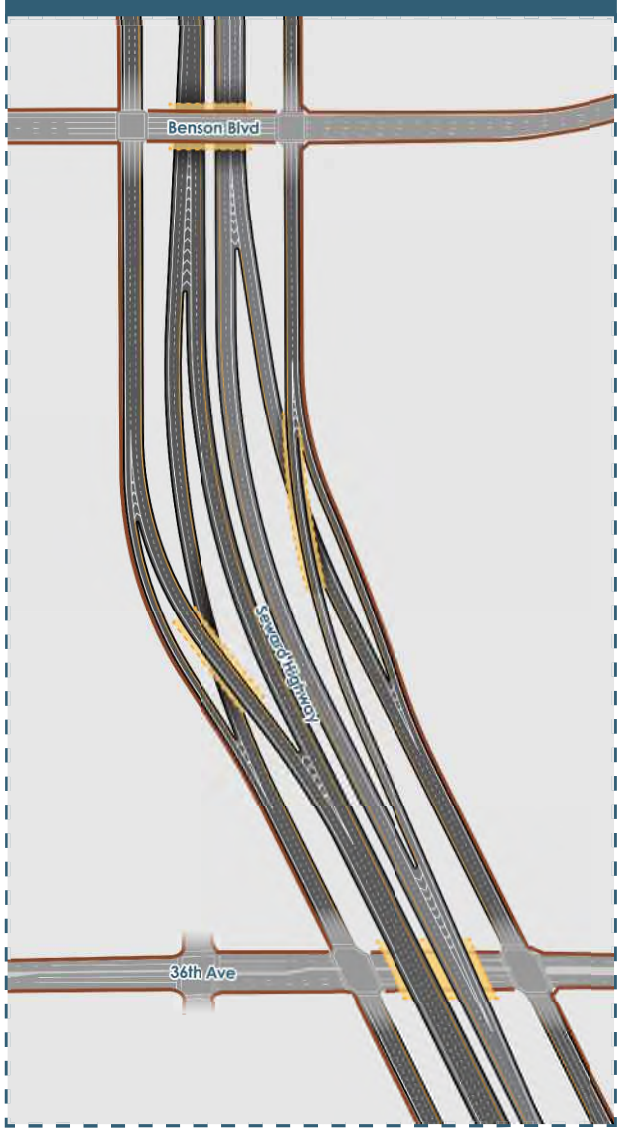
FREEWAY ENTRANCE

EXIT TO TUDOR RD

Transition to Existing

N

BRAIDED RAMP



KEY FEATURES

- Reduces the number of intersections along 36th Ave
- Tight weaving and additional lane required along Seward Hwy between 36th Ave and Tudor Rd in southbound direction
- Braided exit ramp ties directly to arterial roadway

CONCEPT C2

- Seward Highway – Freeway Mainline
- Freeway Ramp
- Street/Frontage Network and Direction of Traffic
- Future Ramp
- Optional Secondary Road Improvement
- Number of Lanes and Direction of Traffic
- Structure
- Active Transportation (🚲/🚶)

See active transportation schematic
Alignment/footprint to be determined

Transition to Existing

EXIT TO MIDTOWN

20th Ave

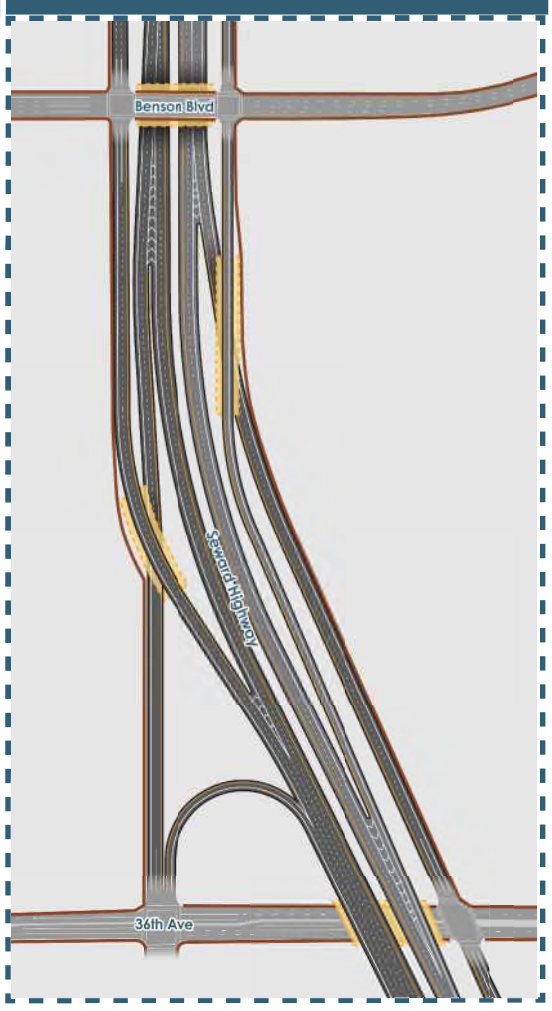
FREEWAY ENTRANCE

Fireweed Ln

Northern Lights Blvd

Benson Blvd

BRAIDED RAMP TO OLD SEWARD VARIANT



Old Seward Hwy

FREEWAY ENTRANCE

E Tudor Rd

FREEWAY ENTRANCE

EXIT TO TUDOR RD

Transition to Existing

N

KEY FEATURES

- Mainline could be over or under cross streets
- Traditional two-way road next to the Seward Hwy for Midtown access
- Direct access to businesses may be difficult due to traffic volumes
- Additional structures required crossing mainline to end frontage
- Accommodates future southbound off and northbound on ramps north of Fireweed Lane

CONCEPT E1

- Seward Highway – Freeway Mainline
- Freeway Ramp
- Street/Frontage Network and Direction of Traffic
- Future Ramp
- Optional Secondary Road Improvement
- Number of Lanes and Direction of Traffic
- Structure
- Active Transportation (🚲/🚶)

See active transportation schematic
Alignment/footprint to be determined

Transition to Existing

EXIT TO MIDTOWN

20th Ave

FREEWAY ENTRANCE

Fireweed Ln

Northern Lights Blvd

Benson Blvd

33rd Ave

34th Ave

36th Ave

EXIT TO MIDTOWN

EXIT TO TUDOR RD

FREEWAY ENTRANCE

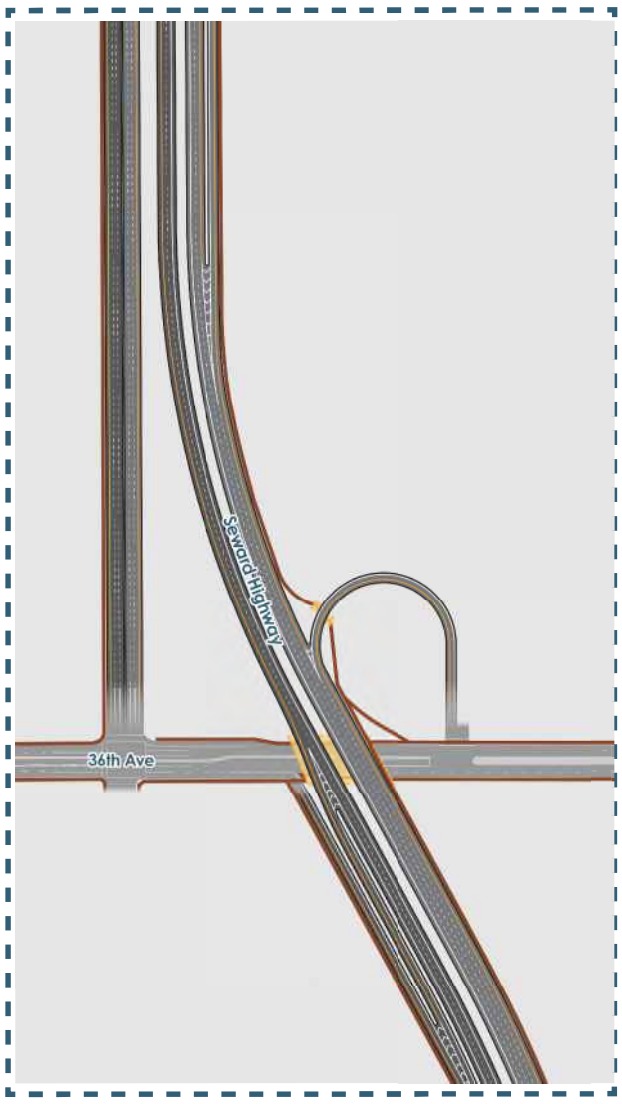
Old Seward Hwy

E Tudor Rd

FREEWAY ENTRANCE

EXIT TO TUDOR RD

LOOP RAMP DETAIL



CONCEPT E2



N

KEY FEATURES

- Mainline could be over or under cross streets
- Traditional two-way road next to the Seward Hwy for Midtown access
- Direct access to businesses may be difficult due to traffic volumes
- Additional structures required crossing mainline to begin and end frontage
- Accommodates future southbound off and northbound on ramps north of Fireweed Lane

CONCEPT F1

- Seward Highway – Freeway Mainline
- Freeway Ramp
- Street/Frontage Network and Direction of Traffic
- Future Ramp
- Optional Secondary Road Improvement
- Number of Lanes and Direction of Traffic
- Structure
- Active Transportation (🚲/🚶)

See active transportation schematic
Alignment/footprint to be determined

CROSSOVER DETAIL



CONCEPT F2



Transition to Existing
20th Ave
FREEWAY ENTRANCE
Fireweed Ln
Northern Lights Blvd
Benson
33rd Ave
34th Ave
EXIT TO 36TH AVE
FREEWAY ENTRANCE
36th Ave
Old Seward Hwy
FREEWAY ENTRANCE
EXIT TO MIDTOWN
E Tudor Rd
FREEWAY ENTRANCE
EXIT TO TUDOR RD
Transition to Existing
N

CONCEPT G

KEY FEATURES

- Mainline could be over or under cross streets
- Traditional two-way road next to the Seward Hwy for Midtown access
- Direct access to businesses may be difficult due to traffic volumes
- Additional structures required crossing mainline to begin and end frontage
- Accommodates future southbound off and northbound on ramps north of Fireweed Lane

- Seward Highway – Freeway Mainline
- Freeway Ramp
- Street/Frontage Network and Direction of Traffic
- Future Ramp
- Optional Secondary Road Improvement
- Number of Lanes and Direction of Traffic
- Structure
- Active Transportation (🚲/🚶)

See active transportation schematic
Alignment/footprint to be determined

Transition to Existing

EXIT TO MIDTOWN

20th Ave

FREEWAY ENTRANCE

Fireweed Ln

Northern Lights Blvd

Benson Blvd

33rd Ave

34th Ave

EXIT TO BENSON BLVD

36th Ave

FREEWAY ENTRANCE

EXIT TO TUDOR RD

Old Seward Hwy

E Tudor Rd

FREEWAY ENTRANCE

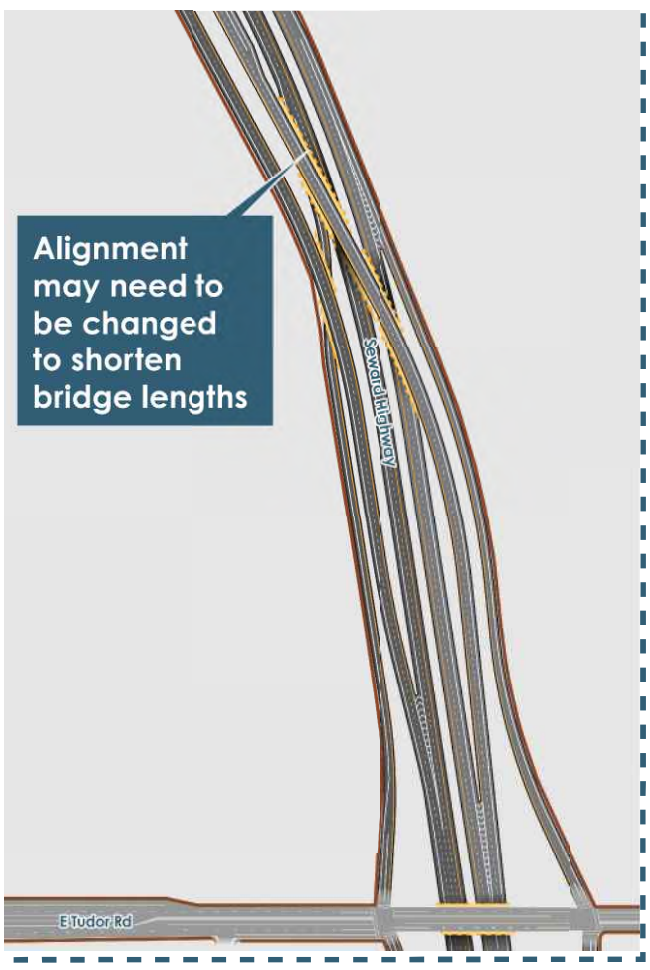
EXIT TO TUDOR RD

EXIT TO MIDTOWN

Transition to Existing

N

CROSSOVER DETAIL



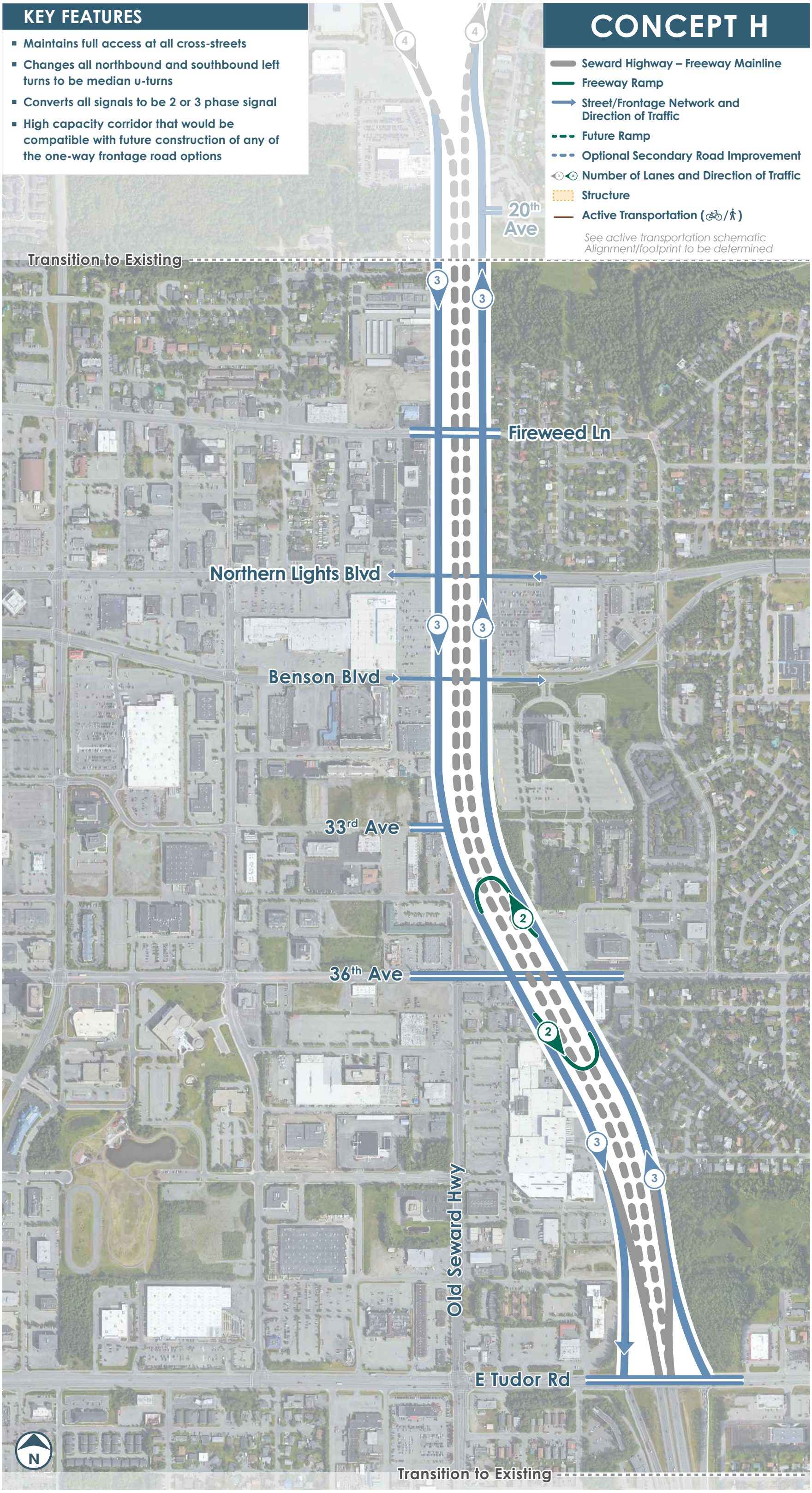
KEY FEATURES

- Maintains full access at all cross-streets
- Changes all northbound and southbound left turns to be median u-turns
- Converts all signals to be 2 or 3 phase signal
- High capacity corridor that would be compatible with future construction of any of the one-way frontage road options

CONCEPT H

- Seward Highway – Freeway Mainline
- Freeway Ramp
- Street/Frontage Network and Direction of Traffic
- Future Ramp
- Optional Secondary Road Improvement
- Number of Lanes and Direction of Traffic
- Structure
- Active Transportation (🚲/🚶)

See active transportation schematic
Alignment/footprint to be determined



CONCEPT I

- Seward Highway – Freeway Mainline
- Freeway Ramp
- Street/Frontage Network and Direction of Traffic
- Future Ramp
- Optional Secondary Road Improvement
- Number of Lanes and Direction of Traffic
- Structure
- Potential Lid Locations
- Active Transportation (🚲/🚶)

See active transportation schematic
Alignment/footprint to be determined

Transition to Existing

EXIT TO MIDTOWN

20th Ave

Fireweed Ln

FREEWAY ENTRANCE

Northern Lights Blvd

EXIT TO FIREWEED

Benson Blvd

FREEWAY ENTRANCE

33rd Ave

34th Ave

36th Ave

EXIT TO N. LIGHTS & BENSON BLVD

EXIT TO 36TH AVE

Old Seward Hwy

EXIT TO TUDOR RD

FREEWAY ENTRANCE

E Tudor Rd

FREEWAY ENTRANCE

EXIT TO TUDOR RD

Transition to Existing

N

CONCEPT J

- Seward Highway – Freeway Mainline
- Freeway Ramp
- Street/Frontage Network and Direction of Traffic
- Future Ramp
- Optional Secondary Road Improvement
- Number of Lanes and Direction of Traffic
- Structure
- Potential Lid Locations
- Active Transportation (🚲/🚶)

See active transportation schematic
Alignment/footprint to be determined

Transition to Existing

EXIT TO MIDTOWN

FREEWAY ENTRANCE

Fireweed Ln

Northern Lights Blvd

Benson Blvd

33rd Ave

34th Ave

36th Ave

Old Seward Hwy

E Tudor Rd

FREEWAY ENTRANCE

EXIT TO MIDTOWN

FREEWAY ENTRANCE

EXIT TO TUDOR RD

N

Transition to Existing

ATTACHMENT E – SYNCHRO REPORTS

2017 Existing (AM Peak Hour)



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (vph)	175	25	110	0	0	55	10	250	2055	10	5	10
Future Volume (vph)	175	25	110	0	0	55	10	250	2055	10	5	10
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	6.3	6.3	6.3			4.0		5.9	5.9			5.9
Lane Util. Factor	0.95	0.95	1.00			1.00		1.00	0.91			1.00
Frpb, ped/bikes	1.00	1.00	0.98			1.00		1.00	1.00			1.00
Flpb, ped/bikes	1.00	1.00	1.00			1.00		1.00	1.00			1.00
Frt	1.00	1.00	0.85			0.86		1.00	1.00			1.00
Flt Protected	0.95	0.96	1.00			1.00		0.95	1.00			0.95
Satd. Flow (prot)	1575	1621	1494			1600		1758	4853			1758
Flt Permitted	0.95	0.96	1.00			1.00		0.95	1.00			0.95
Satd. Flow (perm)	1575	1621	1494			1600		1758	4853			1758
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	194	28	122	0	0	61	11	278	2283	11	6	11
RTOR Reduction (vph)	0	0	110	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	111	111	12	0	0	61	0	289	2294	0	0	17
Confl. Peds. (#/hr)			7	7				2		6		6
Heavy Vehicles (%)	6%	0%	3%	0%	0%	0%	0%	0%	4%	0%	0%	0%
Turn Type	Split	NA	Perm			Free	Prot	Prot	NA		Prot	Prot
Protected Phases	8	8					5	5	2		1	1
Permitted Phases			8			Free						
Actuated Green, G (s)	16.3	16.3	16.3			160.0		32.5	121.2			4.4
Effective Green, g (s)	16.3	16.3	16.3			160.0		32.5	121.2			4.4
Actuated g/C Ratio	0.10	0.10	0.10			1.00		0.20	0.76			0.03
Clearance Time (s)	6.3	6.3	6.3					5.9	5.9			5.9
Vehicle Extension (s)	2.0	2.0	2.0					2.0	3.0			2.0
Lane Grp Cap (vph)	160	165	152			1600		357	3676			48
v/s Ratio Prot	c0.07	0.07						c0.16	c0.47			0.01
v/s Ratio Perm			0.01			0.04						
v/c Ratio	0.69	0.67	0.08			0.04		0.81	0.62			0.35
Uniform Delay, d1	69.4	69.3	65.1			0.0		60.8	8.9			76.4
Progression Factor	0.76	0.76	1.21			1.00		0.82	0.04			1.00
Incremental Delay, d2	10.0	8.2	0.1			0.0		7.4	0.5			1.6
Delay (s)	63.0	61.0	78.7			0.0		57.5	0.8			78.0
Level of Service	E	E	E			A		E	A			E
Approach Delay (s)		67.9			0.0				7.1			
Approach LOS		E			A				A			

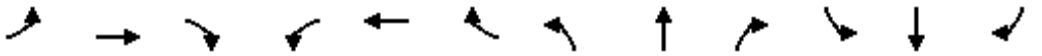
Intersection Summary			
HCM 2000 Control Delay	17.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	18.1
Intersection Capacity Utilization	75.9%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



Movement	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	1415	120
Future Volume (vph)	1415	120
Ideal Flow (vphpl)	1850	1850
Total Lost time (s)	5.9	
Lane Util. Factor	0.91	
Frpb, ped/bikes	1.00	
Flpb, ped/bikes	1.00	
Frt	0.99	
Flt Protected	1.00	
Satd. Flow (prot)	4808	
Flt Permitted	1.00	
Satd. Flow (perm)	4808	
Peak-hour factor, PHF	0.90	0.90
Adj. Flow (vph)	1572	133
RTOR Reduction (vph)	5	0
Lane Group Flow (vph)	1700	0
Confl. Peds. (#/hr)		2
Heavy Vehicles (%)	4%	0%
Turn Type	NA	
Protected Phases	6	
Permitted Phases		
Actuated Green, G (s)	93.1	
Effective Green, g (s)	93.1	
Actuated g/C Ratio	0.58	
Clearance Time (s)	5.9	
Vehicle Extension (s)	3.0	
Lane Grp Cap (vph)	2797	
v/s Ratio Prot	c0.35	
v/s Ratio Perm		
v/c Ratio	0.61	
Uniform Delay, d1	21.6	
Progression Factor	1.00	
Incremental Delay, d2	1.0	
Delay (s)	22.6	
Level of Service	C	
Approach Delay (s)	23.2	
Approach LOS	C	

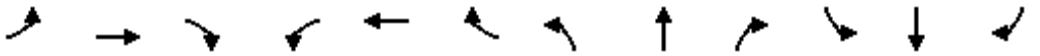
Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	415	1350	165	465	2160	0	0	1305	210
Future Volume (vph)	0	0	0	415	1350	165	465	2160	0	0	1305	210
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)				6.4	6.4	6.4	6.5	6.5			6.5	6.5
Lane Util. Factor				0.81	0.81	1.00	0.97	0.91			0.86	0.86
Frpb, ped/bikes				1.00	1.00	0.98	1.00	1.00			1.00	0.97
Flpb, ped/bikes				1.00	1.00	1.00	1.00	1.00			1.00	1.00
Frt				1.00	1.00	0.85	1.00	1.00			1.00	0.85
Flt Protected				0.95	1.00	1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)				1396	5916	1532	3376	4903			4579	1310
Flt Permitted				0.95	1.00	1.00	0.95	1.00			1.00	1.00
Satd. Flow (perm)				1396	5916	1532	3376	4903			4579	1310
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	461	1500	183	517	2400	0	0	1450	233
RTOR Reduction (vph)	0	0	0	0	0	46	0	0	0	0	1	42
Lane Group Flow (vph)	0	0	0	378	1583	137	517	2400	0	0	1472	168
Confl. Peds. (#/hr)	3					3	7		13	13		7
Heavy Vehicles (%)	0%	0%	0%	2%	1%	1%	1%	3%	0%	0%	4%	0%
Turn Type				Perm	NA	Perm	Prot	NA			NA	Perm
Protected Phases					4		5	2			6	
Permitted Phases				4		4						6
Actuated Green, G (s)				52.4	52.4	52.4	27.5	94.7			60.7	60.7
Effective Green, g (s)				52.4	52.4	52.4	27.5	94.7			60.7	60.7
Actuated g/C Ratio				0.33	0.33	0.33	0.17	0.59			0.38	0.38
Clearance Time (s)				6.4	6.4	6.4	6.5	6.5			6.5	6.5
Vehicle Extension (s)				2.9	2.9	2.9	2.0	3.7			3.7	3.7
Lane Grp Cap (vph)				457	1937	501	580	2901			1737	496
v/s Ratio Prot							0.15	c0.49			0.32	
v/s Ratio Perm				c0.27	0.27	0.09						0.13
v/c Ratio				0.83	0.82	0.27	0.89	0.83			0.85	0.34
Uniform Delay, d1				49.6	49.4	39.7	64.8	26.1			45.4	35.4
Progression Factor				0.89	0.89	0.75	0.72	0.51			0.66	0.66
Incremental Delay, d2				10.4	2.5	0.3	8.4	1.4			4.5	1.5
Delay (s)				54.7	46.3	30.3	55.0	14.8			34.5	24.9
Level of Service				D	D	C	E	B			C	C
Approach Delay (s)		0.0			46.4			22.0			33.3	
Approach LOS		A			D			C			C	

Intersection Summary			
HCM 2000 Control Delay	32.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	19.4
Intersection Capacity Utilization	87.7%	ICU Level of Service	E
Analysis Period (min)	15		

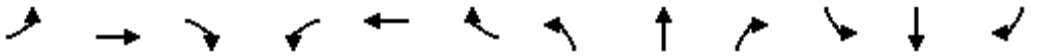
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	225	880	210	0	0	0	0	2385	240	150	1570	0
Future Volume (vph)	225	880	210	0	0	0	0	2385	240	150	1570	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	6.3	6.3	6.3					6.3	6.3	6.3	6.3	
Lane Util. Factor	0.86	0.81	0.86					0.91	1.00	0.97	0.91	
Frpb, ped/bikes	1.00	1.00	0.98					1.00	0.97	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00					1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85					1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1439	4383	1315					4903	1460	3310	4856	
Flt Permitted	0.95	1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1439	4383	1315					4903	1460	3310	4856	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	242	946	226	0	0	0	0	2565	258	161	1688	0
RTOR Reduction (vph)	0	1	49	0	0	0	0	0	28	0	0	0
Lane Group Flow (vph)	218	992	154	0	0	0	0	2565	230	161	1688	0
Confl. Peds. (#/hr)			5	5			5		8	8		5
Heavy Vehicles (%)	5%	2%	1%	0%	0%	0%	0%	3%	4%	3%	4%	0%
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		8						2		1	6	
Permitted Phases	8		8						2			
Actuated Green, G (s)	40.2	40.2	40.2					90.1	90.1	10.8	107.2	
Effective Green, g (s)	40.2	40.2	40.2					90.1	90.1	10.8	107.2	
Actuated g/C Ratio	0.25	0.25	0.25					0.56	0.56	0.07	0.67	
Clearance Time (s)	6.3	6.3	6.3					6.3	6.3	6.3	6.3	
Vehicle Extension (s)	6.0	6.0	6.0					5.0	5.0	2.0	5.0	
Lane Grp Cap (vph)	361	1101	330					2761	822	223	3253	
v/s Ratio Prot								c0.52		c0.05	0.35	
v/s Ratio Perm	0.15	0.23	0.12						0.16			
v/c Ratio	0.60	0.90	0.47					0.93	0.28	0.72	0.52	
Uniform Delay, d1	52.9	58.0	50.8					32.0	18.1	73.1	13.4	
Progression Factor	0.88	0.87	0.85					0.19	0.06	1.35	0.51	
Incremental Delay, d2	4.7	10.4	2.7					2.4	0.3	5.2	0.3	
Delay (s)	51.4	60.9	45.7					8.5	1.4	103.9	7.1	
Level of Service	D	E	D					A	A	F	A	
Approach Delay (s)		57.3			0.0			7.9			15.6	
Approach LOS		E			A			A			B	

Intersection Summary			
HCM 2000 Control Delay	21.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	18.9
Intersection Capacity Utilization	87.7%	ICU Level of Service	E
Analysis Period (min)	15		

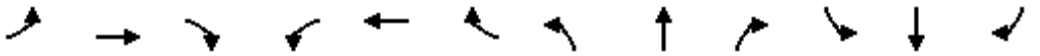
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	110	340	55	125	310	155	470	2535	450	165	1130	75
Future Volume (vph)	110	340	55	125	310	155	470	2535	450	165	1130	75
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	7.1	7.1	7.1	7.1	7.1	7.1	8.0	8.0	8.0	8.0	8.0	8.0
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.91	1.00	0.97	0.91	1.00
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00	1.00	1.00	1.00	0.99	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3157	3380	1515	3343	3413	1557	3410	4951	1536	3278	4951	1498
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3157	3380	1515	3343	3413	1557	3410	4951	1536	3278	4951	1498
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	124	382	62	140	348	174	528	2848	506	185	1270	84
RTOR Reduction (vph)	0	0	53	0	0	151	0	0	91	0	0	46
Lane Group Flow (vph)	124	382	9	140	348	23	528	2848	415	185	1270	38
Confl. Peds. (#/hr)			3	3					1	1		
Heavy Vehicles (%)	8%	4%	2%	2%	3%	1%	0%	2%	1%	4%	2%	5%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	3	8		7	4		5	2		1	6	
Permitted Phases			8			4			2			6
Actuated Green, G (s)	7.9	22.2	22.2	6.9	21.2	21.2	29.1	91.7	91.7	9.0	71.6	71.6
Effective Green, g (s)	7.9	22.2	22.2	6.9	21.2	21.2	29.1	91.7	91.7	9.0	71.6	71.6
Actuated g/C Ratio	0.05	0.14	0.14	0.04	0.13	0.13	0.18	0.57	0.57	0.06	0.45	0.45
Clearance Time (s)	7.1	7.1	7.1	7.1	7.1	7.1	8.0	8.0	8.0	8.0	8.0	8.0
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	5.0	5.0	2.0	5.0	5.0
Lane Grp Cap (vph)	155	468	210	144	452	206	620	2837	880	184	2215	670
v/s Ratio Prot	0.04	c0.11		c0.04	0.10		0.15	c0.58		c0.06	0.26	
v/s Ratio Perm			0.01			0.01			0.27			0.03
v/c Ratio	0.80	0.82	0.04	0.97	0.77	0.11	0.85	1.00	0.47	1.01	0.57	0.06
Uniform Delay, d1	75.3	66.9	59.7	76.5	67.0	61.1	63.4	34.1	20.0	75.5	32.8	25.0
Progression Factor	1.12	0.83	1.00	1.09	1.01	2.94	0.99	1.02	1.01	0.65	0.42	0.86
Incremental Delay, d2	23.3	9.9	0.0	65.1	6.8	0.1	10.5	17.8	1.8	63.4	0.9	0.1
Delay (s)	108.0	65.2	59.7	148.4	74.6	179.8	73.1	52.6	22.0	112.3	14.9	21.8
Level of Service	F	E	E	F	E	F	E	D	C	F	B	C
Approach Delay (s)		73.9			117.9			51.4			27.0	
Approach LOS		E			F			D			C	

Intersection Summary			
HCM 2000 Control Delay	54.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.97		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	30.2
Intersection Capacity Utilization	95.6%	ICU Level of Service	F
Analysis Period (min)	15		

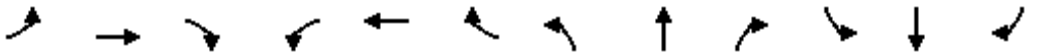
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	305	45	135	700	65	125	50	160	45	220	65
Future Volume (vph)	15	305	45	135	700	65	125	50	160	45	220	65
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	0.99		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.98		1.00	0.99		1.00	0.89		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1758	3353		1722	3439		1740	2855		1755	3293	
Flt Permitted	0.31	1.00		0.48	1.00		0.26	1.00		0.61	1.00	
Satd. Flow (perm)	565	3353		875	3439		468	2855		1123	3293	
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	16	335	49	148	769	71	137	55	176	49	242	71
RTOR Reduction (vph)	0	5	0	0	3	0	0	144	0	0	19	0
Lane Group Flow (vph)	16	379	0	148	837	0	137	87	0	49	294	0
Confl. Peds. (#/hr)			1	1			1		2	2		1
Heavy Vehicles (%)	0%	2%	7%	2%	1%	0%	1%	7%	8%	0%	3%	2%
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases	6			2			4			8		
Actuated Green, G (s)	96.4	93.4		107.4	98.9		40.1	28.7		25.3	19.9	
Effective Green, g (s)	96.4	93.4		107.4	98.9		40.1	28.7		25.3	19.9	
Actuated g/C Ratio	0.60	0.58		0.67	0.62		0.25	0.18		0.16	0.12	
Clearance Time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Vehicle Extension (s)	1.0	5.5		1.0	5.5		1.0	2.0		1.0	2.0	
Lane Grp Cap (vph)	362	1957		632	2125		230	512		198	409	
v/s Ratio Prot	0.00	0.11		c0.01	c0.24		c0.05	0.03		0.01	c0.09	
v/s Ratio Perm	0.03			0.14			0.10			0.03		
v/c Ratio	0.04	0.19		0.23	0.39		0.60	0.17		0.25	0.72	
Uniform Delay, d1	13.0	15.6		9.7	15.4		49.5	55.6		58.3	67.4	
Progression Factor	1.00	1.00		0.16	0.13		0.47	0.60		0.86	0.82	
Incremental Delay, d2	0.0	0.2		0.1	0.4		2.7	0.1		0.2	4.6	
Delay (s)	13.0	15.9		1.6	2.4		26.0	33.3		50.1	60.0	
Level of Service	B	B		A	A		C	C		D	E	
Approach Delay (s)		15.7			2.3			30.6			58.7	
Approach LOS		B			A			C			E	

Intersection Summary			
HCM 2000 Control Delay	19.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.47		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	24.0
Intersection Capacity Utilization	62.1%	ICU Level of Service	B
Analysis Period (min)	15		

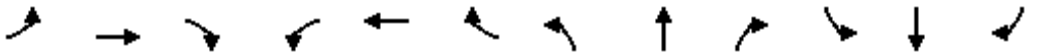
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	225	725	45	255	690	295	110	1010	250	170	680	60
Future Volume (vph)	225	725	45	255	690	295	110	1010	250	170	680	60
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.91	1.00	0.97	0.91	1.00
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.98	1.00	1.00	0.98	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3343	3480	1470	3376	3446	1481	3343	4903	1466	3186	4856	1446
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3343	3480	1470	3376	3446	1481	3343	4903	1466	3186	4856	1446
Peak-hour factor, PHF	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Adj. Flow (vph)	271	873	54	307	831	355	133	1217	301	205	819	72
RTOR Reduction (vph)	0	0	34	0	0	179	0	0	167	0	0	51
Lane Group Flow (vph)	271	873	20	307	831	176	133	1217	134	205	819	21
Confl. Peds. (#/hr)	5					5	3		7	7		3
Heavy Vehicles (%)	2%	1%	7%	1%	2%	4%	2%	3%	5%	7%	4%	7%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases			6			2			4			8
Actuated Green, G (s)	16.8	58.5	58.5	13.6	55.3	55.3	10.7	44.0	44.0	14.3	47.6	47.6
Effective Green, g (s)	16.8	58.5	58.5	13.6	55.3	55.3	10.7	44.0	44.0	14.3	47.6	47.6
Actuated g/C Ratio	0.11	0.37	0.37	0.08	0.35	0.35	0.07	0.28	0.28	0.09	0.30	0.30
Clearance Time (s)	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4
Vehicle Extension (s)	2.0	5.0	5.0	2.0	5.0	5.0	2.0	5.0	5.0	2.0	5.0	5.0
Lane Grp Cap (vph)	351	1272	537	286	1191	511	223	1348	403	284	1444	430
v/s Ratio Prot	0.08	c0.25		c0.09	c0.24		0.04	c0.25		c0.06	0.17	
v/s Ratio Perm			0.01			0.12			0.09			0.01
v/c Ratio	0.77	0.69	0.04	1.07	0.70	0.34	0.60	0.90	0.33	0.72	0.57	0.05
Uniform Delay, d1	69.7	43.0	32.6	73.2	45.1	38.9	72.6	55.9	46.3	70.9	47.5	40.1
Progression Factor	1.00	1.00	1.00	1.21	1.30	2.78	1.00	1.00	1.00	0.80	0.74	1.00
Incremental Delay, d2	9.2	3.0	0.1	67.7	2.6	1.4	2.8	9.2	1.0	6.9	0.8	0.1
Delay (s)	79.0	46.0	32.8	156.3	61.4	109.3	75.4	65.2	47.3	63.6	36.1	40.2
Level of Service	E	D	C	F	E	F	E	E	D	E	D	D
Approach Delay (s)		52.9			92.3			62.7			41.5	
Approach LOS		D			F			E			D	

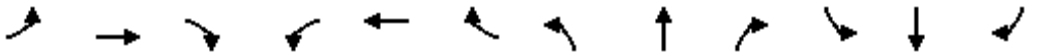
Intersection Summary			
HCM 2000 Control Delay	64.4	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	29.6
Intersection Capacity Utilization	81.9%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	60	940	80	310	1335	125	155	240	255	40	195	55
Future Volume (vph)	60	940	80	310	1335	125	155	240	255	40	195	55
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	6.5	6.5	6.5	6.5	6.5	6.5	6.8	6.8	6.5	6.8	6.8	6.8
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	1.00	0.95	0.88	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.98	1.00	1.00	0.98	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3310	3446	1498	3343	3480	1524	1674	3366	2575	1528	3399	1489
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3310	3446	1498	3343	3480	1524	1674	3366	2575	1528	3399	1489
Peak-hour factor, PHF	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Adj. Flow (vph)	70	1093	93	360	1552	145	180	279	297	47	227	64
RTOR Reduction (vph)	0	0	51	0	0	70	0	0	141	0	0	58
Lane Group Flow (vph)	70	1093	42	360	1552	75	180	279	156	47	227	6
Confl. Peds. (#/hr)	5					5	2		6	6		2
Heavy Vehicles (%)	3%	2%	5%	2%	1%	1%	5%	4%	5%	15%	3%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	2	0	0	2	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4	5	3	8	
Permitted Phases			6			2			4			8
Actuated Green, G (s)	7.5	71.4	71.4	18.6	82.5	82.5	28.1	35.2	53.8	8.2	15.3	15.3
Effective Green, g (s)	7.5	71.4	71.4	18.6	82.5	82.5	28.1	35.2	53.8	8.2	15.3	15.3
Actuated g/C Ratio	0.05	0.45	0.45	0.12	0.52	0.52	0.18	0.22	0.34	0.05	0.10	0.10
Clearance Time (s)	6.5	6.5	6.5	6.5	6.5	6.5	6.8	6.8	6.5	6.8	6.8	6.8
Vehicle Extension (s)	2.0	5.0	5.0	3.0	5.0	5.0	1.0	2.0	3.0	2.0	2.0	2.0
Lane Grp Cap (vph)	155	1537	668	388	1794	785	293	740	865	78	325	142
v/s Ratio Prot	0.02	c0.32		0.11	c0.45		c0.11	0.08	0.02	0.03	c0.07	
v/s Ratio Perm			0.03			0.05			0.04			0.00
v/c Ratio	0.45	0.71	0.06	0.93	0.87	0.10	0.61	0.38	0.18	0.60	0.70	0.04
Uniform Delay, d1	74.2	35.9	25.2	70.0	33.9	19.7	60.9	53.1	37.5	74.3	70.1	65.7
Progression Factor	1.21	0.31	1.00	0.77	0.56	0.33	1.00	1.00	1.00	0.65	0.67	1.00
Incremental Delay, d2	0.7	2.7	0.2	22.8	4.5	0.2	2.7	0.1	0.1	8.4	5.0	0.0
Delay (s)	90.9	13.6	25.4	76.8	23.3	6.7	63.6	53.2	37.6	56.3	51.8	65.7
Level of Service	F	B	C	E	C	A	E	D	D	E	D	E
Approach Delay (s)		18.8			31.5			49.6			55.1	
Approach LOS		B			C			D			E	

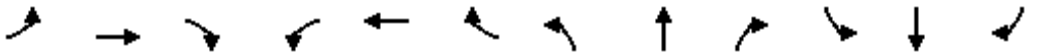
Intersection Summary			
HCM 2000 Control Delay	32.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	26.6
Intersection Capacity Utilization	84.1%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↱	↰	↑↑						↲	↱
Traffic Volume (vph)	0	1210	70	235	1725	0	0	0	0	60	30	120
Future Volume (vph)	0	1210	70	235	1725	0	0	0	0	60	30	120
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)		5.8	5.8	5.8	5.8						5.9	5.9
Lane Util. Factor		0.91	1.00	1.00	0.95						1.00	1.00
Frpb, ped/bikes		1.00	1.00	1.00	1.00						1.00	0.98
Flpb, ped/bikes		1.00	1.00	1.00	1.00						1.00	1.00
Frt		1.00	0.85	1.00	1.00						1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00						0.97	1.00
Satd. Flow (prot)		4856	1417	1740	3480						1637	1489
Flt Permitted		1.00	1.00	0.95	1.00						0.97	1.00
Satd. Flow (perm)		4856	1417	1740	3480						1637	1489
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	0	1375	80	267	1960	0	0	0	0	68	34	136
RTOR Reduction (vph)	0	0	31	0	0	0	0	0	0	0	0	54
Lane Group Flow (vph)	0	1375	49	267	1960	0	0	0	0	0	102	82
Confl. Peds. (#/hr)	2					2	2					2
Heavy Vehicles (%)	0%	4%	11%	1%	1%	0%	0%	0%	0%	7%	14%	4%
Turn Type		NA	Perm	Prot	NA					Perm	NA	Perm
Protected Phases		6		5	2						8	
Permitted Phases			6							8		8
Actuated Green, G (s)		98.5	98.5	29.6	133.9						14.4	14.4
Effective Green, g (s)		98.5	98.5	29.6	133.9						14.4	14.4
Actuated g/C Ratio		0.62	0.62	0.19	0.84						0.09	0.09
Clearance Time (s)		5.8	5.8	5.8	5.8						5.9	5.9
Vehicle Extension (s)		3.8	3.8	3.0	3.4						1.5	1.5
Lane Grp Cap (vph)		2989	872	321	2912						147	134
v/s Ratio Prot		0.28		c0.15	c0.56							
v/s Ratio Perm			0.03								0.06	0.06
v/c Ratio		0.46	0.06	0.83	0.67						0.69	0.61
Uniform Delay, d1		16.5	12.2	62.8	4.9						70.7	70.1
Progression Factor		0.32	0.06	1.24	0.40						0.60	0.56
Incremental Delay, d2		0.4	0.1	13.0	1.0						8.9	4.7
Delay (s)		5.7	0.8	91.1	2.9						51.5	44.3
Level of Service		A	A	F	A						D	D
Approach Delay (s)		5.5			13.5			0.0			47.4	
Approach LOS		A			B			A			D	

Intersection Summary			
HCM 2000 Control Delay	12.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	17.5
Intersection Capacity Utilization	68.0%	ICU Level of Service	C
Analysis Period (min)	15		

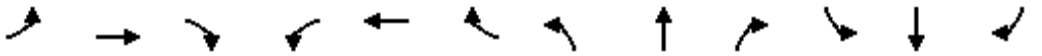
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	100	1170	0	0	1590	225	370	60	410	0	0	0
Future Volume (vph)	100	1170	0	0	1590	225	370	60	410	0	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	5.6	5.6			5.6	5.6	5.9	5.9	3.0			
Lane Util. Factor	1.00	0.95			0.91	1.00	0.95	0.95	1.00			
Frpb, ped/bikes	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Flpb, ped/bikes	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.97	1.00			
Satd. Flow (prot)	1583	3413			4951	1557	1653	1684	1542			
Flt Permitted	0.95	1.00			1.00	1.00	0.95	0.97	1.00			
Satd. Flow (perm)	1583	3413			4951	1557	1653	1684	1542			
Peak-hour factor, PHF	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	115	1345	0	0	1828	259	425	69	471	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	111	0	0	233	0	0	0
Lane Group Flow (vph)	115	1345	0	0	1828	148	246	248	238	0	0	0
Confl. Peds. (#/hr)			4	4								
Heavy Vehicles (%)	11%	3%	0%	0%	2%	1%	1%	0%	2%	0%	0%	0%
Turn Type	Prot	NA			NA	Perm	Perm	NA	custom			
Protected Phases	1	6			2			4				
Permitted Phases						2	4		7 5			
Actuated Green, G (s)	23.5	103.4			91.4	91.4	28.0	28.0	45.4			
Effective Green, g (s)	23.5	103.4			91.4	91.4	28.0	28.0	45.4			
Actuated g/C Ratio	0.15	0.65			0.57	0.57	0.18	0.18	0.28			
Clearance Time (s)	5.6	5.6			5.6	5.6	5.9	5.9				
Vehicle Extension (s)	1.5	3.3			3.6	3.6	2.0	2.0				
Lane Grp Cap (vph)	232	2205			2828	889	289	294	437			
v/s Ratio Prot	0.07	c0.39			c0.37							
v/s Ratio Perm						0.10	c0.15	0.15	0.15			
v/c Ratio	0.50	0.61			0.65	0.17	0.85	0.84	0.54			
Uniform Delay, d1	62.8	16.5			23.3	16.3	64.0	63.9	48.5			
Progression Factor	0.81	0.16			0.20	0.18	1.00	1.00	1.00			
Incremental Delay, d2	0.6	1.2			0.5	0.2	20.0	18.6	0.7			
Delay (s)	51.2	3.8			5.2	3.0	84.0	82.5	49.3			
Level of Service	D	A			A	A	F	F	D			
Approach Delay (s)		7.5			4.9			66.7			0.0	
Approach LOS		A			A			E			A	

Intersection Summary			
HCM 2000 Control Delay	19.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	17.2
Intersection Capacity Utilization	68.0%	ICU Level of Service	C
Analysis Period (min)	15		

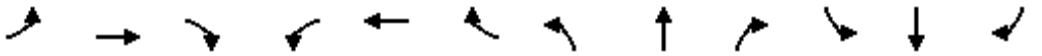
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	75	1800	15	55	20	0	0	30	75
Future Volume (vph)	0	0	0	75	1800	15	55	20	0	0	30	75
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)				5.6	5.6			5.5			5.5	5.5
Lane Util. Factor				1.00	0.86			0.95			1.00	1.00
Frpb, ped/bikes				1.00	1.00			1.00			1.00	0.99
Flpb, ped/bikes				1.00	1.00			1.00			1.00	1.00
Frt				1.00	1.00			1.00			1.00	0.85
Flt Protected				0.95	1.00			0.96			1.00	1.00
Satd. Flow (prot)				1758	6293			3388			1850	1552
Flt Permitted				0.95	1.00			0.76			1.00	1.00
Satd. Flow (perm)				1758	6293			2671			1850	1552
Peak-hour factor, PHF	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Adj. Flow (vph)	0	0	0	94	2250	19	69	25	0	0	38	94
RTOR Reduction (vph)	0	0	0	0	1	0	0	0	0	0	0	29
Lane Group Flow (vph)	0	0	0	94	2268	0	0	94	0	0	38	65
Confl. Peds. (#/hr)	4					4	1					1
Heavy Vehicles (%)	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%
Turn Type				Perm	NA		Perm	NA			NA	Perm
Protected Phases					2			4			8	
Permitted Phases				2			4					8
Actuated Green, G (s)				54.5	54.5			14.4			14.4	14.4
Effective Green, g (s)				54.5	54.5			14.4			14.4	14.4
Actuated g/C Ratio				0.68	0.68			0.18			0.18	0.18
Clearance Time (s)				5.6	5.6			5.5			5.5	5.5
Vehicle Extension (s)				2.5	2.5			2.0			2.8	2.8
Lane Grp Cap (vph)				1197	4287			480			333	279
v/s Ratio Prot					c0.36						0.02	
v/s Ratio Perm				0.05				0.04				c0.04
v/c Ratio				0.08	0.53			0.20			0.11	0.23
Uniform Delay, d1				4.3	6.4			27.9			27.5	28.1
Progression Factor				0.53	0.51			0.69			0.93	0.88
Incremental Delay, d2				0.1	0.3			0.1			0.1	0.4
Delay (s)				2.3	3.5			19.4			25.8	25.0
Level of Service				A	A			B			C	C
Approach Delay (s)		0.0			3.5			19.4			25.2	
Approach LOS		A			A			B			C	

Intersection Summary			
HCM 2000 Control Delay	5.1	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.47		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	11.1
Intersection Capacity Utilization	70.9%	ICU Level of Service	C
Analysis Period (min)	15		

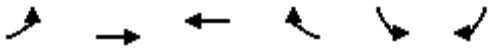
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	1055	110	0	0	0	0	75	30	30	75	0
Future Volume (vph)	30	1055	110	0	0	0	0	75	30	30	75	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)		5.8	5.8					5.7		5.7	5.7	
Lane Util. Factor		0.91	1.00					0.95		1.00	1.00	
Frpb, ped/bikes		1.00	0.97					1.00		1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00		1.00	1.00	
Frt		1.00	0.85					0.96		1.00	1.00	
Flt Protected		1.00	1.00					1.00		0.95	1.00	
Satd. Flow (prot)		4943	1487					3363		1690	1850	
Flt Permitted		1.00	1.00					1.00		0.67	1.00	
Satd. Flow (perm)		4943	1487					3363		1189	1850	
Peak-hour factor, PHF	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Adj. Flow (vph)	38	1319	138	0	0	0	0	94	38	38	94	0
RTOR Reduction (vph)	0	0	45	0	0	0	0	31	0	0	0	0
Lane Group Flow (vph)	0	1357	93	0	0	0	0	101	0	38	94	0
Confl. Peds. (#/hr)			4	4			3					3
Heavy Vehicles (%)	3%	2%	3%	0%	0%	0%	0%	0%	0%	4%	0%	0%
Turn Type	Perm	NA	Perm					NA		Perm	NA	
Protected Phases		6						4			8	
Permitted Phases	6		6							8		
Actuated Green, G (s)		54.1	54.1					14.4		14.4	14.4	
Effective Green, g (s)		54.1	54.1					14.4		14.4	14.4	
Actuated g/C Ratio		0.68	0.68					0.18		0.18	0.18	
Clearance Time (s)		5.8	5.8					5.7		5.7	5.7	
Vehicle Extension (s)		2.0	2.0					2.0		2.0	2.0	
Lane Grp Cap (vph)		3342	1005					605		214	333	
v/s Ratio Prot								0.03			c0.05	
v/s Ratio Perm		0.27	0.06							0.03		
v/c Ratio		0.41	0.09					0.17		0.18	0.28	
Uniform Delay, d1		5.8	4.5					27.7		27.8	28.3	
Progression Factor		0.55	0.89					0.82		0.99	1.00	
Incremental Delay, d2		0.3	0.1					0.0		0.1	0.2	
Delay (s)		3.4	4.1					22.8		27.8	28.4	
Level of Service		A	A					C		C	C	
Approach Delay (s)		3.5			0.0			22.8			28.2	
Approach LOS		A			A			C			C	

Intersection Summary			
HCM 2000 Control Delay	6.8	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.38		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	11.5
Intersection Capacity Utilization	46.6%	ICU Level of Service	A
Analysis Period (min)	15		

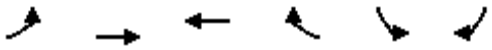
c Critical Lane Group



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	45	695	540	35	65	60
Future Volume (vph)	45	695	540	35	65	60
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850
Total Lost time (s)	5.5	5.5	5.5		5.5	5.5
Lane Util. Factor	1.00	0.95	0.95		1.00	1.00
Frpb, ped/bikes	1.00	1.00	1.00		1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Frt	1.00	1.00	0.99		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1756	3446	3413		1723	1543
Flt Permitted	0.36	1.00	1.00		0.95	1.00
Satd. Flow (perm)	666	3446	3413		1723	1543
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	51	790	614	40	74	68
RTOR Reduction (vph)	0	0	3	0	0	62
Lane Group Flow (vph)	51	790	651	0	74	6
Confl. Peds. (#/hr)	3			3		2
Heavy Vehicles (%)	0%	2%	2%	0%	2%	0%
Turn Type	pm+pt	NA	NA		Prot	Perm
Protected Phases	1	6	2		3	
Permitted Phases	6					7
Actuated Green, G (s)	62.0	62.0	53.5		7.0	7.0
Effective Green, g (s)	62.0	62.0	53.5		7.0	7.0
Actuated g/C Ratio	0.78	0.78	0.67		0.09	0.09
Clearance Time (s)	5.5	5.5	5.5		5.5	5.5
Vehicle Extension (s)	1.0	6.2	6.2		2.0	2.0
Lane Grp Cap (vph)	557	2670	2282		150	135
v/s Ratio Prot	0.00	c0.23	0.19		c0.04	
v/s Ratio Perm	0.07					0.00
v/c Ratio	0.09	0.30	0.29		0.49	0.04
Uniform Delay, d1	2.3	2.6	5.4		34.8	33.4
Progression Factor	1.46	1.33	0.71		1.07	2.20
Incremental Delay, d2	0.0	0.2	0.3		0.9	0.0
Delay (s)	3.4	3.7	4.2		38.3	73.7
Level of Service	A	A	A		D	E
Approach Delay (s)		3.7	4.2		55.2	
Approach LOS		A	A		E	

Intersection Summary			
HCM 2000 Control Delay	8.3	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.36		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	19.5
Intersection Capacity Utilization	42.9%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	150	1030	1400	95	50	75
Future Volume (vph)	150	1030	1400	95	50	75
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850
Total Lost time (s)	6.3	6.3	6.3	6.3	6.3	6.3
Lane Util. Factor	1.00	0.95	0.95	1.00	0.97	1.00
Frpb, ped/bikes	1.00	1.00	1.00	0.98	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1740	3413	3446	1503	3410	1461
Flt Permitted	0.10	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	181	3413	3446	1503	3410	1461
Peak-hour factor, PHF	0.84	0.84	0.84	0.84	0.84	0.84
Adj. Flow (vph)	179	1226	1667	113	60	89
RTOR Reduction (vph)	0	0	0	23	0	9
Lane Group Flow (vph)	179	1226	1667	90	60	80
Confl. Peds. (#/hr)	2			2		4
Heavy Vehicles (%)	1%	3%	2%	3%	0%	7%
Turn Type	pm+pt	NA	NA	Perm	Prot	pm+ov
Protected Phases	1	6	2		3	1
Permitted Phases	6			2		3
Actuated Green, G (s)	140.4	140.4	117.8	117.8	7.0	23.3
Effective Green, g (s)	140.4	140.4	117.8	117.8	7.0	23.3
Actuated g/C Ratio	0.88	0.88	0.74	0.74	0.04	0.15
Clearance Time (s)	6.3	6.3	6.3	6.3	6.3	6.3
Vehicle Extension (s)	3.0	4.0	4.0	4.0	3.0	3.0
Lane Grp Cap (vph)	317	2994	2537	1106	149	270
v/s Ratio Prot	c0.06	0.36	c0.48		0.02	c0.03
v/s Ratio Perm	0.44			0.06		0.02
v/c Ratio	0.56	0.41	0.66	0.08	0.40	0.29
Uniform Delay, d1	16.5	1.9	10.8	5.9	74.5	61.0
Progression Factor	3.28	0.31	0.16	0.06	1.00	1.00
Incremental Delay, d2	1.8	0.3	0.8	0.1	1.8	0.6
Delay (s)	55.9	0.9	2.5	0.4	76.2	61.6
Level of Service	E	A	A	A	E	E
Approach Delay (s)		7.9	2.4		67.5	
Approach LOS		A	A		E	

Intersection Summary			
HCM 2000 Control Delay	7.6	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	18.9
Intersection Capacity Utilization	69.9%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	270	145	55	160	0	0	0	0	65	1270	120
Future Volume (vph)	0	270	145	55	160	0	0	0	0	65	1270	120
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)		5.4		5.4	5.4						5.8	5.8
Lane Util. Factor		0.95		1.00	0.95						0.91	1.00
Frpb, ped/bikes		1.00		1.00	1.00						1.00	0.99
Flpb, ped/bikes		1.00		1.00	1.00						1.00	1.00
Frt		0.95		1.00	1.00						1.00	0.85
Flt Protected		1.00		0.95	1.00						1.00	1.00
Satd. Flow (prot)		3183		1723	3413						4847	1535
Flt Permitted		1.00		0.22	1.00						1.00	1.00
Satd. Flow (perm)		3183		391	3413						4847	1535
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	0	307	165	62	182	0	0	0	0	74	1443	136
RTOR Reduction (vph)	0	98	0	0	0	0	0	0	0	0	0	69
Lane Group Flow (vph)	0	374	0	63	182	0	0	0	0	0	1517	67
Confl. Peds. (#/hr)	2					2	2					2
Heavy Vehicles (%)	0%	5%	4%	2%	3%	0%	0%	0%	0%	3%	4%	1%
Turn Type		NA		pm+pt	NA					Perm	NA	Perm
Protected Phases		8		7	4						6	
Permitted Phases				4						6		6
Actuated Green, G (s)		13.8		29.2	29.2						39.6	39.6
Effective Green, g (s)		13.8		29.2	29.2						39.6	39.6
Actuated g/C Ratio		0.17		0.36	0.36						0.50	0.50
Clearance Time (s)		5.4		5.4	5.4						5.8	5.8
Vehicle Extension (s)		2.0		1.5	2.0						2.5	2.5
Lane Grp Cap (vph)		549		309	1245						2399	759
v/s Ratio Prot		c0.12		c0.03	0.05							
v/s Ratio Perm				0.05							0.31	0.04
v/c Ratio		0.68		0.20	0.15						0.63	0.09
Uniform Delay, d1		31.0		17.5	17.0						14.8	10.7
Progression Factor		1.00		1.04	1.05						1.00	1.00
Incremental Delay, d2		2.8		0.1	0.0						1.3	0.2
Delay (s)		33.8		18.4	17.8						16.1	10.9
Level of Service		C		B	B						B	B
Approach Delay (s)		33.8			18.0			0.0			15.7	
Approach LOS		C			B			A			B	

Intersection Summary			
HCM 2000 Control Delay	19.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	16.6
Intersection Capacity Utilization	61.2%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	60	265	0	0	160	95	90	1125	150	0	0	0
Future Volume (vph)	60	265	0	0	160	95	90	1125	150	0	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	5.7	5.7			5.7			5.8	5.8			
Lane Util. Factor	1.00	0.95			0.95			0.91	1.00			
Frpb, ped/bikes	1.00	1.00			0.99			1.00	0.98			
Flpb, ped/bikes	1.00	1.00			1.00			1.00	1.00			
Frt	1.00	1.00			0.94			1.00	0.85			
Flt Protected	0.95	1.00			1.00			1.00	1.00			
Satd. Flow (prot)	1641	3380			3253			4796	1501			
Flt Permitted	0.36	1.00			1.00			1.00	1.00			
Satd. Flow (perm)	621	3380			3253			4796	1501			
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	66	291	0	0	176	104	99	1236	165	0	0	0
RTOR Reduction (vph)	0	0	0	0	90	0	0	0	74	0	0	0
Lane Group Flow (vph)	66	291	0	0	190	0	0	1335	91	0	0	0
Confl. Peds. (#/hr)	6		1	1		6			5	5		
Heavy Vehicles (%)	7%	4%	0%	0%	1%	2%	4%	5%	3%	0%	0%	0%
Turn Type	pm+pt	NA			NA		Perm	NA	Perm			
Protected Phases	3	8			4			2				
Permitted Phases	8						2		2			
Actuated Green, G (s)	24.4	24.4			10.6			44.1	44.1			
Effective Green, g (s)	24.4	24.4			10.6			44.1	44.1			
Actuated g/C Ratio	0.30	0.30			0.13			0.55	0.55			
Clearance Time (s)	5.7	5.7			5.7			5.8	5.8			
Vehicle Extension (s)	1.0	2.0			2.0			2.5	2.5			
Lane Grp Cap (vph)	292	1030			431			2643	827			
v/s Ratio Prot	0.02	c0.09			c0.06							
v/s Ratio Perm	0.05							0.28	0.06			
v/c Ratio	0.23	0.28			0.44			0.51	0.11			
Uniform Delay, d1	20.4	21.1			32.0			11.2	8.6			
Progression Factor	0.55	0.55			0.75			0.62	0.48			
Incremental Delay, d2	0.1	0.0			0.3			0.5	0.2			
Delay (s)	11.4	11.6			24.3			7.4	4.3			
Level of Service	B	B			C			A	A			
Approach Delay (s)		11.6			24.3			7.0			0.0	
Approach LOS		B			C			A			A	

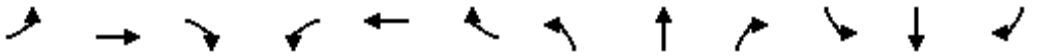
Intersection Summary			
HCM 2000 Control Delay	10.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	17.2
Intersection Capacity Utilization	61.2%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	330	30	50	225	25	30
Future Volume (vph)	330	30	50	225	25	30
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850
Total Lost time (s)	5.5			5.5	5.3	5.3
Lane Util. Factor	0.95			0.95	1.00	1.00
Frpb, ped/bikes	1.00			1.00	1.00	0.98
Flpb, ped/bikes	1.00			1.00	1.00	1.00
Frt	0.99			1.00	1.00	0.85
Flt Protected	1.00			0.99	0.95	1.00
Satd. Flow (prot)	3367			3443	1758	1501
Flt Permitted	1.00			0.83	0.95	1.00
Satd. Flow (perm)	3367			2883	1758	1501
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	375	34	57	256	28	34
RTOR Reduction (vph)	3	0	0	0	0	32
Lane Group Flow (vph)	406	0	0	313	28	2
Confl. Peds. (#/hr)						1
Heavy Vehicles (%)	3%	4%	2%	1%	0%	3%
Turn Type	NA		Perm	NA	Prot	Perm
Protected Phases	6			2	7	
Permitted Phases			2			3
Actuated Green, G (s)	64.4			64.4	4.8	4.8
Effective Green, g (s)	64.4			64.4	4.8	4.8
Actuated g/C Ratio	0.81			0.81	0.06	0.06
Clearance Time (s)	5.5			5.5	5.3	5.3
Vehicle Extension (s)	2.0			2.0	2.0	0.2
Lane Grp Cap (vph)	2710			2320	105	90
v/s Ratio Prot	c0.12				c0.02	
v/s Ratio Perm				0.11		0.00
v/c Ratio	0.15			0.13	0.27	0.02
Uniform Delay, d1	1.7			1.7	35.9	35.4
Progression Factor	0.17			2.22	1.00	1.53
Incremental Delay, d2	0.1			0.1	0.5	0.0
Delay (s)	0.4			3.9	36.5	54.1
Level of Service	A			A	D	D
Approach Delay (s)	0.4			3.9	46.2	
Approach LOS	A			A	D	

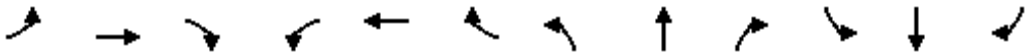
Intersection Summary			
HCM 2000 Control Delay	5.4	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.17		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	16.1
Intersection Capacity Utilization	40.6%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



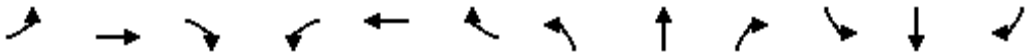
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	445	1155	0	0	0	0	0	1310	115
Future Volume (vph)	0	0	0	445	1155	0	0	0	0	0	1310	115
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)				5.8	5.8						5.8	5.8
Lane Util. Factor				0.81	0.81						0.86	0.86
Frpb, ped/bikes				1.00	1.00						1.00	0.99
Flpb, ped/bikes				1.00	1.00						1.00	1.00
Frt				1.00	1.00						1.00	0.85
Flt Protected				0.95	0.99						1.00	1.00
Satd. Flow (prot)				1406	5902						4627	1283
Flt Permitted				0.95	0.99						1.00	1.00
Satd. Flow (perm)				1406	5902						4627	1283
Peak-hour factor, PHF	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Adj. Flow (vph)	0	0	0	517	1343	0	0	0	0	0	1523	134
RTOR Reduction (vph)	0	0	0	20	20	0	0	0	0	0	1	24
Lane Group Flow (vph)	0	0	0	337	1483	0	0	0	0	0	1535	97
Confl. Peds. (#/hr)	5		2	2		5	1		4	4		1
Heavy Vehicles (%)	0%	0%	0%	1%	1%	0%	0%	0%	0%	0%	3%	4%
Turn Type				Perm	NA						NA	Perm
Protected Phases					1						2	
Permitted Phases				1								2
Actuated Green, G (s)				38.2	38.2						30.2	30.2
Effective Green, g (s)				38.2	38.2						30.2	30.2
Actuated g/C Ratio				0.48	0.48						0.38	0.38
Clearance Time (s)				5.8	5.8						5.8	5.8
Lane Grp Cap (vph)				671	2818						1746	484
v/s Ratio Prot											c0.33	
v/s Ratio Perm				0.24	0.25							0.08
v/c Ratio				0.50	0.53						0.88	0.20
Uniform Delay, d1				14.4	14.6						23.2	16.8
Progression Factor				0.75	0.77						0.50	0.15
Incremental Delay, d2				2.2	0.6						5.4	0.7
Delay (s)				13.1	11.9						17.0	3.2
Level of Service				B	B						B	A
Approach Delay (s)		0.0			12.1			0.0			16.0	
Approach LOS		A			B			A			B	

Intersection Summary			
HCM 2000 Control Delay	13.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	11.6
Intersection Capacity Utilization	55.9%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	1470	285	180	1205	0	0	0	0
Future Volume (vph)	0	0	0	0	1470	285	180	1205	0	0	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)					6.0	6.0	6.0	6.0				
Lane Util. Factor					0.81	0.81	0.86	0.86				
Frpb, ped/bikes					1.00	0.98	1.00	1.00				
Flpb, ped/bikes					1.00	1.00	1.00	1.00				
Frt					1.00	0.85	1.00	1.00				
Flt Protected					1.00	1.00	0.95	1.00				
Satd. Flow (prot)					5915	1235	1453	4543				
Flt Permitted					1.00	1.00	0.95	1.00				
Satd. Flow (perm)					5915	1235	1453	4543				
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	0	0	0	0	1652	320	202	1354	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	3	22	26	26	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	1681	266	156	1348	0	0	0	0
Confl. Peds. (#/hr)	9		2	2		9			12	12		
Heavy Vehicles (%)	0%	0%	0%	0%	1%	1%	4%	5%	0%	0%	0%	0%
Turn Type					NA	Perm	Perm	NA				
Protected Phases					1			2				
Permitted Phases						1	2					
Actuated Green, G (s)					38.0	38.0	30.0	30.0				
Effective Green, g (s)					38.0	38.0	30.0	30.0				
Actuated g/C Ratio					0.48	0.48	0.38	0.38				
Clearance Time (s)					6.0	6.0	6.0	6.0				
Lane Grp Cap (vph)					2809	586	544	1703				
v/s Ratio Prot					c0.28							
v/s Ratio Perm						0.22	0.11	0.30				
v/c Ratio					0.60	0.45	0.29	0.79				
Uniform Delay, d1					15.4	14.1	17.5	22.2				
Progression Factor					0.59	0.46	0.45	0.44				
Incremental Delay, d2					0.8	2.1	1.1	3.1				
Delay (s)					9.8	8.5	8.9	13.0				
Level of Service					A	A	A	B				
Approach Delay (s)		0.0			9.6			12.5			0.0	
Approach LOS		A			A			B			A	

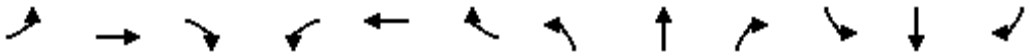
Intersection Summary			
HCM 2000 Control Delay	10.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	55.9%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	190	1700	90	65	90	0	0	25	10
Future Volume (vph)	0	0	0	190	1700	90	65	90	0	0	25	10
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)					5.4		5.3	5.3			5.3	
Lane Util. Factor					0.86		0.97	1.00			1.00	
Frpb, ped/bikes					1.00		1.00	1.00			1.00	
Flpb, ped/bikes					1.00		1.00	1.00			1.00	
Frt					0.99		1.00	1.00			0.96	
Flt Protected					1.00		0.95	1.00			1.00	
Satd. Flow (prot)					6223		3343	1832			1729	
Flt Permitted					1.00		0.95	1.00			1.00	
Satd. Flow (perm)					6223		3343	1832			1729	
Peak-hour factor, PHF	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Adj. Flow (vph)	0	0	0	241	2152	114	82	114	0	0	32	13
RTOR Reduction (vph)	0	0	0	0	5	0	0	0	0	0	12	0
Lane Group Flow (vph)	0	0	0	0	2502	0	82	114	0	0	33	0
Confl. Peds. (#/hr)	2		2	2		2			1	1		
Heavy Vehicles (%)	0%	0%	0%	1%	1%	0%	2%	1%	0%	0%	4%	0%
Turn Type				Perm	NA		Prot	NA			NA	
Protected Phases					2		7	4			8	
Permitted Phases				2								
Actuated Green, G (s)					52.2		7.4	17.1			4.4	
Effective Green, g (s)					52.2		7.4	17.1			4.4	
Actuated g/C Ratio					0.65		0.09	0.21			0.06	
Clearance Time (s)					5.4		5.3	5.3			5.3	
Vehicle Extension (s)					3.7		1.5	1.5			1.5	
Lane Grp Cap (vph)					4060		309	391			95	
v/s Ratio Prot							0.02	c0.06			0.02	
v/s Ratio Perm					0.40							
v/c Ratio					0.62		0.27	0.29			0.34	
Uniform Delay, d1					8.1		33.8	26.4			36.4	
Progression Factor					1.28		0.88	0.83			1.34	
Incremental Delay, d2					0.5		0.2	0.2			0.8	
Delay (s)					10.8		30.0	22.0			49.6	
Level of Service					B		C	C			D	
Approach Delay (s)		0.0			10.8			25.4			49.6	
Approach LOS		A			B			C			D	

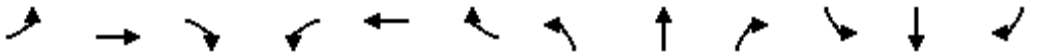
Intersection Summary			
HCM 2000 Control Delay	12.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	56.5%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1405	150	0	0	0	0	0	0	270	1460	0
Future Volume (vph)	0	1405	150	0	0	0	0	0	0	270	1460	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)		5.9	5.9							5.9	5.9	
Lane Util. Factor		0.81	0.81							0.86	0.86	
Frpb, ped/bikes		1.00	0.98							1.00	1.00	
Flpb, ped/bikes		1.00	1.00							1.00	1.00	
Frt		1.00	0.85							1.00	1.00	
Flt Protected		1.00	1.00							0.95	1.00	
Satd. Flow (prot)		5924	1241							1480	4630	
Flt Permitted		1.00	1.00							0.95	1.00	
Satd. Flow (perm)		5924	1241							1480	4630	
Peak-hour factor, PHF	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Adj. Flow (vph)	0	1653	176	0	0	0	0	0	0	318	1718	0
RTOR Reduction (vph)	0	2	24	0	0	0	0	0	0	21	21	0
Lane Group Flow (vph)	0	1669	134	0	0	0	0	0	0	265	1729	0
Confl. Peds. (#/hr)			4	4			3		1	1		3
Heavy Vehicles (%)	0%	1%	1%	0%	0%	0%	0%	0%	0%	2%	3%	0%
Turn Type		NA	Perm							Perm	NA	
Protected Phases		1									2	
Permitted Phases			1							2		
Actuated Green, G (s)		31.1	31.1							37.1	37.1	
Effective Green, g (s)		31.1	31.1							37.1	37.1	
Actuated g/C Ratio		0.39	0.39							0.46	0.46	
Clearance Time (s)		5.9	5.9							5.9	5.9	
Lane Grp Cap (vph)		2302	482							686	2147	
v/s Ratio Prot		c0.28										
v/s Ratio Perm			0.11							0.18	0.37	
v/c Ratio		0.73	0.28							0.39	0.81	
Uniform Delay, d1		20.8	16.7							14.0	18.4	
Progression Factor		1.00	1.00							0.30	0.32	
Incremental Delay, d2		2.0	1.4							1.0	2.0	
Delay (s)		22.8	18.2							5.2	7.8	
Level of Service		C	B							A	A	
Approach Delay (s)		22.4			0.0			0.0			7.4	
Approach LOS		C			A			A			A	

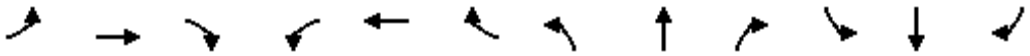
Intersection Summary			
HCM 2000 Control Delay	14.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	11.8
Intersection Capacity Utilization	57.6%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	305	1325	0	0	0	0	0	1065	150	0	0	0
Future Volume (vph)	305	1325	0	0	0	0	0	1065	150	0	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	5.6	5.6						6.0	6.0			
Lane Util. Factor	0.81	0.81						0.91	0.88			
Frpb, ped/bikes	1.00	1.00						1.00	0.98			
Flpb, ped/bikes	1.00	1.00						1.00	1.00			
Frt	1.00	1.00						1.00	0.85			
Flt Protected	0.95	1.00						1.00	1.00			
Satd. Flow (prot)	1392	5870						4765	2668			
Flt Permitted	0.95	1.00						1.00	1.00			
Satd. Flow (perm)	1392	5870						4765	2668			
Peak-hour factor, PHF	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Adj. Flow (vph)	363	1577	0	0	0	0	0	1268	179	0	0	0
RTOR Reduction (vph)	46	46	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	281	1567	0	0	0	0	0	1268	179	0	0	0
Confl. Peds. (#/hr)	3		6	6		3			16	16		
Heavy Vehicles (%)	2%	2%	0%	0%	0%	0%	0%	6%	2%	0%	0%	0%
Turn Type	Perm	NA						NA	custom			
Protected Phases		8						2				
Permitted Phases	8								5			
Actuated Green, G (s)	35.4	35.4						33.0	80.0			
Effective Green, g (s)	35.4	35.4						33.0	80.0			
Actuated g/C Ratio	0.44	0.44						0.41	1.00			
Clearance Time (s)	5.6	5.6						6.0	6.0			
Vehicle Extension (s)	5.0	5.0						5.0	0.2			
Lane Grp Cap (vph)	615	2597						1965	2668			
v/s Ratio Prot								c0.27				
v/s Ratio Perm	0.20	0.27							0.07			
v/c Ratio	0.46	0.60						0.65	0.07			
Uniform Delay, d1	15.6	17.0						18.8	0.0			
Progression Factor	0.29	0.39						1.02	1.00			
Incremental Delay, d2	1.8	0.8						1.3	0.0			
Delay (s)	6.4	7.3						20.5	0.0			
Level of Service	A	A						C	A			
Approach Delay (s)		7.2			0.0			18.0			0.0	
Approach LOS		A			A			B			A	

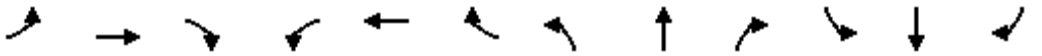
Intersection Summary			
HCM 2000 Control Delay	11.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.98		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	14.6
Intersection Capacity Utilization	54.3%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	55	1385	125	0	0	0	0	110	75	40	155	0
Future Volume (vph)	55	1385	125	0	0	0	0	110	75	40	155	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	5.7	5.7						5.7	5.7	5.7	5.7	
Lane Util. Factor	1.00	0.86						0.95	1.00	1.00	0.95	
Frpb, ped/bikes	1.00	1.00						1.00	1.00	1.00	1.00	
Flpb, ped/bikes	1.00	1.00						1.00	1.00	1.00	1.00	
Frt	1.00	0.99						1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00						1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1754	6162						3432	1572	1758	3466	
Flt Permitted	0.95	1.00						1.00	1.00	0.43	1.00	
Satd. Flow (perm)	1754	6162						3432	1572	792	3466	
Peak-hour factor, PHF	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	63	1592	144	0	0	0	0	126	86	46	178	0
RTOR Reduction (vph)	0	12	0	0	0	0	0	0	75	0	0	0
Lane Group Flow (vph)	63	1724	0	0	0	0	0	126	11	46	178	0
Confl. Peds. (#/hr)	2		7	7		2	4					4
Heavy Vehicles (%)	0%	2%	0%	0%	0%	0%	0%	2%	0%	0%	1%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	2	0	0	2	0
Turn Type	Perm	NA						NA	Perm	pm+pt	NA	
Protected Phases		6						4		3	8	
Permitted Phases	6								4	8		
Actuated Green, G (s)	49.3	49.3						10.0	10.0	19.3	19.3	
Effective Green, g (s)	49.3	49.3						10.0	10.0	19.3	19.3	
Actuated g/C Ratio	0.62	0.62						0.12	0.12	0.24	0.24	
Clearance Time (s)	5.7	5.7						5.7	5.7	5.7	5.7	
Vehicle Extension (s)	4.8	4.8						1.7	1.7	1.0	1.7	
Lane Grp Cap (vph)	1080	3797						429	196	234	836	
v/s Ratio Prot		c0.28						c0.04		0.01	c0.05	
v/s Ratio Perm	0.04								0.01	0.04		
v/c Ratio	0.06	0.45						0.29	0.05	0.20	0.21	
Uniform Delay, d1	6.1	8.2						31.8	30.8	23.9	24.3	
Progression Factor	0.21	0.16						1.00	1.00	0.94	0.97	
Incremental Delay, d2	0.1	0.3						0.1	0.0	0.1	0.0	
Delay (s)	1.4	1.6						31.9	30.9	22.5	23.6	
Level of Service	A	A						C	C	C	C	
Approach Delay (s)		1.6			0.0			31.5			23.4	
Approach LOS		A			A			C			C	

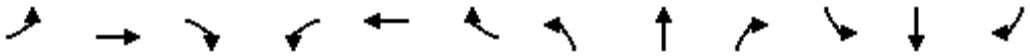
Intersection Summary			
HCM 2000 Control Delay	6.6	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.43		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	17.1
Intersection Capacity Utilization	56.5%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	245	30	100	320	0	0	0	0	195	1085	145
Future Volume (vph)	0	245	30	100	320	0	0	0	0	195	1085	145
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)		5.5		5.5	5.5					6.0	6.0	6.0
Lane Util. Factor		0.95		1.00	0.95					1.00	0.91	1.00
Frpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	1.00
Flpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	1.00
Frt		0.98		1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00		0.95	1.00					0.95	1.00	1.00
Satd. Flow (prot)		3422		1738	3446					1723	4903	1572
Flt Permitted		1.00		0.51	1.00					0.95	1.00	1.00
Satd. Flow (perm)		3422		936	3446					1723	4903	1572
Peak-hour factor, PHF	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Adj. Flow (vph)	0	288	35	118	376	0	0	0	0	229	1276	171
RTOR Reduction (vph)	0	13	0	0	0	0	0	0	0	0	0	75
Lane Group Flow (vph)	0	310	0	118	376	0	0	0	0	229	1276	96
Confl. Peds. (#/hr)	2		3	3		2						
Heavy Vehicles (%)	0%	1%	0%	1%	2%	0%	0%	0%	0%	2%	3%	0%
Turn Type		NA		pm+pt	NA					Perm	NA	Perm
Protected Phases		8		7	4						6	
Permitted Phases				4						6		6
Actuated Green, G (s)		13.0		23.6	23.6					44.9	44.9	44.9
Effective Green, g (s)		13.0		23.6	23.6					44.9	44.9	44.9
Actuated g/C Ratio		0.16		0.30	0.30					0.56	0.56	0.56
Clearance Time (s)		5.5		5.5	5.5					6.0	6.0	6.0
Vehicle Extension (s)		2.5		2.0	2.5					6.0	6.0	6.0
Lane Grp Cap (vph)		556		327	1016					967	2751	882
v/s Ratio Prot		c0.09		0.02	c0.11						c0.26	
v/s Ratio Perm				0.08						0.13		0.06
v/c Ratio		0.56		0.36	0.37					0.24	0.46	0.11
Uniform Delay, d1		30.8		23.7	22.3					8.9	10.4	8.2
Progression Factor		1.00		0.32	0.33					0.18	0.16	0.00
Incremental Delay, d2		1.0		0.2	0.2					0.4	0.4	0.2
Delay (s)		31.8		7.8	7.6					2.0	2.0	0.2
Level of Service		C		A	A					A	A	A
Approach Delay (s)		31.8			7.7			0.0			1.8	
Approach LOS		C			A			A			A	

Intersection Summary			
HCM 2000 Control Delay	6.9	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	58.5%	ICU Level of Service	B
Analysis Period (min)	15		

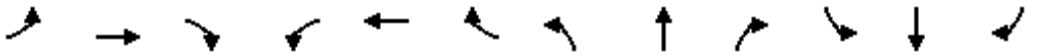
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	65	325	0	0	420	250	80	1125	115	0	0	0
Future Volume (vph)	65	325	0	0	420	250	80	1125	115	0	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	5.7	5.7			5.7	5.7	6.0	6.0	6.0			
Lane Util. Factor	1.00	0.95			0.95	1.00	1.00	0.91	1.00			
Frpb, ped/bikes	1.00	1.00			1.00	0.98	1.00	1.00	0.98			
Flpb, ped/bikes	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1719	3446			3446	1536	1653	4765	1499			
Flt Permitted	0.43	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	770	3446			3446	1536	1653	4765	1499			
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	73	365	0	0	472	281	90	1264	129	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	84	0	0	74	0	0	0
Lane Group Flow (vph)	73	365	0	0	472	197	90	1264	55	0	0	0
Confl. Peds. (#/hr)	10		6	6		10	3		7	7		3
Heavy Vehicles (%)	2%	2%	0%	0%	2%	0%	6%	6%	3%	0%	0%	0%
Turn Type	pm+pt	NA			NA	Perm	Perm	NA	Perm			
Protected Phases	3	8			4			2				
Permitted Phases	8					4	2		2			
Actuated Green, G (s)	34.3	34.3			23.3	23.3	34.0	34.0	34.0			
Effective Green, g (s)	34.3	34.3			23.3	23.3	34.0	34.0	34.0			
Actuated g/C Ratio	0.43	0.43			0.29	0.29	0.42	0.42	0.42			
Clearance Time (s)	5.7	5.7			5.7	5.7	6.0	6.0	6.0			
Vehicle Extension (s)	1.0	2.5			2.5	2.5	2.5	2.5	2.5			
Lane Grp Cap (vph)	393	1477			1003	447	702	2025	637			
v/s Ratio Prot	0.01	c0.11			c0.14			c0.27				
v/s Ratio Perm	0.07					0.13	0.05		0.04			
v/c Ratio	0.19	0.25			0.47	0.44	0.13	0.62	0.09			
Uniform Delay, d1	16.4	14.6			23.3	23.0	14.0	18.0	13.7			
Progression Factor	0.43	0.45			1.00	1.00	1.39	1.63	4.75			
Incremental Delay, d2	0.2	0.1			1.6	3.1	0.2	0.9	0.2			
Delay (s)	7.2	6.6			24.9	26.2	19.6	30.3	65.3			
Level of Service	A	A			C	C	B	C	E			
Approach Delay (s)		6.7			25.4			32.7			0.0	
Approach LOS		A			C			C			A	

Intersection Summary			
HCM 2000 Control Delay	26.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	17.4
Intersection Capacity Utilization	58.5%	ICU Level of Service	B
Analysis Period (min)	15		

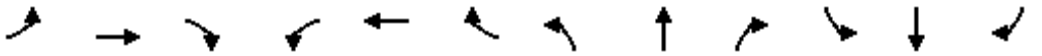
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	70	340	40	35	630	110	55	145	15	30	120	80
Future Volume (vph)	70	340	40	35	630	110	55	145	15	30	120	80
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	5.7	5.7		5.7	5.7		5.7	5.7		5.7	5.7	5.7
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.98		1.00	0.98		1.00	0.99		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1706	3383		1706	3396		1756	3374		1758	3480	1534
Flt Permitted	0.18	1.00		0.49	1.00		0.57	1.00		0.63	1.00	1.00
Satd. Flow (perm)	320	3383		872	3396		1062	3374		1164	3480	1534
Peak-hour factor, PHF	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Adj. Flow (vph)	85	415	49	43	768	134	67	177	18	37	146	98
RTOR Reduction (vph)	0	10	0	0	16	0	0	10	0	0	0	79
Lane Group Flow (vph)	85	454	0	43	886	0	67	185	0	37	146	19
Confl. Peds. (#/hr)	1		1	1		1	3					3
Heavy Vehicles (%)	3%	2%	3%	3%	1%	1%	0%	3%	0%	0%	1%	1%
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases	6			2			4			8		8
Actuated Green, G (s)	29.4	25.6		27.2	24.5		19.4	15.6		15.4	13.6	13.6
Effective Green, g (s)	29.4	25.6		27.2	24.5		19.4	15.6		15.4	13.6	13.6
Actuated g/C Ratio	0.43	0.37		0.40	0.36		0.28	0.23		0.22	0.20	0.20
Clearance Time (s)	5.7	5.7		5.7	5.7		5.7	5.7		5.7	5.7	5.7
Vehicle Extension (s)	1.0	5.0		1.0	5.0		1.0	2.0		1.2	5.0	5.0
Lane Grp Cap (vph)	214	1264		379	1214		339	768		277	690	304
v/s Ratio Prot	c0.02	0.13		0.00	c0.26		c0.01	c0.05		0.00	0.04	
v/s Ratio Perm	0.15			0.04			0.04			0.03		0.01
v/c Ratio	0.40	0.36		0.11	0.73		0.20	0.24		0.13	0.21	0.06
Uniform Delay, d1	12.8	15.5		12.8	19.1		18.3	21.6		21.0	23.0	22.3
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	0.4	0.4		0.0	2.7		0.1	0.1		0.1	0.3	0.2
Delay (s)	13.3	15.9		12.8	21.9		18.4	21.7		21.1	23.3	22.5
Level of Service	B	B		B	C		B	C		C	C	C
Approach Delay (s)		15.5			21.5			20.8			22.7	
Approach LOS		B			C			C			C	

Intersection Summary			
HCM 2000 Control Delay	19.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	68.5	Sum of lost time (s)	22.8
Intersection Capacity Utilization	58.3%	ICU Level of Service	B
Analysis Period (min)	15		

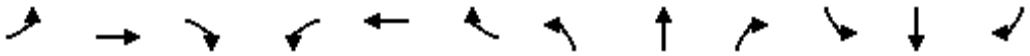
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	365	1070	100	150	1215	180	345	755	280	85	370	205
Future Volume (vph)	365	1070	100	150	1215	180	345	755	280	85	370	205
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	6.5	6.5	6.5	6.5	6.5	6.5	6.3	6.3	6.5	6.3	6.3	6.3
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95	0.88	0.97	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00	0.98	1.00	1.00	1.00	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3410	3413	1515	3376	3480	1533	3376	3480	2713	3278	3380	1515
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3410	3413	1515	3376	3480	1533	3376	3480	2713	3278	3380	1515
Peak-hour factor, PHF	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Adj. Flow (vph)	429	1259	118	176	1429	212	406	888	329	100	435	241
RTOR Reduction (vph)	0	0	62	0	0	94	0	0	76	0	0	179
Lane Group Flow (vph)	429	1259	56	176	1429	118	406	888	253	100	435	62
Confl. Peds. (#/hr)	2		4	4		2	3					3
Heavy Vehicles (%)	0%	3%	2%	1%	1%	1%	1%	1%	2%	4%	4%	2%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4	5	3	8	
Permitted Phases			6			2			4			8
Actuated Green, G (s)	18.5	75.5	75.5	11.5	68.5	68.5	22.4	39.1	50.6	8.3	25.0	25.0
Effective Green, g (s)	18.5	75.5	75.5	11.5	68.5	68.5	22.4	39.1	50.6	8.3	25.0	25.0
Actuated g/C Ratio	0.12	0.47	0.47	0.07	0.43	0.43	0.14	0.24	0.32	0.05	0.16	0.16
Clearance Time (s)	6.5	6.5	6.5	6.5	6.5	6.5	6.3	6.3	6.5	6.3	6.3	6.3
Vehicle Extension (s)	2.0	5.0	5.0	2.0	5.0	5.0	2.0	1.0	2.0	2.0	1.0	1.0
Lane Grp Cap (vph)	394	1610	714	242	1489	656	472	850	857	170	528	236
v/s Ratio Prot	c0.13	0.37		0.05	c0.41		0.12	c0.26	0.02	0.03	c0.13	
v/s Ratio Perm			0.04			0.08			0.07			0.04
v/c Ratio	1.09	0.78	0.08	0.73	0.96	0.18	0.86	1.04	0.30	0.59	0.82	0.26
Uniform Delay, d1	70.8	35.4	23.2	72.7	44.4	28.3	67.3	60.5	41.3	74.2	65.4	59.4
Progression Factor	1.26	1.48	8.60	1.00	1.00	1.00	1.00	1.00	1.00	0.99	1.17	2.73
Incremental Delay, d2	66.3	3.0	0.2	8.9	15.5	0.6	14.3	43.2	0.1	2.4	7.1	0.2
Delay (s)	155.8	55.3	199.4	81.6	59.9	28.9	81.6	103.6	41.3	75.9	83.8	162.1
Level of Service	F	E	F	F	E	C	F	F	D	E	F	F
Approach Delay (s)		88.6			58.4			85.5			107.1	
Approach LOS		F			E			F			F	

Intersection Summary			
HCM 2000 Control Delay	81.0	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.02		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	25.6
Intersection Capacity Utilization	93.8%	ICU Level of Service	F
Analysis Period (min)	15		

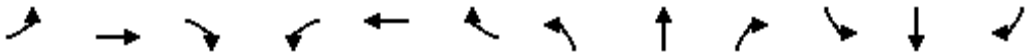
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	180	465	115	70	165	60	95	785	140	125	765	115
Future Volume (vph)	180	465	115	70	165	60	95	785	140	125	765	115
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	6.3	6.3		6.3	6.3		5.7	5.7		5.7	5.7	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.97		1.00	0.96		1.00	0.98		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1722	3350		1612	3179		1706	3366		1690	3402	
Flt Permitted	0.42	1.00		0.20	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	765	3350		343	3179		1706	3366		1690	3402	
Peak-hour factor, PHF	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Adj. Flow (vph)	212	547	135	82	194	71	112	924	165	147	900	135
RTOR Reduction (vph)	0	14	0	0	24	0	0	8	0	0	7	0
Lane Group Flow (vph)	212	668	0	82	241	0	112	1081	0	147	1028	0
Confl. Peds. (#/hr)	1		5	5		1	1		1	1		1
Heavy Vehicles (%)	2%	1%	3%	9%	6%	5%	3%	2%	1%	4%	1%	2%
Turn Type	pm+pt	NA		pm+pt	NA		Prot	NA		Prot	NA	
Protected Phases	3	8		7	4		5	2		1	6	
Permitted Phases	8			4								
Actuated Green, G (s)	55.5	40.0		41.0	31.8		17.3	69.2		17.6	69.5	
Effective Green, g (s)	55.5	40.0		41.0	31.8		17.3	69.2		17.6	69.5	
Actuated g/C Ratio	0.35	0.25		0.26	0.20		0.11	0.43		0.11	0.43	
Clearance Time (s)	6.3	6.3		6.3	6.3		5.7	5.7		5.7	5.7	
Vehicle Extension (s)	1.2	4.0		1.2	4.0		1.2	4.0		1.2	4.0	
Lane Grp Cap (vph)	369	837		160	631		184	1455		185	1477	
v/s Ratio Prot	c0.06	c0.20		0.03	0.08		0.07	c0.32		0.09	c0.30	
v/s Ratio Perm	0.14			0.10								
v/c Ratio	0.57	0.80		0.51	0.38		0.61	0.74		0.79	0.70	
Uniform Delay, d1	39.4	56.2		47.5	55.6		68.1	38.0		69.4	36.7	
Progression Factor	0.62	0.72		1.00	1.00		0.61	0.35		1.25	0.47	
Incremental Delay, d2	1.3	5.5		1.2	0.5		1.3	1.1		13.2	1.8	
Delay (s)	25.9	46.0		48.6	56.1		42.6	14.5		100.1	19.2	
Level of Service	C	D		D	E		D	B		F	B	
Approach Delay (s)		41.2			54.3			17.2			29.2	
Approach LOS		D			D			B			C	

Intersection Summary			
HCM 2000 Control Delay	30.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	24.0
Intersection Capacity Utilization	76.2%	ICU Level of Service	D
Analysis Period (min)	15		

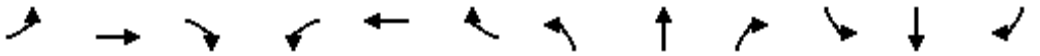
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	320	70	340	810	0	0	0	0	65	1090	65
Future Volume (vph)	0	320	70	340	810	0	0	0	0	65	1090	65
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		5.1		5.1	5.1						5.4	
Lane Util. Factor		0.95		1.00	0.95						0.86	
Frpb, ped/bikes		1.00		1.00	1.00						1.00	
Flpb, ped/bikes		1.00		1.00	1.00						1.00	
Frt		0.97		1.00	1.00						0.99	
Flt Protected		1.00		0.95	1.00						1.00	
Satd. Flow (prot)		2962		1508	3018						5351	
Flt Permitted		1.00		0.26	1.00						1.00	
Satd. Flow (perm)		2962		416	3018						5351	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	340	74	362	862	0	0	0	0	69	1160	69
RTOR Reduction (vph)	0	24	0	0	0	0	0	0	0	0	9	0
Lane Group Flow (vph)	0	390	0	362	862	0	0	0	0	0	1289	0
Confl. Peds. (#/hr)	1		3	3		1	7					7
Heavy Vehicles (%)	0%	1%	0%	2%	2%	0%	0%	0%	0%	3%	3%	2%
Turn Type		NA		pm+pt	NA					Split	NA	
Protected Phases		8		7	4					6	6	
Permitted Phases				4								
Actuated Green, G (s)		13.7		39.2	39.2						30.3	
Effective Green, g (s)		13.7		39.2	39.2						30.3	
Actuated g/C Ratio		0.17		0.49	0.49						0.38	
Clearance Time (s)		5.1		5.1	5.1						5.4	
Vehicle Extension (s)		0.2		1.5	0.2						0.2	
Lane Grp Cap (vph)		507		482	1478						2026	
v/s Ratio Prot		0.13		c0.19	0.29						c0.24	
v/s Ratio Perm				c0.18								
v/c Ratio		0.77		0.75	0.58						0.64	
Uniform Delay, d1		31.6		14.6	14.6						20.3	
Progression Factor		1.00		1.38	0.80						1.00	
Incremental Delay, d2		6.2		0.5	0.0						1.5	
Delay (s)		37.9		20.7	11.8						21.9	
Level of Service		D		C	B						C	
Approach Delay (s)		37.9			14.4			0.0			21.9	
Approach LOS		D			B			A			C	

Intersection Summary			
HCM 2000 Control Delay	21.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	15.6
Intersection Capacity Utilization	91.7%	ICU Level of Service	F
Analysis Period (min)	15		

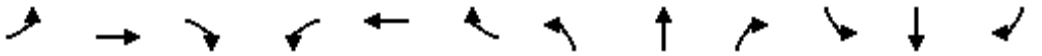
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	355	0	0	995	195	155	1760	290	0	0	0
Future Volume (vph)	30	355	0	0	995	195	155	1760	290	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	5.3	5.3			5.3			5.7	5.7			
Lane Util. Factor	1.00	0.95			0.95			0.86	1.00			
Frpb, ped/bikes	1.00	1.00			1.00			1.00	0.98			
Flpb, ped/bikes	1.00	1.00			1.00			1.00	1.00			
Frt	1.00	1.00			0.98			1.00	0.85			
Flt Protected	0.95	1.00			1.00			1.00	1.00			
Satd. Flow (prot)	1539	3048			2966			5341	1304			
Flt Permitted	0.06	1.00			1.00			1.00	1.00			
Satd. Flow (perm)	90	3048			2966			5341	1304			
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	34	403	0	0	1131	222	176	2000	330	0	0	0
RTOR Reduction (vph)	0	0	0	0	10	0	0	0	183	0	0	0
Lane Group Flow (vph)	34	403	0	0	1343	0	0	2176	147	0	0	0
Confl. Peds. (#/hr)	1		2	2		1			5	5		
Heavy Vehicles (%)	0%	1%	0%	0%	1%	1%	3%	4%	4%	0%	0%	0%
Turn Type	pm+pt	NA			NA		Split	NA	Perm			
Protected Phases	3	8			4		2	2				
Permitted Phases	8								2			
Actuated Green, G (s)	77.8	77.8			66.7			71.2	71.2			
Effective Green, g (s)	77.8	77.8			66.7			71.2	71.2			
Actuated g/C Ratio	0.49	0.49			0.42			0.45	0.45			
Clearance Time (s)	5.3	5.3			5.3			5.7	5.7			
Vehicle Extension (s)	1.5	0.2			0.2			0.2	0.2			
Lane Grp Cap (vph)	96	1482			1236			2376	580			
v/s Ratio Prot	0.01	c0.13			c0.45			c0.41				
v/s Ratio Perm	0.16								0.11			
v/c Ratio	0.35	0.27			1.09			0.92	0.25			
Uniform Delay, d1	34.0	24.3			46.6			41.6	27.8			
Progression Factor	1.59	1.25			1.00			0.79	1.06			
Incremental Delay, d2	0.6	0.0			52.5			6.0	0.9			
Delay (s)	54.7	30.5			99.2			39.0	30.3			
Level of Service	D	C			F			D	C			
Approach Delay (s)		32.4			99.2			37.9			0.0	
Approach LOS		C			F			D			A	

Intersection Summary			
HCM 2000 Control Delay	56.6	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.97		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	16.3
Intersection Capacity Utilization	91.7%	ICU Level of Service	F
Analysis Period (min)	15		

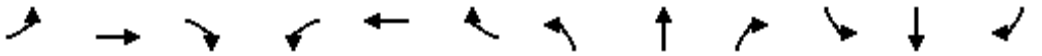
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	125	725	165	335	1325	40	215	405	250	150	565	275
Future Volume (vph)	125	725	165	335	1325	40	215	405	250	150	565	275
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	6.4	6.4	6.4	6.4	6.4		6.4	6.4	6.4	6.4	6.4	6.4
Lane Util. Factor	0.97	0.95	1.00	0.97	0.91		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00		1.00	1.00	0.98	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3376	3446	1506	3343	4976		1706	3446	1487	1674	3446	1552
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3376	3446	1506	3343	4976		1706	3446	1487	1674	3446	1552
Peak-hour factor, PHF	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Adj. Flow (vph)	151	873	199	404	1596	48	259	488	301	181	681	331
RTOR Reduction (vph)	0	0	106	0	2	0	0	0	224	0	0	157
Lane Group Flow (vph)	151	873	93	404	1642	0	259	488	77	181	681	174
Confl. Peds. (#/hr)			1	1			1		3	3		1
Heavy Vehicles (%)	1%	2%	3%	2%	1%	3%	3%	2%	4%	5%	2%	0%
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases			6						4			8
Actuated Green, G (s)	11.5	50.9	50.9	22.6	62.0		22.6	40.7	40.7	20.2	38.3	38.3
Effective Green, g (s)	11.5	50.9	50.9	22.6	62.0		22.6	40.7	40.7	20.2	38.3	38.3
Actuated g/C Ratio	0.07	0.32	0.32	0.14	0.39		0.14	0.25	0.25	0.13	0.24	0.24
Clearance Time (s)	6.4	6.4	6.4	6.4	6.4		6.4	6.4	6.4	6.4	6.4	6.4
Vehicle Extension (s)	2.0	5.0	5.0	2.0	5.0		2.0	3.0	3.0	2.0	2.5	2.5
Lane Grp Cap (vph)	242	1096	479	472	1928		240	876	378	211	824	371
v/s Ratio Prot	0.04	c0.25		0.12	c0.33		c0.15	0.14		0.11	c0.20	
v/s Ratio Perm			0.06						0.05			0.11
v/c Ratio	0.62	0.80	0.19	0.86	0.85		1.08	0.56	0.20	0.86	0.83	0.47
Uniform Delay, d1	72.1	49.8	39.6	67.1	44.8		68.7	51.8	46.9	68.5	57.7	52.1
Progression Factor	1.00	1.00	1.00	1.00	1.00		0.71	0.80	3.60	1.00	1.00	1.00
Incremental Delay, d2	3.6	6.0	0.9	13.7	5.0		71.9	0.6	0.2	26.6	6.7	0.7
Delay (s)	75.7	55.9	40.5	80.8	49.8		120.5	42.2	169.1	95.0	64.4	52.8
Level of Service	E	E	D	F	D		F	D	F	F	E	D
Approach Delay (s)		55.8			55.9			98.0			65.8	
Approach LOS		E			E			F			E	

Intersection Summary			
HCM 2000 Control Delay	66.0	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	25.6
Intersection Capacity Utilization	84.1%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

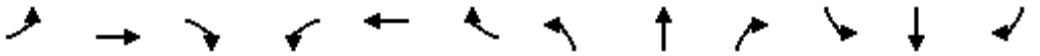


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	520	165	520	1025	5	155	20	355	0	5	10
Future Volume (vph)	20	520	165	520	1025	5	155	20	355	0	5	10
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	6.2	6.2	6.2	6.2	6.2		6.6	6.6	6.2		6.2	
Lane Util. Factor	1.00	0.95	1.00	0.97	0.95		0.95	0.95	0.88		1.00	
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		0.99	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	
Frt	1.00	1.00	0.85	1.00	1.00		1.00	1.00	0.85		0.90	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	0.96	1.00		1.00	
Satd. Flow (prot)	1758	3413	1557	3343	3443		1653	1679	2713		1656	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	0.96	1.00		1.00	
Satd. Flow (perm)	1758	3413	1557	3343	3443		1653	1679	2713		1656	
Peak-hour factor, PHF	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	23	598	190	598	1178	6	178	23	408	0	6	11
RTOR Reduction (vph)	0	0	96	0	0	0	0	0	297	0	11	0
Lane Group Flow (vph)	23	598	94	598	1184	0	100	101	111	0	6	0
Confl. Peds. (#/hr)	1					1	1					1
Heavy Vehicles (%)	0%	3%	1%	2%	2%	0%	1%	0%	2%	0%	0%	0%
Turn Type	Prot	NA	Perm	Prot	NA		Split	NA	pm+ov	Split	NA	
Protected Phases	1	6		5	2		8	8	5	4	4	
Permitted Phases			6						8			
Actuated Green, G (s)	4.4	59.4	59.4	20.8	75.8		11.8	11.8	32.6		2.8	
Effective Green, g (s)	4.4	59.4	59.4	20.8	75.8		11.8	11.8	32.6		2.8	
Actuated g/C Ratio	0.04	0.49	0.49	0.17	0.63		0.10	0.10	0.27		0.02	
Clearance Time (s)	6.2	6.2	6.2	6.2	6.2		6.6	6.6	6.2		6.2	
Vehicle Extension (s)	2.0	2.5	2.5	2.0	4.0		2.0	2.0	2.0		2.0	
Lane Grp Cap (vph)	64	1689	770	579	2174		162	165	737		38	
v/s Ratio Prot	0.01	0.18		c0.18	c0.34		c0.06	0.06	0.03		c0.00	
v/s Ratio Perm			0.06						0.01			
v/c Ratio	0.36	0.35	0.12	1.03	0.54		0.62	0.61	0.15		0.16	
Uniform Delay, d1	56.4	18.6	16.3	49.6	12.4		51.9	51.9	33.2		57.5	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	
Incremental Delay, d2	1.3	0.6	0.3	46.1	1.0		4.8	4.7	0.0		0.7	
Delay (s)	57.7	19.1	16.6	95.7	13.4		56.8	56.6	33.2		58.2	
Level of Service	E	B	B	F	B		E	E	C		E	
Approach Delay (s)		19.6			41.0			41.0			58.2	
Approach LOS		B			D			D			E	

Intersection Summary			
HCM 2000 Control Delay	35.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	25.2
Intersection Capacity Utilization	62.5%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

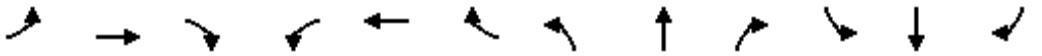
2017 Existing (PM Peak Hour)



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	450	75	340	0	0	40	145	1910	65	125	1805	125
Future Volume (vph)	450	75	340	0	0	40	145	1910	65	125	1805	125
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	6.3	6.3	6.3			4.0	5.9	5.9		5.9	5.9	
Lane Util. Factor	0.95	0.95	1.00			1.00	1.00	0.91		1.00	0.91	
Frpb, ped/bikes	1.00	1.00	0.97			0.99	1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00			1.00	1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85			0.86	1.00	1.00		1.00	0.99	
Flt Protected	0.95	0.97	1.00			1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1653	1685	1530			1580	1740	4918		1758	4852	
Flt Permitted	0.95	0.97	1.00			1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1653	1685	1530			1580	1740	4918		1758	4852	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	459	77	347	0	0	41	148	1949	66	128	1842	128
RTOR Reduction (vph)	0	0	215	0	0	0	0	2	0	0	4	0
Lane Group Flow (vph)	266	270	133	0	0	41	148	2013	0	128	1966	0
Confl. Peds. (#/hr)	3		11	11		3	9		9	9		9
Heavy Vehicles (%)	1%	0%	0%	0%	0%	0%	1%	2%	2%	0%	3%	1%
Turn Type	Split	NA	Perm			Free	Prot	NA		Prot	NA	
Protected Phases	8	8					5	2		1	6	
Permitted Phases			8			Free						
Actuated Green, G (s)	30.0	30.0	30.0			160.0	23.1	96.3		15.6	88.8	
Effective Green, g (s)	30.0	30.0	30.0			160.0	23.1	96.3		15.6	88.8	
Actuated g/C Ratio	0.19	0.19	0.19			1.00	0.14	0.60		0.10	0.55	
Clearance Time (s)	6.3	6.3	6.3				5.9	5.9		5.9	5.9	
Vehicle Extension (s)	2.0	2.0	2.0				2.0	3.0		2.0	3.0	
Lane Grp Cap (vph)	309	315	286			1580	251	2960		171	2692	
v/s Ratio Prot	c0.16	0.16					0.09	c0.41		0.07	c0.41	
v/s Ratio Perm			0.09			0.03						
v/c Ratio	0.86	0.86	0.46			0.03	0.59	0.68		0.75	0.73	
Uniform Delay, d1	63.0	62.9	57.8			0.0	64.0	21.5		70.3	26.6	
Progression Factor	1.02	1.01	1.32			1.00	0.47	0.12		1.07	1.02	
Incremental Delay, d2	19.5	18.4	0.4			0.0	1.8	1.0		10.6	1.3	
Delay (s)	83.4	82.3	76.7			0.0	32.1	3.6		85.8	28.5	
Level of Service	F	F	E			A	C	A		F	C	
Approach Delay (s)		80.4			0.0			5.5			32.0	
Approach LOS		F			A			A			C	

Intersection Summary			
HCM 2000 Control Delay	28.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	18.1
Intersection Capacity Utilization	85.9%	ICU Level of Service	E
Analysis Period (min)	15		

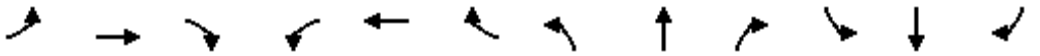
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	445	1230	175	405	1945	0	0	1905	240
Future Volume (vph)	0	0	0	445	1230	175	405	1945	0	0	1905	240
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)				6.4	6.4	6.4	6.5	6.5			6.5	6.5
Lane Util. Factor				0.81	0.81	1.00	0.97	0.91			0.86	0.86
Frpb, ped/bikes				1.00	1.00	0.96	1.00	1.00			1.00	0.96
Flpb, ped/bikes				1.00	1.00	1.00	1.00	1.00			1.00	1.00
Frt				1.00	1.00	0.85	1.00	1.00			1.00	0.85
Flt Protected				0.95	1.00	1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)				1382	5898	1502	3410	4903			4668	1273
Flt Permitted				0.95	1.00	1.00	0.95	1.00			1.00	1.00
Satd. Flow (perm)				1382	5898	1502	3410	4903			4668	1273
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	0	0	0	464	1281	182	422	2026	0	0	1984	250
RTOR Reduction (vph)	0	0	0	0	0	49	0	0	0	0	1	37
Lane Group Flow (vph)	0	0	0	339	1406	133	422	2026	0	0	2008	188
Confl. Peds. (#/hr)	18					18	10		25	25		10
Heavy Vehicles (%)	0%	0%	0%	3%	1%	1%	0%	3%	0%	0%	2%	2%
Turn Type				Perm	NA	Perm	Prot	NA			NA	Perm
Protected Phases					4		5	2			6	
Permitted Phases				4		4						6
Actuated Green, G (s)				44.0	44.0	44.0	23.5	103.1			73.1	73.1
Effective Green, g (s)				44.0	44.0	44.0	23.5	103.1			73.1	73.1
Actuated g/C Ratio				0.28	0.28	0.28	0.15	0.64			0.46	0.46
Clearance Time (s)				6.4	6.4	6.4	6.5	6.5			6.5	6.5
Vehicle Extension (s)				2.9	2.9	2.9	2.0	3.7			3.7	3.7
Lane Grp Cap (vph)				380	1621	413	500	3159			2132	581
v/s Ratio Prot							c0.12	0.41			c0.43	
v/s Ratio Perm				c0.25	0.24	0.09						0.15
v/c Ratio				0.89	0.87	0.32	0.84	0.64			0.94	0.32
Uniform Delay, d1				55.7	55.2	46.1	66.5	17.2			41.4	27.7
Progression Factor				0.55	0.54	0.40	0.92	0.49			0.39	0.16
Incremental Delay, d2				21.4	5.0	0.4	3.9	0.3			7.5	1.0
Delay (s)				52.1	35.0	19.0	64.9	8.7			23.7	5.5
Level of Service				D	D	B	E	A			C	A
Approach Delay (s)		0.0			36.5			18.4			21.9	
Approach LOS		A			D			B			C	

Intersection Summary			
HCM 2000 Control Delay	24.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.91		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	19.4
Intersection Capacity Utilization	94.7%	ICU Level of Service	F
Analysis Period (min)	15		

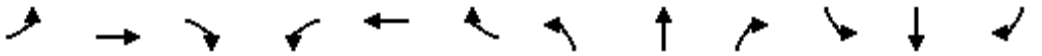
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	550	1665	675	0	0	0	0	1715	375	255	2155	0
Future Volume (vph)	550	1665	675	0	0	0	0	1715	375	255	2155	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	6.3	6.3	6.3					6.3	6.3	6.3	6.3	
Lane Util. Factor	0.86	0.81	0.86					0.91	1.00	0.97	0.91	
Frpb, ped/bikes	1.00	1.00	0.96					1.00	0.89	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00					1.00	1.00	1.00	1.00	
Frt	1.00	0.99	0.85					1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1496	4380	1285					4903	1379	3410	4903	
Flt Permitted	0.95	1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1496	4380	1285					4903	1379	3410	4903	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	591	1790	726	0	0	0	0	1844	403	274	2317	0
RTOR Reduction (vph)	0	1	37	0	0	0	0	0	41	0	0	0
Lane Group Flow (vph)	532	2000	537	0	0	0	0	1844	362	274	2317	0
Confl. Peds. (#/hr)			24	24			10		37	37		10
Heavy Vehicles (%)	1%	1%	1%	0%	0%	0%	0%	3%	1%	0%	3%	0%
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		8						2		1	6	
Permitted Phases	8		8						2			
Actuated Green, G (s)	68.7	68.7	68.7					59.7	59.7	12.7	78.7	
Effective Green, g (s)	68.7	68.7	68.7					59.7	59.7	12.7	78.7	
Actuated g/C Ratio	0.43	0.43	0.43					0.37	0.37	0.08	0.49	
Clearance Time (s)	6.3	6.3	6.3					6.3	6.3	6.3	6.3	
Vehicle Extension (s)	6.0	6.0	6.0					5.0	5.0	2.0	5.0	
Lane Grp Cap (vph)	642	1880	551					1829	514	270	2411	
v/s Ratio Prot								0.38		0.08	c0.47	
v/s Ratio Perm	0.36	0.46	0.42						0.26			
v/c Ratio	0.83	1.06	0.97					1.01	0.70	1.01	0.96	
Uniform Delay, d1	40.4	45.6	44.8					50.1	42.7	73.7	39.2	
Progression Factor	0.70	0.70	0.66					0.51	0.43	0.62	0.29	
Incremental Delay, d2	4.1	33.9	18.0					19.3	5.4	40.8	6.2	
Delay (s)	32.5	66.0	47.6					44.7	23.6	86.3	17.4	
Level of Service	C	E	D					D	C	F	B	
Approach Delay (s)		56.8			0.0			40.9			24.7	
Approach LOS		E			A			D			C	

Intersection Summary			
HCM 2000 Control Delay	41.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.05		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	18.9
Intersection Capacity Utilization	94.7%	ICU Level of Service	F
Analysis Period (min)	15		

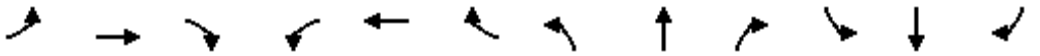
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	265	530	400	380	505	215	200	1525	295	220	2120	40
Future Volume (vph)	265	530	400	380	505	215	200	1525	295	220	2120	40
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	7.1	7.1	7.1	7.1	7.1	7.1	8.0	8.0	8.0	8.0	8.0	8.0
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.91	1.00	0.97	0.91	1.00
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00	0.98	1.00	1.00	0.98	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3376	3480	1537	3376	3446	1532	3376	4951	1549	3410	4903	1572
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3376	3480	1537	3376	3446	1532	3376	4951	1549	3410	4903	1572
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	285	570	430	409	543	231	215	1640	317	237	2280	43
RTOR Reduction (vph)	0	0	160	0	0	169	0	0	131	0	0	23
Lane Group Flow (vph)	285	570	270	409	543	62	215	1640	186	237	2280	20
Confl. Peds. (#/hr)	2		6	6		2			2	2		
Heavy Vehicles (%)	1%	1%	0%	1%	2%	1%	1%	2%	0%	0%	3%	0%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	3	8		7	4		5	2		1	6	
Permitted Phases			8			4			2			6
Actuated Green, G (s)	15.5	26.9	26.9	18.9	30.3	30.3	10.0	67.0	67.0	17.0	74.0	74.0
Effective Green, g (s)	15.5	26.9	26.9	18.9	30.3	30.3	10.0	67.0	67.0	17.0	74.0	74.0
Actuated g/C Ratio	0.10	0.17	0.17	0.12	0.19	0.19	0.06	0.42	0.42	0.11	0.46	0.46
Clearance Time (s)	7.1	7.1	7.1	7.1	7.1	7.1	8.0	8.0	8.0	8.0	8.0	8.0
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	5.0	5.0	2.0	5.0	5.0
Lane Grp Cap (vph)	327	585	258	398	652	290	211	2073	648	362	2267	727
v/s Ratio Prot	0.08	0.16		c0.12	c0.16		0.06	c0.33		0.07	c0.46	
v/s Ratio Perm			c0.18			0.04			0.12			0.01
v/c Ratio	0.87	0.97	1.05	1.03	0.83	0.21	1.02	0.79	0.29	0.65	1.01	0.03
Uniform Delay, d1	71.3	66.2	66.5	70.5	62.4	54.8	75.0	40.4	30.7	68.7	43.0	23.4
Progression Factor	1.23	0.84	0.67	1.05	1.15	2.61	0.94	1.07	1.22	0.97	0.94	1.00
Incremental Delay, d2	18.9	28.2	65.5	50.9	8.1	0.1	66.9	3.2	1.1	0.9	11.5	0.0
Delay (s)	106.5	83.6	110.4	125.2	79.9	143.2	137.6	46.5	38.5	67.4	51.9	23.4
Level of Service	F	F	F	F	E	F	F	D	D	E	D	C
Approach Delay (s)		97.6			107.9			54.3			52.8	
Approach LOS		F			F			D			D	

Intersection Summary			
HCM 2000 Control Delay	70.3	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.04		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	30.2
Intersection Capacity Utilization	100.5%	ICU Level of Service	G
Analysis Period (min)	15		

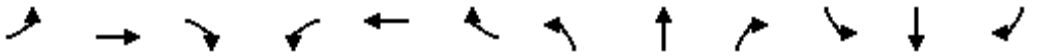
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	50	875	95	110	585	115	220	150	200	125	320	60
Future Volume (vph)	50	875	95	110	585	115	220	150	200	125	320	60
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	0.99		1.00	0.99	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.99		1.00	0.98		1.00	0.91		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1706	3416		1723	3383		1755	3151		1720	3329	
Flt Permitted	0.33	1.00		0.19	1.00		0.20	1.00		0.54	1.00	
Satd. Flow (perm)	597	3416		345	3383		366	3151		971	3329	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	52	902	98	113	603	119	227	155	206	129	330	62
RTOR Reduction (vph)	0	4	0	0	9	0	0	161	0	0	10	0
Lane Group Flow (vph)	52	996	0	113	713	0	227	200	0	129	382	0
Confl. Peds. (#/hr)			8	8			13		3	3		13
Heavy Vehicles (%)	3%	1%	2%	2%	1%	3%	0%	1%	1%	2%	3%	0%
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases	6			2			4			8		
Actuated Green, G (s)	87.9	83.4		95.1	87.0		50.5	33.5		33.7	22.7	
Effective Green, g (s)	87.9	83.4		95.1	87.0		50.5	33.5		33.7	22.7	
Actuated g/C Ratio	0.55	0.52		0.59	0.54		0.32	0.21		0.21	0.14	
Clearance Time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Vehicle Extension (s)	1.0	5.5		1.0	5.5		1.0	2.0		1.0	2.0	
Lane Grp Cap (vph)	359	1780		274	1839		304	659		256	472	
v/s Ratio Prot	0.00	c0.29		c0.02	c0.21		c0.10	0.06		0.03	0.11	
v/s Ratio Perm	0.08			0.22			c0.13			0.07		
v/c Ratio	0.14	0.56		0.41	0.39		0.75	0.30		0.50	0.81	
Uniform Delay, d1	17.1	25.9		17.5	21.1		44.3	53.4		53.9	66.5	
Progression Factor	1.00	1.00		1.27	0.04		1.30	2.10		1.17	1.11	
Incremental Delay, d2	0.1	1.3		0.2	0.3		7.2	0.1		0.5	7.9	
Delay (s)	17.2	27.2		22.4	1.3		64.8	112.4		63.4	81.7	
Level of Service	B	C		C	A		E	F		E	F	
Approach Delay (s)		26.7			4.1			94.0			77.2	
Approach LOS		C			A			F			E	

Intersection Summary			
HCM 2000 Control Delay	42.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	24.0
Intersection Capacity Utilization	82.0%	ICU Level of Service	E
Analysis Period (min)	15		

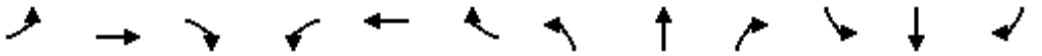
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	260	615	100	445	1040	210	120	1010	205	470	1480	320
Future Volume (vph)	260	615	100	445	1040	210	120	1010	205	470	1480	320
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.91	1.00	0.97	0.91	1.00
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00	0.98	1.00	1.00	0.97	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3343	3480	1510	3343	3480	1500	3410	4856	1516	3376	4903	1534
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3343	3480	1510	3343	3480	1500	3410	4856	1516	3376	4903	1534
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	277	654	106	473	1106	223	128	1074	218	500	1574	340
RTOR Reduction (vph)	0	0	78	0	0	147	0	0	167	0	0	151
Lane Group Flow (vph)	277	654	28	473	1106	76	128	1074	51	500	1574	189
Confl. Peds. (#/hr)	3		5	5		3	2		11	11		2
Heavy Vehicles (%)	2%	1%	2%	2%	1%	3%	0%	4%	1%	1%	3%	1%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases			6			2			4			8
Actuated Green, G (s)	13.6	41.6	41.6	26.6	54.6	54.6	7.6	37.6	37.6	24.6	54.6	54.6
Effective Green, g (s)	13.6	41.6	41.6	26.6	54.6	54.6	7.6	37.6	37.6	24.6	54.6	54.6
Actuated g/C Ratio	0.08	0.26	0.26	0.17	0.34	0.34	0.05	0.24	0.24	0.15	0.34	0.34
Clearance Time (s)	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4
Vehicle Extension (s)	2.0	5.0	5.0	2.0	5.0	5.0	2.0	5.0	5.0	2.0	5.0	5.0
Lane Grp Cap (vph)	284	904	392	555	1187	511	161	1141	356	519	1673	523
v/s Ratio Prot	0.08	c0.19		0.14	c0.32		0.04	c0.22		0.15	c0.32	
v/s Ratio Perm			0.02			0.05			0.03			0.12
v/c Ratio	0.98	0.72	0.07	0.85	0.93	0.15	0.80	0.94	0.14	0.96	0.94	0.36
Uniform Delay, d1	73.0	54.0	44.6	64.8	50.9	36.6	75.4	60.1	48.5	67.3	51.1	39.6
Progression Factor	1.00	1.00	1.00	0.74	0.66	0.31	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	46.1	5.0	0.3	9.2	11.5	0.5	21.8	15.1	0.4	30.0	11.3	0.9
Delay (s)	119.1	59.0	45.0	57.0	45.2	11.9	97.2	75.2	48.8	97.3	62.4	40.5
Level of Service	F	E	D	E	D	B	F	E	D	F	E	D
Approach Delay (s)		73.6			44.2			73.2			66.6	
Approach LOS		E			D			E			E	

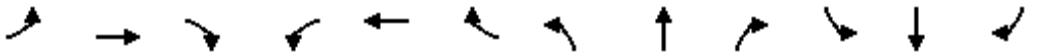
Intersection Summary			
HCM 2000 Control Delay	63.0	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.98		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	29.6
Intersection Capacity Utilization	98.9%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	85	1040	265	320	1235	95	190	405	730	270	410	105
Future Volume (vph)	85	1040	265	320	1235	95	190	405	730	270	410	105
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	6.5	6.5	6.5	6.5	6.5	6.5	6.8	6.8	6.5	6.8	6.8	6.8
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	1.00	0.95	0.88	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00	0.99	1.00	1.00	0.97	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3310	3480	1526	3343	3480	1520	1740	3466	2671	1758	3432	1527
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3310	3480	1526	3343	3480	1520	1740	3466	2671	1758	3432	1527
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	89	1095	279	337	1300	100	200	426	768	284	432	111
RTOR Reduction (vph)	0	0	174	0	0	55	0	0	69	0	0	88
Lane Group Flow (vph)	89	1095	105	337	1300	46	200	426	699	284	432	23
Confl. Peds. (#/hr)	1		5	5		1	5		10	10		5
Heavy Vehicles (%)	3%	1%	1%	2%	1%	2%	1%	1%	1%	0%	2%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	2	0	0	2	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4	5	3	8	
Permitted Phases			6			2			4			8
Actuated Green, G (s)	6.8	60.4	60.4	19.2	72.8	72.8	20.8	24.0	43.2	29.8	33.0	33.0
Effective Green, g (s)	6.8	60.4	60.4	19.2	72.8	72.8	20.8	24.0	43.2	29.8	33.0	33.0
Actuated g/C Ratio	0.04	0.38	0.38	0.12	0.45	0.45	0.13	0.15	0.27	0.19	0.21	0.21
Clearance Time (s)	6.5	6.5	6.5	6.5	6.5	6.5	6.8	6.8	6.5	6.8	6.8	6.8
Vehicle Extension (s)	2.0	5.0	5.0	3.0	5.0	5.0	1.0	2.0	3.0	2.0	2.0	2.0
Lane Grp Cap (vph)	140	1313	576	401	1583	691	226	519	721	327	707	314
v/s Ratio Prot	0.03	0.31		0.10	c0.37		0.11	0.12	c0.12	c0.16	c0.13	
v/s Ratio Perm			0.07			0.03			0.15			0.01
v/c Ratio	0.64	0.83	0.18	0.84	0.82	0.07	0.88	0.82	0.97	0.87	0.61	0.07
Uniform Delay, d1	75.4	45.2	33.3	68.9	37.9	24.5	68.4	65.9	57.8	63.2	57.7	51.2
Progression Factor	1.08	0.97	2.42	1.26	0.80	1.00	1.00	1.00	1.00	0.70	0.69	0.10
Incremental Delay, d2	6.4	6.0	0.7	12.4	4.1	0.2	30.3	9.6	26.2	19.4	1.0	0.0
Delay (s)	87.8	50.1	81.1	99.4	34.5	24.6	98.7	75.5	83.9	63.6	40.6	5.2
Level of Service	F	D	F	F	C	C	F	E	F	E	D	A
Approach Delay (s)		58.3			46.5			83.5			43.7	
Approach LOS		E			D			F			D	

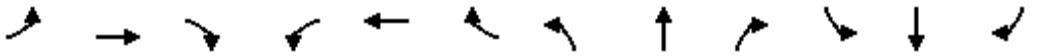
Intersection Summary			
HCM 2000 Control Delay	58.8	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	26.6
Intersection Capacity Utilization	92.3%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1815	300	385	1530	0	0	0	0	155	20	90
Future Volume (vph)	0	1815	300	385	1530	0	0	0	0	155	20	90
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)		5.8	5.8	5.8	5.8						5.9	5.9
Lane Util. Factor		0.91	1.00	1.00	0.95						1.00	1.00
Frpb, ped/bikes		1.00	1.00	1.00	1.00						1.00	0.98
Flpb, ped/bikes		1.00	1.00	1.00	1.00						1.00	1.00
Frt		1.00	0.85	1.00	1.00						1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00						0.96	1.00
Satd. Flow (prot)		5000	1557	1723	3446						1705	1475
Flt Permitted		1.00	1.00	0.95	1.00						0.96	1.00
Satd. Flow (perm)		5000	1557	1723	3446						1705	1475
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	1931	319	410	1628	0	0	0	0	165	21	96
RTOR Reduction (vph)	0	0	114	0	0	0	0	0	0	0	0	51
Lane Group Flow (vph)	0	1931	205	410	1628	0	0	0	0	0	186	45
Confl. Peds. (#/hr)	10					10	2					2
Heavy Vehicles (%)	0%	1%	1%	2%	2%	0%	0%	0%	0%	3%	11%	5%
Turn Type		NA	Perm	Prot	NA					Perm	NA	Perm
Protected Phases		6		5	2						8	
Permitted Phases			6							8		8
Actuated Green, G (s)		79.3	79.3	42.1	127.2						21.1	21.1
Effective Green, g (s)		79.3	79.3	42.1	127.2						21.1	21.1
Actuated g/C Ratio		0.50	0.50	0.26	0.80						0.13	0.13
Clearance Time (s)		5.8	5.8	5.8	5.8						5.9	5.9
Vehicle Extension (s)		3.8	3.8	3.0	3.4						1.5	1.5
Lane Grp Cap (vph)		2478	771	453	2739						224	194
v/s Ratio Prot		c0.39		c0.24	0.47							
v/s Ratio Perm			0.13								0.11	0.03
v/c Ratio		0.78	0.27	0.91	0.59						0.83	0.23
Uniform Delay, d1		33.2	23.4	57.0	6.4						67.7	62.2
Progression Factor		0.75	0.63	1.31	0.27						0.95	0.90
Incremental Delay, d2		1.3	0.4	18.0	0.8						2.4	0.0
Delay (s)		26.2	15.2	92.8	2.5						66.5	56.1
Level of Service		C	B	F	A						E	E
Approach Delay (s)		24.6			20.7			0.0			63.0	
Approach LOS		C			C			A			E	

Intersection Summary			
HCM 2000 Control Delay	25.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	17.5
Intersection Capacity Utilization	83.3%	ICU Level of Service	E
Analysis Period (min)	15		

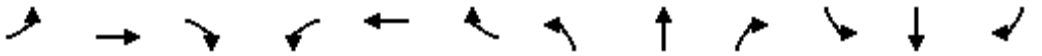
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	225	1745	0	0	1755	220	160	25	250	0	0	0
Future Volume (vph)	225	1745	0	0	1755	220	160	25	250	0	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	5.6	5.6			5.6	5.6	5.9	5.9	5.9			
Lane Util. Factor	1.00	0.95			0.91	1.00	0.95	0.95	1.00			
Frpb, ped/bikes	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Flpb, ped/bikes	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.96	1.00			
Satd. Flow (prot)	1690	3480			4951	1557	1637	1671	1542			
Flt Permitted	0.95	1.00			1.00	1.00	0.95	0.96	1.00			
Satd. Flow (perm)	1690	3480			4951	1557	1637	1671	1542			
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	237	1837	0	0	1847	232	168	26	263	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	95	0	0	221	0	0	0
Lane Group Flow (vph)	237	1837	0	0	1847	137	96	98	42	0	0	0
Confl. Peds. (#/hr)			7	7								
Heavy Vehicles (%)	4%	1%	0%	0%	2%	1%	2%	0%	2%	0%	0%	0%
Turn Type	Prot	NA			NA	Perm	Perm	NA	custom			
Protected Phases	1	6			2			4				
Permitted Phases						2	4		7 5			
Actuated Green, G (s)	34.4	125.7			94.3	94.3	14.2	14.2	25.7			
Effective Green, g (s)	34.4	125.7			94.3	94.3	14.2	14.2	25.7			
Actuated g/C Ratio	0.21	0.79			0.59	0.59	0.09	0.09	0.16			
Clearance Time (s)	5.6	5.6			5.6	5.6	5.9	5.9				
Vehicle Extension (s)	1.5	3.3			3.6	3.6	2.0	2.0				
Lane Grp Cap (vph)	363	2733			2917	917	145	148	247			
v/s Ratio Prot	0.14	c0.53			c0.37							
v/s Ratio Perm						0.09	0.06	0.06	0.03			
v/c Ratio	0.65	0.67			0.63	0.15	0.66	0.66	0.17			
Uniform Delay, d1	57.3	7.8			21.5	14.8	70.6	70.6	58.0			
Progression Factor	0.77	0.69			0.48	0.18	1.00	1.00	1.00			
Incremental Delay, d2	2.0	0.8			0.4	0.1	8.5	8.3	0.1			
Delay (s)	46.3	6.2			10.8	2.7	79.1	78.9	58.1			
Level of Service	D	A			B	A	E	E	E			
Approach Delay (s)		10.8			9.9			66.9			0.0	
Approach LOS		B			A			E			A	

Intersection Summary			
HCM 2000 Control Delay	16.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	20.1
Intersection Capacity Utilization	83.3%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

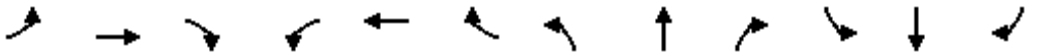


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	30	1665	15	140	45	0	0	35	50
Future Volume (vph)	0	0	0	30	1665	15	140	45	0	0	35	50
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)				5.6	5.6			5.5			5.5	5.5
Lane Util. Factor				1.00	0.86			0.95			1.00	1.00
Frpb, ped/bikes				1.00	1.00			1.00			1.00	0.97
Flpb, ped/bikes				1.00	1.00			0.99			1.00	1.00
Frt				1.00	1.00			1.00			1.00	0.85
Flt Protected				0.95	1.00			0.96			1.00	1.00
Satd. Flow (prot)				1758	6292			3352			1850	1531
Flt Permitted				0.95	1.00			0.75			1.00	1.00
Satd. Flow (perm)				1758	6292			2618			1850	1531
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	32	1753	16	147	47	0	0	37	53
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	26
Lane Group Flow (vph)	0	0	0	32	1769	0	0	194	0	0	37	27
Confl. Peds. (#/hr)	5					5	6					6
Heavy Vehicles (%)	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%
Turn Type				Perm	NA		Perm	NA			NA	Perm
Protected Phases					2			4			8	
Permitted Phases				2			4					8
Actuated Green, G (s)				130.0	130.0			18.9			18.9	18.9
Effective Green, g (s)				130.0	130.0			18.9			18.9	18.9
Actuated g/C Ratio				0.81	0.81			0.12			0.12	0.12
Clearance Time (s)				5.6	5.6			5.5			5.5	5.5
Vehicle Extension (s)				2.5	2.5			2.0			2.8	2.8
Lane Grp Cap (vph)				1428	5112			309			218	180
v/s Ratio Prot					c0.28						0.02	
v/s Ratio Perm				0.02				c0.07				0.02
v/c Ratio				0.02	0.35			0.94dl			0.17	0.15
Uniform Delay, d1				2.9	3.9			67.2			63.5	63.3
Progression Factor				0.18	0.28			0.55			0.91	0.94
Incremental Delay, d2				0.0	0.1			2.7			0.3	0.3
Delay (s)				0.5	1.2			39.7			57.9	59.8
Level of Service				A	A			D			E	E
Approach Delay (s)		0.0			1.2			39.7			59.0	
Approach LOS		A			A			D			E	

Intersection Summary			
HCM 2000 Control Delay	7.3	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.38		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	11.1
Intersection Capacity Utilization	69.2%	ICU Level of Service	C
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

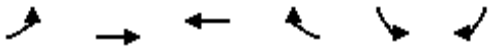
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	80	1960	340	0	0	0	0	125	65	35	40	0
Future Volume (vph)	80	1960	340	0	0	0	0	125	65	35	40	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)		5.8	5.8					5.7		5.7	5.7	
Lane Util. Factor		0.91	1.00					0.95		1.00	1.00	
Frpb, ped/bikes		1.00	0.95					1.00		1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00		1.00	1.00	
Frt		1.00	0.85					0.95		1.00	1.00	
Flt Protected		1.00	1.00					1.00		0.95	1.00	
Satd. Flow (prot)		5041	1498					3334		1758	1850	
Flt Permitted		1.00	1.00					1.00		0.51	1.00	
Satd. Flow (perm)		5041	1498					3334		942	1850	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	86	2108	366	0	0	0	0	134	70	38	43	0
RTOR Reduction (vph)	0	0	67	0	0	0	0	20	0	0	0	0
Lane Group Flow (vph)	0	2194	299	0	0	0	0	184	0	38	43	0
Confl. Peds. (#/hr)			9	9			15					15
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Perm	NA	Perm					NA		Perm	NA	
Protected Phases		6						4			8	
Permitted Phases	6		6							8		
Actuated Green, G (s)		130.5	130.5					18.0		18.0	18.0	
Effective Green, g (s)		130.5	130.5					18.0		18.0	18.0	
Actuated g/C Ratio		0.82	0.82					0.11		0.11	0.11	
Clearance Time (s)		5.8	5.8					5.7		5.7	5.7	
Vehicle Extension (s)		2.0	2.0					2.0		2.0	2.0	
Lane Grp Cap (vph)		4111	1221					375		105	208	
v/s Ratio Prot								c0.06			0.02	
v/s Ratio Perm		0.44	0.20							0.04		
v/c Ratio		0.53	0.24					0.49		0.36	0.21	
Uniform Delay, d1		4.8	3.4					66.7		65.7	64.5	
Progression Factor		0.26	0.00					0.89		0.74	0.75	
Incremental Delay, d2		0.1	0.1					0.4		0.8	0.2	
Delay (s)		1.4	0.1					59.5		49.5	48.8	
Level of Service		A	A					E		D	D	
Approach Delay (s)		1.2			0.0			59.5			49.1	
Approach LOS		A			A			E			D	

Intersection Summary			
HCM 2000 Control Delay	6.8	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	11.5
Intersection Capacity Utilization	80.0%	ICU Level of Service	D
Analysis Period (min)	15		

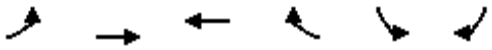
c Critical Lane Group



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	100	865	810	45	175	220
Future Volume (vph)	100	865	810	45	175	220
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850
Total Lost time (s)	5.5	5.5	5.5		5.5	5.5
Lane Util. Factor	1.00	0.95	0.95		1.00	1.00
Frpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Frt	1.00	1.00	0.99		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1757	3480	3446		1758	1572
Flt Permitted	0.26	1.00	1.00		0.95	1.00
Satd. Flow (perm)	485	3480	3446		1758	1572
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	110	951	890	49	192	242
RTOR Reduction (vph)	0	0	1	0	0	209
Lane Group Flow (vph)	110	951	938	0	192	33
Confl. Peds. (#/hr)	3			3		
Heavy Vehicles (%)	0%	1%	1%	2%	0%	0%
Turn Type	pm+pt	NA	NA		Prot	Perm
Protected Phases	1	6	2		3	
Permitted Phases	6					7
Actuated Green, G (s)	127.2	127.2	115.7		21.8	21.8
Effective Green, g (s)	127.2	127.2	115.7		21.8	21.8
Actuated g/C Ratio	0.80	0.80	0.72		0.14	0.14
Clearance Time (s)	5.5	5.5	5.5		5.5	5.5
Vehicle Extension (s)	1.0	6.2	6.2		2.0	2.0
Lane Grp Cap (vph)	433	2766	2491		239	214
v/s Ratio Prot	0.01	c0.27	c0.27		c0.11	
v/s Ratio Perm	0.19					0.02
v/c Ratio	0.25	0.34	0.38		0.80	0.15
Uniform Delay, d1	4.7	4.6	8.4		67.0	61.0
Progression Factor	0.47	0.32	0.32		0.93	0.78
Incremental Delay, d2	0.1	0.2	0.2		16.3	0.1
Delay (s)	2.3	1.7	2.9		78.6	47.9
Level of Service	A	A	A		E	D
Approach Delay (s)		1.8	2.9		61.5	
Approach LOS		A	A		E	

Intersection Summary			
HCM 2000 Control Delay	12.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.46		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	19.5
Intersection Capacity Utilization	53.9%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	195	1130	1450	115	210	240
Future Volume (vph)	195	1130	1450	115	210	240
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850
Total Lost time (s)	6.3	6.3	6.3	6.3	6.3	6.3
Lane Util. Factor	1.00	0.95	0.95	1.00	0.97	1.00
Frpb, ped/bikes	1.00	1.00	1.00	0.98	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1758	3480	3480	1545	3343	1561
Flt Permitted	0.12	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	219	3480	3480	1545	3343	1561
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	203	1177	1510	120	219	250
RTOR Reduction (vph)	0	0	0	36	0	17
Lane Group Flow (vph)	203	1177	1510	84	219	233
Confl. Peds. (#/hr)	3			3		2
Heavy Vehicles (%)	0%	1%	1%	0%	2%	0%
Turn Type	pm+pt	NA	NA	Perm	Prot	pm+ov
Protected Phases	1	6	2		3	1
Permitted Phases	6			2		3
Actuated Green, G (s)	131.5	131.5	107.5	107.5	15.9	33.6
Effective Green, g (s)	131.5	131.5	107.5	107.5	15.9	33.6
Actuated g/C Ratio	0.82	0.82	0.67	0.67	0.10	0.21
Clearance Time (s)	6.3	6.3	6.3	6.3	6.3	6.3
Vehicle Extension (s)	3.0	4.0	4.0	4.0	3.0	3.0
Lane Grp Cap (vph)	350	2860	2338	1038	332	389
v/s Ratio Prot	0.06	0.34	c0.43		0.07	c0.07
v/s Ratio Perm	0.41			0.05		0.08
v/c Ratio	0.58	0.41	0.65	0.08	0.66	0.60
Uniform Delay, d1	28.7	3.8	15.2	9.1	69.4	57.1
Progression Factor	1.35	0.13	0.16	0.00	1.00	1.00
Incremental Delay, d2	1.5	0.3	0.9	0.1	4.7	2.6
Delay (s)	40.4	0.8	3.2	0.1	74.1	59.7
Level of Service	D	A	A	A	E	E
Approach Delay (s)		6.6	3.0		66.5	
Approach LOS		A	A		E	

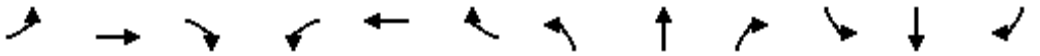
Intersection Summary			
HCM 2000 Control Delay	13.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	18.9
Intersection Capacity Utilization	74.2%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	445	140	125	295	0	0	0	0	135	1795	125
Future Volume (vph)	0	445	140	125	295	0	0	0	0	135	1795	125
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)		5.4		5.4	5.4						5.8	5.8
Lane Util. Factor		0.95		1.00	0.95						0.91	1.00
Frpb, ped/bikes		1.00		1.00	1.00						1.00	0.98
Flpb, ped/bikes		1.00		1.00	1.00						1.00	1.00
Frt		0.96		1.00	1.00						1.00	0.85
Flt Protected		1.00		0.95	1.00						1.00	1.00
Satd. Flow (prot)		3317		1757	3480						4939	1535
Flt Permitted		1.00		0.18	1.00						1.00	1.00
Satd. Flow (perm)		3317		330	3480						4939	1535
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	0	454	143	128	301	0	0	0	0	138	1832	128
RTOR Reduction (vph)	0	39	0	0	0	0	0	0	0	0	0	70
Lane Group Flow (vph)	0	558	0	128	301	0	0	0	0	0	1970	58
Confl. Peds. (#/hr)	15		4	4		15	12		5	5		12
Heavy Vehicles (%)	0%	2%	1%	0%	1%	0%	0%	0%	0%	0%	2%	0%
Turn Type		NA		pm+pt	NA					Perm	NA	Perm
Protected Phases		8		7	4						6	
Permitted Phases				4						6		6
Actuated Green, G (s)		17.0		32.6	32.6						36.2	36.2
Effective Green, g (s)		17.0		32.6	32.6						36.2	36.2
Actuated g/C Ratio		0.21		0.41	0.41						0.45	0.45
Clearance Time (s)		5.4		5.4	5.4						5.8	5.8
Vehicle Extension (s)		2.0		1.5	2.0						2.5	2.5
Lane Grp Cap (vph)		704		316	1418						2234	694
v/s Ratio Prot		c0.17		c0.05	0.09							
v/s Ratio Perm				0.11							0.40	0.04
v/c Ratio		0.79		0.41	0.21						0.88	0.08
Uniform Delay, d1		29.8		16.5	15.4						20.0	12.5
Progression Factor		1.00		0.73	0.74						1.00	1.00
Incremental Delay, d2		5.7		0.3	0.0						5.5	0.2
Delay (s)		35.5		12.4	11.4						25.4	12.7
Level of Service		D		B	B						C	B
Approach Delay (s)		35.5			11.7			0.0			24.6	
Approach LOS		D			B			A			C	

Intersection Summary			
HCM 2000 Control Delay	24.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	16.6
Intersection Capacity Utilization	77.9%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	105	465	0	0	265	100	175	1490	195	0	0	0
Future Volume (vph)	105	465	0	0	265	100	175	1490	195	0	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	5.7	5.7			5.7			5.8	5.8			
Lane Util. Factor	1.00	0.95			0.95			0.91	1.00			
Frpb, ped/bikes	1.00	1.00			1.00			1.00	0.98			
Flpb, ped/bikes	1.00	1.00			1.00			1.00	1.00			
Frt	1.00	1.00			0.96			1.00	0.85			
Flt Protected	0.95	1.00			1.00			0.99	1.00			
Satd. Flow (prot)	1739	3480			3344			4931	1532			
Flt Permitted	0.27	1.00			1.00			0.99	1.00			
Satd. Flow (perm)	500	3480			3344			4931	1532			
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	113	500	0	0	285	108	188	1602	210	0	0	0
RTOR Reduction (vph)	0	0	0	0	60	0	0	0	100	0	0	0
Lane Group Flow (vph)	113	500	0	0	333	0	0	1790	110	0	0	0
Confl. Peds. (#/hr)	6		4	4		6			4	4		
Heavy Vehicles (%)	1%	1%	0%	0%	0%	1%	1%	2%	1%	0%	0%	0%
Turn Type	pm+pt	NA			NA		Perm	NA	Perm			
Protected Phases	3	8			4			2				
Permitted Phases	8						2		2			
Actuated Green, G (s)	26.5	26.5			12.7			42.0	42.0			
Effective Green, g (s)	26.5	26.5			12.7			42.0	42.0			
Actuated g/C Ratio	0.33	0.33			0.16			0.52	0.52			
Clearance Time (s)	5.7	5.7			5.7			5.8	5.8			
Vehicle Extension (s)	1.0	2.0			2.0			2.5	2.5			
Lane Grp Cap (vph)	291	1152			530			2588	804			
v/s Ratio Prot	0.04	c0.14			c0.10							
v/s Ratio Perm	0.09							0.36	0.07			
v/c Ratio	0.39	0.43			0.63			0.69	0.14			
Uniform Delay, d1	19.7	20.9			31.4			14.2	9.7			
Progression Factor	0.51	0.55			0.52			0.39	0.06			
Incremental Delay, d2	0.2	0.1			1.7			1.0	0.2			
Delay (s)	10.3	11.5			18.1			6.6	0.8			
Level of Service	B	B			B			A	A			
Approach Delay (s)		11.3			18.1			6.0			0.0	
Approach LOS		B			B			A			A	

Intersection Summary			
HCM 2000 Control Delay	8.6	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	17.2
Intersection Capacity Utilization	77.9%	ICU Level of Service	D
Analysis Period (min)	15		

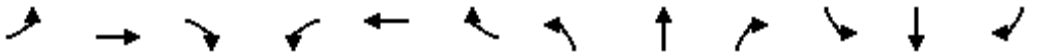
c Critical Lane Group



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	680	60	45	255	85	195
Future Volume (vph)	680	60	45	255	85	195
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850
Total Lost time (s)	5.5			5.5	5.3	5.3
Lane Util. Factor	0.95			0.95	1.00	1.00
Frpb, ped/bikes	1.00			1.00	1.00	0.99
Flpb, ped/bikes	1.00			1.00	1.00	1.00
Frt	0.99			1.00	1.00	0.85
Flt Protected	1.00			0.99	0.95	1.00
Satd. Flow (prot)	3466			3489	1723	1550
Flt Permitted	1.00			0.78	0.95	1.00
Satd. Flow (perm)	3466			2743	1723	1550
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	773	68	51	290	97	222
RTOR Reduction (vph)	3	0	0	0	0	195
Lane Group Flow (vph)	838	0	0	341	97	27
Confl. Peds. (#/hr)		1	1			1
Heavy Vehicles (%)	0%	0%	0%	0%	2%	0%
Turn Type	NA		Perm	NA	Prot	Perm
Protected Phases	6			2	7	
Permitted Phases			2			3
Actuated Green, G (s)	59.5			59.5	9.7	9.7
Effective Green, g (s)	59.5			59.5	9.7	9.7
Actuated g/C Ratio	0.74			0.74	0.12	0.12
Clearance Time (s)	5.5			5.5	5.3	5.3
Vehicle Extension (s)	2.0			2.0	2.0	0.2
Lane Grp Cap (vph)	2577			2040	208	187
v/s Ratio Prot	c0.24				c0.06	
v/s Ratio Perm				0.12		0.02
v/c Ratio	0.33			0.17	0.47	0.14
Uniform Delay, d1	3.5			3.0	32.7	31.4
Progression Factor	0.46			0.63	1.24	4.88
Incremental Delay, d2	0.3			0.2	0.6	0.1
Delay (s)	1.9			2.1	41.3	153.6
Level of Service	A			A	D	F
Approach Delay (s)	1.9			2.1	119.5	
Approach LOS	A			A	F	

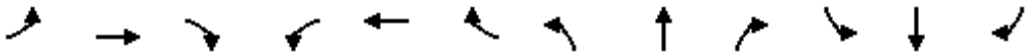
Intersection Summary			
HCM 2000 Control Delay	26.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.37		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	16.1
Intersection Capacity Utilization	51.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



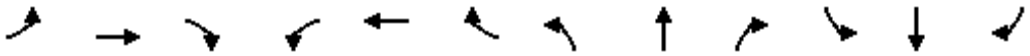
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	475	1770	0	0	0	0	0	1850	280
Future Volume (vph)	0	0	0	475	1770	0	0	0	0	0	1850	280
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)				5.8	5.8						5.8	5.8
Lane Util. Factor				0.81	0.81						0.86	0.86
Frpb, ped/bikes				1.00	1.00						1.00	0.98
Flpb, ped/bikes				1.00	1.00						1.00	1.00
Frt				1.00	1.00						1.00	0.85
Flt Protected				0.95	1.00						1.00	1.00
Satd. Flow (prot)				1417	5928						4669	1320
Flt Permitted				0.95	1.00						1.00	1.00
Satd. Flow (perm)				1417	5928						4669	1320
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	0	0	0	495	1844	0	0	0	0	0	1927	292
RTOR Reduction (vph)	0	0	0	24	24	0	0	0	0	0	1	20
Lane Group Flow (vph)	0	0	0	421	1870	0	0	0	0	0	1955	243
Confl. Peds. (#/hr)	14		4	4		14	11		5	5		11
Heavy Vehicles (%)	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	2%	0%
Turn Type				Perm	NA						NA	Perm
Protected Phases					1						2	
Permitted Phases				1								2
Actuated Green, G (s)				30.2	30.2						38.2	38.2
Effective Green, g (s)				30.2	30.2						38.2	38.2
Actuated g/C Ratio				0.38	0.38						0.48	0.48
Clearance Time (s)				5.8	5.8						5.8	5.8
Lane Grp Cap (vph)				534	2237						2229	630
v/s Ratio Prot											c0.42	
v/s Ratio Perm				0.30	0.32							0.18
v/c Ratio				0.79	0.84						0.88	0.39
Uniform Delay, d1				22.1	22.6						18.8	13.4
Progression Factor				0.60	0.59						0.26	0.16
Incremental Delay, d2				7.0	2.4						3.2	1.0
Delay (s)				20.1	15.7						8.1	3.1
Level of Service				C	B						A	A
Approach Delay (s)		0.0			16.6			0.0			7.5	
Approach LOS		A			B			A			A	

Intersection Summary			
HCM 2000 Control Delay	12.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	11.6
Intersection Capacity Utilization	75.6%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	1810	245	430	1600	0	0	0	0
Future Volume (vph)	0	0	0	0	1810	245	430	1600	0	0	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)					6.0	6.0	6.0	6.0				
Lane Util. Factor					0.81	0.81	0.86	0.86				
Frpb, ped/bikes					1.00	0.98	1.00	1.00				
Flpb, ped/bikes					1.00	1.00	1.00	1.00				
Frt					1.00	0.85	1.00	1.00				
Flt Protected					1.00	1.00	0.95	1.00				
Satd. Flow (prot)					5980	1251	1506	4675				
Flt Permitted					1.00	1.00	0.95	1.00				
Satd. Flow (perm)					5980	1251	1506	4675				
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	0	1905	258	453	1684	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	2	25	22	22	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	1929	207	386	1707	0	0	0	0
Confl. Peds. (#/hr)	6		6	6		6	3		6	6		3
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%	0%	0%
Turn Type					NA	Perm	Perm	NA				
Protected Phases					1			2				
Permitted Phases						1	2					
Actuated Green, G (s)					31.0	31.0	37.0	37.0				
Effective Green, g (s)					31.0	31.0	37.0	37.0				
Actuated g/C Ratio					0.39	0.39	0.46	0.46				
Clearance Time (s)					6.0	6.0	6.0	6.0				
Lane Grp Cap (vph)					2317	484	696	2162				
v/s Ratio Prot					c0.32							
v/s Ratio Perm						0.17	0.26	0.37				
v/c Ratio					0.83	0.43	0.55	0.79				
Uniform Delay, d1					22.2	18.0	15.5	18.2				
Progression Factor					0.71	0.58	0.28	0.27				
Incremental Delay, d2					2.9	2.1	1.6	1.6				
Delay (s)					18.7	12.6	6.0	6.5				
Level of Service					B	B	A	A				
Approach Delay (s)		0.0			18.0			6.4			0.0	
Approach LOS		A			B			A			A	

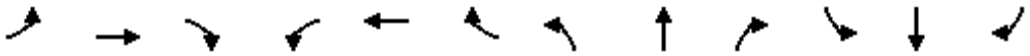
Intersection Summary			
HCM 2000 Control Delay	12.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	75.6%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	235	1720	35	265	185	0	0	145	40
Future Volume (vph)	0	0	0	235	1720	35	265	185	0	0	145	40
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)					5.4		5.3	5.3			5.3	
Lane Util. Factor					0.86		0.97	1.00			1.00	
Frpb, ped/bikes					1.00		1.00	1.00			1.00	
Flpb, ped/bikes					1.00		1.00	1.00			1.00	
Frt					1.00		1.00	1.00			0.97	
Flt Protected					0.99		0.95	1.00			1.00	
Satd. Flow (prot)					6243		3410	1832			1795	
Flt Permitted					0.99		0.95	1.00			1.00	
Satd. Flow (perm)					6243		3410	1832			1795	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	0	0	250	1830	37	282	197	0	0	154	43
RTOR Reduction (vph)	0	0	0	0	2	0	0	0	0	0	14	0
Lane Group Flow (vph)	0	0	0	0	2115	0	282	197	0	0	183	0
Confl. Peds. (#/hr)	11		6	6		11			8	8		
Heavy Vehicles (%)	0%	0%	0%	0%	1%	3%	0%	1%	0%	0%	0%	0%
Turn Type				Perm	NA		Prot	NA			NA	
Protected Phases					2		7	4			8	
Permitted Phases				2								
Actuated Green, G (s)					41.5		10.4	27.8			12.1	
Effective Green, g (s)					41.5		10.4	27.8			12.1	
Actuated g/C Ratio					0.52		0.13	0.35			0.15	
Clearance Time (s)					5.4		5.3	5.3			5.3	
Vehicle Extension (s)					3.7		1.5	1.5			1.5	
Lane Grp Cap (vph)					3238		443	636			271	
v/s Ratio Prot							c0.08	0.11			c0.10	
v/s Ratio Perm					0.34							
v/c Ratio					0.65		0.64	0.31			0.68	
Uniform Delay, d1					14.0		33.0	19.1			32.1	
Progression Factor					1.09		0.49	0.45			1.12	
Incremental Delay, d2					0.7		2.1	0.1			5.2	
Delay (s)					15.9		18.3	8.6			41.1	
Level of Service					B		B	A			D	
Approach Delay (s)		0.0			15.9			14.3			41.1	
Approach LOS		A			B			B			D	

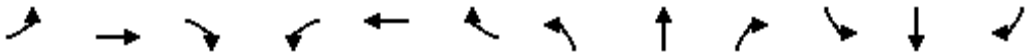
Intersection Summary			
HCM 2000 Control Delay	17.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	87.9%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1955	205	0	0	0	0	0	0	585	1730	0
Future Volume (vph)	0	1955	205	0	0	0	0	0	0	585	1730	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)		5.9	5.9							5.9	5.9	
Lane Util. Factor		0.81	0.81							0.86	0.86	
Frpb, ped/bikes		1.00	0.97							1.00	1.00	
Flpb, ped/bikes		1.00	1.00							0.99	1.00	
Frt		1.00	0.85							1.00	1.00	
Flt Protected		1.00	1.00							0.95	1.00	
Satd. Flow (prot)		5983	1241							1500	4674	
Flt Permitted		1.00	1.00							0.95	1.00	
Satd. Flow (perm)		5983	1241							1500	4674	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	2058	216	0	0	0	0	0	0	616	1821	0
RTOR Reduction (vph)	0	2	24	0	0	0	0	0	0	21	21	0
Lane Group Flow (vph)	0	2078	170	0	0	0	0	0	0	533	1862	0
Confl. Peds. (#/hr)	14		13	13		14	21		7	7		21
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	0%
Turn Type		NA	Perm							Perm	NA	
Protected Phases		1									2	
Permitted Phases			1							2		
Actuated Green, G (s)		31.1	31.1							37.1	37.1	
Effective Green, g (s)		31.1	31.1							37.1	37.1	
Actuated g/C Ratio		0.39	0.39							0.46	0.46	
Clearance Time (s)		5.9	5.9							5.9	5.9	
Lane Grp Cap (vph)		2325	482							695	2167	
v/s Ratio Prot		c0.35										
v/s Ratio Perm			0.14							0.35	0.40	
v/c Ratio		0.89	0.35							0.77	0.86	
Uniform Delay, d1		22.9	17.3							17.8	19.1	
Progression Factor		1.00	1.00							0.58	0.57	
Incremental Delay, d2		5.8	2.0							4.0	2.4	
Delay (s)		28.7	19.3							14.3	13.3	
Level of Service		C	B							B	B	
Approach Delay (s)		27.9			0.0			0.0			13.5	
Approach LOS		C			A			A			B	

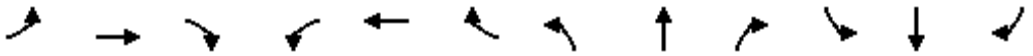
Intersection Summary			
HCM 2000 Control Delay	20.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	11.8
Intersection Capacity Utilization	75.6%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	335	2255	0	0	0	0	0	1695	515	0	0	0
Future Volume (vph)	335	2255	0	0	0	0	0	1695	515	0	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	5.6	5.6						6.0	6.0			
Lane Util. Factor	0.81	0.81						0.91	0.88			
Frpb, ped/bikes	1.00	1.00						1.00	0.99			
Flpb, ped/bikes	1.00	1.00						1.00	1.00			
Frt	1.00	1.00						1.00	0.85			
Flt Protected	0.95	1.00						1.00	1.00			
Satd. Flow (prot)	1417	5931						4951	2703			
Flt Permitted	0.95	1.00						1.00	1.00			
Satd. Flow (perm)	1417	5931						4951	2703			
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	364	2451	0	0	0	0	0	1842	560	0	0	0
RTOR Reduction (vph)	46	46	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	282	2441	0	0	0	0	0	1842	560	0	0	0
Confl. Peds. (#/hr)	5		17	17		5	1		5	5		1
Heavy Vehicles (%)	0%	1%	0%	0%	0%	0%	0%	2%	1%	0%	0%	0%
Turn Type	Perm	NA						NA	custom			
Protected Phases		8						2				
Permitted Phases	8								5			
Actuated Green, G (s)	35.4	35.4						33.0	80.0			
Effective Green, g (s)	35.4	35.4						33.0	80.0			
Actuated g/C Ratio	0.44	0.44						0.41	1.00			
Clearance Time (s)	5.6	5.6						6.0	6.0			
Vehicle Extension (s)	5.0	5.0						5.0	0.2			
Lane Grp Cap (vph)	627	2624						2042	2703			
v/s Ratio Prot								c0.37				
v/s Ratio Perm	0.20	0.41							0.21			
v/c Ratio	0.45	0.93						0.90	0.21			
Uniform Delay, d1	15.5	21.1						22.0	0.0			
Progression Factor	0.58	0.54						0.84	1.00			
Incremental Delay, d2	1.3	4.3						5.3	0.1			
Delay (s)	10.3	15.7						23.7	0.1			
Level of Service	B	B						C	A			
Approach Delay (s)		15.1			0.0			18.2			0.0	
Approach LOS		B			A			B			A	

Intersection Summary			
HCM 2000 Control Delay	16.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	1.46		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	14.6
Intersection Capacity Utilization	74.3%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



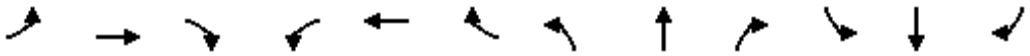
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	135	2495	185	0	0	0	0	395	375	165	265	0
Future Volume (vph)	135	2495	185	0	0	0	0	395	375	165	265	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	5.7	5.7						5.7	5.7	5.7	5.7	
Lane Util. Factor	1.00	0.86						0.95	1.00	1.00	0.95	
Frpb, ped/bikes	1.00	1.00						1.00	1.00	1.00	1.00	
Flpb, ped/bikes	1.00	1.00						1.00	1.00	1.00	1.00	
Frt	1.00	0.99						1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00						1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1721	6227						3501	1557	1758	3501	
Flt Permitted	0.95	1.00						1.00	1.00	0.32	1.00	
Satd. Flow (perm)	1721	6227						3501	1557	594	3501	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	147	2712	201	0	0	0	0	429	408	179	288	0
RTOR Reduction (vph)	0	13	0	0	0	0	0	0	88	0	0	0
Lane Group Flow (vph)	147	2900	0	0	0	0	0	429	320	179	288	0
Confl. Peds. (#/hr)	1		9	9		1	9					9
Heavy Vehicles (%)	2%	1%	1%	0%	0%	0%	0%	0%	1%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	2	0	0	2	0
Turn Type	Perm	NA						NA	Perm	pm+pt	NA	
Protected Phases		6						4		3	8	
Permitted Phases	6								4	8		
Actuated Green, G (s)	38.9	38.9						18.7	18.7	29.7	29.7	
Effective Green, g (s)	38.9	38.9						18.7	18.7	29.7	29.7	
Actuated g/C Ratio	0.49	0.49						0.23	0.23	0.37	0.37	
Clearance Time (s)	5.7	5.7						5.7	5.7	5.7	5.7	
Vehicle Extension (s)	4.8	4.8						1.7	1.7	1.0	1.7	
Lane Grp Cap (vph)	836	3027						818	363	297	1299	
v/s Ratio Prot		c0.47						0.12		c0.04	0.08	
v/s Ratio Perm	0.09								c0.21	0.18		
v/c Ratio	0.18	0.96						0.52	0.88	0.60	0.22	
Uniform Delay, d1	11.5	19.8						26.8	29.6	18.7	17.2	
Progression Factor	0.32	0.25						1.00	1.00	0.71	0.73	
Incremental Delay, d2	0.3	6.1						0.3	20.8	2.1	0.0	
Delay (s)	3.9	11.1						27.0	50.3	15.4	12.6	
Level of Service	A	B						C	D	B	B	
Approach Delay (s)		10.7			0.0			38.4			13.6	
Approach LOS		B			A			D			B	

Intersection Summary			
HCM 2000 Control Delay	16.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.91		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	17.1
Intersection Capacity Utilization	87.9%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	655	80	190	515	0	0	0	0	295	1715	125
Future Volume (vph)	0	655	80	190	515	0	0	0	0	295	1715	125
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)		5.5		5.5	5.5					6.0	6.0	6.0
Lane Util. Factor		0.95		1.00	0.95					0.86	0.81	0.86
Frpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	0.98
Flpb, ped/bikes		1.00		1.00	1.00					0.99	1.00	1.00
Frt		0.98		1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00		0.95	1.00					0.95	1.00	1.00
Satd. Flow (prot)		3443		1757	3515					1487	4399	1311
Flt Permitted		1.00		0.17	1.00					0.95	1.00	1.00
Satd. Flow (perm)		3443		317	3515					1487	4399	1311
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	0	720	88	209	566	0	0	0	0	324	1885	137
RTOR Reduction (vph)	0	12	0	0	0	0	0	0	0	0	1	67
Lane Group Flow (vph)	0	796	0	209	566	0	0	0	0	292	1930	56
Confl. Peds. (#/hr)	16		14	14		16	9		6	6		9
Heavy Vehicles (%)	0%	0%	1%	0%	0%	0%	0%	0%	0%	1%	2%	1%
Turn Type		NA		pm+pt	NA					Perm	NA	Perm
Protected Phases		8		7	4						6	
Permitted Phases				4						6		6
Actuated Green, G (s)		20.2		32.3	32.3					36.2	36.2	36.2
Effective Green, g (s)		20.2		32.3	32.3					36.2	36.2	36.2
Actuated g/C Ratio		0.25		0.40	0.40					0.45	0.45	0.45
Clearance Time (s)		5.5		5.5	5.5					6.0	6.0	6.0
Vehicle Extension (s)		2.5		2.0	2.5					6.0	6.0	6.0
Lane Grp Cap (vph)		869		246	1419					672	1990	593
v/s Ratio Prot		0.23		c0.07	0.16							
v/s Ratio Perm				c0.27						0.20	0.44	0.04
v/c Ratio		0.92		0.85	0.40					0.43	0.97	0.09
Uniform Delay, d1		29.1		28.9	17.0					14.9	21.4	12.5
Progression Factor		1.00		0.44	0.26					0.30	0.35	0.01
Incremental Delay, d2		14.1		19.2	0.1					1.4	11.2	0.2
Delay (s)		43.2		32.0	4.6					5.9	18.8	0.3
Level of Service		D		C	A					A	B	A
Approach Delay (s)		43.2			12.0			0.0			16.2	
Approach LOS		D			B			A			B	

Intersection Summary			
HCM 2000 Control Delay	20.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.96		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	77.2%	ICU Level of Service	D
Analysis Period (min)	15		

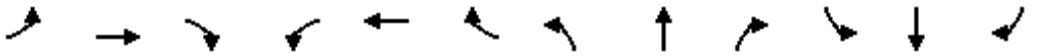
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	215	770	0	0	575	255	115	1510	155	0	0	0
Future Volume (vph)	215	770	0	0	575	255	115	1510	155	0	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	5.7	5.7			5.7	5.7	6.0	6.0	6.0			
Lane Util. Factor	1.00	0.95			0.95	1.00	1.00	0.91	1.00			
Frpb, ped/bikes	1.00	1.00			1.00	0.98	1.00	1.00	0.98			
Flpb, ped/bikes	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1756	3480			3515	1511	1749	4903	1520			
Flt Permitted	0.31	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	565	3480			3515	1511	1749	4903	1520			
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	231	828	0	0	618	274	124	1624	167	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	87	0	0	69	0	0	0
Lane Group Flow (vph)	231	828	0	0	618	187	124	1624	98	0	0	0
Confl. Peds. (#/hr)	7		20	20		7	5		13	13		5
Heavy Vehicles (%)	0%	1%	0%	0%	0%	2%	0%	3%	1%	0%	0%	0%
Turn Type	pm+pt	NA			NA	Perm	Perm	NA	Perm			
Protected Phases	3	8			4			2				
Permitted Phases	8					4	2		2			
Actuated Green, G (s)	36.3	36.3			21.3	21.3	32.0	32.0	32.0			
Effective Green, g (s)	36.3	36.3			21.3	21.3	32.0	32.0	32.0			
Actuated g/C Ratio	0.45	0.45			0.27	0.27	0.40	0.40	0.40			
Clearance Time (s)	5.7	5.7			5.7	5.7	6.0	6.0	6.0			
Vehicle Extension (s)	1.0	2.5			2.5	2.5	2.5	2.5	2.5			
Lane Grp Cap (vph)	394	1579			935	402	699	1961	608			
v/s Ratio Prot	0.07	c0.24			0.18			c0.33				
v/s Ratio Perm	c0.20					0.12	0.07		0.06			
v/c Ratio	0.59	0.52			0.66	0.46	0.18	0.83	0.16			
Uniform Delay, d1	22.7	15.7			26.1	24.6	15.5	21.5	15.4			
Progression Factor	0.36	0.35			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	1.2	0.2			3.7	3.8	0.6	4.2	0.6			
Delay (s)	9.4	5.7			29.8	28.4	16.1	25.7	16.0			
Level of Service	A	A			C	C	B	C	B			
Approach Delay (s)		6.5			29.4			24.3			0.0	
Approach LOS		A			C			C			A	

Intersection Summary			
HCM 2000 Control Delay	20.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	17.4
Intersection Capacity Utilization	77.2%	ICU Level of Service	D
Analysis Period (min)	15		

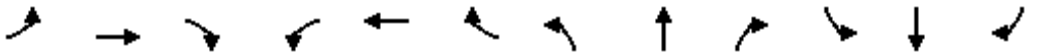
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	170	775	110	45	625	155	145	375	45	120	305	145
Future Volume (vph)	170	775	110	45	625	155	145	375	45	120	305	145
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	5.7	5.7		5.7	5.7		5.7	5.7		5.7	5.7	5.7
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.98		1.00	0.97		1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1757	3410		1722	3373		1751	3421		1755	3480	1533
Flt Permitted	0.20	1.00		0.20	1.00		0.50	1.00		0.44	1.00	1.00
Satd. Flow (perm)	368	3410		362	3373		921	3421		807	3480	1533
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	179	816	116	47	658	163	153	395	47	126	321	153
RTOR Reduction (vph)	0	12	0	0	25	0	0	12	0	0	0	122
Lane Group Flow (vph)	179	920	0	47	796	0	153	430	0	126	321	31
Confl. Peds. (#/hr)	3		12	12		3	14		8	8		14
Heavy Vehicles (%)	0%	1%	0%	2%	1%	0%	0%	1%	0%	0%	1%	0%
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases	6			2			4			8		8
Actuated Green, G (s)	34.2	28.9		29.4	26.5		21.8	16.5		19.4	15.3	15.3
Effective Green, g (s)	34.2	28.9		29.4	26.5		21.8	16.5		19.4	15.3	15.3
Actuated g/C Ratio	0.45	0.38		0.39	0.35		0.29	0.22		0.26	0.20	0.20
Clearance Time (s)	5.7	5.7		5.7	5.7		5.7	5.7		5.7	5.7	5.7
Vehicle Extension (s)	1.0	5.0		1.0	5.0		1.0	2.0		1.2	5.0	5.0
Lane Grp Cap (vph)	265	1310		193	1188		325	750		259	708	311
v/s Ratio Prot	c0.05	c0.27		0.01	0.24		c0.03	c0.13		0.03	0.09	
v/s Ratio Perm	0.26			0.09			0.10			0.10		0.02
v/c Ratio	0.68	0.70		0.24	0.67		0.47	0.57		0.49	0.45	0.10
Uniform Delay, d1	13.8	19.5		15.0	20.6		20.8	26.2		22.4	26.3	24.4
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	5.3	2.2		0.2	2.0		0.4	0.7		0.5	1.0	0.3
Delay (s)	19.1	21.7		15.2	22.6		21.2	26.9		22.9	27.2	24.6
Level of Service	B	C		B	C		C	C		C	C	C
Approach Delay (s)		21.3			22.2			25.4			25.7	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM 2000 Control Delay	23.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	75.2	Sum of lost time (s)	22.8
Intersection Capacity Utilization	72.7%	ICU Level of Service	C
Analysis Period (min)	15		

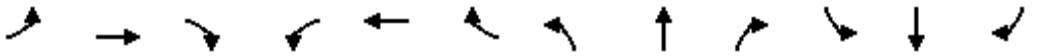
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	320	1195	330	380	1375	105	160	525	205	140	770	420
Future Volume (vph)	320	1195	330	380	1375	105	160	525	205	140	770	420
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	6.5	6.5	6.5	6.5	6.5	6.5	6.3	6.3	6.5	6.3	6.3	6.3
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95	0.88	0.97	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.98	1.00	1.00	0.97	1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3410	3480	1536	3376	3446	1537	3410	3480	2696	3376	3446	1513
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3410	3480	1536	3376	3446	1537	3410	3480	2696	3376	3446	1513
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	340	1271	351	404	1463	112	170	559	218	149	819	447
RTOR Reduction (vph)	0	0	96	0	0	63	0	0	71	0	0	160
Lane Group Flow (vph)	340	1271	255	404	1463	49	170	559	147	149	819	287
Confl. Peds. (#/hr)	6		1	1		6	9		7	7		9
Heavy Vehicles (%)	0%	1%	1%	1%	2%	0%	0%	1%	0%	1%	2%	1%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4	5	3	8	
Permitted Phases			6			2			4			8
Actuated Green, G (s)	16.5	65.5	65.5	21.5	70.5	70.5	8.7	36.8	58.3	10.6	38.7	38.7
Effective Green, g (s)	16.5	65.5	65.5	21.5	70.5	70.5	8.7	36.8	58.3	10.6	38.7	38.7
Actuated g/C Ratio	0.10	0.41	0.41	0.13	0.44	0.44	0.05	0.23	0.36	0.07	0.24	0.24
Clearance Time (s)	6.5	6.5	6.5	6.5	6.5	6.5	6.3	6.3	6.5	6.3	6.3	6.3
Vehicle Extension (s)	2.0	5.0	5.0	2.0	5.0	5.0	2.0	1.0	2.0	2.0	1.0	1.0
Lane Grp Cap (vph)	351	1424	628	453	1518	677	185	800	982	223	833	365
v/s Ratio Prot	0.10	c0.37		0.12	c0.42		c0.05	0.16	0.02	0.04	c0.24	
v/s Ratio Perm			0.17			0.03			0.03			0.19
v/c Ratio	0.97	0.89	0.41	0.89	0.96	0.07	0.92	0.70	0.15	0.67	0.98	0.79
Uniform Delay, d1	71.5	44.0	33.5	68.1	43.5	25.9	75.3	56.5	34.2	73.0	60.3	56.8
Progression Factor	0.97	0.57	0.36	1.00	1.00	1.00	1.00	1.00	1.00	1.03	0.55	0.35
Incremental Delay, d2	33.2	6.9	1.5	18.9	15.9	0.2	42.6	2.2	0.0	3.3	19.2	5.8
Delay (s)	102.5	32.1	13.5	87.0	59.5	26.1	117.9	58.7	34.2	78.4	52.2	25.5
Level of Service	F	C	B	F	E	C	F	E	C	E	D	C
Approach Delay (s)		41.0			63.2			63.7			46.5	
Approach LOS		D			E			E			D	

Intersection Summary			
HCM 2000 Control Delay	52.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.98		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	25.6
Intersection Capacity Utilization	97.4%	ICU Level of Service	F
Analysis Period (min)	15		

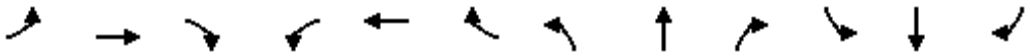
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	245	420	215	185	580	170	145	915	95	125	900	100
Future Volume (vph)	245	420	215	185	580	170	145	915	95	125	900	100
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	6.3	6.3		6.3	6.3		5.7	5.7		5.7	5.7	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	0.99		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.95		1.00	0.97		1.00	0.99		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1758	3260		1722	3330		1740	3422		1706	3424	
Flt Permitted	0.09	1.00		0.23	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	161	3260		409	3330		1740	3422		1706	3424	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	266	457	234	201	630	185	158	995	103	136	978	109
RTOR Reduction (vph)	0	39	0	0	17	0	0	5	0	0	5	0
Lane Group Flow (vph)	266	652	0	201	798	0	158	1093	0	136	1082	0
Confl. Peds. (#/hr)	6		10	10		6	4		10	10		4
Heavy Vehicles (%)	0%	1%	2%	2%	1%	3%	1%	1%	1%	3%	1%	0%
Turn Type	pm+pt	NA		pm+pt	NA		Prot	NA		Prot	NA	
Protected Phases	3	8		7	4		5	2		1	6	
Permitted Phases	8			4								
Actuated Green, G (s)	67.2	46.0		56.0	40.4		16.3	60.5		13.9	58.1	
Effective Green, g (s)	67.2	46.0		56.0	40.4		16.3	60.5		13.9	58.1	
Actuated g/C Ratio	0.42	0.29		0.35	0.25		0.10	0.38		0.09	0.36	
Clearance Time (s)	6.3	6.3		6.3	6.3		5.7	5.7		5.7	5.7	
Vehicle Extension (s)	1.2	4.0		1.2	4.0		1.2	4.0		1.2	4.0	
Lane Grp Cap (vph)	279	937		271	840		177	1293		148	1243	
v/s Ratio Prot	c0.13	c0.20		0.07	0.24		0.09	c0.32		0.08	c0.32	
v/s Ratio Perm	c0.27			0.19								
v/c Ratio	0.95	0.70		0.74	0.95		0.89	0.85		0.92	0.87	
Uniform Delay, d1	50.1	50.8		39.5	58.8		71.0	45.5		72.5	47.4	
Progression Factor	0.90	0.75		1.00	1.00		1.12	1.17		1.18	0.23	
Incremental Delay, d2	39.4	2.3		9.2	19.8		32.9	5.7		35.1	5.3	
Delay (s)	84.3	40.1		48.7	78.6		112.3	59.2		120.5	16.3	
Level of Service	F	D		D	E		F	E		F	B	
Approach Delay (s)		52.4			72.7			65.8			27.9	
Approach LOS		D			E			E			C	

Intersection Summary			
HCM 2000 Control Delay	54.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	24.0
Intersection Capacity Utilization	93.5%	ICU Level of Service	F
Analysis Period (min)	15		

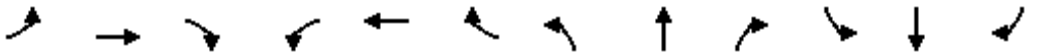
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	525	110	290	755	0	0	0	0	255	1475	85
Future Volume (vph)	0	525	110	290	755	0	0	0	0	255	1475	85
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		5.1		5.1	5.1						5.4	
Lane Util. Factor		0.95		1.00	0.95						0.86	
Frpb, ped/bikes		1.00		1.00	1.00						1.00	
Flpb, ped/bikes		1.00		1.00	1.00						1.00	
Frt		0.97		1.00	1.00						0.99	
Flt Protected		1.00		0.95	1.00						0.99	
Satd. Flow (prot)		2961		1524	3048						5403	
Flt Permitted		1.00		0.12	1.00						0.99	
Satd. Flow (perm)		2961		200	3048						5403	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	559	117	309	803	0	0	0	0	271	1569	90
RTOR Reduction (vph)	0	11	0	0	0	0	0	0	0	0	4	0
Lane Group Flow (vph)	0	665	0	309	803	0	0	0	0	0	1926	0
Confl. Peds. (#/hr)	1		1	1		1	8		3	3		8
Heavy Vehicles (%)	0%	1%	1%	1%	1%	0%	0%	0%	0%	0%	2%	0%
Turn Type		NA		pm+pt	NA					Split	NA	
Protected Phases		8		7	4					6	6	
Permitted Phases				4								
Actuated Green, G (s)		38.6		72.9	72.9						76.6	
Effective Green, g (s)		38.6		72.9	72.9						76.6	
Actuated g/C Ratio		0.24		0.46	0.46						0.48	
Clearance Time (s)		5.1		5.1	5.1						5.4	
Vehicle Extension (s)		2.0		1.5	2.0						2.0	
Lane Grp Cap (vph)		714		332	1388						2586	
v/s Ratio Prot		0.22		c0.17	0.26						c0.36	
v/s Ratio Perm				c0.25								
v/c Ratio		0.93		0.93	0.58						0.74	
Uniform Delay, d1		59.4		45.2	32.2						33.8	
Progression Factor		1.00		1.94	0.94						1.00	
Incremental Delay, d2		18.6		16.1	0.1						2.0	
Delay (s)		78.0		103.7	30.2						35.8	
Level of Service		E		F	C						D	
Approach Delay (s)		78.0			50.7			0.0			35.8	
Approach LOS		E			D			A			D	

Intersection Summary			
HCM 2000 Control Delay	47.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	15.6
Intersection Capacity Utilization	84.3%	ICU Level of Service	E
Analysis Period (min)	15		

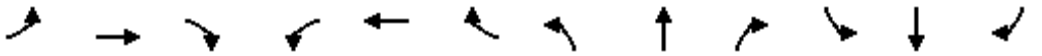
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	40	750	0	0	840	120	175	1600	595	0	0	0
Future Volume (vph)	40	750	0	0	840	120	175	1600	595	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	5.3	5.3			5.3			5.7	5.7			
Lane Util. Factor	1.00	0.95			0.95			0.86	1.00			
Frpb, ped/bikes	1.00	1.00			1.00			1.00	0.98			
Flpb, ped/bikes	1.00	1.00			1.00			1.00	1.00			
Frt	1.00	1.00			0.98			1.00	0.85			
Flt Protected	0.95	1.00			1.00			1.00	1.00			
Satd. Flow (prot)	1539	3078			2983			5442	1342			
Flt Permitted	0.07	1.00			1.00			1.00	1.00			
Satd. Flow (perm)	110	3078			2983			5442	1342			
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	43	798	0	0	894	128	186	1702	633	0	0	0
RTOR Reduction (vph)	0	0	0	0	7	0	0	0	38	0	0	0
Lane Group Flow (vph)	43	798	0	0	1015	0	0	1888	595	0	0	0
Confl. Peds. (#/hr)	10					10			7	7		
Heavy Vehicles (%)	0%	0%	0%	0%	1%	1%	1%	2%	1%	0%	0%	0%
Turn Type	pm+pt	NA			NA		Split	NA	Perm			
Protected Phases	3	8			4		2	2				
Permitted Phases	8								2			
Actuated Green, G (s)	65.8	65.8			54.2			83.2	83.2			
Effective Green, g (s)	65.8	65.8			54.2			83.2	83.2			
Actuated g/C Ratio	0.41	0.41			0.34			0.52	0.52			
Clearance Time (s)	5.3	5.3			5.3			5.7	5.7			
Vehicle Extension (s)	1.5	2.0			2.0			2.0	2.0			
Lane Grp Cap (vph)	101	1265			1010			2829	697			
v/s Ratio Prot	0.02	c0.26			c0.34			0.35				
v/s Ratio Perm	0.16								c0.44			
v/c Ratio	0.43	0.63			1.01			0.67	0.85			
Uniform Delay, d1	35.5	37.4			52.9			28.2	33.1			
Progression Factor	1.68	0.97			1.00			1.17	1.24			
Incremental Delay, d2	0.6	0.4			29.6			1.0	10.4			
Delay (s)	60.3	36.7			82.5			34.1	51.5			
Level of Service	E	D			F			C	D			
Approach Delay (s)		37.9			82.5			38.5			0.0	
Approach LOS		D			F			D			A	

Intersection Summary			
HCM 2000 Control Delay	48.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.91		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	16.3
Intersection Capacity Utilization	84.3%	ICU Level of Service	E
Analysis Period (min)	15		

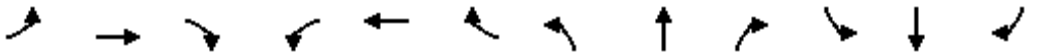
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	340	1345	255	275	1165	70	260	630	455	165	640	260
Future Volume (vph)	340	1345	255	275	1165	70	260	630	455	165	640	260
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	6.4	6.4	6.4	6.4	6.4		6.4	6.4	6.4	6.4	6.4	6.4
Lane Util. Factor	0.97	0.95	1.00	0.97	0.91		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	0.98	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3410	3480	1557	3410	4950		1723	3480	1532	1723	3446	1536
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3410	3480	1557	3410	4950		1723	3480	1532	1723	3446	1536
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	354	1401	266	286	1214	73	271	656	474	172	667	271
RTOR Reduction (vph)	0	0	89	0	4	0	0	0	152	0	0	209
Lane Group Flow (vph)	354	1401	177	286	1283	0	271	656	322	172	667	62
Confl. Peds. (#/hr)	3					3	1		3	3		1
Heavy Vehicles (%)	0%	1%	1%	0%	1%	2%	2%	1%	1%	2%	2%	1%
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases			6						4			8
Actuated Green, G (s)	20.4	60.6	60.6	12.6	52.8		24.7	39.4	39.4	21.8	36.5	36.5
Effective Green, g (s)	20.4	60.6	60.6	12.6	52.8		24.7	39.4	39.4	21.8	36.5	36.5
Actuated g/C Ratio	0.13	0.38	0.38	0.08	0.33		0.15	0.25	0.25	0.14	0.23	0.23
Clearance Time (s)	6.4	6.4	6.4	6.4	6.4		6.4	6.4	6.4	6.4	6.4	6.4
Vehicle Extension (s)	2.0	5.0	5.0	2.0	5.0		2.0	3.0	3.0	2.0	2.5	2.5
Lane Grp Cap (vph)	434	1318	589	268	1633		265	856	377	234	786	350
v/s Ratio Prot	0.10	c0.40		c0.08	0.26		c0.16	0.19		0.10	0.19	
v/s Ratio Perm			0.11						c0.21			0.04
v/c Ratio	0.82	1.06	0.30	1.07	0.79		1.02	0.77	0.85	0.74	0.85	0.18
Uniform Delay, d1	68.0	49.7	34.8	73.7	48.5		67.7	56.0	57.5	66.3	59.1	49.7
Progression Factor	1.24	0.88	0.94	1.00	1.00		1.14	0.94	1.06	1.00	1.00	1.00
Incremental Delay, d2	9.4	41.8	1.1	73.9	3.9		43.6	2.0	8.7	9.9	8.4	0.2
Delay (s)	93.5	85.6	33.9	147.6	52.4		121.0	54.6	69.5	76.2	67.5	49.8
Level of Service	F	F	C	F	D		F	D	E	E	E	D
Approach Delay (s)		80.1			69.7			72.5			64.5	
Approach LOS		F			E			E			E	

Intersection Summary			
HCM 2000 Control Delay	72.8	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.02		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	25.6
Intersection Capacity Utilization	101.0%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

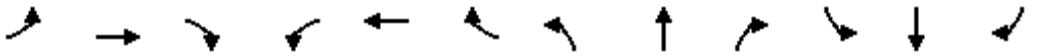


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	1200	265	550	885	5	170	15	600	5	55	25
Future Volume (vph)	10	1200	265	550	885	5	170	15	600	5	55	25
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	6.2	6.2	6.2	6.2	6.2		6.6	6.6	6.2	6.2	6.2	
Lane Util. Factor	1.00	0.95	1.00	0.97	0.95		0.95	0.95	0.88	1.00	1.00	
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00		1.00	1.00	0.85	1.00	0.95	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	0.96	1.00	0.95	1.00	
Satd. Flow (prot)	1758	3480	1572	3376	3477		1637	1659	2768	1758	1739	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	0.96	1.00	0.95	1.00	
Satd. Flow (perm)	1758	3480	1572	3376	3477		1637	1659	2768	1758	1739	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	11	1290	285	591	952	5	183	16	645	5	59	27
RTOR Reduction (vph)	0	0	170	0	0	0	0	0	398	0	13	0
Lane Group Flow (vph)	11	1290	115	591	957	0	99	100	247	5	73	0
Confl. Peds. (#/hr)	1					1						
Heavy Vehicles (%)	0%	1%	0%	1%	1%	0%	2%	0%	0%	0%	2%	0%
Turn Type	Prot	NA	Perm	Prot	NA		Split	NA	pm+ov	Split	NA	
Protected Phases	1	6		5	2		8	8	5	4	4	
Permitted Phases			6						8			
Actuated Green, G (s)	1.4	52.5	52.5	29.8	80.9		12.4	12.4	42.2	10.1	10.1	
Effective Green, g (s)	1.4	52.5	52.5	29.8	80.9		12.4	12.4	42.2	10.1	10.1	
Actuated g/C Ratio	0.01	0.40	0.40	0.23	0.62		0.10	0.10	0.32	0.08	0.08	
Clearance Time (s)	6.2	6.2	6.2	6.2	6.2		6.6	6.6	6.2	6.2	6.2	
Vehicle Extension (s)	2.0	2.0	2.0	2.0	4.0		2.0	2.0	2.0	2.0	2.0	
Lane Grp Cap (vph)	18	1405	634	773	2163		156	158	898	136	135	
v/s Ratio Prot	0.01	c0.37		c0.18	0.28		c0.06	0.06	0.06	0.00	c0.04	
v/s Ratio Perm			0.07						0.03			
v/c Ratio	0.61	0.92	0.18	0.76	0.44		0.63	0.63	0.27	0.04	0.54	
Uniform Delay, d1	64.0	36.7	24.9	46.8	12.8		56.6	56.6	32.6	55.5	57.7	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	36.2	11.1	0.6	4.1	0.7		6.1	6.0	0.1	0.0	2.4	
Delay (s)	100.2	47.8	25.6	50.9	13.5		62.7	62.6	32.6	55.5	60.1	
Level of Service	F	D	C	D	B		E	E	C	E	E	
Approach Delay (s)		44.1			27.7			39.7			59.8	
Approach LOS		D			C			D			E	

Intersection Summary			
HCM 2000 Control Delay	37.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	25.2
Intersection Capacity Utilization	77.9%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

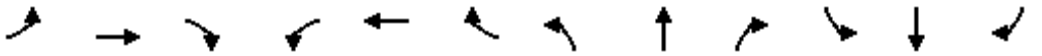
2048 No Build (AM Peak Hour)



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	210	35	130	0	0	65	305	2270	10	15	1565	145
Future Volume (vph)	210	35	130	0	0	65	305	2270	10	15	1565	145
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	6.3	6.3	6.3			4.0	5.9	5.9		5.9	5.9	
Lane Util. Factor	0.95	0.95	1.00			1.00	1.00	0.91		1.00	0.91	
Frpb, ped/bikes	1.00	1.00	0.98			1.00	1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00			1.00	1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85			0.86	1.00	1.00		1.00	0.99	
Flt Protected	0.95	0.97	1.00			1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1575	1627	1494			1600	1758	4853		1758	4804	
Flt Permitted	0.95	0.97	1.00			1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1575	1627	1494			1600	1758	4853		1758	4804	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	233	39	144	0	0	72	339	2522	11	17	1739	161
RTOR Reduction (vph)	0	0	127	0	0	0	0	0	0	0	6	0
Lane Group Flow (vph)	135	137	17	0	0	72	339	2533	0	17	1894	0
Confl. Peds. (#/hr)			7	7			2		6	6		2
Heavy Vehicles (%)	6%	0%	3%	0%	0%	0%	0%	4%	0%	0%	4%	0%
Turn Type	Split	NA	Perm			Free	Prot	NA		Prot	NA	
Protected Phases	8	8					5	2		1	6	
Permitted Phases			8			Free						
Actuated Green, G (s)	18.4	18.4	18.4			160.0	32.4	119.1		4.4	91.1	
Effective Green, g (s)	18.4	18.4	18.4			160.0	32.4	119.1		4.4	91.1	
Actuated g/C Ratio	0.11	0.11	0.11			1.00	0.20	0.74		0.03	0.57	
Clearance Time (s)	6.3	6.3	6.3				5.9	5.9		5.9	5.9	
Vehicle Extension (s)	2.0	2.0	2.0				2.0	3.0		2.0	3.0	
Lane Grp Cap (vph)	181	187	171			1600	355	3612		48	2735	
v/s Ratio Prot	c0.09	0.08					c0.19	c0.52		0.01	c0.39	
v/s Ratio Perm			0.01			0.04						
v/c Ratio	0.75	0.73	0.10			0.04	0.95	0.70		0.35	0.69	
Uniform Delay, d1	68.5	68.4	63.4			0.0	63.1	10.9		76.4	24.5	
Progression Factor	0.77	0.77	1.22			1.00	0.81	0.13		1.00	1.00	
Incremental Delay, d2	13.5	11.9	0.1			0.1	19.6	0.5		1.6	1.5	
Delay (s)	66.4	64.8	77.3			0.1	70.9	1.8		78.0	26.0	
Level of Service	E	E	E			A	E	A		E	C	
Approach Delay (s)		69.6			0.1			10.0			26.4	
Approach LOS		E			A			A			C	

Intersection Summary			
HCM 2000 Control Delay	20.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	18.1
Intersection Capacity Utilization	80.8%	ICU Level of Service	D
Analysis Period (min)	15		

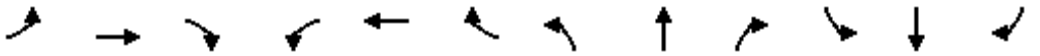
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	440	1550	175	545	2410	0	0	1435	245
Future Volume (vph)	0	0	0	440	1550	175	545	2410	0	0	1435	245
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)				6.4	6.4	6.4	6.5	6.5			6.5	6.5
Lane Util. Factor				0.81	0.81	1.00	0.97	0.91			0.86	0.86
Frpb, ped/bikes				1.00	1.00	0.98	1.00	1.00			1.00	0.97
Flpb, ped/bikes				1.00	1.00	1.00	1.00	1.00			1.00	1.00
Frt				1.00	1.00	0.85	1.00	1.00			1.00	0.85
Flt Protected				0.95	1.00	1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)				1396	5922	1532	3376	4903			4578	1310
Flt Permitted				0.95	1.00	1.00	0.95	1.00			1.00	1.00
Satd. Flow (perm)				1396	5922	1532	3376	4903			4578	1310
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	489	1722	194	606	2678	0	0	1594	272
RTOR Reduction (vph)	0	0	0	0	0	44	0	0	0	0	1	44
Lane Group Flow (vph)	0	0	0	425	1786	150	606	2678	0	0	1620	201
Confl. Peds. (#/hr)	3					3	7		13	13		7
Heavy Vehicles (%)	0%	0%	0%	2%	1%	1%	1%	3%	0%	0%	4%	0%
Turn Type				Perm	NA	Perm	Prot	NA			NA	Perm
Protected Phases					4		5	2			6	
Permitted Phases				4		4						6
Actuated Green, G (s)				55.5	55.5	55.5	27.5	91.6			57.6	57.6
Effective Green, g (s)				55.5	55.5	55.5	27.5	91.6			57.6	57.6
Actuated g/C Ratio				0.35	0.35	0.35	0.17	0.57			0.36	0.36
Clearance Time (s)				6.4	6.4	6.4	6.5	6.5			6.5	6.5
Vehicle Extension (s)				2.9	2.9	2.9	2.0	3.7			3.7	3.7
Lane Grp Cap (vph)				484	2054	531	580	2806			1648	471
v/s Ratio Prot							c0.18	c0.55			0.35	
v/s Ratio Perm				c0.30	0.30	0.10						0.15
v/c Ratio				0.88	0.87	0.28	1.04	0.95			0.98	0.43
Uniform Delay, d1				49.1	48.9	37.8	66.2	32.2			50.7	38.7
Progression Factor				0.89	0.88	0.76	0.76	0.56			0.73	0.80
Incremental Delay, d2				14.7	3.7	0.2	34.7	3.9			15.6	2.1
Delay (s)				58.2	46.8	29.1	85.3	22.0			52.6	32.9
Level of Service				E	D	C	F	C			D	C
Approach Delay (s)		0.0			47.4			33.7			50.1	
Approach LOS		A			D			C			D	

Intersection Summary			
HCM 2000 Control Delay	42.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.97		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	19.4
Intersection Capacity Utilization	94.8%	ICU Level of Service	F
Analysis Period (min)	15		

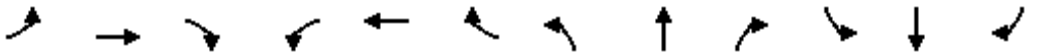
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	255	995	230	0	0	0	0	2625	255	165	1710	0
Future Volume (vph)	255	995	230	0	0	0	0	2625	255	165	1710	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	6.3	6.3	6.3					6.3	6.3	6.3	6.3	
Lane Util. Factor	0.86	0.81	0.86					0.91	1.00	0.97	0.91	
Frpb, ped/bikes	1.00	1.00	0.98					1.00	0.97	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00					1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85					1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1439	4383	1315					4903	1460	3310	4856	
Flt Permitted	0.95	1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1439	4383	1315					4903	1460	3310	4856	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	274	1070	247	0	0	0	0	2823	274	177	1839	0
RTOR Reduction (vph)	0	1	48	0	0	0	0	0	29	0	0	0
Lane Group Flow (vph)	247	1121	174	0	0	0	0	2823	245	177	1839	0
Confl. Peds. (#/hr)			5	5			5		8	8		5
Heavy Vehicles (%)	5%	2%	1%	0%	0%	0%	0%	3%	4%	3%	4%	0%
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		8						2		1	6	
Permitted Phases	8		8						2			
Actuated Green, G (s)	40.7	40.7	40.7					89.2	89.2	11.2	106.7	
Effective Green, g (s)	40.7	40.7	40.7					89.2	89.2	11.2	106.7	
Actuated g/C Ratio	0.25	0.25	0.25					0.56	0.56	0.07	0.67	
Clearance Time (s)	6.3	6.3	6.3					6.3	6.3	6.3	6.3	
Vehicle Extension (s)	6.0	6.0	6.0					5.0	5.0	2.0	5.0	
Lane Grp Cap (vph)	366	1114	334					2733	813	231	3238	
v/s Ratio Prot								c0.58		c0.05	0.38	
v/s Ratio Perm	0.17	0.26	0.13						0.17			
v/c Ratio	0.67	1.01	0.52					1.03	0.30	0.77	0.57	
Uniform Delay, d1	53.7	59.6	51.2					35.4	18.8	73.1	14.3	
Progression Factor	0.92	0.92	0.90					0.18	0.07	1.33	0.44	
Incremental Delay, d2	6.7	26.9	3.2					16.5	0.1	4.4	0.2	
Delay (s)	56.1	81.6	49.3					23.0	1.4	101.9	6.5	
Level of Service	E	F	D					C	A	F	A	
Approach Delay (s)		73.1			0.0			21.1			14.9	
Approach LOS		E			A			C			B	

Intersection Summary			
HCM 2000 Control Delay	31.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	1.00		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	18.9
Intersection Capacity Utilization	94.8%	ICU Level of Service	F
Analysis Period (min)	15		

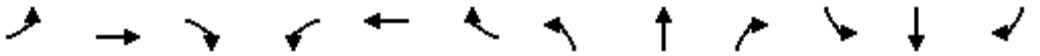
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	125	420	65	150	385	175	560	2760	540	185	1230	85
Future Volume (vph)	125	420	65	150	385	175	560	2760	540	185	1230	85
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	7.1	7.1	7.1	7.1	7.1	7.1	8.0	8.0	8.0	8.0	8.0	8.0
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.91	1.00	0.97	0.91	1.00
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00	1.00	1.00	1.00	0.99	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3157	3380	1515	3343	3413	1557	3410	4951	1536	3278	4951	1498
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3157	3380	1515	3343	3413	1557	3410	4951	1536	3278	4951	1498
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	140	472	73	169	433	197	629	3101	607	208	1382	96
RTOR Reduction (vph)	0	0	62	0	0	163	0	0	87	0	0	57
Lane Group Flow (vph)	140	472	11	169	433	34	629	3101	520	208	1382	39
Confl. Peds. (#/hr)			3	3					1	1		
Heavy Vehicles (%)	8%	4%	2%	2%	3%	1%	0%	2%	1%	4%	2%	5%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	3	8		7	4		5	2		1	6	
Permitted Phases			8			4			2			6
Actuated Green, G (s)	7.9	25.2	25.2	6.9	24.2	24.2	33.0	88.7	88.7	9.0	64.7	64.7
Effective Green, g (s)	7.9	25.2	25.2	6.9	24.2	24.2	33.0	88.7	88.7	9.0	64.7	64.7
Actuated g/C Ratio	0.05	0.16	0.16	0.04	0.15	0.15	0.21	0.55	0.55	0.06	0.40	0.40
Clearance Time (s)	7.1	7.1	7.1	7.1	7.1	7.1	8.0	8.0	8.0	8.0	8.0	8.0
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	5.0	5.0	2.0	5.0	5.0
Lane Grp Cap (vph)	155	532	238	144	516	235	703	2744	851	184	2002	605
v/s Ratio Prot	0.04	c0.14		c0.05	0.13		0.18	c0.63		c0.06	0.28	
v/s Ratio Perm			0.01			0.02			0.34			0.03
v/c Ratio	0.90	0.89	0.05	1.17	0.84	0.14	0.89	1.13	0.61	1.13	0.69	0.06
Uniform Delay, d1	75.7	66.0	57.2	76.5	66.0	58.9	61.8	35.6	24.0	75.5	39.4	29.1
Progression Factor	1.14	0.85	1.00	1.05	0.99	2.17	1.00	1.00	1.00	0.68	0.50	0.50
Incremental Delay, d2	43.4	15.6	0.0	127.6	10.5	0.1	13.6	63.8	3.3	100.4	1.7	0.2
Delay (s)	130.0	71.5	57.2	207.7	75.7	128.0	75.4	99.4	27.3	152.0	21.3	14.8
Level of Service	F	E	E	F	E	F	E	F	C	F	C	B
Approach Delay (s)		81.9			116.5			85.8			37.1	
Approach LOS		F			F			F			D	

Intersection Summary			
HCM 2000 Control Delay	77.8	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.08		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	30.2
Intersection Capacity Utilization	102.6%	ICU Level of Service	G
Analysis Period (min)	15		

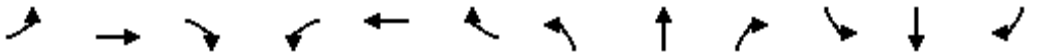
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	380	55	170	870	80	155	60	200	55	275	80
Future Volume (vph)	15	380	55	170	870	80	155	60	200	55	275	80
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	0.99		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.98		1.00	0.99		1.00	0.88		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1758	3355		1722	3439		1740	2851		1755	3294	
Flt Permitted	0.22	1.00		0.42	1.00		0.21	1.00		0.58	1.00	
Satd. Flow (perm)	416	3355		755	3439		391	2851		1065	3294	
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	16	418	60	187	956	88	170	66	220	60	302	88
RTOR Reduction (vph)	0	5	0	0	3	0	0	174	0	0	18	0
Lane Group Flow (vph)	16	473	0	187	1041	0	170	112	0	60	372	0
Confl. Peds. (#/hr)			1	1			1		2	2		1
Heavy Vehicles (%)	0%	2%	7%	2%	1%	0%	1%	7%	8%	0%	3%	2%
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases	6			2			4			8		
Actuated Green, G (s)	89.1	86.1		102.7	93.7		45.3	33.8		29.2	23.7	
Effective Green, g (s)	89.1	86.1		102.7	93.7		45.3	33.8		29.2	23.7	
Actuated g/C Ratio	0.56	0.54		0.64	0.59		0.28	0.21		0.18	0.15	
Clearance Time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Vehicle Extension (s)	1.0	5.5		1.0	5.5		1.0	2.0		1.0	2.0	
Lane Grp Cap (vph)	256	1805		548	2013		242	602		218	487	
v/s Ratio Prot	0.00	0.14		c0.02	c0.30		c0.07	0.04		0.01	0.11	
v/s Ratio Perm	0.03			0.20			c0.13			0.04		
v/c Ratio	0.06	0.26		0.34	0.52		0.70	0.19		0.28	0.76	
Uniform Delay, d1	16.6	19.9		12.1	19.7		46.7	51.8		55.4	65.5	
Progression Factor	1.00	1.00		0.16	0.13		0.51	0.62		0.85	0.82	
Incremental Delay, d2	0.0	0.4		0.1	0.7		7.0	0.1		0.2	5.9	
Delay (s)	16.7	20.2		2.1	3.2		31.0	32.3		47.0	59.8	
Level of Service	B	C		A	A		C	C		D	E	
Approach Delay (s)		20.1			3.0			31.8			58.1	
Approach LOS		C			A			C			E	

Intersection Summary			
HCM 2000 Control Delay	20.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	24.0
Intersection Capacity Utilization	71.2%	ICU Level of Service	C
Analysis Period (min)	15		

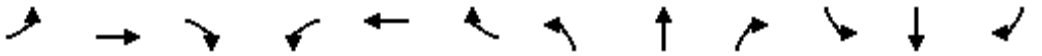
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	265	795	55	325	755	365	135	1405	320	210	945	70
Future Volume (vph)	265	795	55	325	755	365	135	1405	320	210	945	70
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.91	1.00	0.97	0.91	1.00
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.98	1.00	1.00	0.98	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3343	3480	1470	3376	3446	1481	3343	4903	1466	3186	4856	1446
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3343	3480	1470	3376	3446	1481	3343	4903	1466	3186	4856	1446
Peak-hour factor, PHF	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Adj. Flow (vph)	319	958	66	392	910	440	163	1693	386	253	1139	84
RTOR Reduction (vph)	0	0	48	0	0	130	0	0	200	0	0	55
Lane Group Flow (vph)	319	958	18	392	910	310	163	1693	186	253	1139	29
Confl. Peds. (#/hr)	5					5	3		7	7		3
Heavy Vehicles (%)	2%	1%	7%	1%	2%	4%	2%	3%	5%	7%	4%	7%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases			6			2			4			8
Actuated Green, G (s)	16.5	44.6	44.6	18.6	46.7	46.7	11.3	54.6	54.6	12.6	55.9	55.9
Effective Green, g (s)	16.5	44.6	44.6	18.6	46.7	46.7	11.3	54.6	54.6	12.6	55.9	55.9
Actuated g/C Ratio	0.10	0.28	0.28	0.12	0.29	0.29	0.07	0.34	0.34	0.08	0.35	0.35
Clearance Time (s)	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4
Vehicle Extension (s)	2.0	5.0	5.0	2.0	5.0	5.0	2.0	5.0	5.0	2.0	5.0	5.0
Lane Grp Cap (vph)	344	970	409	392	1005	432	236	1673	500	250	1696	505
v/s Ratio Prot	0.10	c0.28		0.12	c0.26		0.05	c0.35		c0.08	0.23	
v/s Ratio Perm			0.01			0.21			0.13			0.02
v/c Ratio	0.93	0.99	0.04	1.00	0.91	0.72	0.69	1.01	0.37	1.01	0.67	0.06
Uniform Delay, d1	71.2	57.4	42.1	70.7	54.5	50.7	72.6	52.7	39.8	73.7	44.2	34.6
Progression Factor	1.00	1.00	1.00	1.16	1.21	1.54	1.00	1.00	1.00	0.82	0.73	1.00
Incremental Delay, d2	29.9	26.1	0.2	36.1	8.9	6.3	6.8	25.0	1.0	54.6	1.1	0.1
Delay (s)	101.0	83.5	42.4	118.3	74.9	84.2	79.5	77.7	40.8	115.0	33.4	34.6
Level of Service	F	F	D	F	E	F	E	E	D	F	C	C
Approach Delay (s)		85.6			87.0			71.5			47.5	
Approach LOS		F			F			E			D	

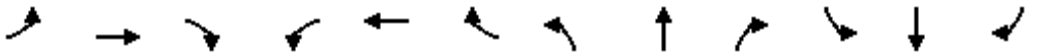
Intersection Summary			
HCM 2000 Control Delay	73.0	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.01		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	29.6
Intersection Capacity Utilization	91.4%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	70	1095	95	380	1560	155	185	300	310	50	240	65
Future Volume (vph)	70	1095	95	380	1560	155	185	300	310	50	240	65
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	6.5	6.5	6.5	6.5	6.5	6.5	6.8	6.8	6.5	6.8	6.8	6.8
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	1.00	0.95	0.88	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.98	1.00	1.00	0.98	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3310	3446	1498	3343	3480	1524	1674	3366	2573	1528	3399	1489
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3310	3446	1498	3343	3480	1524	1674	3366	2573	1528	3399	1489
Peak-hour factor, PHF	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Adj. Flow (vph)	81	1273	110	442	1814	180	215	349	360	58	279	76
RTOR Reduction (vph)	0	0	64	0	0	93	0	0	104	0	0	68
Lane Group Flow (vph)	81	1273	46	442	1814	87	215	349	256	58	279	8
Confl. Peds. (#/hr)	5					5	2		6	6		2
Heavy Vehicles (%)	3%	2%	5%	2%	1%	1%	5%	4%	5%	15%	3%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	2	0	0	2	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4	5	3	8	
Permitted Phases			6			2			4			8
Actuated Green, G (s)	7.7	66.2	66.2	18.5	77.0	77.0	31.2	39.8	58.3	8.9	17.5	17.5
Effective Green, g (s)	7.7	66.2	66.2	18.5	77.0	77.0	31.2	39.8	58.3	8.9	17.5	17.5
Actuated g/C Ratio	0.05	0.41	0.41	0.12	0.48	0.48	0.19	0.25	0.36	0.06	0.11	0.11
Clearance Time (s)	6.5	6.5	6.5	6.5	6.5	6.5	6.8	6.8	6.5	6.8	6.8	6.8
Vehicle Extension (s)	2.0	5.0	5.0	3.0	5.0	5.0	1.0	2.0	3.0	2.0	2.0	2.0
Lane Grp Cap (vph)	159	1425	619	386	1674	733	326	837	937	84	371	162
v/s Ratio Prot	0.02	c0.37		0.13	c0.52		c0.13	0.10	0.03	0.04	c0.08	
v/s Ratio Perm			0.03			0.06			0.07			0.01
v/c Ratio	0.51	0.89	0.07	1.15	1.08	0.12	0.66	0.42	0.27	0.69	0.75	0.05
Uniform Delay, d1	74.3	43.6	28.4	70.8	41.5	22.8	59.5	50.4	35.9	74.2	69.1	63.8
Progression Factor	1.21	0.31	0.21	0.83	0.69	0.58	1.00	1.00	1.00	0.70	0.65	1.00
Incremental Delay, d2	0.9	8.2	0.2	81.6	44.2	0.2	3.7	0.1	0.2	16.7	6.9	0.0
Delay (s)	90.5	21.8	6.1	140.1	73.0	13.4	63.1	50.5	36.0	68.7	51.9	63.9
Level of Service	F	C	A	F	E	B	E	D	D	E	D	E
Approach Delay (s)		24.4			80.8			47.8			56.5	
Approach LOS		C			F			D			E	

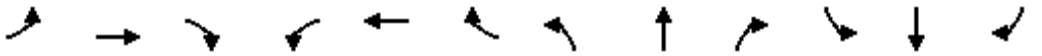
Intersection Summary			
HCM 2000 Control Delay	57.3	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.96		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	26.6
Intersection Capacity Utilization	92.2%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑↑	↱	↰	↑↑						↲	↱
Traffic Volume (vph)	0	1480	85	295	2110	0	0	0	0	70	35	140
Future Volume (vph)	0	1480	85	295	2110	0	0	0	0	70	35	140
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)		5.8	5.8	5.8	5.8						5.9	5.9
Lane Util. Factor		0.91	1.00	1.00	0.95						1.00	1.00
Frpb, ped/bikes		1.00	1.00	1.00	1.00						1.00	0.98
Flpb, ped/bikes		1.00	1.00	1.00	1.00						1.00	1.00
Frt		1.00	0.85	1.00	1.00						1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00						0.97	1.00
Satd. Flow (prot)		4856	1417	1740	3480						1637	1489
Flt Permitted		1.00	1.00	0.95	1.00						0.97	1.00
Satd. Flow (perm)		4856	1417	1740	3480						1637	1489
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	0	1682	97	335	2398	0	0	0	0	80	40	159
RTOR Reduction (vph)	0	0	40	0	0	0	0	0	0	0	0	53
Lane Group Flow (vph)	0	1682	57	335	2398	0	0	0	0	0	120	106
Confl. Peds. (#/hr)	2					2	2					2
Heavy Vehicles (%)	0%	4%	11%	1%	1%	0%	0%	0%	0%	7%	14%	4%
Turn Type		NA	Perm	Prot	NA					Perm	NA	Perm
Protected Phases		6		5	2						8	
Permitted Phases			6							8		8
Actuated Green, G (s)		90.3	90.3	36.0	132.1						16.2	16.2
Effective Green, g (s)		90.3	90.3	36.0	132.1						16.2	16.2
Actuated g/C Ratio		0.56	0.56	0.22	0.83						0.10	0.10
Clearance Time (s)		5.8	5.8	5.8	5.8						5.9	5.9
Vehicle Extension (s)		3.8	3.8	3.0	3.4						1.5	1.5
Lane Grp Cap (vph)		2740	799	391	2873						165	150
v/s Ratio Prot		0.35		0.19	c0.69							
v/s Ratio Perm			0.04								0.07	0.07
v/c Ratio		0.61	0.07	0.86	0.83						0.73	0.71
Uniform Delay, d1		23.2	15.8	59.5	7.8						69.8	69.6
Progression Factor		0.38	0.10	1.23	0.90						0.60	0.52
Incremental Delay, d2		0.7	0.1	9.1	1.5						9.0	8.3
Delay (s)		9.5	1.7	82.0	8.6						51.1	44.5
Level of Service		A	A	F	A						D	D
Approach Delay (s)		9.1			17.6			0.0			47.3	
Approach LOS		A			B			A			D	

Intersection Summary			
HCM 2000 Control Delay	16.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	17.5
Intersection Capacity Utilization	83.3%	ICU Level of Service	E
Analysis Period (min)	15		

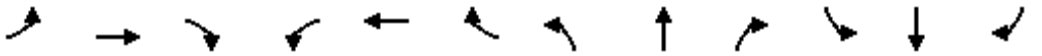
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	120	1475	0	0	2005	275	465	75	525	0	0	0
Future Volume (vph)	120	1475	0	0	2005	275	465	75	525	0	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	5.6	5.6			5.6	5.6	5.9	5.9	3.0			
Lane Util. Factor	1.00	0.95			0.91	1.00	0.95	0.95	1.00			
Frpb, ped/bikes	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Flpb, ped/bikes	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.97	1.00			
Satd. Flow (prot)	1583	3413			4951	1557	1653	1684	1542			
Flt Permitted	0.95	1.00			1.00	1.00	0.95	0.97	1.00			
Satd. Flow (perm)	1583	3413			4951	1557	1653	1684	1542			
Peak-hour factor, PHF	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	138	1695	0	0	2305	316	534	86	603	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	145	0	0	201	0	0	0
Lane Group Flow (vph)	138	1695	0	0	2305	171	310	310	402	0	0	0
Confl. Peds. (#/hr)			4	4								
Heavy Vehicles (%)	11%	3%	0%	0%	2%	1%	1%	0%	2%	0%	0%	0%
Turn Type	Prot	NA			NA	Perm	Perm	NA	custom			
Protected Phases	1	6			2			4				
Permitted Phases						2	4		7 5			
Actuated Green, G (s)	23.4	94.4			86.7	86.7	32.8	32.8	54.4			
Effective Green, g (s)	23.4	94.4			86.7	86.7	32.8	32.8	54.4			
Actuated g/C Ratio	0.15	0.59			0.54	0.54	0.20	0.20	0.34			
Clearance Time (s)	5.6	5.6			5.6	5.6	5.9	5.9				
Vehicle Extension (s)	1.5	3.3			3.6	3.6	2.0	2.0				
Lane Grp Cap (vph)	231	2013			2682	843	338	345	524			
v/s Ratio Prot	0.09	c0.50			c0.47							
v/s Ratio Perm						0.11	c0.19	0.18	0.26			
v/c Ratio	0.60	0.84			0.86	0.20	0.92	0.90	0.77			
Uniform Delay, d1	63.9	26.7			31.4	18.9	62.3	62.0	47.1			
Progression Factor	0.76	0.41			0.27	0.26	1.00	1.00	1.00			
Incremental Delay, d2	2.3	3.7			0.4	0.0	28.2	24.2	6.0			
Delay (s)	50.6	14.5			8.8	4.9	90.4	86.2	53.1			
Level of Service	D	B			A	A	F	F	D			
Approach Delay (s)		17.3			8.4			71.0			0.0	
Approach LOS		B			A			E			A	

Intersection Summary			
HCM 2000 Control Delay	24.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	17.2
Intersection Capacity Utilization	83.3%	ICU Level of Service	E
Analysis Period (min)	15		

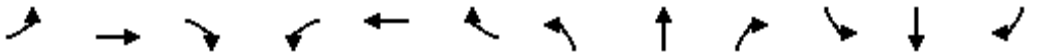
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	85	1855	15	65	25	0	0	40	85
Future Volume (vph)	0	0	0	85	1855	15	65	25	0	0	40	85
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)				5.6	5.6			5.5			5.5	5.5
Lane Util. Factor				1.00	0.86			0.95			1.00	1.00
Frpb, ped/bikes				1.00	1.00			1.00			1.00	0.99
Flpb, ped/bikes				1.00	1.00			1.00			1.00	1.00
Frt				1.00	1.00			1.00			1.00	0.85
Flt Protected				0.95	1.00			0.97			1.00	1.00
Satd. Flow (prot)				1758	6293			3390			1850	1552
Flt Permitted				0.95	1.00			0.76			1.00	1.00
Satd. Flow (perm)				1758	6293			2658			1850	1552
Peak-hour factor, PHF	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Adj. Flow (vph)	0	0	0	106	2319	19	81	31	0	0	50	106
RTOR Reduction (vph)	0	0	0	0	1	0	0	0	0	0	0	29
Lane Group Flow (vph)	0	0	0	106	2337	0	0	112	0	0	50	77
Confl. Peds. (#/hr)	4					4	1					1
Heavy Vehicles (%)	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%
Turn Type				Perm	NA		Perm	NA			NA	Perm
Protected Phases					2			4			8	
Permitted Phases				2			4					8
Actuated Green, G (s)				54.5	54.5			14.4			14.4	14.4
Effective Green, g (s)				54.5	54.5			14.4			14.4	14.4
Actuated g/C Ratio				0.68	0.68			0.18			0.18	0.18
Clearance Time (s)				5.6	5.6			5.5			5.5	5.5
Vehicle Extension (s)				2.5	2.5			2.0			2.8	2.8
Lane Grp Cap (vph)				1197	4287			478			333	279
v/s Ratio Prot					c0.37						0.03	
v/s Ratio Perm				0.06				0.04				c0.05
v/c Ratio				0.09	0.55			0.23			0.15	0.28
Uniform Delay, d1				4.3	6.5			28.1			27.6	28.3
Progression Factor				0.53	0.50			0.60			0.96	0.92
Incremental Delay, d2				0.1	0.2			0.1			0.2	0.5
Delay (s)				2.4	3.5			17.0			26.8	26.5
Level of Service				A	A			B			C	C
Approach Delay (s)		0.0			3.4			17.0			26.6	
Approach LOS		A			A			B			C	

Intersection Summary			
HCM 2000 Control Delay	5.3	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	11.1
Intersection Capacity Utilization	71.8%	ICU Level of Service	C
Analysis Period (min)	15		

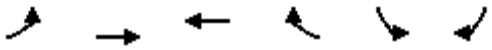
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	35	1120	130	0	0	0	0	100	35	35	100	0
Future Volume (vph)	35	1120	130	0	0	0	0	100	35	35	100	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)		5.8	5.8					5.7		5.7	5.7	
Lane Util. Factor		0.91	1.00					0.95		1.00	1.00	
Frpb, ped/bikes		1.00	0.97					1.00		1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00		1.00	1.00	
Frt		1.00	0.85					0.96		1.00	1.00	
Flt Protected		1.00	1.00					1.00		0.95	1.00	
Satd. Flow (prot)		4942	1487					3378		1690	1850	
Flt Permitted		1.00	1.00					1.00		0.65	1.00	
Satd. Flow (perm)		4942	1487					3378		1147	1850	
Peak-hour factor, PHF	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Adj. Flow (vph)	44	1400	162	0	0	0	0	125	44	44	125	0
RTOR Reduction (vph)	0	0	60	0	0	0	0	25	0	0	0	0
Lane Group Flow (vph)	0	1444	103	0	0	0	0	144	0	44	125	0
Confl. Peds. (#/hr)			4	4			3					3
Heavy Vehicles (%)	3%	2%	3%	0%	0%	0%	0%	0%	0%	4%	0%	0%
Turn Type	Perm	NA	Perm					NA		Perm	NA	
Protected Phases		6						4			8	
Permitted Phases	6		6							8		
Actuated Green, G (s)		50.5	50.5					18.0		18.0	18.0	
Effective Green, g (s)		50.5	50.5					18.0		18.0	18.0	
Actuated g/C Ratio		0.63	0.63					0.22		0.22	0.22	
Clearance Time (s)		5.8	5.8					5.7		5.7	5.7	
Vehicle Extension (s)		2.0	2.0					2.0		2.0	2.0	
Lane Grp Cap (vph)		3119	938					760		258	416	
v/s Ratio Prot								0.04			c0.07	
v/s Ratio Perm		0.29	0.07							0.04		
v/c Ratio		0.46	0.11					0.19		0.17	0.30	
Uniform Delay, d1		7.7	5.8					25.1		25.0	25.8	
Progression Factor		0.51	0.91					0.90		1.07	1.04	
Incremental Delay, d2		0.3	0.1					0.0		0.1	0.1	
Delay (s)		4.2	5.5					22.7		26.7	27.0	
Level of Service		A	A					C		C	C	
Approach Delay (s)		4.4			0.0			22.7			27.0	
Approach LOS		A			A			C			C	

Intersection Summary			
HCM 2000 Control Delay	7.9	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.42		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	11.5
Intersection Capacity Utilization	62.4%	ICU Level of Service	B
Analysis Period (min)	15		

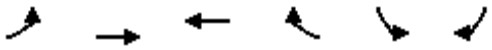
c Critical Lane Group



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	55	850	660	45	80	75
Future Volume (vph)	55	850	660	45	80	75
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850
Total Lost time (s)	5.5	5.5	5.5		5.5	5.5
Lane Util. Factor	1.00	0.95	0.95		1.00	1.00
Frpb, ped/bikes	1.00	1.00	1.00		1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Frt	1.00	1.00	0.99		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1757	3446	3412		1723	1544
Flt Permitted	0.30	1.00	1.00		0.95	1.00
Satd. Flow (perm)	548	3446	3412		1723	1544
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	62	966	750	51	91	85
RTOR Reduction (vph)	0	0	3	0	0	77
Lane Group Flow (vph)	63	966	798	0	91	8
Confl. Peds. (#/hr)	3			3		2
Heavy Vehicles (%)	0%	2%	2%	0%	2%	0%
Turn Type	pm+pt	NA	NA		Prot	Perm
Protected Phases	1	6	2		3	
Permitted Phases	6					7
Actuated Green, G (s)	61.3	61.3	51.7		7.7	7.7
Effective Green, g (s)	61.3	61.3	51.7		7.7	7.7
Actuated g/C Ratio	0.77	0.77	0.65		0.10	0.10
Clearance Time (s)	5.5	5.5	5.5		5.5	5.5
Vehicle Extension (s)	1.0	6.2	6.2		2.0	2.0
Lane Grp Cap (vph)	481	2640	2205		165	148
v/s Ratio Prot	0.01	c0.28	0.23		c0.05	
v/s Ratio Perm	0.09					0.01
v/c Ratio	0.13	0.37	0.36		0.55	0.06
Uniform Delay, d1	2.8	3.0	6.5		34.5	32.8
Progression Factor	1.42	1.31	0.70		1.08	2.48
Incremental Delay, d2	0.0	0.2	0.4		2.2	0.1
Delay (s)	4.0	4.2	5.0		39.6	81.5
Level of Service	A	A	A		D	F
Approach Delay (s)		4.2	5.0		59.8	
Approach LOS		A	A		E	

Intersection Summary			
HCM 2000 Control Delay	9.4	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.44		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	19.5
Intersection Capacity Utilization	44.0%	ICU Level of Service	A
Analysis Period (min)	15		

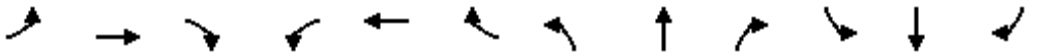
c Critical Lane Group



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	180	1165	1585	115	60	90
Future Volume (vph)	180	1165	1585	115	60	90
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850
Total Lost time (s)	6.3	6.3	6.3	6.3	6.3	6.3
Lane Util. Factor	1.00	0.95	0.95	1.00	0.97	1.00
Frpb, ped/bikes	1.00	1.00	1.00	0.98	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1740	3413	3446	1503	3410	1461
Flt Permitted	0.06	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	108	3413	3446	1503	3410	1461
Peak-hour factor, PHF	0.84	0.84	0.84	0.84	0.84	0.84
Adj. Flow (vph)	214	1387	1887	137	71	107
RTOR Reduction (vph)	0	0	0	28	0	5
Lane Group Flow (vph)	214	1387	1887	109	71	102
Confl. Peds. (#/hr)	2			2		4
Heavy Vehicles (%)	1%	3%	2%	3%	0%	7%
Turn Type	pm+pt	NA	NA	Perm	Prot	pm+ov
Protected Phases	1	6	2		3	1
Permitted Phases	6			2		3
Actuated Green, G (s)	138.5	138.5	112.2	112.2	8.9	28.9
Effective Green, g (s)	138.5	138.5	112.2	112.2	8.9	28.9
Actuated g/C Ratio	0.87	0.87	0.70	0.70	0.06	0.18
Clearance Time (s)	6.3	6.3	6.3	6.3	6.3	6.3
Vehicle Extension (s)	3.0	4.0	4.0	4.0	3.0	3.0
Lane Grp Cap (vph)	297	2954	2416	1053	189	321
v/s Ratio Prot	c0.09	0.41	c0.55		0.02	c0.04
v/s Ratio Perm	0.53			0.07		0.03
v/c Ratio	0.72	0.47	0.78	0.10	0.38	0.32
Uniform Delay, d1	45.0	2.4	15.8	7.7	72.9	57.0
Progression Factor	1.64	0.29	0.33	0.05	1.00	1.00
Incremental Delay, d2	3.8	0.2	0.6	0.0	1.3	0.6
Delay (s)	77.8	0.9	5.8	0.4	74.1	57.6
Level of Service	E	A	A	A	E	E
Approach Delay (s)		11.2	5.4		64.2	
Approach LOS		B	A		E	

Intersection Summary			
HCM 2000 Control Delay	10.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	18.9
Intersection Capacity Utilization	76.8%	ICU Level of Service	D
Analysis Period (min)	15		

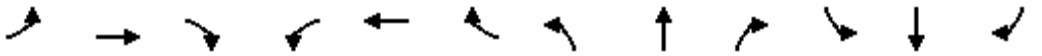
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	350	190	70	210	0	0	0	0	85	1690	160
Future Volume (vph)	0	350	190	70	210	0	0	0	0	85	1690	160
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)		5.4		5.4	5.4						5.8	5.8
Lane Util. Factor		0.95		1.00	0.95						0.91	1.00
Frpb, ped/bikes		1.00		1.00	1.00						1.00	0.99
Flpb, ped/bikes		1.00		1.00	1.00						1.00	1.00
Frt		0.95		1.00	1.00						1.00	0.85
Flt Protected		1.00		0.95	1.00						1.00	1.00
Satd. Flow (prot)		3182		1723	3413						4847	1535
Flt Permitted		1.00		0.18	1.00						1.00	1.00
Satd. Flow (perm)		3182		331	3413						4847	1535
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	0	398	216	80	239	0	0	0	0	97	1920	182
RTOR Reduction (vph)	0	95	0	0	0	0	0	0	0	0	0	98
Lane Group Flow (vph)	0	519	0	80	239	0	0	0	0	0	2017	84
Confl. Peds. (#/hr)	2					2	2					2
Heavy Vehicles (%)	0%	5%	4%	2%	3%	0%	0%	0%	0%	3%	4%	1%
Turn Type		NA		pm+pt	NA					Perm	NA	Perm
Protected Phases		8		7	4						6	
Permitted Phases				4						6		6
Actuated Green, G (s)		16.5		32.0	32.0						36.8	36.8
Effective Green, g (s)		16.5		32.0	32.0						36.8	36.8
Actuated g/C Ratio		0.21		0.40	0.40						0.46	0.46
Clearance Time (s)		5.4		5.4	5.4						5.8	5.8
Vehicle Extension (s)		2.0		1.5	2.0						2.5	2.5
Lane Grp Cap (vph)		656		308	1365						2229	706
v/s Ratio Prot		c0.16		c0.03	0.07							
v/s Ratio Perm				0.07							0.42	0.05
v/c Ratio		0.79		0.26	0.18						0.90	0.12
Uniform Delay, d1		30.1		16.4	15.5						20.0	12.3
Progression Factor		1.00		1.05	1.06						1.00	1.00
Incremental Delay, d2		6.0		0.2	0.0						6.6	0.3
Delay (s)		36.2		17.3	16.4						26.6	12.7
Level of Service		D		B	B						C	B
Approach Delay (s)		36.2			16.6			0.0			25.5	
Approach LOS		D			B			A			C	

Intersection Summary			
HCM 2000 Control Delay	26.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	16.6
Intersection Capacity Utilization	73.7%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	75	345	0	0	210	120	115	1395	190	0	0	0
Future Volume (vph)	75	345	0	0	210	120	115	1395	190	0	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	5.7	5.7			5.7			5.8	5.8			
Lane Util. Factor	1.00	0.95			0.95			0.91	1.00			
Frpb, ped/bikes	1.00	1.00			0.99			1.00	0.98			
Flpb, ped/bikes	1.00	1.00			1.00			1.00	1.00			
Frt	1.00	1.00			0.95			1.00	0.85			
Flt Protected	0.95	1.00			1.00			1.00	1.00			
Satd. Flow (prot)	1641	3380			3257			4795	1501			
Flt Permitted	0.28	1.00			1.00			1.00	1.00			
Satd. Flow (perm)	484	3380			3257			4795	1501			
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	82	379	0	0	231	132	126	1533	209	0	0	0
RTOR Reduction (vph)	0	0	0	0	113	0	0	0	96	0	0	0
Lane Group Flow (vph)	82	379	0	0	250	0	0	1659	113	0	0	0
Confl. Peds. (#/hr)	6		1	1		6			5	5		
Heavy Vehicles (%)	7%	4%	0%	0%	1%	2%	4%	5%	3%	0%	0%	0%
Turn Type	pm+pt	NA			NA		Perm	NA	Perm			
Protected Phases	3	8			4			2				
Permitted Phases	8						2		2			
Actuated Green, G (s)	25.2	25.2			11.4			43.3	43.3			
Effective Green, g (s)	25.2	25.2			11.4			43.3	43.3			
Actuated g/C Ratio	0.31	0.31			0.14			0.54	0.54			
Clearance Time (s)	5.7	5.7			5.7			5.8	5.8			
Vehicle Extension (s)	1.0	2.0			2.0			2.5	2.5			
Lane Grp Cap (vph)	269	1064			464			2595	812			
v/s Ratio Prot	0.03	c0.11			c0.08							
v/s Ratio Perm	0.06							0.35	0.08			
v/c Ratio	0.30	0.36			0.54			0.64	0.14			
Uniform Delay, d1	20.2	21.1			31.9			12.9	9.1			
Progression Factor	0.51	0.50			0.75			0.75	1.29			
Incremental Delay, d2	0.2	0.0			0.6			0.7	0.2			
Delay (s)	10.5	10.6			24.6			10.3	11.9			
Level of Service	B	B			C			B	B			
Approach Delay (s)		10.6			24.6			10.5			0.0	
Approach LOS		B			C			B			A	

Intersection Summary			
HCM 2000 Control Delay	12.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	17.2
Intersection Capacity Utilization	73.7%	ICU Level of Service	D
Analysis Period (min)	15		

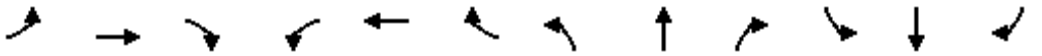
c Critical Lane Group



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	430	40	65	295	30	40
Future Volume (vph)	430	40	65	295	30	40
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850
Total Lost time (s)	5.5			5.5	5.3	5.3
Lane Util. Factor	0.95			0.95	1.00	1.00
Frpb, ped/bikes	1.00			1.00	1.00	0.98
Flpb, ped/bikes	1.00			1.00	1.00	1.00
Frt	0.99			1.00	1.00	0.85
Flt Protected	1.00			0.99	0.95	1.00
Satd. Flow (prot)	3367			3443	1758	1501
Flt Permitted	1.00			0.79	0.95	1.00
Satd. Flow (perm)	3367			2743	1758	1501
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	489	45	74	335	34	45
RTOR Reduction (vph)	3	0	0	0	0	42
Lane Group Flow (vph)	531	0	0	409	34	3
Confl. Peds. (#/hr)						1
Heavy Vehicles (%)	3%	4%	2%	1%	0%	3%
Turn Type	NA		Perm	NA	Prot	Perm
Protected Phases	6			2	7	
Permitted Phases			2			3
Actuated Green, G (s)	64.4			64.4	4.8	4.8
Effective Green, g (s)	64.4			64.4	4.8	4.8
Actuated g/C Ratio	0.81			0.81	0.06	0.06
Clearance Time (s)	5.5			5.5	5.3	5.3
Vehicle Extension (s)	2.0			2.0	2.0	0.2
Lane Grp Cap (vph)	2710			2208	105	90
v/s Ratio Prot	c0.16				c0.02	
v/s Ratio Perm				0.15		0.00
v/c Ratio	0.20			0.19	0.32	0.03
Uniform Delay, d1	1.8			1.8	36.0	35.4
Progression Factor	0.16			2.36	1.05	1.54
Incremental Delay, d2	0.2			0.1	0.6	0.0
Delay (s)	0.4			4.3	38.6	54.6
Level of Service	A			A	D	D
Approach Delay (s)	0.4			4.3	47.7	
Approach LOS	A			A	D	

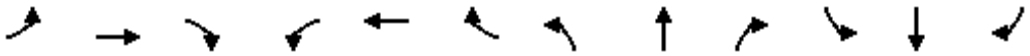
Intersection Summary			
HCM 2000 Control Delay	5.6	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.22		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	16.1
Intersection Capacity Utilization	44.1%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



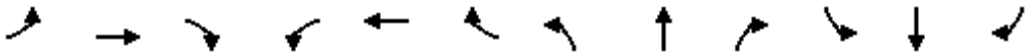
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	555	1350	0	0	0	0	0	1705	140
Future Volume (vph)	0	0	0	555	1350	0	0	0	0	0	1705	140
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)				5.8	5.8						5.8	5.8
Lane Util. Factor				0.81	0.81						0.86	0.86
Frpb, ped/bikes				1.00	1.00						1.00	0.99
Flpb, ped/bikes				1.00	1.00						1.00	1.00
Frt				1.00	1.00						1.00	0.85
Flt Protected				0.95	0.99						1.00	1.00
Satd. Flow (prot)				1406	5897						4628	1283
Flt Permitted				0.95	0.99						1.00	1.00
Satd. Flow (perm)				1406	5897						4628	1283
Peak-hour factor, PHF	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Adj. Flow (vph)	0	0	0	645	1570	0	0	0	0	0	1983	163
RTOR Reduction (vph)	0	0	0	24	24	0	0	0	0	0	1	19
Lane Group Flow (vph)	0	0	0	402	1765	0	0	0	0	0	1998	128
Confl. Peds. (#/hr)	5		2	2		5	1		4	4		1
Heavy Vehicles (%)	0%	0%	0%	1%	1%	0%	0%	0%	0%	0%	3%	4%
Turn Type				Perm	NA						NA	Perm
Protected Phases					1						2	
Permitted Phases				1								2
Actuated Green, G (s)				29.2	29.2						39.2	39.2
Effective Green, g (s)				29.2	29.2						39.2	39.2
Actuated g/C Ratio				0.36	0.36						0.49	0.49
Clearance Time (s)				5.8	5.8						5.8	5.8
Lane Grp Cap (vph)				513	2152						2267	628
v/s Ratio Prot											c0.43	
v/s Ratio Perm				0.29	0.30							0.10
v/c Ratio				0.78	0.82						0.88	0.20
Uniform Delay, d1				22.6	23.0						18.3	11.6
Progression Factor				0.95	0.94						0.49	0.11
Incremental Delay, d2				6.7	2.1						2.7	0.3
Delay (s)				28.3	23.8						11.6	1.6
Level of Service				C	C						B	A
Approach Delay (s)		0.0			24.7			0.0			10.9	
Approach LOS		A			C			A			B	

Intersection Summary			
HCM 2000 Control Delay	17.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	11.6
Intersection Capacity Utilization	67.6%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	1770	350	220	1495	0	0	0	0
Future Volume (vph)	0	0	0	0	1770	350	220	1495	0	0	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)					6.0	6.0	6.0	6.0				
Lane Util. Factor					0.81	0.81	0.86	0.86				
Frpb, ped/bikes					1.00	0.98	1.00	1.00				
Flpb, ped/bikes					1.00	1.00	1.00	1.00				
Frt					1.00	0.85	1.00	1.00				
Flt Protected					1.00	1.00	0.95	1.00				
Satd. Flow (prot)					5915	1235	1453	4543				
Flt Permitted					1.00	1.00	0.95	1.00				
Satd. Flow (perm)					5915	1235	1453	4543				
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	0	0	0	0	1989	393	247	1680	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	3	25	23	23	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	2025	329	199	1682	0	0	0	0
Confl. Peds. (#/hr)	9		2	2		9			12	12		
Heavy Vehicles (%)	0%	0%	0%	0%	1%	1%	4%	5%	0%	0%	0%	0%
Turn Type					NA	Perm	Perm	NA				
Protected Phases					1			2				
Permitted Phases						1	2					
Actuated Green, G (s)					32.0	32.0	36.0	36.0				
Effective Green, g (s)					32.0	32.0	36.0	36.0				
Actuated g/C Ratio					0.40	0.40	0.45	0.45				
Clearance Time (s)					6.0	6.0	6.0	6.0				
Lane Grp Cap (vph)					2366	494	653	2044				
v/s Ratio Prot					c0.34							
v/s Ratio Perm						0.27	0.14	0.37				
v/c Ratio					0.86	0.67	0.31	0.82				
Uniform Delay, d1					21.9	19.6	14.0	19.2				
Progression Factor					0.87	0.59	0.23	0.27				
Incremental Delay, d2					2.9	4.8	0.8	2.8				
Delay (s)					21.9	16.4	4.1	7.9				
Level of Service					C	B	A	A				
Approach Delay (s)		0.0			21.1			7.5			0.0	
Approach LOS		A			C			A			A	

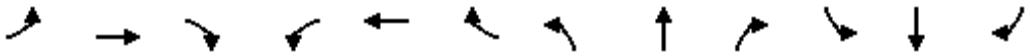
Intersection Summary			
HCM 2000 Control Delay	15.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	67.6%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	230	2045	110	80	110	0	0	30	10
Future Volume (vph)	0	0	0	230	2045	110	80	110	0	0	30	10
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)					5.4		5.3	5.3			5.3	
Lane Util. Factor					0.86		0.97	1.00			1.00	
Frpb, ped/bikes					1.00		1.00	1.00			1.00	
Flpb, ped/bikes					1.00		1.00	1.00			1.00	
Frt					0.99		1.00	1.00			0.97	
Flt Protected					1.00		0.95	1.00			1.00	
Satd. Flow (prot)					6222		3343	1832			1735	
Flt Permitted					1.00		0.95	1.00			1.00	
Satd. Flow (perm)					6222		3343	1832			1735	
Peak-hour factor, PHF	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Adj. Flow (vph)	0	0	0	291	2589	139	101	139	0	0	38	13
RTOR Reduction (vph)	0	0	0	0	6	0	0	0	0	0	12	0
Lane Group Flow (vph)	0	0	0	0	3013	0	101	139	0	0	39	0
Confl. Peds. (#/hr)	2		2	2		2			1	1		
Heavy Vehicles (%)	0%	0%	0%	1%	1%	0%	2%	1%	0%	0%	4%	0%
Turn Type				Perm	NA		Prot	NA			NA	
Protected Phases					2		7	4			8	
Permitted Phases				2								
Actuated Green, G (s)					50.1		9.4	19.2			4.5	
Effective Green, g (s)					50.1		9.4	19.2			4.5	
Actuated g/C Ratio					0.63		0.12	0.24			0.06	
Clearance Time (s)					5.4		5.3	5.3			5.3	
Vehicle Extension (s)					3.7		1.5	1.5			1.5	
Lane Grp Cap (vph)					3896		392	439			97	
v/s Ratio Prot							0.03	c0.08			0.02	
v/s Ratio Perm					0.48							
v/c Ratio					0.77		0.26	0.32			0.40	
Uniform Delay, d1					10.8		32.1	25.0			36.4	
Progression Factor					1.58		0.95	0.91			1.31	
Incremental Delay, d2					1.0		0.1	0.2			1.0	
Delay (s)					18.1		30.7	23.0			48.7	
Level of Service					B		C	C			D	
Approach Delay (s)		0.0			18.1			26.2			48.7	
Approach LOS		A			B			C			D	

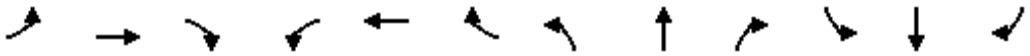
Intersection Summary			
HCM 2000 Control Delay	19.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	62.6%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1530	170	0	0	0	0	0	0	325	1855	0
Future Volume (vph)	0	1530	170	0	0	0	0	0	0	325	1855	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)		5.9	5.9							5.9	5.9	
Lane Util. Factor		0.81	0.81							0.86	0.86	
Frpb, ped/bikes		1.00	0.98							1.00	1.00	
Flpb, ped/bikes		1.00	1.00							1.00	1.00	
Frt		1.00	0.85							1.00	1.00	
Flt Protected		1.00	1.00							0.95	1.00	
Satd. Flow (prot)		5924	1241							1480	4631	
Flt Permitted		1.00	1.00							0.95	1.00	
Satd. Flow (perm)		5924	1241							1480	4631	
Peak-hour factor, PHF	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Adj. Flow (vph)	0	1800	200	0	0	0	0	0	0	382	2182	0
RTOR Reduction (vph)	0	2	26	0	0	0	0	0	0	19	19	0
Lane Group Flow (vph)	0	1818	154	0	0	0	0	0	0	325	2201	0
Confl. Peds. (#/hr)			4	4			3		1	1		3
Heavy Vehicles (%)	0%	1%	1%	0%	0%	0%	0%	0%	0%	2%	3%	0%
Turn Type		NA	Perm							Perm	NA	
Protected Phases		1									2	
Permitted Phases			1							2		
Actuated Green, G (s)		27.1	27.1							41.1	41.1	
Effective Green, g (s)		27.1	27.1							41.1	41.1	
Actuated g/C Ratio		0.34	0.34							0.51	0.51	
Clearance Time (s)		5.9	5.9							5.9	5.9	
Lane Grp Cap (vph)		2006	420							760	2379	
v/s Ratio Prot		c0.31										
v/s Ratio Perm			0.12							0.22	0.48	
v/c Ratio		0.91	0.37							0.43	0.92	
Uniform Delay, d1		25.2	20.0							12.1	18.0	
Progression Factor		1.00	1.00							0.39	0.40	
Incremental Delay, d2		7.4	2.4							0.8	4.0	
Delay (s)		32.6	22.4							5.6	11.2	
Level of Service		C	C							A	B	
Approach Delay (s)		31.7			0.0			0.0			10.4	
Approach LOS		C			A			A			B	

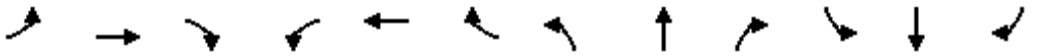
Intersection Summary			
HCM 2000 Control Delay	19.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.92		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	11.8
Intersection Capacity Utilization	67.6%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	360	1475	0	0	0	0	0	1320	175	0	0	0
Future Volume (vph)	360	1475	0	0	0	0	0	1320	175	0	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	5.6	5.6						6.0	6.0			
Lane Util. Factor	0.81	0.81						0.91	0.88			
Frpb, ped/bikes	1.00	1.00						1.00	0.98			
Flpb, ped/bikes	1.00	1.00						1.00	1.00			
Frt	1.00	1.00						1.00	0.85			
Flt Protected	0.95	1.00						1.00	1.00			
Satd. Flow (prot)	1392	5869						4765	2668			
Flt Permitted	0.95	1.00						1.00	1.00			
Satd. Flow (perm)	1392	5869						4765	2668			
Peak-hour factor, PHF	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Adj. Flow (vph)	429	1756	0	0	0	0	0	1571	208	0	0	0
RTOR Reduction (vph)	50	50	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	336	1749	0	0	0	0	0	1571	208	0	0	0
Confl. Peds. (#/hr)	3		6	6		3			16	16		
Heavy Vehicles (%)	2%	2%	0%	0%	0%	0%	0%	6%	2%	0%	0%	0%
Turn Type	Perm	NA						NA	custom			
Protected Phases		8						2				
Permitted Phases	8								5			
Actuated Green, G (s)	31.4	31.4						37.0	80.0			
Effective Green, g (s)	31.4	31.4						37.0	80.0			
Actuated g/C Ratio	0.39	0.39						0.46	1.00			
Clearance Time (s)	5.6	5.6						6.0	6.0			
Vehicle Extension (s)	5.0	5.0						5.0	0.2			
Lane Grp Cap (vph)	546	2303						2203	2668			
v/s Ratio Prot								c0.33				
v/s Ratio Perm	0.24	0.30							0.08			
v/c Ratio	0.62	0.76						0.71	0.08			
Uniform Delay, d1	19.5	21.0						17.2	0.0			
Progression Factor	0.59	0.59						1.04	1.00			
Incremental Delay, d2	2.7	1.3						1.3	0.0			
Delay (s)	14.2	13.7						19.1	0.0			
Level of Service	B	B						B	A			
Approach Delay (s)		13.8			0.0			16.9			0.0	
Approach LOS		B			A			B			A	

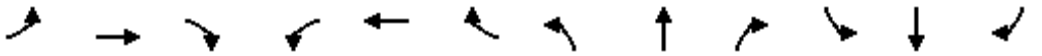
Intersection Summary			
HCM 2000 Control Delay	15.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	1.13		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	14.6
Intersection Capacity Utilization	64.1%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	65	1580	145	0	0	0	0	135	90	50	190	0
Future Volume (vph)	65	1580	145	0	0	0	0	135	90	50	190	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	5.7	5.7						5.7	5.7	5.7	5.7	
Lane Util. Factor	1.00	0.86						0.95	1.00	1.00	0.95	
Frpb, ped/bikes	1.00	1.00						1.00	1.00	1.00	1.00	
Flpb, ped/bikes	1.00	1.00						1.00	1.00	1.00	1.00	
Frt	1.00	0.99						1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00						1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1754	6161						3432	1572	1758	3466	
Flt Permitted	0.95	1.00						1.00	1.00	0.42	1.00	
Satd. Flow (perm)	1754	6161						3432	1572	770	3466	
Peak-hour factor, PHF	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	75	1816	167	0	0	0	0	155	103	57	218	0
RTOR Reduction (vph)	0	12	0	0	0	0	0	0	90	0	0	0
Lane Group Flow (vph)	75	1971	0	0	0	0	0	155	13	57	218	0
Confl. Peds. (#/hr)	2		7	7		2	4					4
Heavy Vehicles (%)	0%	2%	0%	0%	0%	0%	0%	2%	0%	0%	1%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	2	0	0	2	0
Turn Type	Perm	NA						NA	Perm	pm+pt	NA	
Protected Phases		6						4		3	8	
Permitted Phases	6								4	8		
Actuated Green, G (s)	49.1	49.1						10.0	10.0	19.5	19.5	
Effective Green, g (s)	49.1	49.1						10.0	10.0	19.5	19.5	
Actuated g/C Ratio	0.61	0.61						0.12	0.12	0.24	0.24	
Clearance Time (s)	5.7	5.7						5.7	5.7	5.7	5.7	
Vehicle Extension (s)	4.8	4.8						1.7	1.7	1.0	1.7	
Lane Grp Cap (vph)	1076	3781						429	196	234	844	
v/s Ratio Prot		c0.32						c0.05		0.01	c0.06	
v/s Ratio Perm	0.04								0.01	0.05		
v/c Ratio	0.07	0.52						0.36	0.07	0.24	0.26	
Uniform Delay, d1	6.2	8.8						32.1	30.9	23.9	24.4	
Progression Factor	0.26	0.19						1.00	1.00	0.98	0.98	
Incremental Delay, d2	0.1	0.4						0.2	0.1	0.1	0.0	
Delay (s)	1.7	2.1						32.3	30.9	23.6	24.0	
Level of Service	A	A						C	C	C	C	
Approach Delay (s)		2.0			0.0			31.7			23.9	
Approach LOS		A			A			C			C	

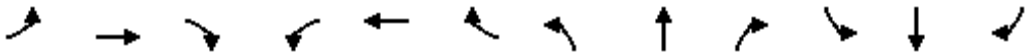
Intersection Summary			
HCM 2000 Control Delay	7.3	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	17.1
Intersection Capacity Utilization	62.6%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	295	40	130	390	0	0	0	0	240	1400	175
Future Volume (vph)	0	295	40	130	390	0	0	0	0	240	1400	175
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)		5.5		5.5	5.5					6.0	6.0	6.0
Lane Util. Factor		0.95		1.00	0.95					1.00	0.91	1.00
Frpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	1.00
Flpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	1.00
Frt		0.98		1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00		0.95	1.00					0.95	1.00	1.00
Satd. Flow (prot)		3416		1739	3446					1723	4903	1572
Flt Permitted		1.00		0.44	1.00					0.95	1.00	1.00
Satd. Flow (perm)		3416		801	3446					1723	4903	1572
Peak-hour factor, PHF	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Adj. Flow (vph)	0	347	47	153	459	0	0	0	0	282	1647	206
RTOR Reduction (vph)	0	15	0	0	0	0	0	0	0	0	0	95
Lane Group Flow (vph)	0	379	0	153	459	0	0	0	0	282	1647	111
Confl. Peds. (#/hr)	2		3	3		2						
Heavy Vehicles (%)	0%	1%	0%	1%	2%	0%	0%	0%	0%	2%	3%	0%
Turn Type		NA		pm+pt	NA					Perm	NA	Perm
Protected Phases		8		7	4						6	
Permitted Phases				4						6		6
Actuated Green, G (s)		14.1		25.3	25.3					43.2	43.2	43.2
Effective Green, g (s)		14.1		25.3	25.3					43.2	43.2	43.2
Actuated g/C Ratio		0.18		0.32	0.32					0.54	0.54	0.54
Clearance Time (s)		5.5		5.5	5.5					6.0	6.0	6.0
Vehicle Extension (s)		2.5		2.0	2.5					6.0	6.0	6.0
Lane Grp Cap (vph)		602		320	1089					930	2647	848
v/s Ratio Prot		c0.11		0.03	c0.13						c0.34	
v/s Ratio Perm				0.12						0.16		0.07
v/c Ratio		0.63		0.48	0.42					0.30	0.62	0.13
Uniform Delay, d1		30.5		24.9	21.6					10.1	12.7	9.1
Progression Factor		1.00		0.30	0.32					0.40	0.33	0.12
Incremental Delay, d2		1.8		0.4	0.2					0.4	0.5	0.1
Delay (s)		32.3		7.8	7.0					4.4	4.7	1.3
Level of Service		C		A	A					A	A	A
Approach Delay (s)		32.3			7.2			0.0			4.3	
Approach LOS		C			A			A			A	

Intersection Summary			
HCM 2000 Control Delay	8.4	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	68.6%	ICU Level of Service	C
Analysis Period (min)	15		

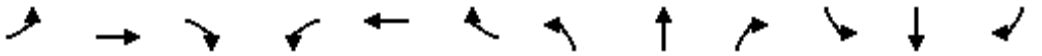
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	80	395	0	0	515	310	100	1450	145	0	0	0
Future Volume (vph)	80	395	0	0	515	310	100	1450	145	0	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	5.7	5.7			5.7	5.7	6.0	6.0	6.0			
Lane Util. Factor	1.00	0.95			0.95	1.00	1.00	0.91	1.00			
Frpb, ped/bikes	1.00	1.00			1.00	0.98	1.00	1.00	0.98			
Flpb, ped/bikes	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1721	3446			3446	1536	1653	4765	1499			
Flt Permitted	0.35	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	627	3446			3446	1536	1653	4765	1499			
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	90	444	0	0	579	348	112	1629	163	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	84	0	0	94	0	0	0
Lane Group Flow (vph)	90	444	0	0	579	264	112	1629	69	0	0	0
Confl. Peds. (#/hr)	10		6	6		10	3		7	7		3
Heavy Vehicles (%)	2%	2%	0%	0%	2%	0%	6%	6%	3%	0%	0%	0%
Turn Type	pm+pt	NA			NA	Perm	Perm	NA	Perm			
Protected Phases	3	8			4			2				
Permitted Phases	8					4	2		2			
Actuated Green, G (s)	34.3	34.3			23.3	23.3	34.0	34.0	34.0			
Effective Green, g (s)	34.3	34.3			23.3	23.3	34.0	34.0	34.0			
Actuated g/C Ratio	0.43	0.43			0.29	0.29	0.42	0.42	0.42			
Clearance Time (s)	5.7	5.7			5.7	5.7	6.0	6.0	6.0			
Vehicle Extension (s)	1.0	2.5			2.5	2.5	2.5	2.5	2.5			
Lane Grp Cap (vph)	341	1477			1003	447	702	2025	637			
v/s Ratio Prot	0.02	c0.13			0.17			c0.34				
v/s Ratio Perm	0.10					c0.17	0.07		0.05			
v/c Ratio	0.26	0.30			0.58	0.59	0.16	0.80	0.11			
Uniform Delay, d1	18.8	15.0			24.2	24.3	14.2	20.1	13.9			
Progression Factor	0.44	0.45			1.00	1.00	1.13	1.69	3.68			
Incremental Delay, d2	0.3	0.1			2.4	5.6	0.1	1.1	0.1			
Delay (s)	8.5	6.8			26.6	29.9	16.1	35.1	51.2			
Level of Service	A	A			C	C	B	D	D			
Approach Delay (s)		7.1			27.8			35.4			0.0	
Approach LOS		A			C			D			A	

Intersection Summary			
HCM 2000 Control Delay	28.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	17.4
Intersection Capacity Utilization	68.6%	ICU Level of Service	C
Analysis Period (min)	15		

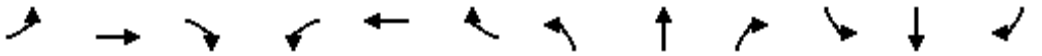
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	85	420	50	45	775	135	70	180	20	35	150	100
Future Volume (vph)	85	420	50	45	775	135	70	180	20	35	150	100
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	5.7	5.7		5.7	5.7		5.7	5.7		5.7	5.7	5.7
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.98		1.00	0.98		1.00	0.99		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1706	3383		1706	3396		1755	3372		1758	3480	1534
Flt Permitted	0.14	1.00		0.41	1.00		0.59	1.00		0.60	1.00	1.00
Satd. Flow (perm)	244	3383		737	3396		1091	3372		1110	3480	1534
Peak-hour factor, PHF	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Adj. Flow (vph)	104	512	61	55	945	165	85	220	24	43	183	122
RTOR Reduction (vph)	0	9	0	0	15	0	0	11	0	0	0	100
Lane Group Flow (vph)	104	564	0	55	1095	0	85	233	0	43	183	22
Confl. Peds. (#/hr)	1		1	1		1	3					3
Heavy Vehicles (%)	3%	2%	3%	3%	1%	1%	0%	3%	0%	0%	1%	1%
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases	6			2			4			8		8
Actuated Green, G (s)	33.4	29.5		31.2	28.4		17.7	13.8		15.7	12.8	12.8
Effective Green, g (s)	33.4	29.5		31.2	28.4		17.7	13.8		15.7	12.8	12.8
Actuated g/C Ratio	0.47	0.41		0.43	0.40		0.25	0.19		0.22	0.18	0.18
Clearance Time (s)	5.7	5.7		5.7	5.7		5.7	5.7		5.7	5.7	5.7
Vehicle Extension (s)	1.0	5.0		1.0	5.0		1.0	2.0		1.2	5.0	5.0
Lane Grp Cap (vph)	192	1389		358	1343		305	648		268	620	273
v/s Ratio Prot	c0.03	0.17		0.01	c0.32		c0.02	c0.07		0.01	0.05	
v/s Ratio Perm	0.22			0.06			0.05			0.03		0.01
v/c Ratio	0.54	0.41		0.15	0.82		0.28	0.36		0.16	0.30	0.08
Uniform Delay, d1	13.2	15.0		11.9	19.4		21.4	25.2		22.5	25.6	24.6
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	1.7	0.4		0.1	4.4		0.2	0.1		0.1	0.6	0.3
Delay (s)	14.9	15.4		12.0	23.8		21.6	25.3		22.6	26.1	24.9
Level of Service	B	B		B	C		C	C		C	C	C
Approach Delay (s)		15.3			23.2			24.3			25.3	
Approach LOS		B			C			C			C	

Intersection Summary			
HCM 2000 Control Delay	21.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	71.8	Sum of lost time (s)	22.8
Intersection Capacity Utilization	63.9%	ICU Level of Service	B
Analysis Period (min)	15		

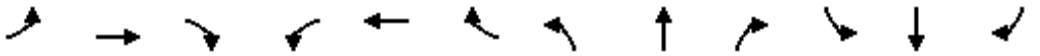
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	480	1340	125	190	1520	235	440	995	355	110	490	270
Future Volume (vph)	480	1340	125	190	1520	235	440	995	355	110	490	270
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	6.5	6.5	6.5	6.5	6.5	6.5	6.3	6.3	6.5	6.3	6.3	6.3
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95	0.88	0.97	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00	0.98	1.00	1.00	1.00	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3410	3413	1515	3376	3480	1533	3376	3480	2713	3278	3380	1515
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3410	3413	1515	3376	3480	1533	3376	3480	2713	3278	3380	1515
Peak-hour factor, PHF	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Adj. Flow (vph)	565	1576	147	224	1788	276	518	1171	418	129	576	318
RTOR Reduction (vph)	0	0	78	0	0	92	0	0	75	0	0	169
Lane Group Flow (vph)	565	1576	69	224	1788	185	518	1171	343	129	576	149
Confl. Peds. (#/hr)	2		4	4		2	3					3
Heavy Vehicles (%)	0%	3%	2%	1%	1%	1%	1%	1%	2%	4%	4%	2%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4	5	3	8	
Permitted Phases			6			2			4			8
Actuated Green, G (s)	18.5	74.7	74.7	12.3	68.5	68.5	18.8	38.9	51.2	8.5	28.6	28.6
Effective Green, g (s)	18.5	74.7	74.7	12.3	68.5	68.5	18.8	38.9	51.2	8.5	28.6	28.6
Actuated g/C Ratio	0.12	0.47	0.47	0.08	0.43	0.43	0.12	0.24	0.32	0.05	0.18	0.18
Clearance Time (s)	6.5	6.5	6.5	6.5	6.5	6.5	6.3	6.3	6.5	6.3	6.3	6.3
Vehicle Extension (s)	2.0	5.0	5.0	2.0	5.0	5.0	2.0	1.0	2.0	2.0	1.0	1.0
Lane Grp Cap (vph)	394	1593	707	259	1489	656	396	846	868	174	604	270
v/s Ratio Prot	c0.17	0.46		0.07	c0.51		0.15	c0.34	0.03	0.04	c0.17	
v/s Ratio Perm			0.05			0.12			0.10			0.10
v/c Ratio	1.43	0.99	0.10	0.86	1.20	0.28	1.31	1.38	0.39	0.74	0.95	0.55
Uniform Delay, d1	70.8	42.3	23.8	73.0	45.8	29.7	70.6	60.5	42.3	74.7	65.0	59.9
Progression Factor	1.12	1.20	2.55	1.00	1.00	1.00	1.00	1.00	1.00	0.92	1.12	1.64
Incremental Delay, d2	202.9	14.0	0.1	23.9	97.1	1.1	155.8	180.2	0.1	3.7	9.4	0.3
Delay (s)	282.4	64.9	60.9	96.9	142.8	30.8	226.4	240.8	42.4	72.3	82.0	98.3
Level of Service	F	E	E	F	F	C	F	F	D	E	F	F
Approach Delay (s)		118.3			124.8			197.9			85.9	
Approach LOS		F			F			F			F	

Intersection Summary			
HCM 2000 Control Delay	137.7	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.30		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	25.6
Intersection Capacity Utilization	112.6%	ICU Level of Service	H
Analysis Period (min)	15		

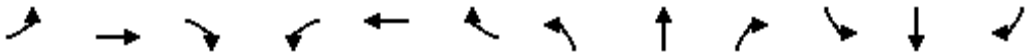
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	240	550	145	90	195	80	120	1100	175	165	1075	150
Future Volume (vph)	240	550	145	90	195	80	120	1100	175	165	1075	150
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	6.3	6.3		6.3	6.3		5.7	5.7		5.7	5.7	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.97		1.00	0.96		1.00	0.98		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1723	3343		1612	3167		1706	3373		1690	3406	
Flt Permitted	0.38	1.00		0.13	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	685	3343		227	3167		1706	3373		1690	3406	
Peak-hour factor, PHF	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Adj. Flow (vph)	282	647	171	106	229	94	141	1294	206	194	1265	176
RTOR Reduction (vph)	0	15	0	0	28	0	0	7	0	0	7	0
Lane Group Flow (vph)	282	803	0	106	295	0	141	1493	0	194	1434	0
Confl. Peds. (#/hr)	1		5	5		1	1		1	1		1
Heavy Vehicles (%)	2%	1%	3%	9%	6%	5%	3%	2%	1%	4%	1%	2%
Turn Type	pm+pt	NA		pm+pt	NA		Prot	NA		Prot	NA	
Protected Phases	3	8		7	4		5	2		1	6	
Permitted Phases	8			4								
Actuated Green, G (s)	59.9	43.7		44.4	34.5		17.3	61.1		21.3	65.1	
Effective Green, g (s)	59.9	43.7		44.4	34.5		17.3	61.1		21.3	65.1	
Actuated g/C Ratio	0.37	0.27		0.28	0.22		0.11	0.38		0.13	0.41	
Clearance Time (s)	6.3	6.3		6.3	6.3		5.7	5.7		5.7	5.7	
Vehicle Extension (s)	1.2	4.0		1.2	4.0		1.2	4.0		1.2	4.0	
Lane Grp Cap (vph)	380	913		148	682		184	1288		224	1385	
v/s Ratio Prot	c0.09	c0.24		0.04	0.09		0.08	c0.44		0.11	c0.42	
v/s Ratio Perm	0.19			0.15								
v/c Ratio	0.74	0.88		0.72	0.43		0.77	1.16		0.87	1.04	
Uniform Delay, d1	38.5	55.6		46.4	54.3		69.4	49.5		68.0	47.5	
Progression Factor	0.73	0.81		1.00	1.00		0.62	0.43		1.28	0.44	
Incremental Delay, d2	6.4	9.5		12.8	0.6		1.6	72.4		9.3	23.3	
Delay (s)	34.7	54.5		59.2	54.9		44.5	93.8		96.6	44.1	
Level of Service	C	D		E	D		D	F		F	D	
Approach Delay (s)		49.4			56.0			89.6			50.3	
Approach LOS		D			E			F			D	

Intersection Summary			
HCM 2000 Control Delay	64.0	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.06		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	24.0
Intersection Capacity Utilization	92.4%	ICU Level of Service	F
Analysis Period (min)	15		

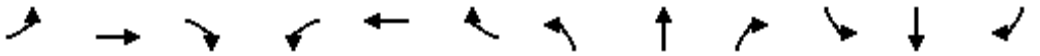
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	390	80	400	990	0	0	0	0	75	1235	75
Future Volume (vph)	0	390	80	400	990	0	0	0	0	75	1235	75
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		5.1		5.1	5.1						5.4	
Lane Util. Factor		0.95		1.00	0.95						0.86	
Frpb, ped/bikes		1.00		1.00	1.00						1.00	
Flpb, ped/bikes		1.00		1.00	1.00						1.00	
Frt		0.97		1.00	1.00						0.99	
Flt Protected		1.00		0.95	1.00						1.00	
Satd. Flow (prot)		2966		1508	3018						5350	
Flt Permitted		1.00		0.21	1.00						1.00	
Satd. Flow (perm)		2966		327	3018						5350	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	415	85	426	1053	0	0	0	0	80	1314	80
RTOR Reduction (vph)	0	22	0	0	0	0	0	0	0	0	10	0
Lane Group Flow (vph)	0	478	0	426	1053	0	0	0	0	0	1464	0
Confl. Peds. (#/hr)	1		3	3		1	7					7
Heavy Vehicles (%)	0%	1%	0%	2%	2%	0%	0%	0%	0%	3%	3%	2%
Turn Type		NA		pm+pt	NA					Split	NA	
Protected Phases		8		7	4					6	6	
Permitted Phases				4								
Actuated Green, G (s)		14.8		41.7	41.7						27.8	
Effective Green, g (s)		14.8		41.7	41.7						27.8	
Actuated g/C Ratio		0.19		0.52	0.52						0.35	
Clearance Time (s)		5.1		5.1	5.1						5.4	
Vehicle Extension (s)		0.2		1.5	0.2						0.2	
Lane Grp Cap (vph)		548		492	1573						1859	
v/s Ratio Prot		0.16		c0.24	0.35						c0.27	
v/s Ratio Perm				c0.22								
v/c Ratio		0.87		0.87	0.67						0.79	
Uniform Delay, d1		31.7		17.6	14.1						23.4	
Progression Factor		1.00		1.42	1.09						1.00	
Incremental Delay, d2		13.8		1.5	0.1						3.5	
Delay (s)		45.5		26.5	15.5						26.9	
Level of Service		D		C	B						C	
Approach Delay (s)		45.5			18.6			0.0			26.9	
Approach LOS		D			B			A			C	

Intersection Summary			
HCM 2000 Control Delay	26.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	15.6
Intersection Capacity Utilization	104.6%	ICU Level of Service	G
Analysis Period (min)	15		

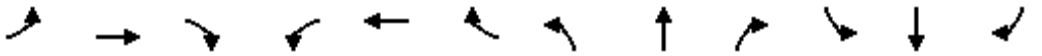
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	35	460	0	0	1235	220	175	1990	330	0	0	0
Future Volume (vph)	35	460	0	0	1235	220	175	1990	330	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	5.3	5.3			5.3			5.7	5.7			
Lane Util. Factor	1.00	0.95			0.95			0.86	1.00			
Frpb, ped/bikes	1.00	1.00			1.00			1.00	0.98			
Flpb, ped/bikes	1.00	1.00			1.00			1.00	1.00			
Frt	1.00	1.00			0.98			1.00	0.85			
Flt Protected	0.95	1.00			1.00			1.00	1.00			
Satd. Flow (prot)	1539	3048			2973			5341	1304			
Flt Permitted	0.06	1.00			1.00			1.00	1.00			
Satd. Flow (perm)	90	3048			2973			5341	1304			
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	40	523	0	0	1403	250	199	2261	375	0	0	0
RTOR Reduction (vph)	0	0	0	0	9	0	0	0	145	0	0	0
Lane Group Flow (vph)	40	523	0	0	1644	0	0	2460	230	0	0	0
Confl. Peds. (#/hr)	1		2	2		1			5	5		
Heavy Vehicles (%)	0%	1%	0%	0%	1%	1%	3%	4%	4%	0%	0%	0%
Turn Type	pm+pt	NA			NA		Split	NA	Perm			
Protected Phases	3	8			4		2	2				
Permitted Phases	8								2			
Actuated Green, G (s)	77.7	77.7			66.5			71.3	71.3			
Effective Green, g (s)	77.7	77.7			66.5			71.3	71.3			
Actuated g/C Ratio	0.49	0.49			0.42			0.45	0.45			
Clearance Time (s)	5.3	5.3			5.3			5.7	5.7			
Vehicle Extension (s)	1.5	0.2			0.2			0.2	0.2			
Lane Grp Cap (vph)	97	1480			1235			2380	581			
v/s Ratio Prot	0.02	c0.17			c0.55			c0.46				
v/s Ratio Perm	0.18								0.18			
v/c Ratio	0.41	0.35			1.33			1.03	0.40			
Uniform Delay, d1	36.5	25.6			46.8			44.4	29.9			
Progression Factor	1.55	1.27			1.00			0.83	0.93			
Incremental Delay, d2	0.7	0.0			154.8			25.9	1.6			
Delay (s)	57.4	32.6			201.5			62.7	29.3			
Level of Service	E	C			F			E	C			
Approach Delay (s)		34.4			201.5			58.3			0.0	
Approach LOS		C			F			E			A	

Intersection Summary			
HCM 2000 Control Delay	102.5	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.15		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	16.3
Intersection Capacity Utilization	104.6%	ICU Level of Service	G
Analysis Period (min)	15		

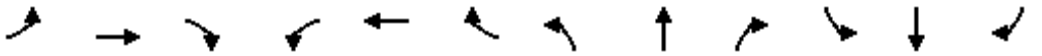
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	140	725	200	395	1325	45	265	560	295	175	780	320
Future Volume (vph)	140	725	200	395	1325	45	265	560	295	175	780	320
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	6.4	6.4	6.4	6.4	6.4		6.4	6.4	6.4	6.4	6.4	6.4
Lane Util. Factor	0.97	0.95	1.00	0.97	0.91		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00		1.00	1.00	0.98	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3376	3446	1506	3343	4973		1706	3446	1487	1674	3446	1552
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3376	3446	1506	3343	4973		1706	3446	1487	1674	3446	1552
Peak-hour factor, PHF	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Adj. Flow (vph)	169	873	241	476	1596	54	319	675	355	211	940	386
RTOR Reduction (vph)	0	0	130	0	2	0	0	0	246	0	0	147
Lane Group Flow (vph)	169	873	111	476	1648	0	319	675	109	211	940	239
Confl. Peds. (#/hr)			1	1			1		3	3		1
Heavy Vehicles (%)	1%	2%	3%	2%	1%	3%	3%	2%	4%	5%	2%	0%
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases			6						4			8
Actuated Green, G (s)	12.2	49.6	49.6	22.6	60.0		22.6	40.4	40.4	21.8	39.6	39.6
Effective Green, g (s)	12.2	49.6	49.6	22.6	60.0		22.6	40.4	40.4	21.8	39.6	39.6
Actuated g/C Ratio	0.08	0.31	0.31	0.14	0.38		0.14	0.25	0.25	0.14	0.25	0.25
Clearance Time (s)	6.4	6.4	6.4	6.4	6.4		6.4	6.4	6.4	6.4	6.4	6.4
Vehicle Extension (s)	2.0	5.0	5.0	2.0	5.0		2.0	3.0	3.0	2.0	2.5	2.5
Lane Grp Cap (vph)	257	1068	466	472	1864		240	870	375	228	852	384
v/s Ratio Prot	0.05	c0.25		c0.14	c0.33		c0.19	0.20		0.13	c0.27	
v/s Ratio Perm			0.07						0.07			0.15
v/c Ratio	0.66	0.82	0.24	1.01	0.88		1.33	0.78	0.29	0.93	1.10	0.62
Uniform Delay, d1	71.9	51.0	41.1	68.7	46.8		68.7	55.6	48.2	68.3	60.2	53.6
Progression Factor	1.00	1.00	1.00	1.00	1.00		0.67	0.77	2.72	1.00	1.00	1.00
Incremental Delay, d2	4.6	7.0	1.2	43.6	6.5		150.8	0.4	0.0	38.9	63.1	2.7
Delay (s)	76.4	58.0	42.3	112.3	53.3		197.1	43.1	131.0	107.2	123.3	56.3
Level of Service	E	E	D	F	D		F	D	F	F	F	E
Approach Delay (s)		57.5			66.5			102.7			104.3	
Approach LOS		E			E			F			F	

Intersection Summary			
HCM 2000 Control Delay	81.6	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.04		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	25.6
Intersection Capacity Utilization	94.6%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

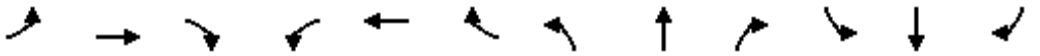


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	660	210	685	1300	5	195	25	470	0	5	15
Future Volume (vph)	25	660	210	685	1300	5	195	25	470	0	5	15
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	6.2	6.2	6.2	6.2	6.2		6.6	6.6	6.2		6.2	
Lane Util. Factor	1.00	0.95	1.00	0.97	0.95		0.95	0.95	0.88		1.00	
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		0.99	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	
Frt	1.00	1.00	0.85	1.00	1.00		1.00	1.00	0.85		0.89	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	0.96	1.00		1.00	
Satd. Flow (prot)	1758	3413	1557	3343	3444		1653	1679	2713		1629	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	0.96	1.00		1.00	
Satd. Flow (perm)	1758	3413	1557	3343	3444		1653	1679	2713		1629	
Peak-hour factor, PHF	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	29	759	241	787	1494	6	224	29	540	0	6	17
RTOR Reduction (vph)	0	0	128	0	0	0	0	0	385	0	16	0
Lane Group Flow (vph)	29	759	113	787	1500	0	125	128	155	0	7	0
Confl. Peds. (#/hr)	1					1	1					1
Heavy Vehicles (%)	0%	3%	1%	2%	2%	0%	1%	0%	2%	0%	0%	0%
Turn Type	Prot	NA	Perm	Prot	NA		Split	NA	pm+ov	Split	NA	
Protected Phases	1	6		5	2		8	8	5	4	4	
Permitted Phases			6						8			
Actuated Green, G (s)	4.5	56.1	56.1	20.8	72.4		13.6	13.6	34.4		4.3	
Effective Green, g (s)	4.5	56.1	56.1	20.8	72.4		13.6	13.6	34.4		4.3	
Actuated g/C Ratio	0.04	0.47	0.47	0.17	0.60		0.11	0.11	0.29		0.04	
Clearance Time (s)	6.2	6.2	6.2	6.2	6.2		6.6	6.6	6.2		6.2	
Vehicle Extension (s)	2.0	2.5	2.5	2.0	4.0		2.0	2.0	2.0		2.0	
Lane Grp Cap (vph)	65	1595	727	579	2077		187	190	777		58	
v/s Ratio Prot	0.02	0.22		c0.24	c0.44		0.08	c0.08	0.03		c0.00	
v/s Ratio Perm			0.07						0.02			
v/c Ratio	0.45	0.48	0.15	1.36	0.72		0.67	0.67	0.20		0.11	
Uniform Delay, d1	56.5	21.9	18.3	49.6	16.7		51.0	51.1	32.4		56.0	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	
Incremental Delay, d2	1.8	1.0	0.5	172.7	2.2		6.8	7.2	0.0		0.3	
Delay (s)	58.3	22.9	18.8	222.3	18.9		57.9	58.3	32.4		56.3	
Level of Service	E	C	B	F	B		E	E	C		E	
Approach Delay (s)		22.9			88.9			40.6			56.3	
Approach LOS		C			F			D			E	

Intersection Summary			
HCM 2000 Control Delay	63.0	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	25.2
Intersection Capacity Utilization	71.6%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

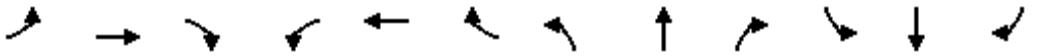
2048 No Build (PM Peak Hour)



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	545	100	405	0	0	50	170	2110	75	150	1995	150
Future Volume (vph)	545	100	405	0	0	50	170	2110	75	150	1995	150
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	6.3	6.3	6.3			4.0	5.9	5.9		5.9	5.9	
Lane Util. Factor	0.95	0.95	1.00			1.00	1.00	0.91		1.00	0.91	
Frpb, ped/bikes	1.00	1.00	0.97			0.99	1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00			1.00	1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85			0.86	1.00	0.99		1.00	0.99	
Flt Protected	0.95	0.97	1.00			1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1653	1687	1530			1580	1740	4916		1758	4848	
Flt Permitted	0.95	0.97	1.00			1.00	0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1653	1687	1530			1580	1740	4916		1758	4848	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	556	102	413	0	0	51	173	2153	77	153	2036	153
RTOR Reduction (vph)	0	0	205	0	0	0	0	2	0	0	5	0
Lane Group Flow (vph)	328	330	208	0	0	51	173	2228	0	153	2184	0
Confl. Peds. (#/hr)	3		11	11		3	9		9	9		9
Heavy Vehicles (%)	1%	0%	0%	0%	0%	0%	1%	2%	2%	0%	3%	1%
Turn Type	Split	NA	Perm			Free	Prot	NA		Prot	NA	
Protected Phases	8	8					5	2		1	6	
Permitted Phases			8			Free						
Actuated Green, G (s)	34.7	34.7	34.7			160.0	23.1	90.0		17.2	84.1	
Effective Green, g (s)	34.7	34.7	34.7			160.0	23.1	90.0		17.2	84.1	
Actuated g/C Ratio	0.22	0.22	0.22			1.00	0.14	0.56		0.11	0.53	
Clearance Time (s)	6.3	6.3	6.3				5.9	5.9		5.9	5.9	
Vehicle Extension (s)	2.0	2.0	2.0				2.0	3.0		2.0	3.0	
Lane Grp Cap (vph)	358	365	331			1580	251	2765		188	2548	
v/s Ratio Prot	c0.20	0.20					0.10	c0.45		0.09	c0.45	
v/s Ratio Perm			0.14			0.03						
v/c Ratio	0.92	0.90	0.63			0.03	0.69	0.81		0.81	0.86	
Uniform Delay, d1	61.2	61.0	56.8			0.0	65.0	28.0		69.8	32.8	
Progression Factor	1.02	1.02	1.13			1.00	0.53	0.20		1.00	1.00	
Incremental Delay, d2	25.0	22.6	2.4			0.0	4.4	1.9		21.8	4.0	
Delay (s)	87.2	84.6	66.7			0.0	39.0	7.4		91.7	36.7	
Level of Service	F	F	E			A	D	A		F	D	
Approach Delay (s)		78.5			0.0			9.7			40.3	
Approach LOS		E			A			A			D	

Intersection Summary			
HCM 2000 Control Delay	34.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	18.1
Intersection Capacity Utilization	94.0%	ICU Level of Service	F
Analysis Period (min)	15		

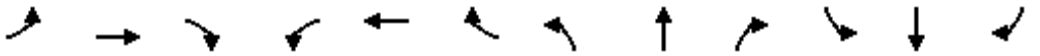
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	470	1415	235	475	2120	0	0	2100	280
Future Volume (vph)	0	0	0	470	1415	235	475	2120	0	0	2100	280
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)				6.4	6.4	6.4	6.5	6.5			6.5	6.5
Lane Util. Factor				0.81	0.81	1.00	0.97	0.91			0.86	0.86
Frpb, ped/bikes				1.00	1.00	0.96	1.00	1.00			1.00	0.96
Flpb, ped/bikes				1.00	1.00	1.00	1.00	1.00			1.00	1.00
Frt				1.00	1.00	0.85	1.00	1.00			1.00	0.85
Flt Protected				0.95	1.00	1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)				1382	5905	1502	3410	4903			4668	1273
Flt Permitted				0.95	1.00	1.00	0.95	1.00			1.00	1.00
Satd. Flow (perm)				1382	5905	1502	3410	4903			4668	1273
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	0	0	0	490	1474	245	495	2208	0	0	2188	292
RTOR Reduction (vph)	0	0	0	0	0	49	0	0	0	0	1	38
Lane Group Flow (vph)	0	0	0	377	1587	196	495	2208	0	0	2216	225
Confl. Peds. (#/hr)	18					18	10		25	25		10
Heavy Vehicles (%)	0%	0%	0%	3%	1%	1%	0%	3%	0%	0%	2%	2%
Turn Type				Perm	NA	Perm	Prot	NA			NA	Perm
Protected Phases					4		5	2			6	
Permitted Phases				4		4						6
Actuated Green, G (s)				45.6	45.6	45.6	23.5	101.5			71.5	71.5
Effective Green, g (s)				45.6	45.6	45.6	23.5	101.5			71.5	71.5
Actuated g/C Ratio				0.29	0.29	0.29	0.15	0.63			0.45	0.45
Clearance Time (s)				6.4	6.4	6.4	6.5	6.5			6.5	6.5
Vehicle Extension (s)				2.9	2.9	2.9	2.0	3.7			3.7	3.7
Lane Grp Cap (vph)				393	1682	428	500	3110			2086	568
v/s Ratio Prot							c0.15	0.45			c0.47	
v/s Ratio Perm				c0.27	0.27	0.13						0.18
v/c Ratio				0.96	0.94	0.46	0.99	0.71			1.06	0.40
Uniform Delay, d1				56.3	55.9	47.1	68.1	19.5			44.2	29.8
Progression Factor				0.60	0.60	0.49	0.91	0.52			0.43	0.14
Incremental Delay, d2				33.5	10.8	0.7	9.8	0.1			34.6	1.1
Delay (s)				67.4	44.5	23.6	72.0	10.2			53.4	5.2
Level of Service				E	D	C	E	B			D	A
Approach Delay (s)		0.0			46.1			21.6			48.3	
Approach LOS		A			D			C			D	

Intersection Summary			
HCM 2000 Control Delay	37.8	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.02		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	19.4
Intersection Capacity Utilization	103.6%	ICU Level of Service	G
Analysis Period (min)	15		

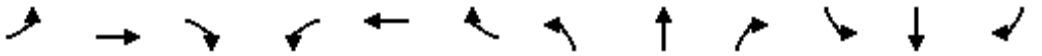
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	620	1885	740	0	0	0	0	1895	400	275	2365	0
Future Volume (vph)	620	1885	740	0	0	0	0	1895	400	275	2365	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	6.3	6.3	6.3					6.3	6.3	6.3	6.3	
Lane Util. Factor	0.86	0.81	0.86					0.91	1.00	0.97	0.91	
Frpb, ped/bikes	1.00	1.00	0.96					1.00	0.89	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00					1.00	1.00	1.00	1.00	
Frt	1.00	0.99	0.85					1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1496	4388	1285					4903	1379	3410	4903	
Flt Permitted	0.95	1.00	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1496	4388	1285					4903	1379	3410	4903	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	667	2027	796	0	0	0	0	2038	430	296	2543	0
RTOR Reduction (vph)	0	1	37	0	0	0	0	0	41	0	0	0
Lane Group Flow (vph)	600	2244	608	0	0	0	0	2038	389	296	2543	0
Confl. Peds. (#/hr)			24	24			10		37	37		10
Heavy Vehicles (%)	1%	1%	1%	0%	0%	0%	0%	3%	1%	0%	3%	0%
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		8						2		1	6	
Permitted Phases	8		8						2			
Actuated Green, G (s)	68.7	68.7	68.7					59.7	59.7	12.7	78.7	
Effective Green, g (s)	68.7	68.7	68.7					59.7	59.7	12.7	78.7	
Actuated g/C Ratio	0.43	0.43	0.43					0.37	0.37	0.08	0.49	
Clearance Time (s)	6.3	6.3	6.3					6.3	6.3	6.3	6.3	
Vehicle Extension (s)	6.0	6.0	6.0					5.0	5.0	2.0	5.0	
Lane Grp Cap (vph)	642	1884	551					1829	514	270	2411	
v/s Ratio Prot								0.42		0.09	c0.52	
v/s Ratio Perm	0.40	0.51	0.47						0.28			
v/c Ratio	0.93	1.19	1.10					1.11	0.76	1.10	1.05	
Uniform Delay, d1	43.5	45.6	45.6					50.1	43.8	73.7	40.6	
Progression Factor	0.70	0.70	0.66					0.57	0.52	0.60	0.26	
Incremental Delay, d2	3.1	86.6	49.4					56.5	6.0	58.0	27.9	
Delay (s)	33.5	118.5	79.5					84.9	28.6	101.8	38.6	
Level of Service	C	F	E					F	C	F	D	
Approach Delay (s)		96.6			0.0			75.1			45.2	
Approach LOS		F			A			E			D	

Intersection Summary			
HCM 2000 Control Delay	74.0	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.17		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	18.9
Intersection Capacity Utilization	103.6%	ICU Level of Service	G
Analysis Period (min)	15		

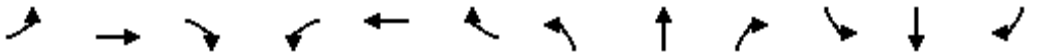
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	300	660	480	455	625	245	240	1660	350	250	2310	45
Future Volume (vph)	300	660	480	455	625	245	240	1660	350	250	2310	45
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	7.1	7.1	7.1	7.1	7.1	7.1	8.0	8.0	8.0	8.0	8.0	8.0
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.91	1.00	0.97	0.91	1.00
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00	0.98	1.00	1.00	0.98	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3376	3480	1537	3376	3446	1532	3376	4951	1549	3410	4903	1572
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3376	3480	1537	3376	3446	1532	3376	4951	1549	3410	4903	1572
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	323	710	516	489	672	263	258	1785	376	269	2484	48
RTOR Reduction (vph)	0	0	160	0	0	159	0	0	142	0	0	26
Lane Group Flow (vph)	323	710	356	489	672	104	258	1785	234	269	2484	22
Confl. Peds. (#/hr)	2		6	6		2			2	2		
Heavy Vehicles (%)	1%	1%	0%	1%	2%	1%	1%	2%	0%	0%	3%	0%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	3	8		7	4		5	2		1	6	
Permitted Phases			8			4			2			6
Actuated Green, G (s)	15.9	26.9	26.9	18.9	29.9	29.9	10.0	67.0	67.0	17.0	74.0	74.0
Effective Green, g (s)	15.9	26.9	26.9	18.9	29.9	29.9	10.0	67.0	67.0	17.0	74.0	74.0
Actuated g/C Ratio	0.10	0.17	0.17	0.12	0.19	0.19	0.06	0.42	0.42	0.11	0.46	0.46
Clearance Time (s)	7.1	7.1	7.1	7.1	7.1	7.1	8.0	8.0	8.0	8.0	8.0	8.0
Vehicle Extension (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	5.0	5.0	2.0	5.0	5.0
Lane Grp Cap (vph)	335	585	258	398	643	286	211	2073	648	362	2267	727
v/s Ratio Prot	0.10	0.20		c0.14	c0.20		0.08	c0.36		0.08	c0.51	
v/s Ratio Perm			c0.23			0.07			0.15			0.01
v/c Ratio	0.96	1.21	1.38	1.23	1.05	0.37	1.22	0.86	0.36	0.74	1.10	0.03
Uniform Delay, d1	71.8	66.5	66.5	70.5	65.0	56.8	75.0	42.3	31.8	69.4	43.0	23.4
Progression Factor	1.33	0.93	0.87	1.07	1.09	1.76	0.93	1.07	1.18	0.99	0.97	1.00
Incremental Delay, d2	31.7	107.1	187.6	121.0	45.6	0.3	134.9	5.0	1.6	0.7	43.9	0.0
Delay (s)	126.8	169.1	245.6	196.4	116.6	100.3	204.9	50.1	39.1	69.3	85.8	23.5
Level of Service	F	F	F	F	F	F	F	D	D	E	F	C
Approach Delay (s)		185.8			141.0			64.9			83.1	
Approach LOS		F			F			E			F	

Intersection Summary			
HCM 2000 Control Delay	107.2	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.20		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	30.2
Intersection Capacity Utilization	110.6%	ICU Level of Service	H
Analysis Period (min)	15		

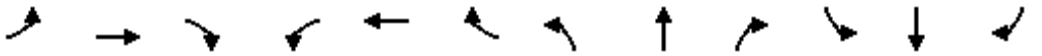
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	60	1085	120	135	725	145	275	185	250	155	395	75
Future Volume (vph)	60	1085	120	135	725	145	275	185	250	155	395	75
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	0.99		1.00	0.99	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.99		1.00	0.98		1.00	0.91		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1706	3415		1723	3382		1756	3149		1721	3328	
Flt Permitted	0.25	1.00		0.09	1.00		0.15	1.00		0.49	1.00	
Satd. Flow (perm)	456	3415		159	3382		275	3149		892	3328	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	62	1119	124	139	747	149	284	191	258	160	407	77
RTOR Reduction (vph)	0	5	0	0	10	0	0	134	0	0	10	0
Lane Group Flow (vph)	62	1238	0	139	886	0	284	315	0	160	474	0
Confl. Peds. (#/hr)			8	8			13		3	3		13
Heavy Vehicles (%)	3%	1%	2%	2%	1%	3%	0%	1%	1%	2%	3%	0%
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases	6			2			4			8		
Actuated Green, G (s)	78.5	74.3		91.5	81.3		56.5	39.0		37.6	26.1	
Effective Green, g (s)	78.5	74.3		91.5	81.3		56.5	39.0		37.6	26.1	
Actuated g/C Ratio	0.49	0.46		0.57	0.51		0.35	0.24		0.24	0.16	
Clearance Time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	
Vehicle Extension (s)	1.0	5.5		1.0	5.5		1.0	2.0		1.0	2.0	
Lane Grp Cap (vph)	256	1585		200	1718		322	767		269	542	
v/s Ratio Prot	0.01	c0.36		c0.05	0.26		c0.13	0.10		0.04	0.14	
v/s Ratio Perm	0.11			0.35			c0.18			0.10		
v/c Ratio	0.24	0.78		0.69	0.52		0.88	0.41		0.59	0.87	
Uniform Delay, d1	22.3	36.0		27.3	26.2		43.0	50.8		51.7	65.4	
Progression Factor	1.00	1.00		2.85	0.11		1.28	1.68		1.13	1.07	
Incremental Delay, d2	0.2	3.9		2.2	0.3		17.2	0.1		1.9	11.8	
Delay (s)	22.5	39.9		80.0	3.2		72.4	85.7		60.1	82.1	
Level of Service	C	D		E	A		E	F		E	F	
Approach Delay (s)		39.1			13.5			80.5			76.6	
Approach LOS		D			B			F			E	

Intersection Summary			
HCM 2000 Control Delay	46.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	24.0
Intersection Capacity Utilization	95.1%	ICU Level of Service	F
Analysis Period (min)	15		

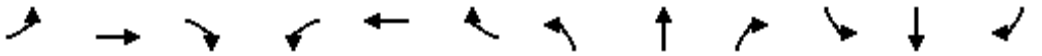
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	310	675	125	565	1140	260	150	1405	260	580	2060	380
Future Volume (vph)	310	675	125	565	1140	260	150	1405	260	580	2060	380
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.91	1.00	0.97	0.91	1.00
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00	0.98	1.00	1.00	0.97	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3343	3480	1510	3343	3480	1500	3410	4856	1516	3376	4903	1534
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3343	3480	1510	3343	3480	1500	3410	4856	1516	3376	4903	1534
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	330	718	133	601	1213	277	160	1495	277	617	2191	404
RTOR Reduction (vph)	0	0	98	0	0	182	0	0	162	0	0	147
Lane Group Flow (vph)	330	718	35	601	1213	95	160	1495	115	617	2191	257
Confl. Peds. (#/hr)	3		5	5		3	2		11	11		2
Heavy Vehicles (%)	2%	1%	2%	2%	1%	3%	0%	4%	1%	1%	3%	1%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases			6			2			4			8
Actuated Green, G (s)	13.6	41.6	41.6	26.6	54.6	54.6	7.6	37.6	37.6	24.6	54.6	54.6
Effective Green, g (s)	13.6	41.6	41.6	26.6	54.6	54.6	7.6	37.6	37.6	24.6	54.6	54.6
Actuated g/C Ratio	0.08	0.26	0.26	0.17	0.34	0.34	0.05	0.24	0.24	0.15	0.34	0.34
Clearance Time (s)	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4
Vehicle Extension (s)	2.0	5.0	5.0	2.0	5.0	5.0	2.0	5.0	5.0	2.0	5.0	5.0
Lane Grp Cap (vph)	284	904	392	555	1187	511	161	1141	356	519	1673	523
v/s Ratio Prot	c0.10	0.21		0.18	c0.35		0.05	c0.31		0.18	c0.45	
v/s Ratio Perm			0.02			0.06			0.08			0.17
v/c Ratio	1.16	0.79	0.09	1.08	1.02	0.18	0.99	1.31	0.32	1.19	1.31	0.49
Uniform Delay, d1	73.2	55.2	44.8	66.7	52.7	37.1	76.2	61.2	50.7	67.7	52.7	41.7
Progression Factor	1.00	1.00	1.00	0.81	0.76	0.85	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	104.6	7.1	0.4	56.2	27.1	0.5	68.7	146.0	1.1	103.0	143.7	1.5
Delay (s)	177.8	62.3	45.3	110.2	67.0	32.0	144.9	207.2	51.8	170.7	196.4	43.2
Level of Service	F	E	D	F	E	C	F	F	D	F	F	D
Approach Delay (s)		92.7			74.8			179.7			172.2	
Approach LOS		F			E			F			F	

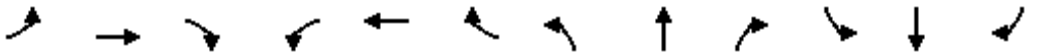
Intersection Summary			
HCM 2000 Control Delay	138.6	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.22		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	29.6
Intersection Capacity Utilization	112.8%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	100	1215	315	390	1440	115	225	505	890	330	510	125
Future Volume (vph)	100	1215	315	390	1440	115	225	505	890	330	510	125
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	6.5	6.5	6.5	6.5	6.5	6.5	6.8	6.8	6.5	6.8	6.8	6.8
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	1.00	0.95	0.88	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00	0.99	1.00	1.00	0.97	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3310	3480	1526	3343	3480	1520	1740	3466	2664	1758	3432	1527
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3310	3480	1526	3343	3480	1520	1740	3466	2664	1758	3432	1527
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	105	1279	332	411	1516	121	237	532	937	347	537	132
RTOR Reduction (vph)	0	0	211	0	0	69	0	0	50	0	0	102
Lane Group Flow (vph)	105	1279	121	411	1516	52	237	532	887	347	537	30
Confl. Peds. (#/hr)	1		5	5		1	5		10	10		5
Heavy Vehicles (%)	3%	1%	1%	2%	1%	2%	1%	1%	1%	0%	2%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	2	0	0	2	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4	5	3	8	
Permitted Phases			6			2			4			8
Actuated Green, G (s)	5.5	56.5	56.5	17.5	68.5	68.5	23.1	28.0	45.5	31.4	36.3	36.3
Effective Green, g (s)	5.5	56.5	56.5	17.5	68.5	68.5	23.1	28.0	45.5	31.4	36.3	36.3
Actuated g/C Ratio	0.03	0.35	0.35	0.11	0.43	0.43	0.14	0.18	0.28	0.20	0.23	0.23
Clearance Time (s)	6.5	6.5	6.5	6.5	6.5	6.5	6.8	6.8	6.5	6.8	6.8	6.8
Vehicle Extension (s)	2.0	5.0	5.0	3.0	5.0	5.0	1.0	2.0	3.0	2.0	2.0	2.0
Lane Grp Cap (vph)	113	1228	538	365	1489	650	251	606	757	345	778	346
v/s Ratio Prot	0.03	0.37		0.12	c0.44		0.14	0.15	c0.13	c0.20	c0.16	
v/s Ratio Perm			0.08			0.03			0.20			0.02
v/c Ratio	0.93	1.04	0.23	1.13	1.02	0.08	0.94	0.88	1.17	1.01	0.69	0.09
Uniform Delay, d1	77.1	51.8	36.4	71.2	45.8	27.1	67.8	64.3	57.2	64.3	56.7	48.8
Progression Factor	1.11	0.92	1.95	1.22	0.81	1.53	1.00	1.00	1.00	0.77	0.76	0.55
Incremental Delay, d2	58.5	36.2	0.9	78.3	23.8	0.2	41.1	13.2	91.0	47.0	1.9	0.0
Delay (s)	144.3	84.0	72.0	165.4	60.7	41.6	108.9	77.5	148.2	96.2	44.7	27.0
Level of Service	F	F	E	F	E	D	F	E	F	F	D	C
Approach Delay (s)		85.3			80.6			120.7			60.0	
Approach LOS		F			F			F			E	

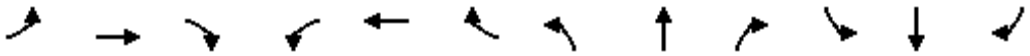
Intersection Summary			
HCM 2000 Control Delay	89.2	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.10		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	26.6
Intersection Capacity Utilization	104.5%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	2220	370	485	1870	0	0	0	0	185	25	105
Future Volume (vph)	0	2220	370	485	1870	0	0	0	0	185	25	105
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)		5.8	5.8	5.8	5.8						5.9	5.9
Lane Util. Factor		0.91	1.00	1.00	0.95						1.00	1.00
Frpb, ped/bikes		1.00	1.00	1.00	1.00						1.00	0.98
Flpb, ped/bikes		1.00	1.00	1.00	1.00						1.00	1.00
Frt		1.00	0.85	1.00	1.00						1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00						0.96	1.00
Satd. Flow (prot)		5000	1557	1723	3446						1705	1475
Flt Permitted		1.00	1.00	0.95	1.00						0.96	1.00
Satd. Flow (perm)		5000	1557	1723	3446						1705	1475
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	2362	394	516	1989	0	0	0	0	197	27	112
RTOR Reduction (vph)	0	0	131	0	0	0	0	0	0	0	0	50
Lane Group Flow (vph)	0	2362	263	516	1989	0	0	0	0	0	224	62
Confl. Peds. (#/hr)	10					10	2					2
Heavy Vehicles (%)	0%	1%	1%	2%	2%	0%	0%	0%	0%	3%	11%	5%
Turn Type		NA	Perm	Prot	NA					Perm	NA	Perm
Protected Phases		6		5	2						8	
Permitted Phases			6							8		8
Actuated Green, G (s)		68.2	68.2	50.3	124.3						24.0	24.0
Effective Green, g (s)		68.2	68.2	50.3	124.3						24.0	24.0
Actuated g/C Ratio		0.43	0.43	0.31	0.78						0.15	0.15
Clearance Time (s)		5.8	5.8	5.8	5.8						5.9	5.9
Vehicle Extension (s)		3.8	3.8	3.0	3.4						1.5	1.5
Lane Grp Cap (vph)		2131	663	541	2677						255	221
v/s Ratio Prot		c0.47		c0.30	0.58							
v/s Ratio Perm			0.17								0.13	0.04
v/c Ratio		1.11	0.40	0.95	0.74						0.88	0.28
Uniform Delay, d1		45.9	31.7	53.7	9.4						66.6	60.3
Progression Factor		0.80	0.68	1.28	0.46						0.94	0.89
Incremental Delay, d2		49.5	0.2	20.5	1.2						3.3	0.0
Delay (s)		86.3	21.6	89.4	5.5						66.2	53.9
Level of Service		F	C	F	A						E	D
Approach Delay (s)		77.0			22.8			0.0			62.1	
Approach LOS		E			C			A			E	

Intersection Summary			
HCM 2000 Control Delay	51.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.01		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	17.5
Intersection Capacity Utilization	98.8%	ICU Level of Service	F
Analysis Period (min)	15		

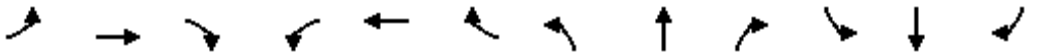
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	270	2135	0	0	2155	265	200	30	320	0	0	0
Future Volume (vph)	270	2135	0	0	2155	265	200	30	320	0	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	5.6	5.6			5.6	5.6	5.9	5.9	5.9			
Lane Util. Factor	1.00	0.95			0.91	1.00	0.95	0.95	1.00			
Frpb, ped/bikes	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Flpb, ped/bikes	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.96	1.00			
Satd. Flow (prot)	1690	3480			4951	1557	1637	1670	1542			
Flt Permitted	0.95	1.00			1.00	1.00	0.95	0.96	1.00			
Satd. Flow (perm)	1690	3480			4951	1557	1637	1670	1542			
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	284	2247	0	0	2268	279	211	32	337	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	118	0	0	238	0	0	0
Lane Group Flow (vph)	284	2247	0	0	2268	161	120	123	99	0	0	0
Confl. Peds. (#/hr)			7	7								
Heavy Vehicles (%)	4%	1%	0%	0%	2%	1%	2%	0%	2%	0%	0%	0%
Turn Type	Prot	NA			NA	Perm	Perm	NA	custom			
Protected Phases	1	6			2			4				
Permitted Phases						2	4		7 5			
Actuated Green, G (s)	34.5	123.4			92.1	92.1	16.3	16.3	28.0			
Effective Green, g (s)	34.5	123.4			92.1	92.1	16.3	16.3	28.0			
Actuated g/C Ratio	0.22	0.77			0.58	0.58	0.10	0.10	0.18			
Clearance Time (s)	5.6	5.6			5.6	5.6	5.9	5.9				
Vehicle Extension (s)	1.5	3.3			3.6	3.6	2.0	2.0				
Lane Grp Cap (vph)	364	2683			2849	896	166	170	269			
v/s Ratio Prot	0.17	c0.65			c0.46							
v/s Ratio Perm						0.10	0.07	0.07	0.06			
v/c Ratio	0.78	0.84			0.80	0.18	0.72	0.72	0.37			
Uniform Delay, d1	59.2	11.8			26.6	16.1	69.7	69.7	58.2			
Progression Factor	0.66	1.31			0.48	0.19	1.00	1.00	1.00			
Incremental Delay, d2	0.9	0.3			0.2	0.0	12.4	12.1	0.3			
Delay (s)	40.0	15.8			13.1	3.1	82.0	81.8	58.5			
Level of Service	D	B			B	A	F	F	E			
Approach Delay (s)		18.5			12.0			68.3			0.0	
Approach LOS		B			B			E			A	

Intersection Summary			
HCM 2000 Control Delay	20.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	20.1
Intersection Capacity Utilization	98.8%	ICU Level of Service	F
Analysis Period (min)	15		

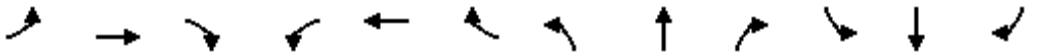
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	35	1775	15	160	60	0	0	45	60
Future Volume (vph)	0	0	0	35	1775	15	160	60	0	0	45	60
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)				5.6	5.6			5.5			5.5	5.5
Lane Util. Factor				1.00	0.86			0.95			1.00	1.00
Frpb, ped/bikes				1.00	1.00			1.00			1.00	0.97
Flpb, ped/bikes				1.00	1.00			0.99			1.00	1.00
Frt				1.00	1.00			1.00			1.00	0.85
Flt Protected				0.95	1.00			0.96			1.00	1.00
Satd. Flow (prot)				1758	6292			3358			1850	1531
Flt Permitted				0.95	1.00			0.75			1.00	1.00
Satd. Flow (perm)				1758	6292			2617			1850	1531
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	37	1868	16	168	63	0	0	47	63
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	21
Lane Group Flow (vph)	0	0	0	37	1884	0	0	231	0	0	47	42
Confl. Peds. (#/hr)	5					5	6					6
Heavy Vehicles (%)	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%
Turn Type				Perm	NA		Perm	NA			NA	Perm
Protected Phases					2			4			8	
Permitted Phases				2			4					8
Actuated Green, G (s)				128.8	128.8			20.1			20.1	20.1
Effective Green, g (s)				128.8	128.8			20.1			20.1	20.1
Actuated g/C Ratio				0.81	0.81			0.13			0.13	0.13
Clearance Time (s)				5.6	5.6			5.5			5.5	5.5
Vehicle Extension (s)				2.5	2.5			2.0			2.8	2.8
Lane Grp Cap (vph)				1415	5065			328			232	192
v/s Ratio Prot					c0.30						0.03	
v/s Ratio Perm				0.02				c0.09				0.03
v/c Ratio				0.03	0.37			1.01dl			0.20	0.22
Uniform Delay, d1				3.1	4.3			67.1			62.8	62.9
Progression Factor				0.20	0.25			0.56			0.89	0.86
Incremental Delay, d2				0.0	0.1			5.0			0.2	0.3
Delay (s)				0.7	1.2			42.3			56.1	54.2
Level of Service				A	A			D			E	D
Approach Delay (s)		0.0			1.2			42.3			55.0	
Approach LOS		A			A			D			E	

Intersection Summary			
HCM 2000 Control Delay	8.0	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.42		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	11.1
Intersection Capacity Utilization	70.8%	ICU Level of Service	C
Analysis Period (min)	15		

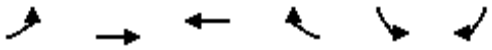
dl Defacto Left Lane. Recode with 1 though lane as a left lane.
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	95	2085	405	0	0	0	0	165	75	40	50	0
Future Volume (vph)	95	2085	405	0	0	0	0	165	75	40	50	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)		5.8	5.8					5.7		5.7	5.7	
Lane Util. Factor		0.91	1.00					0.95		1.00	1.00	
Frpb, ped/bikes		1.00	0.95					1.00		1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00		1.00	1.00	
Frt		1.00	0.85					0.95		1.00	1.00	
Flt Protected		1.00	1.00					1.00		0.95	1.00	
Satd. Flow (prot)		5040	1498					3349		1758	1850	
Flt Permitted		1.00	1.00					1.00		0.41	1.00	
Satd. Flow (perm)		5040	1498					3349		749	1850	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	102	2242	435	0	0	0	0	177	81	43	54	0
RTOR Reduction (vph)	0	0	82	0	0	0	0	15	0	0	0	0
Lane Group Flow (vph)	0	2344	353	0	0	0	0	243	0	43	54	0
Confl. Peds. (#/hr)			9	9			15					15
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Perm	NA	Perm					NA		Perm	NA	
Protected Phases		6						4			8	
Permitted Phases	6		6							8		
Actuated Green, G (s)		130.0	130.0					18.5		18.5	18.5	
Effective Green, g (s)		130.0	130.0					18.5		18.5	18.5	
Actuated g/C Ratio		0.81	0.81					0.12		0.12	0.12	
Clearance Time (s)		5.8	5.8					5.7		5.7	5.7	
Vehicle Extension (s)		2.0	2.0					2.0		2.0	2.0	
Lane Grp Cap (vph)		4095	1217					387		86	213	
v/s Ratio Prot								c0.07			0.03	
v/s Ratio Perm		0.47	0.24							0.06		
v/c Ratio		0.57	0.29					0.63		0.50	0.25	
Uniform Delay, d1		5.3	3.7					67.5		66.4	64.5	
Progression Factor		0.24	0.01					0.92		0.70	0.64	
Incremental Delay, d2		0.1	0.1					2.2		1.7	0.2	
Delay (s)		1.3	0.1					64.0		47.9	41.7	
Level of Service		A	A					E		D	D	
Approach Delay (s)		1.1			0.0			64.0			44.4	
Approach LOS		A			A			E			D	

Intersection Summary			
HCM 2000 Control Delay	7.6	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	11.5
Intersection Capacity Utilization	87.1%	ICU Level of Service	E
Analysis Period (min)	15		

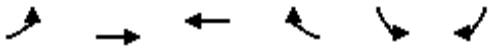
c Critical Lane Group



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	125	1055	990	55	220	280
Future Volume (vph)	125	1055	990	55	220	280
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850
Total Lost time (s)	5.5	5.5	5.5		5.5	5.5
Lane Util. Factor	1.00	0.95	0.95		1.00	1.00
Frpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Frt	1.00	1.00	0.99		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1758	3480	3446		1758	1572
Flt Permitted	0.19	1.00	1.00		0.95	1.00
Satd. Flow (perm)	355	3480	3446		1758	1572
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	137	1159	1088	60	242	308
RTOR Reduction (vph)	0	0	1	0	0	257
Lane Group Flow (vph)	137	1159	1147	0	242	51
Confl. Peds. (#/hr)	3			3		
Heavy Vehicles (%)	0%	1%	1%	2%	0%	0%
Turn Type	pm+pt	NA	NA		Prot	Perm
Protected Phases	1	6	2		3	
Permitted Phases	6					7
Actuated Green, G (s)	122.7	122.7	109.3		26.3	26.3
Effective Green, g (s)	122.7	122.7	109.3		26.3	26.3
Actuated g/C Ratio	0.77	0.77	0.68		0.16	0.16
Clearance Time (s)	5.5	5.5	5.5		5.5	5.5
Vehicle Extension (s)	1.0	6.2	6.2		2.0	2.0
Lane Grp Cap (vph)	341	2668	2354		288	258
v/s Ratio Prot	0.02	c0.33	c0.33		c0.14	
v/s Ratio Perm	0.29					0.03
v/c Ratio	0.40	0.43	0.49		0.84	0.20
Uniform Delay, d1	7.6	6.5	12.0		64.8	57.7
Progression Factor	1.58	0.46	0.36		0.90	0.65
Incremental Delay, d2	0.1	0.2	0.1		18.2	0.1
Delay (s)	12.2	3.2	4.4		76.3	37.9
Level of Service	B	A	A		E	D
Approach Delay (s)		4.2	4.4		54.8	
Approach LOS		A	A		D	

Intersection Summary			
HCM 2000 Control Delay	13.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	19.5
Intersection Capacity Utilization	63.3%	ICU Level of Service	B
Analysis Period (min)	15		

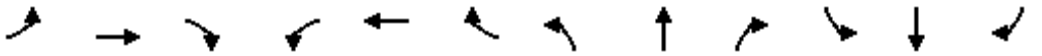
c Critical Lane Group



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	230	1280	1640	135	250	285
Future Volume (vph)	230	1280	1640	135	250	285
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850
Total Lost time (s)	6.3	6.3	6.3	6.3	6.3	6.3
Lane Util. Factor	1.00	0.95	0.95	1.00	0.97	1.00
Frpb, ped/bikes	1.00	1.00	1.00	0.98	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1758	3480	3480	1545	3343	1561
Flt Permitted	0.08	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	148	3480	3480	1545	3343	1561
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	240	1333	1708	141	260	297
RTOR Reduction (vph)	0	0	0	38	0	9
Lane Group Flow (vph)	240	1333	1708	103	260	288
Confl. Peds. (#/hr)	3			3		2
Heavy Vehicles (%)	0%	1%	1%	0%	2%	0%
Turn Type	pm+pt	NA	NA	Perm	Prot	pm+ov
Protected Phases	1	6	2		3	1
Permitted Phases	6			2		3
Actuated Green, G (s)	129.6	129.6	105.6	105.6	17.8	35.5
Effective Green, g (s)	129.6	129.6	105.6	105.6	17.8	35.5
Actuated g/C Ratio	0.81	0.81	0.66	0.66	0.11	0.22
Clearance Time (s)	6.3	6.3	6.3	6.3	6.3	6.3
Vehicle Extension (s)	3.0	4.0	4.0	4.0	3.0	3.0
Lane Grp Cap (vph)	297	2818	2296	1019	371	407
v/s Ratio Prot	0.09	0.38	0.49		0.08	c0.08
v/s Ratio Perm	c0.56			0.07		0.11
v/c Ratio	0.81	0.47	0.74	0.10	0.70	0.71
Uniform Delay, d1	37.7	4.7	18.2	9.9	68.5	57.4
Progression Factor	1.20	0.28	0.17	0.00	1.00	1.00
Incremental Delay, d2	6.7	0.2	0.7	0.1	5.9	5.5
Delay (s)	51.9	1.6	3.8	0.1	74.4	63.0
Level of Service	D	A	A	A	E	E
Approach Delay (s)		9.2	3.5		68.3	
Approach LOS		A	A		E	

Intersection Summary			
HCM 2000 Control Delay	14.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	18.9
Intersection Capacity Utilization	82.7%	ICU Level of Service	E
Analysis Period (min)	15		

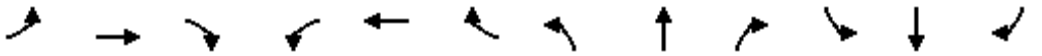
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	580	180	160	385	0	0	0	0	180	2390	165
Future Volume (vph)	0	580	180	160	385	0	0	0	0	180	2390	165
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)		5.4		5.4	5.4						5.8	5.8
Lane Util. Factor		0.95		1.00	0.95						0.91	1.00
Frpb, ped/bikes		1.00		1.00	1.00						1.00	0.98
Flpb, ped/bikes		1.00		1.00	1.00						1.00	1.00
Frt		0.96		1.00	1.00						1.00	0.85
Flt Protected		1.00		0.95	1.00						1.00	1.00
Satd. Flow (prot)		3318		1757	3480						4939	1535
Flt Permitted		1.00		0.16	1.00						1.00	1.00
Satd. Flow (perm)		3318		300	3480						4939	1535
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	0	592	184	163	393	0	0	0	0	184	2439	168
RTOR Reduction (vph)	0	37	0	0	0	0	0	0	0	0	0	97
Lane Group Flow (vph)	0	739	0	163	393	0	0	0	0	0	2623	71
Confl. Peds. (#/hr)	15		4	4		15	12		5	5		12
Heavy Vehicles (%)	0%	2%	1%	0%	1%	0%	0%	0%	0%	0%	2%	0%
Turn Type		NA		pm+pt	NA					Perm	NA	Perm
Protected Phases		8		7	4						6	
Permitted Phases				4						6		6
Actuated Green, G (s)		19.3		35.1	35.1						33.7	33.7
Effective Green, g (s)		19.3		35.1	35.1						33.7	33.7
Actuated g/C Ratio		0.24		0.44	0.44						0.42	0.42
Clearance Time (s)		5.4		5.4	5.4						5.8	5.8
Vehicle Extension (s)		2.0		1.5	2.0						2.5	2.5
Lane Grp Cap (vph)		800		321	1526						2080	646
v/s Ratio Prot		c0.22		c0.07	0.11							
v/s Ratio Perm				0.16							0.53	0.05
v/c Ratio		0.92		0.51	0.26						1.26	0.11
Uniform Delay, d1		29.6		16.2	14.2						23.1	14.0
Progression Factor		1.00		0.80	0.81						1.00	1.00
Incremental Delay, d2		15.9		0.4	0.0						121.5	0.3
Delay (s)		45.5		13.3	11.5						144.7	14.4
Level of Service		D		B	B						F	B
Approach Delay (s)		45.5			12.0			0.0			136.8	
Approach LOS		D			B			A			F	

Intersection Summary			
HCM 2000 Control Delay	102.8	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.04		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	16.6
Intersection Capacity Utilization	96.6%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	130	605	0	0	345	125	220	1850	250	0	0	0
Future Volume (vph)	130	605	0	0	345	125	220	1850	250	0	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	5.7	5.7			5.7			5.8	5.8			
Lane Util. Factor	1.00	0.95			0.95			0.91	1.00			
Frpb, ped/bikes	1.00	1.00			1.00			1.00	0.98			
Flpb, ped/bikes	1.00	1.00			1.00			1.00	1.00			
Frt	1.00	1.00			0.96			1.00	0.85			
Flt Protected	0.95	1.00			1.00			0.99	1.00			
Satd. Flow (prot)	1739	3480			3350			4930	1532			
Flt Permitted	0.21	1.00			1.00			0.99	1.00			
Satd. Flow (perm)	392	3480			3350			4930	1532			
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	140	651	0	0	371	134	237	1989	269	0	0	0
RTOR Reduction (vph)	0	0	0	0	54	0	0	0	91	0	0	0
Lane Group Flow (vph)	140	651	0	0	451	0	0	2226	178	0	0	0
Confl. Peds. (#/hr)	6		4	4		6			4	4		
Heavy Vehicles (%)	1%	1%	0%	0%	0%	1%	1%	2%	1%	0%	0%	0%
Turn Type	pm+pt	NA			NA		Perm	NA	Perm			
Protected Phases	3	8			4			2				
Permitted Phases	8						2		2			
Actuated Green, G (s)	28.9	28.9			15.1			39.6	39.6			
Effective Green, g (s)	28.9	28.9			15.1			39.6	39.6			
Actuated g/C Ratio	0.36	0.36			0.19			0.50	0.50			
Clearance Time (s)	5.7	5.7			5.7			5.8	5.8			
Vehicle Extension (s)	1.0	2.0			2.0			2.5	2.5			
Lane Grp Cap (vph)	277	1257			632			2440	758			
v/s Ratio Prot	0.05	c0.19			c0.13							
v/s Ratio Perm	0.13							0.45	0.12			
v/c Ratio	0.51	0.52			0.71			0.91	0.23			
Uniform Delay, d1	18.7	20.1			30.4			18.6	11.5			
Progression Factor	0.52	0.55			0.63			0.48	0.08			
Incremental Delay, d2	0.1	0.0			3.2			3.0	0.3			
Delay (s)	9.8	11.0			22.3			12.0	1.2			
Level of Service	A	B			C			B	A			
Approach Delay (s)		10.8			22.3			10.8			0.0	
Approach LOS		B			C			B			A	

Intersection Summary			
HCM 2000 Control Delay	12.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	17.2
Intersection Capacity Utilization	96.6%	ICU Level of Service	F
Analysis Period (min)	15		

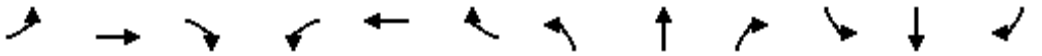
c Critical Lane Group



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	885	75	55	330	110	250
Future Volume (vph)	885	75	55	330	110	250
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850
Total Lost time (s)	5.5			5.5	5.3	5.3
Lane Util. Factor	0.95			0.95	1.00	1.00
Frpb, ped/bikes	1.00			1.00	1.00	0.99
Flpb, ped/bikes	1.00			1.00	1.00	1.00
Frt	0.99			1.00	1.00	0.85
Flt Protected	1.00			0.99	0.95	1.00
Satd. Flow (prot)	3468			3490	1723	1550
Flt Permitted	1.00			0.73	0.95	1.00
Satd. Flow (perm)	3468			2556	1723	1550
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	1006	85	62	375	125	284
RTOR Reduction (vph)	4	0	0	0	0	246
Lane Group Flow (vph)	1087	0	0	438	125	38
Confl. Peds. (#/hr)		1	1			1
Heavy Vehicles (%)	0%	0%	0%	0%	2%	0%
Turn Type	NA		Perm	NA	Prot	Perm
Protected Phases	6			2	7	
Permitted Phases			2			3
Actuated Green, G (s)	58.4			58.4	10.8	10.8
Effective Green, g (s)	58.4			58.4	10.8	10.8
Actuated g/C Ratio	0.73			0.73	0.14	0.14
Clearance Time (s)	5.5			5.5	5.3	5.3
Vehicle Extension (s)	2.0			2.0	2.0	0.2
Lane Grp Cap (vph)	2531			1865	232	209
v/s Ratio Prot	c0.31				c0.07	
v/s Ratio Perm				0.17		0.02
v/c Ratio	0.43			0.23	0.54	0.18
Uniform Delay, d1	4.2			3.5	32.3	30.7
Progression Factor	0.51			0.55	1.24	5.30
Incremental Delay, d2	0.5			0.2	1.2	0.2
Delay (s)	2.7			2.2	41.3	162.7
Level of Service	A			A	D	F
Approach Delay (s)	2.7			2.2	125.6	
Approach LOS	A			A	F	

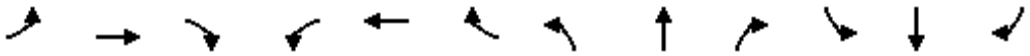
Intersection Summary			
HCM 2000 Control Delay	28.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	16.1
Intersection Capacity Utilization	58.8%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group



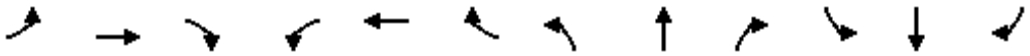
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	595	2065	0	0	0	0	0	2405	340
Future Volume (vph)	0	0	0	595	2065	0	0	0	0	0	2405	340
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)				5.8	5.8						5.8	5.8
Lane Util. Factor				0.81	0.81						0.86	0.86
Frpb, ped/bikes				1.00	1.00						1.00	0.98
Flpb, ped/bikes				1.00	1.00						1.00	1.00
Frt				1.00	1.00						1.00	0.85
Flt Protected				0.95	1.00						1.00	1.00
Satd. Flow (prot)				1417	5924						4669	1320
Flt Permitted				0.95	1.00						1.00	1.00
Satd. Flow (perm)				1417	5924						4669	1320
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	0	0	0	620	2151	0	0	0	0	0	2505	354
RTOR Reduction (vph)	0	0	0	24	24	0	0	0	0	0	0	20
Lane Group Flow (vph)	0	0	0	509	2214	0	0	0	0	0	2540	299
Confl. Peds. (#/hr)	14		4	4		14	11		5	5		11
Heavy Vehicles (%)	0%	0%	0%	0%	1%	0%	0%	0%	0%	0%	2%	0%
Turn Type				Perm	NA						NA	Perm
Protected Phases					1						2	
Permitted Phases				1								2
Actuated Green, G (s)				30.2	30.2						38.2	38.2
Effective Green, g (s)				30.2	30.2						38.2	38.2
Actuated g/C Ratio				0.38	0.38						0.48	0.48
Clearance Time (s)				5.8	5.8						5.8	5.8
Lane Grp Cap (vph)				534	2236						2229	630
v/s Ratio Prot											c0.54	
v/s Ratio Perm				0.36	0.37							0.23
v/c Ratio				0.95	0.99						1.14	0.47
Uniform Delay, d1				24.2	24.8						20.9	14.1
Progression Factor				0.71	0.71						0.18	0.13
Incremental Delay, d2				13.7	8.8						63.4	0.2
Delay (s)				30.8	26.4						67.2	2.0
Level of Service				C	C						E	A
Approach Delay (s)		0.0			27.3			0.0			59.9	
Approach LOS		A			C			A			E	

Intersection Summary			
HCM 2000 Control Delay	43.8	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.07		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	11.6
Intersection Capacity Utilization	92.1%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	2180	300	525	1985	0	0	0	0
Future Volume (vph)	0	0	0	0	2180	300	525	1985	0	0	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)					6.0	6.0	6.0	6.0				
Lane Util. Factor					0.81	0.81	0.86	0.86				
Frpb, ped/bikes					1.00	0.98	1.00	1.00				
Flpb, ped/bikes					1.00	1.00	1.00	1.00				
Frt					1.00	0.85	1.00	1.00				
Flt Protected					1.00	1.00	0.95	1.00				
Satd. Flow (prot)					5980	1251	1506	4675				
Flt Permitted					1.00	1.00	0.95	1.00				
Satd. Flow (perm)					5980	1251	1506	4675				
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	0	2295	316	553	2089	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	1	25	22	22	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	2326	259	476	2122	0	0	0	0
Confl. Peds. (#/hr)	6		6	6		6	3		6	6		3
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%	0%	0%
Turn Type					NA	Perm	Perm	NA				
Protected Phases					1			2				
Permitted Phases						1	2					
Actuated Green, G (s)					31.0	31.0	37.0	37.0				
Effective Green, g (s)					31.0	31.0	37.0	37.0				
Actuated g/C Ratio					0.39	0.39	0.46	0.46				
Clearance Time (s)					6.0	6.0	6.0	6.0				
Lane Grp Cap (vph)					2317	484	696	2162				
v/s Ratio Prot					c0.39							
v/s Ratio Perm						0.21	0.32	0.45				
v/c Ratio					1.00	0.53	0.68	0.98				
Uniform Delay, d1					24.5	18.9	16.9	21.2				
Progression Factor					0.71	0.51	0.37	0.35				
Incremental Delay, d2					14.9	2.4	0.5	2.9				
Delay (s)					32.2	12.0	6.8	10.4				
Level of Service					C	B	A	B				
Approach Delay (s)		0.0			30.0			9.8			0.0	
Approach LOS		A			C			A			A	

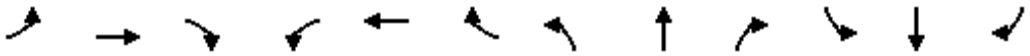
Intersection Summary			
HCM 2000 Control Delay	19.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.99		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	92.1%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	285	2070	45	325	230	0	0	180	50
Future Volume (vph)	0	0	0	285	2070	45	325	230	0	0	180	50
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)					5.4		5.3	5.3			5.3	
Lane Util. Factor					0.86		0.97	1.00			1.00	
Frpb, ped/bikes					1.00		1.00	1.00			1.00	
Flpb, ped/bikes					1.00		1.00	1.00			1.00	
Frt					1.00		1.00	1.00			0.97	
Flt Protected					0.99		0.95	1.00			1.00	
Satd. Flow (prot)					6241		3410	1832			1796	
Flt Permitted					0.99		0.95	1.00			1.00	
Satd. Flow (perm)					6241		3410	1832			1796	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	0	0	303	2202	48	346	245	0	0	191	53
RTOR Reduction (vph)	0	0	0	0	3	0	0	0	0	0	10	0
Lane Group Flow (vph)	0	0	0	0	2550	0	346	245	0	0	234	0
Confl. Peds. (#/hr)	11		6	6		11			8	8		
Heavy Vehicles (%)	0%	0%	0%	0%	1%	3%	0%	1%	0%	0%	0%	0%
Turn Type				Perm	NA		Prot	NA			NA	
Protected Phases					2		7	4			8	
Permitted Phases				2								
Actuated Green, G (s)					39.1		10.9	30.2			14.0	
Effective Green, g (s)					39.1		10.9	30.2			14.0	
Actuated g/C Ratio					0.49		0.14	0.38			0.18	
Clearance Time (s)					5.4		5.3	5.3			5.3	
Vehicle Extension (s)					3.7		1.5	1.5			1.5	
Lane Grp Cap (vph)					3050		464	691			314	
v/s Ratio Prot							c0.10	0.13			c0.13	
v/s Ratio Perm					0.41							
v/c Ratio					0.84		0.75	0.35			0.75	
Uniform Delay, d1					17.7		33.2	17.9			31.3	
Progression Factor					1.09		0.54	0.44			1.12	
Incremental Delay, d2					1.7		5.0	0.1			8.1	
Delay (s)					21.0		22.9	8.0			43.1	
Level of Service					C		C	A			D	
Approach Delay (s)		0.0			21.0			16.7			43.1	
Approach LOS		A			C			B			D	

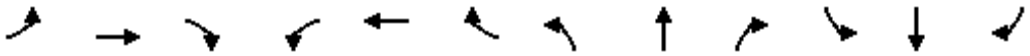
Intersection Summary			
HCM 2000 Control Delay	21.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	100.4%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	2130	235	0	0	0	0	0	0	705	2200	0
Future Volume (vph)	0	2130	235	0	0	0	0	0	0	705	2200	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)		5.9	5.9							5.9	5.9	
Lane Util. Factor		0.81	0.81							0.86	0.86	
Frpb, ped/bikes		1.00	0.97							1.00	1.00	
Flpb, ped/bikes		1.00	1.00							0.99	1.00	
Frt		1.00	0.85							1.00	1.00	
Flt Protected		1.00	1.00							0.95	1.00	
Satd. Flow (prot)		5982	1241							1500	4674	
Flt Permitted		1.00	1.00							0.95	1.00	
Satd. Flow (perm)		5982	1241							1500	4674	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	2242	247	0	0	0	0	0	0	742	2316	0
RTOR Reduction (vph)	0	1	24	0	0	0	0	0	0	21	21	0
Lane Group Flow (vph)	0	2266	198	0	0	0	0	0	0	647	2369	0
Confl. Peds. (#/hr)	14		13	13		14	21		7	7		21
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	0%
Turn Type		NA	Perm							Perm	NA	
Protected Phases		1									2	
Permitted Phases			1							2		
Actuated Green, G (s)		31.1	31.1							37.1	37.1	
Effective Green, g (s)		31.1	31.1							37.1	37.1	
Actuated g/C Ratio		0.39	0.39							0.46	0.46	
Clearance Time (s)		5.9	5.9							5.9	5.9	
Lane Grp Cap (vph)		2325	482							695	2167	
v/s Ratio Prot		c0.38										
v/s Ratio Perm			0.16							0.43	0.51	
v/c Ratio		0.97	0.41							0.93	1.09	
Uniform Delay, d1		24.1	17.8							20.2	21.4	
Progression Factor		1.00	1.00							0.71	0.71	
Incremental Delay, d2		13.6	2.6							2.9	42.7	
Delay (s)		37.7	20.3							17.2	58.0	
Level of Service		D	C							B	E	
Approach Delay (s)		36.1			0.0			0.0			49.1	
Approach LOS		D			A			A			D	

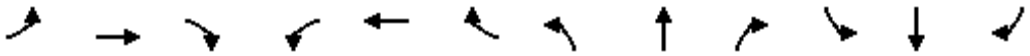
Intersection Summary			
HCM 2000 Control Delay	43.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.04		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	11.8
Intersection Capacity Utilization	92.1%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	395	2515	0	0	0	0	0	2105	605	0	0	0
Future Volume (vph)	395	2515	0	0	0	0	0	2105	605	0	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	5.6	5.6						6.0	6.0			
Lane Util. Factor	0.81	0.81						0.91	0.88			
Frpb, ped/bikes	1.00	1.00						1.00	0.99			
Flpb, ped/bikes	1.00	1.00						1.00	1.00			
Frt	1.00	1.00						1.00	0.85			
Flt Protected	0.95	1.00						1.00	1.00			
Satd. Flow (prot)	1417	5931						4951	2703			
Flt Permitted	0.95	1.00						1.00	1.00			
Satd. Flow (perm)	1417	5931						4951	2703			
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	429	2734	0	0	0	0	0	2288	658	0	0	0
RTOR Reduction (vph)	46	46	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	340	2731	0	0	0	0	0	2288	658	0	0	0
Confl. Peds. (#/hr)	5		17	17		5	1		5	5		1
Heavy Vehicles (%)	0%	1%	0%	0%	0%	0%	0%	2%	1%	0%	0%	0%
Turn Type	Perm	NA						NA	custom			
Protected Phases		8						2				
Permitted Phases	8								5			
Actuated Green, G (s)	35.4	35.4						33.0	80.0			
Effective Green, g (s)	35.4	35.4						33.0	80.0			
Actuated g/C Ratio	0.44	0.44						0.41	1.00			
Clearance Time (s)	5.6	5.6						6.0	6.0			
Vehicle Extension (s)	5.0	5.0						5.0	0.2			
Lane Grp Cap (vph)	627	2624						2042	2703			
v/s Ratio Prot								c0.46				
v/s Ratio Perm	0.24	0.46							0.24			
v/c Ratio	0.54	1.04						1.12	0.24			
Uniform Delay, d1	16.4	22.3						23.5	0.0			
Progression Factor	0.66	0.61						0.81	1.00			
Incremental Delay, d2	1.3	23.7						57.7	0.1			
Delay (s)	12.2	37.3						76.7	0.1			
Level of Service	B	D						E	A			
Approach Delay (s)		34.2			0.0			59.6			0.0	
Approach LOS		C			A			E			A	

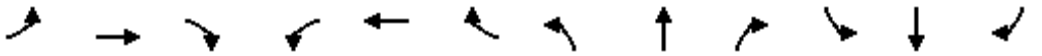
Intersection Summary			
HCM 2000 Control Delay	46.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.69		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	14.6
Intersection Capacity Utilization	86.3%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	160	2845	220	0	0	0	0	490	450	200	330	0
Future Volume (vph)	160	2845	220	0	0	0	0	490	450	200	330	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	5.7	5.7						5.7	5.7	5.7	5.7	
Lane Util. Factor	1.00	0.86						0.95	1.00	1.00	0.95	
Frpb, ped/bikes	1.00	1.00						1.00	1.00	1.00	1.00	
Flpb, ped/bikes	1.00	1.00						1.00	1.00	1.00	1.00	
Frt	1.00	0.99						1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00						1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1721	6224						3501	1557	1758	3501	
Flt Permitted	0.95	1.00						1.00	1.00	0.27	1.00	
Satd. Flow (perm)	1721	6224						3501	1557	503	3501	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	174	3092	239	0	0	0	0	533	489	217	359	0
RTOR Reduction (vph)	0	15	0	0	0	0	0	0	84	0	0	0
Lane Group Flow (vph)	174	3316	0	0	0	0	0	533	405	217	359	0
Confl. Peds. (#/hr)	1		9	9		1	9					9
Heavy Vehicles (%)	2%	1%	1%	0%	0%	0%	0%	0%	1%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	2	0	0	2	0
Turn Type	Perm	NA						NA	Perm	pm+pt	NA	
Protected Phases		6						4		3	8	
Permitted Phases	6								4	8		
Actuated Green, G (s)	36.3	36.3						21.3	21.3	32.3	32.3	
Effective Green, g (s)	36.3	36.3						21.3	21.3	32.3	32.3	
Actuated g/C Ratio	0.45	0.45						0.27	0.27	0.40	0.40	
Clearance Time (s)	5.7	5.7						5.7	5.7	5.7	5.7	
Vehicle Extension (s)	4.8	4.8						1.7	1.7	1.0	1.7	
Lane Grp Cap (vph)	780	2824						932	414	286	1413	
v/s Ratio Prot		c0.53						0.15		c0.05	0.10	
v/s Ratio Perm	0.10								c0.26	0.26		
v/c Ratio	0.22	1.17						0.57	0.98	0.76	0.25	
Uniform Delay, d1	13.3	21.9						25.4	29.1	19.2	15.8	
Progression Factor	0.33	0.29						1.00	1.00	0.64	0.65	
Incremental Delay, d2	0.3	80.5						0.5	37.7	7.7	0.0	
Delay (s)	4.7	86.7						25.9	66.8	20.1	10.4	
Level of Service	A	F						C	E	C	B	
Approach Delay (s)		82.7			0.0			45.5			14.0	
Approach LOS		F			A			D			B	

Intersection Summary			
HCM 2000 Control Delay	67.5	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.08		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	17.1
Intersection Capacity Utilization	100.4%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	795	100	245	625	0	0	0	0	365	2210	155
Future Volume (vph)	0	795	100	245	625	0	0	0	0	365	2210	155
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)		5.5		5.5	5.5					6.0	6.0	6.0
Lane Util. Factor		0.95		1.00	0.95					0.86	0.81	0.86
Frpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	0.98
Flpb, ped/bikes		1.00		1.00	1.00					0.99	1.00	1.00
Frt		0.98		1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00		0.95	1.00					0.95	1.00	1.00
Satd. Flow (prot)		3441		1757	3515					1487	4399	1311
Flt Permitted		1.00		0.15	1.00					0.95	1.00	1.00
Satd. Flow (perm)		3441		285	3515					1487	4399	1311
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	0	874	110	269	687	0	0	0	0	401	2429	170
RTOR Reduction (vph)	0	9	0	0	0	0	0	0	0	0	1	60
Lane Group Flow (vph)	0	975	0	269	687	0	0	0	0	361	2485	93
Confl. Peds. (#/hr)	16		14	14		16	9		6	6		9
Heavy Vehicles (%)	0%	0%	1%	0%	0%	0%	0%	0%	0%	1%	2%	1%
Turn Type		NA		pm+pt	NA					Perm	NA	Perm
Protected Phases		8		7	4						6	
Permitted Phases				4						6		6
Actuated Green, G (s)		20.5		32.5	32.5					36.0	36.0	36.0
Effective Green, g (s)		20.5		32.5	32.5					36.0	36.0	36.0
Actuated g/C Ratio		0.26		0.41	0.41					0.45	0.45	0.45
Clearance Time (s)		5.5		5.5	5.5					6.0	6.0	6.0
Vehicle Extension (s)		2.5		2.0	2.5					6.0	6.0	6.0
Lane Grp Cap (vph)		881		235	1427					669	1979	589
v/s Ratio Prot		0.28		c0.09	0.20							
v/s Ratio Perm				c0.37						0.24	0.56	0.07
v/c Ratio		1.11		1.14	0.48					0.54	1.26	0.16
Uniform Delay, d1		29.8		32.1	17.5					16.0	22.0	13.0
Progression Factor		1.00		0.36	0.25					0.29	0.35	0.01
Incremental Delay, d2		64.0		95.3	0.1					1.4	117.2	0.3
Delay (s)		93.7		106.8	4.5					6.1	124.9	0.3
Level of Service		F		F	A					A	F	A
Approach Delay (s)		93.7			33.3			0.0			104.2	
Approach LOS		F			C			A			F	

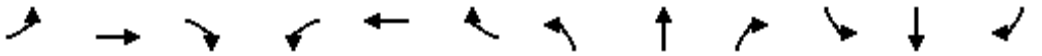
Intersection Summary			
HCM 2000 Control Delay	88.4	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.27		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	93.6%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	265	940	0	0	705	315	145	1950	200	0	0	0
Future Volume (vph)	265	940	0	0	705	315	145	1950	200	0	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	5.7	5.7			5.7	5.7	6.0	6.0	6.0			
Lane Util. Factor	1.00	0.95			0.95	1.00	1.00	0.91	1.00			
Frpb, ped/bikes	1.00	1.00			1.00	0.98	1.00	1.00	0.98			
Flpb, ped/bikes	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1757	3480			3515	1511	1749	4903	1520			
Flt Permitted	0.22	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	399	3480			3515	1511	1749	4903	1520			
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	285	1011	0	0	758	339	156	2097	215	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	87	0	0	65	0	0	0
Lane Group Flow (vph)	285	1011	0	0	758	252	156	2097	150	0	0	0
Confl. Peds. (#/hr)	7		20	20		7	5		13	13		5
Heavy Vehicles (%)	0%	1%	0%	0%	0%	2%	0%	3%	1%	0%	0%	0%
Turn Type	pm+pt	NA			NA	Perm	Perm	NA	Perm			
Protected Phases	3	8			4			2				
Permitted Phases	8					4	2		2			
Actuated Green, G (s)	33.3	33.3			21.3	21.3	35.0	35.0	35.0			
Effective Green, g (s)	33.3	33.3			21.3	21.3	35.0	35.0	35.0			
Actuated g/C Ratio	0.42	0.42			0.27	0.27	0.44	0.44	0.44			
Clearance Time (s)	5.7	5.7			5.7	5.7	6.0	6.0	6.0			
Vehicle Extension (s)	1.0	2.5			2.5	2.5	2.5	2.5	2.5			
Lane Grp Cap (vph)	273	1448			935	402	765	2145	665			
v/s Ratio Prot	c0.08	0.29			0.22			c0.43				
v/s Ratio Perm	c0.35					0.17	0.09		0.10			
v/c Ratio	1.04	0.70			0.81	0.63	0.20	0.98	0.23			
Uniform Delay, d1	28.0	19.2			27.5	25.8	13.9	22.1	14.0			
Progression Factor	0.45	0.34			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	44.4	0.5			7.6	7.2	0.6	14.8	0.8			
Delay (s)	57.0	7.0			35.0	33.0	14.5	36.9	14.8			
Level of Service	E	A			D	C	B	D	B			
Approach Delay (s)		18.0			34.4			33.6			0.0	
Approach LOS		B			C			C			A	

Intersection Summary			
HCM 2000 Control Delay	29.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	1.07		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	17.4
Intersection Capacity Utilization	93.6%	ICU Level of Service	F
Analysis Period (min)	15		

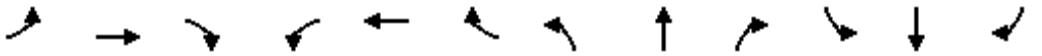
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	210	955	135	55	770	190	180	465	55	150	380	180
Future Volume (vph)	210	955	135	55	770	190	180	465	55	150	380	180
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	5.7	5.7		5.7	5.7		5.7	5.7		5.7	5.7	5.7
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.98		1.00	0.97		1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1757	3410		1723	3374		1752	3421		1756	3480	1532
Flt Permitted	0.13	1.00		0.14	1.00		0.44	1.00		0.28	1.00	1.00
Satd. Flow (perm)	239	3410		253	3374		807	3421		520	3480	1532
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	221	1005	142	58	811	200	189	489	58	158	400	189
RTOR Reduction (vph)	0	12	0	0	24	0	0	12	0	0	0	149
Lane Group Flow (vph)	221	1135	0	58	987	0	189	535	0	158	400	40
Confl. Peds. (#/hr)	3		12	12		3	14		8	8		14
Heavy Vehicles (%)	0%	1%	0%	2%	1%	0%	0%	1%	0%	0%	1%	0%
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases	6			2			4			8		8
Actuated Green, G (s)	36.3	31.0		31.7	28.7		21.8	16.5		21.8	16.5	16.5
Effective Green, g (s)	36.3	31.0		31.7	28.7		21.8	16.5		21.8	16.5	16.5
Actuated g/C Ratio	0.46	0.39		0.40	0.37		0.28	0.21		0.28	0.21	0.21
Clearance Time (s)	5.7	5.7		5.7	5.7		5.7	5.7		5.7	5.7	5.7
Vehicle Extension (s)	1.0	5.0		1.0	5.0		1.0	2.0		1.2	5.0	5.0
Lane Grp Cap (vph)	212	1344		158	1231		287	718		227	730	321
v/s Ratio Prot	c0.07	0.33		0.01	0.29		0.04	c0.16		c0.05	0.11	
v/s Ratio Perm	c0.41			0.13			0.14			0.15		0.03
v/c Ratio	1.04	0.84		0.37	0.80		0.66	0.75		0.70	0.55	0.12
Uniform Delay, d1	17.5	21.6		16.3	22.4		23.7	29.1		23.2	27.7	25.2
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	73.4	5.6		0.5	4.4		4.1	3.7		7.3	1.5	0.4
Delay (s)	90.9	27.2		16.8	26.8		27.8	32.8		30.4	29.2	25.5
Level of Service	F	C		B	C		C	C		C	C	C
Approach Delay (s)		37.5			26.2			31.5			28.5	
Approach LOS		D			C			C			C	

Intersection Summary			
HCM 2000 Control Delay	31.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.96		
Actuated Cycle Length (s)	78.6	Sum of lost time (s)	22.8
Intersection Capacity Utilization	83.9%	ICU Level of Service	E
Analysis Period (min)	15		

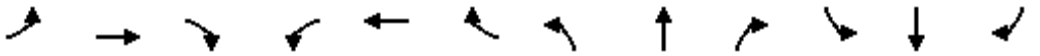
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	420	1495	420	480	1720	135	205	695	260	180	1015	550
Future Volume (vph)	420	1495	420	480	1720	135	205	695	260	180	1015	550
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	6.5	6.5	6.5	6.5	6.5	6.5	6.3	6.3	6.5	6.3	6.3	6.3
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95	0.88	0.97	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.98	1.00	1.00	0.97	1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3410	3480	1536	3376	3446	1537	3410	3480	2696	3376	3446	1513
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3410	3480	1536	3376	3446	1537	3410	3480	2696	3376	3446	1513
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	447	1590	447	511	1830	144	218	739	277	191	1080	585
RTOR Reduction (vph)	0	0	91	0	0	81	0	0	71	0	0	155
Lane Group Flow (vph)	447	1590	356	511	1830	63	218	739	206	191	1080	430
Confl. Peds. (#/hr)	6		1	1		6	9		7	7		9
Heavy Vehicles (%)	0%	1%	1%	1%	2%	0%	0%	1%	0%	1%	2%	1%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4	5	3	8	
Permitted Phases			6			2			4			8
Actuated Green, G (s)	16.5	65.5	65.5	21.5	70.5	70.5	8.7	36.1	57.6	11.3	38.7	38.7
Effective Green, g (s)	16.5	65.5	65.5	21.5	70.5	70.5	8.7	36.1	57.6	11.3	38.7	38.7
Actuated g/C Ratio	0.10	0.41	0.41	0.13	0.44	0.44	0.05	0.23	0.36	0.07	0.24	0.24
Clearance Time (s)	6.5	6.5	6.5	6.5	6.5	6.5	6.3	6.3	6.5	6.3	6.3	6.3
Vehicle Extension (s)	2.0	5.0	5.0	2.0	5.0	5.0	2.0	1.0	2.0	2.0	1.0	1.0
Lane Grp Cap (vph)	351	1424	628	453	1518	677	185	785	970	238	833	365
v/s Ratio Prot	0.13	c0.46		0.15	c0.53		0.06	c0.21	0.03	0.06	c0.31	
v/s Ratio Perm			0.23			0.04			0.05			0.28
v/c Ratio	1.27	1.12	0.57	1.13	1.21	0.09	1.18	0.94	0.21	0.80	1.30	1.18
Uniform Delay, d1	71.8	47.2	36.3	69.2	44.8	26.1	75.7	60.9	35.5	73.3	60.6	60.6
Progression Factor	1.08	0.63	0.46	1.00	1.00	1.00	1.00	1.00	1.00	1.05	0.61	0.35
Incremental Delay, d2	135.4	58.6	2.1	82.2	99.0	0.3	122.4	19.1	0.0	1.7	134.3	83.4
Delay (s)	212.7	88.5	18.8	151.4	143.7	26.4	198.1	80.0	35.5	78.9	171.4	104.5
Level of Service	F	F	B	F	F	C	F	E	D	E	F	F
Approach Delay (s)		98.3			138.5			90.9			140.8	
Approach LOS		F			F			F			F	

Intersection Summary			
HCM 2000 Control Delay	119.4	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.25		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	25.6
Intersection Capacity Utilization	117.3%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	325	500	275	230	685	220	185	1285	120	165	1265	130
Future Volume (vph)	325	500	275	230	685	220	185	1285	120	165	1265	130
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	6.3	6.3		6.3	6.3		5.7	5.7		5.7	5.7	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	0.99		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.95		1.00	0.96		1.00	0.99		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1758	3250		1723	3319		1740	3428		1706	3428	
Flt Permitted	0.09	1.00		0.10	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	173	3250		183	3319		1740	3428		1706	3428	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	353	543	299	250	745	239	201	1397	130	179	1375	141
RTOR Reduction (vph)	0	47	0	0	20	0	0	4	0	0	5	0
Lane Group Flow (vph)	353	795	0	250	964	0	201	1523	0	179	1511	0
Confl. Peds. (#/hr)	6		10	10		6	4		10	10		4
Heavy Vehicles (%)	0%	1%	2%	2%	1%	3%	1%	1%	1%	3%	1%	0%
Turn Type	pm+pt	NA		pm+pt	NA		Prot	NA		Prot	NA	
Protected Phases	3	8		7	4		5	2		1	6	
Permitted Phases	8			4								
Actuated Green, G (s)	65.4	42.7		59.4	39.7		16.3	59.3		14.3	57.3	
Effective Green, g (s)	65.4	42.7		59.4	39.7		16.3	59.3		14.3	57.3	
Actuated g/C Ratio	0.41	0.27		0.37	0.25		0.10	0.37		0.09	0.36	
Clearance Time (s)	6.3	6.3		6.3	6.3		5.7	5.7		5.7	5.7	
Vehicle Extension (s)	1.2	4.0		1.2	4.0		1.2	4.0		1.2	4.0	
Lane Grp Cap (vph)	295	867		257	823		177	1270		152	1227	
v/s Ratio Prot	c0.17	0.24		0.12	0.29		0.12	c0.44		0.10	c0.44	
v/s Ratio Perm	c0.32			0.24								
v/c Ratio	1.20	0.92		0.97	1.17		1.14	1.20		1.18	1.23	
Uniform Delay, d1	51.7	56.9		48.9	60.1		71.8	50.4		72.8	51.4	
Progression Factor	0.97	0.79		1.00	1.00		1.09	1.13		1.19	0.26	
Incremental Delay, d2	114.2	13.3		48.1	90.1		95.9	94.7		99.2	106.4	
Delay (s)	164.6	58.3		96.9	150.3		174.2	151.6		186.3	120.0	
Level of Service	F	E		F	F		F	F		F	F	
Approach Delay (s)		89.7			139.5			154.2			127.0	
Approach LOS		F			F			F			F	

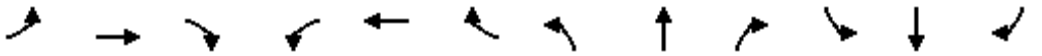
Intersection Summary			
HCM 2000 Control Delay	130.0	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.26		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	24.0
Intersection Capacity Utilization	116.0%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	640	130	340	925	0	0	0	0	300	1670	100
Future Volume (vph)	0	640	130	340	925	0	0	0	0	300	1670	100
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)		5.1		5.1	5.1						5.4	
Lane Util. Factor		0.95		1.00	0.95						0.86	
Frpb, ped/bikes		1.00		1.00	1.00						1.00	
Flpb, ped/bikes		1.00		1.00	1.00						1.00	
Frt		0.97		1.00	1.00						0.99	
Flt Protected		1.00		0.95	1.00						0.99	
Satd. Flow (prot)		2963		1524	3048						5401	
Flt Permitted		1.00		0.09	1.00						0.99	
Satd. Flow (perm)		2963		140	3048						5401	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	681	138	362	984	0	0	0	0	319	1777	106
RTOR Reduction (vph)	0	11	0	0	0	0	0	0	0	0	5	0
Lane Group Flow (vph)	0	808	0	362	984	0	0	0	0	0	2197	0
Confl. Peds. (#/hr)	1		1	1		1	8		3	3		8
Heavy Vehicles (%)	0%	1%	1%	1%	1%	0%	0%	0%	0%	0%	2%	0%
Turn Type		NA		pm+pt	NA					Split	NA	
Protected Phases		8		7	4					6	6	
Permitted Phases				4								
Actuated Green, G (s)		43.9		82.9	82.9						66.6	
Effective Green, g (s)		43.9		82.9	82.9						66.6	
Actuated g/C Ratio		0.27		0.52	0.52						0.42	
Clearance Time (s)		5.1		5.1	5.1						5.4	
Vehicle Extension (s)		2.0		1.5	2.0						2.0	
Lane Grp Cap (vph)		812		365	1579						2248	
v/s Ratio Prot		0.27		c0.21	0.32						c0.41	
v/s Ratio Perm				c0.30								
v/c Ratio		1.00		0.99	0.62						0.98	
Uniform Delay, d1		57.9		51.0	27.4						46.0	
Progression Factor		1.00		1.72	0.75						1.00	
Incremental Delay, d2		30.2		12.2	0.1						14.4	
Delay (s)		88.1		100.1	20.7						60.3	
Level of Service		F		F	C						E	
Approach Delay (s)		88.1			42.1			0.0			60.3	
Approach LOS		F			D			A			E	

Intersection Summary			
HCM 2000 Control Delay	59.9	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.00		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	15.6
Intersection Capacity Utilization	97.8%	ICU Level of Service	F
Analysis Period (min)	15		

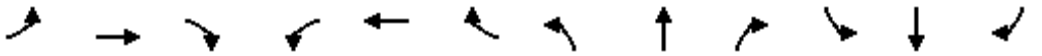
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	45	910	0	0	1100	220	200	1810	675	0	0	0
Future Volume (vph)	45	910	0	0	1100	220	200	1810	675	0	0	0
Ideal Flow (vphpl)	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800	1800
Total Lost time (s)	5.3	5.3			5.3			5.7	5.7			
Lane Util. Factor	1.00	0.95			0.95			0.86	1.00			
Frpb, ped/bikes	1.00	1.00			1.00			1.00	0.98			
Flpb, ped/bikes	1.00	1.00			1.00			1.00	1.00			
Frt	1.00	1.00			0.97			1.00	0.85			
Flt Protected	0.95	1.00			1.00			1.00	1.00			
Satd. Flow (prot)	1539	3078			2962			5442	1341			
Flt Permitted	0.05	1.00			1.00			1.00	1.00			
Satd. Flow (perm)	89	3078			2962			5442	1341			
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	48	968	0	0	1170	234	213	1926	718	0	0	0
RTOR Reduction (vph)	0	0	0	0	10	0	0	0	43	0	0	0
Lane Group Flow (vph)	48	968	0	0	1394	0	0	2139	675	0	0	0
Confl. Peds. (#/hr)	10					10			7	7		
Heavy Vehicles (%)	0%	0%	0%	0%	1%	1%	1%	2%	1%	0%	0%	0%
Turn Type	pm+pt	NA			NA		Split	NA	Perm			
Protected Phases	3	8			4		2	2				
Permitted Phases	8								2			
Actuated Green, G (s)	78.8	78.8			67.6			70.2	70.2			
Effective Green, g (s)	78.8	78.8			67.6			70.2	70.2			
Actuated g/C Ratio	0.49	0.49			0.42			0.44	0.44			
Clearance Time (s)	5.3	5.3			5.3			5.7	5.7			
Vehicle Extension (s)	1.5	2.0			2.0			2.0	2.0			
Lane Grp Cap (vph)	97	1515			1251			2387	588			
v/s Ratio Prot	0.02	c0.31			c0.47			0.39				
v/s Ratio Perm	0.23								c0.50			
v/c Ratio	0.49	0.64			1.11			0.90	1.15			
Uniform Delay, d1	35.1	30.1			46.2			41.5	44.9			
Progression Factor	2.02	1.05			1.00			0.94	0.95			
Incremental Delay, d2	0.4	0.2			62.8			4.1	79.9			
Delay (s)	71.3	31.8			109.0			43.1	122.4			
Level of Service	E	C			F			D	F			
Approach Delay (s)		33.7			109.0			63.0			0.0	
Approach LOS		C			F			E			A	

Intersection Summary			
HCM 2000 Control Delay	69.6	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.12		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	16.3
Intersection Capacity Utilization	97.8%	ICU Level of Service	F
Analysis Period (min)	15		

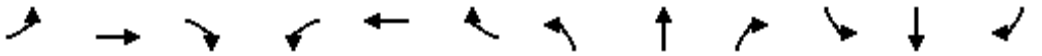
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	395	1345	310	325	1165	80	320	870	540	190	885	305
Future Volume (vph)	395	1345	310	325	1165	80	320	870	540	190	885	305
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	6.4	6.4	6.4	6.4	6.4		6.4	6.4	6.4	6.4	6.4	6.4
Lane Util. Factor	0.97	0.95	1.00	0.97	0.91		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	0.98	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3410	3480	1557	3410	4944		1723	3480	1532	1723	3446	1536
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3410	3480	1557	3410	4944		1723	3480	1532	1723	3446	1536
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	411	1401	323	339	1214	83	333	906	562	198	922	318
RTOR Reduction (vph)	0	0	109	0	5	0	0	0	143	0	0	239
Lane Group Flow (vph)	411	1401	214	339	1292	0	333	906	420	198	922	79
Confl. Peds. (#/hr)	3					3	1		3	3		1
Heavy Vehicles (%)	0%	1%	1%	0%	1%	2%	2%	1%	1%	2%	2%	1%
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases			6						4			8
Actuated Green, G (s)	22.2	60.6	60.6	12.6	51.0		23.6	41.6	41.6	19.6	37.6	37.6
Effective Green, g (s)	22.2	60.6	60.6	12.6	51.0		23.6	41.6	41.6	19.6	37.6	37.6
Actuated g/C Ratio	0.14	0.38	0.38	0.08	0.32		0.15	0.26	0.26	0.12	0.24	0.24
Clearance Time (s)	6.4	6.4	6.4	6.4	6.4		6.4	6.4	6.4	6.4	6.4	6.4
Vehicle Extension (s)	2.0	5.0	5.0	2.0	5.0		2.0	3.0	3.0	2.0	2.5	2.5
Lane Grp Cap (vph)	473	1318	589	268	1575		254	904	398	211	809	360
v/s Ratio Prot	0.12	c0.40		c0.10	0.26		c0.19	0.26		0.11	0.27	
v/s Ratio Perm			0.14						c0.27			0.05
v/c Ratio	0.87	1.06	0.36	1.26	0.82		1.31	1.00	1.06	0.94	1.14	0.22
Uniform Delay, d1	67.5	49.7	35.8	73.7	50.3		68.2	59.2	59.2	69.6	61.2	49.4
Progression Factor	1.26	0.89	0.93	1.00	1.00		1.11	0.91	0.97	1.00	1.00	1.00
Incremental Delay, d2	12.9	41.5	1.5	145.5	4.9		142.6	9.5	31.3	43.9	77.6	0.2
Delay (s)	97.9	85.5	34.6	219.2	55.2		218.1	63.6	89.0	113.5	138.8	49.6
Level of Service	F	F	C	F	E		F	E	F	F	F	D
Approach Delay (s)		80.2			89.2			100.1			115.6	
Approach LOS		F			F			F			F	

Intersection Summary			
HCM 2000 Control Delay	94.7	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.15		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	25.6
Intersection Capacity Utilization	112.6%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	1525	335	725	1125	5	215	20	790	0	75	30
Future Volume (vph)	15	1525	335	725	1125	5	215	20	790	0	75	30
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	6.2	6.2	6.2	6.2	6.2		6.6	6.6	6.2		6.2	
Lane Util. Factor	1.00	0.95	1.00	0.97	0.95		0.95	0.95	0.88		1.00	
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	
Frt	1.00	1.00	0.85	1.00	1.00		1.00	1.00	0.85		0.96	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	0.96	1.00		1.00	
Satd. Flow (prot)	1758	3480	1572	3376	3478		1637	1660	2768		1746	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	0.96	1.00		1.00	
Satd. Flow (perm)	1758	3480	1572	3376	3478		1637	1660	2768		1746	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	16	1640	360	780	1210	5	231	22	849	0	81	32
RTOR Reduction (vph)	0	0	203	0	0	0	0	0	418	0	11	0
Lane Group Flow (vph)	16	1640	157	780	1215	0	127	126	431	0	102	0
Confl. Peds. (#/hr)	1					1						
Heavy Vehicles (%)	0%	1%	0%	1%	1%	0%	2%	0%	0%	0%	2%	0%
Turn Type	Prot	NA	Perm	Prot	NA		Split	NA	pm+ov	Split	NA	
Protected Phases	1	6		5	2		8	8	5	4	4	
Permitted Phases			6						8			
Actuated Green, G (s)	2.9	50.4	50.4	28.5	76.0		14.6	14.6	43.1		11.3	
Effective Green, g (s)	2.9	50.4	50.4	28.5	76.0		14.6	14.6	43.1		11.3	
Actuated g/C Ratio	0.02	0.39	0.39	0.22	0.58		0.11	0.11	0.33		0.09	
Clearance Time (s)	6.2	6.2	6.2	6.2	6.2		6.6	6.6	6.2		6.2	
Vehicle Extension (s)	2.0	2.0	2.0	2.0	4.0		2.0	2.0	2.0		2.0	
Lane Grp Cap (vph)	39	1349	609	740	2033		183	186	917		151	
v/s Ratio Prot	0.01	c0.47		c0.23	0.35		c0.08	0.08	0.10		c0.06	
v/s Ratio Perm			0.10						0.05			
v/c Ratio	0.41	1.22	0.26	1.05	0.60		0.69	0.68	0.47		0.68	
Uniform Delay, d1	62.7	39.8	27.1	50.8	17.2		55.5	55.4	34.4		57.6	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	
Incremental Delay, d2	2.5	104.1	1.0	48.2	1.3		8.8	7.5	0.1		9.0	
Delay (s)	65.3	143.9	28.1	99.0	18.5		64.4	62.9	34.5		66.6	
Level of Service	E	F	C	F	B		E	E	C		E	
Approach Delay (s)		122.6			50.0			41.2			66.6	
Approach LOS		F			D			D			E	

Intersection Summary			
HCM 2000 Control Delay	76.5	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.04		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	25.2
Intersection Capacity Utilization	93.7%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

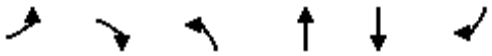
2048 Concept V1 (MUT) (AM Peak Hour)

Previously Referred to as Concept B



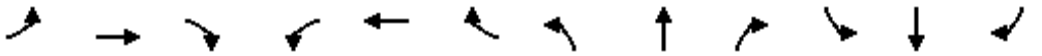
Movement	EBT	WBT	WBR	WBR2	NBL	NBT	NBR
Lane Configurations							
Traffic Volume (vph)	390	240	55	95	500	470	790
Future Volume (vph)	390	240	55	95	500	470	790
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850
Lane Width	14	14	14	14	14	14	14
Total Lost time (s)	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	0.95	0.95	1.00		1.00	0.91	0.91
Frt	1.00	1.00	0.85		1.00	0.93	0.85
Flt Protected	1.00	1.00	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3605	3605	1613		1803	3217	1468
Flt Permitted	1.00	1.00	1.00		0.95	1.00	1.00
Satd. Flow (perm)	3605	3605	1613		1803	3217	1468
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	433	267	61	106	556	522	878
RTOR Reduction (vph)	0	0	27	0	0	84	84
Lane Group Flow (vph)	433	267	140	0	556	877	355
Turn Type	NA	NA	Perm		Perm	NA	Perm
Protected Phases	4	8				2	
Permitted Phases			8		2		2
Actuated Green, G (s)	81.5	81.5	81.5		70.5	70.5	70.5
Effective Green, g (s)	81.5	81.5	81.5		70.5	70.5	70.5
Actuated g/C Ratio	0.51	0.51	0.51		0.44	0.44	0.44
Clearance Time (s)	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)	2.5	2.5	2.5		2.5	2.5	2.5
Lane Grp Cap (vph)	1836	1836	821		794	1417	646
v/s Ratio Prot	c0.12	0.07				0.27	
v/s Ratio Perm			0.09		c0.31		0.24
v/c Ratio	0.24	0.15	0.17		0.70	0.62	0.55
Uniform Delay, d1	21.9	20.8	21.1		36.2	34.4	33.0
Progression Factor	0.27	0.89	0.85		0.98	0.39	0.42
Incremental Delay, d2	0.3	0.2	0.4		2.3	0.6	0.7
Delay (s)	6.2	18.7	18.4		37.8	13.9	14.7
Level of Service	A	B	B		D	B	B
Approach Delay (s)	6.2	18.6				20.8	
Approach LOS	A	B				C	

Intersection Summary			
HCM 2000 Control Delay	18.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.45		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	51.2%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



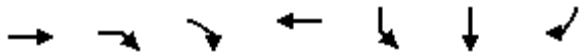
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	595	0	0	1165	0	0
Future Volume (vph)	595	0	0	1165	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850
Lane Width	14	14	14	14	14	14
Total Lost time (s)	4.0			4.0		
Lane Util. Factor	0.97			0.95		
Frt	1.00			1.00		
Flt Protected	0.95			1.00		
Satd. Flow (prot)	3497			3605		
Flt Permitted	0.95			1.00		
Satd. Flow (perm)	3497			3605		
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	661	0	0	1294	0	0
RTOR Reduction (vph)	111	0	0	0	0	0
Lane Group Flow (vph)	550	0	0	1294	0	0
Turn Type	Prot			NA		
Protected Phases	4			2		
Permitted Phases						
Actuated Green, G (s)	30.8			121.2		
Effective Green, g (s)	30.8			121.2		
Actuated g/C Ratio	0.19			0.76		
Clearance Time (s)	4.0			4.0		
Vehicle Extension (s)	2.5			2.5		
Lane Grp Cap (vph)	673			2730		
v/s Ratio Prot	c0.16			c0.36		
v/s Ratio Perm						
v/c Ratio	0.82			0.47		
Uniform Delay, d1	61.9			7.3		
Progression Factor	0.20			1.00		
Incremental Delay, d2	7.3			0.6		
Delay (s)	20.0			7.9		
Level of Service	B			A		
Approach Delay (s)	20.0			7.9	0.0	
Approach LOS	B			A	A	

Intersection Summary			
HCM 2000 Control Delay	12.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	57.2%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



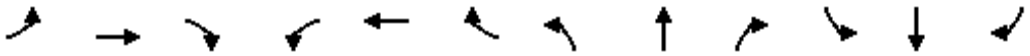
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	55	500	0	0	0	0	0	515	675
Future Volume (vph)	0	0	0	55	500	0	0	0	0	0	515	675
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Lane Width	14	14	14	14	14	14	14	14	14	14	14	14
Total Lost time (s)					4.0						4.0	4.0
Lane Util. Factor					0.95						0.95	1.00
Frt					1.00						1.00	0.85
Flt Protected					1.00						1.00	1.00
Satd. Flow (prot)					3587						3605	1613
Flt Permitted					1.00						1.00	1.00
Satd. Flow (perm)					3587						3605	1613
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	61	556	0	0	0	0	0	572	750
RTOR Reduction (vph)	0	0	0	0	6	0	0	0	0	0	0	16
Lane Group Flow (vph)	0	0	0	0	611	0	0	0	0	0	572	734
Turn Type				Perm	NA						NA	Perm
Protected Phases					8						6	
Permitted Phases				8								6
Actuated Green, G (s)					32.7						119.3	119.3
Effective Green, g (s)					32.7						119.3	119.3
Actuated g/C Ratio					0.20						0.75	0.75
Clearance Time (s)					4.0						4.0	4.0
Vehicle Extension (s)					2.5						2.5	2.5
Lane Grp Cap (vph)					733						2687	1202
v/s Ratio Prot											0.16	
v/s Ratio Perm					0.17							c0.45
v/c Ratio					0.83						0.21	0.61
Uniform Delay, d1					61.0						6.2	9.5
Progression Factor					0.72						0.03	0.54
Incremental Delay, d2					7.2						0.1	1.7
Delay (s)					51.4						0.3	6.8
Level of Service					D						A	A
Approach Delay (s)		0.0			51.4			0.0			4.0	
Approach LOS		A			D			A			A	

Intersection Summary			
HCM 2000 Control Delay	19.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	65.4%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBT	EBR	EBR2	WBT	SBL	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	390	205	70	240	390	180	0
Future Volume (vph)	390	205	70	240	390	180	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850
Lane Width	14	14	14	14	14	14	14
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	
Lane Util. Factor	0.91	0.91		0.95	0.97	1.00	
Frt	0.98	0.85		1.00	1.00	1.00	
Flt Protected	1.00	1.00		1.00	0.95	1.00	
Satd. Flow (prot)	3371	1468		3605	3497	1897	
Flt Permitted	1.00	1.00		1.00	0.95	1.00	
Satd. Flow (perm)	3371	1468		3605	3497	1897	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	433	228	78	267	433	200	0
RTOR Reduction (vph)	0	6	0	0	0	0	0
Lane Group Flow (vph)	515	218	0	267	433	200	0
Turn Type	NA	Perm		NA	Perm	NA	Perm
Protected Phases	4			8		6	
Permitted Phases		4			6		6
Actuated Green, G (s)	125.9	125.9		125.9	26.1	26.1	
Effective Green, g (s)	125.9	125.9		125.9	26.1	26.1	
Actuated g/C Ratio	0.79	0.79		0.79	0.16	0.16	
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0	
Vehicle Extension (s)	2.5	2.5		2.5	2.5	2.5	
Lane Grp Cap (vph)	2652	1155		2836	570	309	
v/s Ratio Prot	c0.15			0.07		0.11	
v/s Ratio Perm		0.15			c0.12		
v/c Ratio	0.19	0.19		0.09	0.76	0.65	
Uniform Delay, d1	4.3	4.3		3.9	64.0	62.6	
Progression Factor	0.31	0.25		0.35	0.50	0.91	
Incremental Delay, d2	0.2	0.3		0.1	5.4	3.9	
Delay (s)	1.5	1.4		1.5	37.4	61.2	
Level of Service	A	A		A	D	E	
Approach Delay (s)	1.5			1.5		44.9	
Approach LOS	A			A		D	

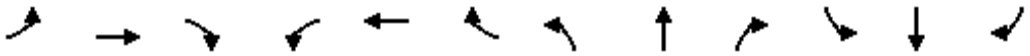
Intersection Summary			
HCM 2000 Control Delay	18.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.29		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	32.2%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	195	1040	0	0	0	0	0	1625	330	0	0	0
Future Volume (vph)	195	1040	0	0	0	0	0	1625	330	0	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	4.0	4.0						4.0	4.0			
Lane Util. Factor	0.97	0.91						0.81	0.81			
Frt	1.00	1.00						1.00	0.85			
Flt Protected	0.95	1.00						1.00	1.00			
Satd. Flow (prot)	3278	4856						5746	1225			
Flt Permitted	0.95	1.00						1.00	1.00			
Satd. Flow (perm)	3278	4856						5746	1225			
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	217	1156	0	0	0	0	0	1806	367	0	0	0
RTOR Reduction (vph)	8	0	0	0	0	0	0	2	17	0	0	0
Lane Group Flow (vph)	209	1156	0	0	0	0	0	1841	313	0	0	0
Turn Type	Perm	NA						NA	Perm			
Protected Phases		4						2				
Permitted Phases	4								2			
Actuated Green, G (s)	84.9	84.9						67.1	67.1			
Effective Green, g (s)	84.9	84.9						67.1	67.1			
Actuated g/C Ratio	0.53	0.53						0.42	0.42			
Clearance Time (s)	4.0	4.0						4.0	4.0			
Vehicle Extension (s)	2.5	2.5						2.5	2.5			
Lane Grp Cap (vph)	1739	2576						2409	513			
v/s Ratio Prot		c0.24						c0.32				
v/s Ratio Perm	0.06								0.26			
v/c Ratio	0.12	0.45						0.76	0.61			
Uniform Delay, d1	18.8	23.1						39.7	36.3			
Progression Factor	0.00	0.39						0.91	0.96			
Incremental Delay, d2	0.1	0.5						1.4	1.8			
Delay (s)	0.1	9.6						37.5	36.8			
Level of Service	A	A						D	D			
Approach Delay (s)		8.1			0.0			37.4			0.0	
Approach LOS		A			A			D			A	

Intersection Summary			
HCM 2000 Control Delay	26.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	59.3%	ICU Level of Service	B
Analysis Period (min)	15		

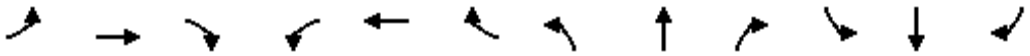
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	965	305	0	0	0	0	0	0	270	1625	0
Future Volume (vph)	0	965	305	0	0	0	0	0	0	270	1625	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)		4.0	4.0							4.0	4.0	
Lane Util. Factor		0.76	0.76							0.86	0.86	
Frt		0.98	0.85							1.00	1.00	
Flt Protected		1.00	1.00							0.95	1.00	
Satd. Flow (prot)		6648	1149							1453	4586	
Flt Permitted		1.00	1.00							0.95	1.00	
Satd. Flow (perm)		6648	1149							1453	4586	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	1072	339	0	0	0	0	0	0	300	1806	0
RTOR Reduction (vph)	0	10	10	0	0	0	0	0	0	9	3	0
Lane Group Flow (vph)	0	1194	197	0	0	0	0	0	0	261	1833	0
Turn Type		NA	Perm							Perm	NA	
Protected Phases		4									6	
Permitted Phases			4							6		
Actuated Green, G (s)		69.4	69.4							82.6	82.6	
Effective Green, g (s)		69.4	69.4							82.6	82.6	
Actuated g/C Ratio		0.43	0.43							0.52	0.52	
Clearance Time (s)		4.0	4.0							4.0	4.0	
Vehicle Extension (s)		2.5	2.5							2.5	2.5	
Lane Grp Cap (vph)		2883	498							750	2367	
v/s Ratio Prot		c0.18										
v/s Ratio Perm			0.17							0.18	0.40	
v/c Ratio		0.41	0.40							0.35	0.77	
Uniform Delay, d1		31.3	31.0							22.8	31.2	
Progression Factor		1.00	1.00							0.03	0.39	
Incremental Delay, d2		0.4	2.4							0.1	1.1	
Delay (s)		31.7	33.3							0.8	13.3	
Level of Service		C	C							A	B	
Approach Delay (s)		31.9			0.0			0.0			11.7	
Approach LOS		C			A			A			B	

Intersection Summary			
HCM 2000 Control Delay	19.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	79.6%	ICU Level of Service	D
Analysis Period (min)	15		

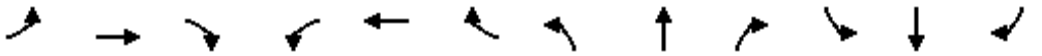
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	255	310	0	525	0	0	0	0	10	1720	265
Future Volume (vph)	0	255	310	0	525	0	0	0	0	10	1720	265
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)		4.0	4.0		4.0					4.0	4.0	
Lane Util. Factor		0.91	0.91		1.00					1.00	0.91	
Frt		0.95	0.85		1.00					1.00	0.98	
Flt Protected		1.00	1.00		1.00					0.95	1.00	
Satd. Flow (prot)		3071	1376		1779					1690	4759	
Flt Permitted		1.00	1.00		1.00					0.95	1.00	
Satd. Flow (perm)		3071	1376		1779					1690	4759	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	283	344	0	583	0	0	0	0	11	1911	294
RTOR Reduction (vph)	0	3	8	0	0	0	0	0	0	0	26	0
Lane Group Flow (vph)	0	428	188	0	583	0	0	0	0	11	2179	0
Turn Type		NA	Perm		NA					Perm	NA	
Protected Phases		4			8						6	
Permitted Phases			4							6		
Actuated Green, G (s)		33.0	33.0		33.0					39.0	39.0	
Effective Green, g (s)		33.0	33.0		33.0					39.0	39.0	
Actuated g/C Ratio		0.41	0.41		0.41					0.49	0.49	
Clearance Time (s)		4.0	4.0		4.0					4.0	4.0	
Vehicle Extension (s)		2.5	2.5		2.5					2.5	2.5	
Lane Grp Cap (vph)		1266	567		733					823	2320	
v/s Ratio Prot		0.14			c0.33						c0.46	
v/s Ratio Perm			0.14							0.01		
v/c Ratio		0.34	0.33		0.80					0.01	0.94	
Uniform Delay, d1		16.0	16.0		20.5					10.6	19.4	
Progression Factor		1.00	1.00		0.34					1.00	1.00	
Incremental Delay, d2		0.7	1.6		7.3					0.0	8.2	
Delay (s)		16.8	17.6		14.2					10.6	27.6	
Level of Service		B	B		B					B	C	
Approach Delay (s)		17.0			14.2			0.0			27.5	
Approach LOS		B			B			A			C	

Intersection Summary			
HCM 2000 Control Delay	23.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	96.4%	ICU Level of Service	F
Analysis Period (min)	15		

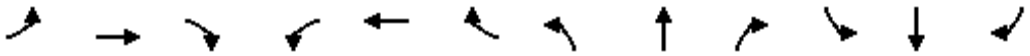
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	385	2100	0	0	0	0	0	1470	560
Future Volume (vph)	0	0	0	385	2100	0	0	0	0	0	1470	560
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)				4.0	4.0						4.0	4.0
Lane Util. Factor				0.86	0.86						0.91	1.00
Frt				1.00	1.00						1.00	0.85
Flt Protected				0.95	1.00						1.00	1.00
Satd. Flow (prot)				1453	4585						4856	1512
Flt Permitted				0.95	1.00						1.00	1.00
Satd. Flow (perm)				1453	4585						4856	1512
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	428	2333	0	0	0	0	0	1633	622
RTOR Reduction (vph)	0	0	0	3	3	0	0	0	0	0	0	4
Lane Group Flow (vph)	0	0	0	382	2373	0	0	0	0	0	1633	618
Turn Type				Perm	NA						NA	Perm
Protected Phases					8						6	
Permitted Phases				8								6
Actuated Green, G (s)				83.8	83.8						68.2	68.2
Effective Green, g (s)				83.8	83.8						68.2	68.2
Actuated g/C Ratio				0.52	0.52						0.43	0.43
Clearance Time (s)				4.0	4.0						4.0	4.0
Vehicle Extension (s)				2.5	2.5						2.5	2.5
Lane Grp Cap (vph)				761	2401						2069	644
v/s Ratio Prot											0.34	
v/s Ratio Perm				0.26	0.52							c0.41
v/c Ratio				0.50	0.99						0.79	0.96
Uniform Delay, d1				24.6	37.6						39.7	44.6
Progression Factor				0.09	0.75						0.80	0.79
Incremental Delay, d2				1.8	14.1						1.1	12.6
Delay (s)				4.1	42.2						32.7	47.8
Level of Service				A	D						C	D
Approach Delay (s)		0.0			36.9			0.0			36.9	
Approach LOS		A			D			A			D	

Intersection Summary			
HCM 2000 Control Delay	36.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.97		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	102.7%	ICU Level of Service	G
Analysis Period (min)	15		

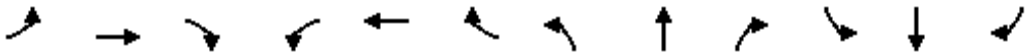
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	215	50	0	0	0	60	525	0	15	0	0	0
Future Volume (vph)	215	50	0	0	0	60	525	0	15	0	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	4.0	4.0				4.0	4.0	4.0				
Lane Util. Factor	1.00	1.00				1.00	1.00	1.00				
Frt	1.00	1.00				0.86	1.00	0.85				
Flt Protected	0.95	1.00				1.00	0.95	1.00				
Satd. Flow (prot)	1690	1779				1539	1690	1512				
Flt Permitted	0.95	1.00				1.00	0.95	1.00				
Satd. Flow (perm)	1690	1779				1539	1690	1512				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	239	56	0	0	0	67	583	0	17	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	37	0	9	0	0	0	0
Lane Group Flow (vph)	239	56	0	0	0	30	583	8	0	0	0	0
Turn Type	Split	NA				Perm	Perm	NA				
Protected Phases	4	4						2				
Permitted Phases						2	2					
Actuated Green, G (s)	36.1	36.1				35.9	35.9	35.9				
Effective Green, g (s)	36.1	36.1				35.9	35.9	35.9				
Actuated g/C Ratio	0.45	0.45				0.45	0.45	0.45				
Clearance Time (s)	4.0	4.0				4.0	4.0	4.0				
Vehicle Extension (s)	2.5	2.5				2.5	2.5	2.5				
Lane Grp Cap (vph)	762	802				690	758	678				
v/s Ratio Prot	c0.14	0.03						0.01				
v/s Ratio Perm						0.02	c0.34					
v/c Ratio	0.31	0.07				0.04	0.77	0.01				
Uniform Delay, d1	14.0	12.4				12.4	18.6	12.2				
Progression Factor	1.66	1.41				1.00	0.95	1.00				
Incremental Delay, d2	1.0	0.2				0.0	3.5	0.0				
Delay (s)	24.3	17.7				12.4	21.1	12.2				
Level of Service	C	B				B	C	B				
Approach Delay (s)		23.0			12.4			20.9			0.0	
Approach LOS		C			B			C			A	

Intersection Summary			
HCM 2000 Control Delay	21.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	96.4%	ICU Level of Service	F
Analysis Period (min)	15		

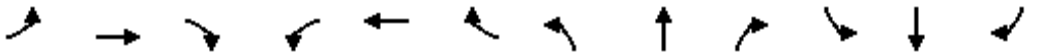
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	1785	150	700	1075	0	0	0	0
Future Volume (vph)	0	0	0	0	1785	150	700	1075	0	0	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)					4.0	4.0	4.0	4.0				
Lane Util. Factor					0.86	1.00	0.97	0.95				
Frt					1.00	0.85	1.00	1.00				
Flt Protected					1.00	1.00	0.95	1.00				
Satd. Flow (prot)					6119	1512	3278	3380				
Flt Permitted					1.00	1.00	0.95	1.00				
Satd. Flow (perm)					6119	1512	3278	3380				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	0	1983	167	778	1194	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	21	4	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	1983	146	774	1194	0	0	0	0
Turn Type					NA	Perm	Perm	NA				
Protected Phases					8			2				
Permitted Phases						8	2					
Actuated Green, G (s)					82.5	82.5	69.5	69.5				
Effective Green, g (s)					82.5	82.5	69.5	69.5				
Actuated g/C Ratio					0.52	0.52	0.43	0.43				
Clearance Time (s)					4.0	4.0	4.0	4.0				
Vehicle Extension (s)					2.5	2.5	2.5	2.5				
Lane Grp Cap (vph)					3155	779	1423	1468				
v/s Ratio Prot					c0.32			c0.35				
v/s Ratio Perm						0.10	0.24					
v/c Ratio					0.63	0.19	0.54	0.81				
Uniform Delay, d1					27.8	20.8	33.5	39.6				
Progression Factor					0.90	0.93	0.20	0.35				
Incremental Delay, d2					0.9	0.5	0.3	3.0				
Delay (s)					25.9	19.9	7.1	16.8				
Level of Service					C	B	A	B				
Approach Delay (s)		0.0			25.4			13.0			0.0	
Approach LOS		A			C			B			A	

Intersection Summary			
HCM 2000 Control Delay	19.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	98.4%	ICU Level of Service	F
Analysis Period (min)	15		

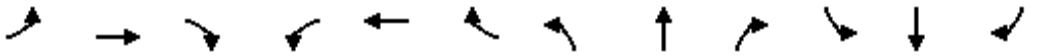
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	450	60	30	210	0	275	0	215	0	450	640
Future Volume (vph)	0	450	60	30	210	0	275	0	215	0	450	640
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Lane Width	14	14	14	14	14	14	14	14	14	14	14	14
Total Lost time (s)		6.0		6.0	6.0		6.0		6.0		6.0	6.0
Lane Util. Factor		0.91		1.00	0.95		0.97		1.00		0.95	1.00
Frpb, ped/bikes		1.00		1.00	1.00		1.00		0.98		1.00	0.97
Flpb, ped/bikes		1.00		1.00	1.00		1.00		1.00		1.00	1.00
Frt		0.98		1.00	1.00		1.00		0.85		1.00	0.85
Flt Protected		1.00		0.95	1.00		0.95		1.00		1.00	1.00
Satd. Flow (prot)		5071		1799	3605		3497		1587		3605	1557
Flt Permitted		1.00		0.35	1.00		0.95		1.00		1.00	1.00
Satd. Flow (perm)		5071		661	3605		3497		1587		3605	1557
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	500	67	33	233	0	306	0	239	0	500	711
RTOR Reduction (vph)	0	9	0	0	0	0	0	0	8	0	0	134
Lane Group Flow (vph)	0	558	0	33	233	0	306	0	231	0	500	577
Confl. Peds. (#/hr)			8	8			13		3	3		13
Turn Type		NA		D.P+P	NA		Prot		pm+ov		NA	Perm
Protected Phases		6		5	2		7		5		8	
Permitted Phases				6			7		4			8
Actuated Green, G (s)		47.0		53.0	59.0		17.2		95.0		65.8	65.8
Effective Green, g (s)		47.0		53.0	59.0		17.2		95.0		65.8	65.8
Actuated g/C Ratio		0.29		0.33	0.37		0.11		0.59		0.41	0.41
Clearance Time (s)		6.0		6.0	6.0		6.0		6.0		6.0	6.0
Vehicle Extension (s)		5.5		1.0	5.5		1.0		1.0		2.0	2.0
Lane Grp Cap (vph)		1489		261	1329		375		1001		1482	640
v/s Ratio Prot		c0.11		0.00	0.06		c0.09		c0.01		0.14	
v/s Ratio Perm				0.04					0.14			c0.37
v/c Ratio		0.37		0.13	0.18		0.82		0.23		0.34	0.90
Uniform Delay, d1		44.8		36.7	34.1		69.9		15.3		32.2	44.1
Progression Factor		1.00		0.52	0.52		1.00		1.00		0.61	0.66
Incremental Delay, d2		0.7		0.1	0.3		12.2		0.0		0.0	12.8
Delay (s)		45.6		19.1	17.9		82.1		15.3		19.8	42.0
Level of Service		D		B	B		F		B		B	D
Approach Delay (s)		45.6			18.0			52.8			32.9	
Approach LOS		D			B			D			C	

Intersection Summary			
HCM 2000 Control Delay	38.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	24.0
Intersection Capacity Utilization	73.9%	ICU Level of Service	D
Analysis Period (min)	15		

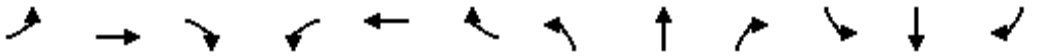
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	60	990	115	375	1495	165	170	270	300	40	275	50
Future Volume (vph)	60	990	115	375	1495	165	170	270	300	40	275	50
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	6.5	6.5	6.8	6.5	6.5	6.8	6.8	6.8	6.5	6.8	6.8	6.5
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95	0.88	0.97	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00	0.99	1.00	1.00	0.98	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3278	3380	1486	3278	3380	1492	3278	3366	2600	3278	3366	1491
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3278	3380	1486	3278	3380	1492	3278	3366	2600	3278	3366	1491
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	67	1100	128	417	1661	183	189	300	333	44	306	56
RTOR Reduction (vph)	0	0	38	0	0	63	0	0	80	0	0	47
Lane Group Flow (vph)	67	1100	90	417	1661	120	189	300	253	44	306	9
Confl. Peds. (#/hr)	1		5	5		1	5		10	10		5
Bus Blockages (#/hr)	0	0	0	0	0	0	0	2	0	0	2	0
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	1	6	7	5	2	3	7	4	5	3	8	1
Permitted Phases			6			2			4			8
Actuated Green, G (s)	7.7	80.1	90.9	23.5	95.9	101.1	10.8	24.6	48.1	5.2	19.0	26.7
Effective Green, g (s)	7.7	80.1	90.9	23.5	95.9	101.1	10.8	24.6	48.1	5.2	19.0	26.7
Actuated g/C Ratio	0.05	0.50	0.57	0.15	0.60	0.63	0.07	0.15	0.30	0.03	0.12	0.17
Clearance Time (s)	6.5	6.5	6.8	6.5	6.5	6.8	6.8	6.8	6.5	6.8	6.8	6.5
Vehicle Extension (s)	2.0	5.0	1.0	3.0	5.0	2.0	1.0	2.0	3.0	2.0	2.0	2.0
Lane Grp Cap (vph)	157	1692	844	481	2025	942	221	517	781	106	399	248
v/s Ratio Prot	0.02	c0.33	0.01	0.13	c0.49	0.00	c0.06	c0.09	0.05	0.01	c0.09	0.00
v/s Ratio Perm			0.05			0.08			0.05			0.00
v/c Ratio	0.43	0.65	0.11	0.87	0.82	0.13	0.86	0.58	0.32	0.42	0.77	0.04
Uniform Delay, d1	74.0	29.6	15.9	66.7	25.3	11.8	73.8	62.9	43.3	75.9	68.4	55.9
Progression Factor	1.00	1.00	1.00	0.85	0.61	0.05	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.7	2.0	0.0	10.3	2.5	0.0	25.3	1.1	0.2	1.0	7.7	0.0
Delay (s)	74.7	31.5	15.9	66.8	17.8	0.6	99.1	64.0	43.6	76.9	76.1	55.9
Level of Service	E	C	B	E	B	A	F	E	D	E	E	E
Approach Delay (s)		32.2			25.5			63.8			73.4	
Approach LOS		C			C			E			E	

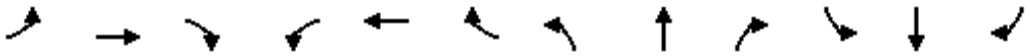
Intersection Summary			
HCM 2000 Control Delay	37.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	26.6
Intersection Capacity Utilization	87.4%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



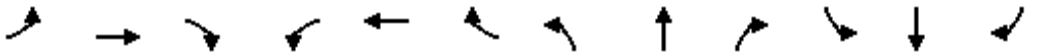
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1280	50	100	1730	0	0	0	0	260	85	345
Future Volume (vph)	0	1280	50	100	1730	0	0	0	0	260	85	345
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)		5.8		5.8	5.8					5.9	5.9	5.9
Lane Util. Factor		0.86		0.97	0.95					0.95	0.91	0.95
Frpb, ped/bikes		1.00		1.00	1.00					1.00	0.99	0.98
Flpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	1.00
Frt		0.99		1.00	1.00					1.00	0.92	0.85
Flt Protected		1.00		0.95	1.00					0.95	0.99	1.00
Satd. Flow (prot)		6084		3278	3380					1605	1470	1414
Flt Permitted		1.00		0.95	1.00					0.95	0.99	1.00
Satd. Flow (perm)		6084		3278	3380					1605	1470	1414
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	1422	56	111	1922	0	0	0	0	289	94	383
RTOR Reduction (vph)	0	3	0	0	0	0	0	0	0	0	19	48
Lane Group Flow (vph)	0	1475	0	111	1922	0	0	0	0	260	242	197
Confl. Peds. (#/hr)	10					10	2					2
Turn Type		NA		Prot	NA					Perm	NA	Perm
Protected Phases		6		5	2						8	
Permitted Phases										8		8
Actuated Green, G (s)		102.4		10.0	118.2					30.1	30.1	30.1
Effective Green, g (s)		102.4		10.0	118.2					30.1	30.1	30.1
Actuated g/C Ratio		0.64		0.06	0.74					0.19	0.19	0.19
Clearance Time (s)		5.8		5.8	5.8					5.9	5.9	5.9
Vehicle Extension (s)		3.8		3.0	3.4					1.5	1.5	1.5
Lane Grp Cap (vph)		3893		204	2496					301	276	266
v/s Ratio Prot		0.24		0.03	c0.57							
v/s Ratio Perm										0.16	0.16	0.14
v/c Ratio		0.38		0.54	0.77					0.86	0.88	0.74
Uniform Delay, d1		13.7		72.8	12.7					63.0	63.2	61.3
Progression Factor		0.28		1.33	0.38					0.92	0.91	0.88
Incremental Delay, d2		0.2		2.3	1.8					21.1	24.8	9.3
Delay (s)		4.1		99.1	6.6					78.8	82.1	63.5
Level of Service		A		F	A					E	F	E
Approach Delay (s)		4.1			11.7			0.0			75.0	
Approach LOS		A			B			A			E	

Intersection Summary			
HCM 2000 Control Delay	20.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	17.5
Intersection Capacity Utilization	74.3%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



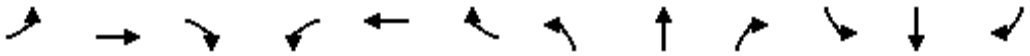
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	275	1265	0	0	1480	405	350	115	405	0	0	0
Future Volume (vph)	275	1265	0	0	1480	405	350	115	405	0	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	5.6	5.6			5.6		5.9	5.9	5.9			
Lane Util. Factor	0.97	0.95			0.86		0.95	0.95	1.00			
Frpb, ped/bikes	1.00	1.00			1.00		1.00	1.00	1.00			
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00	1.00			
Frt	1.00	1.00			0.97		1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00		0.95	0.98	1.00			
Satd. Flow (prot)	3278	3380			5922		1605	1648	1512			
Flt Permitted	0.95	1.00			1.00		0.95	0.98	1.00			
Satd. Flow (perm)	3278	3380			5922		1605	1648	1512			
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	306	1406	0	0	1644	450	389	128	450	0	0	0
RTOR Reduction (vph)	0	0	0	0	28	0	0	0	256	0	0	0
Lane Group Flow (vph)	306	1406	0	0	2066	0	257	260	194	0	0	0
Confl. Peds. (#/hr)			7	7								
Turn Type	Prot	NA			NA		Perm	NA	custom			
Protected Phases	1	6			2			4				
Permitted Phases							4		7 5			
Actuated Green, G (s)	22.4	110.3			91.4		29.1	29.1	41.1			
Effective Green, g (s)	22.4	110.3			91.4		29.1	29.1	41.1			
Actuated g/C Ratio	0.14	0.69			0.57		0.18	0.18	0.26			
Clearance Time (s)	5.6	5.6			5.6		5.9	5.9				
Vehicle Extension (s)	1.5	3.3			3.6		2.0	2.0				
Lane Grp Cap (vph)	458	2330			3382		291	299	388			
v/s Ratio Prot	0.09	c0.42			c0.35							
v/s Ratio Perm							c0.16	0.16	c0.13			
v/c Ratio	0.67	0.60			0.61		0.88	0.87	0.50			
Uniform Delay, d1	65.3	13.2			22.6		63.8	63.6	50.7			
Progression Factor	0.88	0.98			1.00		1.00	1.00	1.00			
Incremental Delay, d2	2.7	1.1			0.8		24.9	21.9	0.4			
Delay (s)	60.0	14.0			23.4		88.7	85.5	51.0			
Level of Service	E	B			C		F	F	D			
Approach Delay (s)		22.2			23.4			70.3			0.0	
Approach LOS		C			C			E			A	

Intersection Summary			
HCM 2000 Control Delay	32.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	20.1
Intersection Capacity Utilization	74.3%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



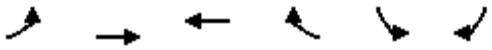
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	85	1795	15	35	10	0	0	30	70
Future Volume (vph)	0	0	0	85	1795	15	35	10	0	0	30	70
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)				5.6	5.6		5.5	5.5			5.5	5.5
Lane Util. Factor				1.00	0.86		1.00	1.00			1.00	1.00
Frpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	0.97
Flpb, ped/bikes				1.00	1.00		0.99	1.00			1.00	1.00
Frt				1.00	1.00		1.00	1.00			1.00	0.85
Flt Protected				0.95	1.00		0.95	1.00			1.00	1.00
Satd. Flow (prot)				1690	6110		1667	1779			1779	1473
Flt Permitted				0.95	1.00		0.74	1.00			1.00	1.00
Satd. Flow (perm)				1690	6110		1291	1779			1779	1473
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	94	1994	17	39	11	0	0	33	78
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	21
Lane Group Flow (vph)	0	0	0	94	2011	0	39	11	0	0	33	57
Confl. Peds. (#/hr)	5					5	6					6
Turn Type				Perm	NA		Perm	NA			NA	Perm
Protected Phases					2			4			8	
Permitted Phases				2			4					8
Actuated Green, G (s)				130.9	130.9		18.0	18.0			18.0	18.0
Effective Green, g (s)				130.9	130.9		18.0	18.0			18.0	18.0
Actuated g/C Ratio				0.82	0.82		0.11	0.11			0.11	0.11
Clearance Time (s)				5.6	5.6		5.5	5.5			5.5	5.5
Vehicle Extension (s)				2.5	2.5		2.0	2.0			2.8	2.8
Lane Grp Cap (vph)				1382	4998		145	200			200	165
v/s Ratio Prot					c0.33			0.01			0.02	
v/s Ratio Perm				0.06			0.03					c0.04
v/c Ratio				0.07	0.40		0.27	0.06			0.17	0.34
Uniform Delay, d1				2.8	3.9		65.0	63.4			64.2	65.5
Progression Factor				1.00	1.00		0.61	0.61			1.00	1.00
Incremental Delay, d2				0.1	0.2		0.4	0.0			0.3	1.1
Delay (s)				2.9	4.2		39.8	38.4			64.6	66.7
Level of Service				A	A		D	D			E	E
Approach Delay (s)		0.0			4.1			39.5			66.0	
Approach LOS		A			A			D			E	

Intersection Summary			
HCM 2000 Control Delay	7.9	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.39		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	11.1
Intersection Capacity Utilization	71.1%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



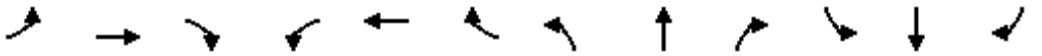
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	1175	100	0	0	0	0	60	50	40	75	0
Future Volume (vph)	15	1175	100	0	0	0	0	60	50	40	75	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)		5.8	5.8					5.7		5.7	5.7	
Lane Util. Factor		0.91	1.00					0.95		1.00	1.00	
Frpb, ped/bikes		1.00	0.95					1.00		1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00		1.00	1.00	
Frt		1.00	0.85					0.93		1.00	1.00	
Flt Protected		1.00	1.00					1.00		0.95	1.00	
Satd. Flow (prot)		4853	1441					3149		1690	1779	
Flt Permitted		1.00	1.00					1.00		0.67	1.00	
Satd. Flow (perm)		4853	1441					3149		1199	1779	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	17	1306	111	0	0	0	0	67	56	44	83	0
RTOR Reduction (vph)	0	0	20	0	0	0	0	50	0	0	0	0
Lane Group Flow (vph)	0	1323	91	0	0	0	0	73	0	44	83	0
Confl. Peds. (#/hr)			9	9			15					15
Turn Type	Perm	NA	Perm					NA		Perm	NA	
Protected Phases		6						4			8	
Permitted Phases	6		6							8		
Actuated Green, G (s)		130.5	130.5					18.0		18.0	18.0	
Effective Green, g (s)		130.5	130.5					18.0		18.0	18.0	
Actuated g/C Ratio		0.82	0.82					0.11		0.11	0.11	
Clearance Time (s)		5.8	5.8					5.7		5.7	5.7	
Vehicle Extension (s)		2.0	2.0					2.0		2.0	2.0	
Lane Grp Cap (vph)		3958	1175					354		134	200	
v/s Ratio Prot								0.02			c0.05	
v/s Ratio Perm		0.27	0.06							0.04		
v/c Ratio		0.33	0.08					0.21		0.33	0.41	
Uniform Delay, d1		3.7	2.9					64.5		65.4	66.1	
Progression Factor		0.29	0.02					1.00		0.87	0.88	
Incremental Delay, d2		0.2	0.1					0.1		0.5	0.5	
Delay (s)		1.3	0.2					64.6		57.5	58.4	
Level of Service		A	A					E		E	E	
Approach Delay (s)		1.2			0.0			64.6			58.1	
Approach LOS		A			A			E			E	

Intersection Summary			
HCM 2000 Control Delay	10.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.34		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	11.5
Intersection Capacity Utilization	71.1%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



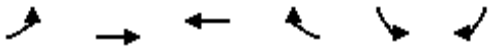
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	75	860	295	35	85	35
Future Volume (vph)	75	860	295	35	85	35
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850
Total Lost time (s)	5.5	5.5	5.5		5.5	5.5
Lane Util. Factor	1.00	0.95	0.95		1.00	1.00
Frpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Frt	1.00	1.00	0.98		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1685	3380	3315		1690	1512
Flt Permitted	0.51	1.00	1.00		0.95	1.00
Satd. Flow (perm)	906	3380	3315		1690	1512
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	83	956	328	39	94	39
RTOR Reduction (vph)	0	0	2	0	0	36
Lane Group Flow (vph)	83	956	365	0	94	3
Confl. Peds. (#/hr)	3			3		
Turn Type	pm+pt	NA	NA		Prot	Perm
Protected Phases	1	6	2		3	
Permitted Phases	6					7
Actuated Green, G (s)	135.7	135.7	124.9		13.3	13.3
Effective Green, g (s)	135.7	135.7	124.9		13.3	13.3
Actuated g/C Ratio	0.85	0.85	0.78		0.08	0.08
Clearance Time (s)	5.5	5.5	5.5		5.5	5.5
Vehicle Extension (s)	1.0	6.2	6.2		2.0	2.0
Lane Grp Cap (vph)	794	2866	2587		140	125
v/s Ratio Prot	0.00	c0.28	0.11		c0.06	
v/s Ratio Perm	0.09					0.00
v/c Ratio	0.10	0.33	0.14		0.67	0.03
Uniform Delay, d1	2.0	2.6	4.3		71.2	67.4
Progression Factor	0.40	0.37	1.00		1.00	1.00
Incremental Delay, d2	0.0	0.3	0.1		9.5	0.0
Delay (s)	0.8	1.3	4.4		80.8	67.4
Level of Service	A	A	A		F	E
Approach Delay (s)		1.2	4.4		76.8	
Approach LOS		A	A		E	

Intersection Summary			
HCM 2000 Control Delay	8.5	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.39		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	19.5
Intersection Capacity Utilization	43.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



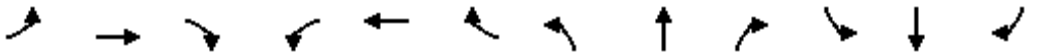
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	165	770	50	320	705	270	140	1545	325	160	795	260
Future Volume (vph)	165	770	50	320	705	270	140	1545	325	160	795	260
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.91	1.00	0.97	0.91	1.00
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.98	1.00	1.00	0.98	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3278	3380	1512	3278	3380	1481	3278	4856	1480	3278	4856	1488
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3278	3380	1512	3278	3380	1481	3278	4856	1480	3278	4856	1488
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	183	856	56	356	783	300	156	1717	361	178	883	289
RTOR Reduction (vph)	0	0	40	0	0	122	0	0	184	0	0	146
Lane Group Flow (vph)	183	856	16	356	783	178	156	1717	177	178	883	143
Confl. Peds. (#/hr)	5					5	3		7	7		3
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases			6			2			4			8
Actuated Green, G (s)	11.2	45.6	45.6	17.6	52.0	52.0	11.2	57.6	57.6	9.6	56.0	56.0
Effective Green, g (s)	11.2	45.6	45.6	17.6	52.0	52.0	11.2	57.6	57.6	9.6	56.0	56.0
Actuated g/C Ratio	0.07	0.29	0.29	0.11	0.32	0.32	0.07	0.36	0.36	0.06	0.35	0.35
Clearance Time (s)	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4
Vehicle Extension (s)	2.0	5.0	5.0	2.0	5.0	5.0	2.0	5.0	5.0	2.0	5.0	5.0
Lane Grp Cap (vph)	229	963	430	360	1098	481	229	1748	532	196	1699	520
v/s Ratio Prot	0.06	c0.25		c0.11	0.23		0.05	c0.35		c0.05	0.18	
v/s Ratio Perm			0.01			0.12			0.12			0.10
v/c Ratio	0.80	0.89	0.04	0.99	0.71	0.37	0.68	0.98	0.33	0.91	0.52	0.27
Uniform Delay, d1	73.3	54.8	41.3	71.1	47.4	41.4	72.7	50.7	37.2	74.8	41.3	37.4
Progression Factor	1.00	1.00	1.00	0.90	0.85	0.60	1.00	1.00	1.00	1.15	1.23	1.97
Incremental Delay, d2	16.4	12.0	0.2	38.4	3.1	1.7	6.5	17.5	0.8	34.7	0.5	0.5
Delay (s)	89.7	66.8	41.5	102.3	43.3	26.4	79.1	68.2	38.0	120.7	51.3	74.0
Level of Service	F	E	D	F	D	C	E	E	D	F	D	E
Approach Delay (s)		69.4			54.4			64.1			65.3	
Approach LOS		E			D			E			E	

Intersection Summary			
HCM 2000 Control Delay	63.0	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	29.6
Intersection Capacity Utilization	92.4%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



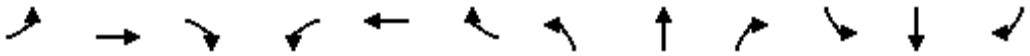
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	130	1140	1545	85	55	90
Future Volume (vph)	130	1140	1545	85	55	90
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850
Total Lost time (s)	6.3	6.3	6.3	6.3	6.3	6.3
Lane Util. Factor	1.00	0.95	0.95	1.00	0.97	1.00
Frpb, ped/bikes	1.00	1.00	1.00	0.98	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1690	3380	3380	1488	3278	1496
Flt Permitted	0.10	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	182	3380	3380	1488	3278	1496
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	144	1267	1717	94	61	100
RTOR Reduction (vph)	0	0	0	20	0	39
Lane Group Flow (vph)	144	1267	1717	74	61	61
Confl. Peds. (#/hr)	2			2		4
Turn Type	pm+pt	NA	NA	Perm	Prot	pm+ov
Protected Phases	1	6	2		3	1
Permitted Phases	6			2		3
Actuated Green, G (s)	140.4	140.4	125.4	125.4	7.0	15.7
Effective Green, g (s)	140.4	140.4	125.4	125.4	7.0	15.7
Actuated g/C Ratio	0.88	0.88	0.78	0.78	0.04	0.10
Clearance Time (s)	6.3	6.3	6.3	6.3	6.3	6.3
Vehicle Extension (s)	3.0	4.0	4.0	4.0	3.0	3.0
Lane Grp Cap (vph)	241	2965	2649	1166	143	205
v/s Ratio Prot	c0.03	0.37	c0.51		0.02	c0.02
v/s Ratio Perm	0.49			0.05		0.02
v/c Ratio	0.60	0.43	0.65	0.06	0.43	0.30
Uniform Delay, d1	10.4	1.9	7.6	3.9	74.5	67.0
Progression Factor	4.37	0.19	1.00	1.00	1.00	1.00
Incremental Delay, d2	2.4	0.3	1.2	0.1	2.0	0.8
Delay (s)	47.9	0.6	8.8	4.0	76.6	67.9
Level of Service	D	A	A	A	E	E
Approach Delay (s)		5.5	8.6		71.2	
Approach LOS		A	A		E	

Intersection Summary			
HCM 2000 Control Delay	10.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	18.9
Intersection Capacity Utilization	72.8%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	315	155	90	185	0	0	0	0	225	1265	140
Future Volume (vph)	0	315	155	90	185	0	0	0	0	225	1265	140
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)		5.4		5.4	5.4						5.8	5.8
Lane Util. Factor		0.95		1.00	0.95						0.91	1.00
Frpb, ped/bikes		1.00		1.00	1.00						1.00	0.99
Flpb, ped/bikes		1.00		1.00	1.00						1.00	1.00
Frt		0.95		1.00	1.00						1.00	0.85
Flt Protected		1.00		0.95	1.00						0.99	1.00
Satd. Flow (prot)		3213		1690	3380						4820	1491
Flt Permitted		1.00		0.20	1.00						0.99	1.00
Satd. Flow (perm)		3213		349	3380						4820	1491
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	350	172	100	206	0	0	0	0	250	1406	156
RTOR Reduction (vph)	0	81	0	0	0	0	0	0	0	0	0	81
Lane Group Flow (vph)	0	441	0	100	206	0	0	0	0	0	1656	75
Confl. Peds. (#/hr)	2					2	2					2
Turn Type		NA		pm+pt	NA					Perm	NA	Perm
Protected Phases		8		7	4						6	
Permitted Phases				4						6		6
Actuated Green, G (s)		15.0		30.5	30.5						38.3	38.3
Effective Green, g (s)		15.0		30.5	30.5						38.3	38.3
Actuated g/C Ratio		0.19		0.38	0.38						0.48	0.48
Clearance Time (s)		5.4		5.4	5.4						5.8	5.8
Vehicle Extension (s)		2.0		1.5	2.0						2.5	2.5
Lane Grp Cap (vph)		602		302	1288						2307	713
v/s Ratio Prot		c0.14		c0.04	0.06							
v/s Ratio Perm				0.08							0.34	0.05
v/c Ratio		0.73		0.33	0.16						0.72	0.10
Uniform Delay, d1		30.6		17.3	16.3						16.6	11.4
Progression Factor		1.00		0.94	0.94						1.00	1.00
Incremental Delay, d2		4.0		0.2	0.0						2.0	0.3
Delay (s)		34.6		16.4	15.3						18.5	11.7
Level of Service		C		B	B						B	B
Approach Delay (s)		34.6			15.6			0.0			17.9	
Approach LOS		C			B			A			B	

Intersection Summary			
HCM 2000 Control Delay	21.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	16.6
Intersection Capacity Utilization	71.5%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	110	425	0	0	205	335	105	1540	180	0	0	0
Future Volume (vph)	110	425	0	0	205	335	105	1540	180	0	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	5.7	5.7			5.7			5.8	5.8			
Lane Util. Factor	1.00	0.95			0.95			0.91	1.00			
Frpb, ped/bikes	1.00	1.00			0.99			1.00	0.98			
Flpb, ped/bikes	1.00	1.00			1.00			1.00	1.00			
Frt	1.00	1.00			0.91			1.00	0.85			
Flt Protected	0.95	1.00			1.00			1.00	1.00			
Satd. Flow (prot)	1689	3380			3032			4841	1486			
Flt Permitted	0.18	1.00			1.00			1.00	1.00			
Satd. Flow (perm)	328	3380			3032			4841	1486			
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	122	472	0	0	228	372	117	1711	200	0	0	0
RTOR Reduction (vph)	0	0	0	0	76	0	0	0	108	0	0	0
Lane Group Flow (vph)	122	472	0	0	524	0	0	1828	93	0	0	0
Confl. Peds. (#/hr)	6		1	1		6			5	5		
Turn Type	pm+pt	NA			NA		Perm	NA	Perm			
Protected Phases	3	8			4			2				
Permitted Phases	8						2		2			
Actuated Green, G (s)	31.5	31.5			17.7			37.0	37.0			
Effective Green, g (s)	31.5	31.5			17.7			37.0	37.0			
Actuated g/C Ratio	0.39	0.39			0.22			0.46	0.46			
Clearance Time (s)	5.7	5.7			5.7			5.8	5.8			
Vehicle Extension (s)	1.0	2.0			2.0			2.5	2.5			
Lane Grp Cap (vph)	266	1330			670			2238	687			
v/s Ratio Prot	0.05	c0.14			c0.17							
v/s Ratio Perm	0.13							0.38	0.06			
v/c Ratio	0.46	0.35			0.90dr			0.82	0.13			
Uniform Delay, d1	17.2	17.1			29.3			18.6	12.3			
Progression Factor	0.91	0.81			0.87			0.32	0.02			
Incremental Delay, d2	0.3	0.0			5.4			1.6	0.2			
Delay (s)	16.0	13.9			30.9			7.5	0.4			
Level of Service	B	B			C			A	A			
Approach Delay (s)		14.4			30.9			6.8			0.0	
Approach LOS		B			C			A			A	

Intersection Summary			
HCM 2000 Control Delay	12.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	17.2
Intersection Capacity Utilization	71.5%	ICU Level of Service	C
Analysis Period (min)	15		

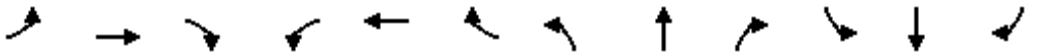
dr Defacto Right Lane. Recode with 1 though lane as a right lane.

c Critical Lane Group



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	505	25	80	495	40	50
Future Volume (vph)	505	25	80	495	40	50
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850
Total Lost time (s)	5.5			5.5	5.3	5.3
Lane Util. Factor	0.95			0.95	1.00	1.00
Frpb, ped/bikes	1.00			1.00	1.00	0.98
Flpb, ped/bikes	1.00			1.00	1.00	1.00
Frt	0.99			1.00	1.00	0.85
Flt Protected	1.00			0.99	0.95	1.00
Satd. Flow (prot)	3356			3356	1690	1487
Flt Permitted	1.00			0.79	0.95	1.00
Satd. Flow (perm)	3356			2676	1690	1487
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	561	28	89	550	44	56
RTOR Reduction (vph)	2	0	0	0	0	53
Lane Group Flow (vph)	587	0	0	639	44	4
Confl. Peds. (#/hr)						1
Turn Type	NA		Perm	NA	Prot	Perm
Protected Phases	6			2	7	
Permitted Phases			2			3
Actuated Green, G (s)	64.2			64.2	5.0	5.0
Effective Green, g (s)	64.2			64.2	5.0	5.0
Actuated g/C Ratio	0.80			0.80	0.06	0.06
Clearance Time (s)	5.5			5.5	5.3	5.3
Vehicle Extension (s)	2.0			2.0	2.0	0.2
Lane Grp Cap (vph)	2693			2147	105	92
v/s Ratio Prot	0.18				c0.03	
v/s Ratio Perm				c0.24		0.00
v/c Ratio	0.22			0.30	0.42	0.04
Uniform Delay, d1	1.9			2.0	36.1	35.2
Progression Factor	0.51			1.00	1.02	1.29
Incremental Delay, d2	0.2			0.4	0.9	0.1
Delay (s)	1.1			2.4	37.7	45.6
Level of Service	A			A	D	D
Approach Delay (s)	1.1			2.4	42.1	
Approach LOS	A			A	D	

Intersection Summary			
HCM 2000 Control Delay	4.8	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.33		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	16.1
Intersection Capacity Utilization	51.8%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	505	1685	0	0	0	0	0	1355	115
Future Volume (vph)	0	0	0	505	1685	0	0	0	0	0	1355	115
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)				5.8	5.8						5.8	5.8
Lane Util. Factor				0.81	0.81						0.86	0.86
Frpb, ped/bikes				1.00	1.00						1.00	0.99
Flpb, ped/bikes				1.00	1.00						1.00	1.00
Frt				1.00	1.00						1.00	0.85
Flt Protected				0.95	1.00						1.00	1.00
Satd. Flow (prot)				1366	5750						4583	1283
Flt Permitted				0.95	1.00						1.00	1.00
Satd. Flow (perm)				1366	5750						4583	1283
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	561	1872	0	0	0	0	0	1506	128
RTOR Reduction (vph)	0	0	0	21	21	0	0	0	0	0	1	22
Lane Group Flow (vph)	0	0	0	450	1941	0	0	0	0	0	1518	93
Confl. Peds. (#/hr)	5		2	2		5	1		4	4		1
Turn Type				Perm	NA						NA	Perm
Protected Phases					1						2	
Permitted Phases				1								2
Actuated Green, G (s)				35.2	35.2						33.2	33.2
Effective Green, g (s)				35.2	35.2						33.2	33.2
Actuated g/C Ratio				0.44	0.44						0.42	0.42
Clearance Time (s)				5.8	5.8						5.8	5.8
Lane Grp Cap (vph)				601	2530						1901	532
v/s Ratio Prot											c0.33	
v/s Ratio Perm				0.33	0.34							0.07
v/c Ratio				0.75	0.77						0.80	0.17
Uniform Delay, d1				18.7	18.9						20.5	14.8
Progression Factor				0.34	0.36						0.42	0.14
Incremental Delay, d2				4.4	1.2						2.6	0.5
Delay (s)				10.8	8.0						11.3	2.6
Level of Service				B	A						B	A
Approach Delay (s)		0.0			8.6			0.0			10.7	
Approach LOS		A			A			A			B	

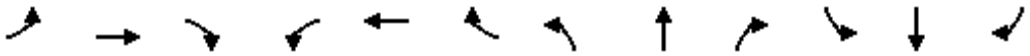
Intersection Summary			
HCM 2000 Control Delay	9.4	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	11.6
Intersection Capacity Utilization	70.1%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	1865	335	375	1650	0	0	0	0
Future Volume (vph)	0	0	0	0	1865	335	375	1650	0	0	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)					6.0	6.0	6.0	6.0				
Lane Util. Factor					0.81	0.81	0.86	0.86				
Frpb, ped/bikes					1.00	0.98	1.00	1.00				
Flpb, ped/bikes					1.00	1.00	1.00	1.00				
Frt					1.00	0.85	1.00	1.00				
Flt Protected					1.00	1.00	0.95	1.00				
Satd. Flow (prot)					5746	1199	1453	4584				
Flt Permitted					1.00	1.00	0.95	1.00				
Satd. Flow (perm)					5746	1199	1453	4584				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	0	2072	372	417	1833	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	2	24	23	23	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	2107	311	352	1852	0	0	0	0
Confl. Peds. (#/hr)	9		2	2		9			12	12		
Turn Type					NA	Perm	Perm	NA				
Protected Phases					1			2				
Permitted Phases						1	2					
Actuated Green, G (s)					33.0	33.0	35.0	35.0				
Effective Green, g (s)					33.0	33.0	35.0	35.0				
Actuated g/C Ratio					0.41	0.41	0.44	0.44				
Clearance Time (s)					6.0	6.0	6.0	6.0				
Lane Grp Cap (vph)					2370	494	635	2005				
v/s Ratio Prot					c0.37							
v/s Ratio Perm						0.26	0.24	0.40				
v/c Ratio					0.89	0.63	0.55	0.92				
Uniform Delay, d1					21.8	18.6	16.7	21.2				
Progression Factor					0.68	0.54	0.47	0.45				
Incremental Delay, d2					4.4	4.8	2.3	6.1				
Delay (s)					19.3	14.9	10.1	15.7				
Level of Service					B	B	B	B				
Approach Delay (s)		0.0			18.7			14.8			0.0	
Approach LOS		A			B			B			A	

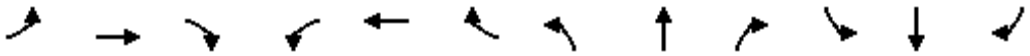
Intersection Summary			
HCM 2000 Control Delay	16.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.91		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	70.1%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	215	2160	135	60	95	0	0	15	5
Future Volume (vph)	0	0	0	215	2160	135	60	95	0	0	15	5
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)					5.4		5.3	5.3			5.3	
Lane Util. Factor					0.86		0.97	1.00			1.00	
Frpb, ped/bikes					1.00		1.00	1.00			1.00	
Flpb, ped/bikes					1.00		1.00	1.00			1.00	
Frt					0.99		1.00	1.00			0.96	
Flt Protected					1.00		0.95	1.00			1.00	
Satd. Flow (prot)					6035		3278	1779			1716	
Flt Permitted					1.00		0.95	1.00			1.00	
Satd. Flow (perm)					6035		3278	1779			1716	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	239	2400	150	67	106	0	0	17	6
RTOR Reduction (vph)	0	0	0	0	6	0	0	0	0	0	6	0
Lane Group Flow (vph)	0	0	0	0	2783	0	67	106	0	0	17	0
Confl. Peds. (#/hr)	2		2	2		2			1	1		
Turn Type				Perm	NA		Prot	NA			NA	
Protected Phases					2		7	4			8	
Permitted Phases				2								
Actuated Green, G (s)					53.6		7.6	15.7			2.8	
Effective Green, g (s)					53.6		7.6	15.7			2.8	
Actuated g/C Ratio					0.67		0.09	0.20			0.03	
Clearance Time (s)					5.4		5.3	5.3			5.3	
Vehicle Extension (s)					3.7		1.5	1.5			1.5	
Lane Grp Cap (vph)					4043		311	349			60	
v/s Ratio Prot							0.02	c0.06			0.01	
v/s Ratio Perm					0.46							
v/c Ratio					0.69		0.22	0.30			0.29	
Uniform Delay, d1					8.1		33.4	27.5			37.6	
Progression Factor					1.00		0.70	0.63			1.23	
Incremental Delay, d2					1.0		0.1	0.2			0.9	
Delay (s)					9.1		23.7	17.4			47.3	
Level of Service					A		C	B			D	
Approach Delay (s)		0.0			9.1			19.8			47.3	
Approach LOS		A			A			B			D	

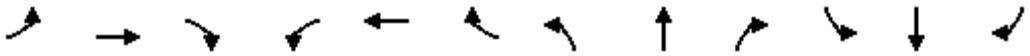
Intersection Summary			
HCM 2000 Control Delay	10.0	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	64.5%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1635	155	0	0	0	0	0	0	265	1570	0
Future Volume (vph)	0	1635	155	0	0	0	0	0	0	265	1570	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)		5.9	5.9							5.9	5.9	
Lane Util. Factor		0.81	0.81							0.86	0.86	
Frpb, ped/bikes		1.00	0.98							1.00	1.00	
Flpb, ped/bikes		1.00	1.00							1.00	1.00	
Frt		1.00	0.85							1.00	1.00	
Flt Protected		1.00	1.00							0.95	1.00	
Satd. Flow (prot)		5755	1205							1452	4586	
Flt Permitted		1.00	1.00							0.95	1.00	
Satd. Flow (perm)		5755	1205							1452	4586	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	1817	172	0	0	0	0	0	0	294	1744	0
RTOR Reduction (vph)	0	1	25	0	0	0	0	0	0	21	21	0
Lane Group Flow (vph)	0	1833	130	0	0	0	0	0	0	244	1752	0
Confl. Peds. (#/hr)			4	4			3		1	1		3
Turn Type		NA	Perm							Perm	NA	
Protected Phases		1									2	
Permitted Phases			1							2		
Actuated Green, G (s)		30.1	30.1							38.1	38.1	
Effective Green, g (s)		30.1	30.1							38.1	38.1	
Actuated g/C Ratio		0.38	0.38							0.48	0.48	
Clearance Time (s)		5.9	5.9							5.9	5.9	
Lane Grp Cap (vph)		2165	453							691	2184	
v/s Ratio Prot		c0.32										
v/s Ratio Perm			0.11							0.17	0.38	
v/c Ratio		0.85	0.29							0.35	0.80	
Uniform Delay, d1		22.8	17.4							13.2	17.8	
Progression Factor		1.00	1.00							0.54	0.49	
Incremental Delay, d2		4.3	1.6							0.8	1.9	
Delay (s)		27.2	19.0							8.0	10.6	
Level of Service		C	B							A	B	
Approach Delay (s)		26.5			0.0			0.0			10.3	
Approach LOS		C			A			A			B	

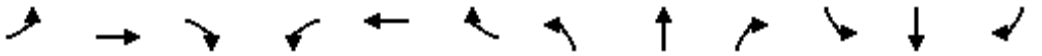
Intersection Summary				
HCM 2000 Control Delay	18.3	HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio	0.82			
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	11.8	
Intersection Capacity Utilization	63.8%	ICU Level of Service	B	
Analysis Period (min)	15			

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	505	1355	0	0	0	0	0	1505	85	0	0	0
Future Volume (vph)	505	1355	0	0	0	0	0	1505	85	0	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	5.6	5.6						6.0	6.0			
Lane Util. Factor	0.81	0.81						0.91	0.88			
Frpb, ped/bikes	1.00	1.00						1.00	0.98			
Flpb, ped/bikes	1.00	1.00						1.00	1.00			
Frt	1.00	1.00						1.00	0.85			
Flt Protected	0.95	1.00						1.00	1.00			
Satd. Flow (prot)	1365	5734						4856	2617			
Flt Permitted	0.95	1.00						1.00	1.00			
Satd. Flow (perm)	1365	5734						4856	2617			
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	561	1506	0	0	0	0	0	1672	94	0	0	0
RTOR Reduction (vph)	49	49	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	349	1620	0	0	0	0	0	1672	94	0	0	0
Confl. Peds. (#/hr)	3		6	6		3			16	16		
Turn Type	Perm	NA						NA	custom			
Protected Phases		8						2				
Permitted Phases	8								5			
Actuated Green, G (s)	32.4	32.4						36.0	80.0			
Effective Green, g (s)	32.4	32.4						36.0	80.0			
Actuated g/C Ratio	0.40	0.40						0.45	1.00			
Clearance Time (s)	5.6	5.6						6.0	6.0			
Vehicle Extension (s)	5.0	5.0						5.0	0.2			
Lane Grp Cap (vph)	552	2322						2185	2617			
v/s Ratio Prot								c0.34				
v/s Ratio Perm	0.26	0.28							0.04			
v/c Ratio	0.63	0.70						0.77	0.04			
Uniform Delay, d1	19.0	19.7						18.5	0.0			
Progression Factor	0.35	0.40						0.94	1.00			
Incremental Delay, d2	3.3	1.1						1.5	0.0			
Delay (s)	9.9	9.0						18.8	0.0			
Level of Service	A	A						B	A			
Approach Delay (s)		9.2			0.0			17.8			0.0	
Approach LOS		A			A			B			A	

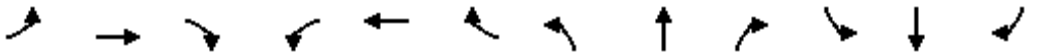
Intersection Summary			
HCM 2000 Control Delay	13.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	1.11		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	14.6
Intersection Capacity Utilization	70.1%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	65	1355	115	0	0	0	0	95	50	45	160	0
Future Volume (vph)	65	1355	115	0	0	0	0	95	50	45	160	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	5.7	5.7						5.7	5.7	5.7	5.7	
Lane Util. Factor	1.00	0.86						0.95	1.00	1.00	0.95	
Frpb, ped/bikes	1.00	1.00						1.00	1.00	1.00	1.00	
Flpb, ped/bikes	1.00	1.00						1.00	1.00	1.00	1.00	
Frt	1.00	0.99						1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00						1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1687	6039						3366	1512	1690	3366	
Flt Permitted	0.95	1.00						1.00	1.00	0.44	1.00	
Satd. Flow (perm)	1687	6039						3366	1512	776	3366	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	72	1506	128	0	0	0	0	106	56	50	178	0
RTOR Reduction (vph)	0	11	0	0	0	0	0	0	49	0	0	0
Lane Group Flow (vph)	72	1623	0	0	0	0	0	106	7	50	178	0
Confl. Peds. (#/hr)	2		7	7		2	4					4
Bus Blockages (#/hr)	0	0	0	0	0	0	0	2	0	0	2	0
Turn Type	Perm	NA						NA	Perm	pm+pt	NA	
Protected Phases		6						4		3	8	
Permitted Phases	6								4	8		
Actuated Green, G (s)	49.7	49.7						10.0	10.0	18.9	18.9	
Effective Green, g (s)	49.7	49.7						10.0	10.0	18.9	18.9	
Actuated g/C Ratio	0.62	0.62						0.12	0.12	0.24	0.24	
Clearance Time (s)	5.7	5.7						5.7	5.7	5.7	5.7	
Vehicle Extension (s)	4.8	4.8						1.7	1.7	1.0	1.7	
Lane Grp Cap (vph)	1048	3751						420	189	219	795	
v/s Ratio Prot		c0.27						0.03		0.01	c0.05	
v/s Ratio Perm	0.04								0.00	c0.04		
v/c Ratio	0.07	0.43						0.25	0.04	0.23	0.22	
Uniform Delay, d1	6.0	7.8						31.6	30.8	24.3	24.6	
Progression Factor	0.13	0.09						1.00	1.00	0.66	0.71	
Incremental Delay, d2	0.1	0.3						0.1	0.0	0.2	0.0	
Delay (s)	0.9	1.0						31.7	30.8	16.1	17.6	
Level of Service	A	A						C	C	B	B	
Approach Delay (s)		1.0			0.0			31.4			17.3	
Approach LOS		A			A			C			B	

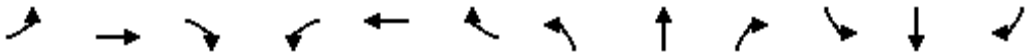
Intersection Summary			
HCM 2000 Control Delay	5.1	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	17.1
Intersection Capacity Utilization	64.5%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



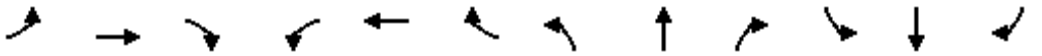
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	310	35	185	500	0	0	0	0	200	1245	105
Future Volume (vph)	0	310	35	185	500	0	0	0	0	200	1245	105
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)		5.5		5.5	5.5					6.0	6.0	6.0
Lane Util. Factor		0.95		1.00	0.95					1.00	0.91	1.00
Frpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	1.00
Flpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	1.00
Frt		0.98		1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00		0.95	1.00					0.95	1.00	1.00
Satd. Flow (prot)		3323		1689	3380					1690	4856	1512
Flt Permitted		1.00		0.45	1.00					0.95	1.00	1.00
Satd. Flow (perm)		3323		799	3380					1690	4856	1512
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	344	39	206	556	0	0	0	0	222	1383	117
RTOR Reduction (vph)	0	12	0	0	0	0	0	0	0	0	0	55
Lane Group Flow (vph)	0	371	0	206	556	0	0	0	0	222	1383	62
Confl. Peds. (#/hr)	2		3	3		2						
Turn Type		NA		pm+pt	NA					Perm	NA	Perm
Protected Phases		8		7	4						6	
Permitted Phases				4						6		6
Actuated Green, G (s)		14.1		26.2	26.2					42.3	42.3	42.3
Effective Green, g (s)		14.1		26.2	26.2					42.3	42.3	42.3
Actuated g/C Ratio		0.18		0.33	0.33					0.53	0.53	0.53
Clearance Time (s)		5.5		5.5	5.5					6.0	6.0	6.0
Vehicle Extension (s)		2.5		2.0	2.5					6.0	6.0	6.0
Lane Grp Cap (vph)		585		335	1106					893	2567	799
v/s Ratio Prot		0.11		c0.05	0.16						c0.28	
v/s Ratio Perm				c0.15						0.13		0.04
v/c Ratio		0.63		0.61	0.50					0.25	0.54	0.08
Uniform Delay, d1		30.6		25.7	21.7					10.2	12.4	9.3
Progression Factor		1.00		0.22	0.25					0.19	0.17	0.01
Incremental Delay, d2		2.0		1.6	0.2					0.4	0.5	0.1
Delay (s)		32.5		7.3	5.5					2.3	2.6	0.2
Level of Service		C		A	A					A	A	A
Approach Delay (s)		32.5			6.0			0.0			2.4	
Approach LOS		C			A			A			A	

Intersection Summary			
HCM 2000 Control Delay	7.4	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	69.9%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



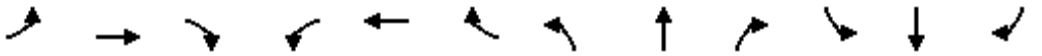
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	55	405	0	0	695	180	100	1590	140	0	0	0
Future Volume (vph)	55	405	0	0	695	180	100	1590	140	0	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	5.7	5.7			5.7	5.7	6.0	6.0	6.0			
Lane Util. Factor	1.00	0.95			0.95	1.00	1.00	0.91	1.00			
Frpb, ped/bikes	1.00	1.00			1.00	0.98	1.00	1.00	0.98			
Flpb, ped/bikes	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1689	3380			3380	1477	1685	4856	1484			
Flt Permitted	0.23	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	400	3380			3380	1477	1685	4856	1484			
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	61	450	0	0	772	200	111	1767	156	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	84	0	0	90	0	0	0
Lane Group Flow (vph)	61	450	0	0	772	116	111	1767	66	0	0	0
Confl. Peds. (#/hr)	10		6	6		10	3		7	7		3
Turn Type	pm+pt	NA			NA	Perm	Perm	NA	Perm			
Protected Phases	3	8			4			2				
Permitted Phases	8					4	2		2			
Actuated Green, G (s)	34.3	34.3			23.3	23.3	34.0	34.0	34.0			
Effective Green, g (s)	34.3	34.3			23.3	23.3	34.0	34.0	34.0			
Actuated g/C Ratio	0.43	0.43			0.29	0.29	0.42	0.42	0.42			
Clearance Time (s)	5.7	5.7			5.7	5.7	6.0	6.0	6.0			
Vehicle Extension (s)	1.0	2.5			2.5	2.5	2.5	2.5	2.5			
Lane Grp Cap (vph)	256	1449			984	430	716	2063	630			
v/s Ratio Prot	0.02	c0.13			c0.23			c0.36				
v/s Ratio Perm	0.09					0.08	0.07		0.04			
v/c Ratio	0.24	0.31			0.78	0.27	0.16	0.86	0.11			
Uniform Delay, d1	22.1	15.1			26.0	21.8	14.2	20.8	13.8			
Progression Factor	0.42	0.42			1.00	1.00	0.86	0.81	2.35			
Incremental Delay, d2	0.3	0.1			6.3	1.5	0.2	2.1	0.1			
Delay (s)	9.5	6.4			32.3	23.3	12.3	19.0	32.6			
Level of Service	A	A			C	C	B	B	C			
Approach Delay (s)		6.8			30.5			19.7			0.0	
Approach LOS		A			C			B			A	

Intersection Summary			
HCM 2000 Control Delay	20.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	17.4
Intersection Capacity Utilization	69.9%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



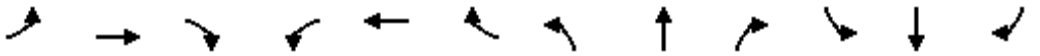
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	85	430	45	50	840	180	50	130	15	35	115	85
Future Volume (vph)	85	430	45	50	840	180	50	130	15	35	115	85
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	5.7	5.7		5.7	5.7		5.7	5.7		5.7	5.7	5.7
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.99		1.00	0.97		1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1690	3328		1690	3283		1687	3326		1690	3380	1490
Flt Permitted	0.15	1.00		0.46	1.00		0.67	1.00		0.65	1.00	1.00
Satd. Flow (perm)	260	3328		811	3283		1192	3326		1156	3380	1490
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	94	478	50	56	933	200	56	144	17	39	128	94
RTOR Reduction (vph)	0	7	0	0	17	0	0	13	0	0	0	83
Lane Group Flow (vph)	94	521	0	56	1116	0	56	148	0	39	128	11
Confl. Peds. (#/hr)	1		1	1		1	3					3
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases	6			2			4			8		8
Actuated Green, G (s)	37.4	33.5		35.0	32.3		10.7	7.9		10.7	7.9	7.9
Effective Green, g (s)	37.4	33.5		35.0	32.3		10.7	7.9		10.7	7.9	7.9
Actuated g/C Ratio	0.54	0.48		0.50	0.46		0.15	0.11		0.15	0.11	0.11
Clearance Time (s)	5.7	5.7		5.7	5.7		5.7	5.7		5.7	5.7	5.7
Vehicle Extension (s)	1.0	5.0		1.0	5.0		1.0	2.0		1.2	5.0	5.0
Lane Grp Cap (vph)	219	1599		441	1521		202	376		198	383	168
v/s Ratio Prot	c0.02	0.16		0.00	c0.34		c0.01	c0.04		0.01	0.04	
v/s Ratio Perm	0.21			0.06			0.03			0.02		0.01
v/c Ratio	0.43	0.33		0.13	0.73		0.28	0.39		0.20	0.33	0.06
Uniform Delay, d1	9.7	11.1		8.9	15.2		25.8	28.7		25.6	28.5	27.6
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	0.5	0.2		0.0	2.3		0.3	0.2		0.2	1.1	0.3
Delay (s)	10.2	11.4		9.0	17.5		26.1	28.9		25.7	29.6	27.9
Level of Service	B	B		A	B		C	C		C	C	C
Approach Delay (s)		11.2			17.1			28.2			28.4	
Approach LOS		B			B			C			C	

Intersection Summary			
HCM 2000 Control Delay	17.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	69.7	Sum of lost time (s)	22.8
Intersection Capacity Utilization	67.2%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



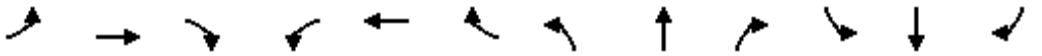
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	245	1180	115	325	1335	130	330	585	500	60	280	130
Future Volume (vph)	245	1180	115	325	1335	130	330	585	500	60	280	130
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	6.5	6.5	6.5	6.5	6.5	6.5	6.3	6.3	6.5	6.3	6.3	6.3
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95	0.88	0.97	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00	0.98	1.00	1.00	1.00	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3278	3380	1486	3278	3380	1488	3278	3380	2661	3278	3380	1486
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3278	3380	1486	3278	3380	1488	3278	3380	2661	3278	3380	1486
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	272	1311	128	361	1483	144	367	650	556	67	311	144
RTOR Reduction (vph)	0	0	70	0	0	74	0	0	73	0	0	127
Lane Group Flow (vph)	272	1311	58	361	1483	70	367	650	483	67	311	17
Confl. Peds. (#/hr)	2		4	4		2	3					3
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4	5	3	8	
Permitted Phases			6			2			4			8
Actuated Green, G (s)	14.5	72.6	72.6	20.0	78.1	78.1	22.8	34.4	54.4	7.4	19.0	19.0
Effective Green, g (s)	14.5	72.6	72.6	20.0	78.1	78.1	22.8	34.4	54.4	7.4	19.0	19.0
Actuated g/C Ratio	0.09	0.45	0.45	0.12	0.49	0.49	0.14	0.21	0.34	0.05	0.12	0.12
Clearance Time (s)	6.5	6.5	6.5	6.5	6.5	6.5	6.3	6.3	6.5	6.3	6.3	6.3
Vehicle Extension (s)	2.0	5.0	5.0	2.0	5.0	5.0	2.0	1.0	2.0	2.0	1.0	1.0
Lane Grp Cap (vph)	297	1533	674	409	1649	726	467	726	904	151	401	176
v/s Ratio Prot	0.08	c0.39		0.11	c0.44		0.11	c0.19	0.07	0.02	c0.09	
v/s Ratio Perm			0.04			0.05			0.11			0.01
v/c Ratio	0.92	0.86	0.09	0.88	0.90	0.10	0.79	0.90	0.53	0.44	0.78	0.10
Uniform Delay, d1	72.1	39.0	24.8	68.8	37.4	22.0	66.2	61.0	42.6	74.3	68.4	62.9
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.07	1.18	2.17
Incremental Delay, d2	30.6	6.3	0.3	19.1	8.2	0.3	7.8	13.3	0.3	0.6	6.9	0.1
Delay (s)	102.7	45.3	25.1	87.9	45.6	22.3	74.1	74.3	42.9	80.2	87.5	136.6
Level of Service	F	D	C	F	D	C	E	E	D	F	F	F
Approach Delay (s)		52.9			51.6			63.2			100.1	
Approach LOS		D			D			E			F	

Intersection Summary			
HCM 2000 Control Delay	59.5	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.92		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	25.6
Intersection Capacity Utilization	88.9%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



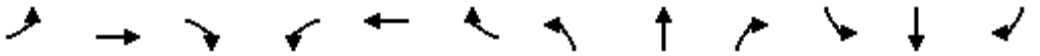
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	100	630	230	185	110	90	20	550	75	25	265	105
Future Volume (vph)	100	630	230	185	110	90	20	550	75	25	265	105
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	6.3	6.3		6.3	6.3		5.7	5.7		5.7	5.7	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	0.99		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.96		1.00	0.93		1.00	0.98		1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1689	3226		1690	3132		1690	3314		1690	3223	
Flt Permitted	0.61	1.00		0.10	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1090	3226		181	3132		1690	3314		1690	3223	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	111	700	256	206	122	100	22	611	83	28	294	117
RTOR Reduction (vph)	0	24	0	0	57	0	0	6	0	0	24	0
Lane Group Flow (vph)	111	932	0	206	166	0	22	688	0	28	387	0
Confl. Peds. (#/hr)	1		5	5		1	1		1	1		1
Turn Type	pm+pt	NA		pm+pt	NA		Prot	NA		Prot	NA	
Protected Phases	3	8		7	4		5	2		1	6	
Permitted Phases	8			4								
Actuated Green, G (s)	62.0	55.3		82.6	69.6		3.8	55.9		3.8	55.9	
Effective Green, g (s)	62.0	55.3		82.6	69.6		3.8	55.9		3.8	55.9	
Actuated g/C Ratio	0.39	0.35		0.52	0.43		0.02	0.35		0.02	0.35	
Clearance Time (s)	6.3	6.3		6.3	6.3		5.7	5.7		5.7	5.7	
Vehicle Extension (s)	1.2	4.0		1.2	4.0		1.2	4.0		1.2	4.0	
Lane Grp Cap (vph)	447	1114		291	1362		40	1157		40	1126	
v/s Ratio Prot	0.01	c0.29		c0.09	0.05		0.01	c0.21		c0.02	0.12	
v/s Ratio Perm	0.09			0.27								
v/c Ratio	0.25	0.84		0.71	0.12		0.55	0.59		0.70	0.34	
Uniform Delay, d1	32.1	48.2		33.7	27.0		77.3	42.7		77.5	38.5	
Progression Factor	1.00	1.00		1.00	1.00		0.49	0.24		0.62	0.86	
Incremental Delay, d2	0.1	5.8		6.3	0.1		5.8	1.4		32.5	0.8	
Delay (s)	32.2	54.0		40.0	27.0		43.7	11.5		81.0	34.0	
Level of Service	C	D		D	C		D	B		F	C	
Approach Delay (s)		51.8			33.3			12.5			37.0	
Approach LOS		D			C			B			D	

Intersection Summary			
HCM 2000 Control Delay	35.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	24.0
Intersection Capacity Utilization	75.5%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	225	785	85	260	1375	60	120	300	195	105	175	300
Future Volume (vph)	225	785	85	260	1375	60	120	300	195	105	175	300
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	6.4	6.4	6.4	6.4	6.4		6.4	6.4	6.4	6.4	6.4	6.4
Lane Util. Factor	0.97	0.95	1.00	0.97	0.91		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00		1.00	1.00	0.98	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3278	3380	1491	3278	4826		1690	3380	1487	1690	3380	1492
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3278	3380	1491	3278	4826		1690	3380	1487	1690	3380	1492
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	250	872	94	289	1528	67	133	333	217	117	194	333
RTOR Reduction (vph)	0	0	50	0	3	0	0	0	185	0	0	217
Lane Group Flow (vph)	250	872	44	289	1592	0	133	333	32	117	194	116
Confl. Peds. (#/hr)			1	1			1		3	3		1
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases			6						4			8
Actuated Green, G (s)	16.5	75.2	75.2	20.6	79.3		15.9	23.5	23.5	15.1	22.7	22.7
Effective Green, g (s)	16.5	75.2	75.2	20.6	79.3		15.9	23.5	23.5	15.1	22.7	22.7
Actuated g/C Ratio	0.10	0.47	0.47	0.13	0.50		0.10	0.15	0.15	0.09	0.14	0.14
Clearance Time (s)	6.4	6.4	6.4	6.4	6.4		6.4	6.4	6.4	6.4	6.4	6.4
Vehicle Extension (s)	2.0	5.0	5.0	2.0	5.0		2.0	3.0	3.0	2.0	2.5	2.5
Lane Grp Cap (vph)	338	1588	700	422	2391		167	496	218	159	479	211
v/s Ratio Prot	c0.08	0.26		0.09	c0.33		c0.08	c0.10		0.07	0.06	
v/s Ratio Perm			0.03						0.02			0.08
v/c Ratio	0.74	0.55	0.06	0.68	0.67		0.80	0.67	0.15	0.74	0.41	0.55
Uniform Delay, d1	69.7	30.3	23.2	66.6	30.4		70.5	64.6	59.5	70.5	62.5	63.9
Progression Factor	1.00	1.00	1.00	1.00	1.00		0.59	0.72	2.75	1.00	1.00	1.00
Incremental Delay, d2	7.1	1.4	0.2	3.7	1.5		19.3	3.2	0.3	14.1	0.4	2.3
Delay (s)	76.8	31.7	23.3	70.2	31.9		61.0	50.0	163.7	84.6	62.9	66.2
Level of Service	E	C	C	E	C		E	D	F	F	E	E
Approach Delay (s)		40.3			37.8			88.2			68.5	
Approach LOS		D			D			F			E	

Intersection Summary			
HCM 2000 Control Delay	50.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	25.6
Intersection Capacity Utilization	72.9%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	540	135	150	770	5	260	20	285	0	5	10
Future Volume (vph)	25	540	135	150	770	5	260	20	285	0	5	10
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	6.2	6.2	6.2	6.2	6.2		6.6	6.6	6.2		6.2	
Lane Util. Factor	1.00	0.95	1.00	0.97	0.95		0.95	0.95	0.88		1.00	
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		0.99	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	
Frt	1.00	1.00	0.85	1.00	1.00		1.00	1.00	0.85		0.90	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	0.96	1.00		1.00	
Satd. Flow (prot)	1690	3380	1512	3278	3376		1605	1620	2661		1593	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	0.96	1.00		1.00	
Satd. Flow (perm)	1690	3380	1512	3278	3376		1605	1620	2661		1593	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	28	600	150	167	856	6	289	22	317	0	6	11
RTOR Reduction (vph)	0	0	65	0	0	0	0	0	253	0	11	0
Lane Group Flow (vph)	28	600	85	167	862	0	156	155	64	0	6	0
Confl. Peds. (#/hr)	1					1	1					1
Turn Type	Prot	NA	Perm	Prot	NA		Split	NA	pm+ov	Split	NA	
Protected Phases	1	6		5	2		8	8	5	4	4	
Permitted Phases			6						8			
Actuated Green, G (s)	4.5	67.7	67.7	9.7	72.9		14.6	14.6	24.3		2.8	
Effective Green, g (s)	4.5	67.7	67.7	9.7	72.9		14.6	14.6	24.3		2.8	
Actuated g/C Ratio	0.04	0.56	0.56	0.08	0.61		0.12	0.12	0.20		0.02	
Clearance Time (s)	6.2	6.2	6.2	6.2	6.2		6.6	6.6	6.2		6.2	
Vehicle Extension (s)	2.0	2.5	2.5	2.0	4.0		2.0	2.0	2.0		2.0	
Lane Grp Cap (vph)	63	1906	853	264	2050		195	197	538		37	
v/s Ratio Prot	0.02	0.18		c0.05	c0.26		c0.10	0.10	0.01		c0.00	
v/s Ratio Perm			0.06						0.01			
v/c Ratio	0.44	0.31	0.10	0.63	0.42		0.80	0.79	0.12		0.17	
Uniform Delay, d1	56.5	13.9	12.1	53.4	12.4		51.3	51.2	39.1		57.5	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	
Incremental Delay, d2	1.8	0.4	0.2	3.6	0.6		19.4	17.2	0.0		0.8	
Delay (s)	58.3	14.3	12.3	57.0	13.0		70.7	68.4	39.1		58.2	
Level of Service	E	B	B	E	B		E	E	D		E	
Approach Delay (s)		15.5			20.2			54.2			58.2	
Approach LOS		B			C			D			E	

Intersection Summary			
HCM 2000 Control Delay	27.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	25.2
Intersection Capacity Utilization	58.3%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

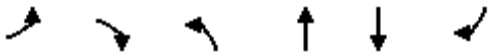
2048 Concept V1 (MUT) (PM Peak Hour)

Previously Referred to as Concept B



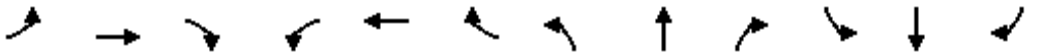
Movement	EBT	WBT	WBR	WBR2	NBL	NBT	NBR
Lane Configurations							
Traffic Volume (vph)	575	505	300	315	375	795	915
Future Volume (vph)	575	505	300	315	375	795	915
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850
Lane Width	14	14	14	14	14	14	14
Total Lost time (s)	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	0.95	0.95	1.00		1.00	0.91	0.91
Frt	1.00	1.00	0.85		1.00	0.95	0.85
Flt Protected	1.00	1.00	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3640	3640	1628		1820	3316	1482
Flt Permitted	1.00	1.00	1.00		0.95	1.00	1.00
Satd. Flow (perm)	3640	3640	1628		1820	3316	1482
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	612	537	319	335	399	846	973
RTOR Reduction (vph)	0	0	23	0	0	34	129
Lane Group Flow (vph)	612	537	631	0	399	1221	435
Turn Type	NA	NA	Perm		Perm	NA	Perm
Protected Phases	4	8				2	
Permitted Phases			8		2		2
Actuated Green, G (s)	83.6	83.6	83.6		68.4	68.4	68.4
Effective Green, g (s)	83.6	83.6	83.6		68.4	68.4	68.4
Actuated g/C Ratio	0.52	0.52	0.52		0.43	0.43	0.43
Clearance Time (s)	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)	2.5	2.5	2.5		2.5	2.5	2.5
Lane Grp Cap (vph)	1901	1901	850		778	1417	633
v/s Ratio Prot	0.17	0.15				c0.37	
v/s Ratio Perm			c0.39		0.22		0.29
v/c Ratio	0.32	0.28	0.74		0.51	0.86	0.69
Uniform Delay, d1	21.9	21.4	29.8		33.6	41.5	37.1
Progression Factor	0.30	0.72	0.80		1.93	0.51	0.78
Incremental Delay, d2	0.4	0.4	5.5		0.4	4.5	2.3
Delay (s)	7.0	15.8	29.3		65.1	25.8	31.4
Level of Service	A	B	C		E	C	C
Approach Delay (s)	7.0	23.3				34.3	
Approach LOS	A	C				C	

Intersection Summary			
HCM 2000 Control Delay	26.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	78.4%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



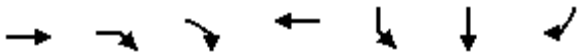
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	1000	0	0	1085	0	0
Future Volume (vph)	1000	0	0	1085	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850
Lane Width	14	14	14	14	14	14
Total Lost time (s)	4.0			4.0		
Lane Util. Factor	0.97			0.95		
Frt	1.00			1.00		
Flt Protected	0.95			1.00		
Satd. Flow (prot)	3531			3640		
Flt Permitted	0.95			1.00		
Satd. Flow (perm)	3531			3640		
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	1064	0	0	1154	0	0
RTOR Reduction (vph)	68	0	0	0	0	0
Lane Group Flow (vph)	996	0	0	1154	0	0
Turn Type	Prot			NA		
Protected Phases	4			2		
Permitted Phases						
Actuated Green, G (s)	53.8			98.2		
Effective Green, g (s)	53.8			98.2		
Actuated g/C Ratio	0.34			0.61		
Clearance Time (s)	4.0			4.0		
Vehicle Extension (s)	2.5			2.5		
Lane Grp Cap (vph)	1187			2234		
v/s Ratio Prot	c0.28			c0.32		
v/s Ratio Perm						
v/c Ratio	0.84			0.52		
Uniform Delay, d1	49.1			17.5		
Progression Factor	0.57			0.86		
Incremental Delay, d2	4.7			0.8		
Delay (s)	32.5			15.9		
Level of Service	C			B		
Approach Delay (s)	32.5			15.9	0.0	
Approach LOS	C			B	A	

Intersection Summary			
HCM 2000 Control Delay	23.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	66.8%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



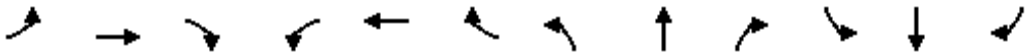
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	300	375	0	0	0	0	0	760	430
Future Volume (vph)	0	0	0	300	375	0	0	0	0	0	760	430
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Lane Width	14	14	14	14	14	14	14	14	14	14	14	14
Total Lost time (s)					4.0						4.0	4.0
Lane Util. Factor					0.95						0.95	1.00
Frt					1.00						1.00	0.85
Flt Protected					0.98						1.00	1.00
Satd. Flow (prot)					3561						3640	1628
Flt Permitted					0.98						1.00	1.00
Satd. Flow (perm)					3561						3640	1628
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	0	0	319	399	0	0	0	0	0	809	457
RTOR Reduction (vph)	0	0	0	0	117	0	0	0	0	0	0	74
Lane Group Flow (vph)	0	0	0	0	601	0	0	0	0	0	809	383
Turn Type				Perm	NA						NA	Perm
Protected Phases					8						6	
Permitted Phases				8								6
Actuated Green, G (s)					33.4						118.6	118.6
Effective Green, g (s)					33.4						118.6	118.6
Actuated g/C Ratio					0.21						0.74	0.74
Clearance Time (s)					4.0						4.0	4.0
Vehicle Extension (s)					2.5						2.5	2.5
Lane Grp Cap (vph)					743						2698	1206
v/s Ratio Prot											0.22	
v/s Ratio Perm					0.17							c0.24
v/c Ratio					0.81						0.30	0.32
Uniform Delay, d1					60.3						6.9	7.0
Progression Factor					0.23						0.17	0.02
Incremental Delay, d2					5.6						0.1	0.3
Delay (s)					19.7						1.3	0.4
Level of Service					B						A	A
Approach Delay (s)		0.0			19.7			0.0			1.0	
Approach LOS		A			B			A			A	

Intersection Summary			
HCM 2000 Control Delay	7.7	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.43		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	53.6%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBT	EBR	EBR2	WBT	SBL	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	575	540	440	505	460	600	0
Future Volume (vph)	575	540	440	505	460	600	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850
Lane Width	14	14	14	14	14	14	14
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	
Lane Util. Factor	0.91	0.91		0.95	0.97	1.00	
Frt	0.93	0.85		1.00	1.00	1.00	
Flt Protected	1.00	1.00		1.00	0.95	1.00	
Satd. Flow (prot)	3247	1482		3640	3531	1916	
Flt Permitted	1.00	1.00		1.00	0.95	1.00	
Satd. Flow (perm)	3247	1482		3640	3531	1916	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	612	574	468	537	489	638	0
RTOR Reduction (vph)	0	83	0	0	0	0	0
Lane Group Flow (vph)	1129	442	0	537	489	638	0
Turn Type	NA	Perm		NA	Perm	NA	Perm
Protected Phases	4			8		6	
Permitted Phases		4			6		6
Actuated Green, G (s)	89.1	89.1		89.1	62.9	62.9	
Effective Green, g (s)	89.1	89.1		89.1	62.9	62.9	
Actuated g/C Ratio	0.56	0.56		0.56	0.39	0.39	
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0	
Vehicle Extension (s)	2.5	2.5		2.5	2.5	2.5	
Lane Grp Cap (vph)	1808	825		2027	1388	753	
v/s Ratio Prot	c0.35			0.15		c0.33	
v/s Ratio Perm		0.30			0.14		
v/c Ratio	0.62	0.54		0.26	0.35	0.85	
Uniform Delay, d1	24.1	22.4		18.4	34.2	44.2	
Progression Factor	0.68	0.59		0.15	0.77	0.41	
Incremental Delay, d2	1.3	2.1		0.3	0.1	8.1	
Delay (s)	17.7	15.3		3.0	26.5	26.0	
Level of Service	B	B		A	C	C	
Approach Delay (s)	16.9			3.0		26.3	
Approach LOS	B			A		C	

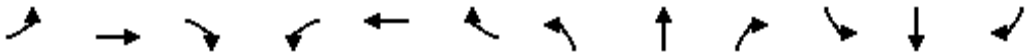
Intersection Summary			
HCM 2000 Control Delay	17.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	84.3%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	560	2230	0	0	0	0	0	1985	500	0	0	0
Future Volume (vph)	560	2230	0	0	0	0	0	1985	500	0	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	4.0	4.0						4.0	4.0			
Lane Util. Factor	0.97	0.91						0.81	0.81			
Frt	1.00	1.00						1.00	0.85			
Flt Protected	0.95	1.00						1.00	1.00			
Satd. Flow (prot)	3310	4903						5792	1237			
Flt Permitted	0.95	1.00						1.00	1.00			
Satd. Flow (perm)	3310	4903						5792	1237			
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	596	2372	0	0	0	0	0	2112	532	0	0	0
RTOR Reduction (vph)	3	0	0	0	0	0	0	1	4	0	0	0
Lane Group Flow (vph)	593	2372	0	0	0	0	0	2180	459	0	0	0
Turn Type	Perm	NA						NA	Perm			
Protected Phases		4						2				
Permitted Phases	4								2			
Actuated Green, G (s)	86.2	86.2						65.8	65.8			
Effective Green, g (s)	86.2	86.2						65.8	65.8			
Actuated g/C Ratio	0.54	0.54						0.41	0.41			
Clearance Time (s)	4.0	4.0						4.0	4.0			
Vehicle Extension (s)	2.5	2.5						2.5	2.5			
Lane Grp Cap (vph)	1783	2641						2381	508			
v/s Ratio Prot		c0.48						c0.38				
v/s Ratio Perm	0.18								0.37			
v/c Ratio	0.33	0.90						0.92	0.90			
Uniform Delay, d1	20.7	33.0						44.5	44.1			
Progression Factor	0.00	0.24						0.95	0.97			
Incremental Delay, d2	0.2	2.8						5.7	19.1			
Delay (s)	0.2	10.8						47.8	62.1			
Level of Service	A	B						D	E			
Approach Delay (s)		8.6			0.0			50.3			0.0	
Approach LOS		A			A			D			A	

Intersection Summary			
HCM 2000 Control Delay	28.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.91		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	85.7%	ICU Level of Service	E
Analysis Period (min)	15		

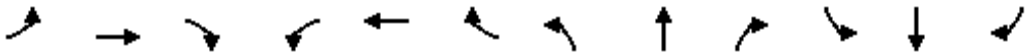
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	2425	850	0	0	0	0	0	0	365	1945	0
Future Volume (vph)	0	2425	850	0	0	0	0	0	0	365	1945	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)		4.0	4.0							4.0	4.0	
Lane Util. Factor		0.76	0.76							0.86	0.86	
Frt		0.98	0.85							1.00	1.00	
Flt Protected		1.00	1.00							0.95	1.00	
Satd. Flow (prot)		6691	1160							1467	4630	
Flt Permitted		1.00	1.00							0.95	1.00	
Satd. Flow (perm)		6691	1160							1467	4630	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	2580	904	0	0	0	0	0	0	388	2069	0
RTOR Reduction (vph)	0	1	4	0	0	0	0	0	0	4	4	0
Lane Group Flow (vph)	0	2968	511	0	0	0	0	0	0	345	2104	0
Turn Type		NA	Perm							Perm	NA	
Protected Phases		4									6	
Permitted Phases			4							6		
Actuated Green, G (s)		78.0	78.0							74.0	74.0	
Effective Green, g (s)		78.0	78.0							74.0	74.0	
Actuated g/C Ratio		0.49	0.49							0.46	0.46	
Clearance Time (s)		4.0	4.0							4.0	4.0	
Vehicle Extension (s)		2.5	2.5							2.5	2.5	
Lane Grp Cap (vph)		3261	565							678	2141	
v/s Ratio Prot		c0.44										
v/s Ratio Perm			0.44							0.24	0.45	
v/c Ratio		0.91	0.91							0.51	0.98	
Uniform Delay, d1		37.8	37.6							30.2	42.4	
Progression Factor		1.00	1.00							0.07	0.47	
Incremental Delay, d2		5.0	20.5							0.2	11.2	
Delay (s)		42.7	58.1							2.4	31.0	
Level of Service		D	E							A	C	
Approach Delay (s)		45.0			0.0			0.0			26.9	
Approach LOS		D			A			A			C	

Intersection Summary			
HCM 2000 Control Delay	37.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.95		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	78.2%	ICU Level of Service	D
Analysis Period (min)	15		

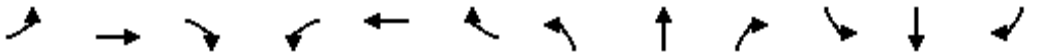
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	495	535	0	340	0	0	0	0	105	1550	195
Future Volume (vph)	0	495	535	0	340	0	0	0	0	105	1550	195
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)		4.0	4.0		4.0					4.0	4.0	
Lane Util. Factor		0.91	0.91		1.00					1.00	0.91	
Frt		0.95	0.85		1.00					1.00	0.98	
Flt Protected		1.00	1.00		1.00					0.95	1.00	
Satd. Flow (prot)		3121	1389		1796					1706	4821	
Flt Permitted		1.00	1.00		1.00					0.95	1.00	
Satd. Flow (perm)		3121	1389		1796					1706	4821	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	527	569	0	362	0	0	0	0	112	1649	207
RTOR Reduction (vph)	0	6	8	0	0	0	0	0	0	0	20	0
Lane Group Flow (vph)	0	749	333	0	362	0	0	0	0	112	1836	0
Turn Type		NA	Perm		NA					Perm	NA	
Protected Phases		4			8						6	
Permitted Phases			4							6		
Actuated Green, G (s)		34.7	34.7		34.7					37.3	37.3	
Effective Green, g (s)		34.7	34.7		34.7					37.3	37.3	
Actuated g/C Ratio		0.43	0.43		0.43					0.47	0.47	
Clearance Time (s)		4.0	4.0		4.0					4.0	4.0	
Vehicle Extension (s)		2.5	2.5		2.5					2.5	2.5	
Lane Grp Cap (vph)		1353	602		779					795	2247	
v/s Ratio Prot		c0.24			0.20						c0.38	
v/s Ratio Perm			0.24							0.07		
v/c Ratio		0.55	0.55		0.46					0.14	0.82	
Uniform Delay, d1		16.9	16.9		16.1					12.2	18.4	
Progression Factor		1.00	1.00		0.50					1.00	1.00	
Incremental Delay, d2		1.6	3.6		1.7					0.1	2.4	
Delay (s)		18.5	20.5		9.8					12.3	20.8	
Level of Service		B	C		A					B	C	
Approach Delay (s)		19.1			9.8			0.0			20.3	
Approach LOS		B			A			A			C	

Intersection Summary			
HCM 2000 Control Delay	18.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	90.4%	ICU Level of Service	E
Analysis Period (min)	15		

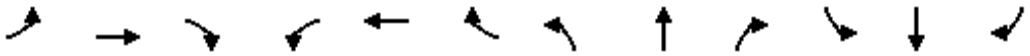
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	570	1920	0	0	0	0	0	1715	370
Future Volume (vph)	0	0	0	570	1920	0	0	0	0	0	1715	370
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)				4.0	4.0						4.0	4.0
Lane Util. Factor				0.86	0.86						0.91	1.00
Frt				1.00	1.00						1.00	0.85
Flt Protected				0.95	1.00						1.00	1.00
Satd. Flow (prot)				1467	4627						4903	1527
Flt Permitted				0.95	1.00						1.00	1.00
Satd. Flow (perm)				1467	4627						4903	1527
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	0	0	606	2043	0	0	0	0	0	1824	394
RTOR Reduction (vph)	0	0	0	3	3	0	0	0	0	0	0	4
Lane Group Flow (vph)	0	0	0	542	2101	0	0	0	0	0	1824	390
Turn Type				Perm	NA						NA	Perm
Protected Phases					8						6	
Permitted Phases				8								6
Actuated Green, G (s)				83.5	83.5						68.5	68.5
Effective Green, g (s)				83.5	83.5						68.5	68.5
Actuated g/C Ratio				0.52	0.52						0.43	0.43
Clearance Time (s)				4.0	4.0						4.0	4.0
Vehicle Extension (s)				2.5	2.5						2.5	2.5
Lane Grp Cap (vph)				765	2414						2099	653
v/s Ratio Prot											c0.37	
v/s Ratio Perm				0.37	0.45							0.26
v/c Ratio				0.71	0.87						0.87	0.60
Uniform Delay, d1				29.0	33.5						41.7	35.2
Progression Factor				0.43	0.37						0.85	0.65
Incremental Delay, d2				2.2	3.2						2.9	0.7
Delay (s)				14.6	15.5						38.1	23.5
Level of Service				B	B						D	C
Approach Delay (s)		0.0			15.3			0.0			35.5	
Approach LOS		A			B			A			D	

Intersection Summary			
HCM 2000 Control Delay	24.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	123.1%	ICU Level of Service	H
Analysis Period (min)	15		

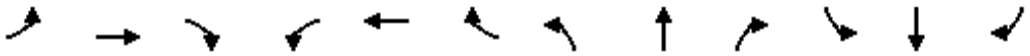
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	435	165	0	0	0	60	340	0	150	0	0	0
Future Volume (vph)	435	165	0	0	0	60	340	0	150	0	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	4.0	4.0				4.0	4.0	4.0				
Lane Util. Factor	1.00	1.00				1.00	1.00	1.00				
Frt	1.00	1.00				0.86	1.00	0.85				
Flt Protected	0.95	1.00				1.00	0.95	1.00				
Satd. Flow (prot)	1706	1796				1554	1706	1527				
Flt Permitted	0.95	1.00				1.00	0.95	1.00				
Satd. Flow (perm)	1706	1796				1554	1706	1527				
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	463	176	0	0	0	64	362	0	160	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	46	0	115	0	0	0	0
Lane Group Flow (vph)	463	176	0	0	0	18	362	45	0	0	0	0
Turn Type	Split	NA				Perm	Perm	NA				
Protected Phases	4	4						2				
Permitted Phases						2	2					
Actuated Green, G (s)	49.7	49.7				22.3	22.3	22.3				
Effective Green, g (s)	49.7	49.7				22.3	22.3	22.3				
Actuated g/C Ratio	0.62	0.62				0.28	0.28	0.28				
Clearance Time (s)	4.0	4.0				4.0	4.0	4.0				
Vehicle Extension (s)	2.5	2.5				2.5	2.5	2.5				
Lane Grp Cap (vph)	1059	1115				433	475	425				
v/s Ratio Prot	c0.27	0.10						0.03				
v/s Ratio Perm						0.01	c0.21					
v/c Ratio	0.44	0.16				0.04	0.76	0.10				
Uniform Delay, d1	7.9	6.4				21.0	26.4	21.4				
Progression Factor	1.20	0.68				1.00	1.04	1.00				
Incremental Delay, d2	1.1	0.3				0.0	3.1	0.0				
Delay (s)	10.6	4.6				21.1	30.5	21.5				
Level of Service	B	A				C	C	C				
Approach Delay (s)		8.9			21.1			27.7			0.0	
Approach LOS		A			C			C			A	

Intersection Summary			
HCM 2000 Control Delay	17.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	90.4%	ICU Level of Service	E
Analysis Period (min)	15		

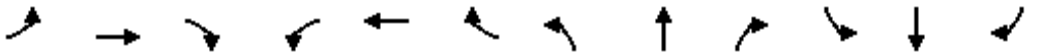
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	1765	165	725	1860	0	0	0	0
Future Volume (vph)	0	0	0	0	1765	165	725	1860	0	0	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)					4.0	4.0	4.0	4.0				
Lane Util. Factor					0.86	1.00	0.97	0.95				
Frt					1.00	0.85	1.00	1.00				
Flt Protected					1.00	1.00	0.95	1.00				
Satd. Flow (prot)					6179	1527	3310	3413				
Flt Permitted					1.00	1.00	0.95	1.00				
Satd. Flow (perm)					6179	1527	3310	3413				
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	0	0	0	1878	176	771	1979	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	9	3	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	1878	167	768	1979	0	0	0	0
Turn Type					NA	Perm	Perm	NA				
Protected Phases					8			2				
Permitted Phases						8	2					
Actuated Green, G (s)					53.0	53.0	99.0	99.0				
Effective Green, g (s)					53.0	53.0	99.0	99.0				
Actuated g/C Ratio					0.33	0.33	0.62	0.62				
Clearance Time (s)					4.0	4.0	4.0	4.0				
Vehicle Extension (s)					2.5	2.5	2.5	2.5				
Lane Grp Cap (vph)					2046	505	2048	2111				
v/s Ratio Prot					c0.30			c0.58				
v/s Ratio Perm						0.11	0.23					
v/c Ratio					0.92	0.33	0.38	0.94				
Uniform Delay, d1					51.4	40.2	15.1	27.7				
Progression Factor					0.83	0.83	0.01	0.36				
Incremental Delay, d2					7.7	1.7	0.0	6.3				
Delay (s)					50.5	35.2	0.2	16.3				
Level of Service					D	D	A	B				
Approach Delay (s)		0.0			49.1			11.8			0.0	
Approach LOS		A			D			B			A	

Intersection Summary			
HCM 2000 Control Delay	27.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.93		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	118.8%	ICU Level of Service	H
Analysis Period (min)	15		

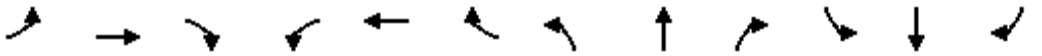
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1070	140	150	355	0	465	0	485	0	380	400
Future Volume (vph)	0	1070	140	150	355	0	465	0	485	0	380	400
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Lane Width	14	14	14	14	14	14	14	14	14	14	14	14
Total Lost time (s)		6.0		6.0	6.0		6.0		6.0		6.0	6.0
Lane Util. Factor		0.91		1.00	0.95		0.97		1.00		0.95	1.00
Frpb, ped/bikes		1.00		1.00	1.00		1.00		0.99		1.00	0.97
Flpb, ped/bikes		1.00		1.00	1.00		1.00		1.00		1.00	1.00
Frt		0.98		1.00	1.00		1.00		0.85		1.00	0.85
Flt Protected		1.00		0.95	1.00		0.95		1.00		1.00	1.00
Satd. Flow (prot)		5122		1820	3640		3531		1606		3640	1572
Flt Permitted		1.00		0.13	1.00		0.95		1.00		1.00	1.00
Satd. Flow (perm)		5122		256	3640		3531		1606		3640	1572
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	1138	149	160	378	0	495	0	516	0	404	426
RTOR Reduction (vph)	0	8	0	0	0	0	0	0	11	0	0	244
Lane Group Flow (vph)	0	1279	0	160	378	0	495	0	505	0	404	182
Confl. Peds. (#/hr)			8	8			13		3	3		13
Turn Type		NA		D.P+P	NA		Prot		pm+ov		NA	Perm
Protected Phases		6		5	2		7		5		8	
Permitted Phases				6			7		4			8
Actuated Green, G (s)		72.9		86.2	92.2		25.2		69.1		24.6	24.6
Effective Green, g (s)		72.9		86.2	92.2		25.2		69.1		24.6	24.6
Actuated g/C Ratio		0.46		0.54	0.58		0.16		0.43		0.15	0.15
Clearance Time (s)		6.0		6.0	6.0		6.0		6.0		6.0	6.0
Vehicle Extension (s)		5.5		1.0	5.5		1.0		1.0		2.0	2.0
Lane Grp Cap (vph)		2333		267	2097		556		753		559	241
v/s Ratio Prot		0.25		0.05	0.10		c0.14		c0.06		0.11	
v/s Ratio Perm				c0.27					0.26			0.12
v/c Ratio		0.55		0.60	0.18		0.89		0.67		0.72	0.76
Uniform Delay, d1		31.6		22.0	16.0		66.0		36.3		64.5	64.8
Progression Factor		1.00		0.75	0.00		1.00		1.00		0.61	0.72
Incremental Delay, d2		0.9		2.4	0.2		15.9		1.9		3.7	10.6
Delay (s)		32.5		18.9	0.2		82.0		38.2		43.1	57.0
Level of Service		C		B	A		F		D		D	E
Approach Delay (s)		32.5			5.8			59.6			50.3	
Approach LOS		C			A			E			D	

Intersection Summary			
HCM 2000 Control Delay	40.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	24.0
Intersection Capacity Utilization	79.9%	ICU Level of Service	D
Analysis Period (min)	15		

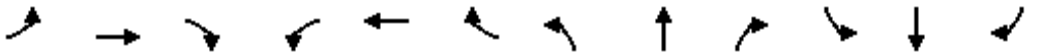
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	100	1070	335	400	1285	105	235	540	960	310	525	115
Future Volume (vph)	100	1070	335	400	1285	105	235	540	960	310	525	115
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	6.5	6.5	6.8	6.5	6.5	6.8	6.8	6.8	6.5	6.8	6.8	6.5
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95	0.88	0.97	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00	0.99	1.00	1.00	0.98	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3310	3413	1503	3310	3413	1509	3310	3399	2626	3310	3399	1503
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3310	3413	1503	3310	3413	1509	3310	3399	2626	3310	3399	1503
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	106	1138	356	426	1367	112	250	574	1021	330	559	122
RTOR Reduction (vph)	0	0	39	0	0	28	0	0	72	0	0	86
Lane Group Flow (vph)	106	1138	317	426	1367	84	250	574	949	330	559	36
Confl. Peds. (#/hr)	1		5	5		1	5		10	10		5
Bus Blockages (#/hr)	0	0	0	0	0	0	0	2	0	0	2	0
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	1	6	7	5	2	3	7	4	5	3	8	1
Permitted Phases			6			2			4			8
Actuated Green, G (s)	7.5	57.1	71.3	29.5	79.1	96.2	14.2	29.7	59.2	17.1	32.6	40.1
Effective Green, g (s)	7.5	57.1	71.3	29.5	79.1	96.2	14.2	29.7	59.2	17.1	32.6	40.1
Actuated g/C Ratio	0.05	0.36	0.45	0.18	0.49	0.60	0.09	0.19	0.37	0.11	0.20	0.25
Clearance Time (s)	6.5	6.5	6.8	6.5	6.5	6.8	6.8	6.8	6.5	6.8	6.8	6.5
Vehicle Extension (s)	2.0	5.0	1.0	3.0	5.0	2.0	1.0	2.0	3.0	2.0	2.0	2.0
Lane Grp Cap (vph)	155	1218	669	610	1687	907	293	630	971	353	692	376
v/s Ratio Prot	0.03	c0.33	0.04	0.13	0.40	0.01	0.08	0.17	c0.18	c0.10	c0.16	0.00
v/s Ratio Perm			0.17			0.05			0.18			0.02
v/c Ratio	0.68	0.93	0.47	0.70	0.81	0.09	0.85	0.91	0.98	0.93	0.81	0.10
Uniform Delay, d1	75.1	49.6	31.2	61.1	34.1	13.5	71.9	63.9	49.7	70.9	60.7	46.0
Progression Factor	1.00	1.00	1.00	0.64	0.38	0.15	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	9.5	14.2	0.2	2.7	3.3	0.0	20.0	17.2	23.1	31.1	6.5	0.0
Delay (s)	84.6	63.8	31.4	42.0	16.2	2.1	91.9	81.0	72.9	102.0	67.2	46.1
Level of Service	F	E	C	D	B	A	F	F	E	F	E	D
Approach Delay (s)		58.0			21.2			78.0			76.0	
Approach LOS		E			C			E			E	

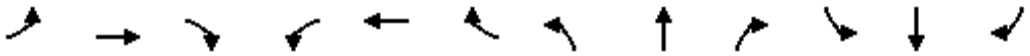
Intersection Summary			
HCM 2000 Control Delay	55.6	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.96		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	26.6
Intersection Capacity Utilization	91.7%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group



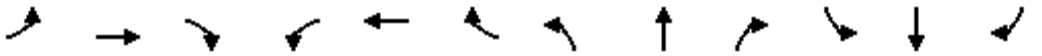
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	2065	340	390	1520	0	0	0	0	495	60	240
Future Volume (vph)	0	2065	340	390	1520	0	0	0	0	495	60	240
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)		5.8		5.8	5.8					5.9	5.9	5.9
Lane Util. Factor		0.86		0.97	0.95					0.95	0.91	0.95
Frpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	0.98
Flpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	1.00
Frt		0.98		1.00	1.00					1.00	0.99	0.85
Flt Protected		1.00		0.95	1.00					0.95	0.97	1.00
Satd. Flow (prot)		6048		3310	3413					1621	1557	1428
Flt Permitted		1.00		0.95	1.00					0.95	0.97	1.00
Satd. Flow (perm)		6048		3310	3413					1621	1557	1428
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	2197	362	415	1617	0	0	0	0	527	64	255
RTOR Reduction (vph)	0	17	0	0	0	0	0	0	0	0	2	46
Lane Group Flow (vph)	0	2542	0	415	1617	0	0	0	0	311	304	183
Confl. Peds. (#/hr)	10					10	2					2
Turn Type		NA		Prot	NA					Perm	NA	Perm
Protected Phases		6		5	2						8	
Permitted Phases										8		8
Actuated Green, G (s)		84.2		23.9	113.9					34.4	34.4	34.4
Effective Green, g (s)		84.2		23.9	113.9					34.4	34.4	34.4
Actuated g/C Ratio		0.53		0.15	0.71					0.21	0.21	0.21
Clearance Time (s)		5.8		5.8	5.8					5.9	5.9	5.9
Vehicle Extension (s)		3.8		3.0	3.4					1.5	1.5	1.5
Lane Grp Cap (vph)		3182		494	2429					348	334	307
v/s Ratio Prot		c0.42		c0.13	0.47							
v/s Ratio Perm										0.19	0.20	0.13
v/c Ratio		0.80		0.84	0.67					0.89	0.91	0.60
Uniform Delay, d1		31.0		66.2	12.6					61.0	61.3	56.5
Progression Factor		0.89		1.17	0.71					0.94	0.94	0.91
Incremental Delay, d2		0.8		8.9	1.1					23.3	26.6	2.1
Delay (s)		28.5		86.4	10.1					80.7	84.3	53.7
Level of Service		C		F	B					F	F	D
Approach Delay (s)		28.5			25.7			0.0			74.7	
Approach LOS		C			C			A			E	

Intersection Summary			
HCM 2000 Control Delay	34.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	17.5
Intersection Capacity Utilization	95.9%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



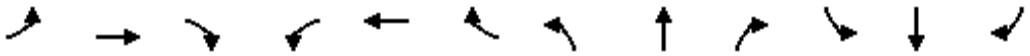
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	550	2010	0	0	1645	400	265	115	460	0	0	0
Future Volume (vph)	550	2010	0	0	1645	400	265	115	460	0	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	5.6	5.6			5.6		5.9	5.9	5.9			
Lane Util. Factor	0.97	0.95			0.86		0.95	0.95	1.00			
Frpb, ped/bikes	1.00	1.00			1.00		1.00	1.00	1.00			
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00	1.00			
Frt	1.00	1.00			0.97		1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00		0.95	0.98	1.00			
Satd. Flow (prot)	3310	3413			5997		1621	1673	1527			
Flt Permitted	0.95	1.00			1.00		0.95	0.98	1.00			
Satd. Flow (perm)	3310	3413			5997		1621	1673	1527			
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	585	2138	0	0	1750	426	282	122	489	0	0	0
RTOR Reduction (vph)	0	0	0	0	24	0	0	0	211	0	0	0
Lane Group Flow (vph)	585	2138	0	0	2152	0	200	204	278	0	0	0
Confl. Peds. (#/hr)			7	7								
Turn Type	Prot	NA			NA		Perm	NA	custom			
Protected Phases	1	6			2			4				
Permitted Phases							4		7 5			
Actuated Green, G (s)	37.4	104.9			81.4		24.1	24.1	46.5			
Effective Green, g (s)	37.4	104.9			81.4		24.1	24.1	46.5			
Actuated g/C Ratio	0.23	0.66			0.51		0.15	0.15	0.29			
Clearance Time (s)	5.6	5.6			5.6		5.9	5.9				
Vehicle Extension (s)	1.5	3.3			3.6		2.0	2.0				
Lane Grp Cap (vph)	773	2237			3050		244	251	443			
v/s Ratio Prot	0.18	c0.63			c0.36							
v/s Ratio Perm							c0.12	0.12	0.18			
v/c Ratio	0.76	0.96			0.71		0.82	0.81	0.63			
Uniform Delay, d1	57.1	25.4			30.1		65.8	65.8	49.2			
Progression Factor	0.43	0.65			1.00		1.00	1.00	1.00			
Incremental Delay, d2	2.2	7.4			1.4		18.0	17.0	2.0			
Delay (s)	26.8	24.0			31.5		83.9	82.8	51.2			
Level of Service	C	C			C		F	F	D			
Approach Delay (s)		24.6			31.5			65.8			0.0	
Approach LOS		C			C			E			A	

Intersection Summary			
HCM 2000 Control Delay	33.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	20.1
Intersection Capacity Utilization	95.9%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



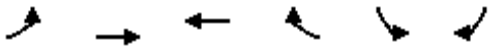
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	35	1645	15	175	25	0	0	45	45
Future Volume (vph)	0	0	0	35	1645	15	175	25	0	0	45	45
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)				5.6	5.6		5.5	5.5			5.5	5.5
Lane Util. Factor				1.00	0.86		1.00	1.00			1.00	1.00
Frpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	0.97
Flpb, ped/bikes				1.00	1.00		0.99	1.00			1.00	1.00
Frt				1.00	1.00		1.00	1.00			1.00	0.85
Flt Protected				0.95	1.00		0.95	1.00			1.00	1.00
Satd. Flow (prot)				1706	6168		1683	1796			1796	1487
Flt Permitted				0.95	1.00		0.73	1.00			1.00	1.00
Satd. Flow (perm)				1706	6168		1286	1796			1796	1487
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	0	0	37	1750	16	186	27	0	0	48	48
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	15
Lane Group Flow (vph)	0	0	0	37	1766	0	186	27	0	0	48	33
Confl. Peds. (#/hr)	5					5	6					6
Turn Type				Perm	NA		Perm	NA			NA	Perm
Protected Phases					2			4			8	
Permitted Phases				2			4					8
Actuated Green, G (s)				120.6	120.6		28.3	28.3			28.3	28.3
Effective Green, g (s)				120.6	120.6		28.3	28.3			28.3	28.3
Actuated g/C Ratio				0.75	0.75		0.18	0.18			0.18	0.18
Clearance Time (s)				5.6	5.6		5.5	5.5			5.5	5.5
Vehicle Extension (s)				2.5	2.5		2.0	2.0			2.8	2.8
Lane Grp Cap (vph)				1285	4649		227	317			317	263
v/s Ratio Prot					c0.29			0.02			0.03	
v/s Ratio Perm				0.02			c0.14					0.02
v/c Ratio				0.03	0.38		0.82	0.09			0.15	0.13
Uniform Delay, d1				5.0	6.8		63.4	55.0			55.7	55.4
Progression Factor				1.00	1.00		0.54	0.48			1.00	1.00
Incremental Delay, d2				0.0	0.2		17.0	0.0			0.2	0.2
Delay (s)				5.0	7.0		51.2	26.6			55.9	55.6
Level of Service				A	A		D	C			E	E
Approach Delay (s)		0.0			7.0			48.1			55.8	
Approach LOS		A			A			D			E	

Intersection Summary			
HCM 2000 Control Delay	13.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.46		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	11.1
Intersection Capacity Utilization	93.8%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



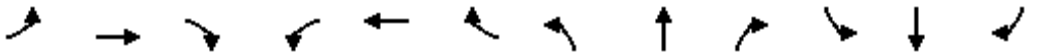
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	65	2425	280	0	0	0	0	135	80	45	35	0
Future Volume (vph)	65	2425	280	0	0	0	0	135	80	45	35	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)		5.8	5.8					5.7		5.7	5.7	
Lane Util. Factor		0.91	1.00					0.95		1.00	1.00	
Frpb, ped/bikes		1.00	0.95					1.00		1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00		1.00	1.00	
Frt		1.00	0.85					0.94		1.00	1.00	
Flt Protected		1.00	1.00					1.00		0.95	1.00	
Satd. Flow (prot)		4897	1455					3223		1706	1796	
Flt Permitted		1.00	1.00					1.00		0.46	1.00	
Satd. Flow (perm)		4897	1455					3223		829	1796	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	69	2580	298	0	0	0	0	144	85	48	37	0
RTOR Reduction (vph)	0	0	56	0	0	0	0	10	0	0	0	0
Lane Group Flow (vph)	0	2649	242	0	0	0	0	219	0	48	37	0
Confl. Peds. (#/hr)			9	9			15					15
Turn Type	Perm	NA	Perm					NA		Perm	NA	
Protected Phases		6						4			8	
Permitted Phases	6		6							8		
Actuated Green, G (s)		130.1	130.1					18.4		18.4	18.4	
Effective Green, g (s)		130.1	130.1					18.4		18.4	18.4	
Actuated g/C Ratio		0.81	0.81					0.11		0.11	0.11	
Clearance Time (s)		5.8	5.8					5.7		5.7	5.7	
Vehicle Extension (s)		2.0	2.0					2.0		2.0	2.0	
Lane Grp Cap (vph)		3981	1183					370		95	206	
v/s Ratio Prot								c0.07			0.02	
v/s Ratio Perm		0.54	0.17							0.06		
v/c Ratio		0.67	0.20					0.59		0.51	0.18	
Uniform Delay, d1		6.1	3.4					67.2		66.5	64.0	
Progression Factor		0.27	0.00					1.00		0.65	0.65	
Incremental Delay, d2		0.4	0.2					1.7		1.5	0.2	
Delay (s)		2.1	0.2					68.9		44.5	42.1	
Level of Service		A	A					E		D	D	
Approach Delay (s)		1.9			0.0			68.9			43.4	
Approach LOS		A			A			E			D	

Intersection Summary			
HCM 2000 Control Delay	7.7	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	11.5
Intersection Capacity Utilization	93.8%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



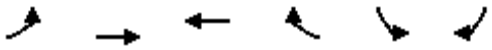
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	120	1240	825	45	175	175
Future Volume (vph)	120	1240	825	45	175	175
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850
Total Lost time (s)	5.5	5.5	5.5		5.5	5.5
Lane Util. Factor	1.00	0.95	0.95		1.00	1.00
Frpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Frt	1.00	1.00	0.99		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1706	3413	3381		1706	1527
Flt Permitted	0.27	1.00	1.00		0.95	1.00
Satd. Flow (perm)	478	3413	3381		1706	1527
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	128	1319	878	48	186	186
RTOR Reduction (vph)	0	0	1	0	0	161
Lane Group Flow (vph)	128	1319	925	0	186	25
Confl. Peds. (#/hr)	3			3		
Turn Type	pm+pt	NA	NA		Prot	Perm
Protected Phases	1	6	2		3	
Permitted Phases	6					7
Actuated Green, G (s)	127.2	127.2	115.3		21.8	21.8
Effective Green, g (s)	127.2	127.2	115.3		21.8	21.8
Actuated g/C Ratio	0.80	0.80	0.72		0.14	0.14
Clearance Time (s)	5.5	5.5	5.5		5.5	5.5
Vehicle Extension (s)	1.0	6.2	6.2		2.0	2.0
Lane Grp Cap (vph)	429	2713	2436		232	208
v/s Ratio Prot	0.01	c0.39	0.27		c0.11	
v/s Ratio Perm	0.23					0.02
v/c Ratio	0.30	0.49	0.38		0.80	0.12
Uniform Delay, d1	4.8	5.5	8.6		67.0	60.7
Progression Factor	0.76	0.73	1.00		1.00	1.00
Incremental Delay, d2	0.1	0.5	0.5		16.9	0.1
Delay (s)	3.7	4.5	9.0		83.9	60.8
Level of Service	A	A	A		F	E
Approach Delay (s)		4.4	9.0		72.3	
Approach LOS		A	A		E	

Intersection Summary			
HCM 2000 Control Delay	15.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	19.5
Intersection Capacity Utilization	55.4%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



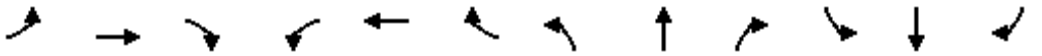
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	275	585	120	425	1085	260	145	1385	310	435	1785	365
Future Volume (vph)	275	585	120	425	1085	260	145	1385	310	435	1785	365
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.91	1.00	0.97	0.91	1.00
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00	0.98	1.00	1.00	0.97	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3310	3413	1496	3310	3413	1500	3310	4903	1487	3310	4903	1504
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3310	3413	1496	3310	3413	1500	3310	4903	1487	3310	4903	1504
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	293	622	128	452	1154	277	154	1473	330	463	1899	388
RTOR Reduction (vph)	0	0	96	0	0	188	0	0	196	0	0	149
Lane Group Flow (vph)	293	622	32	452	1154	89	154	1473	134	463	1899	239
Confl. Peds. (#/hr)	3		5	5		3	2		11	11		2
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases			6			2			4			8
Actuated Green, G (s)	13.6	39.6	39.6	25.6	51.6	51.6	7.6	44.6	44.6	20.6	57.6	57.6
Effective Green, g (s)	13.6	39.6	39.6	25.6	51.6	51.6	7.6	44.6	44.6	20.6	57.6	57.6
Actuated g/C Ratio	0.08	0.25	0.25	0.16	0.32	0.32	0.05	0.28	0.28	0.13	0.36	0.36
Clearance Time (s)	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4
Vehicle Extension (s)	2.0	5.0	5.0	2.0	5.0	5.0	2.0	5.0	5.0	2.0	5.0	5.0
Lane Grp Cap (vph)	281	844	370	529	1100	483	157	1366	414	426	1765	541
v/s Ratio Prot	c0.09	0.18		0.14	c0.34		0.05	c0.30		0.14	c0.39	
v/s Ratio Perm			0.02			0.06			0.09			0.16
v/c Ratio	1.04	0.74	0.09	0.85	1.05	0.18	0.98	1.08	0.32	1.09	1.08	0.44
Uniform Delay, d1	73.2	55.4	46.3	65.4	54.2	39.0	76.1	57.7	45.7	69.7	51.2	39.0
Progression Factor	1.00	1.00	1.00	0.77	0.73	0.73	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	65.3	5.7	0.5	7.8	35.2	0.5	65.7	48.4	1.0	69.0	45.1	1.2
Delay (s)	138.5	61.1	46.7	58.1	74.5	29.1	141.8	106.1	46.7	138.7	96.3	40.2
Level of Service	F	E	D	E	E	C	F	F	D	F	F	D
Approach Delay (s)		81.1			63.9			98.9			95.5	
Approach LOS		F			E			F			F	

Intersection Summary			
HCM 2000 Control Delay	86.6	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.10		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	29.6
Intersection Capacity Utilization	104.8%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			



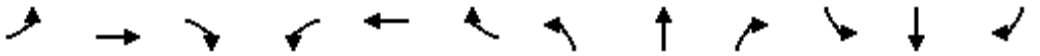
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	155	1280	1595	80	215	260
Future Volume (vph)	155	1280	1595	80	215	260
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850
Total Lost time (s)	6.3	6.3	6.3	6.3	6.3	6.3
Lane Util. Factor	1.00	0.95	0.95	1.00	0.97	1.00
Frpb, ped/bikes	1.00	1.00	1.00	0.98	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1706	3413	3413	1500	3310	1519
Flt Permitted	0.07	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	125	3413	3413	1500	3310	1519
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	165	1362	1697	85	229	277
RTOR Reduction (vph)	0	0	0	32	0	18
Lane Group Flow (vph)	165	1362	1697	53	229	259
Confl. Peds. (#/hr)	3			3		2
Turn Type	pm+pt	NA	NA	Perm	Prot	pm+ov
Protected Phases	1	6	2		3	1
Permitted Phases	6			2		3
Actuated Green, G (s)	132.2	132.2	99.2	99.2	15.2	41.9
Effective Green, g (s)	132.2	132.2	99.2	99.2	15.2	41.9
Actuated g/C Ratio	0.83	0.83	0.62	0.62	0.09	0.26
Clearance Time (s)	6.3	6.3	6.3	6.3	6.3	6.3
Vehicle Extension (s)	3.0	4.0	4.0	4.0	3.0	3.0
Lane Grp Cap (vph)	367	2819	2116	930	314	457
v/s Ratio Prot	0.07	0.40	c0.50		c0.07	c0.09
v/s Ratio Perm	0.30			0.04		0.08
v/c Ratio	0.45	0.48	0.80	0.06	0.73	0.57
Uniform Delay, d1	35.0	4.0	23.0	12.0	70.4	51.2
Progression Factor	0.75	0.33	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.6	0.4	3.3	0.1	8.2	1.6
Delay (s)	26.8	1.7	26.3	12.1	78.6	52.8
Level of Service	C	A	C	B	E	D
Approach Delay (s)		4.4	25.6		64.5	
Approach LOS		A	C		E	

Intersection Summary			
HCM 2000 Control Delay	22.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	18.9
Intersection Capacity Utilization	76.2%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	490	160	135	320	0	0	0	0	215	1995	120
Future Volume (vph)	0	490	160	135	320	0	0	0	0	215	1995	120
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)		5.4		5.4	5.4						5.8	5.8
Lane Util. Factor		0.95		1.00	0.95						0.91	1.00
Frpb, ped/bikes		1.00		1.00	1.00						1.00	0.98
Flpb, ped/bikes		1.00		1.00	1.00						1.00	1.00
Frt		0.96		1.00	1.00						1.00	0.85
Flt Protected		1.00		0.95	1.00						1.00	1.00
Satd. Flow (prot)		3273		1706	3413						4877	1490
Flt Permitted		1.00		0.17	1.00						1.00	1.00
Satd. Flow (perm)		3273		301	3413						4877	1490
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	521	170	144	340	0	0	0	0	229	2122	128
RTOR Reduction (vph)	0	40	0	0	0	0	0	0	0	0	0	73
Lane Group Flow (vph)	0	651	0	144	340	0	0	0	0	0	2351	55
Confl. Peds. (#/hr)	15		4	4		15	12		5	5		12
Turn Type		NA		pm+pt	NA					Perm	NA	Perm
Protected Phases		8		7	4						6	
Permitted Phases				4						6		6
Actuated Green, G (s)		18.5		34.2	34.2						34.6	34.6
Effective Green, g (s)		18.5		34.2	34.2						34.6	34.6
Actuated g/C Ratio		0.23		0.43	0.43						0.43	0.43
Clearance Time (s)		5.4		5.4	5.4						5.8	5.8
Vehicle Extension (s)		2.0		1.5	2.0						2.5	2.5
Lane Grp Cap (vph)		756		309	1459						2109	644
v/s Ratio Prot		c0.20		c0.06	0.10							
v/s Ratio Perm				0.14							0.48	0.04
v/c Ratio		0.86		0.47	0.23						1.11	0.09
Uniform Delay, d1		29.5		16.1	14.6						22.7	13.4
Progression Factor		1.00		1.31	1.31						1.00	1.00
Incremental Delay, d2		9.6		0.2	0.0						58.9	0.3
Delay (s)		39.1		21.4	19.1						81.6	13.6
Level of Service		D		C	B						F	B
Approach Delay (s)		39.1			19.8			0.0			78.1	
Approach LOS		D			B			A			E	

Intersection Summary			
HCM 2000 Control Delay	63.0	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	16.6
Intersection Capacity Utilization	94.7%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



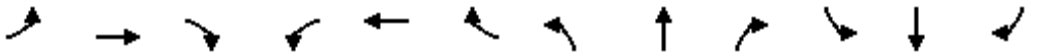
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	225	510	0	0	325	275	165	2280	165	0	0	0
Future Volume (vph)	225	510	0	0	325	275	165	2280	165	0	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	5.7	5.7			5.7			5.8	5.8			
Lane Util. Factor	1.00	0.95			0.95			0.91	1.00			
Frpb, ped/bikes	1.00	1.00			0.99			1.00	0.98			
Flpb, ped/bikes	1.00	1.00			1.00			1.00	1.00			
Frt	1.00	1.00			0.93			1.00	0.85			
Flt Protected	0.95	1.00			1.00			1.00	1.00			
Satd. Flow (prot)	1706	3413			3152			4887	1502			
Flt Permitted	0.18	1.00			1.00			1.00	1.00			
Satd. Flow (perm)	329	3413			3152			4887	1502			
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	239	543	0	0	346	293	176	2426	176	0	0	0
RTOR Reduction (vph)	0	0	0	0	29	0	0	0	99	0	0	0
Lane Group Flow (vph)	239	543	0	0	610	0	0	2602	77	0	0	0
Confl. Peds. (#/hr)	6		4	4		6			4	4		
Turn Type	pm+pt	NA			NA		Perm	NA	Perm			
Protected Phases	3	8			4			2				
Permitted Phases	8						2		2			
Actuated Green, G (s)	33.4	33.4			19.5			35.1	35.1			
Effective Green, g (s)	33.4	33.4			19.5			35.1	35.1			
Actuated g/C Ratio	0.42	0.42			0.24			0.44	0.44			
Clearance Time (s)	5.7	5.7			5.7			5.8	5.8			
Vehicle Extension (s)	1.0	2.0			2.0			2.5	2.5			
Lane Grp Cap (vph)	278	1424			768			2144	659			
v/s Ratio Prot	c0.09	0.16			0.19							
v/s Ratio Perm	c0.27							0.53	0.05			
v/c Ratio	0.86	0.38			0.79			1.21	0.12			
Uniform Delay, d1	17.6	16.1			28.4			22.4	13.3			
Progression Factor	1.75	0.64			0.84			0.35	0.08			
Incremental Delay, d2	11.3	0.0			5.2			97.2	0.1			
Delay (s)	42.1	10.4			28.9			105.0	1.2			
Level of Service	D	B			C			F	A			
Approach Delay (s)		20.1			28.9			98.4			0.0	
Approach LOS		C			C			F			A	

Intersection Summary			
HCM 2000 Control Delay	73.2	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.10		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	17.2
Intersection Capacity Utilization	94.7%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	710	45	70	455	110	310
Future Volume (vph)	710	45	70	455	110	310
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850
Total Lost time (s)	5.5			5.5	5.3	5.3
Lane Util. Factor	0.95			0.95	1.00	1.00
Frpb, ped/bikes	1.00			1.00	1.00	0.99
Flpb, ped/bikes	1.00			1.00	1.00	1.00
Frt	0.99			1.00	1.00	0.85
Flt Protected	1.00			0.99	0.95	1.00
Satd. Flow (prot)	3378			3390	1706	1505
Flt Permitted	1.00			0.77	0.95	1.00
Satd. Flow (perm)	3378			2617	1706	1505
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	755	48	74	484	117	330
RTOR Reduction (vph)	2	0	0	0	0	287
Lane Group Flow (vph)	801	0	0	558	117	43
Confl. Peds. (#/hr)		1	1			1
Turn Type	NA		Perm	NA	Prot	Perm
Protected Phases	6			2	7	
Permitted Phases			2			3
Actuated Green, G (s)	58.8			58.8	10.4	10.4
Effective Green, g (s)	58.8			58.8	10.4	10.4
Actuated g/C Ratio	0.73			0.73	0.13	0.13
Clearance Time (s)	5.5			5.5	5.3	5.3
Vehicle Extension (s)	2.0			2.0	2.0	0.2
Lane Grp Cap (vph)	2482			1923	221	195
v/s Ratio Prot	c0.24				c0.07	
v/s Ratio Perm				0.21		0.03
v/c Ratio	0.32			0.29	0.53	0.22
Uniform Delay, d1	3.7			3.6	32.5	31.2
Progression Factor	0.30			1.00	1.06	2.66
Incremental Delay, d2	0.3			0.4	1.0	0.2
Delay (s)	1.4			4.0	35.4	83.1
Level of Service	A			A	D	F
Approach Delay (s)	1.4			4.0	70.6	
Approach LOS	A			A	E	

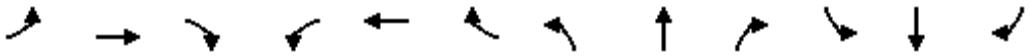
Intersection Summary			
HCM 2000 Control Delay	19.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.38		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	16.1
Intersection Capacity Utilization	56.9%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	530	2150	0	0	0	0	0	2030	285
Future Volume (vph)	0	0	0	530	2150	0	0	0	0	0	2030	285
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)				5.8	5.8						5.8	5.8
Lane Util. Factor				0.81	0.81						0.86	0.86
Frpb, ped/bikes				1.00	1.00						1.00	0.98
Flpb, ped/bikes				1.00	1.00						1.00	1.00
Frt				1.00	1.00						1.00	0.85
Flt Protected				0.95	1.00						1.00	1.00
Satd. Flow (prot)				1375	5812						4623	1282
Flt Permitted				0.95	1.00						1.00	1.00
Satd. Flow (perm)				1375	5812						4623	1282
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	0	0	564	2287	0	0	0	0	0	2160	303
RTOR Reduction (vph)	0	0	0	24	24	0	0	0	0	0	0	20
Lane Group Flow (vph)	0	0	0	484	2319	0	0	0	0	0	2190	253
Confl. Peds. (#/hr)	14		4	4		14	11		5	5		11
Turn Type				Perm	NA						NA	Perm
Protected Phases					1						2	
Permitted Phases				1								2
Actuated Green, G (s)				30.2	30.2						38.2	38.2
Effective Green, g (s)				30.2	30.2						38.2	38.2
Actuated g/C Ratio				0.38	0.38						0.48	0.48
Clearance Time (s)				5.8	5.8						5.8	5.8
Lane Grp Cap (vph)				519	2194						2207	612
v/s Ratio Prot											c0.47	
v/s Ratio Perm				0.35	0.40							0.20
v/c Ratio				0.93	1.06						0.99	0.41
Uniform Delay, d1				23.9	24.9						20.8	13.6
Progression Factor				0.26	0.30						0.17	0.13
Incremental Delay, d2				3.9	27.0						4.2	0.2
Delay (s)				10.0	34.6						7.8	2.0
Level of Service				A	C						A	A
Approach Delay (s)		0.0			30.2			0.0			7.2	
Approach LOS		A			C			A			A	

Intersection Summary			
HCM 2000 Control Delay	19.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	1.02		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	11.6
Intersection Capacity Utilization	84.8%	ICU Level of Service	E
Analysis Period (min)	15		

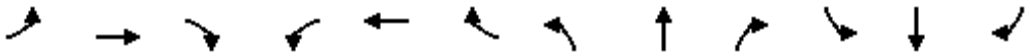
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	2200	335	475	2195	0	0	0	0
Future Volume (vph)	0	0	0	0	2200	335	475	2195	0	0	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)					6.0	6.0	6.0	6.0				
Lane Util. Factor					0.81	0.81	0.86	0.86				
Frpb, ped/bikes					1.00	0.98	1.00	1.00				
Flpb, ped/bikes					1.00	1.00	1.00	1.00				
Frt					1.00	0.85	1.00	1.00				
Flt Protected					1.00	1.00	0.95	1.00				
Satd. Flow (prot)					5805	1215	1462	4629				
Flt Permitted					1.00	1.00	0.95	1.00				
Satd. Flow (perm)					5805	1215	1462	4629				
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	0	0	0	2340	356	505	2335	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	1	26	22	22	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	2375	294	432	2364	0	0	0	0
Confl. Peds. (#/hr)	6		6	6		6	3		6	6		3
Turn Type					NA	Perm	Perm	NA				
Protected Phases					1			2				
Permitted Phases						1	2					
Actuated Green, G (s)					30.0	30.0	38.0	38.0				
Effective Green, g (s)					30.0	30.0	38.0	38.0				
Actuated g/C Ratio					0.38	0.38	0.48	0.48				
Clearance Time (s)					6.0	6.0	6.0	6.0				
Lane Grp Cap (vph)					2176	455	694	2198				
v/s Ratio Prot					c0.41							
v/s Ratio Perm						0.24	0.30	0.51				
v/c Ratio					1.09	0.65	0.62	1.08				
Uniform Delay, d1					25.0	20.6	15.7	21.0				
Progression Factor					0.64	0.49	0.41	0.39				
Incremental Delay, d2					46.8	4.5	0.4	35.1				
Delay (s)					62.8	14.7	6.8	43.3				
Level of Service					E	B	A	D				
Approach Delay (s)		0.0			57.1			37.5			0.0	
Approach LOS		A			E			D			A	

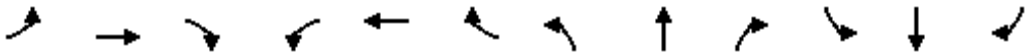
Intersection Summary			
HCM 2000 Control Delay	47.0	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.08		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	84.8%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	190	2205	50	260	195	0	0	95	45
Future Volume (vph)	0	0	0	190	2205	50	260	195	0	0	95	45
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)					5.4		5.3	5.3			5.3	
Lane Util. Factor					0.86		0.97	1.00			1.00	
Frpb, ped/bikes					1.00		1.00	1.00			1.00	
Flpb, ped/bikes					1.00		1.00	1.00			1.00	
Frt					1.00		1.00	1.00			0.96	
Flt Protected					1.00		0.95	1.00			1.00	
Satd. Flow (prot)					6127		3310	1796			1718	
Flt Permitted					1.00		0.95	1.00			1.00	
Satd. Flow (perm)					6127		3310	1796			1718	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	0	0	202	2346	53	277	207	0	0	101	48
RTOR Reduction (vph)	0	0	0	0	3	0	0	0	0	0	10	0
Lane Group Flow (vph)	0	0	0	0	2598	0	277	207	0	0	139	0
Confl. Peds. (#/hr)	11		6	6		11			8	8		
Turn Type				Perm	NA		Prot	NA			NA	
Protected Phases					2		7	4			8	
Permitted Phases				2								
Actuated Green, G (s)					43.8		9.5	25.5			10.7	
Effective Green, g (s)					43.8		9.5	25.5			10.7	
Actuated g/C Ratio					0.55		0.12	0.32			0.13	
Clearance Time (s)					5.4		5.3	5.3			5.3	
Vehicle Extension (s)					3.7		1.5	1.5			1.5	
Lane Grp Cap (vph)					3354		393	572			229	
v/s Ratio Prot							c0.08	0.12			c0.08	
v/s Ratio Perm					0.42							
v/c Ratio					0.77		0.70	0.36			0.61	
Uniform Delay, d1					14.2		33.9	21.0			32.7	
Progression Factor					1.00		0.65	0.79			0.98	
Incremental Delay, d2					1.8		4.4	0.1			3.1	
Delay (s)					16.0		26.6	16.7			35.0	
Level of Service					B		C	B			D	
Approach Delay (s)		0.0			16.0			22.3			35.0	
Approach LOS		A			B			C			D	

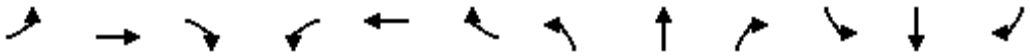
Intersection Summary			
HCM 2000 Control Delay	17.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	91.7%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	2580	235	0	0	0	0	0	0	535	2015	0
Future Volume (vph)	0	2580	235	0	0	0	0	0	0	535	2015	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)		5.9	5.9							5.9	5.9	
Lane Util. Factor		0.81	0.81							0.86	0.86	
Frpb, ped/bikes		1.00	0.97							1.00	1.00	
Flpb, ped/bikes		1.00	1.00							0.99	1.00	
Frt		1.00	0.85							1.00	1.00	
Flt Protected		1.00	1.00							0.95	1.00	
Satd. Flow (prot)		5810	1205							1457	4627	
Flt Permitted		1.00	1.00							0.95	1.00	
Satd. Flow (perm)		5810	1205							1457	4627	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	2745	250	0	0	0	0	0	0	569	2144	0
RTOR Reduction (vph)	0	1	23	0	0	0	0	0	0	23	23	0
Lane Group Flow (vph)	0	2769	202	0	0	0	0	0	0	489	2178	0
Confl. Peds. (#/hr)	14		13	13		14	21		7	7		21
Turn Type		NA	Perm							Perm	NA	
Protected Phases		1									2	
Permitted Phases			1							2		
Actuated Green, G (s)		34.1	34.1							34.1	34.1	
Effective Green, g (s)		34.1	34.1							34.1	34.1	
Actuated g/C Ratio		0.43	0.43							0.43	0.43	
Clearance Time (s)		5.9	5.9							5.9	5.9	
Lane Grp Cap (vph)		2476	513							621	1972	
v/s Ratio Prot		c0.48										
v/s Ratio Perm			0.17							0.34	0.47	
v/c Ratio		1.12	0.39							0.79	1.10	
Uniform Delay, d1		22.9	15.8							19.8	22.9	
Progression Factor		1.00	1.00							1.14	1.07	
Incremental Delay, d2		59.5	2.3							2.7	49.4	
Delay (s)		82.4	18.1							25.3	74.0	
Level of Service		F	B							C	E	
Approach Delay (s)		77.6			0.0			0.0			64.8	
Approach LOS		E			A			A			E	

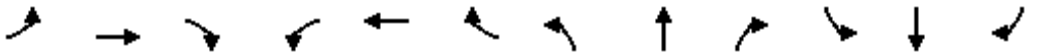
Intersection Summary			
HCM 2000 Control Delay	71.5	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.11		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	11.8
Intersection Capacity Utilization	88.0%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	510	2655	0	0	0	0	0	2165	670	0	0	0
Future Volume (vph)	510	2655	0	0	0	0	0	2165	670	0	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	5.6	5.6						6.0	6.0			
Lane Util. Factor	0.81	0.81						0.91	0.88			
Frpb, ped/bikes	1.00	1.00						1.00	0.99			
Flpb, ped/bikes	1.00	1.00						1.00	1.00			
Frt	1.00	1.00						1.00	0.85			
Flt Protected	0.95	1.00						1.00	1.00			
Satd. Flow (prot)	1376	5813						4903	2651			
Flt Permitted	0.95	1.00						1.00	1.00			
Satd. Flow (perm)	1376	5813						4903	2651			
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	543	2824	0	0	0	0	0	2303	713	0	0	0
RTOR Reduction (vph)	47	47	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	442	2831	0	0	0	0	0	2303	713	0	0	0
Confl. Peds. (#/hr)	5		17	17		5	1		5	5		1
Turn Type	Perm	NA						NA	custom			
Protected Phases		8						2				
Permitted Phases	8								5			
Actuated Green, G (s)	34.4	34.4						34.0	80.0			
Effective Green, g (s)	34.4	34.4						34.0	80.0			
Actuated g/C Ratio	0.43	0.43						0.42	1.00			
Clearance Time (s)	5.6	5.6						6.0	6.0			
Vehicle Extension (s)	5.0	5.0						5.0	0.2			
Lane Grp Cap (vph)	591	2499						2083	2651			
v/s Ratio Prot								c0.47				
v/s Ratio Perm	0.32	0.49							0.27			
v/c Ratio	0.75	1.13						1.11	0.27			
Uniform Delay, d1	19.2	22.8						23.0	0.0			
Progression Factor	0.60	0.61						0.86	1.00			
Incremental Delay, d2	0.8	60.4						51.6	0.1			
Delay (s)	12.3	74.2						71.4	0.1			
Level of Service	B	E						E	A			
Approach Delay (s)		65.2			0.0			54.6			0.0	
Approach LOS		E			A			D			A	

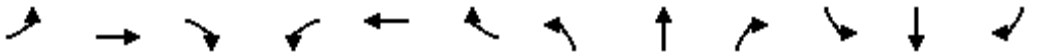
Intersection Summary			
HCM 2000 Control Delay	60.2	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.77		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	14.6
Intersection Capacity Utilization	90.6%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	160	2930	205	0	0	0	0	370	360	130	195	0
Future Volume (vph)	160	2930	205	0	0	0	0	370	360	130	195	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	5.7	5.7						5.7	5.7	5.7	5.7	
Lane Util. Factor	1.00	0.86						0.95	1.00	1.00	0.95	
Frpb, ped/bikes	1.00	1.00						1.00	1.00	1.00	1.00	
Flpb, ped/bikes	1.00	1.00						1.00	1.00	1.00	1.00	
Frt	1.00	0.99						1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00						1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1705	6110						3399	1527	1706	3399	
Flt Permitted	0.95	1.00						1.00	1.00	0.34	1.00	
Satd. Flow (perm)	1705	6110						3399	1527	613	3399	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	170	3117	218	0	0	0	0	394	383	138	207	0
RTOR Reduction (vph)	0	12	0	0	0	0	0	0	89	0	0	0
Lane Group Flow (vph)	170	3323	0	0	0	0	0	394	294	138	207	0
Confl. Peds. (#/hr)	1		9	9		1	9					9
Bus Blockages (#/hr)	0	0	0	0	0	0	0	2	0	0	2	0
Turn Type	Perm	NA						NA	Perm	pm+pt	NA	
Protected Phases		6						4		3	8	
Permitted Phases	6								4	8		
Actuated Green, G (s)	39.8	39.8						17.9	17.9	28.8	28.8	
Effective Green, g (s)	39.8	39.8						17.9	17.9	28.8	28.8	
Actuated g/C Ratio	0.50	0.50						0.22	0.22	0.36	0.36	
Clearance Time (s)	5.7	5.7						5.7	5.7	5.7	5.7	
Vehicle Extension (s)	4.8	4.8						1.7	1.7	1.0	1.7	
Lane Grp Cap (vph)	848	3039						760	341	291	1223	
v/s Ratio Prot		c0.54						0.12		c0.03	0.06	
v/s Ratio Perm	0.10								c0.19	0.14		
v/c Ratio	0.20	1.09						0.52	0.86	0.47	0.17	
Uniform Delay, d1	11.2	20.1						27.3	29.9	18.3	17.4	
Progression Factor	0.29	0.23						1.00	1.00	0.71	0.71	
Incremental Delay, d2	0.2	44.1						0.2	18.8	0.4	0.0	
Delay (s)	3.4	48.8						27.5	48.7	13.3	12.4	
Level of Service	A	D						C	D	B	B	
Approach Delay (s)		46.6			0.0			38.0			12.8	
Approach LOS		D			A			D			B	

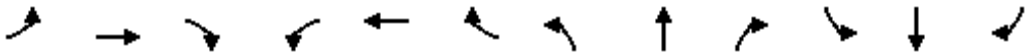
Intersection Summary			
HCM 2000 Control Delay	42.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.98		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	17.1
Intersection Capacity Utilization	91.7%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group



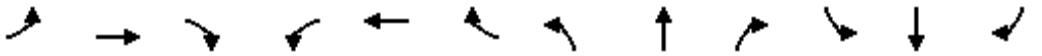
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	745	75	220	690	0	0	0	0	340	2000	135
Future Volume (vph)	0	745	75	220	690	0	0	0	0	340	2000	135
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)		5.5		5.5	5.5					6.0	6.0	6.0
Lane Util. Factor		0.95		1.00	0.95					0.86	0.81	0.86
Frpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	0.98
Flpb, ped/bikes		1.00		1.00	1.00					0.99	1.00	1.00
Frt		0.99		1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00		0.95	1.00					0.95	1.00	1.00
Satd. Flow (prot)		3357		1706	3413					1458	4356	1285
Flt Permitted		1.00		0.15	1.00					0.95	1.00	1.00
Satd. Flow (perm)		3357		276	3413					1458	4356	1285
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	793	80	234	734	0	0	0	0	362	2128	144
RTOR Reduction (vph)	0	10	0	0	0	0	0	0	0	0	1	60
Lane Group Flow (vph)	0	863	0	234	734	0	0	0	0	326	2177	70
Confl. Peds. (#/hr)	16		14	14		16	9		6	6		9
Turn Type		NA		pm+pt	NA					Perm	NA	Perm
Protected Phases		8		7	4						6	
Permitted Phases				4						6		6
Actuated Green, G (s)		20.5		32.5	32.5					36.0	36.0	36.0
Effective Green, g (s)		20.5		32.5	32.5					36.0	36.0	36.0
Actuated g/C Ratio		0.26		0.41	0.41					0.45	0.45	0.45
Clearance Time (s)		5.5		5.5	5.5					6.0	6.0	6.0
Vehicle Extension (s)		2.5		2.0	2.5					6.0	6.0	6.0
Lane Grp Cap (vph)		860		228	1386					656	1960	578
v/s Ratio Prot		0.26		c0.08	0.22							
v/s Ratio Perm				c0.33						0.22	0.50	0.05
v/c Ratio		1.00		1.03	0.53					0.50	1.11	0.12
Uniform Delay, d1		29.8		30.4	18.0					15.6	22.0	12.8
Progression Factor		1.00		0.30	0.21					0.24	0.26	0.00
Incremental Delay, d2		31.6		52.9	0.2					1.0	53.0	0.2
Delay (s)		61.4		62.1	3.9					4.7	58.6	0.2
Level of Service		E		E	A					A	E	A
Approach Delay (s)		61.4			18.0			0.0			49.1	
Approach LOS		E			B			A			D	

Intersection Summary			
HCM 2000 Control Delay	44.8	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.13		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	90.0%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



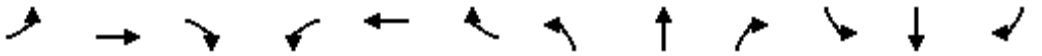
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	240	920	0	0	765	260	140	2020	160	0	0	0
Future Volume (vph)	240	920	0	0	765	260	140	2020	160	0	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	5.7	5.7			5.7	5.7	6.0	6.0	6.0			
Lane Util. Factor	1.00	0.95			0.95	1.00	1.00	0.91	1.00			
Frpb, ped/bikes	1.00	1.00			1.00	0.98	1.00	1.00	0.98			
Flpb, ped/bikes	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1706	3413			3413	1496	1698	4903	1490			
Flt Permitted	0.18	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	329	3413			3413	1496	1698	4903	1490			
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	255	979	0	0	814	277	149	2149	170	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	87	0	0	65	0	0	0
Lane Group Flow (vph)	255	979	0	0	814	190	149	2149	105	0	0	0
Confl. Peds. (#/hr)	7		20	20		7	5		13	13		5
Turn Type	pm+pt	NA			NA	Perm	Perm	NA	Perm			
Protected Phases	3	8			4			2				
Permitted Phases	8					4	2		2			
Actuated Green, G (s)	33.3	33.3			21.3	21.3	35.0	35.0	35.0			
Effective Green, g (s)	33.3	33.3			21.3	21.3	35.0	35.0	35.0			
Actuated g/C Ratio	0.42	0.42			0.27	0.27	0.44	0.44	0.44			
Clearance Time (s)	5.7	5.7			5.7	5.7	6.0	6.0	6.0			
Vehicle Extension (s)	1.0	2.5			2.5	2.5	2.5	2.5	2.5			
Lane Grp Cap (vph)	245	1420			908	398	742	2145	651			
v/s Ratio Prot	c0.08	0.29			0.24			c0.44				
v/s Ratio Perm	c0.35					0.13	0.09		0.07			
v/c Ratio	1.04	0.69			0.90	0.48	0.20	1.00	0.16			
Uniform Delay, d1	28.9	19.1			28.3	24.7	13.9	22.5	13.6			
Progression Factor	0.52	0.37			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	54.1	0.7			13.3	4.0	0.6	19.9	0.5			
Delay (s)	69.0	7.8			41.6	28.7	14.5	42.4	14.2			
Level of Service	E	A			D	C	B	D	B			
Approach Delay (s)		20.4			38.4			38.7			0.0	
Approach LOS		C			D			D			A	

Intersection Summary			
HCM 2000 Control Delay	33.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	1.08		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	17.4
Intersection Capacity Utilization	90.0%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



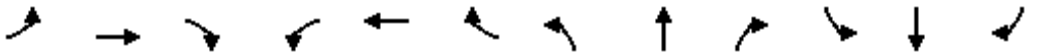
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	185	890	125	65	840	220	125	340	40	120	305	140
Future Volume (vph)	185	890	125	65	840	220	125	340	40	120	305	140
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	5.7	5.7		5.7	5.7		5.7	5.7		5.7	5.7	5.7
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.98		1.00	0.97		1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1706	3340		1706	3296		1700	3351		1703	3413	1488
Flt Permitted	0.13	1.00		0.14	1.00		0.50	1.00		0.46	1.00	1.00
Satd. Flow (perm)	241	3340		243	3296		887	3351		833	3413	1488
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	197	947	133	69	894	234	133	362	43	128	324	149
RTOR Reduction (vph)	0	12	0	0	25	0	0	12	0	0	0	119
Lane Group Flow (vph)	197	1068	0	69	1103	0	133	393	0	128	324	30
Confl. Peds. (#/hr)	3		12	12		3	14		8	8		14
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases	6			2			4			8		8
Actuated Green, G (s)	34.1	29.8		33.7	29.6		21.7	16.5		19.7	15.5	15.5
Effective Green, g (s)	34.1	29.8		33.7	29.6		21.7	16.5		19.7	15.5	15.5
Actuated g/C Ratio	0.44	0.39		0.44	0.38		0.28	0.21		0.25	0.20	0.20
Clearance Time (s)	5.7	5.7		5.7	5.7		5.7	5.7		5.7	5.7	5.7
Vehicle Extension (s)	1.0	5.0		1.0	5.0		1.0	2.0		1.2	5.0	5.0
Lane Grp Cap (vph)	187	1285		183	1260		303	714		259	683	297
v/s Ratio Prot	c0.06	0.32		0.02	0.33		c0.03	c0.12		0.03	0.09	
v/s Ratio Perm	c0.40			0.14			0.09			0.10		0.02
v/c Ratio	1.05	0.83		0.38	0.88		0.44	0.55		0.49	0.47	0.10
Uniform Delay, d1	19.6	21.5		14.8	22.2		21.8	27.1		23.4	27.4	25.3
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	80.6	5.3		0.5	7.6		0.4	0.5		0.5	1.1	0.3
Delay (s)	100.2	26.8		15.2	29.8		22.1	27.7		24.0	28.4	25.6
Level of Service	F	C		B	C		C	C		C	C	C
Approach Delay (s)		38.1			29.0			26.3			26.8	
Approach LOS		D			C			C			C	

Intersection Summary			
HCM 2000 Control Delay	31.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	77.4	Sum of lost time (s)	22.8
Intersection Capacity Utilization	80.7%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



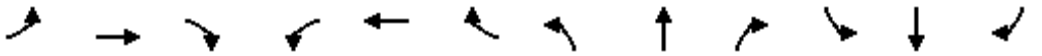
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	130	1795	370	485	1410	50	190	280	410	170	700	405
Future Volume (vph)	130	1795	370	485	1410	50	190	280	410	170	700	405
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	6.5	6.5	6.5	6.5	6.5	6.5	6.3	6.3	6.5	6.3	6.3	6.3
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95	0.88	0.97	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.98	1.00	1.00	0.98	1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3310	3413	1506	3310	3413	1492	3310	3413	2623	3310	3413	1484
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3310	3413	1506	3310	3413	1492	3310	3413	2623	3310	3413	1484
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	138	1910	394	516	1500	53	202	298	436	181	745	431
RTOR Reduction (vph)	0	0	87	0	0	24	0	0	79	0	0	126
Lane Group Flow (vph)	138	1910	307	516	1500	29	202	298	357	181	745	305
Confl. Peds. (#/hr)	6		1	1		6	9		7	7		9
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4	5	3	8	
Permitted Phases			6			2			4			8
Actuated Green, G (s)	8.4	77.5	77.5	19.5	88.6	88.6	7.7	26.9	46.4	10.5	29.7	29.7
Effective Green, g (s)	8.4	77.5	77.5	19.5	88.6	88.6	7.7	26.9	46.4	10.5	29.7	29.7
Actuated g/C Ratio	0.05	0.48	0.48	0.12	0.55	0.55	0.05	0.17	0.29	0.07	0.19	0.19
Clearance Time (s)	6.5	6.5	6.5	6.5	6.5	6.5	6.3	6.3	6.5	6.3	6.3	6.3
Vehicle Extension (s)	2.0	5.0	5.0	2.0	5.0	5.0	2.0	1.0	2.0	2.0	1.0	1.0
Lane Grp Cap (vph)	173	1653	729	403	1889	826	159	573	760	217	633	275
v/s Ratio Prot	0.04	c0.56		c0.16	0.44		c0.06	0.09	0.06	0.05	c0.22	
v/s Ratio Perm			0.20			0.02			0.08			0.21
v/c Ratio	0.80	1.16	0.42	1.28	0.79	0.04	1.27	0.52	0.47	0.83	1.18	1.11
Uniform Delay, d1	75.0	41.2	26.7	70.2	28.4	16.3	76.2	60.7	46.7	73.9	65.2	65.2
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.98	0.98	0.99
Incremental Delay, d2	20.7	77.3	1.8	144.0	3.5	0.1	161.7	0.4	0.2	15.1	90.1	75.7
Delay (s)	95.7	118.5	28.5	214.3	32.0	16.3	237.9	61.1	46.9	87.8	154.1	140.0
Level of Service	F	F	C	F	C	B	F	E	D	F	F	F
Approach Delay (s)		102.7			77.0			92.6			140.8	
Approach LOS		F			E			F			F	

Intersection Summary			
HCM 2000 Control Delay	101.1	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.18		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	25.6
Intersection Capacity Utilization	112.7%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			



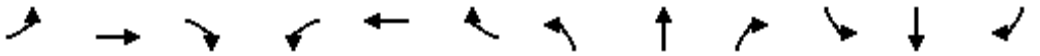
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	240	640	305	295	635	190	75	480	75	75	600	65
Future Volume (vph)	240	640	305	295	635	190	75	480	75	75	600	65
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	6.3	6.3		6.3	6.3		5.7	5.7		5.7	5.7	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	0.99		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.95		1.00	0.97		1.00	0.98		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1706	3217		1706	3278		1706	3331		1706	3356	
Flt Permitted	0.21	1.00		0.07	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	383	3217		135	3278		1706	3331		1706	3356	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	255	681	324	314	676	202	80	511	80	80	638	69
RTOR Reduction (vph)	0	36	0	0	16	0	0	7	0	0	5	0
Lane Group Flow (vph)	255	969	0	314	862	0	80	584	0	80	702	0
Confl. Peds. (#/hr)	6		10	10		6	4		10	10		4
Turn Type	pm+pt	NA		pm+pt	NA		Prot	NA		Prot	NA	
Protected Phases	3	8		7	4		5	2		1	6	
Permitted Phases	8			4								
Actuated Green, G (s)	72.9	53.7		88.2	62.7		10.3	44.6		9.5	43.8	
Effective Green, g (s)	72.9	53.7		88.2	62.7		10.3	44.6		9.5	43.8	
Actuated g/C Ratio	0.46	0.34		0.55	0.39		0.06	0.28		0.06	0.27	
Clearance Time (s)	6.3	6.3		6.3	6.3		5.7	5.7		5.7	5.7	
Vehicle Extension (s)	1.2	4.0		1.2	4.0		1.2	4.0		1.2	4.0	
Lane Grp Cap (vph)	333	1079		351	1284		109	928		101	918	
v/s Ratio Prot	0.09	0.30		c0.16	0.26		0.05	c0.18		0.05	c0.21	
v/s Ratio Perm	0.26			c0.34								
v/c Ratio	0.77	0.90		0.89	0.67		0.73	0.63		0.79	0.76	
Uniform Delay, d1	29.7	50.5		49.4	40.1		73.5	50.5		74.3	53.4	
Progression Factor	1.00	1.00		1.00	1.00		0.56	0.39		1.12	0.28	
Incremental Delay, d2	9.1	10.2		23.4	1.5		18.4	3.0		23.5	4.3	
Delay (s)	38.9	60.7		72.8	41.7		59.5	22.7		107.0	19.3	
Level of Service	D	E		E	D		E	C		F	B	
Approach Delay (s)		56.3			49.9			27.1			28.2	
Approach LOS		E			D			C			C	

Intersection Summary			
HCM 2000 Control Delay	43.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	24.0
Intersection Capacity Utilization	93.7%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	540	1695	170	265	1140	85	185	490	275	170	375	340
Future Volume (vph)	540	1695	170	265	1140	85	185	490	275	170	375	340
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	6.4	6.4	6.4	6.4	6.4		6.4	6.4	6.4	6.4	6.4	6.4
Lane Util. Factor	0.97	0.95	1.00	0.97	0.91		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	0.98	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3310	3413	1527	3310	4847		1706	3413	1502	1706	3413	1506
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3310	3413	1527	3310	4847		1706	3413	1502	1706	3413	1506
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	574	1803	181	282	1213	90	197	521	293	181	399	362
RTOR Reduction (vph)	0	0	61	0	5	0	0	0	123	0	0	298
Lane Group Flow (vph)	574	1803	120	282	1298	0	197	521	170	181	399	64
Confl. Peds. (#/hr)	3					3	1		3	3		1
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases			6						4			8
Actuated Green, G (s)	30.1	70.6	70.6	10.6	51.1		24.7	32.1	32.1	21.1	28.5	28.5
Effective Green, g (s)	30.1	70.6	70.6	10.6	51.1		24.7	32.1	32.1	21.1	28.5	28.5
Actuated g/C Ratio	0.19	0.44	0.44	0.07	0.32		0.15	0.20	0.20	0.13	0.18	0.18
Clearance Time (s)	6.4	6.4	6.4	6.4	6.4		6.4	6.4	6.4	6.4	6.4	6.4
Vehicle Extension (s)	2.0	5.0	5.0	2.0	5.0		2.0	3.0	3.0	2.0	2.5	2.5
Lane Grp Cap (vph)	622	1505	673	219	1548		263	684	301	224	607	268
v/s Ratio Prot	0.17	c0.53		c0.09	0.27		c0.12	c0.15		0.11	0.12	
v/s Ratio Perm			0.08						0.11			0.04
v/c Ratio	0.92	1.20	0.18	1.29	0.84		0.75	0.76	0.56	0.81	0.66	0.24
Uniform Delay, d1	63.8	44.7	27.1	74.7	50.6		64.7	60.3	57.6	67.5	61.2	56.5
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.07	0.93	1.03	1.00	1.00	1.00
Incremental Delay, d2	19.1	95.8	0.6	159.3	5.6		8.0	4.1	1.9	17.9	2.3	0.3
Delay (s)	82.9	140.5	27.7	234.0	56.2		77.4	60.0	61.3	85.4	63.5	56.8
Level of Service	F	F	C	F	E		E	E	E	F	E	E
Approach Delay (s)		119.6			87.8			63.8			65.1	
Approach LOS		F			F			E			E	

Intersection Summary			
HCM 2000 Control Delay	93.7	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.05		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	25.6
Intersection Capacity Utilization	102.1%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	1085	300	345	650	5	245	15	590	0	50	30
Future Volume (vph)	10	1085	300	345	650	5	245	15	590	0	50	30
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	6.2	6.2	6.2	6.2	6.2		6.6	6.6	6.2		6.2	
Lane Util. Factor	1.00	0.95	1.00	0.97	0.95		0.95	0.95	0.88		1.00	
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	
Frt	1.00	1.00	0.85	1.00	1.00		1.00	1.00	0.85		0.94	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	0.96	1.00		1.00	
Satd. Flow (prot)	1706	3413	1527	3310	3408		1621	1634	2687		1695	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	0.96	1.00		1.00	
Satd. Flow (perm)	1706	3413	1527	3310	3408		1621	1634	2687		1695	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	11	1154	319	367	691	5	261	16	628	0	53	32
RTOR Reduction (vph)	0	0	162	0	0	0	0	0	478	0	21	0
Lane Group Flow (vph)	11	1154	157	367	696	0	138	139	150	0	64	0
Confl. Peds. (#/hr)	1					1						
Turn Type	Prot	NA	Perm	Prot	NA		Split	NA	pm+ov	Split	NA	
Protected Phases	1	6		5	2		8	8	5	4	4	
Permitted Phases			6						8			
Actuated Green, G (s)	1.4	63.9	63.9	19.7	82.2		11.4	11.4	31.1		9.8	
Effective Green, g (s)	1.4	63.9	63.9	19.7	82.2		11.4	11.4	31.1		9.8	
Actuated g/C Ratio	0.01	0.49	0.49	0.15	0.63		0.09	0.09	0.24		0.08	
Clearance Time (s)	6.2	6.2	6.2	6.2	6.2		6.6	6.6	6.2		6.2	
Vehicle Extension (s)	2.0	2.0	2.0	2.0	4.0		2.0	2.0	2.0		2.0	
Lane Grp Cap (vph)	18	1677	750	501	2154		142	143	642		127	
v/s Ratio Prot	0.01	c0.34		c0.11	0.20		c0.09	0.09	0.04		c0.04	
v/s Ratio Perm			0.10						0.02			
v/c Ratio	0.61	0.69	0.21	0.73	0.32		0.97	0.97	0.23		0.50	
Uniform Delay, d1	64.0	25.4	18.7	52.6	11.0		59.1	59.1	39.9		57.8	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	
Incremental Delay, d2	36.2	2.3	0.6	4.7	0.4		66.4	66.2	0.1		1.1	
Delay (s)	100.2	27.7	19.4	57.4	11.4		125.5	125.3	39.9		58.9	
Level of Service	F	C	B	E	B		F	F	D		E	
Approach Delay (s)		26.5			27.3			66.1			58.9	
Approach LOS		C			C			E			E	

Intersection Summary			
HCM 2000 Control Delay	37.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	25.2
Intersection Capacity Utilization	70.8%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

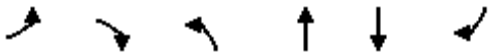
2048 Concept V1 (MUT) Alternate (AM Peak Hour)

Previously Referred to as Concept B Alternate



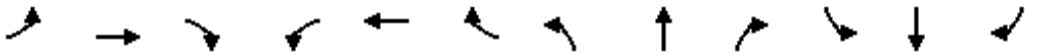
Movement	EBT	WBT	WBR	WBR2	NBL	NBT	NBR
Lane Configurations							
Traffic Volume (vph)	390	240	55	95	500	470	790
Future Volume (vph)	390	240	55	95	500	470	790
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850
Lane Width	14	14	14	14	14	14	14
Total Lost time (s)	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	0.95	0.95	1.00		1.00	0.91	0.91
Frt	1.00	1.00	0.85		1.00	0.93	0.85
Flt Protected	1.00	1.00	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3605	3605	1613		1803	3217	1468
Flt Permitted	1.00	1.00	1.00		0.95	1.00	1.00
Satd. Flow (perm)	3605	3605	1613		1803	3217	1468
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	433	267	61	106	556	522	878
RTOR Reduction (vph)	0	0	27	0	0	84	84
Lane Group Flow (vph)	433	267	140	0	556	877	355
Turn Type	NA	NA	Perm		Perm	NA	Perm
Protected Phases	4	8				2	
Permitted Phases			8		2		2
Actuated Green, G (s)	81.5	81.5	81.5		70.5	70.5	70.5
Effective Green, g (s)	81.5	81.5	81.5		70.5	70.5	70.5
Actuated g/C Ratio	0.51	0.51	0.51		0.44	0.44	0.44
Clearance Time (s)	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)	2.5	2.5	2.5		2.5	2.5	2.5
Lane Grp Cap (vph)	1836	1836	821		794	1417	646
v/s Ratio Prot	c0.12	0.07				0.27	
v/s Ratio Perm			0.09		c0.31		0.24
v/c Ratio	0.24	0.15	0.17		0.70	0.62	0.55
Uniform Delay, d1	21.9	20.8	21.1		36.2	34.4	33.0
Progression Factor	0.29	0.89	0.86		0.93	0.36	0.38
Incremental Delay, d2	0.3	0.2	0.4		2.3	0.6	0.7
Delay (s)	6.7	18.7	18.5		36.0	12.9	13.2
Level of Service	A	B	B		D	B	B
Approach Delay (s)	6.7	18.6				19.5	
Approach LOS	A	B				B	

Intersection Summary			
HCM 2000 Control Delay	17.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.45		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	51.2%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



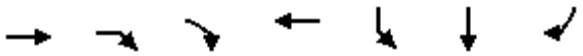
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	595	0	0	1165	0	0
Future Volume (vph)	595	0	0	1165	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850
Lane Width	14	14	14	14	14	14
Total Lost time (s)	4.0			4.0		
Lane Util. Factor	0.97			0.95		
Frt	1.00			1.00		
Flt Protected	0.95			1.00		
Satd. Flow (prot)	3497			3605		
Flt Permitted	0.95			1.00		
Satd. Flow (perm)	3497			3605		
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	661	0	0	1294	0	0
RTOR Reduction (vph)	111	0	0	0	0	0
Lane Group Flow (vph)	550	0	0	1294	0	0
Turn Type	Prot			NA		
Protected Phases	4			2		
Permitted Phases						
Actuated Green, G (s)	30.8			121.2		
Effective Green, g (s)	30.8			121.2		
Actuated g/C Ratio	0.19			0.76		
Clearance Time (s)	4.0			4.0		
Vehicle Extension (s)	2.5			2.5		
Lane Grp Cap (vph)	673			2730		
v/s Ratio Prot	c0.16			c0.36		
v/s Ratio Perm						
v/c Ratio	0.82			0.47		
Uniform Delay, d1	61.9			7.3		
Progression Factor	0.21			0.98		
Incremental Delay, d2	7.3			0.6		
Delay (s)	20.3			7.8		
Level of Service	C			A		
Approach Delay (s)	20.3			7.8	0.0	
Approach LOS	C			A	A	

Intersection Summary			
HCM 2000 Control Delay	12.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	57.2%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



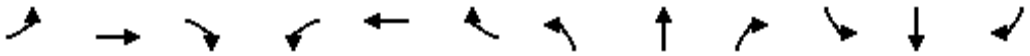
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	55	500	0	0	0	0	0	515	675
Future Volume (vph)	0	0	0	55	500	0	0	0	0	0	515	675
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Lane Width	14	14	14	14	14	14	14	14	14	14	14	14
Total Lost time (s)					4.0						4.0	4.0
Lane Util. Factor					0.95						0.95	1.00
Frt					1.00						1.00	0.85
Flt Protected					1.00						1.00	1.00
Satd. Flow (prot)					3587						3605	1613
Flt Permitted					1.00						1.00	1.00
Satd. Flow (perm)					3587						3605	1613
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	61	556	0	0	0	0	0	572	750
RTOR Reduction (vph)	0	0	0	0	6	0	0	0	0	0	0	16
Lane Group Flow (vph)	0	0	0	0	611	0	0	0	0	0	572	734
Turn Type				Perm	NA						NA	Perm
Protected Phases					8						6	
Permitted Phases				8								6
Actuated Green, G (s)					32.7						119.3	119.3
Effective Green, g (s)					32.7						119.3	119.3
Actuated g/C Ratio					0.20						0.75	0.75
Clearance Time (s)					4.0						4.0	4.0
Vehicle Extension (s)					2.5						2.5	2.5
Lane Grp Cap (vph)					733						2687	1202
v/s Ratio Prot											0.16	
v/s Ratio Perm					0.17							c0.45
v/c Ratio					0.83						0.21	0.61
Uniform Delay, d1					61.0						6.2	9.5
Progression Factor					0.77						0.06	1.32
Incremental Delay, d2					7.2						0.1	1.9
Delay (s)					54.1						0.5	14.4
Level of Service					D						A	B
Approach Delay (s)		0.0			54.1			0.0			8.4	
Approach LOS		A			D			A			A	

Intersection Summary			
HCM 2000 Control Delay	22.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	65.4%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBT	EBR	EBR2	WBT	SBL	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	390	205	70	240	390	180	0
Future Volume (vph)	390	205	70	240	390	180	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850
Lane Width	14	14	14	14	14	14	14
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	
Lane Util. Factor	0.91	0.91		0.95	0.97	1.00	
Frt	0.98	0.85		1.00	1.00	1.00	
Flt Protected	1.00	1.00		1.00	0.95	1.00	
Satd. Flow (prot)	3371	1468		3605	3497	1897	
Flt Permitted	1.00	1.00		1.00	0.95	1.00	
Satd. Flow (perm)	3371	1468		3605	3497	1897	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	433	228	78	267	433	200	0
RTOR Reduction (vph)	0	6	0	0	0	0	0
Lane Group Flow (vph)	515	218	0	267	433	200	0
Turn Type	NA	Perm		NA	Perm	NA	Perm
Protected Phases	4			8		6	
Permitted Phases		4			6		6
Actuated Green, G (s)	125.9	125.9		125.9	26.1	26.1	
Effective Green, g (s)	125.9	125.9		125.9	26.1	26.1	
Actuated g/C Ratio	0.79	0.79		0.79	0.16	0.16	
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0	
Vehicle Extension (s)	2.5	2.5		2.5	2.5	2.5	
Lane Grp Cap (vph)	2652	1155		2836	570	309	
v/s Ratio Prot	c0.15			0.07		0.11	
v/s Ratio Perm		0.15			c0.12		
v/c Ratio	0.19	0.19		0.09	0.76	0.65	
Uniform Delay, d1	4.3	4.3		3.9	64.0	62.6	
Progression Factor	0.31	0.25		0.47	0.42	0.86	
Incremental Delay, d2	0.2	0.3		0.1	5.4	3.9	
Delay (s)	1.5	1.4		1.9	32.5	57.7	
Level of Service	A	A		A	C	E	
Approach Delay (s)	1.5			1.9		40.4	
Approach LOS	A			A		D	

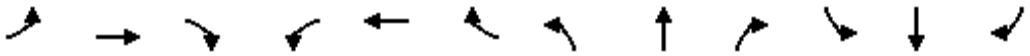
Intersection Summary			
HCM 2000 Control Delay	16.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.29		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	32.2%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	195	1040	0	0	0	0	0	1150	330	0	0	0
Future Volume (vph)	195	1040	0	0	0	0	0	1150	330	0	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	4.0	4.0						4.0	4.0			
Lane Util. Factor	0.97	0.91						0.81	0.81			
Frt	1.00	1.00						0.99	0.85			
Flt Protected	0.95	1.00						1.00	1.00			
Satd. Flow (prot)	3278	4856						5714	1225			
Flt Permitted	0.95	1.00						1.00	1.00			
Satd. Flow (perm)	3278	4856						5714	1225			
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	217	1156	0	0	0	0	0	1278	367	0	0	0
RTOR Reduction (vph)	22	0	0	0	0	0	0	7	26	0	0	0
Lane Group Flow (vph)	195	1156	0	0	0	0	0	1348	264	0	0	0
Turn Type	Perm	NA						NA	Perm			
Protected Phases		4						2				
Permitted Phases	4								2			
Actuated Green, G (s)	102.2	102.2						49.8	49.8			
Effective Green, g (s)	102.2	102.2						49.8	49.8			
Actuated g/C Ratio	0.64	0.64						0.31	0.31			
Clearance Time (s)	4.0	4.0						4.0	4.0			
Vehicle Extension (s)	2.5	2.5						2.5	2.5			
Lane Grp Cap (vph)	2093	3101						1778	381			
v/s Ratio Prot		c0.24						c0.24				
v/s Ratio Perm	0.06								0.22			
v/c Ratio	0.09	0.37						0.76	0.69			
Uniform Delay, d1	11.1	13.7						49.7	48.4			
Progression Factor	0.00	0.57						0.89	0.95			
Incremental Delay, d2	0.1	0.3						1.8	4.9			
Delay (s)	0.1	8.1						46.1	51.1			
Level of Service	A	A						D	D			
Approach Delay (s)		6.8			0.0			47.0			0.0	
Approach LOS		A			A			D			A	

Intersection Summary			
HCM 2000 Control Delay	28.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	52.2%	ICU Level of Service	A
Analysis Period (min)	15		

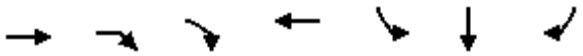
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	965	305	0	0	0	0	0	0	270	1355	0
Future Volume (vph)	0	965	305	0	0	0	0	0	0	270	1355	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)		4.0	4.0							4.0	4.0	
Lane Util. Factor		0.76	0.76							0.86	0.86	
Frt		0.98	0.85							1.00	1.00	
Flt Protected		1.00	1.00							0.95	1.00	
Satd. Flow (prot)		6648	1149							1453	4585	
Flt Permitted		1.00	1.00							0.95	1.00	
Satd. Flow (perm)		6648	1149							1453	4585	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	1072	339	0	0	0	0	0	0	300	1506	0
RTOR Reduction (vph)	0	11	13	0	0	0	0	0	0	15	4	0
Lane Group Flow (vph)	0	1193	194	0	0	0	0	0	0	255	1532	0
Turn Type		NA	Perm							Perm	NA	
Protected Phases		4									6	
Permitted Phases			4							6		
Actuated Green, G (s)		83.4	83.4							68.6	68.6	
Effective Green, g (s)		83.4	83.4							68.6	68.6	
Actuated g/C Ratio		0.52	0.52							0.43	0.43	
Clearance Time (s)		4.0	4.0							4.0	4.0	
Vehicle Extension (s)		2.5	2.5							2.5	2.5	
Lane Grp Cap (vph)		3465	598							622	1965	
v/s Ratio Prot		c0.18										
v/s Ratio Perm			0.17							0.18	0.33	
v/c Ratio		0.34	0.32							0.41	0.78	
Uniform Delay, d1		22.3	22.1							31.7	39.2	
Progression Factor		1.00	1.00							0.00	0.51	
Incremental Delay, d2		0.3	1.4							0.2	1.3	
Delay (s)		22.6	23.5							0.2	21.4	
Level of Service		C	C							A	C	
Approach Delay (s)		22.7			0.0			0.0			18.2	
Approach LOS		C			A			A			B	

Intersection Summary			
HCM 2000 Control Delay	20.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	72.0%	ICU Level of Service	C
Analysis Period (min)	15		

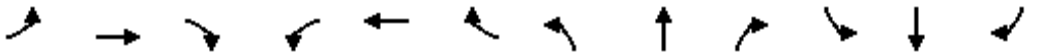
c Critical Lane Group



Movement	EBT	EBR	EBR2	WBT	SBL2	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	255	270	40	525	10	1720	265
Future Volume (vph)	255	270	40	525	10	1720	265
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	
Lane Util. Factor	0.91	0.91		0.95	1.00	0.91	
Frt	0.95	0.85		1.00	1.00	0.98	
Flt Protected	1.00	1.00		1.00	0.95	1.00	
Satd. Flow (prot)	3069	1376		3380	1690	4759	
Flt Permitted	1.00	1.00		1.00	0.95	1.00	
Satd. Flow (perm)	3069	1376		3380	1690	4759	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	283	300	44	583	11	1911	294
RTOR Reduction (vph)	0	10	0	0	0	27	0
Lane Group Flow (vph)	433	184	0	583	11	2178	0
Turn Type	NA	Perm		NA	Perm	NA	
Protected Phases	4			8		6	
Permitted Phases		4			6		
Actuated Green, G (s)	24.6	24.6		24.6	47.4	47.4	
Effective Green, g (s)	24.6	24.6		24.6	47.4	47.4	
Actuated g/C Ratio	0.31	0.31		0.31	0.59	0.59	
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0	
Vehicle Extension (s)	2.5	2.5		2.5	2.5	2.5	
Lane Grp Cap (vph)	943	423		1039	1001	2819	
v/s Ratio Prot	0.14			c0.17		c0.46	
v/s Ratio Perm		0.13			0.01		
v/c Ratio	0.46	0.43		0.56	0.01	0.77	
Uniform Delay, d1	22.3	22.1		23.2	6.7	12.3	
Progression Factor	1.00	1.00		0.30	1.00	1.00	
Incremental Delay, d2	1.6	3.2		1.9	0.0	1.3	
Delay (s)	23.9	25.4		8.9	6.7	13.6	
Level of Service	C	C		A	A	B	
Approach Delay (s)	24.4			8.9		13.5	
Approach LOS	C			A		B	

Intersection Summary			
HCM 2000 Control Delay	14.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	61.8%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	385	2100	0	0	0	0	0	1200	560
Future Volume (vph)	0	0	0	385	2100	0	0	0	0	0	1200	560
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)				4.0	4.0						4.0	4.0
Lane Util. Factor				0.86	0.86						0.86	0.86
Frt				1.00	1.00						0.98	0.85
Flt Protected				0.95	1.00						1.00	1.00
Satd. Flow (prot)				1453	4585						4508	1300
Flt Permitted				0.95	1.00						1.00	1.00
Satd. Flow (perm)				1453	4585						4508	1300
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	428	2333	0	0	0	0	0	1333	622
RTOR Reduction (vph)	0	0	0	4	3	0	0	0	0	0	2	4
Lane Group Flow (vph)	0	0	0	381	2373	0	0	0	0	0	1511	438
Turn Type				Perm	NA						NA	Perm
Protected Phases					8						6	
Permitted Phases				8								6
Actuated Green, G (s)				91.3	91.3						60.7	60.7
Effective Green, g (s)				91.3	91.3						60.7	60.7
Actuated g/C Ratio				0.57	0.57						0.38	0.38
Clearance Time (s)				4.0	4.0						4.0	4.0
Vehicle Extension (s)				2.5	2.5						2.5	2.5
Lane Grp Cap (vph)				829	2616						1710	493
v/s Ratio Prot											0.34	
v/s Ratio Perm				0.26	0.52							c0.34
v/c Ratio				0.46	0.91						0.88	0.89
Uniform Delay, d1				20.0	30.6						46.4	46.5
Progression Factor				0.52	0.86						0.77	0.75
Incremental Delay, d2				1.6	5.2						3.9	12.0
Delay (s)				12.0	31.4						39.4	46.6
Level of Service				B	C						D	D
Approach Delay (s)		0.0			28.7			0.0			41.0	
Approach LOS		A			C			A			D	

Intersection Summary			
HCM 2000 Control Delay	33.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	85.2%	ICU Level of Service	E
Analysis Period (min)	15		

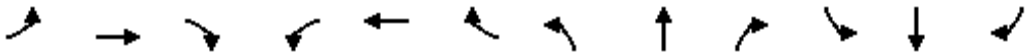
c Critical Lane Group



Movement	EBL	EBT	WBR	NBL	NBT	NBR	NEL2
Lane Configurations							
Traffic Volume (vph)	215	50	60	50	685	15	475
Future Volume (vph)	215	50	60	50	685	15	475
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	1.00
Frt	1.00	1.00	0.86	1.00	1.00	0.85	1.00
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95
Satd. Flow (prot)	1690	1779	1539	1690	3380	1512	1690
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95
Satd. Flow (perm)	1690	1779	1539	1690	3380	1512	1690
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	239	56	67	56	761	17	528
RTOR Reduction (vph)	0	0	38	0	0	10	0
Lane Group Flow (vph)	239	56	29	56	761	7	528
Turn Type	Split	NA	Perm	Perm	NA	Perm	D.Pm
Protected Phases	4	4			2		
Permitted Phases			2	2		2	2
Actuated Green, G (s)	37.4	37.4	34.6	34.6	34.6	34.6	34.6
Effective Green, g (s)	37.4	37.4	34.6	34.6	34.6	34.6	34.6
Actuated g/C Ratio	0.47	0.47	0.43	0.43	0.43	0.43	0.43
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Lane Grp Cap (vph)	790	831	665	730	1461	653	730
v/s Ratio Prot	c0.14	0.03			0.23		
v/s Ratio Perm			0.02	0.03		0.00	c0.31
v/c Ratio	0.30	0.07	0.04	0.08	0.52	0.01	0.72
Uniform Delay, d1	13.2	11.7	13.1	13.3	16.6	12.9	18.7
Progression Factor	1.80	1.52	1.00	0.67	0.66	0.56	0.98
Incremental Delay, d2	0.9	0.1	0.0	0.0	0.2	0.0	3.3
Delay (s)	24.7	18.0	13.1	8.9	11.2	7.2	21.7
Level of Service	C	B	B	A	B	A	C
Approach Delay (s)		23.4			11.0		
Approach LOS		C			B		

Intersection Summary			
HCM 2000 Control Delay	16.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	68.7%	ICU Level of Service	C
Analysis Period (min)	15		

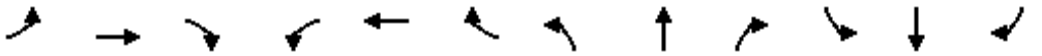
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	1785	150	700	600	0	0	0	0
Future Volume (vph)	0	0	0	0	1785	150	700	600	0	0	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)					4.0	4.0	4.0	4.0				
Lane Util. Factor					0.86	1.00	0.97	0.95				
Frt					1.00	0.85	1.00	1.00				
Flt Protected					1.00	1.00	0.95	1.00				
Satd. Flow (prot)					6119	1512	3278	3380				
Flt Permitted					1.00	1.00	0.95	1.00				
Satd. Flow (perm)					6119	1512	3278	3380				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	0	1983	167	778	667	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	41	9	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	1983	126	769	667	0	0	0	0
Turn Type					NA	Perm	Perm	NA				
Protected Phases					8			2				
Permitted Phases						8	2					
Actuated Green, G (s)					105.3	105.3	46.7	46.7				
Effective Green, g (s)					105.3	105.3	46.7	46.7				
Actuated g/C Ratio					0.66	0.66	0.29	0.29				
Clearance Time (s)					4.0	4.0	4.0	4.0				
Vehicle Extension (s)					2.5	2.5	2.5	2.5				
Lane Grp Cap (vph)					4027	995	956	986				
v/s Ratio Prot					c0.32			0.20				
v/s Ratio Perm						0.08	c0.23					
v/c Ratio					0.49	0.13	0.80	0.68				
Uniform Delay, d1					13.8	10.2	52.4	50.0				
Progression Factor					0.90	0.87	0.08	0.48				
Incremental Delay, d2					0.4	0.2	4.3	1.6				
Delay (s)					12.8	9.2	8.4	25.5				
Level of Service					B	A	A	C				
Approach Delay (s)		0.0			12.5			16.3			0.0	
Approach LOS		A			B			B			A	

Intersection Summary			
HCM 2000 Control Delay	14.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	80.8%	ICU Level of Service	D
Analysis Period (min)	15		

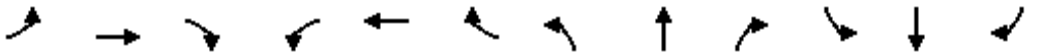
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	450	60	30	210	0	275	0	215	0	450	640
Future Volume (vph)	0	450	60	30	210	0	275	0	215	0	450	640
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Lane Width	14	14	14	14	14	14	14	14	14	14	14	14
Total Lost time (s)		6.0		6.0	6.0		6.0		6.0		6.0	6.0
Lane Util. Factor		0.91		1.00	0.95		0.97		1.00		0.95	1.00
Frpb, ped/bikes		1.00		1.00	1.00		1.00		0.98		1.00	0.97
Flpb, ped/bikes		1.00		1.00	1.00		1.00		1.00		1.00	1.00
Frt		0.98		1.00	1.00		1.00		0.85		1.00	0.85
Flt Protected		1.00		0.95	1.00		0.95		1.00		1.00	1.00
Satd. Flow (prot)		5071		1799	3605		3497		1587		3605	1557
Flt Permitted		1.00		0.35	1.00		0.95		1.00		1.00	1.00
Satd. Flow (perm)		5071		661	3605		3497		1587		3605	1557
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	500	67	33	233	0	306	0	239	0	500	711
RTOR Reduction (vph)	0	9	0	0	0	0	0	0	8	0	0	134
Lane Group Flow (vph)	0	558	0	33	233	0	306	0	231	0	500	577
Confl. Peds. (#/hr)			8	8			13		3	3		13
Turn Type		NA		D.P+P	NA		Prot		pm+ov		NA	Perm
Protected Phases		6		5	2		7		5		8	
Permitted Phases				6			7		4			8
Actuated Green, G (s)		47.0		53.0	59.0		17.2		95.0		65.8	65.8
Effective Green, g (s)		47.0		53.0	59.0		17.2		95.0		65.8	65.8
Actuated g/C Ratio		0.29		0.33	0.37		0.11		0.59		0.41	0.41
Clearance Time (s)		6.0		6.0	6.0		6.0		6.0		6.0	6.0
Vehicle Extension (s)		5.5		1.0	5.5		1.0		1.0		2.0	2.0
Lane Grp Cap (vph)		1489		261	1329		375		1001		1482	640
v/s Ratio Prot		c0.11		0.00	0.06		c0.09		c0.01		0.14	
v/s Ratio Perm				0.04					0.14			c0.37
v/c Ratio		0.37		0.13	0.18		0.82		0.23		0.34	0.90
Uniform Delay, d1		44.8		36.7	34.1		69.9		15.3		32.2	44.1
Progression Factor		1.00		0.53	0.53		1.00		1.00		0.53	0.52
Incremental Delay, d2		0.7		0.1	0.3		12.2		0.0		0.0	12.8
Delay (s)		45.6		19.4	18.2		82.1		15.3		17.0	35.8
Level of Service		D		B	B		F		B		B	D
Approach Delay (s)		45.6			18.4			52.8			28.0	
Approach LOS		D			B			D			C	

Intersection Summary			
HCM 2000 Control Delay	36.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	24.0
Intersection Capacity Utilization	73.9%	ICU Level of Service	D
Analysis Period (min)	15		

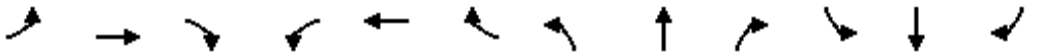
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	60	990	115	375	1495	165	170	270	300	40	275	50
Future Volume (vph)	60	990	115	375	1495	165	170	270	300	40	275	50
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	6.5	6.5	6.8	6.5	6.5	6.8	6.8	6.8	6.5	6.8	6.8	6.5
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95	0.88	0.97	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00	0.99	1.00	1.00	0.98	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3278	3380	1486	3278	3380	1492	3278	3366	2600	3278	3366	1489
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3278	3380	1486	3278	3380	1492	3278	3366	2600	3278	3366	1489
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	67	1100	128	417	1661	183	189	300	333	44	306	56
RTOR Reduction (vph)	0	0	50	0	0	61	0	0	50	0	0	47
Lane Group Flow (vph)	67	1100	78	417	1661	122	189	300	283	44	306	9
Confl. Peds. (#/hr)	1		5	5		1	5		10	10		5
Bus Blockages (#/hr)	0	0	0	0	0	0	0	2	0	0	2	0
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	1	6	7	5	2	3	7	4	5	3	8	1
Permitted Phases			6			2			4			8
Actuated Green, G (s)	5.5	80.1	90.9	23.5	98.1	103.3	10.8	24.6	48.1	5.2	19.0	24.5
Effective Green, g (s)	5.5	80.1	90.9	23.5	98.1	103.3	10.8	24.6	48.1	5.2	19.0	24.5
Actuated g/C Ratio	0.03	0.50	0.57	0.15	0.61	0.65	0.07	0.15	0.30	0.03	0.12	0.15
Clearance Time (s)	6.5	6.5	6.8	6.5	6.5	6.8	6.8	6.8	6.5	6.8	6.8	6.5
Vehicle Extension (s)	2.0	5.0	1.0	3.0	5.0	2.0	1.0	2.0	3.0	2.0	2.0	2.0
Lane Grp Cap (vph)	112	1692	844	481	2072	963	221	517	781	106	399	228
v/s Ratio Prot	0.02	0.33	0.01	c0.13	c0.49	0.00	c0.06	c0.09	0.05	0.01	c0.09	0.00
v/s Ratio Perm			0.05			0.08			0.06			0.00
v/c Ratio	0.60	0.65	0.09	0.87	0.80	0.13	0.86	0.58	0.36	0.42	0.77	0.04
Uniform Delay, d1	76.2	29.6	15.8	66.7	23.5	10.9	73.8	62.9	43.9	75.9	68.4	57.7
Progression Factor	1.00	1.00	1.00	0.88	0.61	0.29	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	5.6	2.0	0.0	10.3	2.2	0.0	25.3	1.1	0.3	1.0	7.7	0.0
Delay (s)	81.8	31.5	15.8	68.9	16.7	3.2	99.1	64.0	44.2	76.9	76.1	57.7
Level of Service	F	C	B	E	B	A	F	E	D	E	E	E
Approach Delay (s)		32.6			25.2			64.0			73.6	
Approach LOS		C			C			E			E	

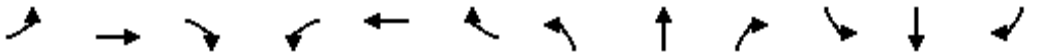
Intersection Summary			
HCM 2000 Control Delay	38.0	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	26.6
Intersection Capacity Utilization	87.4%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



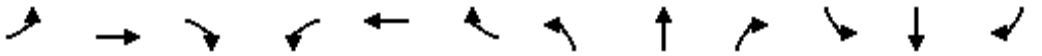
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1280	50	100	1730	0	0	0	0	260	85	345
Future Volume (vph)	0	1280	50	100	1730	0	0	0	0	260	85	345
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)		5.8		5.8	5.8					5.9	5.9	5.9
Lane Util. Factor		0.86		0.97	0.95					0.95	0.91	0.95
Frpb, ped/bikes		1.00		1.00	1.00					1.00	0.99	0.98
Flpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	1.00
Frt		0.99		1.00	1.00					1.00	0.92	0.85
Flt Protected		1.00		0.95	1.00					0.95	0.99	1.00
Satd. Flow (prot)		6084		3278	3380					1605	1470	1414
Flt Permitted		1.00		0.95	1.00					0.95	0.99	1.00
Satd. Flow (perm)		6084		3278	3380					1605	1470	1414
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	1422	56	111	1922	0	0	0	0	289	94	383
RTOR Reduction (vph)	0	3	0	0	0	0	0	0	0	0	19	48
Lane Group Flow (vph)	0	1475	0	111	1922	0	0	0	0	260	242	197
Confl. Peds. (#/hr)	10					10	2					2
Turn Type		NA		Prot	NA					Perm	NA	Perm
Protected Phases		6		5	2						8	
Permitted Phases										8		8
Actuated Green, G (s)		102.4		10.0	118.2					30.1	30.1	30.1
Effective Green, g (s)		102.4		10.0	118.2					30.1	30.1	30.1
Actuated g/C Ratio		0.64		0.06	0.74					0.19	0.19	0.19
Clearance Time (s)		5.8		5.8	5.8					5.9	5.9	5.9
Vehicle Extension (s)		3.8		3.0	3.4					1.5	1.5	1.5
Lane Grp Cap (vph)		3893		204	2496					301	276	266
v/s Ratio Prot		0.24		0.03	c0.57							
v/s Ratio Perm										0.16	0.16	0.14
v/c Ratio		0.38		0.54	0.77					0.86	0.88	0.74
Uniform Delay, d1		13.7		72.8	12.7					63.0	63.2	61.3
Progression Factor		0.42		1.32	0.41					0.97	0.96	0.95
Incremental Delay, d2		0.2		2.4	1.9					21.1	24.8	9.3
Delay (s)		5.9		98.8	7.0					82.0	85.6	67.7
Level of Service		A		F	A					F	F	E
Approach Delay (s)		5.9			12.1			0.0			78.7	
Approach LOS		A			B			A			E	

Intersection Summary			
HCM 2000 Control Delay	21.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	17.5
Intersection Capacity Utilization	74.3%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



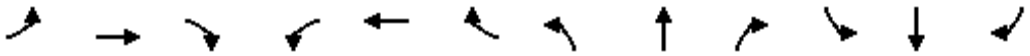
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	275	1265	0	0	1480	405	350	115	405	0	0	0
Future Volume (vph)	275	1265	0	0	1480	405	350	115	405	0	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	5.6	5.6			5.6		5.9	5.9	5.9			
Lane Util. Factor	0.97	0.95			0.86		0.95	0.95	1.00			
Frpb, ped/bikes	1.00	1.00			1.00		1.00	1.00	1.00			
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00	1.00			
Frt	1.00	1.00			0.97		1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00		0.95	0.98	1.00			
Satd. Flow (prot)	3278	3380			5922		1605	1648	1512			
Flt Permitted	0.95	1.00			1.00		0.95	0.98	1.00			
Satd. Flow (perm)	3278	3380			5922		1605	1648	1512			
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	306	1406	0	0	1644	450	389	128	450	0	0	0
RTOR Reduction (vph)	0	0	0	0	27	0	0	0	207	0	0	0
Lane Group Flow (vph)	306	1406	0	0	2067	0	257	260	243	0	0	0
Confl. Peds. (#/hr)			7	7								
Turn Type	Prot	NA			NA		Perm	NA	custom			
Protected Phases	1	6			2			4				
Permitted Phases							4		7 5			
Actuated Green, G (s)	18.5	86.3			95.3		29.1	29.1	62.2			
Effective Green, g (s)	18.5	86.3			95.3		29.1	29.1	59.2			
Actuated g/C Ratio	0.12	0.54			0.60		0.18	0.18	0.37			
Clearance Time (s)	5.6	5.6			5.6		5.9	5.9				
Vehicle Extension (s)	1.5	3.3			3.6		2.0	2.0				
Lane Grp Cap (vph)	379	1823			3527		291	299	559			
v/s Ratio Prot	c0.09	c0.42			c0.35							
v/s Ratio Perm							c0.16	0.16	0.16			
v/c Ratio	0.81	0.77			0.59		0.88	0.87	0.44			
Uniform Delay, d1	69.0	29.1			20.1		63.8	63.6	37.8			
Progression Factor	0.83	0.65			1.00		1.00	1.00	1.00			
Incremental Delay, d2	10.7	3.0			0.7		24.9	21.9	0.2			
Delay (s)	68.2	21.9			20.8		88.7	85.5	38.0			
Level of Service	E	C			C		F	F	D			
Approach Delay (s)		30.1			20.8			64.3			0.0	
Approach LOS		C			C			E			A	

Intersection Summary			
HCM 2000 Control Delay	33.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	20.1
Intersection Capacity Utilization	74.3%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



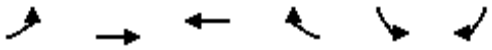
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	85	1795	15	35	10	0	0	30	70
Future Volume (vph)	0	0	0	85	1795	15	35	10	0	0	30	70
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)				5.6	5.6		5.5	5.5			5.5	5.5
Lane Util. Factor				1.00	0.86		1.00	1.00			1.00	1.00
Frpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	0.97
Flpb, ped/bikes				1.00	1.00		0.99	1.00			1.00	1.00
Frt				1.00	1.00		1.00	1.00			1.00	0.85
Flt Protected				0.95	1.00		0.95	1.00			1.00	1.00
Satd. Flow (prot)				1690	6110		1667	1779			1779	1473
Flt Permitted				0.95	1.00		0.74	1.00			1.00	1.00
Satd. Flow (perm)				1690	6110		1291	1779			1779	1473
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	94	1994	17	39	11	0	0	33	78
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	21
Lane Group Flow (vph)	0	0	0	94	2011	0	39	11	0	0	33	57
Confl. Peds. (#/hr)	5					5	6					6
Turn Type				Perm	NA		Perm	NA			NA	Perm
Protected Phases					2			4			8	
Permitted Phases				2			4					8
Actuated Green, G (s)				130.9	130.9		18.0	18.0			18.0	18.0
Effective Green, g (s)				130.9	130.9		18.0	18.0			18.0	18.0
Actuated g/C Ratio				0.82	0.82		0.11	0.11			0.11	0.11
Clearance Time (s)				5.6	5.6		5.5	5.5			5.5	5.5
Vehicle Extension (s)				2.5	2.5		2.0	2.0			2.8	2.8
Lane Grp Cap (vph)				1382	4998		145	200			200	165
v/s Ratio Prot					c0.33			0.01			0.02	
v/s Ratio Perm				0.06			0.03					c0.04
v/c Ratio				0.07	0.40		0.27	0.06			0.17	0.34
Uniform Delay, d1				2.8	3.9		65.0	63.4			64.2	65.5
Progression Factor				1.00	1.00		0.62	0.63			1.00	1.00
Incremental Delay, d2				0.1	0.2		0.4	0.0			0.3	1.1
Delay (s)				2.9	4.2		40.7	40.1			64.6	66.7
Level of Service				A	A		D	D			E	E
Approach Delay (s)		0.0			4.1			40.6			66.0	
Approach LOS		A			A			D			E	

Intersection Summary			
HCM 2000 Control Delay	8.0	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.39		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	11.1
Intersection Capacity Utilization	71.1%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	1175	100	0	0	0	0	60	50	40	75	0
Future Volume (vph)	15	1175	100	0	0	0	0	60	50	40	75	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)		5.8	5.8					5.7		5.7	5.7	
Lane Util. Factor		0.91	1.00					0.95		1.00	1.00	
Frpb, ped/bikes		1.00	0.95					1.00		1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00		1.00	1.00	
Frt		1.00	0.85					0.93		1.00	1.00	
Flt Protected		1.00	1.00					1.00		0.95	1.00	
Satd. Flow (prot)		4853	1441					3149		1690	1779	
Flt Permitted		1.00	1.00					1.00		0.67	1.00	
Satd. Flow (perm)		4853	1441					3149		1199	1779	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	17	1306	111	0	0	0	0	67	56	44	83	0
RTOR Reduction (vph)	0	0	20	0	0	0	0	50	0	0	0	0
Lane Group Flow (vph)	0	1323	91	0	0	0	0	73	0	44	83	0
Confl. Peds. (#/hr)			9	9			15					15
Turn Type	Perm	NA	Perm					NA		Perm	NA	
Protected Phases		6						4			8	
Permitted Phases	6		6							8		
Actuated Green, G (s)		130.5	130.5					18.0		18.0	18.0	
Effective Green, g (s)		130.5	130.5					18.0		18.0	18.0	
Actuated g/C Ratio		0.82	0.82					0.11		0.11	0.11	
Clearance Time (s)		5.8	5.8					5.7		5.7	5.7	
Vehicle Extension (s)		2.0	2.0					2.0		2.0	2.0	
Lane Grp Cap (vph)		3958	1175					354		134	200	
v/s Ratio Prot								0.02			c0.05	
v/s Ratio Perm		0.27	0.06							0.04		
v/c Ratio		0.33	0.08					0.21		0.33	0.41	
Uniform Delay, d1		3.7	2.9					64.5		65.4	66.1	
Progression Factor		0.68	0.46					1.00		0.89	0.89	
Incremental Delay, d2		0.2	0.1					0.1		0.5	0.5	
Delay (s)		2.7	1.5					64.6		58.5	59.5	
Level of Service		A	A					E		E	E	
Approach Delay (s)		2.6			0.0			64.6			59.2	
Approach LOS		A			A			E			E	

Intersection Summary			
HCM 2000 Control Delay	11.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.34		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	11.5
Intersection Capacity Utilization	71.1%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	75	860	295	35	85	35
Future Volume (vph)	75	860	295	35	85	35
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850
Total Lost time (s)	5.5	5.5	5.5		5.5	5.5
Lane Util. Factor	1.00	0.95	0.95		1.00	1.00
Frpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Frt	1.00	1.00	0.98		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1685	3380	3315		1690	1512
Flt Permitted	0.51	1.00	1.00		0.95	1.00
Satd. Flow (perm)	906	3380	3315		1690	1512
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	83	956	328	39	94	39
RTOR Reduction (vph)	0	0	2	0	0	36
Lane Group Flow (vph)	83	956	365	0	94	3
Confl. Peds. (#/hr)	3			3		
Turn Type	pm+pt	NA	NA		Prot	Perm
Protected Phases	1	6	2		3	
Permitted Phases	6					7
Actuated Green, G (s)	135.7	135.7	124.9		13.3	13.3
Effective Green, g (s)	135.7	135.7	124.9		13.3	13.3
Actuated g/C Ratio	0.85	0.85	0.78		0.08	0.08
Clearance Time (s)	5.5	5.5	5.5		5.5	5.5
Vehicle Extension (s)	1.0	6.2	6.2		2.0	2.0
Lane Grp Cap (vph)	794	2866	2587		140	125
v/s Ratio Prot	0.00	c0.28	0.11		c0.06	
v/s Ratio Perm	0.09					0.00
v/c Ratio	0.10	0.33	0.14		0.67	0.03
Uniform Delay, d1	2.0	2.6	4.3		71.2	67.4
Progression Factor	0.40	0.36	1.00		1.00	1.00
Incremental Delay, d2	0.0	0.3	0.1		9.5	0.0
Delay (s)	0.8	1.2	4.4		80.8	67.4
Level of Service	A	A	A		F	E
Approach Delay (s)		1.2	4.4		76.8	
Approach LOS		A	A		E	

Intersection Summary			
HCM 2000 Control Delay	8.5	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.39		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	19.5
Intersection Capacity Utilization	43.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

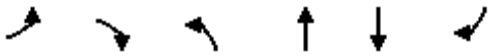
2048 Concept V1 (MUT) Alternate (PM Peak Hour)

Previously Referred to as Concept B Alternate



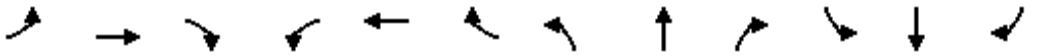
Movement	EBT	WBT	WBR	WBR2	NBL	NBT	NBR
Lane Configurations							
Traffic Volume (vph)	575	505	300	315	375	795	915
Future Volume (vph)	575	505	300	315	375	795	915
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850
Lane Width	14	14	14	14	14	14	14
Total Lost time (s)	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	0.95	0.95	1.00		1.00	0.91	0.91
Frt	1.00	1.00	0.85		1.00	0.95	0.85
Flt Protected	1.00	1.00	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3640	3640	1628		1820	3316	1482
Flt Permitted	1.00	1.00	1.00		0.95	1.00	1.00
Satd. Flow (perm)	3640	3640	1628		1820	3316	1482
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	612	537	319	335	399	846	973
RTOR Reduction (vph)	0	0	23	0	0	34	129
Lane Group Flow (vph)	612	537	631	0	399	1221	435
Turn Type	NA	NA	Perm		Perm	NA	Perm
Protected Phases	4	8				2	
Permitted Phases			8		2		2
Actuated Green, G (s)	83.6	83.6	83.6		68.4	68.4	68.4
Effective Green, g (s)	83.6	83.6	83.6		68.4	68.4	68.4
Actuated g/C Ratio	0.52	0.52	0.52		0.43	0.43	0.43
Clearance Time (s)	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)	2.5	2.5	2.5		2.5	2.5	2.5
Lane Grp Cap (vph)	1901	1901	850		778	1417	633
v/s Ratio Prot	0.17	0.15				c0.37	
v/s Ratio Perm			c0.39		0.22		0.29
v/c Ratio	0.32	0.28	0.74		0.51	0.86	0.69
Uniform Delay, d1	21.9	21.4	29.8		33.6	41.5	37.1
Progression Factor	0.13	0.72	0.80		1.86	0.50	0.74
Incremental Delay, d2	0.4	0.4	5.5		0.4	4.5	2.3
Delay (s)	3.1	15.8	29.3		62.7	25.2	29.9
Level of Service	A	B	C		E	C	C
Approach Delay (s)	3.1	23.2				33.2	
Approach LOS	A	C				C	

Intersection Summary			
HCM 2000 Control Delay	25.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	78.4%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



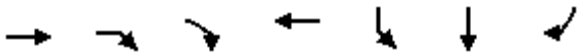
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	1000	0	0	1085	0	0
Future Volume (vph)	1000	0	0	1085	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850
Lane Width	14	14	14	14	14	14
Total Lost time (s)	4.0			4.0		
Lane Util. Factor	0.97			0.95		
Frt	1.00			1.00		
Flt Protected	0.95			1.00		
Satd. Flow (prot)	3531			3640		
Flt Permitted	0.95			1.00		
Satd. Flow (perm)	3531			3640		
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	1064	0	0	1154	0	0
RTOR Reduction (vph)	68	0	0	0	0	0
Lane Group Flow (vph)	996	0	0	1154	0	0
Turn Type	Prot			NA		
Protected Phases	4			2		
Permitted Phases						
Actuated Green, G (s)	53.8			98.2		
Effective Green, g (s)	53.8			98.2		
Actuated g/C Ratio	0.34			0.61		
Clearance Time (s)	4.0			4.0		
Vehicle Extension (s)	2.5			2.5		
Lane Grp Cap (vph)	1187			2234		
v/s Ratio Prot	c0.28			c0.32		
v/s Ratio Perm						
v/c Ratio	0.84			0.52		
Uniform Delay, d1	49.1			17.5		
Progression Factor	0.78			0.81		
Incremental Delay, d2	4.7			0.8		
Delay (s)	43.1			15.0		
Level of Service	D			B		
Approach Delay (s)	43.1			15.0	0.0	
Approach LOS	D			B	A	

Intersection Summary			
HCM 2000 Control Delay	28.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	66.8%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



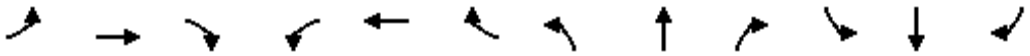
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	300	375	0	0	0	0	0	760	430
Future Volume (vph)	0	0	0	300	375	0	0	0	0	0	760	430
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Lane Width	14	14	14	14	14	14	14	14	14	14	14	14
Total Lost time (s)					4.0						4.0	4.0
Lane Util. Factor					0.95						0.95	1.00
Frt					1.00						1.00	0.85
Flt Protected					0.98						1.00	1.00
Satd. Flow (prot)					3561						3640	1628
Flt Permitted					0.98						1.00	1.00
Satd. Flow (perm)					3561						3640	1628
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	0	0	319	399	0	0	0	0	0	809	457
RTOR Reduction (vph)	0	0	0	0	117	0	0	0	0	0	0	74
Lane Group Flow (vph)	0	0	0	0	601	0	0	0	0	0	809	383
Turn Type				Perm	NA						NA	Perm
Protected Phases					8						6	
Permitted Phases				8								6
Actuated Green, G (s)					33.4						118.6	118.6
Effective Green, g (s)					33.4						118.6	118.6
Actuated g/C Ratio					0.21						0.74	0.74
Clearance Time (s)					4.0						4.0	4.0
Vehicle Extension (s)					2.5						2.5	2.5
Lane Grp Cap (vph)					743						2698	1206
v/s Ratio Prot											0.22	
v/s Ratio Perm					0.17							c0.24
v/c Ratio					0.81						0.30	0.32
Uniform Delay, d1					60.3						6.9	7.0
Progression Factor					0.04						0.08	0.00
Incremental Delay, d2					5.6						0.2	0.4
Delay (s)					7.9						0.7	0.4
Level of Service					A						A	A
Approach Delay (s)		0.0			7.9			0.0			0.6	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM 2000 Control Delay	3.2	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.43		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	53.6%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBT	EBR	EBR2	WBT	SBL	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	575	540	440	505	460	600	0
Future Volume (vph)	575	540	440	505	460	600	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850
Lane Width	14	14	14	14	14	14	14
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	
Lane Util. Factor	0.91	0.91		0.95	0.97	1.00	
Frt	0.93	0.85		1.00	1.00	1.00	
Flt Protected	1.00	1.00		1.00	0.95	1.00	
Satd. Flow (prot)	3247	1482		3640	3531	1916	
Flt Permitted	1.00	1.00		1.00	0.95	1.00	
Satd. Flow (perm)	3247	1482		3640	3531	1916	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	612	574	468	537	489	638	0
RTOR Reduction (vph)	0	83	0	0	0	0	0
Lane Group Flow (vph)	1129	442	0	537	489	638	0
Turn Type	NA	Perm		NA	Perm	NA	Perm
Protected Phases	4			8		6	
Permitted Phases		4			6		6
Actuated Green, G (s)	89.1	89.1		89.1	62.9	62.9	
Effective Green, g (s)	89.1	89.1		89.1	62.9	62.9	
Actuated g/C Ratio	0.56	0.56		0.56	0.39	0.39	
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0	
Vehicle Extension (s)	2.5	2.5		2.5	2.5	2.5	
Lane Grp Cap (vph)	1808	825		2027	1388	753	
v/s Ratio Prot	c0.35			0.15		c0.33	
v/s Ratio Perm		0.30			0.14		
v/c Ratio	0.62	0.54		0.26	0.35	0.85	
Uniform Delay, d1	24.1	22.4		18.4	34.2	44.2	
Progression Factor	0.65	0.53		0.04	0.76	0.40	
Incremental Delay, d2	1.3	2.1		0.3	0.1	8.1	
Delay (s)	17.0	13.8		1.1	26.2	25.6	
Level of Service	B	B		A	C	C	
Approach Delay (s)	16.0			1.1		25.8	
Approach LOS	B			A		C	

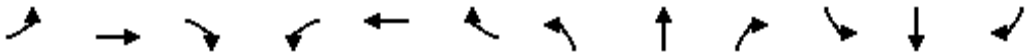
Intersection Summary			
HCM 2000 Control Delay	16.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	84.3%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	560	2230	0	0	0	0	0	1685	500	0	0	0
Future Volume (vph)	560	2230	0	0	0	0	0	1685	500	0	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	4.0	4.0						4.0	4.0			
Lane Util. Factor	0.97	0.91						0.81	0.81			
Frt	1.00	1.00						0.99	0.85			
Flt Protected	0.95	1.00						1.00	1.00			
Satd. Flow (prot)	3310	4903						5764	1237			
Flt Permitted	0.95	1.00						1.00	1.00			
Satd. Flow (perm)	3310	4903						5764	1237			
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	596	2372	0	0	0	0	0	1793	532	0	0	0
RTOR Reduction (vph)	3	0	0	0	0	0	0	2	4	0	0	0
Lane Group Flow (vph)	593	2372	0	0	0	0	0	1913	406	0	0	0
Turn Type	Perm	NA						NA	Perm			
Protected Phases		4						2				
Permitted Phases	4								2			
Actuated Green, G (s)	89.9	89.9						62.1	62.1			
Effective Green, g (s)	89.9	89.9						62.1	62.1			
Actuated g/C Ratio	0.56	0.56						0.39	0.39			
Clearance Time (s)	4.0	4.0						4.0	4.0			
Vehicle Extension (s)	2.5	2.5						2.5	2.5			
Lane Grp Cap (vph)	1859	2754						2237	480			
v/s Ratio Prot		c0.48						c0.33				
v/s Ratio Perm	0.18								0.33			
v/c Ratio	0.32	0.86						0.86	0.85			
Uniform Delay, d1	18.7	29.8						44.8	44.6			
Progression Factor	0.01	0.51						0.91	0.95			
Incremental Delay, d2	0.3	2.5						3.1	12.5			
Delay (s)	0.4	17.6						43.8	55.0			
Level of Service	A	B						D	D			
Approach Delay (s)		14.2			0.0			45.7			0.0	
Approach LOS		B			A			D			A	

Intersection Summary			
HCM 2000 Control Delay	28.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	78.9%	ICU Level of Service	D
Analysis Period (min)	15		

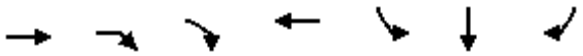
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	2425	850	0	0	0	0	0	0	365	1460	0
Future Volume (vph)	0	2425	850	0	0	0	0	0	0	365	1460	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)		4.0	4.0							4.0	4.0	
Lane Util. Factor		0.76	0.76							0.86	0.86	
Frt		0.98	0.85							1.00	1.00	
Flt Protected		1.00	1.00							0.95	1.00	
Satd. Flow (prot)		6691	1160							1467	4628	
Flt Permitted		1.00	1.00							0.95	1.00	
Satd. Flow (perm)		6691	1160							1467	4628	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	2580	904	0	0	0	0	0	0	388	1553	0
RTOR Reduction (vph)	0	2	3	0	0	0	0	0	0	4	4	0
Lane Group Flow (vph)	0	2967	512	0	0	0	0	0	0	345	1588	0
Turn Type		NA	Perm							Perm	NA	
Protected Phases		4									6	
Permitted Phases			4							6		
Actuated Green, G (s)		92.1	92.1							59.9	59.9	
Effective Green, g (s)		92.1	92.1							59.9	59.9	
Actuated g/C Ratio		0.58	0.58							0.37	0.37	
Clearance Time (s)		4.0	4.0							4.0	4.0	
Vehicle Extension (s)		2.5	2.5							2.5	2.5	
Lane Grp Cap (vph)		3851	667							549	1732	
v/s Ratio Prot		c0.44										
v/s Ratio Perm			0.44							0.23	0.34	
v/c Ratio		0.77	0.77							0.63	0.92	
Uniform Delay, d1		25.9	25.8							40.9	47.7	
Progression Factor		1.00	1.00							0.22	0.50	
Incremental Delay, d2		1.5	8.3							1.3	6.1	
Delay (s)		27.4	34.1							10.2	29.8	
Level of Service		C	C							B	C	
Approach Delay (s)		28.4			0.0			0.0			26.2	
Approach LOS		C			A			A			C	

Intersection Summary			
HCM 2000 Control Delay	27.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	71.4%	ICU Level of Service	C
Analysis Period (min)	15		

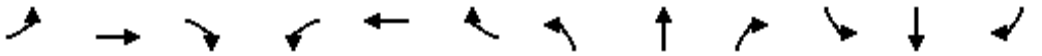
c Critical Lane Group



Movement	EBT	EBR	EBR2	WBT	SBL2	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	495	485	50	340	105	1550	195
Future Volume (vph)	495	485	50	340	105	1550	195
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	
Lane Util. Factor	0.91	0.91		0.95	1.00	0.91	
Frt	0.95	0.85		1.00	1.00	0.98	
Flt Protected	1.00	1.00		1.00	0.95	1.00	
Satd. Flow (prot)	3119	1389		3413	1706	4821	
Flt Permitted	1.00	1.00		1.00	0.95	1.00	
Satd. Flow (perm)	3119	1389		3413	1706	4821	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	527	516	53	362	112	1649	207
RTOR Reduction (vph)	0	8	0	0	0	20	0
Lane Group Flow (vph)	759	329	0	362	112	1836	0
Turn Type	NA	Perm		NA	Perm	NA	
Protected Phases	4			8		6	
Permitted Phases		4			6		
Actuated Green, G (s)	34.2	34.2		34.2	37.8	37.8	
Effective Green, g (s)	34.2	34.2		34.2	37.8	37.8	
Actuated g/C Ratio	0.43	0.43		0.43	0.47	0.47	
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0	
Vehicle Extension (s)	2.5	2.5		2.5	2.5	2.5	
Lane Grp Cap (vph)	1333	593		1459	806	2277	
v/s Ratio Prot	c0.24			0.11		c0.38	
v/s Ratio Perm		0.24			0.07		
v/c Ratio	0.57	0.55		0.25	0.14	0.81	
Uniform Delay, d1	17.3	17.2		14.7	11.9	18.0	
Progression Factor	1.00	1.00		1.38	1.00	1.00	
Incremental Delay, d2	1.8	3.7		0.4	0.1	2.1	
Delay (s)	19.1	20.9		20.7	12.0	20.1	
Level of Service	B	C		C	B	C	
Approach Delay (s)	19.7			20.7		19.6	
Approach LOS	B			C		B	

Intersection Summary			
HCM 2000 Control Delay	19.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	64.6%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	570	1920	0	0	0	0	0	1230	370
Future Volume (vph)	0	0	0	570	1920	0	0	0	0	0	1230	370
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)				4.0	4.0						4.0	4.0
Lane Util. Factor				0.86	0.86						0.86	0.86
Frt				1.00	1.00						1.00	0.85
Flt Protected				0.95	1.00						1.00	1.00
Satd. Flow (prot)				1467	4627						4614	1313
Flt Permitted				0.95	1.00						1.00	1.00
Satd. Flow (perm)				1467	4627						4614	1313
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	0	0	606	2043	0	0	0	0	0	1309	394
RTOR Reduction (vph)	0	0	0	4	3	0	0	0	0	0	2	5
Lane Group Flow (vph)	0	0	0	541	2101	0	0	0	0	0	1346	350
Turn Type				Perm	NA						NA	Perm
Protected Phases					8						6	
Permitted Phases				8								6
Actuated Green, G (s)				96.0	96.0						56.0	56.0
Effective Green, g (s)				96.0	96.0						56.0	56.0
Actuated g/C Ratio				0.60	0.60						0.35	0.35
Clearance Time (s)				4.0	4.0						4.0	4.0
Vehicle Extension (s)				2.5	2.5						2.5	2.5
Lane Grp Cap (vph)				880	2776						1614	459
v/s Ratio Prot											c0.29	
v/s Ratio Perm				0.37	0.45							0.27
v/c Ratio				0.61	0.76						0.83	0.76
Uniform Delay, d1				20.3	23.4						47.7	46.1
Progression Factor				0.50	0.40						0.68	0.65
Incremental Delay, d2				1.9	1.5						2.4	4.3
Delay (s)				12.0	11.0						34.7	34.2
Level of Service				B	B						C	C
Approach Delay (s)		0.0			11.2			0.0			34.6	
Approach LOS		A			B			A			C	

Intersection Summary			
HCM 2000 Control Delay	20.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	107.8%	ICU Level of Service	G
Analysis Period (min)	15		

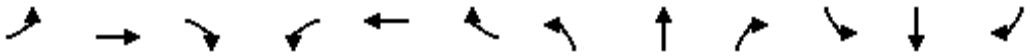
c Critical Lane Group



Movement	EBL	EBT	WBR	NBL	NBT	NBR	NEL2
Lane Configurations							
Traffic Volume (vph)	435	165	60	40	1535	150	300
Future Volume (vph)	435	165	60	40	1535	150	300
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	1.00	0.95	1.00	1.00
Frt	1.00	1.00	0.86	1.00	1.00	0.85	1.00
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95
Satd. Flow (prot)	1706	1796	1554	1706	3413	1527	1706
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95
Satd. Flow (perm)	1706	1796	1554	1706	3413	1527	1706
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	463	176	64	43	1633	160	319
RTOR Reduction (vph)	0	0	30	0	0	73	0
Lane Group Flow (vph)	463	176	34	43	1633	87	319
Turn Type	Split	NA	Perm	Perm	NA	Perm	D.Pm
Protected Phases	4	4			2		
Permitted Phases			2	2		2	2
Actuated Green, G (s)	28.9	28.9	43.1	43.1	43.1	43.1	43.1
Effective Green, g (s)	28.9	28.9	43.1	43.1	43.1	43.1	43.1
Actuated g/C Ratio	0.36	0.36	0.54	0.54	0.54	0.54	0.54
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Lane Grp Cap (vph)	616	648	837	919	1838	822	919
v/s Ratio Prot	c0.27	0.10			c0.48		
v/s Ratio Perm			0.02	0.03		0.06	0.19
v/c Ratio	0.75	0.27	0.04	0.05	0.89	0.11	0.35
Uniform Delay, d1	22.4	18.1	8.7	8.7	16.3	9.0	10.5
Progression Factor	0.45	1.13	1.00	0.99	1.27	3.25	0.87
Incremental Delay, d2	6.9	1.0	0.0	0.0	3.5	0.0	0.2
Delay (s)	16.9	21.4	8.7	8.7	24.2	29.4	9.3
Level of Service	B	C	A	A	C	C	A
Approach Delay (s)		18.1			24.3		
Approach LOS		B			C		

Intersection Summary			
HCM 2000 Control Delay	20.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	95.4%	ICU Level of Service	F
Analysis Period (min)	15		

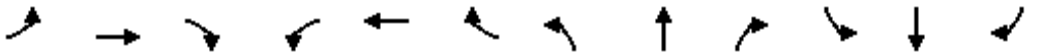
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	1765	165	725	1560	0	0	0	0
Future Volume (vph)	0	0	0	0	1765	165	725	1560	0	0	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)					4.0	4.0	4.0	4.0				
Lane Util. Factor					0.86	1.00	0.97	0.95				
Frt					1.00	0.85	1.00	1.00				
Flt Protected					1.00	1.00	0.95	1.00				
Satd. Flow (prot)					6179	1527	3310	3413				
Flt Permitted					1.00	1.00	0.95	1.00				
Satd. Flow (perm)					6179	1527	3310	3413				
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	0	0	0	1878	176	771	1660	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	14	3	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	1878	162	768	1660	0	0	0	0
Turn Type					NA	Perm	Perm	NA				
Protected Phases					8			2				
Permitted Phases						8	2					
Actuated Green, G (s)					61.4	61.4	90.6	90.6				
Effective Green, g (s)					61.4	61.4	90.6	90.6				
Actuated g/C Ratio					0.38	0.38	0.57	0.57				
Clearance Time (s)					4.0	4.0	4.0	4.0				
Vehicle Extension (s)					2.5	2.5	2.5	2.5				
Lane Grp Cap (vph)					2371	585	1874	1932				
v/s Ratio Prot					c0.30			c0.49				
v/s Ratio Perm						0.11	0.23					
v/c Ratio					0.79	0.28	0.41	0.86				
Uniform Delay, d1					43.6	34.0	19.6	29.3				
Progression Factor					0.81	0.84	0.01	0.59				
Incremental Delay, d2					2.7	1.1	0.1	3.2				
Delay (s)					38.1	29.5	0.3	20.6				
Level of Service					D	C	A	C				
Approach Delay (s)		0.0			37.4			14.2			0.0	
Approach LOS		A			D			B			A	

Intersection Summary			
HCM 2000 Control Delay	24.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	103.4%	ICU Level of Service	G
Analysis Period (min)	15		

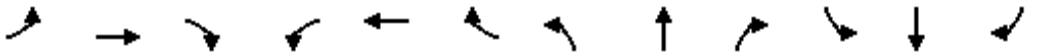
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1070	140	150	355	0	465	0	485	0	380	400
Future Volume (vph)	0	1070	140	150	355	0	465	0	485	0	380	400
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Lane Width	14	14	14	14	14	14	14	14	14	14	14	14
Total Lost time (s)		6.0		6.0	6.0		6.0		6.0		6.0	6.0
Lane Util. Factor		0.91		1.00	0.95		0.97		1.00		0.95	1.00
Frpb, ped/bikes		1.00		1.00	1.00		1.00		0.99		1.00	0.97
Flpb, ped/bikes		1.00		1.00	1.00		1.00		1.00		1.00	1.00
Frt		0.98		1.00	1.00		1.00		0.85		1.00	0.85
Flt Protected		1.00		0.95	1.00		0.95		1.00		1.00	1.00
Satd. Flow (prot)		5122		1820	3640		3531		1606		3640	1572
Flt Permitted		1.00		0.13	1.00		0.95		1.00		1.00	1.00
Satd. Flow (perm)		5122		256	3640		3531		1606		3640	1572
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	1138	149	160	378	0	495	0	516	0	404	426
RTOR Reduction (vph)	0	8	0	0	0	0	0	0	11	0	0	244
Lane Group Flow (vph)	0	1279	0	160	378	0	495	0	505	0	404	182
Confl. Peds. (#/hr)			8	8			13		3	3		13
Turn Type		NA		D.P+P	NA		Prot		pm+ov		NA	Perm
Protected Phases		6		5	2		7		5		8	
Permitted Phases				6			7		4			8
Actuated Green, G (s)		72.9		86.2	92.2		25.2		69.1		24.6	24.6
Effective Green, g (s)		72.9		86.2	92.2		25.2		69.1		24.6	24.6
Actuated g/C Ratio		0.46		0.54	0.58		0.16		0.43		0.15	0.15
Clearance Time (s)		6.0		6.0	6.0		6.0		6.0		6.0	6.0
Vehicle Extension (s)		5.5		1.0	5.5		1.0		1.0		2.0	2.0
Lane Grp Cap (vph)		2333		267	2097		556		753		559	241
v/s Ratio Prot		0.25		0.05	0.10		c0.14		c0.06		0.11	
v/s Ratio Perm				c0.27					0.26			0.12
v/c Ratio		0.55		0.60	0.18		0.89		0.67		0.72	0.76
Uniform Delay, d1		31.6		22.0	16.0		66.0		36.3		64.5	64.8
Progression Factor		1.00		1.48	0.14		1.00		1.00		0.66	0.83
Incremental Delay, d2		0.9		2.4	0.2		15.9		1.9		3.7	10.6
Delay (s)		32.5		34.8	2.4		82.0		38.2		46.0	64.4
Level of Service		C		C	A		F		D		D	E
Approach Delay (s)		32.5			12.0			59.6			55.5	
Approach LOS		C			B			E			E	

Intersection Summary			
HCM 2000 Control Delay	42.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	24.0
Intersection Capacity Utilization	79.9%	ICU Level of Service	D
Analysis Period (min)	15		

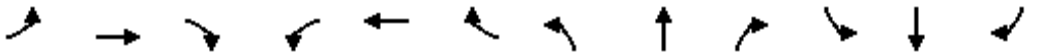
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	100	1070	335	400	1285	105	235	540	960	310	525	115
Future Volume (vph)	100	1070	335	400	1285	105	235	540	960	310	525	115
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	6.5	6.5	6.8	6.5	6.5	6.8	6.8	6.8	6.5	6.8	6.8	6.5
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95	0.88	0.97	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00	0.99	1.00	1.00	0.98	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3310	3413	1503	3310	3413	1509	3310	3399	2626	3310	3399	1503
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3310	3413	1503	3310	3413	1509	3310	3399	2626	3310	3399	1503
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	106	1138	356	426	1367	112	250	574	1021	330	559	122
RTOR Reduction (vph)	0	0	63	0	0	28	0	0	44	0	0	87
Lane Group Flow (vph)	106	1138	293	426	1367	84	250	574	977	330	559	35
Confl. Peds. (#/hr)	1		5	5		1	5		10	10		5
Bus Blockages (#/hr)	0	0	0	0	0	0	0	2	0	0	2	0
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	1	6	7	5	2	3	7	4	5	3	8	1
Permitted Phases			6			2			4			8
Actuated Green, G (s)	7.5	58.1	72.3	29.5	80.1	96.3	14.2	29.6	59.1	16.2	31.6	39.1
Effective Green, g (s)	7.5	58.1	72.3	29.5	80.1	96.3	14.2	29.6	59.1	16.2	31.6	39.1
Actuated g/C Ratio	0.05	0.36	0.45	0.18	0.50	0.60	0.09	0.19	0.37	0.10	0.20	0.24
Clearance Time (s)	6.5	6.5	6.8	6.5	6.5	6.8	6.8	6.8	6.5	6.8	6.8	6.5
Vehicle Extension (s)	2.0	5.0	1.0	3.0	5.0	2.0	1.0	2.0	3.0	2.0	2.0	2.0
Lane Grp Cap (vph)	155	1239	679	610	1708	908	293	628	969	335	671	367
v/s Ratio Prot	0.03	c0.33	0.04	0.13	0.40	0.01	0.08	0.17	c0.19	c0.10	0.16	0.00
v/s Ratio Perm			0.16			0.05			0.19			0.02
v/c Ratio	0.68	0.92	0.43	0.70	0.80	0.09	0.85	0.91	1.01	0.99	0.83	0.10
Uniform Delay, d1	75.1	48.7	29.9	61.1	33.3	13.4	71.9	64.0	50.5	71.8	61.7	46.8
Progression Factor	1.00	1.00	1.00	0.68	0.44	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	9.5	12.3	0.2	2.7	3.1	0.0	20.0	17.6	30.9	44.7	8.4	0.0
Delay (s)	84.6	61.0	30.0	44.4	17.6	4.4	91.9	81.5	81.4	116.5	70.0	46.8
Level of Service	F	E	C	D	B	A	F	F	F	F	E	D
Approach Delay (s)		55.6			22.8			82.8			82.4	
Approach LOS		E			C			F			F	

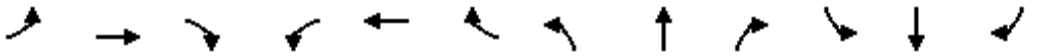
Intersection Summary			
HCM 2000 Control Delay	57.9	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.97		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	26.6
Intersection Capacity Utilization	91.7%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group



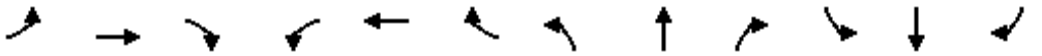
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	2065	340	390	1520	0	0	0	0	495	60	240
Future Volume (vph)	0	2065	340	390	1520	0	0	0	0	495	60	240
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)		5.8		5.8	5.8					5.9	5.9	5.9
Lane Util. Factor		0.86		0.97	0.95					0.95	0.91	0.95
Frpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	0.98
Flpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	1.00
Frt		0.98		1.00	1.00					1.00	0.99	0.85
Flt Protected		1.00		0.95	1.00					0.95	0.97	1.00
Satd. Flow (prot)		6048		3310	3413					1621	1557	1428
Flt Permitted		1.00		0.95	1.00					0.95	0.97	1.00
Satd. Flow (perm)		6048		3310	3413					1621	1557	1428
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	2197	362	415	1617	0	0	0	0	527	64	255
RTOR Reduction (vph)	0	17	0	0	0	0	0	0	0	0	2	46
Lane Group Flow (vph)	0	2542	0	415	1617	0	0	0	0	311	304	183
Confl. Peds. (#/hr)	10					10	2					2
Turn Type		NA		Prot	NA					Perm	NA	Perm
Protected Phases		6		5	2						8	
Permitted Phases										8		8
Actuated Green, G (s)		84.2		23.9	113.9					34.4	34.4	34.4
Effective Green, g (s)		84.2		23.9	113.9					34.4	34.4	34.4
Actuated g/C Ratio		0.53		0.15	0.71					0.21	0.21	0.21
Clearance Time (s)		5.8		5.8	5.8					5.9	5.9	5.9
Vehicle Extension (s)		3.8		3.0	3.4					1.5	1.5	1.5
Lane Grp Cap (vph)		3182		494	2429					348	334	307
v/s Ratio Prot		c0.42		c0.13	0.47							
v/s Ratio Perm										0.19	0.20	0.13
v/c Ratio		0.80		0.84	0.67					0.89	0.91	0.60
Uniform Delay, d1		31.0		66.2	12.6					61.0	61.3	56.5
Progression Factor		0.93		1.31	0.36					0.94	0.94	0.92
Incremental Delay, d2		0.8		8.9	1.1					23.2	26.5	2.0
Delay (s)		29.6		95.5	5.6					80.7	84.3	54.1
Level of Service		C		F	A					F	F	D
Approach Delay (s)		29.6			23.9			0.0			74.8	
Approach LOS		C			C			A			E	

Intersection Summary			
HCM 2000 Control Delay	34.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	17.5
Intersection Capacity Utilization	95.9%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



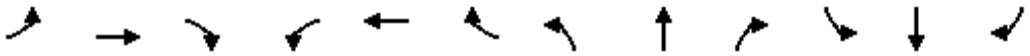
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	550	2010	0	0	1645	400	265	115	460	0	0	0
Future Volume (vph)	550	2010	0	0	1645	400	265	115	460	0	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	5.6	5.6			5.6		5.9	5.9	5.9			
Lane Util. Factor	0.97	0.95			0.86		0.95	0.95	1.00			
Frpb, ped/bikes	1.00	1.00			1.00		1.00	1.00	1.00			
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00	1.00			
Frt	1.00	1.00			0.97		1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00		0.95	0.98	1.00			
Satd. Flow (prot)	3310	3413			5997		1621	1673	1527			
Flt Permitted	0.95	1.00			1.00		0.95	0.98	1.00			
Satd. Flow (perm)	3310	3413			5997		1621	1673	1527			
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	585	2138	0	0	1750	426	282	122	489	0	0	0
RTOR Reduction (vph)	0	0	0	0	24	0	0	0	214	0	0	0
Lane Group Flow (vph)	585	2138	0	0	2152	0	200	204	275	0	0	0
Confl. Peds. (#/hr)			7	7								
Turn Type	Prot	NA			NA		Perm	NA	custom			
Protected Phases	1	6			2			4				
Permitted Phases							4		7 5			
Actuated Green, G (s)	37.4	97.4			81.4		24.1	24.1	51.1			
Effective Green, g (s)	37.4	97.4			81.4		24.1	24.1	48.1			
Actuated g/C Ratio	0.23	0.61			0.51		0.15	0.15	0.30			
Clearance Time (s)	5.6	5.6			5.6		5.9	5.9				
Vehicle Extension (s)	1.5	3.3			3.6		2.0	2.0				
Lane Grp Cap (vph)	773	2077			3050		244	251	459			
v/s Ratio Prot	c0.18	c0.63			0.36							
v/s Ratio Perm							c0.12	0.12	0.18			
v/c Ratio	0.76	1.03			0.71		0.82	0.81	0.60			
Uniform Delay, d1	57.1	31.3			30.1		65.8	65.8	47.7			
Progression Factor	0.53	0.71			1.00		1.00	1.00	1.00			
Incremental Delay, d2	2.2	23.3			1.4		18.0	17.0	1.4			
Delay (s)	32.6	45.6			31.5		83.9	82.8	49.1			
Level of Service	C	D			C		F	F	D			
Approach Delay (s)		42.8			31.5			64.6			0.0	
Approach LOS		D			C			E			A	

Intersection Summary			
HCM 2000 Control Delay	41.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.99		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	20.1
Intersection Capacity Utilization	95.9%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



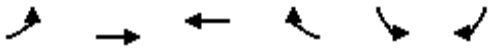
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	35	1645	15	175	25	0	0	45	45
Future Volume (vph)	0	0	0	35	1645	15	175	25	0	0	45	45
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)				5.6	5.6		5.5	5.5			5.5	5.5
Lane Util. Factor				1.00	0.86		1.00	1.00			1.00	1.00
Frpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	0.97
Flpb, ped/bikes				1.00	1.00		0.99	1.00			1.00	1.00
Frt				1.00	1.00		1.00	1.00			1.00	0.85
Flt Protected				0.95	1.00		0.95	1.00			1.00	1.00
Satd. Flow (prot)				1706	6168		1683	1796			1796	1487
Flt Permitted				0.95	1.00		0.73	1.00			1.00	1.00
Satd. Flow (perm)				1706	6168		1286	1796			1796	1487
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	0	0	37	1750	16	186	27	0	0	48	48
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	15
Lane Group Flow (vph)	0	0	0	37	1766	0	186	27	0	0	48	33
Confl. Peds. (#/hr)	5					5	6					6
Turn Type				Perm	NA		Perm	NA			NA	Perm
Protected Phases					2			4			8	
Permitted Phases				2			4					8
Actuated Green, G (s)				120.6	120.6		28.3	28.3			28.3	28.3
Effective Green, g (s)				120.6	120.6		28.3	28.3			28.3	28.3
Actuated g/C Ratio				0.75	0.75		0.18	0.18			0.18	0.18
Clearance Time (s)				5.6	5.6		5.5	5.5			5.5	5.5
Vehicle Extension (s)				2.5	2.5		2.0	2.0			2.8	2.8
Lane Grp Cap (vph)				1285	4649		227	317			317	263
v/s Ratio Prot					c0.29			0.02			0.03	
v/s Ratio Perm				0.02			c0.14					0.02
v/c Ratio				0.03	0.38		0.82	0.09			0.15	0.13
Uniform Delay, d1				5.0	6.8		63.4	55.0			55.7	55.4
Progression Factor				1.00	1.00		0.48	0.50			1.00	1.00
Incremental Delay, d2				0.0	0.2		17.0	0.0			0.2	0.2
Delay (s)				5.0	7.0		47.4	27.6			55.9	55.6
Level of Service				A	A		D	C			E	E
Approach Delay (s)		0.0			7.0			44.9			55.8	
Approach LOS		A			A			D			E	

Intersection Summary			
HCM 2000 Control Delay	13.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.46		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	11.1
Intersection Capacity Utilization	93.8%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	65	2425	280	0	0	0	0	135	80	45	35	0
Future Volume (vph)	65	2425	280	0	0	0	0	135	80	45	35	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)		5.8	5.8					5.7		5.7	5.7	
Lane Util. Factor		0.91	1.00					0.95		1.00	1.00	
Frpb, ped/bikes		1.00	0.95					1.00		1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00		1.00	1.00	
Frt		1.00	0.85					0.94		1.00	1.00	
Flt Protected		1.00	1.00					1.00		0.95	1.00	
Satd. Flow (prot)		4897	1455					3223		1706	1796	
Flt Permitted		1.00	1.00					1.00		0.46	1.00	
Satd. Flow (perm)		4897	1455					3223		829	1796	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	69	2580	298	0	0	0	0	144	85	48	37	0
RTOR Reduction (vph)	0	0	56	0	0	0	0	10	0	0	0	0
Lane Group Flow (vph)	0	2649	242	0	0	0	0	219	0	48	37	0
Confl. Peds. (#/hr)			9	9			15					15
Turn Type	Perm	NA	Perm					NA		Perm	NA	
Protected Phases		6						4			8	
Permitted Phases	6		6							8		
Actuated Green, G (s)		130.1	130.1					18.4		18.4	18.4	
Effective Green, g (s)		130.1	130.1					18.4		18.4	18.4	
Actuated g/C Ratio		0.81	0.81					0.11		0.11	0.11	
Clearance Time (s)		5.8	5.8					5.7		5.7	5.7	
Vehicle Extension (s)		2.0	2.0					2.0		2.0	2.0	
Lane Grp Cap (vph)		3981	1183					370		95	206	
v/s Ratio Prot								c0.07			0.02	
v/s Ratio Perm		0.54	0.17							0.06		
v/c Ratio		0.67	0.20					0.59		0.51	0.18	
Uniform Delay, d1		6.1	3.4					67.2		66.5	64.0	
Progression Factor		0.26	0.00					1.00		0.64	0.65	
Incremental Delay, d2		0.5	0.2					1.7		1.5	0.2	
Delay (s)		2.1	0.2					68.9		43.9	42.0	
Level of Service		A	A					E		D	D	
Approach Delay (s)		1.9			0.0			68.9			43.1	
Approach LOS		A			A			E			D	

Intersection Summary			
HCM 2000 Control Delay	7.7	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	11.5
Intersection Capacity Utilization	93.8%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



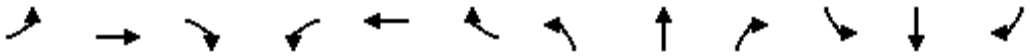
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	120	1240	825	45	175	175
Future Volume (vph)	120	1240	825	45	175	175
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850
Total Lost time (s)	5.5	5.5	5.5		5.5	5.5
Lane Util. Factor	1.00	0.95	0.95		1.00	1.00
Frpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Frt	1.00	1.00	0.99		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1706	3413	3381		1706	1527
Flt Permitted	0.27	1.00	1.00		0.95	1.00
Satd. Flow (perm)	478	3413	3381		1706	1527
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	128	1319	878	48	186	186
RTOR Reduction (vph)	0	0	1	0	0	161
Lane Group Flow (vph)	128	1319	925	0	186	25
Confl. Peds. (#/hr)	3			3		
Turn Type	pm+pt	NA	NA		Prot	Perm
Protected Phases	1	6	2		3	
Permitted Phases	6					7
Actuated Green, G (s)	127.2	127.2	115.3		21.8	21.8
Effective Green, g (s)	127.2	127.2	115.3		21.8	21.8
Actuated g/C Ratio	0.80	0.80	0.72		0.14	0.14
Clearance Time (s)	5.5	5.5	5.5		5.5	5.5
Vehicle Extension (s)	1.0	6.2	6.2		2.0	2.0
Lane Grp Cap (vph)	429	2713	2436		232	208
v/s Ratio Prot	0.01	c0.39	0.27		c0.11	
v/s Ratio Perm	0.23					0.02
v/c Ratio	0.30	0.49	0.38		0.80	0.12
Uniform Delay, d1	4.8	5.5	8.6		67.0	60.7
Progression Factor	0.75	0.70	1.00		1.00	1.00
Incremental Delay, d2	0.1	0.5	0.5		16.9	0.1
Delay (s)	3.7	4.4	9.0		83.9	60.8
Level of Service	A	A	A		F	E
Approach Delay (s)		4.3	9.0		72.3	
Approach LOS		A	A		E	

Intersection Summary			
HCM 2000 Control Delay	15.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	19.5
Intersection Capacity Utilization	55.4%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

2048 Concept V2 (LR) (AM Peak Hour)

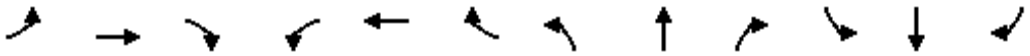
Previously Referred to as Concept C2



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	205	780	0	0	295	95	500	950	400	0	0	0
Future Volume (vph)	205	780	0	0	295	95	500	950	400	0	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	4.0	4.0			4.0	4.0	4.0	4.0	4.0			
Lane Util. Factor	0.97	0.95			0.95	1.00	1.00	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	3278	3380			3380	1512	1690	3380	1512			
Flt Permitted	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	3278	3380			3380	1512	1690	3380	1512			
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	228	867	0	0	328	106	556	1056	444	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	53	0	0	36	0	0	0
Lane Group Flow (vph)	228	867	0	0	328	53	556	1056	408	0	0	0
Turn Type	Prot	NA			NA	Perm	Perm	NA	Perm			
Protected Phases	7	4			8			2				
Permitted Phases						8	2		2			
Actuated Green, G (s)	15.9	83.8			63.9	63.9	68.2	68.2	68.2			
Effective Green, g (s)	15.9	83.8			63.9	63.9	68.2	68.2	68.2			
Actuated g/C Ratio	0.10	0.52			0.40	0.40	0.43	0.43	0.43			
Clearance Time (s)	4.0	4.0			4.0	4.0	4.0	4.0	4.0			
Vehicle Extension (s)	2.5	2.5			2.5	2.5	2.5	2.5	2.5			
Lane Grp Cap (vph)	325	1770			1349	603	720	1440	644			
v/s Ratio Prot	c0.07	c0.26			0.10			0.31				
v/s Ratio Perm						0.04	c0.33		0.27			
v/c Ratio	0.70	0.49			0.24	0.09	0.77	0.73	0.63			
Uniform Delay, d1	69.8	24.4			32.0	29.9	39.3	38.3	36.1			
Progression Factor	0.78	0.61			0.95	0.86	1.09	0.60	1.14			
Incremental Delay, d2	5.8	0.8			0.4	0.3	4.9	1.7	1.8			
Delay (s)	60.5	15.8			30.7	26.1	47.8	24.6	42.8			
Level of Service	E	B			C	C	D	C	D			
Approach Delay (s)		25.1			29.6			34.8			0.0	
Approach LOS		C			C			C			A	

Intersection Summary			
HCM 2000 Control Delay	31.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	57.3%	ICU Level of Service	B
Analysis Period (min)	15		

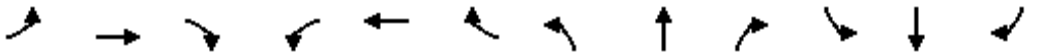
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	195	1040	0	0	0	0	0	1365	330	0	0	0
Future Volume (vph)	195	1040	0	0	0	0	0	1365	330	0	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	4.0	4.0						4.0	4.0			
Lane Util. Factor	0.97	0.91						0.86	0.86			
Frt	1.00	1.00						1.00	0.85			
Flt Protected	0.95	1.00						1.00	1.00			
Satd. Flow (prot)	3278	4856						4573	1300			
Flt Permitted	0.95	1.00						1.00	1.00			
Satd. Flow (perm)	3278	4856						4573	1300			
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	217	1156	0	0	0	0	0	1517	367	0	0	0
RTOR Reduction (vph)	22	0	0	0	0	0	0	2	14	0	0	0
Lane Group Flow (vph)	195	1156	0	0	0	0	0	1552	316	0	0	0
Turn Type	Perm	NA						NA	Perm			
Protected Phases		4						2				
Permitted Phases	4								2			
Actuated Green, G (s)	83.2	83.2						68.8	68.8			
Effective Green, g (s)	83.2	83.2						68.8	68.8			
Actuated g/C Ratio	0.52	0.52						0.43	0.43			
Clearance Time (s)	4.0	4.0						4.0	4.0			
Vehicle Extension (s)	2.5	2.5						2.5	2.5			
Lane Grp Cap (vph)	1704	2525						1966	559			
v/s Ratio Prot		c0.24						c0.34				
v/s Ratio Perm	0.06								0.24			
v/c Ratio	0.11	0.46						0.79	0.57			
Uniform Delay, d1	19.6	24.2						39.4	34.4			
Progression Factor	0.54	0.98						1.02	1.02			
Incremental Delay, d2	0.1	0.6						2.1	1.1			
Delay (s)	10.8	24.4						42.1	36.1			
Level of Service	B	C						D	D			
Approach Delay (s)		22.2			0.0			41.1			0.0	
Approach LOS		C			A			D			A	

Intersection Summary			
HCM 2000 Control Delay	33.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	56.9%	ICU Level of Service	B
Analysis Period (min)	15		

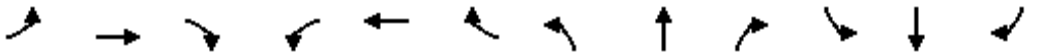
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	965	305	0	0	0	0	0	0	270	765	0
Future Volume (vph)	0	965	305	0	0	0	0	0	0	270	765	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)		4.0	4.0							4.0	4.0	
Lane Util. Factor		0.76	0.76							1.00	0.91	
Frt		0.98	0.85							1.00	1.00	
Flt Protected		1.00	1.00							0.95	1.00	
Satd. Flow (prot)		6648	1149							1690	4856	
Flt Permitted		1.00	1.00							0.95	1.00	
Satd. Flow (perm)		6648	1149							1690	4856	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	1072	339	0	0	0	0	0	0	300	850	0
RTOR Reduction (vph)	0	7	28	0	0	0	0	0	0	41	0	0
Lane Group Flow (vph)	0	1197	179	0	0	0	0	0	0	259	850	0
Turn Type		NA	Perm							Perm	NA	
Protected Phases		4									6	
Permitted Phases			4							6		
Actuated Green, G (s)		115.5	115.5							36.5	36.5	
Effective Green, g (s)		115.5	115.5							36.5	36.5	
Actuated g/C Ratio		0.72	0.72							0.23	0.23	
Clearance Time (s)		4.0	4.0							4.0	4.0	
Vehicle Extension (s)		2.5	2.5							2.5	2.5	
Lane Grp Cap (vph)		4799	829							385	1107	
v/s Ratio Prot		c0.18									c0.18	
v/s Ratio Perm			0.16							0.15		
v/c Ratio		0.25	0.22							0.67	0.77	
Uniform Delay, d1		7.5	7.3							56.3	57.8	
Progression Factor		1.00	1.00							0.21	0.75	
Incremental Delay, d2		0.1	0.6							3.0	2.6	
Delay (s)		7.7	7.9							15.1	45.7	
Level of Service		A	A							B	D	
Approach Delay (s)		7.7			0.0			0.0			37.7	
Approach LOS		A			A			A			D	

Intersection Summary			
HCM 2000 Control Delay	21.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.37		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	65.5%	ICU Level of Service	C
Analysis Period (min)	15		

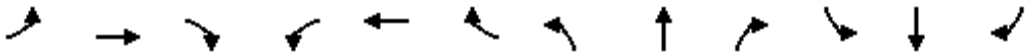
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	255	310	0	525	0	0	0	0	10	710	415
Future Volume (vph)	0	255	310	0	525	0	0	0	0	10	710	415
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)		4.0	4.0		4.0					4.0	4.0	4.0
Lane Util. Factor		0.91	0.91		0.95					1.00	0.95	1.00
Frt		0.95	0.85		1.00					1.00	1.00	0.85
Flt Protected		1.00	1.00		1.00					0.95	1.00	1.00
Satd. Flow (prot)		3071	1376		3380					1690	3380	1512
Flt Permitted		1.00	1.00		1.00					0.95	1.00	1.00
Satd. Flow (perm)		3071	1376		3380					1690	3380	1512
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	283	344	0	583	0	0	0	0	11	789	461
RTOR Reduction (vph)	0	22	70	0	0	0	0	0	0	0	0	89
Lane Group Flow (vph)	0	409	126	0	583	0	0	0	0	11	789	372
Turn Type		NA	Perm		NA					Perm	NA	Perm
Protected Phases		4			8						6	
Permitted Phases			4							6		6
Actuated Green, G (s)		100.5	100.5		100.5					51.5	51.5	51.5
Effective Green, g (s)		100.5	100.5		100.5					51.5	51.5	51.5
Actuated g/C Ratio		0.63	0.63		0.63					0.32	0.32	0.32
Clearance Time (s)		4.0	4.0		4.0					4.0	4.0	4.0
Vehicle Extension (s)		2.5	2.5		2.5					2.5	2.5	2.5
Lane Grp Cap (vph)		1928	864		2123					543	1087	486
v/s Ratio Prot		0.13			c0.17						0.23	
v/s Ratio Perm			0.09							0.01		c0.25
v/c Ratio		0.21	0.15		0.27					0.02	0.73	0.77
Uniform Delay, d1		12.8	12.2		13.4					37.0	48.0	48.8
Progression Factor		1.00	1.00		0.17					1.00	1.00	1.00
Incremental Delay, d2		0.3	0.4		0.3					0.0	2.3	6.8
Delay (s)		13.0	12.5		2.6					37.0	50.3	55.6
Level of Service		B	B		A					D	D	E
Approach Delay (s)		12.9			2.6			0.0			52.1	
Approach LOS		B			A			A			D	

Intersection Summary			
HCM 2000 Control Delay	30.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.44		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	73.0%	ICU Level of Service	D
Analysis Period (min)	15		

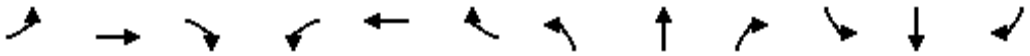
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	385	2100	0	0	0	0	0	610	410
Future Volume (vph)	0	0	0	385	2100	0	0	0	0	0	610	410
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)				4.0	4.0						4.0	
Lane Util. Factor				0.86	0.86						0.91	
Frt				1.00	1.00						0.94	
Flt Protected				0.95	1.00						1.00	
Satd. Flow (prot)				1453	4585						4563	
Flt Permitted				0.95	1.00						1.00	
Satd. Flow (perm)				1453	4585						4563	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	428	2333	0	0	0	0	0	678	456
RTOR Reduction (vph)	0	0	0	21	2	0	0	0	0	0	5	0
Lane Group Flow (vph)	0	0	0	364	2374	0	0	0	0	0	1129	0
Turn Type				Perm	NA						NA	
Protected Phases					8						6	
Permitted Phases				8								
Actuated Green, G (s)				106.4	106.4						45.6	
Effective Green, g (s)				106.4	106.4						45.6	
Actuated g/C Ratio				0.67	0.67						0.29	
Clearance Time (s)				4.0	4.0						4.0	
Vehicle Extension (s)				2.5	2.5						2.5	
Lane Grp Cap (vph)				966	3049						1300	
v/s Ratio Prot											c0.25	
v/s Ratio Perm				0.25	0.52							
v/c Ratio				0.38	0.78						1.03dr	
Uniform Delay, d1				12.0	18.6						54.4	
Progression Factor				0.58	0.74						0.92	
Incremental Delay, d2				1.0	1.7						6.2	
Delay (s)				7.9	15.5						56.2	
Level of Service				A	B						E	
Approach Delay (s)		0.0			14.4			0.0			56.2	
Approach LOS		A			B			A			E	

Intersection Summary			
HCM 2000 Control Delay	26.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	81.2%	ICU Level of Service	D
Analysis Period (min)	15		

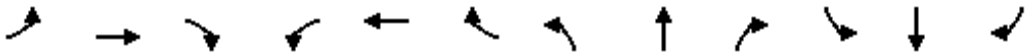
dr Defacto Right Lane. Recode with 1 though lane as a right lane.
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	215	50	0	0	0	60	525	425	15	0	0	0
Future Volume (vph)	215	50	0	0	0	60	525	425	15	0	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	4.0	4.0				4.0	4.0	4.0				
Lane Util. Factor	0.95	0.95				1.00	0.91	0.91				
Frt	1.00	1.00				0.86	1.00	1.00				
Flt Protected	0.95	0.97				1.00	0.95	0.98				
Satd. Flow (prot)	1605	1639				1539	1538	3175				
Flt Permitted	0.95	0.97				1.00	0.95	0.98				
Satd. Flow (perm)	1605	1639				1539	1538	3175				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	239	56	0	0	0	67	583	472	17	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	46	0	2	0	0	0	0
Lane Group Flow (vph)	146	149	0	0	0	21	350	720	0	0	0	0
Turn Type	Split	NA				Perm	Perm	NA				
Protected Phases	4	4						2				
Permitted Phases						2	2					
Actuated Green, G (s)	102.9	102.9				49.1	49.1	49.1				
Effective Green, g (s)	102.9	102.9				49.1	49.1	49.1				
Actuated g/C Ratio	0.64	0.64				0.31	0.31	0.31				
Clearance Time (s)	4.0	4.0				4.0	4.0	4.0				
Vehicle Extension (s)	2.5	2.5				2.5	2.5	2.5				
Lane Grp Cap (vph)	1032	1054				472	471	974				
v/s Ratio Prot	c0.09	0.09										
v/s Ratio Perm						0.01	c0.23	0.23				
v/c Ratio	0.14	0.14				0.04	0.74	0.74				
Uniform Delay, d1	11.2	11.2				39.0	49.8	49.7				
Progression Factor	1.75	1.46				1.00	0.28	0.28				
Incremental Delay, d2	0.3	0.3				0.0	5.1	2.4				
Delay (s)	19.9	16.7				39.0	18.8	16.3				
Level of Service	B	B				D	B	B				
Approach Delay (s)		18.3			39.0			17.1			0.0	
Approach LOS		B			D			B			A	

Intersection Summary			
HCM 2000 Control Delay	18.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.34		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	73.0%	ICU Level of Service	D
Analysis Period (min)	15		

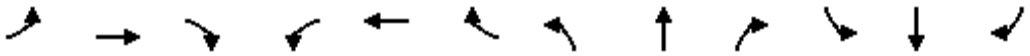
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	1785	150	700	815	0	0	0	0
Future Volume (vph)	0	0	0	0	1785	150	700	815	0	0	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)					4.0	4.0	4.0	4.0				
Lane Util. Factor					0.86	1.00	0.97	0.95				
Frt					1.00	0.85	1.00	1.00				
Flt Protected					1.00	1.00	0.95	1.00				
Satd. Flow (prot)					6119	1512	3278	3380				
Flt Permitted					1.00	1.00	0.95	1.00				
Satd. Flow (perm)					6119	1512	3278	3380				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	0	1983	167	778	906	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	26	7	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	1983	141	771	906	0	0	0	0
Turn Type					NA	Perm	Perm	NA				
Protected Phases					8			2				
Permitted Phases						8	2					
Actuated Green, G (s)					98.7	98.7	53.3	53.3				
Effective Green, g (s)					98.7	98.7	53.3	53.3				
Actuated g/C Ratio					0.62	0.62	0.33	0.33				
Clearance Time (s)					4.0	4.0	4.0	4.0				
Vehicle Extension (s)					2.5	2.5	2.5	2.5				
Lane Grp Cap (vph)					3774	932	1091	1125				
v/s Ratio Prot					c0.32			c0.27				
v/s Ratio Perm						0.09	0.24					
v/c Ratio					0.53	0.15	0.71	0.81				
Uniform Delay, d1					17.4	12.9	46.5	48.6				
Progression Factor					0.89	0.86	0.16	0.55				
Incremental Delay, d2					0.5	0.3	1.5	3.6				
Delay (s)					15.9	11.4	8.8	30.6				
Level of Service					B	B	A	C				
Approach Delay (s)		0.0			15.6			20.5			0.0	
Approach LOS		A			B			C			A	

Intersection Summary			
HCM 2000 Control Delay	17.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	76.9%	ICU Level of Service	D
Analysis Period (min)	15		

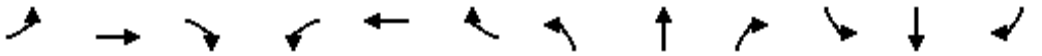
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	45	345	65	70	670	55	275	25	190	450	510	315
Future Volume (vph)	45	345	65	70	670	55	275	25	190	450	510	315
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00	0.97	1.00	1.00	1.00	0.95	
Frt	1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.94	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1690	3300		1690	3380	1512	3278	1779	1512	1690	3186	
Flt Permitted	0.25	1.00		0.39	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	446	3300		703	3380	1512	3278	1779	1512	1690	3186	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	50	383	72	78	744	61	306	28	211	500	567	350
RTOR Reduction (vph)	0	8	0	0	0	38	0	0	141	0	68	0
Lane Group Flow (vph)	50	447	0	78	744	23	306	28	70	500	849	0
Turn Type	pm+pt	NA		pm+pt	NA	Perm	Prot	NA	pm+ov	Prot	NA	
Protected Phases	1	6		5	2		7	4	5	3	8	
Permitted Phases	6			2		2			4			
Actuated Green, G (s)	64.6	59.1		69.4	61.5	61.5	18.0	10.4	18.3	58.6	51.0	
Effective Green, g (s)	64.6	59.1		69.4	61.5	61.5	18.0	10.4	18.3	58.6	51.0	
Actuated g/C Ratio	0.40	0.37		0.43	0.38	0.38	0.11	0.07	0.11	0.37	0.32	
Clearance Time (s)	6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	
Vehicle Extension (s)	1.0	5.5		1.0	5.5	5.5	1.0	2.0	1.0	1.0	2.0	
Lane Grp Cap (vph)	222	1218		353	1299	581	368	115	229	618	1015	
v/s Ratio Prot	0.01	0.14		0.01	c0.22		0.09	0.02	c0.02	c0.30	c0.27	
v/s Ratio Perm	0.08			0.08		0.02			0.03			
v/c Ratio	0.23	0.37		0.22	0.57	0.04	0.83	0.24	0.31	0.81	0.84	
Uniform Delay, d1	30.5	36.8		27.4	38.9	30.8	69.5	71.1	65.0	45.7	50.6	
Progression Factor	1.00	1.00		0.76	0.72	1.00	1.00	1.00	1.00	1.12	1.18	
Incremental Delay, d2	0.2	0.9		0.1	1.6	0.1	14.1	0.4	0.3	7.3	5.8	
Delay (s)	30.7	37.7		20.9	29.4	30.9	83.6	71.5	65.3	58.2	65.4	
Level of Service	C	D		C	C	C	F	E	E	E	E	
Approach Delay (s)		37.0			28.8			75.9			62.8	
Approach LOS		D			C			E			E	

Intersection Summary			
HCM 2000 Control Delay	52.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	24.0
Intersection Capacity Utilization	77.1%	ICU Level of Service	D
Analysis Period (min)	15		

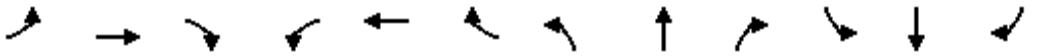
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	60	990	115	375	1415	165	170	270	300	70	275	130
Future Volume (vph)	60	990	115	375	1415	165	170	270	300	70	275	130
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	6.5	6.5	6.5	6.5	6.5	6.5	6.8	6.8	6.5	6.8	6.8	6.8
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95	0.88	0.97	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00	0.99	1.00	1.00	0.98	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3278	3380	1482	3278	3380	1491	3278	3366	2611	3278	3366	1483
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3278	3380	1482	3278	3380	1491	3278	3366	2611	3278	3366	1483
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	67	1100	128	417	1572	183	189	300	333	78	306	144
RTOR Reduction (vph)	0	0	66	0	0	71	0	0	83	0	0	127
Lane Group Flow (vph)	67	1100	62	417	1572	112	189	300	250	78	306	17
Confl. Peds. (#/hr)	1		5	5		1	5		10	10		5
Bus Blockages (#/hr)	0	0	0	0	0	0	0	2	0	0	2	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4	5	3	8	
Permitted Phases			6			2			4			8
Actuated Green, G (s)	5.5	77.2	77.2	25.9	97.6	97.6	11.3	18.7	44.6	11.6	19.0	19.0
Effective Green, g (s)	5.5	77.2	77.2	25.9	97.6	97.6	11.3	18.7	44.6	11.6	19.0	19.0
Actuated g/C Ratio	0.03	0.48	0.48	0.16	0.61	0.61	0.07	0.12	0.28	0.07	0.12	0.12
Clearance Time (s)	6.5	6.5	6.5	6.5	6.5	6.5	6.8	6.8	6.5	6.8	6.8	6.8
Vehicle Extension (s)	2.0	5.0	5.0	3.0	5.0	5.0	1.0	2.0	3.0	2.0	2.0	2.0
Lane Grp Cap (vph)	112	1630	715	530	2061	909	231	393	727	237	399	176
v/s Ratio Prot	0.02	c0.33		0.13	c0.47		0.06	c0.09	0.06	0.02	c0.09	
v/s Ratio Perm			0.04			0.07			0.04			0.01
v/c Ratio	0.60	0.67	0.09	0.79	0.76	0.12	0.82	0.76	0.34	0.33	0.77	0.10
Uniform Delay, d1	76.2	31.8	22.4	64.4	22.8	13.2	73.3	68.5	46.0	70.5	68.4	62.9
Progression Factor	1.00	1.00	1.00	1.22	0.60	0.94	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	5.6	2.3	0.2	5.2	1.9	0.2	18.8	7.7	0.3	0.3	7.7	0.1
Delay (s)	81.8	34.0	22.6	83.6	15.6	12.6	92.1	76.2	46.3	70.8	76.1	62.9
Level of Service	F	C	C	F	B	B	F	E	D	E	E	E
Approach Delay (s)		35.4			28.4			67.8			71.7	
Approach LOS		D			C			E			E	

Intersection Summary			
HCM 2000 Control Delay	41.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	26.6
Intersection Capacity Utilization	85.2%	ICU Level of Service	E
Analysis Period (min)	15		

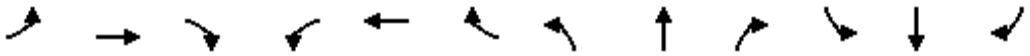
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1310	50	100	1730	0	0	0	0	230	85	265
Future Volume (vph)	0	1310	50	100	1730	0	0	0	0	230	85	265
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)		5.8	5.8	5.8	5.8					5.9	5.9	5.9
Lane Util. Factor		0.86	1.00	1.00	0.95					0.95	0.91	0.95
Frt		1.00	0.85	1.00	1.00					1.00	0.94	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	0.99	1.00
Satd. Flow (prot)		6119	1512	1690	3380					1605	1506	1436
Flt Permitted		1.00	1.00	0.95	1.00					0.95	0.99	1.00
Satd. Flow (perm)		6119	1512	1690	3380					1605	1506	1436
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	1456	56	111	1922	0	0	0	0	256	94	294
RTOR Reduction (vph)	0	0	21	0	0	0	0	0	0	0	18	49
Lane Group Flow (vph)	0	1456	35	111	1922	0	0	0	0	223	200	154
Turn Type		NA	Perm	Prot	NA					Perm	NA	Perm
Protected Phases		6		5	2						8	
Permitted Phases			6							8		8
Actuated Green, G (s)		101.3	101.3	15.1	122.2					26.1	26.1	26.1
Effective Green, g (s)		101.3	101.3	15.1	122.2					26.1	26.1	26.1
Actuated g/C Ratio		0.63	0.63	0.09	0.76					0.16	0.16	0.16
Clearance Time (s)		5.8	5.8	5.8	5.8					5.9	5.9	5.9
Vehicle Extension (s)		3.8	3.8	3.0	3.4					1.5	1.5	1.5
Lane Grp Cap (vph)		3874	957	159	2581					261	245	234
v/s Ratio Prot		0.24		0.07	c0.57							
v/s Ratio Perm			0.02							c0.14	0.13	0.11
v/c Ratio		0.38	0.04	0.70	0.74					0.85	0.82	0.66
Uniform Delay, d1		14.1	11.0	70.2	10.4					65.1	64.7	62.7
Progression Factor		0.57	0.24	1.43	0.56					1.00	1.00	1.00
Incremental Delay, d2		0.2	0.1	10.7	1.7					22.1	17.8	5.0
Delay (s)		8.3	2.7	111.1	7.5					87.2	82.5	67.7
Level of Service		A	A	F	A					F	F	E
Approach Delay (s)		8.1			13.1			0.0			79.5	
Approach LOS		A			B			A			E	

Intersection Summary			
HCM 2000 Control Delay	21.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	17.5
Intersection Capacity Utilization	71.3%	ICU Level of Service	C
Analysis Period (min)	15		

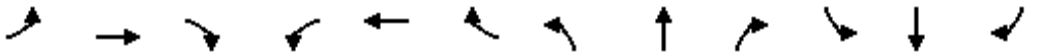
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	275	1265	0	0	1480	405	350	115	405	0	0	0
Future Volume (vph)	275	1265	0	0	1480	405	350	115	405	0	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	5.6	5.6			5.6	5.6	5.9	5.9	5.9			
Lane Util. Factor	0.97	0.95			0.91	1.00	0.95	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.98	1.00			
Satd. Flow (prot)	3278	3380			4856	1512	1605	1648	1512			
Flt Permitted	0.95	1.00			1.00	1.00	0.95	0.98	1.00			
Satd. Flow (perm)	3278	3380			4856	1512	1605	1648	1512			
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	306	1406	0	0	1644	450	389	128	450	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	187	0	0	234	0	0	0
Lane Group Flow (vph)	306	1406	0	0	1644	263	257	260	216	0	0	0
Turn Type	Prot	NA			NA	Perm	Perm	NA	custom			
Protected Phases	1	6			2			4				
Permitted Phases						2	4		7 5			
Actuated Green, G (s)	18.4	107.6			93.5	93.5	31.0	31.0	43.8			
Effective Green, g (s)	18.4	107.6			93.5	93.5	31.0	31.0	43.8			
Actuated g/C Ratio	0.11	0.67			0.58	0.58	0.19	0.19	0.27			
Clearance Time (s)	5.6	5.6			5.6	5.6	5.9	5.9				
Vehicle Extension (s)	1.5	3.3			3.6	3.6	2.0	2.0				
Lane Grp Cap (vph)	376	2273			2837	883	310	319	413			
v/s Ratio Prot	c0.09	c0.42			0.34							
v/s Ratio Perm						0.17	c0.16	0.16	c0.14			
v/c Ratio	0.81	0.62			0.58	0.30	0.83	0.82	0.52			
Uniform Delay, d1	69.1	14.7			20.9	16.7	62.0	61.8	49.3			
Progression Factor	0.64	0.57			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	11.4	1.2			0.9	0.9	15.8	14.0	0.6			
Delay (s)	55.4	9.6			21.8	17.6	77.7	75.8	49.8			
Level of Service	E	A			C	B	E	E	D			
Approach Delay (s)		17.8			20.9			64.2			0.0	
Approach LOS		B			C			E			A	

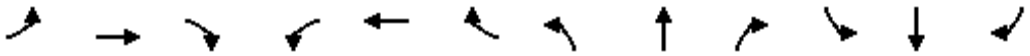
Intersection Summary			
HCM 2000 Control Delay	28.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	20.1
Intersection Capacity Utilization	71.3%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



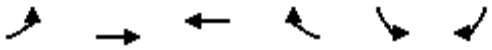
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	85	1795	15	35	10	0	0	30	70
Future Volume (vph)	0	0	0	85	1795	15	35	10	0	0	30	70
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)				5.6	5.6		5.5	5.5			5.5	5.5
Lane Util. Factor				1.00	0.86		1.00	1.00			1.00	1.00
Frpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	0.97
Flpb, ped/bikes				1.00	1.00		0.99	1.00			1.00	1.00
Frt				1.00	1.00		1.00	1.00			1.00	0.85
Flt Protected				0.95	1.00		0.95	1.00			1.00	1.00
Satd. Flow (prot)				1690	6110		1667	1779			1779	1473
Flt Permitted				0.95	1.00		0.74	1.00			1.00	1.00
Satd. Flow (perm)				1690	6110		1291	1779			1779	1473
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	94	1994	17	39	11	0	0	33	78
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	21
Lane Group Flow (vph)	0	0	0	94	2011	0	39	11	0	0	33	57
Confl. Peds. (#/hr)	5					5	6					6
Turn Type				Perm	NA		Perm	NA			NA	Perm
Protected Phases					2			4			8	
Permitted Phases				2			4					8
Actuated Green, G (s)				130.9	130.9		18.0	18.0			18.0	18.0
Effective Green, g (s)				130.9	130.9		18.0	18.0			18.0	18.0
Actuated g/C Ratio				0.82	0.82		0.11	0.11			0.11	0.11
Clearance Time (s)				5.6	5.6		5.5	5.5			5.5	5.5
Vehicle Extension (s)				2.5	2.5		2.0	2.0			2.8	2.8
Lane Grp Cap (vph)				1382	4998		145	200			200	165
v/s Ratio Prot					c0.33			0.01			0.02	
v/s Ratio Perm				0.06			0.03					c0.04
v/c Ratio				0.07	0.40		0.27	0.06			0.17	0.34
Uniform Delay, d1				2.8	3.9		65.0	63.4			64.2	65.5
Progression Factor				1.00	1.00		0.61	0.60			1.00	1.00
Incremental Delay, d2				0.1	0.2		0.4	0.0			0.3	1.1
Delay (s)				2.9	4.2		39.7	38.1			64.6	66.7
Level of Service				A	A		D	D			E	E
Approach Delay (s)		0.0			4.1			39.4			66.0	
Approach LOS		A			A			D			E	

Intersection Summary			
HCM 2000 Control Delay	7.9	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.39		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	11.1
Intersection Capacity Utilization	71.1%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



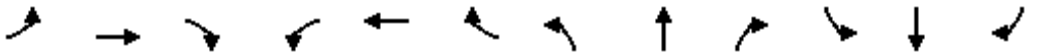
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	1175	100	0	0	0	0	60	50	40	75	0
Future Volume (vph)	15	1175	100	0	0	0	0	60	50	40	75	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)		5.8	5.8					5.7		5.7	5.7	
Lane Util. Factor		0.91	1.00					0.95		1.00	1.00	
Frpb, ped/bikes		1.00	0.95					1.00		1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00		1.00	1.00	
Frt		1.00	0.85					0.93		1.00	1.00	
Flt Protected		1.00	1.00					1.00		0.95	1.00	
Satd. Flow (prot)		4853	1441					3149		1690	1779	
Flt Permitted		1.00	1.00					1.00		0.67	1.00	
Satd. Flow (perm)		4853	1441					3149		1199	1779	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	17	1306	111	0	0	0	0	67	56	44	83	0
RTOR Reduction (vph)	0	0	20	0	0	0	0	50	0	0	0	0
Lane Group Flow (vph)	0	1323	91	0	0	0	0	73	0	44	83	0
Confl. Peds. (#/hr)			9	9			15					15
Turn Type	Perm	NA	Perm					NA		Perm	NA	
Protected Phases		6						4			8	
Permitted Phases	6		6							8		
Actuated Green, G (s)		130.5	130.5					18.0		18.0	18.0	
Effective Green, g (s)		130.5	130.5					18.0		18.0	18.0	
Actuated g/C Ratio		0.82	0.82					0.11		0.11	0.11	
Clearance Time (s)		5.8	5.8					5.7		5.7	5.7	
Vehicle Extension (s)		2.0	2.0					2.0		2.0	2.0	
Lane Grp Cap (vph)		3958	1175					354		134	200	
v/s Ratio Prot								0.02			c0.05	
v/s Ratio Perm		0.27	0.06							0.04		
v/c Ratio		0.33	0.08					0.21		0.33	0.41	
Uniform Delay, d1		3.7	2.9					64.5		65.4	66.1	
Progression Factor		0.65	0.27					1.00		0.87	0.88	
Incremental Delay, d2		0.2	0.1					0.1		0.5	0.5	
Delay (s)		2.6	0.9					64.6		57.7	58.6	
Level of Service		A	A					E		E	E	
Approach Delay (s)		2.5			0.0			64.6			58.3	
Approach LOS		A			A			E			E	

Intersection Summary			
HCM 2000 Control Delay	11.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.34		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	11.5
Intersection Capacity Utilization	71.1%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



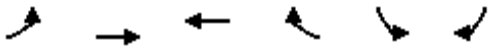
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	75	860	295	35	85	35
Future Volume (vph)	75	860	295	35	85	35
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850
Total Lost time (s)	5.5	5.5	5.5		5.5	5.5
Lane Util. Factor	1.00	0.95	0.95		1.00	1.00
Frpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Frt	1.00	1.00	0.98		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1685	3380	3315		1690	1512
Flt Permitted	0.51	1.00	1.00		0.95	1.00
Satd. Flow (perm)	906	3380	3315		1690	1512
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	83	956	328	39	94	39
RTOR Reduction (vph)	0	0	2	0	0	36
Lane Group Flow (vph)	83	956	365	0	94	3
Confl. Peds. (#/hr)	3			3		
Turn Type	pm+pt	NA	NA		Prot	Perm
Protected Phases	1	6	2		3	
Permitted Phases	6					7
Actuated Green, G (s)	135.7	135.7	124.9		13.3	13.3
Effective Green, g (s)	135.7	135.7	124.9		13.3	13.3
Actuated g/C Ratio	0.85	0.85	0.78		0.08	0.08
Clearance Time (s)	5.5	5.5	5.5		5.5	5.5
Vehicle Extension (s)	1.0	6.2	6.2		2.0	2.0
Lane Grp Cap (vph)	794	2866	2587		140	125
v/s Ratio Prot	0.00	c0.28	0.11		c0.06	
v/s Ratio Perm	0.09					0.00
v/c Ratio	0.10	0.33	0.14		0.67	0.03
Uniform Delay, d1	2.0	2.6	4.3		71.2	67.4
Progression Factor	0.41	0.49	1.00		1.00	1.00
Incremental Delay, d2	0.0	0.3	0.1		9.5	0.0
Delay (s)	0.9	1.5	4.4		80.8	67.4
Level of Service	A	A	A		F	E
Approach Delay (s)		1.5	4.4		76.8	
Approach LOS		A	A		E	

Intersection Summary			
HCM 2000 Control Delay	8.7	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.39		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	19.5
Intersection Capacity Utilization	43.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



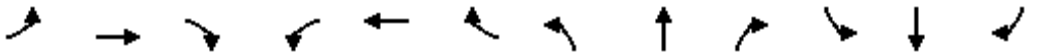
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	165	770	50	320	705	270	140	1545	325	160	795	260
Future Volume (vph)	165	770	50	320	705	270	140	1545	325	160	795	260
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.91	1.00	0.97	0.91	1.00
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.98	1.00	1.00	0.98	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3278	3380	1512	3278	3380	1481	3278	4856	1480	3278	4856	1488
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3278	3380	1512	3278	3380	1481	3278	4856	1480	3278	4856	1488
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	183	856	56	356	783	300	156	1717	361	178	883	289
RTOR Reduction (vph)	0	0	40	0	0	122	0	0	184	0	0	146
Lane Group Flow (vph)	183	856	16	356	783	178	156	1717	177	178	883	143
Confl. Peds. (#/hr)	5					5	3		7	7		3
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases			6			2			4			8
Actuated Green, G (s)	11.2	45.6	45.6	17.6	52.0	52.0	11.2	57.6	57.6	9.6	56.0	56.0
Effective Green, g (s)	11.2	45.6	45.6	17.6	52.0	52.0	11.2	57.6	57.6	9.6	56.0	56.0
Actuated g/C Ratio	0.07	0.29	0.29	0.11	0.32	0.32	0.07	0.36	0.36	0.06	0.35	0.35
Clearance Time (s)	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4
Vehicle Extension (s)	2.0	5.0	5.0	2.0	5.0	5.0	2.0	5.0	5.0	2.0	5.0	5.0
Lane Grp Cap (vph)	229	963	430	360	1098	481	229	1748	532	196	1699	520
v/s Ratio Prot	0.06	c0.25		c0.11	0.23		0.05	c0.35		c0.05	0.18	
v/s Ratio Perm			0.01			0.12			0.12			0.10
v/c Ratio	0.80	0.89	0.04	0.99	0.71	0.37	0.68	0.98	0.33	0.91	0.52	0.27
Uniform Delay, d1	73.3	54.8	41.3	71.1	47.4	41.4	72.7	50.7	37.2	74.8	41.3	37.4
Progression Factor	1.00	1.00	1.00	0.90	0.85	0.60	1.00	1.00	1.00	1.15	1.23	1.97
Incremental Delay, d2	16.4	12.0	0.2	38.4	3.1	1.7	6.5	17.5	0.8	34.7	0.5	0.5
Delay (s)	89.7	66.8	41.5	102.3	43.3	26.4	79.1	68.2	38.0	120.7	51.3	74.0
Level of Service	F	E	D	F	D	C	E	E	D	F	D	E
Approach Delay (s)		69.4			54.4			64.1			65.3	
Approach LOS		E			D			E			E	

Intersection Summary			
HCM 2000 Control Delay	63.0	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	29.6
Intersection Capacity Utilization	92.4%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



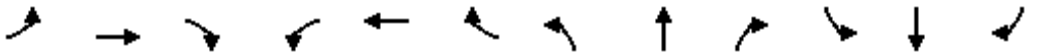
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	130	1140	1545	85	55	90
Future Volume (vph)	130	1140	1545	85	55	90
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850
Total Lost time (s)	6.3	6.3	6.3	6.3	6.3	6.3
Lane Util. Factor	1.00	0.95	0.95	1.00	0.97	1.00
Frpb, ped/bikes	1.00	1.00	1.00	0.98	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1690	3380	3380	1488	3278	1496
Flt Permitted	0.10	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	182	3380	3380	1488	3278	1496
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	144	1267	1717	94	61	100
RTOR Reduction (vph)	0	0	0	20	0	39
Lane Group Flow (vph)	144	1267	1717	74	61	61
Confl. Peds. (#/hr)	2			2		4
Turn Type	pm+pt	NA	NA	Perm	Prot	pm+ov
Protected Phases	1	6	2		3	1
Permitted Phases	6			2		3
Actuated Green, G (s)	140.4	140.4	125.4	125.4	7.0	15.7
Effective Green, g (s)	140.4	140.4	125.4	125.4	7.0	15.7
Actuated g/C Ratio	0.88	0.88	0.78	0.78	0.04	0.10
Clearance Time (s)	6.3	6.3	6.3	6.3	6.3	6.3
Vehicle Extension (s)	3.0	4.0	4.0	4.0	3.0	3.0
Lane Grp Cap (vph)	241	2965	2649	1166	143	205
v/s Ratio Prot	c0.03	0.37	c0.51		0.02	c0.02
v/s Ratio Perm	0.49			0.05		0.02
v/c Ratio	0.60	0.43	0.65	0.06	0.43	0.30
Uniform Delay, d1	10.4	1.9	7.6	3.9	74.5	67.0
Progression Factor	4.37	0.19	1.00	1.00	1.00	1.00
Incremental Delay, d2	2.4	0.3	1.2	0.1	2.0	0.8
Delay (s)	47.9	0.6	8.8	4.0	76.6	67.9
Level of Service	D	A	A	A	E	E
Approach Delay (s)		5.5	8.6		71.2	
Approach LOS		A	A		E	

Intersection Summary			
HCM 2000 Control Delay	10.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	18.9
Intersection Capacity Utilization	72.8%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	315	155	90	185	0	0	0	0	225	1265	140
Future Volume (vph)	0	315	155	90	185	0	0	0	0	225	1265	140
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)		5.4		5.4	5.4						5.8	5.8
Lane Util. Factor		0.95		1.00	0.95						0.91	1.00
Frpb, ped/bikes		1.00		1.00	1.00						1.00	0.99
Flpb, ped/bikes		1.00		1.00	1.00						1.00	1.00
Frt		0.95		1.00	1.00						1.00	0.85
Flt Protected		1.00		0.95	1.00						0.99	1.00
Satd. Flow (prot)		3213		1690	3380						4820	1491
Flt Permitted		1.00		0.20	1.00						0.99	1.00
Satd. Flow (perm)		3213		349	3380						4820	1491
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	350	172	100	206	0	0	0	0	250	1406	156
RTOR Reduction (vph)	0	81	0	0	0	0	0	0	0	0	0	81
Lane Group Flow (vph)	0	441	0	100	206	0	0	0	0	0	1656	75
Confl. Peds. (#/hr)	2					2	2					2
Turn Type		NA		pm+pt	NA					Perm	NA	Perm
Protected Phases		8		7	4						6	
Permitted Phases				4						6		6
Actuated Green, G (s)		15.0		30.5	30.5						38.3	38.3
Effective Green, g (s)		15.0		30.5	30.5						38.3	38.3
Actuated g/C Ratio		0.19		0.38	0.38						0.48	0.48
Clearance Time (s)		5.4		5.4	5.4						5.8	5.8
Vehicle Extension (s)		2.0		1.5	2.0						2.5	2.5
Lane Grp Cap (vph)		602		302	1288						2307	713
v/s Ratio Prot		c0.14		c0.04	0.06							
v/s Ratio Perm				0.08							0.34	0.05
v/c Ratio		0.73		0.33	0.16						0.72	0.10
Uniform Delay, d1		30.6		17.3	16.3						16.6	11.4
Progression Factor		1.00		0.94	0.94						1.00	1.00
Incremental Delay, d2		4.0		0.2	0.0						2.0	0.3
Delay (s)		34.6		16.4	15.3						18.5	11.7
Level of Service		C		B	B						B	B
Approach Delay (s)		34.6			15.6			0.0			17.9	
Approach LOS		C			B			A			B	

Intersection Summary			
HCM 2000 Control Delay	21.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	16.6
Intersection Capacity Utilization	71.5%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	110	425	0	0	205	335	105	1540	180	0	0	0
Future Volume (vph)	110	425	0	0	205	335	105	1540	180	0	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	5.7	5.7			5.7			5.8	5.8			
Lane Util. Factor	1.00	0.95			0.95			0.91	1.00			
Frpb, ped/bikes	1.00	1.00			0.99			1.00	0.98			
Flpb, ped/bikes	1.00	1.00			1.00			1.00	1.00			
Frt	1.00	1.00			0.91			1.00	0.85			
Flt Protected	0.95	1.00			1.00			1.00	1.00			
Satd. Flow (prot)	1689	3380			3032			4841	1486			
Flt Permitted	0.18	1.00			1.00			1.00	1.00			
Satd. Flow (perm)	328	3380			3032			4841	1486			
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	122	472	0	0	228	372	117	1711	200	0	0	0
RTOR Reduction (vph)	0	0	0	0	76	0	0	0	108	0	0	0
Lane Group Flow (vph)	122	472	0	0	524	0	0	1828	93	0	0	0
Confl. Peds. (#/hr)	6		1	1		6			5	5		
Turn Type	pm+pt	NA			NA		Perm	NA	Perm			
Protected Phases	3	8			4			2				
Permitted Phases	8						2		2			
Actuated Green, G (s)	31.5	31.5			17.7			37.0	37.0			
Effective Green, g (s)	31.5	31.5			17.7			37.0	37.0			
Actuated g/C Ratio	0.39	0.39			0.22			0.46	0.46			
Clearance Time (s)	5.7	5.7			5.7			5.8	5.8			
Vehicle Extension (s)	1.0	2.0			2.0			2.5	2.5			
Lane Grp Cap (vph)	266	1330			670			2238	687			
v/s Ratio Prot	0.05	c0.14			c0.17							
v/s Ratio Perm	0.13							0.38	0.06			
v/c Ratio	0.46	0.35			0.90dr			0.82	0.13			
Uniform Delay, d1	17.2	17.1			29.3			18.6	12.3			
Progression Factor	0.91	0.81			0.87			0.32	0.02			
Incremental Delay, d2	0.3	0.0			5.4			1.6	0.2			
Delay (s)	16.0	13.9			30.9			7.5	0.4			
Level of Service	B	B			C			A	A			
Approach Delay (s)		14.4			30.9			6.8			0.0	
Approach LOS		B			C			A			A	

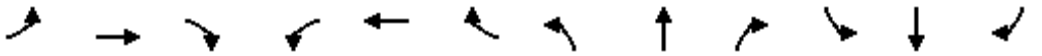
Intersection Summary			
HCM 2000 Control Delay	12.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	17.2
Intersection Capacity Utilization	71.5%	ICU Level of Service	C
Analysis Period (min)	15		

dr Defacto Right Lane. Recode with 1 though lane as a right lane.

c Critical Lane Group

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	505	25	80	495	40	50
Future Volume (vph)	505	25	80	495	40	50
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850
Total Lost time (s)	5.5			5.5	5.3	5.3
Lane Util. Factor	0.95			0.95	1.00	1.00
Frpb, ped/bikes	1.00			1.00	1.00	0.98
Flpb, ped/bikes	1.00			1.00	1.00	1.00
Frt	0.99			1.00	1.00	0.85
Flt Protected	1.00			0.99	0.95	1.00
Satd. Flow (prot)	3356			3356	1690	1487
Flt Permitted	1.00			0.79	0.95	1.00
Satd. Flow (perm)	3356			2676	1690	1487
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	561	28	89	550	44	56
RTOR Reduction (vph)	2	0	0	0	0	53
Lane Group Flow (vph)	587	0	0	639	44	4
Confl. Peds. (#/hr)						1
Turn Type	NA		Perm	NA	Prot	Perm
Protected Phases	6			2	7	
Permitted Phases			2			3
Actuated Green, G (s)	64.2			64.2	5.0	5.0
Effective Green, g (s)	64.2			64.2	5.0	5.0
Actuated g/C Ratio	0.80			0.80	0.06	0.06
Clearance Time (s)	5.5			5.5	5.3	5.3
Vehicle Extension (s)	2.0			2.0	2.0	0.2
Lane Grp Cap (vph)	2693			2147	105	92
v/s Ratio Prot	0.18				c0.03	
v/s Ratio Perm				c0.24		0.00
v/c Ratio	0.22			0.30	0.42	0.04
Uniform Delay, d1	1.9			2.0	36.1	35.2
Progression Factor	0.51			1.00	1.02	1.29
Incremental Delay, d2	0.2			0.4	0.9	0.1
Delay (s)	1.1			2.4	37.7	45.6
Level of Service	A			A	D	D
Approach Delay (s)	1.1			2.4	42.1	
Approach LOS	A			A	D	

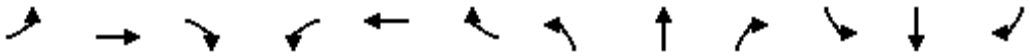
Intersection Summary			
HCM 2000 Control Delay	4.8	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.33		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	16.1
Intersection Capacity Utilization	51.8%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	505	1685	0	0	0	0	0	1355	115
Future Volume (vph)	0	0	0	505	1685	0	0	0	0	0	1355	115
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)				5.8	5.8						5.8	5.8
Lane Util. Factor				0.81	0.81						0.86	0.86
Frpb, ped/bikes				1.00	1.00						1.00	0.99
Flpb, ped/bikes				1.00	1.00						1.00	1.00
Frt				1.00	1.00						1.00	0.85
Flt Protected				0.95	1.00						1.00	1.00
Satd. Flow (prot)				1366	5750						4583	1283
Flt Permitted				0.95	1.00						1.00	1.00
Satd. Flow (perm)				1366	5750						4583	1283
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	561	1872	0	0	0	0	0	1506	128
RTOR Reduction (vph)	0	0	0	21	21	0	0	0	0	0	1	22
Lane Group Flow (vph)	0	0	0	450	1941	0	0	0	0	0	1518	93
Confl. Peds. (#/hr)	5		2	2		5	1		4	4		1
Turn Type				Perm	NA						NA	Perm
Protected Phases					1						2	
Permitted Phases				1								2
Actuated Green, G (s)				35.2	35.2						33.2	33.2
Effective Green, g (s)				35.2	35.2						33.2	33.2
Actuated g/C Ratio				0.44	0.44						0.42	0.42
Clearance Time (s)				5.8	5.8						5.8	5.8
Lane Grp Cap (vph)				601	2530						1901	532
v/s Ratio Prot											c0.33	
v/s Ratio Perm				0.33	0.34							0.07
v/c Ratio				0.75	0.77						0.80	0.17
Uniform Delay, d1				18.7	18.9						20.5	14.8
Progression Factor				0.34	0.36						0.42	0.14
Incremental Delay, d2				4.4	1.2						2.6	0.5
Delay (s)				10.8	8.0						11.3	2.6
Level of Service				B	A						B	A
Approach Delay (s)		0.0			8.6			0.0			10.7	
Approach LOS		A			A			A			B	

Intersection Summary			
HCM 2000 Control Delay	9.4	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	11.6
Intersection Capacity Utilization	70.1%	ICU Level of Service	C
Analysis Period (min)	15		

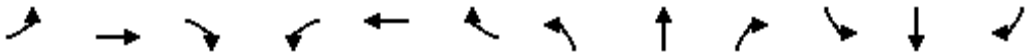
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	1865	335	375	1650	0	0	0	0
Future Volume (vph)	0	0	0	0	1865	335	375	1650	0	0	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)					6.0	6.0	6.0	6.0				
Lane Util. Factor					0.81	0.81	0.86	0.86				
Frpb, ped/bikes					1.00	0.98	1.00	1.00				
Flpb, ped/bikes					1.00	1.00	1.00	1.00				
Frt					1.00	0.85	1.00	1.00				
Flt Protected					1.00	1.00	0.95	1.00				
Satd. Flow (prot)					5746	1199	1453	4584				
Flt Permitted					1.00	1.00	0.95	1.00				
Satd. Flow (perm)					5746	1199	1453	4584				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	0	2072	372	417	1833	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	2	24	23	23	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	2107	311	352	1852	0	0	0	0
Confl. Peds. (#/hr)	9		2	2		9			12	12		
Turn Type					NA	Perm	Perm	NA				
Protected Phases					1			2				
Permitted Phases						1	2					
Actuated Green, G (s)					33.0	33.0	35.0	35.0				
Effective Green, g (s)					33.0	33.0	35.0	35.0				
Actuated g/C Ratio					0.41	0.41	0.44	0.44				
Clearance Time (s)					6.0	6.0	6.0	6.0				
Lane Grp Cap (vph)					2370	494	635	2005				
v/s Ratio Prot					c0.37							
v/s Ratio Perm						0.26	0.24	0.40				
v/c Ratio					0.89	0.63	0.55	0.92				
Uniform Delay, d1					21.8	18.6	16.7	21.2				
Progression Factor					0.68	0.54	0.47	0.45				
Incremental Delay, d2					4.4	4.8	2.3	6.1				
Delay (s)					19.3	14.9	10.1	15.7				
Level of Service					B	B	B	B				
Approach Delay (s)		0.0			18.7			14.8			0.0	
Approach LOS		A			B			B			A	

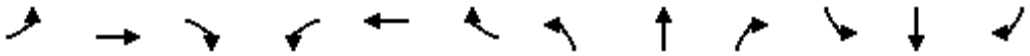
Intersection Summary			
HCM 2000 Control Delay	16.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.91		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	70.1%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	215	2160	135	60	95	0	0	15	5
Future Volume (vph)	0	0	0	215	2160	135	60	95	0	0	15	5
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)					5.4		5.3	5.3			5.3	
Lane Util. Factor					0.86		0.97	1.00			1.00	
Frpb, ped/bikes					1.00		1.00	1.00			1.00	
Flpb, ped/bikes					1.00		1.00	1.00			1.00	
Frt					0.99		1.00	1.00			0.96	
Flt Protected					1.00		0.95	1.00			1.00	
Satd. Flow (prot)					6035		3278	1779			1716	
Flt Permitted					1.00		0.95	1.00			1.00	
Satd. Flow (perm)					6035		3278	1779			1716	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	239	2400	150	67	106	0	0	17	6
RTOR Reduction (vph)	0	0	0	0	6	0	0	0	0	0	6	0
Lane Group Flow (vph)	0	0	0	0	2783	0	67	106	0	0	17	0
Confl. Peds. (#/hr)	2		2	2		2			1	1		
Turn Type				Perm	NA		Prot	NA			NA	
Protected Phases					2		7	4			8	
Permitted Phases				2								
Actuated Green, G (s)					53.6		7.6	15.7			2.8	
Effective Green, g (s)					53.6		7.6	15.7			2.8	
Actuated g/C Ratio					0.67		0.09	0.20			0.03	
Clearance Time (s)					5.4		5.3	5.3			5.3	
Vehicle Extension (s)					3.7		1.5	1.5			1.5	
Lane Grp Cap (vph)					4043		311	349			60	
v/s Ratio Prot							0.02	c0.06			0.01	
v/s Ratio Perm					0.46							
v/c Ratio					0.69		0.22	0.30			0.29	
Uniform Delay, d1					8.1		33.4	27.5			37.6	
Progression Factor					1.00		0.70	0.63			1.23	
Incremental Delay, d2					1.0		0.1	0.2			0.9	
Delay (s)					9.1		23.7	17.4			47.3	
Level of Service					A		C	B			D	
Approach Delay (s)		0.0			9.1			19.8			47.3	
Approach LOS		A			A			B			D	

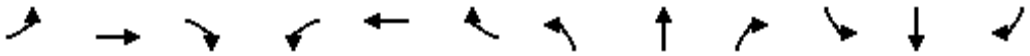
Intersection Summary			
HCM 2000 Control Delay	10.0	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	64.5%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1635	155	0	0	0	0	0	0	265	1570	0
Future Volume (vph)	0	1635	155	0	0	0	0	0	0	265	1570	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)		5.9	5.9							5.9	5.9	
Lane Util. Factor		0.81	0.81							0.86	0.86	
Frpb, ped/bikes		1.00	0.98							1.00	1.00	
Flpb, ped/bikes		1.00	1.00							1.00	1.00	
Frt		1.00	0.85							1.00	1.00	
Flt Protected		1.00	1.00							0.95	1.00	
Satd. Flow (prot)		5755	1205							1452	4586	
Flt Permitted		1.00	1.00							0.95	1.00	
Satd. Flow (perm)		5755	1205							1452	4586	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	1817	172	0	0	0	0	0	0	294	1744	0
RTOR Reduction (vph)	0	1	25	0	0	0	0	0	0	21	21	0
Lane Group Flow (vph)	0	1833	130	0	0	0	0	0	0	244	1752	0
Confl. Peds. (#/hr)			4	4			3		1	1		3
Turn Type		NA	Perm							Perm	NA	
Protected Phases		1									2	
Permitted Phases			1							2		
Actuated Green, G (s)		30.1	30.1							38.1	38.1	
Effective Green, g (s)		30.1	30.1							38.1	38.1	
Actuated g/C Ratio		0.38	0.38							0.48	0.48	
Clearance Time (s)		5.9	5.9							5.9	5.9	
Lane Grp Cap (vph)		2165	453							691	2184	
v/s Ratio Prot		c0.32										
v/s Ratio Perm			0.11							0.17	0.38	
v/c Ratio		0.85	0.29							0.35	0.80	
Uniform Delay, d1		22.8	17.4							13.2	17.8	
Progression Factor		1.00	1.00							0.54	0.49	
Incremental Delay, d2		4.3	1.6							0.8	1.9	
Delay (s)		27.2	19.0							8.0	10.6	
Level of Service		C	B							A	B	
Approach Delay (s)		26.5			0.0			0.0			10.3	
Approach LOS		C			A			A			B	

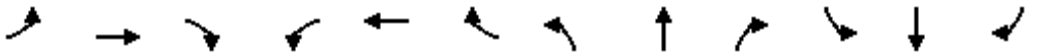
Intersection Summary				
HCM 2000 Control Delay	18.3	HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio	0.82			
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	11.8	
Intersection Capacity Utilization	63.8%	ICU Level of Service	B	
Analysis Period (min)	15			

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	505	1355	0	0	0	0	0	1505	85	0	0	0
Future Volume (vph)	505	1355	0	0	0	0	0	1505	85	0	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	5.6	5.6						6.0	6.0			
Lane Util. Factor	0.81	0.81						0.91	0.88			
Frpb, ped/bikes	1.00	1.00						1.00	0.98			
Flpb, ped/bikes	1.00	1.00						1.00	1.00			
Frt	1.00	1.00						1.00	0.85			
Flt Protected	0.95	1.00						1.00	1.00			
Satd. Flow (prot)	1365	5734						4856	2617			
Flt Permitted	0.95	1.00						1.00	1.00			
Satd. Flow (perm)	1365	5734						4856	2617			
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	561	1506	0	0	0	0	0	1672	94	0	0	0
RTOR Reduction (vph)	49	49	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	349	1620	0	0	0	0	0	1672	94	0	0	0
Confl. Peds. (#/hr)	3		6	6		3			16	16		
Turn Type	Perm	NA						NA	custom			
Protected Phases		8						2				
Permitted Phases	8								5			
Actuated Green, G (s)	32.4	32.4						36.0	80.0			
Effective Green, g (s)	32.4	32.4						36.0	80.0			
Actuated g/C Ratio	0.40	0.40						0.45	1.00			
Clearance Time (s)	5.6	5.6						6.0	6.0			
Vehicle Extension (s)	5.0	5.0						5.0	0.2			
Lane Grp Cap (vph)	552	2322						2185	2617			
v/s Ratio Prot								c0.34				
v/s Ratio Perm	0.26	0.28							0.04			
v/c Ratio	0.63	0.70						0.77	0.04			
Uniform Delay, d1	19.0	19.7						18.5	0.0			
Progression Factor	0.35	0.40						0.94	1.00			
Incremental Delay, d2	3.3	1.1						1.5	0.0			
Delay (s)	9.9	9.0						18.8	0.0			
Level of Service	A	A						B	A			
Approach Delay (s)		9.2			0.0			17.8			0.0	
Approach LOS		A			A			B			A	

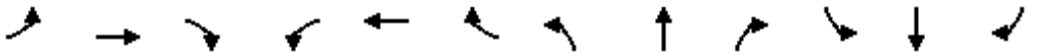
Intersection Summary			
HCM 2000 Control Delay	13.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	1.11		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	14.6
Intersection Capacity Utilization	70.1%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	65	1355	115	0	0	0	0	95	50	45	160	0
Future Volume (vph)	65	1355	115	0	0	0	0	95	50	45	160	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	5.7	5.7						5.7	5.7	5.7	5.7	
Lane Util. Factor	1.00	0.86						0.95	1.00	1.00	0.95	
Frpb, ped/bikes	1.00	1.00						1.00	1.00	1.00	1.00	
Flpb, ped/bikes	1.00	1.00						1.00	1.00	1.00	1.00	
Frt	1.00	0.99						1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00						1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1687	6039						3366	1512	1690	3366	
Flt Permitted	0.95	1.00						1.00	1.00	0.44	1.00	
Satd. Flow (perm)	1687	6039						3366	1512	776	3366	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	72	1506	128	0	0	0	0	106	56	50	178	0
RTOR Reduction (vph)	0	11	0	0	0	0	0	0	49	0	0	0
Lane Group Flow (vph)	72	1623	0	0	0	0	0	106	7	50	178	0
Confl. Peds. (#/hr)	2		7	7		2	4					4
Bus Blockages (#/hr)	0	0	0	0	0	0	0	2	0	0	2	0
Turn Type	Perm	NA						NA	Perm	pm+pt	NA	
Protected Phases		6						4		3	8	
Permitted Phases	6								4	8		
Actuated Green, G (s)	49.7	49.7						10.0	10.0	18.9	18.9	
Effective Green, g (s)	49.7	49.7						10.0	10.0	18.9	18.9	
Actuated g/C Ratio	0.62	0.62						0.12	0.12	0.24	0.24	
Clearance Time (s)	5.7	5.7						5.7	5.7	5.7	5.7	
Vehicle Extension (s)	4.8	4.8						1.7	1.7	1.0	1.7	
Lane Grp Cap (vph)	1048	3751						420	189	219	795	
v/s Ratio Prot		c0.27						0.03		0.01	c0.05	
v/s Ratio Perm	0.04								0.00	c0.04		
v/c Ratio	0.07	0.43						0.25	0.04	0.23	0.22	
Uniform Delay, d1	6.0	7.8						31.6	30.8	24.3	24.6	
Progression Factor	0.13	0.09						1.00	1.00	0.66	0.71	
Incremental Delay, d2	0.1	0.3						0.1	0.0	0.2	0.0	
Delay (s)	0.9	1.0						31.7	30.8	16.1	17.6	
Level of Service	A	A						C	C	B	B	
Approach Delay (s)		1.0			0.0			31.4			17.3	
Approach LOS		A			A			C			B	

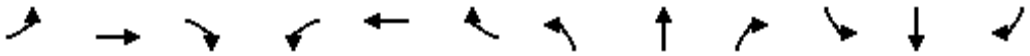
Intersection Summary			
HCM 2000 Control Delay	5.1	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	17.1
Intersection Capacity Utilization	64.5%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



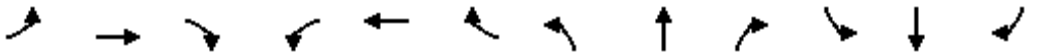
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	310	35	185	500	0	0	0	0	200	1245	105
Future Volume (vph)	0	310	35	185	500	0	0	0	0	200	1245	105
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)		5.5		5.5	5.5					6.0	6.0	6.0
Lane Util. Factor		0.95		1.00	0.95					1.00	0.91	1.00
Frpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	1.00
Flpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	1.00
Frt		0.98		1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00		0.95	1.00					0.95	1.00	1.00
Satd. Flow (prot)		3323		1689	3380					1690	4856	1512
Flt Permitted		1.00		0.45	1.00					0.95	1.00	1.00
Satd. Flow (perm)		3323		799	3380					1690	4856	1512
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	344	39	206	556	0	0	0	0	222	1383	117
RTOR Reduction (vph)	0	12	0	0	0	0	0	0	0	0	0	55
Lane Group Flow (vph)	0	371	0	206	556	0	0	0	0	222	1383	62
Confl. Peds. (#/hr)	2		3	3		2						
Turn Type		NA		pm+pt	NA					Perm	NA	Perm
Protected Phases		8		7	4						6	
Permitted Phases				4						6		6
Actuated Green, G (s)		14.1		26.2	26.2					42.3	42.3	42.3
Effective Green, g (s)		14.1		26.2	26.2					42.3	42.3	42.3
Actuated g/C Ratio		0.18		0.33	0.33					0.53	0.53	0.53
Clearance Time (s)		5.5		5.5	5.5					6.0	6.0	6.0
Vehicle Extension (s)		2.5		2.0	2.5					6.0	6.0	6.0
Lane Grp Cap (vph)		585		335	1106					893	2567	799
v/s Ratio Prot		0.11		c0.05	0.16						c0.28	
v/s Ratio Perm				c0.15						0.13		0.04
v/c Ratio		0.63		0.61	0.50					0.25	0.54	0.08
Uniform Delay, d1		30.6		25.7	21.7					10.2	12.4	9.3
Progression Factor		1.00		0.22	0.25					0.19	0.17	0.01
Incremental Delay, d2		2.0		1.6	0.2					0.4	0.5	0.1
Delay (s)		32.5		7.3	5.5					2.3	2.6	0.2
Level of Service		C		A	A					A	A	A
Approach Delay (s)		32.5			6.0			0.0			2.4	
Approach LOS		C			A			A			A	

Intersection Summary			
HCM 2000 Control Delay	7.4	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	69.9%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



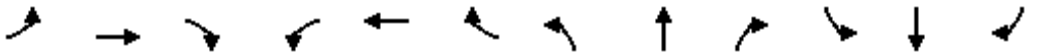
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	55	405	0	0	695	180	100	1590	140	0	0	0
Future Volume (vph)	55	405	0	0	695	180	100	1590	140	0	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	5.7	5.7			5.7	5.7	6.0	6.0	6.0			
Lane Util. Factor	1.00	0.95			0.95	1.00	1.00	0.91	1.00			
Frpb, ped/bikes	1.00	1.00			1.00	0.98	1.00	1.00	0.98			
Flpb, ped/bikes	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1689	3380			3380	1477	1685	4856	1484			
Flt Permitted	0.23	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	400	3380			3380	1477	1685	4856	1484			
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	61	450	0	0	772	200	111	1767	156	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	84	0	0	90	0	0	0
Lane Group Flow (vph)	61	450	0	0	772	116	111	1767	66	0	0	0
Confl. Peds. (#/hr)	10		6	6		10	3		7	7		3
Turn Type	pm+pt	NA			NA	Perm	Perm	NA	Perm			
Protected Phases	3	8			4			2				
Permitted Phases	8					4	2		2			
Actuated Green, G (s)	34.3	34.3			23.3	23.3	34.0	34.0	34.0			
Effective Green, g (s)	34.3	34.3			23.3	23.3	34.0	34.0	34.0			
Actuated g/C Ratio	0.43	0.43			0.29	0.29	0.42	0.42	0.42			
Clearance Time (s)	5.7	5.7			5.7	5.7	6.0	6.0	6.0			
Vehicle Extension (s)	1.0	2.5			2.5	2.5	2.5	2.5	2.5			
Lane Grp Cap (vph)	256	1449			984	430	716	2063	630			
v/s Ratio Prot	0.02	c0.13			c0.23			c0.36				
v/s Ratio Perm	0.09					0.08	0.07		0.04			
v/c Ratio	0.24	0.31			0.78	0.27	0.16	0.86	0.11			
Uniform Delay, d1	22.1	15.1			26.0	21.8	14.2	20.8	13.8			
Progression Factor	0.42	0.42			1.00	1.00	0.86	0.81	2.35			
Incremental Delay, d2	0.3	0.1			6.3	1.5	0.2	2.1	0.1			
Delay (s)	9.5	6.4			32.3	23.3	12.3	19.0	32.6			
Level of Service	A	A			C	C	B	B	C			
Approach Delay (s)		6.8			30.5			19.7			0.0	
Approach LOS		A			C			B			A	

Intersection Summary			
HCM 2000 Control Delay	20.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	17.4
Intersection Capacity Utilization	69.9%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



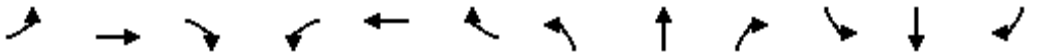
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	85	430	45	50	840	180	50	130	15	35	115	85
Future Volume (vph)	85	430	45	50	840	180	50	130	15	35	115	85
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	5.7	5.7		5.7	5.7		5.7	5.7		5.7	5.7	5.7
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.99		1.00	0.97		1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1690	3328		1690	3283		1687	3326		1690	3380	1490
Flt Permitted	0.15	1.00		0.46	1.00		0.67	1.00		0.65	1.00	1.00
Satd. Flow (perm)	260	3328		811	3283		1192	3326		1156	3380	1490
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	94	478	50	56	933	200	56	144	17	39	128	94
RTOR Reduction (vph)	0	7	0	0	17	0	0	13	0	0	0	83
Lane Group Flow (vph)	94	521	0	56	1116	0	56	148	0	39	128	11
Confl. Peds. (#/hr)	1		1	1		1	3					3
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases	6			2			4			8		8
Actuated Green, G (s)	37.4	33.5		35.0	32.3		10.7	7.9		10.7	7.9	7.9
Effective Green, g (s)	37.4	33.5		35.0	32.3		10.7	7.9		10.7	7.9	7.9
Actuated g/C Ratio	0.54	0.48		0.50	0.46		0.15	0.11		0.15	0.11	0.11
Clearance Time (s)	5.7	5.7		5.7	5.7		5.7	5.7		5.7	5.7	5.7
Vehicle Extension (s)	1.0	5.0		1.0	5.0		1.0	2.0		1.2	5.0	5.0
Lane Grp Cap (vph)	219	1599		441	1521		202	376		198	383	168
v/s Ratio Prot	c0.02	0.16		0.00	c0.34		c0.01	c0.04		0.01	0.04	
v/s Ratio Perm	0.21			0.06			0.03			0.02		0.01
v/c Ratio	0.43	0.33		0.13	0.73		0.28	0.39		0.20	0.33	0.06
Uniform Delay, d1	9.7	11.1		8.9	15.2		25.8	28.7		25.6	28.5	27.6
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	0.5	0.2		0.0	2.3		0.3	0.2		0.2	1.1	0.3
Delay (s)	10.2	11.4		9.0	17.5		26.1	28.9		25.7	29.6	27.9
Level of Service	B	B		A	B		C	C		C	C	C
Approach Delay (s)		11.2			17.1			28.2			28.4	
Approach LOS		B			B			C			C	

Intersection Summary			
HCM 2000 Control Delay	17.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	69.7	Sum of lost time (s)	22.8
Intersection Capacity Utilization	67.2%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



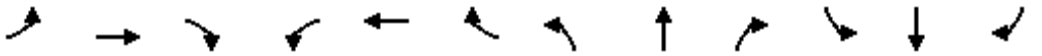
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	245	1180	115	325	1335	130	330	585	500	60	280	130
Future Volume (vph)	245	1180	115	325	1335	130	330	585	500	60	280	130
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	6.5	6.5	6.5	6.5	6.5	6.5	6.3	6.3	6.5	6.3	6.3	6.3
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95	0.88	0.97	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00	0.98	1.00	1.00	1.00	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3278	3380	1486	3278	3380	1488	3278	3380	2661	3278	3380	1486
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3278	3380	1486	3278	3380	1488	3278	3380	2661	3278	3380	1486
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	272	1311	128	361	1483	144	367	650	556	67	311	144
RTOR Reduction (vph)	0	0	70	0	0	74	0	0	73	0	0	127
Lane Group Flow (vph)	272	1311	58	361	1483	70	367	650	483	67	311	17
Confl. Peds. (#/hr)	2		4	4		2	3					3
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4	5	3	8	
Permitted Phases			6			2			4			8
Actuated Green, G (s)	14.5	72.6	72.6	20.0	78.1	78.1	22.8	34.4	54.4	7.4	19.0	19.0
Effective Green, g (s)	14.5	72.6	72.6	20.0	78.1	78.1	22.8	34.4	54.4	7.4	19.0	19.0
Actuated g/C Ratio	0.09	0.45	0.45	0.12	0.49	0.49	0.14	0.21	0.34	0.05	0.12	0.12
Clearance Time (s)	6.5	6.5	6.5	6.5	6.5	6.5	6.3	6.3	6.5	6.3	6.3	6.3
Vehicle Extension (s)	2.0	5.0	5.0	2.0	5.0	5.0	2.0	1.0	2.0	2.0	1.0	1.0
Lane Grp Cap (vph)	297	1533	674	409	1649	726	467	726	904	151	401	176
v/s Ratio Prot	0.08	c0.39		0.11	c0.44		0.11	c0.19	0.07	0.02	c0.09	
v/s Ratio Perm			0.04			0.05			0.11			0.01
v/c Ratio	0.92	0.86	0.09	0.88	0.90	0.10	0.79	0.90	0.53	0.44	0.78	0.10
Uniform Delay, d1	72.1	39.0	24.8	68.8	37.4	22.0	66.2	61.0	42.6	74.3	68.4	62.9
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.07	1.18	2.17
Incremental Delay, d2	30.6	6.3	0.3	19.1	8.2	0.3	7.8	13.3	0.3	0.6	6.9	0.1
Delay (s)	102.7	45.3	25.1	87.9	45.6	22.3	74.1	74.3	42.9	80.2	87.5	136.6
Level of Service	F	D	C	F	D	C	E	E	D	F	F	F
Approach Delay (s)		52.9			51.6			63.2			100.1	
Approach LOS		D			D			E			F	

Intersection Summary			
HCM 2000 Control Delay	59.5	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.92		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	25.6
Intersection Capacity Utilization	88.9%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



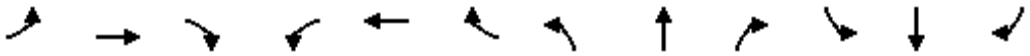
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	100	630	230	185	110	90	20	550	75	25	265	105
Future Volume (vph)	100	630	230	185	110	90	20	550	75	25	265	105
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	6.3	6.3		6.3	6.3		5.7	5.7		5.7	5.7	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	0.99		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.96		1.00	0.93		1.00	0.98		1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1689	3226		1690	3132		1690	3314		1690	3223	
Flt Permitted	0.61	1.00		0.10	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1090	3226		181	3132		1690	3314		1690	3223	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	111	700	256	206	122	100	22	611	83	28	294	117
RTOR Reduction (vph)	0	24	0	0	57	0	0	6	0	0	24	0
Lane Group Flow (vph)	111	932	0	206	166	0	22	688	0	28	387	0
Confl. Peds. (#/hr)	1		5	5		1	1		1	1		1
Turn Type	pm+pt	NA		pm+pt	NA		Prot	NA		Prot	NA	
Protected Phases	3	8		7	4		5	2		1	6	
Permitted Phases	8			4								
Actuated Green, G (s)	62.0	55.3		82.6	69.6		3.8	55.9		3.8	55.9	
Effective Green, g (s)	62.0	55.3		82.6	69.6		3.8	55.9		3.8	55.9	
Actuated g/C Ratio	0.39	0.35		0.52	0.43		0.02	0.35		0.02	0.35	
Clearance Time (s)	6.3	6.3		6.3	6.3		5.7	5.7		5.7	5.7	
Vehicle Extension (s)	1.2	4.0		1.2	4.0		1.2	4.0		1.2	4.0	
Lane Grp Cap (vph)	447	1114		291	1362		40	1157		40	1126	
v/s Ratio Prot	0.01	c0.29		c0.09	0.05		0.01	c0.21		c0.02	0.12	
v/s Ratio Perm	0.09			0.27								
v/c Ratio	0.25	0.84		0.71	0.12		0.55	0.59		0.70	0.34	
Uniform Delay, d1	32.1	48.2		33.7	27.0		77.3	42.7		77.5	38.5	
Progression Factor	1.00	1.00		1.00	1.00		0.49	0.24		0.62	0.86	
Incremental Delay, d2	0.1	5.8		6.3	0.1		5.8	1.4		32.5	0.8	
Delay (s)	32.2	54.0		40.0	27.0		43.7	11.5		81.0	34.0	
Level of Service	C	D		D	C		D	B		F	C	
Approach Delay (s)		51.8			33.3			12.5			37.0	
Approach LOS		D			C			B			D	

Intersection Summary			
HCM 2000 Control Delay	35.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	24.0
Intersection Capacity Utilization	75.5%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	225	785	85	260	1375	60	120	300	195	105	175	300
Future Volume (vph)	225	785	85	260	1375	60	120	300	195	105	175	300
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	6.4	6.4	6.4	6.4	6.4		6.4	6.4	6.4	6.4	6.4	6.4
Lane Util. Factor	0.97	0.95	1.00	0.97	0.91		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00		1.00	1.00	0.98	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3278	3380	1491	3278	4826		1690	3380	1487	1690	3380	1492
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3278	3380	1491	3278	4826		1690	3380	1487	1690	3380	1492
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	250	872	94	289	1528	67	133	333	217	117	194	333
RTOR Reduction (vph)	0	0	50	0	3	0	0	0	185	0	0	217
Lane Group Flow (vph)	250	872	44	289	1592	0	133	333	32	117	194	116
Confl. Peds. (#/hr)			1	1			1		3	3		1
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases			6						4			8
Actuated Green, G (s)	16.5	75.2	75.2	20.6	79.3		15.9	23.5	23.5	15.1	22.7	22.7
Effective Green, g (s)	16.5	75.2	75.2	20.6	79.3		15.9	23.5	23.5	15.1	22.7	22.7
Actuated g/C Ratio	0.10	0.47	0.47	0.13	0.50		0.10	0.15	0.15	0.09	0.14	0.14
Clearance Time (s)	6.4	6.4	6.4	6.4	6.4		6.4	6.4	6.4	6.4	6.4	6.4
Vehicle Extension (s)	2.0	5.0	5.0	2.0	5.0		2.0	3.0	3.0	2.0	2.5	2.5
Lane Grp Cap (vph)	338	1588	700	422	2391		167	496	218	159	479	211
v/s Ratio Prot	c0.08	0.26		0.09	c0.33		c0.08	c0.10		0.07	0.06	
v/s Ratio Perm			0.03						0.02			0.08
v/c Ratio	0.74	0.55	0.06	0.68	0.67		0.80	0.67	0.15	0.74	0.41	0.55
Uniform Delay, d1	69.7	30.3	23.2	66.6	30.4		70.5	64.6	59.5	70.5	62.5	63.9
Progression Factor	1.00	1.00	1.00	1.00	1.00		0.59	0.72	2.75	1.00	1.00	1.00
Incremental Delay, d2	7.1	1.4	0.2	3.7	1.5		19.3	3.2	0.3	14.1	0.4	2.3
Delay (s)	76.8	31.7	23.3	70.2	31.9		61.0	50.0	163.7	84.6	62.9	66.2
Level of Service	E	C	C	E	C		E	D	F	F	E	E
Approach Delay (s)		40.3			37.8			88.2			68.5	
Approach LOS		D			D			F			E	

Intersection Summary			
HCM 2000 Control Delay	50.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	25.6
Intersection Capacity Utilization	72.9%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

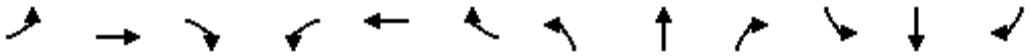


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	540	135	150	770	5	260	20	285	0	5	10
Future Volume (vph)	25	540	135	150	770	5	260	20	285	0	5	10
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	6.2	6.2	6.2	6.2	6.2		6.6	6.6	6.2		6.2	
Lane Util. Factor	1.00	0.95	1.00	0.97	0.95		0.95	0.95	0.88		1.00	
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		0.99	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	
Frt	1.00	1.00	0.85	1.00	1.00		1.00	1.00	0.85		0.90	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	0.96	1.00		1.00	
Satd. Flow (prot)	1690	3380	1512	3278	3376		1605	1620	2661		1593	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	0.96	1.00		1.00	
Satd. Flow (perm)	1690	3380	1512	3278	3376		1605	1620	2661		1593	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	28	600	150	167	856	6	289	22	317	0	6	11
RTOR Reduction (vph)	0	0	65	0	0	0	0	0	253	0	11	0
Lane Group Flow (vph)	28	600	85	167	862	0	156	155	64	0	6	0
Confl. Peds. (#/hr)	1					1	1					1
Turn Type	Prot	NA	Perm	Prot	NA		Split	NA	pm+ov	Split	NA	
Protected Phases	1	6		5	2		8	8	5	4	4	
Permitted Phases			6						8			
Actuated Green, G (s)	4.5	67.7	67.7	9.7	72.9		14.6	14.6	24.3		2.8	
Effective Green, g (s)	4.5	67.7	67.7	9.7	72.9		14.6	14.6	24.3		2.8	
Actuated g/C Ratio	0.04	0.56	0.56	0.08	0.61		0.12	0.12	0.20		0.02	
Clearance Time (s)	6.2	6.2	6.2	6.2	6.2		6.6	6.6	6.2		6.2	
Vehicle Extension (s)	2.0	2.5	2.5	2.0	4.0		2.0	2.0	2.0		2.0	
Lane Grp Cap (vph)	63	1906	853	264	2050		195	197	538		37	
v/s Ratio Prot	0.02	0.18		c0.05	c0.26		c0.10	0.10	0.01		c0.00	
v/s Ratio Perm			0.06						0.01			
v/c Ratio	0.44	0.31	0.10	0.63	0.42		0.80	0.79	0.12		0.17	
Uniform Delay, d1	56.5	13.9	12.1	53.4	12.4		51.3	51.2	39.1		57.5	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	
Incremental Delay, d2	1.8	0.4	0.2	3.6	0.6		19.4	17.2	0.0		0.8	
Delay (s)	58.3	14.3	12.3	57.0	13.0		70.7	68.4	39.1		58.2	
Level of Service	E	B	B	E	B		E	E	D		E	
Approach Delay (s)		15.5			20.2			54.2			58.2	
Approach LOS		B			C			D			E	

Intersection Summary			
HCM 2000 Control Delay	27.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	25.2
Intersection Capacity Utilization	58.3%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

2048 Concept V2 (LR) (PM Peak Hour)

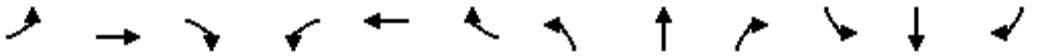
Previously Referred to as Concept C2



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	540	1035	0	0	805	315	375	930	455	0	0	0
Future Volume (vph)	540	1035	0	0	805	315	375	930	455	0	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	4.0	4.0			4.0	4.0	4.0	4.0	4.0			
Lane Util. Factor	0.97	0.95			0.95	1.00	1.00	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	3310	3413			3413	1527	1706	3413	1527			
Flt Permitted	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	3310	3413			3413	1527	1706	3413	1527			
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	574	1101	0	0	856	335	399	989	484	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	21	0	0	54	0	0	0
Lane Group Flow (vph)	574	1101	0	0	856	314	399	989	430	0	0	0
Turn Type	Prot	NA			NA	Perm	Perm	NA	Perm			
Protected Phases	7	4			8			2				
Permitted Phases						8	2		2			
Actuated Green, G (s)	31.5	96.7			61.2	61.2	55.3	55.3	55.3			
Effective Green, g (s)	31.5	96.7			61.2	61.2	55.3	55.3	55.3			
Actuated g/C Ratio	0.20	0.60			0.38	0.38	0.35	0.35	0.35			
Clearance Time (s)	4.0	4.0			4.0	4.0	4.0	4.0	4.0			
Vehicle Extension (s)	2.5	2.5			2.5	2.5	2.5	2.5	2.5			
Lane Grp Cap (vph)	651	2062			1305	584	589	1179	527			
v/s Ratio Prot	c0.17	0.32			c0.25			c0.29				
v/s Ratio Perm						0.21	0.23		0.28			
v/c Ratio	0.88	0.53			0.66	0.54	0.68	0.84	0.82			
Uniform Delay, d1	62.4	18.5			40.7	38.4	44.7	48.2	47.7			
Progression Factor	0.76	0.67			0.86	0.84	0.90	0.79	1.03			
Incremental Delay, d2	7.8	0.3			2.5	3.4	2.7	3.9	9.2			
Delay (s)	55.2	12.8			37.7	35.7	43.1	41.9	58.3			
Level of Service	E	B			D	D	D	D	E			
Approach Delay (s)		27.3			37.1			46.4			0.0	
Approach LOS		C			D			D			A	

Intersection Summary			
HCM 2000 Control Delay	37.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	75.1%	ICU Level of Service	D
Analysis Period (min)	15		

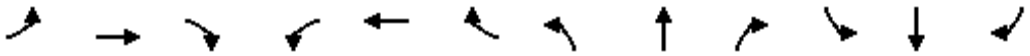
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	560	2230	0	0	0	0	0	1375	500	0	0	0
Future Volume (vph)	560	2230	0	0	0	0	0	1375	500	0	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	4.0	4.0						4.0	4.0			
Lane Util. Factor	0.97	0.91						0.86	0.86			
Frt	1.00	1.00						0.99	0.85			
Flt Protected	0.95	1.00						1.00	1.00			
Satd. Flow (prot)	3310	4903						4594	1313			
Flt Permitted	0.95	1.00						1.00	1.00			
Satd. Flow (perm)	3310	4903						4594	1313			
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	596	2372	0	0	0	0	0	1463	532	0	0	0
RTOR Reduction (vph)	6	0	0	0	0	0	0	2	4	0	0	0
Lane Group Flow (vph)	590	2372	0	0	0	0	0	1551	438	0	0	0
Turn Type	Perm	NA						NA	Perm			
Protected Phases		4						2				
Permitted Phases	4								2			
Actuated Green, G (s)	90.4	90.4						61.6	61.6			
Effective Green, g (s)	90.4	90.4						61.6	61.6			
Actuated g/C Ratio	0.57	0.57						0.39	0.39			
Clearance Time (s)	4.0	4.0						4.0	4.0			
Vehicle Extension (s)	2.5	2.5						2.5	2.5			
Lane Grp Cap (vph)	1870	2770						1768	505			
v/s Ratio Prot		c0.48						c0.34				
v/s Ratio Perm	0.18								0.33			
v/c Ratio	0.32	0.86						0.88	0.87			
Uniform Delay, d1	18.4	29.3						45.7	45.4			
Progression Factor	0.05	0.63						1.08	1.16			
Incremental Delay, d2	0.3	2.5						5.2	14.0			
Delay (s)	1.2	21.2						54.5	66.7			
Level of Service	A	C						D	E			
Approach Delay (s)		17.2			0.0			57.2			0.0	
Approach LOS		B			A			E			A	

Intersection Summary			
HCM 2000 Control Delay	33.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	82.0%	ICU Level of Service	E
Analysis Period (min)	15		

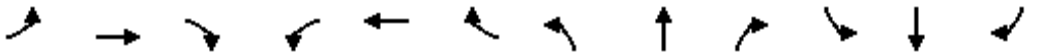
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	2425	850	0	0	0	0	0	0	365	1370	0
Future Volume (vph)	0	2425	850	0	0	0	0	0	0	365	1370	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)		4.0	4.0							4.0	4.0	
Lane Util. Factor		0.76	0.76							1.00	0.91	
Frt		0.98	0.85							1.00	1.00	
Flt Protected		1.00	1.00							0.95	1.00	
Satd. Flow (prot)		6691	1160							1706	4903	
Flt Permitted		1.00	1.00							0.95	1.00	
Satd. Flow (perm)		6691	1160							1706	4903	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	2580	904	0	0	0	0	0	0	388	1457	0
RTOR Reduction (vph)	0	2	3	0	0	0	0	0	0	5	0	0
Lane Group Flow (vph)	0	2967	512	0	0	0	0	0	0	383	1457	0
Turn Type		NA	Perm							Perm	NA	
Protected Phases		4									6	
Permitted Phases			4							6		
Actuated Green, G (s)		96.6	96.6							55.4	55.4	
Effective Green, g (s)		96.6	96.6							55.4	55.4	
Actuated g/C Ratio		0.60	0.60							0.35	0.35	
Clearance Time (s)		4.0	4.0							4.0	4.0	
Vehicle Extension (s)		2.5	2.5							2.5	2.5	
Lane Grp Cap (vph)		4039	700							590	1697	
v/s Ratio Prot		c0.44									c0.30	
v/s Ratio Perm			0.44							0.22		
v/c Ratio		0.73	0.73							0.65	0.86	
Uniform Delay, d1		22.6	22.5							44.1	48.7	
Progression Factor		1.00	1.00							0.30	0.70	
Incremental Delay, d2		1.2	6.6							1.3	3.0	
Delay (s)		23.8	29.2							14.7	36.9	
Level of Service		C	C							B	D	
Approach Delay (s)		24.6			0.0			0.0			32.2	
Approach LOS		C			A			A			C	

Intersection Summary			
HCM 2000 Control Delay	27.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	75.3%	ICU Level of Service	D
Analysis Period (min)	15		

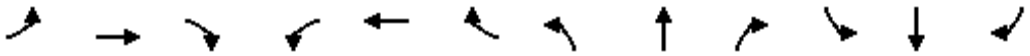
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	495	615	0	340	0	0	0	0	105	895	195
Future Volume (vph)	0	495	615	0	340	0	0	0	0	105	895	195
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)		4.0	4.0		4.0					4.0	4.0	4.0
Lane Util. Factor		0.91	0.91		0.95					1.00	0.95	1.00
Frt		0.95	0.85		1.00					1.00	1.00	0.85
Flt Protected		1.00	1.00		1.00					0.95	1.00	1.00
Satd. Flow (prot)		3096	1389		3413					1706	3413	1527
Flt Permitted		1.00	1.00		1.00					0.95	1.00	1.00
Satd. Flow (perm)		3096	1389		3413					1706	3413	1527
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	527	654	0	362	0	0	0	0	112	952	207
RTOR Reduction (vph)	0	30	31	0	0	0	0	0	0	0	0	136
Lane Group Flow (vph)	0	785	335	0	362	0	0	0	0	112	952	71
Turn Type		NA	Perm		NA					Perm	NA	Perm
Protected Phases		4			8						6	
Permitted Phases			4							6		6
Actuated Green, G (s)		97.3	97.3		97.3					54.7	54.7	54.7
Effective Green, g (s)		97.3	97.3		97.3					54.7	54.7	54.7
Actuated g/C Ratio		0.61	0.61		0.61					0.34	0.34	0.34
Clearance Time (s)		4.0	4.0		4.0					4.0	4.0	4.0
Vehicle Extension (s)		2.5	2.5		2.5					2.5	2.5	2.5
Lane Grp Cap (vph)		1882	844		2075					583	1166	522
v/s Ratio Prot		c0.25			0.11						c0.28	
v/s Ratio Perm			0.24							0.07		0.05
v/c Ratio		0.42	0.40		0.17					0.19	0.82	0.14
Uniform Delay, d1		16.5	16.2		13.7					37.1	48.1	36.3
Progression Factor		1.00	1.00		0.03					1.00	1.00	0.99
Incremental Delay, d2		0.7	1.4		0.2					0.1	4.4	0.1
Delay (s)		17.1	17.6		0.6					37.2	52.5	36.0
Level of Service		B	B		A					D	D	D
Approach Delay (s)		17.3			0.6			0.0			48.5	
Approach LOS		B			A			A			D	

Intersection Summary			
HCM 2000 Control Delay	29.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	93.7%	ICU Level of Service	F
Analysis Period (min)	15		

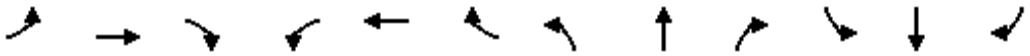
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	570	1920	0	0	0	0	0	1140	370
Future Volume (vph)	0	0	0	570	1920	0	0	0	0	0	1140	370
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)				4.0	4.0						4.0	
Lane Util. Factor				0.86	0.86						0.91	
Frt				1.00	1.00						0.96	
Flt Protected				0.95	1.00						1.00	
Satd. Flow (prot)				1467	4627						4723	
Flt Permitted				0.95	1.00						1.00	
Satd. Flow (perm)				1467	4627						4723	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	0	0	606	2043	0	0	0	0	0	1213	394
RTOR Reduction (vph)	0	0	0	8	3	0	0	0	0	0	4	0
Lane Group Flow (vph)	0	0	0	537	2101	0	0	0	0	0	1603	0
Turn Type				Perm	NA						NA	
Protected Phases					8						6	
Permitted Phases				8								
Actuated Green, G (s)				90.7	90.7						61.3	
Effective Green, g (s)				90.7	90.7						61.3	
Actuated g/C Ratio				0.57	0.57						0.38	
Clearance Time (s)				4.0	4.0						4.0	
Vehicle Extension (s)				2.5	2.5						2.5	
Lane Grp Cap (vph)				831	2622						1809	
v/s Ratio Prot											c0.34	
v/s Ratio Perm				0.37	0.45							
v/c Ratio				0.65	0.80						0.89	
Uniform Delay, d1				23.7	27.5						46.1	
Progression Factor				0.30	0.63						0.78	
Incremental Delay, d2				2.9	2.2						5.0	
Delay (s)				10.1	19.5						41.0	
Level of Service				B	B						D	
Approach Delay (s)		0.0			17.5			0.0			41.0	
Approach LOS		A			B			A			D	

Intersection Summary			
HCM 2000 Control Delay	26.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	102.9%	ICU Level of Service	G
Analysis Period (min)	15		

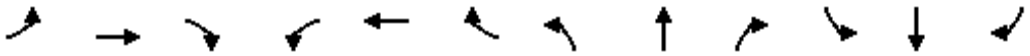
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	435	165	0	0	0	60	340	925	150	0	0	0
Future Volume (vph)	435	165	0	0	0	60	340	925	150	0	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	4.0	4.0				4.0	4.0	4.0				
Lane Util. Factor	0.95	0.95				1.00	0.91	0.91				
Frt	1.00	1.00				0.86	1.00	0.98				
Flt Protected	0.95	0.98				1.00	0.95	1.00				
Satd. Flow (prot)	1621	1668				1554	1553	3198				
Flt Permitted	0.95	0.98				1.00	0.95	1.00				
Satd. Flow (perm)	1621	1668				1554	1553	3198				
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	463	176	0	0	0	64	362	984	160	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	34	0	9	0	0	0	0
Lane Group Flow (vph)	315	324	0	0	0	30	326	1171	0	0	0	0
Turn Type	Split	NA				Perm	Perm	NA				
Protected Phases	4	4						2				
Permitted Phases						2	2					
Actuated Green, G (s)	78.0	78.0				74.0	74.0	74.0				
Effective Green, g (s)	78.0	78.0				74.0	74.0	74.0				
Actuated g/C Ratio	0.49	0.49				0.46	0.46	0.46				
Clearance Time (s)	4.0	4.0				4.0	4.0	4.0				
Vehicle Extension (s)	2.5	2.5				2.5	2.5	2.5				
Lane Grp Cap (vph)	790	813				718	718	1479				
v/s Ratio Prot	c0.19	0.19										
v/s Ratio Perm						0.02	0.21	0.37				
v/c Ratio	0.40	0.40				0.04	0.45	0.79				
Uniform Delay, d1	26.1	26.1				23.6	29.3	36.5				
Progression Factor	1.58	0.69				1.00	0.31	0.39				
Incremental Delay, d2	1.4	1.4				0.0	0.2	2.1				
Delay (s)	42.7	19.5				23.6	9.2	16.4				
Level of Service	D	B				C	A	B				
Approach Delay (s)		30.9			23.6			14.8			0.0	
Approach LOS		C			C			B			A	

Intersection Summary			
HCM 2000 Control Delay	19.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	93.7%	ICU Level of Service	F
Analysis Period (min)	15		

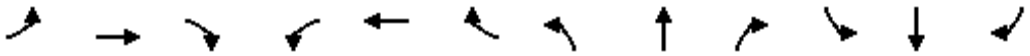
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	1765	165	725	1250	0	0	0	0
Future Volume (vph)	0	0	0	0	1765	165	725	1250	0	0	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)					4.0	4.0	4.0	4.0				
Lane Util. Factor					0.86	1.00	0.97	0.95				
Frt					1.00	0.85	1.00	1.00				
Flt Protected					1.00	1.00	0.95	1.00				
Satd. Flow (prot)					6179	1527	3310	3413				
Flt Permitted					1.00	1.00	0.95	1.00				
Satd. Flow (perm)					6179	1527	3310	3413				
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	0	0	0	1878	176	771	1330	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	21	4	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	1878	155	767	1330	0	0	0	0
Turn Type					NA	Perm	Perm	NA				
Protected Phases					8			2				
Permitted Phases						8	2					
Actuated Green, G (s)					75.4	75.4	76.6	76.6				
Effective Green, g (s)					75.4	75.4	76.6	76.6				
Actuated g/C Ratio					0.47	0.47	0.48	0.48				
Clearance Time (s)					4.0	4.0	4.0	4.0				
Vehicle Extension (s)					2.5	2.5	2.5	2.5				
Lane Grp Cap (vph)					2911	719	1584	1633				
v/s Ratio Prot					c0.30			c0.39				
v/s Ratio Perm						0.10	0.23					
v/c Ratio					0.65	0.22	0.48	0.81				
Uniform Delay, d1					32.1	24.9	28.3	35.6				
Progression Factor					0.81	0.83	0.30	0.80				
Incremental Delay, d2					1.1	0.7	0.1	2.6				
Delay (s)					27.0	21.3	8.7	31.1				
Level of Service					C	C	A	C				
Approach Delay (s)		0.0			26.5			22.9			0.0	
Approach LOS		A			C			C			A	

Intersection Summary			
HCM 2000 Control Delay	24.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	98.5%	ICU Level of Service	F
Analysis Period (min)	15		

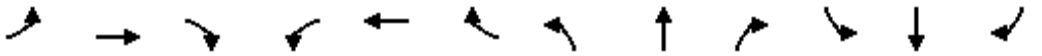
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	380	630	155	170	710	300	465	60	425	520	530	145
Future Volume (vph)	380	630	155	170	710	300	465	60	425	520	530	145
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00	0.97	1.00	1.00	1.00	0.95	
Frt	1.00	0.97		1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1706	3311		1706	3413	1527	3310	1796	1527	1706	3303	
Flt Permitted	0.10	1.00		0.20	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	185	3311		367	3413	1527	3310	1796	1527	1706	3303	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	404	670	165	181	755	319	495	64	452	553	564	154
RTOR Reduction (vph)	0	13	0	0	0	246	0	0	109	0	17	0
Lane Group Flow (vph)	404	822	0	181	755	73	495	64	343	553	701	0
Turn Type	pm+pt	NA		pm+pt	NA	Perm	Prot	NA	pm+ov	Prot	NA	
Protected Phases	1	6		5	2		7	4	5	3	8	
Permitted Phases	6			2		2			4			
Actuated Green, G (s)	76.3	49.6		53.6	32.9	32.9	26.1	17.3	38.0	48.4	39.6	
Effective Green, g (s)	76.3	49.6		53.6	32.9	32.9	26.1	17.3	38.0	48.4	39.6	
Actuated g/C Ratio	0.48	0.31		0.34	0.21	0.21	0.16	0.11	0.24	0.30	0.25	
Clearance Time (s)	6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	
Vehicle Extension (s)	1.0	5.5		1.0	5.5	5.5	1.0	2.0	1.0	1.0	2.0	
Lane Grp Cap (vph)	443	1026		296	701	313	539	194	419	516	817	
v/s Ratio Prot	c0.21	0.25		0.08	c0.22		0.15	0.04	0.11	c0.32	c0.21	
v/s Ratio Perm	0.22			0.13		0.05			0.12			
v/c Ratio	0.91	0.80		0.61	1.08	0.23	0.92	0.33	0.82	1.07	0.86	
Uniform Delay, d1	48.1	50.7		40.3	63.5	53.0	65.9	66.0	57.7	55.8	57.5	
Progression Factor	1.00	1.00		0.88	0.91	6.98	1.00	1.00	1.00	0.98	1.01	
Incremental Delay, d2	22.5	6.6		2.0	52.8	1.3	20.3	0.4	11.2	59.9	8.5	
Delay (s)	70.6	57.3		37.7	110.4	371.2	86.2	66.4	68.9	114.4	66.7	
Level of Service	E	E		D	F	F	F	E	E	F	E	
Approach Delay (s)		61.6			166.2			77.2			87.4	
Approach LOS		E			F			E			F	

Intersection Summary			
HCM 2000 Control Delay	99.3	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.02		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	24.0
Intersection Capacity Utilization	99.7%	ICU Level of Service	F
Analysis Period (min)	15		

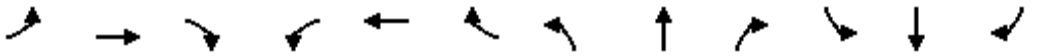
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	100	1070	335	400	1205	105	235	540	960	410	525	195
Future Volume (vph)	100	1070	335	400	1205	105	235	540	960	410	525	195
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	6.5	6.5	6.5	6.5	6.5	6.5	6.8	6.8	6.5	6.8	6.8	6.8
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95	0.88	0.97	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00	0.99	1.00	1.00	0.98	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3310	3413	1497	3310	3413	1506	3310	3399	2626	3310	3399	1497
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3310	3413	1497	3310	3413	1506	3310	3399	2626	3310	3399	1497
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	106	1138	356	426	1282	112	250	574	1021	436	559	207
RTOR Reduction (vph)	0	0	190	0	0	60	0	0	73	0	0	122
Lane Group Flow (vph)	106	1138	166	426	1282	52	250	574	948	436	559	85
Confl. Peds. (#/hr)	1		5	5		1	5		10	10		5
Bus Blockages (#/hr)	0	0	0	0	0	0	0	2	0	0	2	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4	5	3	8	
Permitted Phases			6			2			4			8
Actuated Green, G (s)	7.5	52.4	52.4	29.0	73.9	73.9	14.9	29.6	58.6	22.4	37.1	37.1
Effective Green, g (s)	7.5	52.4	52.4	29.0	73.9	73.9	14.9	29.6	58.6	22.4	37.1	37.1
Actuated g/C Ratio	0.05	0.33	0.33	0.18	0.46	0.46	0.09	0.19	0.37	0.14	0.23	0.23
Clearance Time (s)	6.5	6.5	6.5	6.5	6.5	6.5	6.8	6.8	6.5	6.8	6.8	6.8
Vehicle Extension (s)	2.0	5.0	5.0	3.0	5.0	5.0	1.0	2.0	3.0	2.0	2.0	2.0
Lane Grp Cap (vph)	155	1117	490	599	1576	695	308	628	961	463	788	347
v/s Ratio Prot	0.03	c0.33		0.13	0.38		0.08	0.17	c0.18	c0.13	0.16	
v/s Ratio Perm			0.11			0.03			0.18			0.06
v/c Ratio	0.68	1.02	0.34	0.71	0.81	0.07	0.81	0.91	0.99	0.94	0.71	0.24
Uniform Delay, d1	75.1	53.8	40.7	61.6	37.1	24.0	71.2	64.0	50.3	68.2	56.5	50.0
Progression Factor	1.00	1.00	1.00	1.08	0.52	0.77	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	9.5	31.7	1.9	3.2	3.8	0.2	14.2	17.6	25.5	27.4	2.4	0.1
Delay (s)	84.6	85.5	42.6	69.7	23.1	18.6	85.4	81.5	75.8	95.5	58.9	50.2
Level of Service	F	F	D	E	C	B	F	F	E	F	E	D
Approach Delay (s)		75.9			33.7			78.9			70.7	
Approach LOS		E			C			E			E	

Intersection Summary			
HCM 2000 Control Delay	63.9	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.99		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	26.6
Intersection Capacity Utilization	94.6%	ICU Level of Service	F
Analysis Period (min)	15		

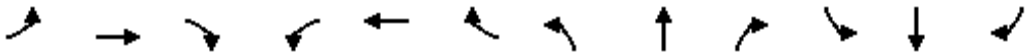
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	2165	340	390	1520	0	0	0	0	395	60	160
Future Volume (vph)	0	2165	340	390	1520	0	0	0	0	395	60	160
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)		5.8	5.8	5.8	5.8					5.9	5.9	5.9
Lane Util. Factor		0.86	1.00	1.00	0.95					0.95	0.91	0.95
Frt		1.00	0.85	1.00	1.00					1.00	0.99	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	0.97	1.00
Satd. Flow (prot)		6179	1527	1706	3413					1621	1565	1450
Flt Permitted		1.00	1.00	0.95	1.00					0.95	0.97	1.00
Satd. Flow (perm)		6179	1527	1706	3413					1621	1565	1450
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	2303	362	415	1617	0	0	0	0	420	64	170
RTOR Reduction (vph)	0	0	143	0	0	0	0	0	0	0	2	49
Lane Group Flow (vph)	0	2303	219	415	1617	0	0	0	0	252	247	104
Turn Type		NA	Perm	Prot	NA					Perm	NA	Perm
Protected Phases		6		5	2						8	
Permitted Phases			6							8		8
Actuated Green, G (s)		72.4	72.4	42.3	120.5					27.8	27.8	27.8
Effective Green, g (s)		72.4	72.4	42.3	120.5					27.8	27.8	27.8
Actuated g/C Ratio		0.45	0.45	0.26	0.75					0.17	0.17	0.17
Clearance Time (s)		5.8	5.8	5.8	5.8					5.9	5.9	5.9
Vehicle Extension (s)		3.8	3.8	3.0	3.4					1.5	1.5	1.5
Lane Grp Cap (vph)		2795	690	451	2570					281	271	251
v/s Ratio Prot		c0.37		c0.24	0.47							
v/s Ratio Perm			0.14							0.16	0.16	0.07
v/c Ratio		0.82	0.32	0.92	0.63					0.90	0.91	0.42
Uniform Delay, d1		38.2	28.0	57.2	9.3					64.7	64.9	58.9
Progression Factor		0.82	0.65	0.86	0.39					1.00	1.00	1.00
Incremental Delay, d2		0.9	0.4	20.2	1.0					27.9	32.1	0.4
Delay (s)		32.1	18.6	69.7	4.6					92.6	97.0	59.3
Level of Service		C	B	E	A					F	F	E
Approach Delay (s)		30.3			17.9			0.0			86.5	
Approach LOS		C			B			A			F	

Intersection Summary			
HCM 2000 Control Delay	32.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	17.5
Intersection Capacity Utilization	95.9%	ICU Level of Service	F
Analysis Period (min)	15		

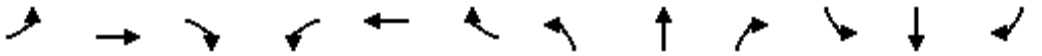
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	550	2010	0	0	1645	400	265	115	460	0	0	0
Future Volume (vph)	550	2010	0	0	1645	400	265	115	460	0	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	5.6	5.6			5.6	5.6	5.9	5.9	5.9			
Lane Util. Factor	0.97	0.95			0.91	1.00	0.95	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.98	1.00			
Satd. Flow (prot)	3310	3413			4903	1527	1621	1673	1527			
Flt Permitted	0.95	1.00			1.00	1.00	0.95	0.98	1.00			
Satd. Flow (perm)	3310	3413			4903	1527	1621	1673	1527			
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	585	2138	0	0	1750	426	282	122	489	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	183	0	0	182	0	0	0
Lane Group Flow (vph)	585	2138	0	0	1750	243	200	204	307	0	0	0
Turn Type	Prot	NA			NA	Perm	Perm	NA	custom			
Protected Phases	1	6			2			4				
Permitted Phases						2	4		7 5			
Actuated Green, G (s)	28.5	96.4			89.6	89.6	24.8	24.8	55.0			
Effective Green, g (s)	28.5	96.4			89.6	89.6	24.8	24.8	55.0			
Actuated g/C Ratio	0.18	0.60			0.56	0.56	0.16	0.16	0.34			
Clearance Time (s)	5.6	5.6			5.6	5.6	5.9	5.9				
Vehicle Extension (s)	1.5	3.3			3.6	3.6	2.0	2.0				
Lane Grp Cap (vph)	589	2056			2745	855	251	259	524			
v/s Ratio Prot	0.18	c0.63			c0.36							
v/s Ratio Perm						0.16	c0.12	0.12	0.20			
v/c Ratio	0.99	1.04			0.64	0.28	0.80	0.79	0.59			
Uniform Delay, d1	65.7	31.8			24.1	18.4	65.2	65.1	43.1			
Progression Factor	0.37	0.83			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	25.4	26.4			1.1	0.8	15.0	13.5	1.1			
Delay (s)	50.0	52.8			25.2	19.3	80.2	78.6	44.2			
Level of Service	D	D			C	B	F	E	D			
Approach Delay (s)		52.2			24.1			60.1			0.0	
Approach LOS		D			C			E			A	

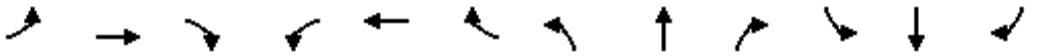
Intersection Summary			
HCM 2000 Control Delay	42.8	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.97		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	20.1
Intersection Capacity Utilization	95.9%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group



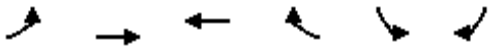
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	35	1645	15	175	25	0	0	45	45
Future Volume (vph)	0	0	0	35	1645	15	175	25	0	0	45	45
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)				5.6	5.6		5.5	5.5			5.5	5.5
Lane Util. Factor				1.00	0.86		1.00	1.00			1.00	1.00
Frpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	0.97
Flpb, ped/bikes				1.00	1.00		0.99	1.00			1.00	1.00
Frt				1.00	1.00		1.00	1.00			1.00	0.85
Flt Protected				0.95	1.00		0.95	1.00			1.00	1.00
Satd. Flow (prot)				1706	6168		1683	1796			1796	1487
Flt Permitted				0.95	1.00		0.73	1.00			1.00	1.00
Satd. Flow (perm)				1706	6168		1286	1796			1796	1487
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	0	0	37	1750	16	186	27	0	0	48	48
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	15
Lane Group Flow (vph)	0	0	0	37	1766	0	186	27	0	0	48	33
Confl. Peds. (#/hr)	5					5	6					6
Turn Type				Perm	NA		Perm	NA			NA	Perm
Protected Phases					2			4			8	
Permitted Phases				2			4					8
Actuated Green, G (s)				120.6	120.6		28.3	28.3			28.3	28.3
Effective Green, g (s)				120.6	120.6		28.3	28.3			28.3	28.3
Actuated g/C Ratio				0.75	0.75		0.18	0.18			0.18	0.18
Clearance Time (s)				5.6	5.6		5.5	5.5			5.5	5.5
Vehicle Extension (s)				2.5	2.5		2.0	2.0			2.8	2.8
Lane Grp Cap (vph)				1285	4649		227	317			317	263
v/s Ratio Prot					c0.29			0.02			0.03	
v/s Ratio Perm				0.02			c0.14					0.02
v/c Ratio				0.03	0.38		0.82	0.09			0.15	0.13
Uniform Delay, d1				5.0	6.8		63.4	55.0			55.7	55.4
Progression Factor				1.00	1.00		0.51	0.50			1.00	1.00
Incremental Delay, d2				0.0	0.2		17.0	0.0			0.2	0.2
Delay (s)				5.0	7.0		49.1	27.4			55.9	55.6
Level of Service				A	A		D	C			E	E
Approach Delay (s)		0.0			7.0			46.4			55.8	
Approach LOS		A			A			D			E	

Intersection Summary			
HCM 2000 Control Delay	13.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.46		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	11.1
Intersection Capacity Utilization	93.8%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



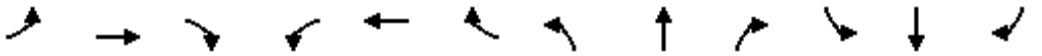
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	65	2425	280	0	0	0	0	135	80	45	35	0
Future Volume (vph)	65	2425	280	0	0	0	0	135	80	45	35	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)		5.8	5.8					5.7		5.7	5.7	
Lane Util. Factor		0.91	1.00					0.95		1.00	1.00	
Frpb, ped/bikes		1.00	0.95					1.00		1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00		1.00	1.00	
Frt		1.00	0.85					0.94		1.00	1.00	
Flt Protected		1.00	1.00					1.00		0.95	1.00	
Satd. Flow (prot)		4897	1455					3223		1706	1796	
Flt Permitted		1.00	1.00					1.00		0.46	1.00	
Satd. Flow (perm)		4897	1455					3223		829	1796	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	69	2580	298	0	0	0	0	144	85	48	37	0
RTOR Reduction (vph)	0	0	56	0	0	0	0	10	0	0	0	0
Lane Group Flow (vph)	0	2649	242	0	0	0	0	219	0	48	37	0
Confl. Peds. (#/hr)			9	9			15					15
Turn Type	Perm	NA	Perm					NA		Perm	NA	
Protected Phases		6						4			8	
Permitted Phases	6		6							8		
Actuated Green, G (s)		130.1	130.1					18.4		18.4	18.4	
Effective Green, g (s)		130.1	130.1					18.4		18.4	18.4	
Actuated g/C Ratio		0.81	0.81					0.11		0.11	0.11	
Clearance Time (s)		5.8	5.8					5.7		5.7	5.7	
Vehicle Extension (s)		2.0	2.0					2.0		2.0	2.0	
Lane Grp Cap (vph)		3981	1183					370		95	206	
v/s Ratio Prot								c0.07			0.02	
v/s Ratio Perm		0.54	0.17							0.06		
v/c Ratio		0.67	0.20					0.59		0.51	0.18	
Uniform Delay, d1		6.1	3.4					67.2		66.5	64.0	
Progression Factor		0.68	0.29					1.00		0.64	0.65	
Incremental Delay, d2		0.5	0.2					1.7		1.5	0.2	
Delay (s)		4.6	1.2					68.9		44.4	42.0	
Level of Service		A	A					E		D	D	
Approach Delay (s)		4.2			0.0			68.9			43.4	
Approach LOS		A			A			E			D	

Intersection Summary			
HCM 2000 Control Delay	9.8	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	11.5
Intersection Capacity Utilization	93.8%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



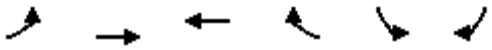
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	120	1240	825	45	175	175
Future Volume (vph)	120	1240	825	45	175	175
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850
Total Lost time (s)	5.5	5.5	5.5		5.5	5.5
Lane Util. Factor	1.00	0.95	0.95		1.00	1.00
Frpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Frt	1.00	1.00	0.99		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1706	3413	3381		1706	1527
Flt Permitted	0.27	1.00	1.00		0.95	1.00
Satd. Flow (perm)	478	3413	3381		1706	1527
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	128	1319	878	48	186	186
RTOR Reduction (vph)	0	0	1	0	0	161
Lane Group Flow (vph)	128	1319	925	0	186	25
Confl. Peds. (#/hr)	3			3		
Turn Type	pm+pt	NA	NA		Prot	Perm
Protected Phases	1	6	2		3	
Permitted Phases	6					7
Actuated Green, G (s)	127.2	127.2	115.3		21.8	21.8
Effective Green, g (s)	127.2	127.2	115.3		21.8	21.8
Actuated g/C Ratio	0.80	0.80	0.72		0.14	0.14
Clearance Time (s)	5.5	5.5	5.5		5.5	5.5
Vehicle Extension (s)	1.0	6.2	6.2		2.0	2.0
Lane Grp Cap (vph)	429	2713	2436		232	208
v/s Ratio Prot	0.01	c0.39	0.27		c0.11	
v/s Ratio Perm	0.23					0.02
v/c Ratio	0.30	0.49	0.38		0.80	0.12
Uniform Delay, d1	4.8	5.5	8.6		67.0	60.7
Progression Factor	0.35	0.30	1.00		1.00	1.00
Incremental Delay, d2	0.1	0.5	0.5		16.9	0.1
Delay (s)	1.8	2.2	9.0		83.9	60.8
Level of Service	A	A	A		F	E
Approach Delay (s)		2.1	9.0		72.3	
Approach LOS		A	A		E	

Intersection Summary			
HCM 2000 Control Delay	14.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	19.5
Intersection Capacity Utilization	55.4%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



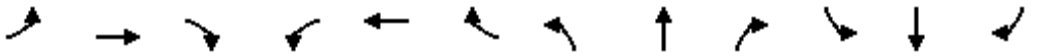
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	275	585	120	425	1085	260	145	1385	310	435	1885	265
Future Volume (vph)	275	585	120	425	1085	260	145	1385	310	435	1885	265
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.91	1.00	0.97	0.91	1.00
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00	0.98	1.00	1.00	0.97	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3310	3413	1496	3310	3413	1500	3310	4903	1487	3310	4903	1504
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3310	3413	1496	3310	3413	1500	3310	4903	1487	3310	4903	1504
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	293	622	128	452	1154	277	154	1473	330	463	2005	282
RTOR Reduction (vph)	0	0	98	0	0	191	0	0	196	0	0	151
Lane Group Flow (vph)	293	622	30	452	1154	86	154	1473	134	463	2005	131
Confl. Peds. (#/hr)	3		5	5		3	2		11	11		2
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases			6			2			4			8
Actuated Green, G (s)	13.6	37.6	37.6	25.6	49.6	49.6	7.6	46.6	46.6	20.6	59.6	59.6
Effective Green, g (s)	13.6	37.6	37.6	25.6	49.6	49.6	7.6	46.6	46.6	20.6	59.6	59.6
Actuated g/C Ratio	0.08	0.24	0.24	0.16	0.31	0.31	0.05	0.29	0.29	0.13	0.37	0.37
Clearance Time (s)	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4
Vehicle Extension (s)	2.0	5.0	5.0	2.0	5.0	5.0	2.0	5.0	5.0	2.0	5.0	5.0
Lane Grp Cap (vph)	281	802	351	529	1058	465	157	1427	433	426	1826	560
v/s Ratio Prot	0.09	c0.18		0.14	c0.34		0.05	c0.30		0.14	c0.41	
v/s Ratio Perm			0.02			0.06			0.09			0.09
v/c Ratio	1.04	0.78	0.09	0.85	1.09	0.18	0.98	1.03	0.31	1.09	1.10	0.23
Uniform Delay, d1	73.2	57.3	47.8	65.4	55.2	40.4	76.1	56.7	44.2	69.7	50.2	34.5
Progression Factor	1.00	1.00	1.00	0.77	0.73	0.79	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	65.3	7.2	0.5	7.8	50.7	0.5	65.7	32.5	0.9	69.0	53.3	0.5
Delay (s)	138.5	64.5	48.3	58.1	91.2	32.6	141.8	89.2	45.0	138.7	103.5	35.0
Level of Service	F	E	D	E	F	C	F	F	D	F	F	C
Approach Delay (s)		83.3			74.6			85.9			102.4	
Approach LOS		F			E			F			F	

Intersection Summary			
HCM 2000 Control Delay	88.7	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.13		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	29.6
Intersection Capacity Utilization	106.8%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			



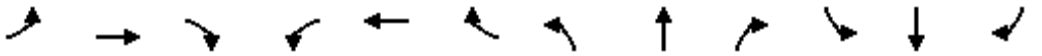
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	155	1280	1595	80	215	260
Future Volume (vph)	155	1280	1595	80	215	260
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850
Total Lost time (s)	6.3	6.3	6.3	6.3	6.3	6.3
Lane Util. Factor	1.00	0.95	0.95	1.00	0.97	1.00
Frpb, ped/bikes	1.00	1.00	1.00	0.98	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1706	3413	3413	1500	3310	1519
Flt Permitted	0.07	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	125	3413	3413	1500	3310	1519
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	165	1362	1697	85	229	277
RTOR Reduction (vph)	0	0	0	32	0	18
Lane Group Flow (vph)	165	1362	1697	53	229	259
Confl. Peds. (#/hr)	3			3		2
Turn Type	pm+pt	NA	NA	Perm	Prot	pm+ov
Protected Phases	1	6	2		3	1
Permitted Phases	6			2		3
Actuated Green, G (s)	132.2	132.2	99.2	99.2	15.2	41.9
Effective Green, g (s)	132.2	132.2	99.2	99.2	15.2	41.9
Actuated g/C Ratio	0.83	0.83	0.62	0.62	0.09	0.26
Clearance Time (s)	6.3	6.3	6.3	6.3	6.3	6.3
Vehicle Extension (s)	3.0	4.0	4.0	4.0	3.0	3.0
Lane Grp Cap (vph)	367	2819	2116	930	314	457
v/s Ratio Prot	0.07	0.40	c0.50		c0.07	c0.09
v/s Ratio Perm	0.30			0.04		0.08
v/c Ratio	0.45	0.48	0.80	0.06	0.73	0.57
Uniform Delay, d1	35.0	4.0	23.0	12.0	70.4	51.2
Progression Factor	0.71	0.33	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.6	0.4	3.3	0.1	8.2	1.6
Delay (s)	25.6	1.7	26.3	12.1	78.6	52.8
Level of Service	C	A	C	B	E	D
Approach Delay (s)		4.3	25.6		64.5	
Approach LOS		A	C		E	

Intersection Summary			
HCM 2000 Control Delay	22.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	18.9
Intersection Capacity Utilization	76.2%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	490	160	135	320	0	0	0	0	215	1995	120
Future Volume (vph)	0	490	160	135	320	0	0	0	0	215	1995	120
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)		5.4		5.4	5.4						5.8	5.8
Lane Util. Factor		0.95		1.00	0.95						0.91	1.00
Frpb, ped/bikes		1.00		1.00	1.00						1.00	0.98
Flpb, ped/bikes		1.00		1.00	1.00						1.00	1.00
Frt		0.96		1.00	1.00						1.00	0.85
Flt Protected		1.00		0.95	1.00						1.00	1.00
Satd. Flow (prot)		3273		1706	3413						4877	1490
Flt Permitted		1.00		0.17	1.00						1.00	1.00
Satd. Flow (perm)		3273		301	3413						4877	1490
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	521	170	144	340	0	0	0	0	229	2122	128
RTOR Reduction (vph)	0	40	0	0	0	0	0	0	0	0	0	73
Lane Group Flow (vph)	0	651	0	144	340	0	0	0	0	0	2351	55
Confl. Peds. (#/hr)	15		4	4		15	12		5	5		12
Turn Type		NA		pm+pt	NA					Perm	NA	Perm
Protected Phases		8		7	4						6	
Permitted Phases				4						6		6
Actuated Green, G (s)		18.5		34.2	34.2						34.6	34.6
Effective Green, g (s)		18.5		34.2	34.2						34.6	34.6
Actuated g/C Ratio		0.23		0.43	0.43						0.43	0.43
Clearance Time (s)		5.4		5.4	5.4						5.8	5.8
Vehicle Extension (s)		2.0		1.5	2.0						2.5	2.5
Lane Grp Cap (vph)		756		309	1459						2109	644
v/s Ratio Prot		c0.20		c0.06	0.10							
v/s Ratio Perm				0.14							0.48	0.04
v/c Ratio		0.86		0.47	0.23						1.11	0.09
Uniform Delay, d1		29.5		16.1	14.6						22.7	13.4
Progression Factor		1.00		1.30	1.30						1.00	1.00
Incremental Delay, d2		9.6		0.2	0.0						58.9	0.3
Delay (s)		39.1		21.2	19.0						81.6	13.6
Level of Service		D		C	B						F	B
Approach Delay (s)		39.1			19.6			0.0			78.1	
Approach LOS		D			B			A			E	

Intersection Summary			
HCM 2000 Control Delay	63.0	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	16.6
Intersection Capacity Utilization	94.7%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

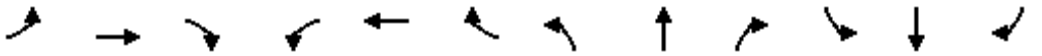


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	225	510	0	0	325	275	165	2280	165	0	0	0
Future Volume (vph)	225	510	0	0	325	275	165	2280	165	0	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	5.7	5.7			5.7			5.8	5.8			
Lane Util. Factor	1.00	0.95			0.95			0.91	1.00			
Frpb, ped/bikes	1.00	1.00			0.99			1.00	0.98			
Flpb, ped/bikes	1.00	1.00			1.00			1.00	1.00			
Frt	1.00	1.00			0.93			1.00	0.85			
Flt Protected	0.95	1.00			1.00			1.00	1.00			
Satd. Flow (prot)	1706	3413			3152			4887	1502			
Flt Permitted	0.18	1.00			1.00			1.00	1.00			
Satd. Flow (perm)	329	3413			3152			4887	1502			
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	239	543	0	0	346	293	176	2426	176	0	0	0
RTOR Reduction (vph)	0	0	0	0	29	0	0	0	99	0	0	0
Lane Group Flow (vph)	239	543	0	0	610	0	0	2602	77	0	0	0
Confl. Peds. (#/hr)	6		4	4		6			4	4		
Turn Type	pm+pt	NA			NA		Perm	NA	Perm			
Protected Phases	3	8			4			2				
Permitted Phases	8						2		2			
Actuated Green, G (s)	33.4	33.4			19.5			35.1	35.1			
Effective Green, g (s)	33.4	33.4			19.5			35.1	35.1			
Actuated g/C Ratio	0.42	0.42			0.24			0.44	0.44			
Clearance Time (s)	5.7	5.7			5.7			5.8	5.8			
Vehicle Extension (s)	1.0	2.0			2.0			2.5	2.5			
Lane Grp Cap (vph)	278	1424			768			2144	659			
v/s Ratio Prot	c0.09	0.16			0.19							
v/s Ratio Perm	c0.27							0.53	0.05			
v/c Ratio	0.86	0.38			0.79			1.21	0.12			
Uniform Delay, d1	17.6	16.1			28.4			22.4	13.3			
Progression Factor	1.75	0.64			1.11			0.35	0.08			
Incremental Delay, d2	11.3	0.0			5.2			97.2	0.1			
Delay (s)	42.1	10.4			36.7			105.0	1.2			
Level of Service	D	B			D			F	A			
Approach Delay (s)		20.1			36.7			98.4			0.0	
Approach LOS		C			D			F			A	

Intersection Summary			
HCM 2000 Control Delay	74.5	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.10		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	17.2
Intersection Capacity Utilization	94.7%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	710	45	70	455	110	310
Future Volume (vph)	710	45	70	455	110	310
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850
Total Lost time (s)	5.5			5.5	5.3	5.3
Lane Util. Factor	0.95			0.95	1.00	1.00
Frpb, ped/bikes	1.00			1.00	1.00	0.99
Flpb, ped/bikes	1.00			1.00	1.00	1.00
Frt	0.99			1.00	1.00	0.85
Flt Protected	1.00			0.99	0.95	1.00
Satd. Flow (prot)	3378			3390	1706	1505
Flt Permitted	1.00			0.77	0.95	1.00
Satd. Flow (perm)	3378			2617	1706	1505
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	755	48	74	484	117	330
RTOR Reduction (vph)	2	0	0	0	0	287
Lane Group Flow (vph)	801	0	0	558	117	43
Confl. Peds. (#/hr)		1	1			1
Turn Type	NA		Perm	NA	Prot	Perm
Protected Phases	6			2	7	
Permitted Phases			2			3
Actuated Green, G (s)	58.8			58.8	10.4	10.4
Effective Green, g (s)	58.8			58.8	10.4	10.4
Actuated g/C Ratio	0.73			0.73	0.13	0.13
Clearance Time (s)	5.5			5.5	5.3	5.3
Vehicle Extension (s)	2.0			2.0	2.0	0.2
Lane Grp Cap (vph)	2482			1923	221	195
v/s Ratio Prot	c0.24				c0.07	
v/s Ratio Perm				0.21		0.03
v/c Ratio	0.32			0.29	0.53	0.22
Uniform Delay, d1	3.7			3.6	32.5	31.2
Progression Factor	0.65			1.00	0.63	0.04
Incremental Delay, d2	0.3			0.4	1.0	0.2
Delay (s)	2.7			4.0	21.7	1.5
Level of Service	A			A	C	A
Approach Delay (s)	2.7			4.0	6.8	
Approach LOS	A			A	A	

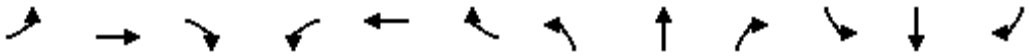
Intersection Summary			
HCM 2000 Control Delay	4.1	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.38		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	16.1
Intersection Capacity Utilization	56.9%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	530	2150	0	0	0	0	0	2030	285
Future Volume (vph)	0	0	0	530	2150	0	0	0	0	0	2030	285
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)				5.8	5.8						5.8	5.8
Lane Util. Factor				0.81	0.81						0.86	0.86
Frpb, ped/bikes				1.00	1.00						1.00	0.98
Flpb, ped/bikes				1.00	1.00						1.00	1.00
Frt				1.00	1.00						1.00	0.85
Flt Protected				0.95	1.00						1.00	1.00
Satd. Flow (prot)				1375	5812						4623	1282
Flt Permitted				0.95	1.00						1.00	1.00
Satd. Flow (perm)				1375	5812						4623	1282
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	0	0	564	2287	0	0	0	0	0	2160	303
RTOR Reduction (vph)	0	0	0	24	24	0	0	0	0	0	0	20
Lane Group Flow (vph)	0	0	0	484	2319	0	0	0	0	0	2190	253
Confl. Peds. (#/hr)	14		4	4		14	11		5	5		11
Turn Type				Perm	NA						NA	Perm
Protected Phases					1						2	
Permitted Phases				1								2
Actuated Green, G (s)				30.2	30.2						38.2	38.2
Effective Green, g (s)				30.2	30.2						38.2	38.2
Actuated g/C Ratio				0.38	0.38						0.48	0.48
Clearance Time (s)				5.8	5.8						5.8	5.8
Lane Grp Cap (vph)				519	2194						2207	612
v/s Ratio Prot											c0.47	
v/s Ratio Perm				0.35	0.40							0.20
v/c Ratio				0.93	1.06						0.99	0.41
Uniform Delay, d1				23.9	24.9						20.8	13.6
Progression Factor				0.26	0.30						0.17	0.13
Incremental Delay, d2				3.9	27.0						4.2	0.2
Delay (s)				10.0	34.5						7.8	2.0
Level of Service				B	C						A	A
Approach Delay (s)		0.0			30.2			0.0			7.2	
Approach LOS		A			C			A			A	

Intersection Summary			
HCM 2000 Control Delay	19.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	1.02		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	11.6
Intersection Capacity Utilization	84.8%	ICU Level of Service	E
Analysis Period (min)	15		

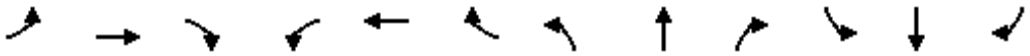
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	2200	335	475	2195	0	0	0	0
Future Volume (vph)	0	0	0	0	2200	335	475	2195	0	0	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)					6.0	6.0	6.0	6.0				
Lane Util. Factor					0.81	0.81	0.86	0.86				
Frpb, ped/bikes					1.00	0.98	1.00	1.00				
Flpb, ped/bikes					1.00	1.00	1.00	1.00				
Frt					1.00	0.85	1.00	1.00				
Flt Protected					1.00	1.00	0.95	1.00				
Satd. Flow (prot)					5805	1215	1462	4629				
Flt Permitted					1.00	1.00	0.95	1.00				
Satd. Flow (perm)					5805	1215	1462	4629				
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	0	0	0	2340	356	505	2335	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	1	26	22	22	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	2375	294	432	2364	0	0	0	0
Confl. Peds. (#/hr)	6		6	6		6	3		6	6		3
Turn Type					NA	Perm	Perm	NA				
Protected Phases					1			2				
Permitted Phases						1	2					
Actuated Green, G (s)					30.0	30.0	38.0	38.0				
Effective Green, g (s)					30.0	30.0	38.0	38.0				
Actuated g/C Ratio					0.38	0.38	0.48	0.48				
Clearance Time (s)					6.0	6.0	6.0	6.0				
Lane Grp Cap (vph)					2176	455	694	2198				
v/s Ratio Prot					c0.41							
v/s Ratio Perm						0.24	0.30	0.51				
v/c Ratio					1.09	0.65	0.62	1.08				
Uniform Delay, d1					25.0	20.6	15.7	21.0				
Progression Factor					0.79	0.71	0.41	0.39				
Incremental Delay, d2					46.8	4.5	0.4	35.1				
Delay (s)					66.5	19.1	6.9	43.3				
Level of Service					E	B	A	D				
Approach Delay (s)		0.0			60.9			37.5			0.0	
Approach LOS		A			E			D			A	

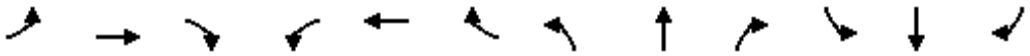
Intersection Summary			
HCM 2000 Control Delay	48.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.08		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	84.8%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	190	2205	50	260	195	0	0	95	45
Future Volume (vph)	0	0	0	190	2205	50	260	195	0	0	95	45
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)					5.4		5.3	5.3			5.3	
Lane Util. Factor					0.86		0.97	1.00			1.00	
Frpb, ped/bikes					1.00		1.00	1.00			1.00	
Flpb, ped/bikes					1.00		1.00	1.00			1.00	
Frt					1.00		1.00	1.00			0.96	
Flt Protected					1.00		0.95	1.00			1.00	
Satd. Flow (prot)					6127		3310	1796			1718	
Flt Permitted					1.00		0.95	1.00			1.00	
Satd. Flow (perm)					6127		3310	1796			1718	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	0	0	202	2346	53	277	207	0	0	101	48
RTOR Reduction (vph)	0	0	0	0	3	0	0	0	0	0	10	0
Lane Group Flow (vph)	0	0	0	0	2598	0	277	207	0	0	139	0
Confl. Peds. (#/hr)	11		6	6		11			8	8		
Turn Type				Perm	NA		Prot	NA			NA	
Protected Phases					2		7	4			8	
Permitted Phases				2								
Actuated Green, G (s)					43.8		9.5	25.5			10.7	
Effective Green, g (s)					43.8		9.5	25.5			10.7	
Actuated g/C Ratio					0.55		0.12	0.32			0.13	
Clearance Time (s)					5.4		5.3	5.3			5.3	
Vehicle Extension (s)					3.7		1.5	1.5			1.5	
Lane Grp Cap (vph)					3354		393	572			229	
v/s Ratio Prot							c0.08	0.12			c0.08	
v/s Ratio Perm					0.42							
v/c Ratio					0.77		0.70	0.36			0.61	
Uniform Delay, d1					14.2		33.9	21.0			32.7	
Progression Factor					1.00		0.54	0.54			0.90	
Incremental Delay, d2					1.8		4.4	0.1			3.1	
Delay (s)					16.0		22.7	11.5			32.6	
Level of Service					B		C	B			C	
Approach Delay (s)		0.0			16.0			17.9			32.6	
Approach LOS		A			B			B			C	

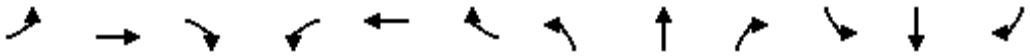
Intersection Summary			
HCM 2000 Control Delay	17.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	91.7%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	2580	235	0	0	0	0	0	0	535	2015	0
Future Volume (vph)	0	2580	235	0	0	0	0	0	0	535	2015	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)		5.9	5.9							5.9	5.9	
Lane Util. Factor		0.81	0.81							0.86	0.86	
Frpb, ped/bikes		1.00	0.97							1.00	1.00	
Flpb, ped/bikes		1.00	1.00							0.99	1.00	
Frt		1.00	0.85							1.00	1.00	
Flt Protected		1.00	1.00							0.95	1.00	
Satd. Flow (prot)		5810	1205							1457	4627	
Flt Permitted		1.00	1.00							0.95	1.00	
Satd. Flow (perm)		5810	1205							1457	4627	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	2745	250	0	0	0	0	0	0	569	2144	0
RTOR Reduction (vph)	0	1	23	0	0	0	0	0	0	23	23	0
Lane Group Flow (vph)	0	2769	202	0	0	0	0	0	0	489	2178	0
Confl. Peds. (#/hr)	14		13	13		14	21		7	7		21
Turn Type		NA	Perm							Perm	NA	
Protected Phases		1									2	
Permitted Phases			1							2		
Actuated Green, G (s)		34.1	34.1							34.1	34.1	
Effective Green, g (s)		34.1	34.1							34.1	34.1	
Actuated g/C Ratio		0.43	0.43							0.43	0.43	
Clearance Time (s)		5.9	5.9							5.9	5.9	
Lane Grp Cap (vph)		2476	513							621	1972	
v/s Ratio Prot		c0.48										
v/s Ratio Perm			0.17							0.34	0.47	
v/c Ratio		1.12	0.39							0.79	1.10	
Uniform Delay, d1		22.9	15.8							19.8	22.9	
Progression Factor		1.00	1.00							0.99	0.94	
Incremental Delay, d2		59.5	2.3							2.7	49.4	
Delay (s)		82.4	18.1							22.4	71.0	
Level of Service		F	B							C	E	
Approach Delay (s)		77.6			0.0			0.0			61.8	
Approach LOS		E			A			A			E	

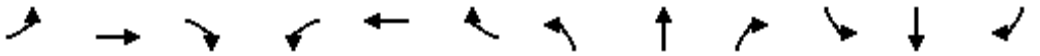
Intersection Summary			
HCM 2000 Control Delay	70.1	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.11		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	11.8
Intersection Capacity Utilization	88.0%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	510	2655	0	0	0	0	0	2165	670	0	0	0
Future Volume (vph)	510	2655	0	0	0	0	0	2165	670	0	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	5.6	5.6						6.0	6.0			
Lane Util. Factor	0.81	0.81						0.91	0.88			
Frpb, ped/bikes	1.00	1.00						1.00	0.99			
Flpb, ped/bikes	1.00	1.00						1.00	1.00			
Frt	1.00	1.00						1.00	0.85			
Flt Protected	0.95	1.00						1.00	1.00			
Satd. Flow (prot)	1376	5813						4903	2651			
Flt Permitted	0.95	1.00						1.00	1.00			
Satd. Flow (perm)	1376	5813						4903	2651			
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	543	2824	0	0	0	0	0	2303	713	0	0	0
RTOR Reduction (vph)	47	47	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	442	2831	0	0	0	0	0	2303	713	0	0	0
Confl. Peds. (#/hr)	5		17	17		5	1		5	5		1
Turn Type	Perm	NA						NA	custom			
Protected Phases		8						2				
Permitted Phases	8								5			
Actuated Green, G (s)	34.4	34.4						34.0	80.0			
Effective Green, g (s)	34.4	34.4						34.0	80.0			
Actuated g/C Ratio	0.43	0.43						0.42	1.00			
Clearance Time (s)	5.6	5.6						6.0	6.0			
Vehicle Extension (s)	5.0	5.0						5.0	0.2			
Lane Grp Cap (vph)	591	2499						2083	2651			
v/s Ratio Prot								c0.47				
v/s Ratio Perm	0.32	0.49							0.27			
v/c Ratio	0.75	1.13						1.11	0.27			
Uniform Delay, d1	19.2	22.8						23.0	0.0			
Progression Factor	0.82	0.78						0.79	1.00			
Incremental Delay, d2	0.8	60.4						51.6	0.1			
Delay (s)	16.6	78.2						69.7	0.1			
Level of Service	B	E						E	A			
Approach Delay (s)		69.3			0.0			53.3			0.0	
Approach LOS		E			A			D			A	

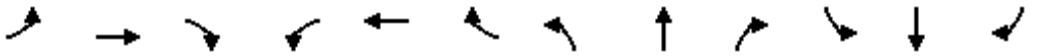
Intersection Summary			
HCM 2000 Control Delay	61.7	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.77		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	14.6
Intersection Capacity Utilization	90.6%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	160	2930	205	0	0	0	0	370	360	130	195	0
Future Volume (vph)	160	2930	205	0	0	0	0	370	360	130	195	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	5.7	5.7						5.7	5.7	5.7	5.7	
Lane Util. Factor	1.00	0.86						0.95	1.00	1.00	0.95	
Frpb, ped/bikes	1.00	1.00						1.00	1.00	1.00	1.00	
Flpb, ped/bikes	1.00	1.00						1.00	1.00	1.00	1.00	
Frt	1.00	0.99						1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00						1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1705	6110						3399	1527	1706	3399	
Flt Permitted	0.95	1.00						1.00	1.00	0.34	1.00	
Satd. Flow (perm)	1705	6110						3399	1527	613	3399	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	170	3117	218	0	0	0	0	394	383	138	207	0
RTOR Reduction (vph)	0	12	0	0	0	0	0	0	89	0	0	0
Lane Group Flow (vph)	170	3323	0	0	0	0	0	394	294	138	207	0
Confl. Peds. (#/hr)	1		9	9		1	9					9
Bus Blockages (#/hr)	0	0	0	0	0	0	0	2	0	0	2	0
Turn Type	Perm	NA						NA	Perm	pm+pt	NA	
Protected Phases		6						4		3	8	
Permitted Phases	6								4	8		
Actuated Green, G (s)	39.8	39.8						17.9	17.9	28.8	28.8	
Effective Green, g (s)	39.8	39.8						17.9	17.9	28.8	28.8	
Actuated g/C Ratio	0.50	0.50						0.22	0.22	0.36	0.36	
Clearance Time (s)	5.7	5.7						5.7	5.7	5.7	5.7	
Vehicle Extension (s)	4.8	4.8						1.7	1.7	1.0	1.7	
Lane Grp Cap (vph)	848	3039						760	341	291	1223	
v/s Ratio Prot		c0.54						0.12		c0.03	0.06	
v/s Ratio Perm	0.10								c0.19	0.14		
v/c Ratio	0.20	1.09						0.52	0.86	0.47	0.17	
Uniform Delay, d1	11.2	20.1						27.3	29.9	18.3	17.4	
Progression Factor	0.30	0.25						1.00	1.00	0.67	0.68	
Incremental Delay, d2	0.2	44.1						0.2	18.8	0.4	0.0	
Delay (s)	3.6	49.1						27.5	48.7	12.6	11.8	
Level of Service	A	D						C	D	B	B	
Approach Delay (s)		46.9			0.0			38.0			12.1	
Approach LOS		D			A			D			B	

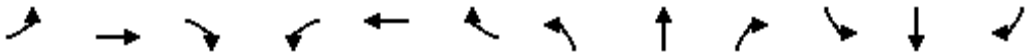
Intersection Summary			
HCM 2000 Control Delay	42.8	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.98		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	17.1
Intersection Capacity Utilization	91.7%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group



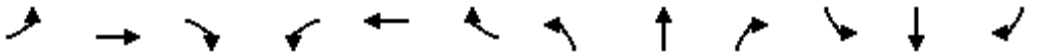
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	745	75	220	690	0	0	0	0	340	2000	135
Future Volume (vph)	0	745	75	220	690	0	0	0	0	340	2000	135
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)		5.5		5.5	5.5					6.0	6.0	6.0
Lane Util. Factor		0.95		1.00	0.95					0.86	0.81	0.86
Frpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	0.98
Flpb, ped/bikes		1.00		1.00	1.00					0.99	1.00	1.00
Frt		0.99		1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00		0.95	1.00					0.95	1.00	1.00
Satd. Flow (prot)		3357		1706	3413					1458	4356	1285
Flt Permitted		1.00		0.15	1.00					0.95	1.00	1.00
Satd. Flow (perm)		3357		276	3413					1458	4356	1285
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	793	80	234	734	0	0	0	0	362	2128	144
RTOR Reduction (vph)	0	10	0	0	0	0	0	0	0	0	1	60
Lane Group Flow (vph)	0	863	0	234	734	0	0	0	0	326	2177	70
Confl. Peds. (#/hr)	16		14	14		16	9		6	6		9
Turn Type		NA		pm+pt	NA					Perm	NA	Perm
Protected Phases		8		7	4						6	
Permitted Phases				4						6		6
Actuated Green, G (s)		20.5		32.5	32.5					36.0	36.0	36.0
Effective Green, g (s)		20.5		32.5	32.5					36.0	36.0	36.0
Actuated g/C Ratio		0.26		0.41	0.41					0.45	0.45	0.45
Clearance Time (s)		5.5		5.5	5.5					6.0	6.0	6.0
Vehicle Extension (s)		2.5		2.0	2.5					6.0	6.0	6.0
Lane Grp Cap (vph)		860		228	1386					656	1960	578
v/s Ratio Prot		0.26		c0.08	0.22							
v/s Ratio Perm				c0.33						0.22	0.50	0.05
v/c Ratio		1.00		1.03	0.53					0.50	1.11	0.12
Uniform Delay, d1		29.8		30.4	18.0					15.6	22.0	12.8
Progression Factor		1.00		0.30	0.20					0.24	0.26	0.00
Incremental Delay, d2		31.6		52.9	0.2					1.0	53.0	0.2
Delay (s)		61.4		62.0	3.7					4.7	58.6	0.2
Level of Service		E		E	A					A	E	A
Approach Delay (s)		61.4			17.8			0.0			49.1	
Approach LOS		E			B			A			D	

Intersection Summary			
HCM 2000 Control Delay	44.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.13		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	90.0%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



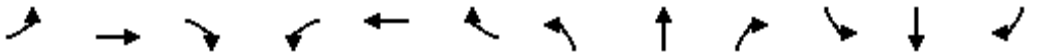
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	240	920	0	0	765	260	140	2020	160	0	0	0
Future Volume (vph)	240	920	0	0	765	260	140	2020	160	0	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	5.7	5.7			5.7	5.7	6.0	6.0	6.0			
Lane Util. Factor	1.00	0.95			0.95	1.00	1.00	0.91	1.00			
Frpb, ped/bikes	1.00	1.00			1.00	0.98	1.00	1.00	0.98			
Flpb, ped/bikes	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1706	3413			3413	1496	1698	4903	1490			
Flt Permitted	0.18	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	329	3413			3413	1496	1698	4903	1490			
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	255	979	0	0	814	277	149	2149	170	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	87	0	0	65	0	0	0
Lane Group Flow (vph)	255	979	0	0	814	190	149	2149	105	0	0	0
Confl. Peds. (#/hr)	7		20	20		7	5		13	13		5
Turn Type	pm+pt	NA			NA	Perm	Perm	NA	Perm			
Protected Phases	3	8			4			2				
Permitted Phases	8					4	2		2			
Actuated Green, G (s)	33.3	33.3			21.3	21.3	35.0	35.0	35.0			
Effective Green, g (s)	33.3	33.3			21.3	21.3	35.0	35.0	35.0			
Actuated g/C Ratio	0.42	0.42			0.27	0.27	0.44	0.44	0.44			
Clearance Time (s)	5.7	5.7			5.7	5.7	6.0	6.0	6.0			
Vehicle Extension (s)	1.0	2.5			2.5	2.5	2.5	2.5	2.5			
Lane Grp Cap (vph)	245	1420			908	398	742	2145	651			
v/s Ratio Prot	c0.08	0.29			0.24			c0.44				
v/s Ratio Perm	c0.35					0.13	0.09		0.07			
v/c Ratio	1.04	0.69			0.90	0.48	0.20	1.00	0.16			
Uniform Delay, d1	28.9	19.1			28.3	24.7	13.9	22.5	13.6			
Progression Factor	0.48	0.35			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	54.1	0.7			13.3	4.0	0.6	19.9	0.5			
Delay (s)	68.0	7.5			41.6	28.7	14.5	42.4	14.2			
Level of Service	E	A			D	C	B	D	B			
Approach Delay (s)		20.0			38.4			38.7			0.0	
Approach LOS		B			D			D			A	

Intersection Summary			
HCM 2000 Control Delay	33.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	1.08		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	17.4
Intersection Capacity Utilization	90.0%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



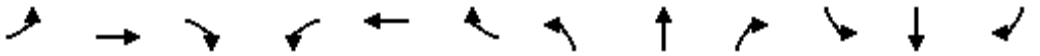
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	185	890	125	65	840	220	125	340	40	120	305	140
Future Volume (vph)	185	890	125	65	840	220	125	340	40	120	305	140
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	5.7	5.7		5.7	5.7		5.7	5.7		5.7	5.7	5.7
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.98		1.00	0.97		1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1706	3340		1706	3296		1700	3351		1703	3413	1488
Flt Permitted	0.13	1.00		0.14	1.00		0.50	1.00		0.46	1.00	1.00
Satd. Flow (perm)	241	3340		243	3296		887	3351		833	3413	1488
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	197	947	133	69	894	234	133	362	43	128	324	149
RTOR Reduction (vph)	0	12	0	0	25	0	0	12	0	0	0	119
Lane Group Flow (vph)	197	1068	0	69	1103	0	133	393	0	128	324	30
Confl. Peds. (#/hr)	3		12	12		3	14		8	8		14
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases	6			2			4			8		8
Actuated Green, G (s)	34.1	29.8		33.7	29.6		21.7	16.5		19.7	15.5	15.5
Effective Green, g (s)	34.1	29.8		33.7	29.6		21.7	16.5		19.7	15.5	15.5
Actuated g/C Ratio	0.44	0.39		0.44	0.38		0.28	0.21		0.25	0.20	0.20
Clearance Time (s)	5.7	5.7		5.7	5.7		5.7	5.7		5.7	5.7	5.7
Vehicle Extension (s)	1.0	5.0		1.0	5.0		1.0	2.0		1.2	5.0	5.0
Lane Grp Cap (vph)	187	1285		183	1260		303	714		259	683	297
v/s Ratio Prot	c0.06	0.32		0.02	0.33		c0.03	c0.12		0.03	0.09	
v/s Ratio Perm	c0.40			0.14			0.09			0.10		0.02
v/c Ratio	1.05	0.83		0.38	0.88		0.44	0.55		0.49	0.47	0.10
Uniform Delay, d1	19.6	21.5		14.8	22.2		21.8	27.1		23.4	27.4	25.3
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	80.6	5.3		0.5	7.6		0.4	0.5		0.5	1.1	0.3
Delay (s)	100.2	26.8		15.2	29.8		22.1	27.7		24.0	28.4	25.6
Level of Service	F	C		B	C		C	C		C	C	C
Approach Delay (s)		38.1			29.0			26.3			26.8	
Approach LOS		D			C			C			C	

Intersection Summary			
HCM 2000 Control Delay	31.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	77.4	Sum of lost time (s)	22.8
Intersection Capacity Utilization	80.7%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



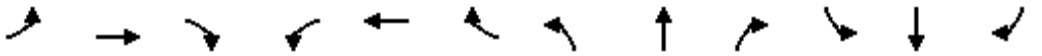
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	130	1795	370	485	1410	50	190	280	410	170	700	405
Future Volume (vph)	130	1795	370	485	1410	50	190	280	410	170	700	405
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	6.5	6.5	6.5	6.5	6.5	6.5	6.3	6.3	6.5	6.3	6.3	6.3
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95	0.88	0.97	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.98	1.00	1.00	0.98	1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3310	3413	1506	3310	3413	1492	3310	3413	2623	3310	3413	1484
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3310	3413	1506	3310	3413	1492	3310	3413	2623	3310	3413	1484
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	138	1910	394	516	1500	53	202	298	436	181	745	431
RTOR Reduction (vph)	0	0	87	0	0	24	0	0	79	0	0	126
Lane Group Flow (vph)	138	1910	307	516	1500	29	202	298	357	181	745	305
Confl. Peds. (#/hr)	6		1	1		6	9		7	7		9
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4	5	3	8	
Permitted Phases			6			2			4			8
Actuated Green, G (s)	8.4	77.5	77.5	19.5	88.6	88.6	7.7	26.9	46.4	10.5	29.7	29.7
Effective Green, g (s)	8.4	77.5	77.5	19.5	88.6	88.6	7.7	26.9	46.4	10.5	29.7	29.7
Actuated g/C Ratio	0.05	0.48	0.48	0.12	0.55	0.55	0.05	0.17	0.29	0.07	0.19	0.19
Clearance Time (s)	6.5	6.5	6.5	6.5	6.5	6.5	6.3	6.3	6.5	6.3	6.3	6.3
Vehicle Extension (s)	2.0	5.0	5.0	2.0	5.0	5.0	2.0	1.0	2.0	2.0	1.0	1.0
Lane Grp Cap (vph)	173	1653	729	403	1889	826	159	573	760	217	633	275
v/s Ratio Prot	0.04	c0.56		c0.16	0.44		c0.06	0.09	0.06	0.05	c0.22	
v/s Ratio Perm			0.20			0.02			0.08			0.21
v/c Ratio	0.80	1.16	0.42	1.28	0.79	0.04	1.27	0.52	0.47	0.83	1.18	1.11
Uniform Delay, d1	75.0	41.2	26.7	70.2	28.4	16.3	76.2	60.7	46.7	73.9	65.2	65.2
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.98	0.98	0.99
Incremental Delay, d2	20.7	77.3	1.8	144.0	3.5	0.1	161.7	0.4	0.2	15.1	90.1	75.7
Delay (s)	95.7	118.5	28.5	214.3	32.0	16.3	237.9	61.1	46.9	87.8	154.1	140.0
Level of Service	F	F	C	F	C	B	F	E	D	F	F	F
Approach Delay (s)		102.7			77.0			92.6			140.8	
Approach LOS		F			E			F			F	

Intersection Summary			
HCM 2000 Control Delay	101.1	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.18		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	25.6
Intersection Capacity Utilization	112.7%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			



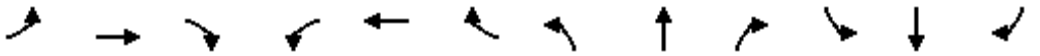
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	240	640	305	295	635	190	75	480	75	75	600	65
Future Volume (vph)	240	640	305	295	635	190	75	480	75	75	600	65
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	6.3	6.3		6.3	6.3		5.7	5.7		5.7	5.7	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	0.99		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.95		1.00	0.97		1.00	0.98		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1706	3217		1706	3278		1706	3331		1706	3356	
Flt Permitted	0.21	1.00		0.07	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	383	3217		135	3278		1706	3331		1706	3356	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	255	681	324	314	676	202	80	511	80	80	638	69
RTOR Reduction (vph)	0	36	0	0	16	0	0	7	0	0	5	0
Lane Group Flow (vph)	255	969	0	314	862	0	80	584	0	80	702	0
Confl. Peds. (#/hr)	6		10	10		6	4		10	10		4
Turn Type	pm+pt	NA		pm+pt	NA		Prot	NA		Prot	NA	
Protected Phases	3	8		7	4		5	2		1	6	
Permitted Phases	8			4								
Actuated Green, G (s)	72.9	53.7		88.2	62.7		10.3	44.6		9.5	43.8	
Effective Green, g (s)	72.9	53.7		88.2	62.7		10.3	44.6		9.5	43.8	
Actuated g/C Ratio	0.46	0.34		0.55	0.39		0.06	0.28		0.06	0.27	
Clearance Time (s)	6.3	6.3		6.3	6.3		5.7	5.7		5.7	5.7	
Vehicle Extension (s)	1.2	4.0		1.2	4.0		1.2	4.0		1.2	4.0	
Lane Grp Cap (vph)	333	1079		351	1284		109	928		101	918	
v/s Ratio Prot	0.09	0.30		c0.16	0.26		0.05	c0.18		0.05	c0.21	
v/s Ratio Perm	0.26			c0.34								
v/c Ratio	0.77	0.90		0.89	0.67		0.73	0.63		0.79	0.76	
Uniform Delay, d1	29.7	50.5		49.4	40.1		73.5	50.5		74.3	53.4	
Progression Factor	1.00	1.00		1.00	1.00		0.56	0.39		1.12	0.28	
Incremental Delay, d2	9.1	10.2		23.4	1.5		18.4	3.0		23.5	4.3	
Delay (s)	38.9	60.7		72.8	41.7		59.5	22.7		107.0	19.3	
Level of Service	D	E		E	D		E	C		F	B	
Approach Delay (s)		56.3			49.9			27.1			28.2	
Approach LOS		E			D			C			C	

Intersection Summary			
HCM 2000 Control Delay	43.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	24.0
Intersection Capacity Utilization	93.7%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	540	1695	170	265	1140	85	185	490	275	170	375	340
Future Volume (vph)	540	1695	170	265	1140	85	185	490	275	170	375	340
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	6.4	6.4	6.4	6.4	6.4		6.4	6.4	6.4	6.4	6.4	6.4
Lane Util. Factor	0.97	0.95	1.00	0.97	0.91		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	0.98	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3310	3413	1527	3310	4847		1706	3413	1502	1706	3413	1506
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3310	3413	1527	3310	4847		1706	3413	1502	1706	3413	1506
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	574	1803	181	282	1213	90	197	521	293	181	399	362
RTOR Reduction (vph)	0	0	61	0	5	0	0	0	123	0	0	298
Lane Group Flow (vph)	574	1803	120	282	1298	0	197	521	170	181	399	64
Confl. Peds. (#/hr)	3					3	1		3	3		1
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases			6						4			8
Actuated Green, G (s)	30.1	70.6	70.6	10.6	51.1		24.7	32.1	32.1	21.1	28.5	28.5
Effective Green, g (s)	30.1	70.6	70.6	10.6	51.1		24.7	32.1	32.1	21.1	28.5	28.5
Actuated g/C Ratio	0.19	0.44	0.44	0.07	0.32		0.15	0.20	0.20	0.13	0.18	0.18
Clearance Time (s)	6.4	6.4	6.4	6.4	6.4		6.4	6.4	6.4	6.4	6.4	6.4
Vehicle Extension (s)	2.0	5.0	5.0	2.0	5.0		2.0	3.0	3.0	2.0	2.5	2.5
Lane Grp Cap (vph)	622	1505	673	219	1548		263	684	301	224	607	268
v/s Ratio Prot	0.17	c0.53		c0.09	0.27		c0.12	c0.15		0.11	0.12	
v/s Ratio Perm			0.08						0.11			0.04
v/c Ratio	0.92	1.20	0.18	1.29	0.84		0.75	0.76	0.56	0.81	0.66	0.24
Uniform Delay, d1	63.8	44.7	27.1	74.7	50.6		64.7	60.3	57.6	67.5	61.2	56.5
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.07	0.93	1.03	1.00	1.00	1.00
Incremental Delay, d2	19.1	95.8	0.6	159.3	5.6		8.0	4.1	1.9	17.9	2.3	0.3
Delay (s)	82.9	140.5	27.7	234.0	56.2		77.4	60.0	61.3	85.4	63.5	56.8
Level of Service	F	F	C	F	E		E	E	E	F	E	E
Approach Delay (s)		119.6			87.8			63.8			65.1	
Approach LOS		F			F			E			E	

Intersection Summary			
HCM 2000 Control Delay	93.7	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.05		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	25.6
Intersection Capacity Utilization	102.1%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

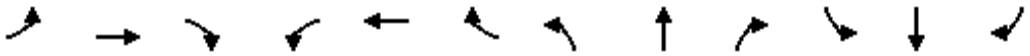


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	1085	300	345	650	5	245	15	590	0	50	30
Future Volume (vph)	10	1085	300	345	650	5	245	15	590	0	50	30
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	6.2	6.2	6.2	6.2	6.2		6.6	6.6	6.2		6.2	
Lane Util. Factor	1.00	0.95	1.00	0.97	0.95		0.95	0.95	0.88		1.00	
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	
Frt	1.00	1.00	0.85	1.00	1.00		1.00	1.00	0.85		0.94	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	0.96	1.00		1.00	
Satd. Flow (prot)	1706	3413	1527	3310	3408		1621	1634	2687		1695	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	0.96	1.00		1.00	
Satd. Flow (perm)	1706	3413	1527	3310	3408		1621	1634	2687		1695	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	11	1154	319	367	691	5	261	16	628	0	53	32
RTOR Reduction (vph)	0	0	162	0	0	0	0	0	478	0	21	0
Lane Group Flow (vph)	11	1154	157	367	696	0	138	139	150	0	64	0
Confl. Peds. (#/hr)	1					1						
Turn Type	Prot	NA	Perm	Prot	NA		Split	NA	pm+ov	Split	NA	
Protected Phases	1	6		5	2		8	8	5	4	4	
Permitted Phases			6						8			
Actuated Green, G (s)	1.4	63.9	63.9	19.7	82.2		11.4	11.4	31.1		9.8	
Effective Green, g (s)	1.4	63.9	63.9	19.7	82.2		11.4	11.4	31.1		9.8	
Actuated g/C Ratio	0.01	0.49	0.49	0.15	0.63		0.09	0.09	0.24		0.08	
Clearance Time (s)	6.2	6.2	6.2	6.2	6.2		6.6	6.6	6.2		6.2	
Vehicle Extension (s)	2.0	2.0	2.0	2.0	4.0		2.0	2.0	2.0		2.0	
Lane Grp Cap (vph)	18	1677	750	501	2154		142	143	642		127	
v/s Ratio Prot	0.01	c0.34		c0.11	0.20		c0.09	0.09	0.04		c0.04	
v/s Ratio Perm			0.10						0.02			
v/c Ratio	0.61	0.69	0.21	0.73	0.32		0.97	0.97	0.23		0.50	
Uniform Delay, d1	64.0	25.4	18.7	52.6	11.0		59.1	59.1	39.9		57.8	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	
Incremental Delay, d2	36.2	2.3	0.6	4.7	0.4		66.4	66.2	0.1		1.1	
Delay (s)	100.2	27.7	19.4	57.4	11.4		125.5	125.3	39.9		58.9	
Level of Service	F	C	B	E	B		F	F	D		E	
Approach Delay (s)		26.5			27.3			66.1			58.9	
Approach LOS		C			C			E			E	

Intersection Summary			
HCM 2000 Control Delay	37.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	25.2
Intersection Capacity Utilization	70.8%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

2048 Concept C-D (AM Peak Hour)

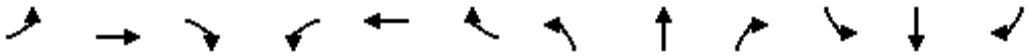
Previously Referred to as Concept J



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	205	780	0	0	295	95	500	2515	400	0	0	0
Future Volume (vph)	205	780	0	0	295	95	500	2515	400	0	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	4.0	4.0			4.0	4.0		4.0				
Lane Util. Factor	0.97	0.95			0.91	1.00		0.86				
Frt	1.00	1.00			1.00	0.85		0.98				
Flt Protected	0.95	1.00			1.00	1.00		0.99				
Satd. Flow (prot)	3278	3380			4856	1512		5968				
Flt Permitted	0.95	1.00			1.00	1.00		0.99				
Satd. Flow (perm)	3278	3380			4856	1512		5968				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	228	867	0	0	328	106	556	2794	444	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	28	0	7	0	0	0	0
Lane Group Flow (vph)	228	867	0	0	328	78	0	3787	0	0	0	0
Turn Type	Prot	NA			NA	Perm	Perm	NA				
Protected Phases	7	4			8			2				
Permitted Phases						8	2					
Actuated Green, G (s)	15.1	45.6			26.5	26.5		106.4				
Effective Green, g (s)	15.1	45.6			26.5	26.5		106.4				
Actuated g/C Ratio	0.09	0.29			0.17	0.17		0.67				
Clearance Time (s)	4.0	4.0			4.0	4.0		4.0				
Vehicle Extension (s)	2.5	2.5			2.5	2.5		2.5				
Lane Grp Cap (vph)	309	963			804	250		3968				
v/s Ratio Prot	0.07	c0.26			0.07							
v/s Ratio Perm						0.05		0.63				
v/c Ratio	0.74	0.90			0.41	0.31		0.95				
Uniform Delay, d1	70.5	55.0			59.7	58.7		24.6				
Progression Factor	0.84	0.84			0.96	0.94		0.90				
Incremental Delay, d2	7.8	10.5			1.5	3.2		6.6				
Delay (s)	67.0	56.5			58.6	58.2		28.7				
Level of Service	E	E			E	E		C				
Approach Delay (s)		58.7			58.5			28.7			0.0	
Approach LOS		E			E			C			A	

Intersection Summary			
HCM 2000 Control Delay	37.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.96		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	80.9%	ICU Level of Service	D
Analysis Period (min)	15		

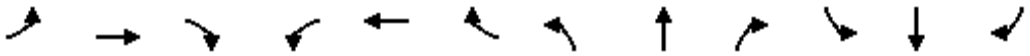
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	195	1040	0	0	0	0	0	2310	330	0	0	0
Future Volume (vph)	195	1040	0	0	0	0	0	2310	330	0	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	4.0	4.0						4.0	4.0			
Lane Util. Factor	0.81	0.81						0.86	1.00			
Frt	1.00	1.00						1.00	0.85			
Flt Protected	0.95	1.00						1.00	1.00			
Satd. Flow (prot)	1369	5758						6119	1512			
Flt Permitted	0.95	1.00						1.00	1.00			
Satd. Flow (perm)	1369	5758						6119	1512			
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	217	1156	0	0	0	0	0	2567	367	0	0	0
RTOR Reduction (vph)	4	4	0	0	0	0	0	0	3	0	0	0
Lane Group Flow (vph)	191	1174	0	0	0	0	0	2567	364	0	0	0
Turn Type	Perm	NA						NA	Perm			
Protected Phases		4						2				
Permitted Phases	4								2			
Actuated Green, G (s)	59.9	59.9						92.1	92.1			
Effective Green, g (s)	59.9	59.9						92.1	92.1			
Actuated g/C Ratio	0.37	0.37						0.58	0.58			
Clearance Time (s)	4.0	4.0						4.0	4.0			
Vehicle Extension (s)	2.5	2.5						2.5	2.5			
Lane Grp Cap (vph)	512	2155						3522	870			
v/s Ratio Prot								c0.42				
v/s Ratio Perm	0.14	0.20							0.24			
v/c Ratio	0.37	0.54						0.73	0.42			
Uniform Delay, d1	36.4	39.3						24.8	19.0			
Progression Factor	0.04	0.48						0.56	0.50			
Incremental Delay, d2	1.9	0.9						0.3	0.1			
Delay (s)	3.3	19.7						14.3	9.6			
Level of Service	A	B						B	A			
Approach Delay (s)		17.4			0.0			13.7			0.0	
Approach LOS		B			A			B			A	

Intersection Summary			
HCM 2000 Control Delay	14.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	67.6%	ICU Level of Service	C
Analysis Period (min)	15		

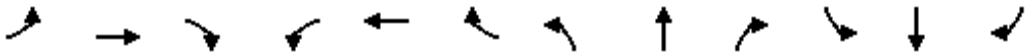
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	965	305	0	0	0	0	0	0	270	2255	0
Future Volume (vph)	0	965	305	0	0	0	0	0	0	270	2255	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)		4.0	4.0							4.0	4.0	
Lane Util. Factor		0.76	0.76							0.97	0.86	
Frt		0.98	0.85							1.00	1.00	
Flt Protected		1.00	1.00							0.95	1.00	
Satd. Flow (prot)		6648	1149							3278	6119	
Flt Permitted		1.00	1.00							0.95	1.00	
Satd. Flow (perm)		6648	1149							3278	6119	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	1072	339	0	0	0	0	0	0	300	2506	0
RTOR Reduction (vph)	0	2	4	0	0	0	0	0	0	14	0	0
Lane Group Flow (vph)	0	1202	203	0	0	0	0	0	0	287	2506	0
Turn Type		NA	Perm							Perm	NA	
Protected Phases		4									6	
Permitted Phases			4							6		
Actuated Green, G (s)		64.0	64.0							88.0	88.0	
Effective Green, g (s)		64.0	64.0							88.0	88.0	
Actuated g/C Ratio		0.40	0.40							0.55	0.55	
Clearance Time (s)		4.0	4.0							4.0	4.0	
Vehicle Extension (s)		2.5	2.5							2.5	2.5	
Lane Grp Cap (vph)		2659	459							1802	3365	
v/s Ratio Prot		c0.18									c0.41	
v/s Ratio Perm			0.18							0.09		
v/c Ratio		0.45	0.44							0.16	0.74	
Uniform Delay, d1		35.2	35.0							17.8	27.4	
Progression Factor		1.00	1.00							0.06	0.36	
Incremental Delay, d2		0.6	3.1							0.0	0.5	
Delay (s)		35.7	38.0							1.1	10.4	
Level of Service		D	D							A	B	
Approach Delay (s)		36.1			0.0			0.0			9.4	
Approach LOS		D			A			A			A	

Intersection Summary			
HCM 2000 Control Delay	18.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	79.6%	ICU Level of Service	D
Analysis Period (min)	15		

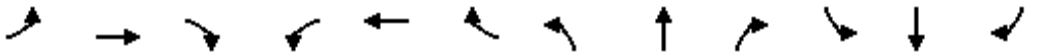
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	255	310	0	525	0	0	0	0	10	2350	265
Future Volume (vph)	0	255	310	0	525	0	0	0	0	10	2350	265
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)		4.0	4.0		4.0					4.0	4.0	
Lane Util. Factor		0.91	0.91		0.95					1.00	0.91	
Frt		0.95	0.85		1.00					1.00	0.98	
Flt Protected		1.00	1.00		1.00					0.95	1.00	
Satd. Flow (prot)		3071	1376		3380					1690	4783	
Flt Permitted		1.00	1.00		1.00					0.95	1.00	
Satd. Flow (perm)		3071	1376		3380					1690	4783	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	283	344	0	583	0	0	0	0	11	2611	294
RTOR Reduction (vph)	0	5	6	0	0	0	0	0	0	0	7	0
Lane Group Flow (vph)	0	426	190	0	583	0	0	0	0	11	2898	0
Turn Type		NA	Perm		NA					Perm	NA	
Protected Phases		4			8						6	
Permitted Phases			4							6		
Actuated Green, G (s)		32.0	32.0		32.0					120.0	120.0	
Effective Green, g (s)		32.0	32.0		32.0					120.0	120.0	
Actuated g/C Ratio		0.20	0.20		0.20					0.75	0.75	
Clearance Time (s)		4.0	4.0		4.0					4.0	4.0	
Vehicle Extension (s)		2.5	2.5		2.5					2.5	2.5	
Lane Grp Cap (vph)		614	275		676					1267	3587	
v/s Ratio Prot		0.14			c0.17						c0.61	
v/s Ratio Perm			0.14							0.01		
v/c Ratio		0.69	0.69		0.86					0.01	0.81	
Uniform Delay, d1		59.5	59.4		61.9					5.0	12.7	
Progression Factor		1.00	1.00		0.52					1.00	1.00	
Incremental Delay, d2		6.4	13.4		12.3					0.0	1.4	
Delay (s)		65.8	72.9		44.3					5.0	14.1	
Level of Service		E	E		D					A	B	
Approach Delay (s)		68.0			44.3			0.0			14.0	
Approach LOS		E			D			A			B	

Intersection Summary			
HCM 2000 Control Delay	26.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	110.4%	ICU Level of Service	H
Analysis Period (min)	15		

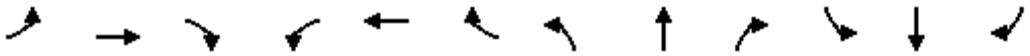
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	385	2100	0	0	0	0	0	2100	560
Future Volume (vph)	0	0	0	385	2100	0	0	0	0	0	2100	560
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)				4.0	4.0						4.0	4.0
Lane Util. Factor				0.86	0.86						0.86	1.00
Frt				1.00	1.00						1.00	0.85
Flt Protected				0.95	1.00						1.00	1.00
Satd. Flow (prot)				1453	4585						6119	1512
Flt Permitted				0.95	1.00						1.00	1.00
Satd. Flow (perm)				1453	4585						6119	1512
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	428	2333	0	0	0	0	0	2333	622
RTOR Reduction (vph)	0	0	0	3	3	0	0	0	0	0	0	4
Lane Group Flow (vph)	0	0	0	382	2373	0	0	0	0	0	2333	618
Turn Type				Perm	NA						NA	Perm
Protected Phases					8						6	
Permitted Phases				8								6
Actuated Green, G (s)				83.0	83.0						69.0	69.0
Effective Green, g (s)				83.0	83.0						69.0	69.0
Actuated g/C Ratio				0.52	0.52						0.43	0.43
Clearance Time (s)				4.0	4.0						4.0	4.0
Vehicle Extension (s)				2.5	2.5						2.5	2.5
Lane Grp Cap (vph)				753	2378						2638	652
v/s Ratio Prot											0.38	
v/s Ratio Perm				0.26	0.52							c0.41
v/c Ratio				0.51	1.00						0.88	0.95
Uniform Delay, d1				25.1	38.4						41.8	43.8
Progression Factor				0.13	0.80						0.89	0.66
Incremental Delay, d2				1.7	15.7						2.5	15.6
Delay (s)				5.0	46.6						39.8	44.3
Level of Service				A	D						D	D
Approach Delay (s)		0.0			40.8			0.0			40.8	
Approach LOS		A			D			A			D	

Intersection Summary			
HCM 2000 Control Delay	40.8	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.97		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	107.1%	ICU Level of Service	G
Analysis Period (min)	15		

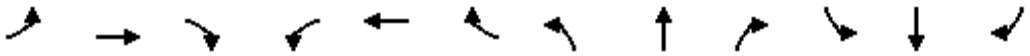
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	215	50	0	0	0	60	525	1370	15	0	0	0
Future Volume (vph)	215	50	0	0	0	60	525	1370	15	0	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	4.0	4.0				4.0	4.0	4.0				
Lane Util. Factor	0.95	0.95				1.00	1.00	0.91				
Frt	1.00	1.00				0.86	1.00	1.00				
Flt Protected	0.95	0.97				1.00	0.95	1.00				
Satd. Flow (prot)	1605	1639				1539	1690	4848				
Flt Permitted	0.95	0.97				1.00	0.95	1.00				
Satd. Flow (perm)	1605	1639				1539	1690	4848				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	239	56	0	0	0	67	583	1522	17	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	34	0	1	0	0	0	0
Lane Group Flow (vph)	146	149	0	0	0	33	583	1538	0	0	0	0
Turn Type	Split	NA				Perm	Perm	NA				
Protected Phases	4	4						2				
Permitted Phases						2	2					
Actuated Green, G (s)	72.3	72.3				79.7	79.7	79.7				
Effective Green, g (s)	72.3	72.3				79.7	79.7	79.7				
Actuated g/C Ratio	0.45	0.45				0.50	0.50	0.50				
Clearance Time (s)	4.0	4.0				4.0	4.0	4.0				
Vehicle Extension (s)	2.5	2.5				2.5	2.5	2.5				
Lane Grp Cap (vph)	725	740				766	841	2414				
v/s Ratio Prot	c0.09	0.09						0.32				
v/s Ratio Perm						0.02	c0.34					
v/c Ratio	0.20	0.20				0.04	0.69	0.64				
Uniform Delay, d1	26.4	26.4				20.6	30.8	29.5				
Progression Factor	0.86	0.86				1.00	0.21	0.22				
Incremental Delay, d2	0.5	0.6				0.0	1.5	0.3				
Delay (s)	23.3	23.3				20.6	8.1	6.7				
Level of Service	C	C				C	A	A				
Approach Delay (s)		23.3			20.6			7.1			0.0	
Approach LOS		C			C			A			A	

Intersection Summary			
HCM 2000 Control Delay	9.4	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.46		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	110.4%	ICU Level of Service	H
Analysis Period (min)	15		

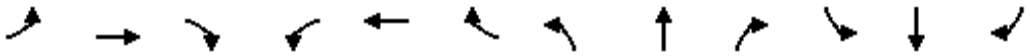
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	1785	150	700	1760	0	0	0	0
Future Volume (vph)	0	0	0	0	1785	150	700	1760	0	0	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)					4.0	4.0	4.0	4.0				
Lane Util. Factor					0.86	1.00	0.97	0.91				
Frt					1.00	0.85	1.00	1.00				
Flt Protected					1.00	1.00	0.95	1.00				
Satd. Flow (prot)					6119	1512	3278	4856				
Flt Permitted					1.00	1.00	0.95	1.00				
Satd. Flow (perm)					6119	1512	3278	4856				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	0	1983	167	778	1956	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	4	4	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	1983	163	774	1956	0	0	0	0
Turn Type					NA	Perm	Perm	NA				
Protected Phases					8			2				
Permitted Phases						8	2					
Actuated Green, G (s)					72.2	72.2	79.8	79.8				
Effective Green, g (s)					72.2	72.2	79.8	79.8				
Actuated g/C Ratio					0.45	0.45	0.50	0.50				
Clearance Time (s)					4.0	4.0	4.0	4.0				
Vehicle Extension (s)					2.5	2.5	2.5	2.5				
Lane Grp Cap (vph)					2761	682	1634	2421				
v/s Ratio Prot					c0.32			c0.40				
v/s Ratio Perm						0.11	0.24					
v/c Ratio					0.72	0.24	0.47	0.81				
Uniform Delay, d1					35.6	27.0	26.3	33.7				
Progression Factor					1.05	1.04	0.56	0.54				
Incremental Delay, d2					1.5	0.8	0.1	1.6				
Delay (s)					38.8	28.9	14.9	19.9				
Level of Service					D	C	B	B				
Approach Delay (s)		0.0			38.1			18.5			0.0	
Approach LOS		A			D			B			A	

Intersection Summary			
HCM 2000 Control Delay	27.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	103.9%	ICU Level of Service	G
Analysis Period (min)	15		

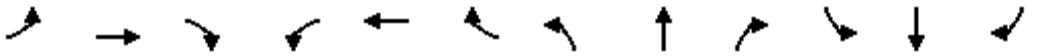
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	45	345	65	70	670	55	275	25	190	450	400	315
Future Volume (vph)	45	345	65	70	670	55	275	25	190	450	400	315
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00	0.97	1.00	1.00	1.00	0.95	
Frt	1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.93	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1690	3300		1690	3380	1512	3278	1779	1512	1690	3156	
Flt Permitted	0.27	1.00		0.41	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	487	3300		735	3380	1512	3278	1779	1512	1690	3156	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	50	383	72	78	744	61	306	28	211	500	444	350
RTOR Reduction (vph)	0	8	0	0	0	35	0	0	145	0	86	0
Lane Group Flow (vph)	50	447	0	78	744	26	306	28	66	500	708	0
Turn Type	pm+pt	NA		pm+pt	NA	Perm	Prot	NA	pm+ov	Prot	NA	
Protected Phases	1	6		5	2		7	4	5	3	8	
Permitted Phases	6			2		2			4			
Actuated Green, G (s)	71.5	66.2		76.1	68.5	68.5	18.0	6.4	14.0	55.8	44.2	
Effective Green, g (s)	71.5	66.2		76.1	68.5	68.5	18.0	6.4	14.0	55.8	44.2	
Actuated g/C Ratio	0.45	0.41		0.48	0.43	0.43	0.11	0.04	0.09	0.35	0.28	
Clearance Time (s)	6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	
Vehicle Extension (s)	1.0	5.5		1.0	5.5	5.5	1.0	2.0	1.0	1.0	2.0	
Lane Grp Cap (vph)	257	1365		394	1447	647	368	71	189	589	871	
v/s Ratio Prot	0.01	0.14		0.01	c0.22		0.09	0.02	c0.02	c0.30	c0.22	
v/s Ratio Perm	0.08			0.08		0.02			0.03			
v/c Ratio	0.19	0.33		0.20	0.51	0.04	0.83	0.39	0.35	0.85	0.81	
Uniform Delay, d1	26.2	31.8		23.5	33.5	26.6	69.5	74.9	68.7	48.2	54.0	
Progression Factor	1.00	1.00		0.93	0.96	1.00	1.00	1.00	1.00	0.68	0.46	
Incremental Delay, d2	0.1	0.6		0.1	0.8	0.1	14.1	1.3	0.4	8.6	4.4	
Delay (s)	26.4	32.5		21.8	33.0	26.7	83.6	76.2	69.1	41.2	29.3	
Level of Service	C	C		C	C	C	F	E	E	D	C	
Approach Delay (s)		31.8			31.5			77.6			33.9	
Approach LOS		C			C			E			C	

Intersection Summary			
HCM 2000 Control Delay	40.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	24.0
Intersection Capacity Utilization	77.1%	ICU Level of Service	D
Analysis Period (min)	15		

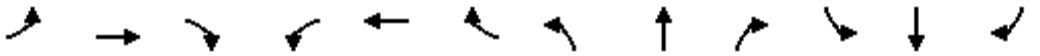
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	60	990	115	375	1495	165	170	270	300	40	275	50
Future Volume (vph)	60	990	115	375	1495	165	170	270	300	40	275	50
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	6.5	6.5	6.5	6.5	6.5	6.5	6.8	6.8	6.5	6.8	6.8	6.8
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95	0.88	0.97	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00	0.99	1.00	1.00	0.97	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3278	3380	1482	3278	3380	1491	3278	3366	2594	3278	3366	1483
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3278	3380	1482	3278	3380	1491	3278	3366	2594	3278	3366	1483
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	67	1100	128	417	1661	183	189	300	333	44	306	56
RTOR Reduction (vph)	0	0	67	0	0	77	0	0	77	0	0	49
Lane Group Flow (vph)	67	1100	61	417	1661	106	189	300	256	44	306	7
Confl. Peds. (#/hr)	1		5	5		1	5		10	10		5
Bus Blockages (#/hr)	0	0	0	0	0	0	0	2	0	0	2	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4	5	3	8	
Permitted Phases			6			2			4			8
Actuated Green, G (s)	7.3	76.4	76.4	23.5	92.6	92.6	14.5	29.3	52.8	4.2	19.0	19.0
Effective Green, g (s)	7.3	76.4	76.4	23.5	92.6	92.6	14.5	29.3	52.8	4.2	19.0	19.0
Actuated g/C Ratio	0.05	0.48	0.48	0.15	0.58	0.58	0.09	0.18	0.33	0.03	0.12	0.12
Clearance Time (s)	6.5	6.5	6.5	6.5	6.5	6.5	6.8	6.8	6.5	6.8	6.8	6.8
Vehicle Extension (s)	2.0	5.0	5.0	3.0	5.0	5.0	1.0	2.0	3.0	2.0	2.0	2.0
Lane Grp Cap (vph)	149	1613	707	481	1956	862	297	616	856	86	399	176
v/s Ratio Prot	0.02	c0.33		0.13	c0.49		c0.06	0.09	0.04	0.01	c0.09	
v/s Ratio Perm			0.04			0.07			0.05			0.00
v/c Ratio	0.45	0.68	0.09	0.87	0.85	0.12	0.64	0.49	0.30	0.51	0.77	0.04
Uniform Delay, d1	74.4	32.4	22.8	66.7	27.9	15.3	70.2	58.6	39.8	76.9	68.4	62.4
Progression Factor	1.00	1.00	1.00	0.85	0.62	0.16	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.8	2.4	0.2	10.4	3.2	0.2	3.3	0.2	0.2	2.1	7.7	0.0
Delay (s)	75.2	34.7	23.0	67.1	20.5	2.6	73.5	58.8	40.0	79.0	76.1	62.4
Level of Service	E	C	C	E	C	A	E	E	D	E	E	E
Approach Delay (s)		35.7			27.7			54.6			74.5	
Approach LOS		D			C			D			E	

Intersection Summary			
HCM 2000 Control Delay	38.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	26.6
Intersection Capacity Utilization	87.4%	ICU Level of Service	E
Analysis Period (min)	15		

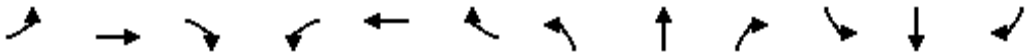
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1280	50	100	1730	0	0	0	0	260	85	345
Future Volume (vph)	0	1280	50	100	1730	0	0	0	0	260	85	345
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)		5.8	5.8	5.8	5.8					5.9	5.9	5.9
Lane Util. Factor		0.86	1.00	1.00	0.95					0.95	0.91	0.95
Frt		1.00	0.85	1.00	1.00					1.00	0.92	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	0.99	1.00
Satd. Flow (prot)		6119	1512	1690	3380					1605	1482	1436
Flt Permitted		1.00	1.00	0.95	1.00					0.95	0.99	1.00
Satd. Flow (perm)		6119	1512	1690	3380					1605	1482	1436
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	1422	56	111	1922	0	0	0	0	289	94	383
RTOR Reduction (vph)	0	0	22	0	0	0	0	0	0	0	20	48
Lane Group Flow (vph)	0	1422	34	111	1922	0	0	0	0	260	241	197
Turn Type		NA	Perm	Prot	NA					Perm	NA	Perm
Protected Phases		6		5	2						8	
Permitted Phases			6							8		8
Actuated Green, G (s)		97.5	97.5	15.1	118.4					29.9	29.9	29.9
Effective Green, g (s)		97.5	97.5	15.1	118.4					29.9	29.9	29.9
Actuated g/C Ratio		0.61	0.61	0.09	0.74					0.19	0.19	0.19
Clearance Time (s)		5.8	5.8	5.8	5.8					5.9	5.9	5.9
Vehicle Extension (s)		3.8	3.8	3.0	3.4					1.5	1.5	1.5
Lane Grp Cap (vph)		3728	921	159	2501					299	276	268
v/s Ratio Prot		0.23		0.07	c0.57							
v/s Ratio Perm			0.02							0.16	0.16	0.14
v/c Ratio		0.38	0.04	0.70	0.77					0.87	0.87	0.74
Uniform Delay, d1		15.9	12.5	70.2	12.5					63.2	63.2	61.3
Progression Factor		0.29	0.03	1.47	0.63					0.73	0.70	0.66
Incremental Delay, d2		0.2	0.1	10.7	2.0					18.3	20.5	7.0
Delay (s)		4.9	0.5	114.1	9.9					64.4	64.9	47.3
Level of Service		A	A	F	A					E	E	D
Approach Delay (s)		4.8			15.5			0.0			59.1	
Approach LOS		A			B			A			E	

Intersection Summary					
HCM 2000 Control Delay	19.6	HCM 2000 Level of Service	B		
HCM 2000 Volume to Capacity ratio	0.82				
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	17.5		
Intersection Capacity Utilization	73.5%	ICU Level of Service	D		
Analysis Period (min)	15				

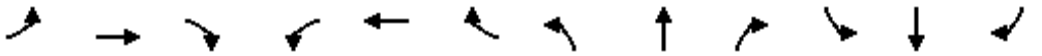
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	275	1265	0	0	1480	405	350	115	405	0	0	0
Future Volume (vph)	275	1265	0	0	1480	405	350	115	405	0	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	5.6	5.6			5.6	5.6	5.9	5.9	5.9			
Lane Util. Factor	0.97	0.95			0.91	1.00	0.95	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.98	1.00			
Satd. Flow (prot)	3278	3380			4856	1512	1605	1648	1512			
Flt Permitted	0.95	1.00			1.00	1.00	0.95	0.98	1.00			
Satd. Flow (perm)	3278	3380			4856	1512	1605	1648	1512			
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	306	1406	0	0	1644	450	389	128	450	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	187	0	0	234	0	0	0
Lane Group Flow (vph)	306	1406	0	0	1644	263	257	260	216	0	0	0
Turn Type	Prot	NA			NA	Perm	Perm	NA	custom			
Protected Phases	1	6			2			4				
Permitted Phases						2	4		7 5			
Actuated Green, G (s)	18.4	107.6			93.5	93.5	31.0	31.0	43.8			
Effective Green, g (s)	18.4	107.6			93.5	93.5	31.0	31.0	43.8			
Actuated g/C Ratio	0.11	0.67			0.58	0.58	0.19	0.19	0.27			
Clearance Time (s)	5.6	5.6			5.6	5.6	5.9	5.9				
Vehicle Extension (s)	1.5	3.3			3.6	3.6	2.0	2.0				
Lane Grp Cap (vph)	376	2273			2837	883	310	319	413			
v/s Ratio Prot	c0.09	c0.42			0.34							
v/s Ratio Perm						0.17	c0.16	0.16	c0.14			
v/c Ratio	0.81	0.62			0.58	0.30	0.83	0.82	0.52			
Uniform Delay, d1	69.1	14.7			20.9	16.7	62.0	61.8	49.3			
Progression Factor	0.72	0.62			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	11.4	1.2			0.9	0.9	15.8	14.0	0.6			
Delay (s)	61.0	10.2			21.8	17.6	77.7	75.8	49.8			
Level of Service	E	B			C	B	E	E	D			
Approach Delay (s)		19.3			20.9			64.2			0.0	
Approach LOS		B			C			E			A	

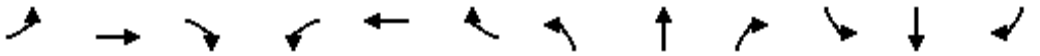
Intersection Summary			
HCM 2000 Control Delay	29.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	20.1
Intersection Capacity Utilization	73.5%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



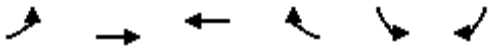
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	85	1795	15	35	10	0	0	30	70
Future Volume (vph)	0	0	0	85	1795	15	35	10	0	0	30	70
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)				5.6	5.6		5.5	5.5			5.5	5.5
Lane Util. Factor				1.00	0.86		1.00	1.00			1.00	1.00
Frpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	0.97
Flpb, ped/bikes				1.00	1.00		0.99	1.00			1.00	1.00
Frt				1.00	1.00		1.00	1.00			1.00	0.85
Flt Protected				0.95	1.00		0.95	1.00			1.00	1.00
Satd. Flow (prot)				1690	6110		1667	1779			1779	1473
Flt Permitted				0.95	1.00		0.74	1.00			1.00	1.00
Satd. Flow (perm)				1690	6110		1291	1779			1779	1473
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	94	1994	17	39	11	0	0	33	78
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	21
Lane Group Flow (vph)	0	0	0	94	2011	0	39	11	0	0	33	57
Confl. Peds. (#/hr)	5					5	6					6
Turn Type				Perm	NA		Perm	NA			NA	Perm
Protected Phases					2			4			8	
Permitted Phases				2			4					8
Actuated Green, G (s)				130.9	130.9		18.0	18.0			18.0	18.0
Effective Green, g (s)				130.9	130.9		18.0	18.0			18.0	18.0
Actuated g/C Ratio				0.82	0.82		0.11	0.11			0.11	0.11
Clearance Time (s)				5.6	5.6		5.5	5.5			5.5	5.5
Vehicle Extension (s)				2.5	2.5		2.0	2.0			2.8	2.8
Lane Grp Cap (vph)				1382	4998		145	200			200	165
v/s Ratio Prot					c0.33			0.01			0.02	
v/s Ratio Perm				0.06			0.03					c0.04
v/c Ratio				0.07	0.40		0.27	0.06			0.17	0.34
Uniform Delay, d1				2.8	3.9		65.0	63.4			64.2	65.5
Progression Factor				1.00	1.00		0.63	0.62			1.00	1.00
Incremental Delay, d2				0.1	0.2		0.4	0.0			0.3	1.1
Delay (s)				2.9	4.2		41.1	39.5			64.6	66.7
Level of Service				A	A		D	D			E	E
Approach Delay (s)		0.0			4.1			40.8			66.0	
Approach LOS		A			A			D			E	

Intersection Summary			
HCM 2000 Control Delay	8.0	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.39		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	11.1
Intersection Capacity Utilization	71.1%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



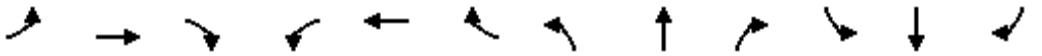
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	1175	100	0	0	0	0	60	50	40	75	0
Future Volume (vph)	15	1175	100	0	0	0	0	60	50	40	75	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)		5.8	5.8					5.7		5.7	5.7	
Lane Util. Factor		0.91	1.00					0.95		1.00	1.00	
Frpb, ped/bikes		1.00	0.95					1.00		1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00		1.00	1.00	
Frt		1.00	0.85					0.93		1.00	1.00	
Flt Protected		1.00	1.00					1.00		0.95	1.00	
Satd. Flow (prot)		4853	1441					3149		1690	1779	
Flt Permitted		1.00	1.00					1.00		0.67	1.00	
Satd. Flow (perm)		4853	1441					3149		1199	1779	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	17	1306	111	0	0	0	0	67	56	44	83	0
RTOR Reduction (vph)	0	0	20	0	0	0	0	50	0	0	0	0
Lane Group Flow (vph)	0	1323	91	0	0	0	0	73	0	44	83	0
Confl. Peds. (#/hr)			9	9			15					15
Turn Type	Perm	NA	Perm					NA		Perm	NA	
Protected Phases		6						4			8	
Permitted Phases	6		6							8		
Actuated Green, G (s)		130.5	130.5					18.0		18.0	18.0	
Effective Green, g (s)		130.5	130.5					18.0		18.0	18.0	
Actuated g/C Ratio		0.82	0.82					0.11		0.11	0.11	
Clearance Time (s)		5.8	5.8					5.7		5.7	5.7	
Vehicle Extension (s)		2.0	2.0					2.0		2.0	2.0	
Lane Grp Cap (vph)		3958	1175					354		134	200	
v/s Ratio Prot								0.02			c0.05	
v/s Ratio Perm		0.27	0.06							0.04		
v/c Ratio		0.33	0.08					0.21		0.33	0.41	
Uniform Delay, d1		3.7	2.9					64.5		65.4	66.1	
Progression Factor		0.75	0.26					1.00		0.89	0.90	
Incremental Delay, d2		0.2	0.1					0.1		0.5	0.5	
Delay (s)		3.0	0.9					64.6		58.8	59.7	
Level of Service		A	A					E		E	E	
Approach Delay (s)		2.8			0.0			64.6			59.4	
Approach LOS		A			A			E			E	

Intersection Summary			
HCM 2000 Control Delay	11.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.34		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	11.5
Intersection Capacity Utilization	71.1%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



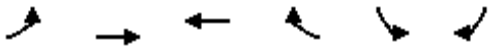
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	75	860	295	35	85	35
Future Volume (vph)	75	860	295	35	85	35
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850
Total Lost time (s)	5.5	5.5	5.5		5.5	5.5
Lane Util. Factor	1.00	0.95	0.95		1.00	1.00
Frpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Frt	1.00	1.00	0.98		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1685	3380	3315		1690	1512
Flt Permitted	0.51	1.00	1.00		0.95	1.00
Satd. Flow (perm)	906	3380	3315		1690	1512
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	83	956	328	39	94	39
RTOR Reduction (vph)	0	0	2	0	0	36
Lane Group Flow (vph)	83	956	365	0	94	3
Confl. Peds. (#/hr)	3			3		
Turn Type	pm+pt	NA	NA		Prot	Perm
Protected Phases	1	6	2		3	
Permitted Phases	6					7
Actuated Green, G (s)	135.7	135.7	124.9		13.3	13.3
Effective Green, g (s)	135.7	135.7	124.9		13.3	13.3
Actuated g/C Ratio	0.85	0.85	0.78		0.08	0.08
Clearance Time (s)	5.5	5.5	5.5		5.5	5.5
Vehicle Extension (s)	1.0	6.2	6.2		2.0	2.0
Lane Grp Cap (vph)	794	2866	2587		140	125
v/s Ratio Prot	0.00	c0.28	0.11		c0.06	
v/s Ratio Perm	0.09					0.00
v/c Ratio	0.10	0.33	0.14		0.67	0.03
Uniform Delay, d1	2.0	2.6	4.3		71.2	67.4
Progression Factor	0.47	0.38	1.00		1.00	1.00
Incremental Delay, d2	0.0	0.1	0.1		9.5	0.0
Delay (s)	1.0	1.1	4.4		80.8	67.4
Level of Service	A	A	A		F	E
Approach Delay (s)		1.1	4.4		76.8	
Approach LOS		A	A		E	

Intersection Summary			
HCM 2000 Control Delay	8.4	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.39		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	19.5
Intersection Capacity Utilization	43.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



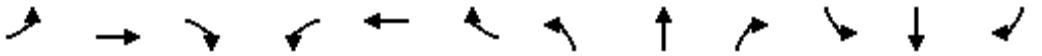
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	165	770	50	320	705	270	140	1545	325	160	795	260
Future Volume (vph)	165	770	50	320	705	270	140	1545	325	160	795	260
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.91	1.00	0.97	0.91	1.00
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.98	1.00	1.00	0.98	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3278	3380	1512	3278	3380	1481	3278	4856	1480	3278	4856	1488
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3278	3380	1512	3278	3380	1481	3278	4856	1480	3278	4856	1488
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	183	856	56	356	783	300	156	1717	361	178	883	289
RTOR Reduction (vph)	0	0	40	0	0	122	0	0	184	0	0	146
Lane Group Flow (vph)	183	856	16	356	783	178	156	1717	177	178	883	143
Confl. Peds. (#/hr)	5					5	3		7	7		3
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases			6			2			4			8
Actuated Green, G (s)	11.2	45.6	45.6	17.6	52.0	52.0	11.2	57.6	57.6	9.6	56.0	56.0
Effective Green, g (s)	11.2	45.6	45.6	17.6	52.0	52.0	11.2	57.6	57.6	9.6	56.0	56.0
Actuated g/C Ratio	0.07	0.29	0.29	0.11	0.32	0.32	0.07	0.36	0.36	0.06	0.35	0.35
Clearance Time (s)	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4
Vehicle Extension (s)	2.0	5.0	5.0	2.0	5.0	5.0	2.0	5.0	5.0	2.0	5.0	5.0
Lane Grp Cap (vph)	229	963	430	360	1098	481	229	1748	532	196	1699	520
v/s Ratio Prot	0.06	c0.25		c0.11	0.23		0.05	c0.35		c0.05	0.18	
v/s Ratio Perm			0.01			0.12			0.12			0.10
v/c Ratio	0.80	0.89	0.04	0.99	0.71	0.37	0.68	0.98	0.33	0.91	0.52	0.27
Uniform Delay, d1	73.3	54.8	41.3	71.1	47.4	41.4	72.7	50.7	37.2	74.8	41.3	37.4
Progression Factor	1.00	1.00	1.00	0.90	0.85	0.60	1.00	1.00	1.00	1.15	1.23	1.97
Incremental Delay, d2	16.4	12.0	0.2	38.4	3.1	1.7	6.5	17.5	0.8	34.7	0.5	0.5
Delay (s)	89.7	66.8	41.5	102.3	43.3	26.4	79.1	68.2	38.0	120.7	51.3	74.0
Level of Service	F	E	D	F	D	C	E	E	D	F	D	E
Approach Delay (s)		69.4			54.4			64.1			65.3	
Approach LOS		E			D			E			E	

Intersection Summary			
HCM 2000 Control Delay	63.0	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	29.6
Intersection Capacity Utilization	92.4%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



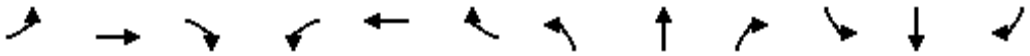
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	130	1140	1545	85	55	90
Future Volume (vph)	130	1140	1545	85	55	90
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850
Total Lost time (s)	6.3	6.3	6.3	6.3	6.3	6.3
Lane Util. Factor	1.00	0.95	0.95	1.00	0.97	1.00
Frpb, ped/bikes	1.00	1.00	1.00	0.98	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1690	3380	3380	1488	3278	1496
Flt Permitted	0.10	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	182	3380	3380	1488	3278	1496
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	144	1267	1717	94	61	100
RTOR Reduction (vph)	0	0	0	20	0	39
Lane Group Flow (vph)	144	1267	1717	74	61	61
Confl. Peds. (#/hr)	2			2		4
Turn Type	pm+pt	NA	NA	Perm	Prot	pm+ov
Protected Phases	1	6	2		3	1
Permitted Phases	6			2		3
Actuated Green, G (s)	140.4	140.4	125.4	125.4	7.0	15.7
Effective Green, g (s)	140.4	140.4	125.4	125.4	7.0	15.7
Actuated g/C Ratio	0.88	0.88	0.78	0.78	0.04	0.10
Clearance Time (s)	6.3	6.3	6.3	6.3	6.3	6.3
Vehicle Extension (s)	3.0	4.0	4.0	4.0	3.0	3.0
Lane Grp Cap (vph)	241	2965	2649	1166	143	205
v/s Ratio Prot	c0.03	0.37	c0.51		0.02	c0.02
v/s Ratio Perm	0.49			0.05		0.02
v/c Ratio	0.60	0.43	0.65	0.06	0.43	0.30
Uniform Delay, d1	10.4	1.9	7.6	3.9	74.5	67.0
Progression Factor	4.37	0.19	1.00	1.00	1.00	1.00
Incremental Delay, d2	2.4	0.3	1.2	0.1	2.0	0.8
Delay (s)	47.9	0.6	8.8	4.0	76.6	67.9
Level of Service	D	A	A	A	E	E
Approach Delay (s)		5.5	8.6		71.2	
Approach LOS		A	A		E	

Intersection Summary			
HCM 2000 Control Delay	10.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	18.9
Intersection Capacity Utilization	72.8%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	315	155	90	185	0	0	0	0	225	1265	140
Future Volume (vph)	0	315	155	90	185	0	0	0	0	225	1265	140
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)		5.4		5.4	5.4						5.8	5.8
Lane Util. Factor		0.95		1.00	0.95						0.91	1.00
Frpb, ped/bikes		1.00		1.00	1.00						1.00	0.99
Flpb, ped/bikes		1.00		1.00	1.00						1.00	1.00
Frt		0.95		1.00	1.00						1.00	0.85
Flt Protected		1.00		0.95	1.00						0.99	1.00
Satd. Flow (prot)		3213		1690	3380						4820	1491
Flt Permitted		1.00		0.20	1.00						0.99	1.00
Satd. Flow (perm)		3213		349	3380						4820	1491
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	350	172	100	206	0	0	0	0	250	1406	156
RTOR Reduction (vph)	0	81	0	0	0	0	0	0	0	0	0	81
Lane Group Flow (vph)	0	441	0	100	206	0	0	0	0	0	1656	75
Confl. Peds. (#/hr)	2					2	2					2
Turn Type		NA		pm+pt	NA					Perm	NA	Perm
Protected Phases		8		7	4						6	
Permitted Phases				4						6		6
Actuated Green, G (s)		15.0		30.5	30.5						38.3	38.3
Effective Green, g (s)		15.0		30.5	30.5						38.3	38.3
Actuated g/C Ratio		0.19		0.38	0.38						0.48	0.48
Clearance Time (s)		5.4		5.4	5.4						5.8	5.8
Vehicle Extension (s)		2.0		1.5	2.0						2.5	2.5
Lane Grp Cap (vph)		602		302	1288						2307	713
v/s Ratio Prot		c0.14		c0.04	0.06							
v/s Ratio Perm				0.08							0.34	0.05
v/c Ratio		0.73		0.33	0.16						0.72	0.10
Uniform Delay, d1		30.6		17.3	16.3						16.6	11.4
Progression Factor		1.00		0.94	0.94						1.00	1.00
Incremental Delay, d2		4.0		0.2	0.0						2.0	0.3
Delay (s)		34.6		16.4	15.3						18.5	11.7
Level of Service		C		B	B						B	B
Approach Delay (s)		34.6			15.6			0.0			17.9	
Approach LOS		C			B			A			B	

Intersection Summary			
HCM 2000 Control Delay	21.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	16.6
Intersection Capacity Utilization	71.5%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	110	425	0	0	205	335	105	1540	180	0	0	0
Future Volume (vph)	110	425	0	0	205	335	105	1540	180	0	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	5.7	5.7			5.7			5.8	5.8			
Lane Util. Factor	1.00	0.95			0.95			0.91	1.00			
Frpb, ped/bikes	1.00	1.00			0.99			1.00	0.98			
Flpb, ped/bikes	1.00	1.00			1.00			1.00	1.00			
Frt	1.00	1.00			0.91			1.00	0.85			
Flt Protected	0.95	1.00			1.00			1.00	1.00			
Satd. Flow (prot)	1689	3380			3032			4841	1486			
Flt Permitted	0.18	1.00			1.00			1.00	1.00			
Satd. Flow (perm)	328	3380			3032			4841	1486			
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	122	472	0	0	228	372	117	1711	200	0	0	0
RTOR Reduction (vph)	0	0	0	0	76	0	0	0	108	0	0	0
Lane Group Flow (vph)	122	472	0	0	524	0	0	1828	93	0	0	0
Confl. Peds. (#/hr)	6		1	1		6			5	5		
Turn Type	pm+pt	NA			NA		Perm	NA	Perm			
Protected Phases	3	8			4			2				
Permitted Phases	8						2		2			
Actuated Green, G (s)	31.5	31.5			17.7			37.0	37.0			
Effective Green, g (s)	31.5	31.5			17.7			37.0	37.0			
Actuated g/C Ratio	0.39	0.39			0.22			0.46	0.46			
Clearance Time (s)	5.7	5.7			5.7			5.8	5.8			
Vehicle Extension (s)	1.0	2.0			2.0			2.5	2.5			
Lane Grp Cap (vph)	266	1330			670			2238	687			
v/s Ratio Prot	0.05	c0.14			c0.17							
v/s Ratio Perm	0.13							0.38	0.06			
v/c Ratio	0.46	0.35			0.90dr			0.82	0.13			
Uniform Delay, d1	17.2	17.1			29.3			18.6	12.3			
Progression Factor	0.91	0.81			0.87			0.32	0.02			
Incremental Delay, d2	0.3	0.0			5.4			1.6	0.2			
Delay (s)	16.0	13.9			30.9			7.5	0.4			
Level of Service	B	B			C			A	A			
Approach Delay (s)		14.4			30.9			6.8			0.0	
Approach LOS		B			C			A			A	

Intersection Summary			
HCM 2000 Control Delay	12.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	17.2
Intersection Capacity Utilization	71.5%	ICU Level of Service	C
Analysis Period (min)	15		

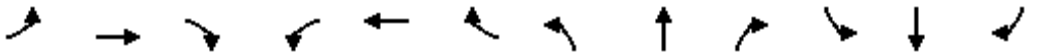
dr Defacto Right Lane. Recode with 1 though lane as a right lane.

c Critical Lane Group



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	505	25	80	495	40	50
Future Volume (vph)	505	25	80	495	40	50
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850
Total Lost time (s)	5.5			5.5	5.3	5.3
Lane Util. Factor	0.95			0.95	1.00	1.00
Frpb, ped/bikes	1.00			1.00	1.00	0.98
Flpb, ped/bikes	1.00			1.00	1.00	1.00
Frt	0.99			1.00	1.00	0.85
Flt Protected	1.00			0.99	0.95	1.00
Satd. Flow (prot)	3356			3356	1690	1487
Flt Permitted	1.00			0.79	0.95	1.00
Satd. Flow (perm)	3356			2676	1690	1487
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	561	28	89	550	44	56
RTOR Reduction (vph)	2	0	0	0	0	53
Lane Group Flow (vph)	587	0	0	639	44	4
Confl. Peds. (#/hr)						1
Turn Type	NA		Perm	NA	Prot	Perm
Protected Phases	6			2	7	
Permitted Phases			2			3
Actuated Green, G (s)	64.2			64.2	5.0	5.0
Effective Green, g (s)	64.2			64.2	5.0	5.0
Actuated g/C Ratio	0.80			0.80	0.06	0.06
Clearance Time (s)	5.5			5.5	5.3	5.3
Vehicle Extension (s)	2.0			2.0	2.0	0.2
Lane Grp Cap (vph)	2693			2147	105	92
v/s Ratio Prot	0.18				c0.03	
v/s Ratio Perm				c0.24		0.00
v/c Ratio	0.22			0.30	0.42	0.04
Uniform Delay, d1	1.9			2.0	36.1	35.2
Progression Factor	0.51			1.00	1.02	1.29
Incremental Delay, d2	0.2			0.4	0.9	0.1
Delay (s)	1.1			2.4	37.7	45.6
Level of Service	A			A	D	D
Approach Delay (s)	1.1			2.4	42.1	
Approach LOS	A			A	D	

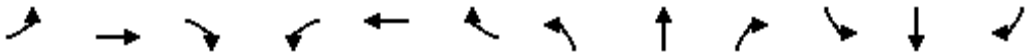
Intersection Summary			
HCM 2000 Control Delay	4.8	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.33		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	16.1
Intersection Capacity Utilization	51.8%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	505	1685	0	0	0	0	0	1355	115
Future Volume (vph)	0	0	0	505	1685	0	0	0	0	0	1355	115
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)				5.8	5.8						5.8	5.8
Lane Util. Factor				0.81	0.81						0.86	0.86
Frpb, ped/bikes				1.00	1.00						1.00	0.99
Flpb, ped/bikes				1.00	1.00						1.00	1.00
Frt				1.00	1.00						1.00	0.85
Flt Protected				0.95	1.00						1.00	1.00
Satd. Flow (prot)				1366	5750						4583	1283
Flt Permitted				0.95	1.00						1.00	1.00
Satd. Flow (perm)				1366	5750						4583	1283
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	561	1872	0	0	0	0	0	1506	128
RTOR Reduction (vph)	0	0	0	21	21	0	0	0	0	0	1	22
Lane Group Flow (vph)	0	0	0	450	1941	0	0	0	0	0	1518	93
Confl. Peds. (#/hr)	5		2	2		5	1		4	4		1
Turn Type				Perm	NA						NA	Perm
Protected Phases					1						2	
Permitted Phases				1								2
Actuated Green, G (s)				35.2	35.2						33.2	33.2
Effective Green, g (s)				35.2	35.2						33.2	33.2
Actuated g/C Ratio				0.44	0.44						0.42	0.42
Clearance Time (s)				5.8	5.8						5.8	5.8
Lane Grp Cap (vph)				601	2530						1901	532
v/s Ratio Prot											c0.33	
v/s Ratio Perm				0.33	0.34							0.07
v/c Ratio				0.75	0.77						0.80	0.17
Uniform Delay, d1				18.7	18.9						20.5	14.8
Progression Factor				0.34	0.36						0.42	0.14
Incremental Delay, d2				4.4	1.2						2.6	0.5
Delay (s)				10.8	8.0						11.3	2.6
Level of Service				B	A						B	A
Approach Delay (s)		0.0			8.6			0.0			10.7	
Approach LOS		A			A			A			B	

Intersection Summary			
HCM 2000 Control Delay	9.4	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	11.6
Intersection Capacity Utilization	70.1%	ICU Level of Service	C
Analysis Period (min)	15		

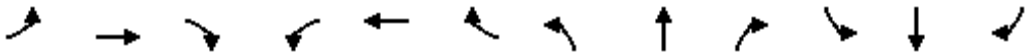
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	1865	335	375	1650	0	0	0	0
Future Volume (vph)	0	0	0	0	1865	335	375	1650	0	0	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)					6.0	6.0	6.0	6.0				
Lane Util. Factor					0.81	0.81	0.86	0.86				
Frpb, ped/bikes					1.00	0.98	1.00	1.00				
Flpb, ped/bikes					1.00	1.00	1.00	1.00				
Frt					1.00	0.85	1.00	1.00				
Flt Protected					1.00	1.00	0.95	1.00				
Satd. Flow (prot)					5746	1199	1453	4584				
Flt Permitted					1.00	1.00	0.95	1.00				
Satd. Flow (perm)					5746	1199	1453	4584				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	0	2072	372	417	1833	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	2	24	23	23	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	2107	311	352	1852	0	0	0	0
Confl. Peds. (#/hr)	9		2	2		9			12	12		
Turn Type					NA	Perm	Perm	NA				
Protected Phases					1			2				
Permitted Phases						1	2					
Actuated Green, G (s)					33.0	33.0	35.0	35.0				
Effective Green, g (s)					33.0	33.0	35.0	35.0				
Actuated g/C Ratio					0.41	0.41	0.44	0.44				
Clearance Time (s)					6.0	6.0	6.0	6.0				
Lane Grp Cap (vph)					2370	494	635	2005				
v/s Ratio Prot					c0.37							
v/s Ratio Perm						0.26	0.24	0.40				
v/c Ratio					0.89	0.63	0.55	0.92				
Uniform Delay, d1					21.8	18.6	16.7	21.2				
Progression Factor					0.68	0.54	0.47	0.45				
Incremental Delay, d2					4.4	4.8	2.3	6.1				
Delay (s)					19.3	14.9	10.1	15.7				
Level of Service					B	B	B	B				
Approach Delay (s)		0.0			18.7			14.8			0.0	
Approach LOS		A			B			B			A	

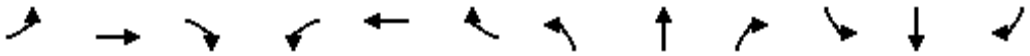
Intersection Summary			
HCM 2000 Control Delay	16.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.91		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	70.1%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	215	2160	135	60	95	0	0	15	5
Future Volume (vph)	0	0	0	215	2160	135	60	95	0	0	15	5
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)					5.4		5.3	5.3			5.3	
Lane Util. Factor					0.86		0.97	1.00			1.00	
Frpb, ped/bikes					1.00		1.00	1.00			1.00	
Flpb, ped/bikes					1.00		1.00	1.00			1.00	
Frt					0.99		1.00	1.00			0.96	
Flt Protected					1.00		0.95	1.00			1.00	
Satd. Flow (prot)					6035		3278	1779			1716	
Flt Permitted					1.00		0.95	1.00			1.00	
Satd. Flow (perm)					6035		3278	1779			1716	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	239	2400	150	67	106	0	0	17	6
RTOR Reduction (vph)	0	0	0	0	6	0	0	0	0	0	6	0
Lane Group Flow (vph)	0	0	0	0	2783	0	67	106	0	0	17	0
Confl. Peds. (#/hr)	2		2	2		2			1	1		
Turn Type				Perm	NA		Prot	NA			NA	
Protected Phases					2		7	4			8	
Permitted Phases				2								
Actuated Green, G (s)					53.6		7.6	15.7			2.8	
Effective Green, g (s)					53.6		7.6	15.7			2.8	
Actuated g/C Ratio					0.67		0.09	0.20			0.03	
Clearance Time (s)					5.4		5.3	5.3			5.3	
Vehicle Extension (s)					3.7		1.5	1.5			1.5	
Lane Grp Cap (vph)					4043		311	349			60	
v/s Ratio Prot							0.02	c0.06			0.01	
v/s Ratio Perm					0.46							
v/c Ratio					0.69		0.22	0.30			0.29	
Uniform Delay, d1					8.1		33.4	27.5			37.6	
Progression Factor					1.00		0.70	0.63			1.23	
Incremental Delay, d2					1.0		0.1	0.2			0.9	
Delay (s)					9.1		23.7	17.4			47.3	
Level of Service					A		C	B			D	
Approach Delay (s)		0.0			9.1			19.8			47.3	
Approach LOS		A			A			B			D	

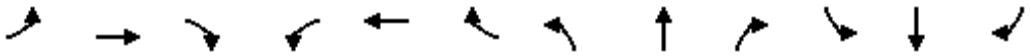
Intersection Summary			
HCM 2000 Control Delay	10.0	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	64.5%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1635	155	0	0	0	0	0	0	265	1570	0
Future Volume (vph)	0	1635	155	0	0	0	0	0	0	265	1570	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)		5.9	5.9							5.9	5.9	
Lane Util. Factor		0.81	0.81							0.86	0.86	
Frpb, ped/bikes		1.00	0.98							1.00	1.00	
Flpb, ped/bikes		1.00	1.00							1.00	1.00	
Frt		1.00	0.85							1.00	1.00	
Flt Protected		1.00	1.00							0.95	1.00	
Satd. Flow (prot)		5755	1205							1452	4586	
Flt Permitted		1.00	1.00							0.95	1.00	
Satd. Flow (perm)		5755	1205							1452	4586	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	1817	172	0	0	0	0	0	0	294	1744	0
RTOR Reduction (vph)	0	1	25	0	0	0	0	0	0	21	21	0
Lane Group Flow (vph)	0	1833	130	0	0	0	0	0	0	244	1752	0
Confl. Peds. (#/hr)			4	4			3		1	1		3
Turn Type		NA	Perm							Perm	NA	
Protected Phases		1									2	
Permitted Phases			1							2		
Actuated Green, G (s)		30.1	30.1							38.1	38.1	
Effective Green, g (s)		30.1	30.1							38.1	38.1	
Actuated g/C Ratio		0.38	0.38							0.48	0.48	
Clearance Time (s)		5.9	5.9							5.9	5.9	
Lane Grp Cap (vph)		2165	453							691	2184	
v/s Ratio Prot		c0.32										
v/s Ratio Perm			0.11							0.17	0.38	
v/c Ratio		0.85	0.29							0.35	0.80	
Uniform Delay, d1		22.8	17.4							13.2	17.8	
Progression Factor		1.00	1.00							0.54	0.49	
Incremental Delay, d2		4.3	1.6							0.8	1.9	
Delay (s)		27.2	19.0							8.0	10.6	
Level of Service		C	B							A	B	
Approach Delay (s)		26.5			0.0			0.0			10.3	
Approach LOS		C			A			A			B	

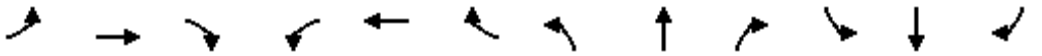
Intersection Summary				
HCM 2000 Control Delay	18.3	HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio	0.82			
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	11.8	
Intersection Capacity Utilization	63.8%	ICU Level of Service	B	
Analysis Period (min)	15			

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	505	1355	0	0	0	0	0	1505	85	0	0	0
Future Volume (vph)	505	1355	0	0	0	0	0	1505	85	0	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	5.6	5.6						6.0	6.0			
Lane Util. Factor	0.81	0.81						0.91	0.88			
Frpb, ped/bikes	1.00	1.00						1.00	0.98			
Flpb, ped/bikes	1.00	1.00						1.00	1.00			
Frt	1.00	1.00						1.00	0.85			
Flt Protected	0.95	1.00						1.00	1.00			
Satd. Flow (prot)	1365	5734						4856	2617			
Flt Permitted	0.95	1.00						1.00	1.00			
Satd. Flow (perm)	1365	5734						4856	2617			
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	561	1506	0	0	0	0	0	1672	94	0	0	0
RTOR Reduction (vph)	49	49	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	349	1620	0	0	0	0	0	1672	94	0	0	0
Confl. Peds. (#/hr)	3		6	6		3			16	16		
Turn Type	Perm	NA						NA	custom			
Protected Phases		8						2				
Permitted Phases	8								5			
Actuated Green, G (s)	32.4	32.4						36.0	80.0			
Effective Green, g (s)	32.4	32.4						36.0	80.0			
Actuated g/C Ratio	0.40	0.40						0.45	1.00			
Clearance Time (s)	5.6	5.6						6.0	6.0			
Vehicle Extension (s)	5.0	5.0						5.0	0.2			
Lane Grp Cap (vph)	552	2322						2185	2617			
v/s Ratio Prot								c0.34				
v/s Ratio Perm	0.26	0.28							0.04			
v/c Ratio	0.63	0.70						0.77	0.04			
Uniform Delay, d1	19.0	19.7						18.5	0.0			
Progression Factor	0.35	0.40						0.94	1.00			
Incremental Delay, d2	3.3	1.1						1.5	0.0			
Delay (s)	9.9	9.0						18.8	0.0			
Level of Service	A	A						B	A			
Approach Delay (s)		9.2			0.0			17.8			0.0	
Approach LOS		A			A			B			A	

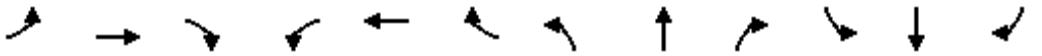
Intersection Summary			
HCM 2000 Control Delay	13.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	1.11		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	14.6
Intersection Capacity Utilization	70.1%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	65	1355	115	0	0	0	0	95	50	45	160	0
Future Volume (vph)	65	1355	115	0	0	0	0	95	50	45	160	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	5.7	5.7						5.7	5.7	5.7	5.7	
Lane Util. Factor	1.00	0.86						0.95	1.00	1.00	0.95	
Frpb, ped/bikes	1.00	1.00						1.00	1.00	1.00	1.00	
Flpb, ped/bikes	1.00	1.00						1.00	1.00	1.00	1.00	
Frt	1.00	0.99						1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00						1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1687	6039						3366	1512	1690	3366	
Flt Permitted	0.95	1.00						1.00	1.00	0.44	1.00	
Satd. Flow (perm)	1687	6039						3366	1512	776	3366	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	72	1506	128	0	0	0	0	106	56	50	178	0
RTOR Reduction (vph)	0	11	0	0	0	0	0	0	49	0	0	0
Lane Group Flow (vph)	72	1623	0	0	0	0	0	106	7	50	178	0
Confl. Peds. (#/hr)	2		7	7		2	4					4
Bus Blockages (#/hr)	0	0	0	0	0	0	0	2	0	0	2	0
Turn Type	Perm	NA						NA	Perm	pm+pt	NA	
Protected Phases		6						4		3	8	
Permitted Phases	6								4	8		
Actuated Green, G (s)	49.7	49.7						10.0	10.0	18.9	18.9	
Effective Green, g (s)	49.7	49.7						10.0	10.0	18.9	18.9	
Actuated g/C Ratio	0.62	0.62						0.12	0.12	0.24	0.24	
Clearance Time (s)	5.7	5.7						5.7	5.7	5.7	5.7	
Vehicle Extension (s)	4.8	4.8						1.7	1.7	1.0	1.7	
Lane Grp Cap (vph)	1048	3751						420	189	219	795	
v/s Ratio Prot		c0.27						0.03		0.01	c0.05	
v/s Ratio Perm	0.04								0.00	c0.04		
v/c Ratio	0.07	0.43						0.25	0.04	0.23	0.22	
Uniform Delay, d1	6.0	7.8						31.6	30.8	24.3	24.6	
Progression Factor	0.13	0.09						1.00	1.00	0.66	0.71	
Incremental Delay, d2	0.1	0.3						0.1	0.0	0.2	0.0	
Delay (s)	0.9	1.0						31.7	30.8	16.1	17.6	
Level of Service	A	A						C	C	B	B	
Approach Delay (s)		1.0			0.0			31.4			17.3	
Approach LOS		A			A			C			B	

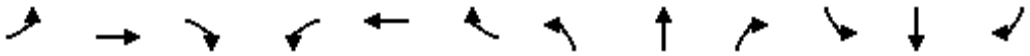
Intersection Summary			
HCM 2000 Control Delay	5.1	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	17.1
Intersection Capacity Utilization	64.5%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



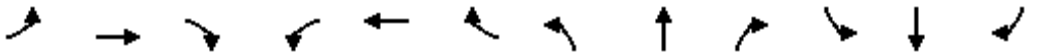
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	310	35	185	500	0	0	0	0	200	1245	105
Future Volume (vph)	0	310	35	185	500	0	0	0	0	200	1245	105
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)		5.5		5.5	5.5					6.0	6.0	6.0
Lane Util. Factor		0.95		1.00	0.95					1.00	0.91	1.00
Frpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	1.00
Flpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	1.00
Frt		0.98		1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00		0.95	1.00					0.95	1.00	1.00
Satd. Flow (prot)		3323		1689	3380					1690	4856	1512
Flt Permitted		1.00		0.45	1.00					0.95	1.00	1.00
Satd. Flow (perm)		3323		799	3380					1690	4856	1512
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	344	39	206	556	0	0	0	0	222	1383	117
RTOR Reduction (vph)	0	12	0	0	0	0	0	0	0	0	0	55
Lane Group Flow (vph)	0	371	0	206	556	0	0	0	0	222	1383	62
Confl. Peds. (#/hr)	2		3	3		2						
Turn Type		NA		pm+pt	NA					Perm	NA	Perm
Protected Phases		8		7	4						6	
Permitted Phases				4						6		6
Actuated Green, G (s)		14.1		26.2	26.2					42.3	42.3	42.3
Effective Green, g (s)		14.1		26.2	26.2					42.3	42.3	42.3
Actuated g/C Ratio		0.18		0.33	0.33					0.53	0.53	0.53
Clearance Time (s)		5.5		5.5	5.5					6.0	6.0	6.0
Vehicle Extension (s)		2.5		2.0	2.5					6.0	6.0	6.0
Lane Grp Cap (vph)		585		335	1106					893	2567	799
v/s Ratio Prot		0.11		c0.05	0.16						c0.28	
v/s Ratio Perm				c0.15						0.13		0.04
v/c Ratio		0.63		0.61	0.50					0.25	0.54	0.08
Uniform Delay, d1		30.6		25.7	21.7					10.2	12.4	9.3
Progression Factor		1.00		0.22	0.25					0.19	0.17	0.01
Incremental Delay, d2		2.0		1.6	0.2					0.4	0.5	0.1
Delay (s)		32.5		7.3	5.5					2.3	2.6	0.2
Level of Service		C		A	A					A	A	A
Approach Delay (s)		32.5			6.0			0.0			2.4	
Approach LOS		C			A			A			A	

Intersection Summary			
HCM 2000 Control Delay	7.4	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	69.9%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



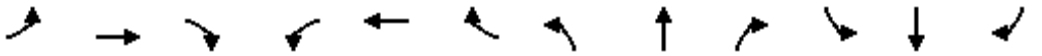
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	55	405	0	0	695	180	100	1590	140	0	0	0
Future Volume (vph)	55	405	0	0	695	180	100	1590	140	0	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	5.7	5.7			5.7	5.7	6.0	6.0	6.0			
Lane Util. Factor	1.00	0.95			0.95	1.00	1.00	0.91	1.00			
Frpb, ped/bikes	1.00	1.00			1.00	0.98	1.00	1.00	0.98			
Flpb, ped/bikes	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1689	3380			3380	1477	1685	4856	1484			
Flt Permitted	0.23	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	400	3380			3380	1477	1685	4856	1484			
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	61	450	0	0	772	200	111	1767	156	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	84	0	0	90	0	0	0
Lane Group Flow (vph)	61	450	0	0	772	116	111	1767	66	0	0	0
Confl. Peds. (#/hr)	10		6	6		10	3		7	7		3
Turn Type	pm+pt	NA			NA	Perm	Perm	NA	Perm			
Protected Phases	3	8			4			2				
Permitted Phases	8					4	2		2			
Actuated Green, G (s)	34.3	34.3			23.3	23.3	34.0	34.0	34.0			
Effective Green, g (s)	34.3	34.3			23.3	23.3	34.0	34.0	34.0			
Actuated g/C Ratio	0.43	0.43			0.29	0.29	0.42	0.42	0.42			
Clearance Time (s)	5.7	5.7			5.7	5.7	6.0	6.0	6.0			
Vehicle Extension (s)	1.0	2.5			2.5	2.5	2.5	2.5	2.5			
Lane Grp Cap (vph)	256	1449			984	430	716	2063	630			
v/s Ratio Prot	0.02	c0.13			c0.23			c0.36				
v/s Ratio Perm	0.09					0.08	0.07		0.04			
v/c Ratio	0.24	0.31			0.78	0.27	0.16	0.86	0.11			
Uniform Delay, d1	22.1	15.1			26.0	21.8	14.2	20.8	13.8			
Progression Factor	0.42	0.42			1.00	1.00	0.86	0.81	2.35			
Incremental Delay, d2	0.3	0.1			6.3	1.5	0.2	2.1	0.1			
Delay (s)	9.5	6.4			32.3	23.3	12.3	19.0	32.6			
Level of Service	A	A			C	C	B	B	C			
Approach Delay (s)		6.8			30.5			19.7			0.0	
Approach LOS		A			C			B			A	

Intersection Summary			
HCM 2000 Control Delay	20.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	17.4
Intersection Capacity Utilization	69.9%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



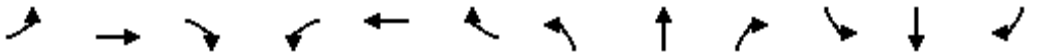
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	85	430	45	50	840	180	50	130	15	35	115	85
Future Volume (vph)	85	430	45	50	840	180	50	130	15	35	115	85
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	5.7	5.7		5.7	5.7		5.7	5.7		5.7	5.7	5.7
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.99		1.00	0.97		1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1690	3328		1690	3283		1687	3326		1690	3380	1490
Flt Permitted	0.15	1.00		0.46	1.00		0.67	1.00		0.65	1.00	1.00
Satd. Flow (perm)	260	3328		811	3283		1192	3326		1156	3380	1490
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	94	478	50	56	933	200	56	144	17	39	128	94
RTOR Reduction (vph)	0	7	0	0	17	0	0	13	0	0	0	83
Lane Group Flow (vph)	94	521	0	56	1116	0	56	148	0	39	128	11
Confl. Peds. (#/hr)	1		1	1		1	3					3
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases	6			2			4			8		8
Actuated Green, G (s)	37.4	33.5		35.0	32.3		10.7	7.9		10.7	7.9	7.9
Effective Green, g (s)	37.4	33.5		35.0	32.3		10.7	7.9		10.7	7.9	7.9
Actuated g/C Ratio	0.54	0.48		0.50	0.46		0.15	0.11		0.15	0.11	0.11
Clearance Time (s)	5.7	5.7		5.7	5.7		5.7	5.7		5.7	5.7	5.7
Vehicle Extension (s)	1.0	5.0		1.0	5.0		1.0	2.0		1.2	5.0	5.0
Lane Grp Cap (vph)	219	1599		441	1521		202	376		198	383	168
v/s Ratio Prot	c0.02	0.16		0.00	c0.34		c0.01	c0.04		0.01	0.04	
v/s Ratio Perm	0.21			0.06			0.03			0.02		0.01
v/c Ratio	0.43	0.33		0.13	0.73		0.28	0.39		0.20	0.33	0.06
Uniform Delay, d1	9.7	11.1		8.9	15.2		25.8	28.7		25.6	28.5	27.6
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	0.5	0.2		0.0	2.3		0.3	0.2		0.2	1.1	0.3
Delay (s)	10.2	11.4		9.0	17.5		26.1	28.9		25.7	29.6	27.9
Level of Service	B	B		A	B		C	C		C	C	C
Approach Delay (s)		11.2			17.1			28.2			28.4	
Approach LOS		B			B			C			C	

Intersection Summary			
HCM 2000 Control Delay	17.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	69.7	Sum of lost time (s)	22.8
Intersection Capacity Utilization	67.2%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



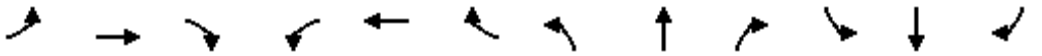
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	245	1180	115	325	1335	130	330	585	500	60	280	130
Future Volume (vph)	245	1180	115	325	1335	130	330	585	500	60	280	130
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	6.5	6.5	6.5	6.5	6.5	6.5	6.3	6.3	6.5	6.3	6.3	6.3
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95	0.88	0.97	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00	0.98	1.00	1.00	1.00	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3278	3380	1486	3278	3380	1488	3278	3380	2661	3278	3380	1486
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3278	3380	1486	3278	3380	1488	3278	3380	2661	3278	3380	1486
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	272	1311	128	361	1483	144	367	650	556	67	311	144
RTOR Reduction (vph)	0	0	70	0	0	74	0	0	73	0	0	127
Lane Group Flow (vph)	272	1311	58	361	1483	70	367	650	483	67	311	17
Confl. Peds. (#/hr)	2		4	4		2	3					3
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4	5	3	8	
Permitted Phases			6			2			4			8
Actuated Green, G (s)	14.5	72.6	72.6	20.0	78.1	78.1	22.8	34.4	54.4	7.4	19.0	19.0
Effective Green, g (s)	14.5	72.6	72.6	20.0	78.1	78.1	22.8	34.4	54.4	7.4	19.0	19.0
Actuated g/C Ratio	0.09	0.45	0.45	0.12	0.49	0.49	0.14	0.21	0.34	0.05	0.12	0.12
Clearance Time (s)	6.5	6.5	6.5	6.5	6.5	6.5	6.3	6.3	6.5	6.3	6.3	6.3
Vehicle Extension (s)	2.0	5.0	5.0	2.0	5.0	5.0	2.0	1.0	2.0	2.0	1.0	1.0
Lane Grp Cap (vph)	297	1533	674	409	1649	726	467	726	904	151	401	176
v/s Ratio Prot	0.08	c0.39		0.11	c0.44		0.11	c0.19	0.07	0.02	c0.09	
v/s Ratio Perm			0.04			0.05			0.11			0.01
v/c Ratio	0.92	0.86	0.09	0.88	0.90	0.10	0.79	0.90	0.53	0.44	0.78	0.10
Uniform Delay, d1	72.1	39.0	24.8	68.8	37.4	22.0	66.2	61.0	42.6	74.3	68.4	62.9
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.07	1.18	2.17
Incremental Delay, d2	30.6	6.3	0.3	19.1	8.2	0.3	7.8	13.3	0.3	0.6	6.9	0.1
Delay (s)	102.7	45.3	25.1	87.9	45.6	22.3	74.1	74.3	42.9	80.2	87.5	136.6
Level of Service	F	D	C	F	D	C	E	E	D	F	F	F
Approach Delay (s)		52.9			51.6			63.2			100.1	
Approach LOS		D			D			E			F	

Intersection Summary			
HCM 2000 Control Delay	59.5	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.92		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	25.6
Intersection Capacity Utilization	88.9%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



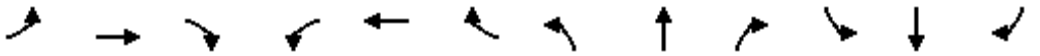
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	100	630	230	185	110	90	20	550	75	25	265	105
Future Volume (vph)	100	630	230	185	110	90	20	550	75	25	265	105
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	6.3	6.3		6.3	6.3		5.7	5.7		5.7	5.7	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	0.99		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.96		1.00	0.93		1.00	0.98		1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1689	3226		1690	3132		1690	3314		1690	3223	
Flt Permitted	0.61	1.00		0.10	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1090	3226		181	3132		1690	3314		1690	3223	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	111	700	256	206	122	100	22	611	83	28	294	117
RTOR Reduction (vph)	0	24	0	0	57	0	0	6	0	0	24	0
Lane Group Flow (vph)	111	932	0	206	166	0	22	688	0	28	387	0
Confl. Peds. (#/hr)	1		5	5		1	1		1	1		1
Turn Type	pm+pt	NA		pm+pt	NA		Prot	NA		Prot	NA	
Protected Phases	3	8		7	4		5	2		1	6	
Permitted Phases	8			4								
Actuated Green, G (s)	62.0	55.3		82.6	69.6		3.8	55.9		3.8	55.9	
Effective Green, g (s)	62.0	55.3		82.6	69.6		3.8	55.9		3.8	55.9	
Actuated g/C Ratio	0.39	0.35		0.52	0.43		0.02	0.35		0.02	0.35	
Clearance Time (s)	6.3	6.3		6.3	6.3		5.7	5.7		5.7	5.7	
Vehicle Extension (s)	1.2	4.0		1.2	4.0		1.2	4.0		1.2	4.0	
Lane Grp Cap (vph)	447	1114		291	1362		40	1157		40	1126	
v/s Ratio Prot	0.01	c0.29		c0.09	0.05		0.01	c0.21		c0.02	0.12	
v/s Ratio Perm	0.09			0.27								
v/c Ratio	0.25	0.84		0.71	0.12		0.55	0.59		0.70	0.34	
Uniform Delay, d1	32.1	48.2		33.7	27.0		77.3	42.7		77.5	38.5	
Progression Factor	1.00	1.00		1.00	1.00		0.49	0.24		0.62	0.86	
Incremental Delay, d2	0.1	5.8		6.3	0.1		5.8	1.4		32.5	0.8	
Delay (s)	32.2	54.0		40.0	27.0		43.7	11.5		81.0	34.0	
Level of Service	C	D		D	C		D	B		F	C	
Approach Delay (s)		51.8			33.3			12.5			37.0	
Approach LOS		D			C			B			D	

Intersection Summary			
HCM 2000 Control Delay	35.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	24.0
Intersection Capacity Utilization	75.5%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	225	785	85	260	1375	60	120	300	195	105	175	300
Future Volume (vph)	225	785	85	260	1375	60	120	300	195	105	175	300
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	6.4	6.4	6.4	6.4	6.4		6.4	6.4	6.4	6.4	6.4	6.4
Lane Util. Factor	0.97	0.95	1.00	0.97	0.91		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00		1.00	1.00	0.98	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3278	3380	1491	3278	4826		1690	3380	1487	1690	3380	1492
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3278	3380	1491	3278	4826		1690	3380	1487	1690	3380	1492
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	250	872	94	289	1528	67	133	333	217	117	194	333
RTOR Reduction (vph)	0	0	50	0	3	0	0	0	185	0	0	217
Lane Group Flow (vph)	250	872	44	289	1592	0	133	333	32	117	194	116
Confl. Peds. (#/hr)			1	1			1		3	3		1
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases			6						4			8
Actuated Green, G (s)	16.5	75.2	75.2	20.6	79.3		15.9	23.5	23.5	15.1	22.7	22.7
Effective Green, g (s)	16.5	75.2	75.2	20.6	79.3		15.9	23.5	23.5	15.1	22.7	22.7
Actuated g/C Ratio	0.10	0.47	0.47	0.13	0.50		0.10	0.15	0.15	0.09	0.14	0.14
Clearance Time (s)	6.4	6.4	6.4	6.4	6.4		6.4	6.4	6.4	6.4	6.4	6.4
Vehicle Extension (s)	2.0	5.0	5.0	2.0	5.0		2.0	3.0	3.0	2.0	2.5	2.5
Lane Grp Cap (vph)	338	1588	700	422	2391		167	496	218	159	479	211
v/s Ratio Prot	c0.08	0.26		0.09	c0.33		c0.08	c0.10		0.07	0.06	
v/s Ratio Perm			0.03						0.02			0.08
v/c Ratio	0.74	0.55	0.06	0.68	0.67		0.80	0.67	0.15	0.74	0.41	0.55
Uniform Delay, d1	69.7	30.3	23.2	66.6	30.4		70.5	64.6	59.5	70.5	62.5	63.9
Progression Factor	1.00	1.00	1.00	1.00	1.00		0.59	0.72	2.75	1.00	1.00	1.00
Incremental Delay, d2	7.1	1.4	0.2	3.7	1.5		19.3	3.2	0.3	14.1	0.4	2.3
Delay (s)	76.8	31.7	23.3	70.2	31.9		61.0	50.0	163.7	84.6	62.9	66.2
Level of Service	E	C	C	E	C		E	D	F	F	E	E
Approach Delay (s)		40.3			37.8			88.2			68.5	
Approach LOS		D			D			F			E	

Intersection Summary			
HCM 2000 Control Delay	50.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	25.6
Intersection Capacity Utilization	72.9%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

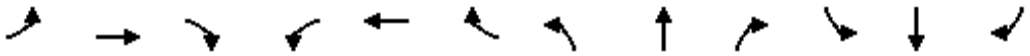


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	25	540	135	150	770	5	260	20	285	0	5	10
Future Volume (vph)	25	540	135	150	770	5	260	20	285	0	5	10
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	6.2	6.2	6.2	6.2	6.2		6.6	6.6	6.2		6.2	
Lane Util. Factor	1.00	0.95	1.00	0.97	0.95		0.95	0.95	0.88		1.00	
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		0.99	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	
Frt	1.00	1.00	0.85	1.00	1.00		1.00	1.00	0.85		0.90	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	0.96	1.00		1.00	
Satd. Flow (prot)	1690	3380	1512	3278	3376		1605	1620	2661		1593	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	0.96	1.00		1.00	
Satd. Flow (perm)	1690	3380	1512	3278	3376		1605	1620	2661		1593	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	28	600	150	167	856	6	289	22	317	0	6	11
RTOR Reduction (vph)	0	0	65	0	0	0	0	0	253	0	11	0
Lane Group Flow (vph)	28	600	85	167	862	0	156	155	64	0	6	0
Confl. Peds. (#/hr)	1					1	1					1
Turn Type	Prot	NA	Perm	Prot	NA		Split	NA	pm+ov	Split	NA	
Protected Phases	1	6		5	2		8	8	5	4	4	
Permitted Phases			6						8			
Actuated Green, G (s)	4.5	67.7	67.7	9.7	72.9		14.6	14.6	24.3		2.8	
Effective Green, g (s)	4.5	67.7	67.7	9.7	72.9		14.6	14.6	24.3		2.8	
Actuated g/C Ratio	0.04	0.56	0.56	0.08	0.61		0.12	0.12	0.20		0.02	
Clearance Time (s)	6.2	6.2	6.2	6.2	6.2		6.6	6.6	6.2		6.2	
Vehicle Extension (s)	2.0	2.5	2.5	2.0	4.0		2.0	2.0	2.0		2.0	
Lane Grp Cap (vph)	63	1906	853	264	2050		195	197	538		37	
v/s Ratio Prot	0.02	0.18		c0.05	c0.26		c0.10	0.10	0.01		c0.00	
v/s Ratio Perm			0.06						0.01			
v/c Ratio	0.44	0.31	0.10	0.63	0.42		0.80	0.79	0.12		0.17	
Uniform Delay, d1	56.5	13.9	12.1	53.4	12.4		51.3	51.2	39.1		57.5	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	
Incremental Delay, d2	1.8	0.4	0.2	3.6	0.6		19.4	17.2	0.0		0.8	
Delay (s)	58.3	14.3	12.3	57.0	13.0		70.7	68.4	39.1		58.2	
Level of Service	E	B	B	E	B		E	E	D		E	
Approach Delay (s)		15.5			20.2			54.2			58.2	
Approach LOS		B			C			D			E	

Intersection Summary			
HCM 2000 Control Delay	27.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	25.2
Intersection Capacity Utilization	58.3%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

2048 Concept C-D (PM Peak Hour)

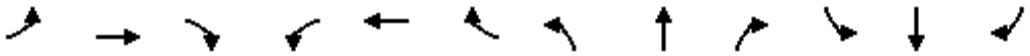
Previously Referred to as Concept J



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	540	1035	0	0	805	315	375	2225	455	0	0	0
Future Volume (vph)	540	1035	0	0	805	315	375	2225	455	0	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	4.0	4.0			4.0	4.0		4.0				
Lane Util. Factor	0.97	0.95			0.91	1.00		0.86				
Frt	1.00	1.00			1.00	0.85		0.98				
Flt Protected	0.95	1.00			1.00	1.00		0.99				
Satd. Flow (prot)	3310	3413			4903	1527		6004				
Flt Permitted	0.95	1.00			1.00	1.00		0.99				
Satd. Flow (perm)	3310	3413			4903	1527		6004				
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	574	1101	0	0	856	335	399	2367	484	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	27	0	14	0	0	0	0
Lane Group Flow (vph)	574	1101	0	0	856	308	0	3236	0	0	0	0
Turn Type	Prot	NA			NA	Perm	Perm	NA				
Protected Phases	7	4			8			2				
Permitted Phases						8	2					
Actuated Green, G (s)	28.0	66.1			34.1	34.1		85.9				
Effective Green, g (s)	28.0	66.1			34.1	34.1		85.9				
Actuated g/C Ratio	0.18	0.41			0.21	0.21		0.54				
Clearance Time (s)	4.0	4.0			4.0	4.0		4.0				
Vehicle Extension (s)	2.5	2.5			2.5	2.5		2.5				
Lane Grp Cap (vph)	579	1409			1044	325		3223				
v/s Ratio Prot	c0.17	0.32			0.17							
v/s Ratio Perm						c0.20		0.54				
v/c Ratio	0.99	0.78			0.82	0.95		1.00				
Uniform Delay, d1	65.9	40.7			60.0	62.1		37.0				
Progression Factor	0.75	0.55			0.88	0.87		0.74				
Incremental Delay, d2	25.8	1.4			6.9	37.2		16.6				
Delay (s)	74.9	23.6			60.0	91.4		43.9				
Level of Service	E	C			E	F		D				
Approach Delay (s)		41.2			68.8			43.9			0.0	
Approach LOS		D			E			D			A	

Intersection Summary			
HCM 2000 Control Delay	48.0	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.99		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	92.6%	ICU Level of Service	F
Analysis Period (min)	15		

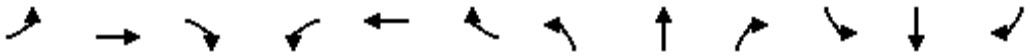
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	560	2230	0	0	0	0	0	2660	500	0	0	0
Future Volume (vph)	560	2230	0	0	0	0	0	2660	500	0	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	4.0	4.0						4.0	4.0			
Lane Util. Factor	0.81	0.81						0.86	1.00			
Frt	1.00	1.00						1.00	0.85			
Flt Protected	0.95	1.00						1.00	1.00			
Satd. Flow (prot)	1382	5812						6179	1527			
Flt Permitted	0.95	1.00						1.00	1.00			
Satd. Flow (perm)	1382	5812						6179	1527			
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	596	2372	0	0	0	0	0	2830	532	0	0	0
RTOR Reduction (vph)	4	4	0	0	0	0	0	0	4	0	0	0
Lane Group Flow (vph)	532	2428	0	0	0	0	0	2830	528	0	0	0
Turn Type	Perm	NA						NA	Perm			
Protected Phases		4						2				
Permitted Phases	4								2			
Actuated Green, G (s)	72.8	72.8						79.2	79.2			
Effective Green, g (s)	72.8	72.8						79.2	79.2			
Actuated g/C Ratio	0.45	0.45						0.50	0.50			
Clearance Time (s)	4.0	4.0						4.0	4.0			
Vehicle Extension (s)	2.5	2.5						2.5	2.5			
Lane Grp Cap (vph)	628	2644						3058	755			
v/s Ratio Prot								c0.46				
v/s Ratio Perm	0.39	0.42							0.35			
v/c Ratio	0.85	0.92						0.93	0.70			
Uniform Delay, d1	38.7	40.8						37.6	31.2			
Progression Factor	0.02	0.31						0.92	0.93			
Incremental Delay, d2	4.9	3.3						1.9	0.7			
Delay (s)	5.6	16.0						36.5	29.9			
Level of Service	A	B						D	C			
Approach Delay (s)		14.1			0.0			35.5			0.0	
Approach LOS		B			A			D			A	

Intersection Summary			
HCM 2000 Control Delay	25.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.92		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	83.2%	ICU Level of Service	E
Analysis Period (min)	15		

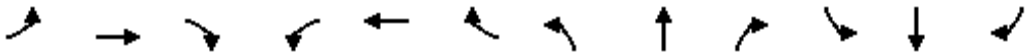
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	2425	850	0	0	0	0	0	0	365	2760	0
Future Volume (vph)	0	2425	850	0	0	0	0	0	0	365	2760	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)		4.0	4.0							4.0	4.0	
Lane Util. Factor		0.76	0.76							1.00	0.86	
Frt		0.98	0.85							1.00	1.00	
Flt Protected		1.00	1.00							0.95	1.00	
Satd. Flow (prot)		6691	1160							1706	6179	
Flt Permitted		1.00	1.00							0.95	1.00	
Satd. Flow (perm)		6691	1160							1706	6179	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	2580	904	0	0	0	0	0	0	388	2936	0
RTOR Reduction (vph)	0	0	4	0	0	0	0	0	0	4	0	0
Lane Group Flow (vph)	0	2969	511	0	0	0	0	0	0	384	2936	0
Turn Type		NA	Perm							Perm	NA	
Protected Phases		4									6	
Permitted Phases			4							6		
Actuated Green, G (s)		75.0	75.0							77.0	77.0	
Effective Green, g (s)		75.0	75.0							77.0	77.0	
Actuated g/C Ratio		0.47	0.47							0.48	0.48	
Clearance Time (s)		4.0	4.0							4.0	4.0	
Vehicle Extension (s)		2.5	2.5							2.5	2.5	
Lane Grp Cap (vph)		3136	543							821	2973	
v/s Ratio Prot		c0.44									c0.48	
v/s Ratio Perm			0.44							0.23		
v/c Ratio		0.95	0.94							0.47	0.99	
Uniform Delay, d1		40.6	40.4							27.8	41.0	
Progression Factor		1.00	1.00							0.27	0.42	
Incremental Delay, d2		7.7	26.6							0.1	8.3	
Delay (s)		48.3	67.0							7.6	25.7	
Level of Service		D	E							A	C	
Approach Delay (s)		51.1			0.0			0.0			23.6	
Approach LOS		D			A			A			C	

Intersection Summary			
HCM 2000 Control Delay	37.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.97		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	83.8%	ICU Level of Service	E
Analysis Period (min)	15		

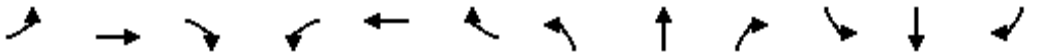
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	495	615	0	340	0	0	0	0	105	2285	195
Future Volume (vph)	0	495	615	0	340	0	0	0	0	105	2285	195
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)		4.0	4.0		4.0					4.0	4.0	
Lane Util. Factor		0.91	0.91		0.95					1.00	0.91	
Frt		0.95	0.85		1.00					1.00	0.99	
Flt Protected		1.00	1.00		1.00					0.95	1.00	
Satd. Flow (prot)		3096	1389		3413					1706	4846	
Flt Permitted		1.00	1.00		1.00					0.95	1.00	
Satd. Flow (perm)		3096	1389		3413					1706	4846	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	527	654	0	362	0	0	0	0	112	2431	207
RTOR Reduction (vph)	0	3	4	0	0	0	0	0	0	0	6	0
Lane Group Flow (vph)	0	812	362	0	362	0	0	0	0	112	2632	0
Turn Type		NA	Perm		NA					Perm	NA	
Protected Phases		4			8						6	
Permitted Phases			4							6		
Actuated Green, G (s)		57.3	57.3		57.3					94.7	94.7	
Effective Green, g (s)		57.3	57.3		57.3					94.7	94.7	
Actuated g/C Ratio		0.36	0.36		0.36					0.59	0.59	
Clearance Time (s)		4.0	4.0		4.0					4.0	4.0	
Vehicle Extension (s)		2.5	2.5		2.5					2.5	2.5	
Lane Grp Cap (vph)		1108	497		1222					1009	2868	
v/s Ratio Prot		c0.26			0.11						c0.54	
v/s Ratio Perm			0.26							0.07		
v/c Ratio		0.73	0.73		0.30					0.11	0.92	
Uniform Delay, d1		44.7	44.6		36.9					14.3	29.2	
Progression Factor		1.00	1.00		0.89					1.00	1.00	
Incremental Delay, d2		4.3	9.0		0.6					0.0	5.2	
Delay (s)		49.0	53.6		33.4					14.3	34.4	
Level of Service		D	D		C					B	C	
Approach Delay (s)		50.4			33.4			0.0			33.6	
Approach LOS		D			C			A			C	

Intersection Summary			
HCM 2000 Control Delay	38.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	137.8%	ICU Level of Service	H
Analysis Period (min)	15		

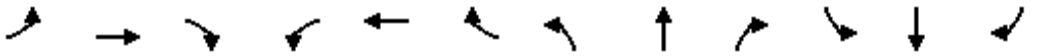
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	570	1920	0	0	0	0	0	2530	370
Future Volume (vph)	0	0	0	570	1920	0	0	0	0	0	2530	370
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)				4.0	4.0						4.0	4.0
Lane Util. Factor				0.86	0.86						0.86	1.00
Frt				1.00	1.00						1.00	0.85
Flt Protected				0.95	1.00						1.00	1.00
Satd. Flow (prot)				1467	4627						6179	1527
Flt Permitted				0.95	1.00						1.00	1.00
Satd. Flow (perm)				1467	4627						6179	1527
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	0	0	606	2043	0	0	0	0	0	2691	394
RTOR Reduction (vph)	0	0	0	4	4	0	0	0	0	0	0	4
Lane Group Flow (vph)	0	0	0	541	2100	0	0	0	0	0	2691	390
Turn Type				Perm	NA						NA	Perm
Protected Phases					8						6	
Permitted Phases				8								6
Actuated Green, G (s)				76.8	76.8						75.2	75.2
Effective Green, g (s)				76.8	76.8						75.2	75.2
Actuated g/C Ratio				0.48	0.48						0.47	0.47
Clearance Time (s)				4.0	4.0						4.0	4.0
Vehicle Extension (s)				2.5	2.5						2.5	2.5
Lane Grp Cap (vph)				704	2220						2904	717
v/s Ratio Prot											c0.44	
v/s Ratio Perm				0.37	0.45							0.26
v/c Ratio				0.77	0.95						0.93	0.54
Uniform Delay, d1				34.3	39.6						39.8	30.2
Progression Factor				0.33	0.51						0.78	0.31
Incremental Delay, d2				3.6	7.6						3.0	0.3
Delay (s)				15.1	27.9						34.0	9.7
Level of Service				B	C						C	A
Approach Delay (s)		0.0			25.2			0.0			30.9	
Approach LOS		A			C			A			C	

Intersection Summary			
HCM 2000 Control Delay	28.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	124.2%	ICU Level of Service	H
Analysis Period (min)	15		

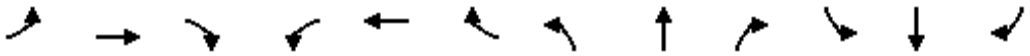
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	435	165	0	0	0	60	340	2210	150	0	0	0
Future Volume (vph)	435	165	0	0	0	60	340	2210	150	0	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	4.0	4.0				4.0	4.0	4.0				
Lane Util. Factor	0.95	0.95				1.00	1.00	0.91				
Frt	1.00	1.00				0.86	1.00	0.99				
Flt Protected	0.95	0.98				1.00	0.95	1.00				
Satd. Flow (prot)	1621	1668				1554	1706	4857				
Flt Permitted	0.95	0.98				1.00	0.95	1.00				
Satd. Flow (perm)	1621	1668				1554	1706	4857				
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	463	176	0	0	0	64	362	2351	160	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	24	0	5	0	0	0	0
Lane Group Flow (vph)	315	324	0	0	0	40	362	2506	0	0	0	0
Turn Type	Split	NA				Perm	Perm	NA				
Protected Phases	4	4						2				
Permitted Phases						2	2					
Actuated Green, G (s)	51.2	51.2				100.8	100.8	100.8				
Effective Green, g (s)	51.2	51.2				100.8	100.8	100.8				
Actuated g/C Ratio	0.32	0.32				0.63	0.63	0.63				
Clearance Time (s)	4.0	4.0				4.0	4.0	4.0				
Vehicle Extension (s)	2.5	2.5				2.5	2.5	2.5				
Lane Grp Cap (vph)	518	533				979	1074	3059				
v/s Ratio Prot	c0.19	0.19						c0.52				
v/s Ratio Perm						0.03	0.21					
v/c Ratio	0.61	0.61				0.04	0.34	0.82				
Uniform Delay, d1	45.9	45.9				11.2	13.9	22.6				
Progression Factor	0.45	0.75				1.00	0.49	0.31				
Incremental Delay, d2	3.6	4.9				0.0	0.1	0.8				
Delay (s)	24.2	39.2				11.3	6.9	7.9				
Level of Service	C	D				B	A	A				
Approach Delay (s)		31.8			11.3			7.8			0.0	
Approach LOS		C			B			A			A	

Intersection Summary			
HCM 2000 Control Delay	12.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	137.8%	ICU Level of Service	H
Analysis Period (min)	15		

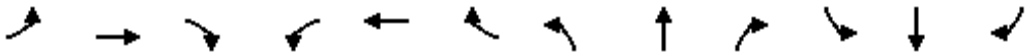
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	1765	165	725	2535	0	0	0	0
Future Volume (vph)	0	0	0	0	1765	165	725	2535	0	0	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)					4.0	4.0	4.0	4.0				
Lane Util. Factor					0.86	1.00	0.97	0.91				
Frt					1.00	0.85	1.00	1.00				
Flt Protected					1.00	1.00	0.95	1.00				
Satd. Flow (prot)					6179	1527	3310	4903				
Flt Permitted					1.00	1.00	0.95	1.00				
Satd. Flow (perm)					6179	1527	3310	4903				
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	0	0	0	1878	176	771	2697	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	5	3	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	1878	171	768	2697	0	0	0	0
Turn Type					NA	Perm	Perm	NA				
Protected Phases					8			2				
Permitted Phases						8	2					
Actuated Green, G (s)					55.1	55.1	96.9	96.9				
Effective Green, g (s)					55.1	55.1	96.9	96.9				
Actuated g/C Ratio					0.34	0.34	0.61	0.61				
Clearance Time (s)					4.0	4.0	4.0	4.0				
Vehicle Extension (s)					2.5	2.5	2.5	2.5				
Lane Grp Cap (vph)					2127	525	2004	2969				
v/s Ratio Prot					c0.30			c0.55				
v/s Ratio Perm						0.11	0.23					
v/c Ratio					0.88	0.33	0.38	0.91				
Uniform Delay, d1					49.4	38.7	16.2	27.7				
Progression Factor					0.82	0.84	0.12	0.33				
Incremental Delay, d2					5.5	1.6	0.0	2.1				
Delay (s)					46.1	34.3	2.0	11.2				
Level of Service					D	C	A	B				
Approach Delay (s)		0.0			45.1			9.2			0.0	
Approach LOS		A			D			A			A	

Intersection Summary			
HCM 2000 Control Delay	22.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	121.1%	ICU Level of Service	H
Analysis Period (min)	15		

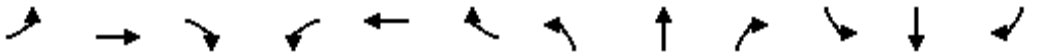
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	380	630	155	170	710	300	465	60	425	520	350	145
Future Volume (vph)	380	630	155	170	710	300	465	60	425	520	350	145
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00	0.97	1.00	1.00	1.00	0.95	
Frt	1.00	0.97		1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1706	3311		1706	3413	1527	3310	1796	1527	1706	3263	
Flt Permitted	0.10	1.00		0.23	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	185	3311		416	3413	1527	3310	1796	1527	1706	3263	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	404	670	165	181	755	319	495	64	452	553	372	154
RTOR Reduction (vph)	0	13	0	0	0	201	0	0	109	0	31	0
Lane Group Flow (vph)	404	822	0	181	755	118	495	64	343	553	495	0
Turn Type	pm+pt	NA		pm+pt	NA	Perm	Prot	NA	pm+ov	Prot	NA	
Protected Phases	1	6		5	2		7	4	5	3	8	
Permitted Phases	6			2		2			4			
Actuated Green, G (s)	83.9	51.6		59.2	32.9	32.9	27.2	11.6	37.9	46.5	30.9	
Effective Green, g (s)	83.9	51.6		59.2	32.9	32.9	27.2	11.6	37.9	46.5	30.9	
Actuated g/C Ratio	0.52	0.32		0.37	0.21	0.21	0.17	0.07	0.24	0.29	0.19	
Clearance Time (s)	6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	
Vehicle Extension (s)	1.0	5.5		1.0	5.5	5.5	1.0	2.0	1.0	1.0	2.0	
Lane Grp Cap (vph)	524	1067		365	701	313	562	130	418	495	630	
v/s Ratio Prot	0.22	c0.25		0.08	c0.22		0.15	0.04	c0.13	c0.32	0.15	
v/s Ratio Perm	0.19			0.10		0.08			0.09			
v/c Ratio	0.77	0.77		0.50	1.08	0.38	0.88	0.49	0.82	1.12	0.79	
Uniform Delay, d1	41.8	48.9		36.0	63.5	54.7	64.8	71.4	57.8	56.8	61.4	
Progression Factor	1.00	1.00		0.84	1.01	4.63	1.00	1.00	1.00	0.69	0.85	
Incremental Delay, d2	6.3	5.4		0.2	46.6	2.0	14.6	1.1	11.6	63.7	2.3	
Delay (s)	48.1	54.2		30.4	111.0	255.4	79.4	72.4	69.4	102.8	54.5	
Level of Service	D	D		C	F	F	E	E	E	F	D	
Approach Delay (s)		52.3			136.1			74.5			79.3	
Approach LOS		D			F			E			E	

Intersection Summary			
HCM 2000 Control Delay	86.5	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.00		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	24.0
Intersection Capacity Utilization	99.7%	ICU Level of Service	F
Analysis Period (min)	15		

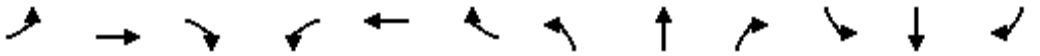
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	100	1070	335	400	1285	105	235	540	960	310	525	115
Future Volume (vph)	100	1070	335	400	1285	105	235	540	960	310	525	115
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	6.5	6.5	6.5	6.5	6.5	6.5	6.8	6.8	6.5	6.8	6.8	6.8
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95	0.88	0.97	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00	0.99	1.00	1.00	0.98	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3310	3413	1497	3310	3413	1506	3310	3399	2626	3310	3399	1497
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3310	3413	1497	3310	3413	1506	3310	3399	2626	3310	3399	1497
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	106	1138	356	426	1367	112	250	574	1021	330	559	122
RTOR Reduction (vph)	0	0	169	0	0	56	0	0	73	0	0	100
Lane Group Flow (vph)	106	1138	187	426	1367	56	250	574	948	330	559	22
Confl. Peds. (#/hr)	1		5	5		1	5		10	10		5
Bus Blockages (#/hr)	0	0	0	0	0	0	0	2	0	0	2	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4	5	3	8	
Permitted Phases			6			2			4			8
Actuated Green, G (s)	7.5	58.1	58.1	29.5	80.1	80.1	16.4	29.6	59.1	16.2	29.4	29.4
Effective Green, g (s)	7.5	58.1	58.1	29.5	80.1	80.1	16.4	29.6	59.1	16.2	29.4	29.4
Actuated g/C Ratio	0.05	0.36	0.36	0.18	0.50	0.50	0.10	0.19	0.37	0.10	0.18	0.18
Clearance Time (s)	6.5	6.5	6.5	6.5	6.5	6.5	6.8	6.8	6.5	6.8	6.8	6.8
Vehicle Extension (s)	2.0	5.0	5.0	3.0	5.0	5.0	1.0	2.0	3.0	2.0	2.0	2.0
Lane Grp Cap (vph)	155	1239	543	610	1708	753	339	628	969	335	624	275
v/s Ratio Prot	0.03	c0.33		0.13	0.40		0.08	0.17	c0.18	0.10	c0.16	
v/s Ratio Perm			0.12			0.04			0.18			0.01
v/c Ratio	0.68	0.92	0.34	0.70	0.80	0.07	0.74	0.91	0.98	0.99	0.90	0.08
Uniform Delay, d1	75.1	48.7	37.1	61.1	33.3	20.7	69.7	64.0	49.8	71.8	63.8	54.1
Progression Factor	1.00	1.00	1.00	0.69	0.44	0.02	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	9.5	12.3	1.7	2.7	3.1	0.1	7.0	17.6	23.5	44.7	15.1	0.0
Delay (s)	84.6	61.0	38.8	44.8	17.8	0.6	76.7	81.5	73.4	116.5	78.9	54.2
Level of Service	F	E	D	D	B	A	E	F	E	F	E	D
Approach Delay (s)		57.6			22.9			76.4			88.2	
Approach LOS		E			C			E			F	

Intersection Summary			
HCM 2000 Control Delay	57.5	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.97		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	26.6
Intersection Capacity Utilization	91.7%	ICU Level of Service	F
Analysis Period (min)	15		

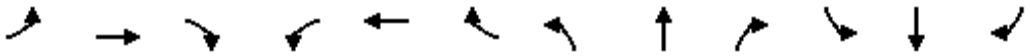
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	2065	340	390	1520	0	0	0	0	495	60	240
Future Volume (vph)	0	2065	340	390	1520	0	0	0	0	495	60	240
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)		5.8	5.8	5.8	5.8					5.9	5.9	5.9
Lane Util. Factor		0.86	1.00	1.00	0.95					0.95	0.91	0.95
Frt		1.00	0.85	1.00	1.00					1.00	0.99	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	0.97	1.00
Satd. Flow (prot)		6179	1527	1706	3413					1621	1559	1450
Flt Permitted		1.00	1.00	0.95	1.00					0.95	0.97	1.00
Satd. Flow (perm)		6179	1527	1706	3413					1621	1559	1450
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	2197	362	415	1617	0	0	0	0	527	64	255
RTOR Reduction (vph)	0	0	153	0	0	0	0	0	0	0	2	47
Lane Group Flow (vph)	0	2197	209	415	1617	0	0	0	0	311	304	182
Turn Type		NA	Perm	Prot	NA					Perm	NA	Perm
Protected Phases		6		5	2						8	
Permitted Phases			6							8		8
Actuated Green, G (s)		67.1	67.1	42.0	114.9					33.4	33.4	33.4
Effective Green, g (s)		67.1	67.1	42.0	114.9					33.4	33.4	33.4
Actuated g/C Ratio		0.42	0.42	0.26	0.72					0.21	0.21	0.21
Clearance Time (s)		5.8	5.8	5.8	5.8					5.9	5.9	5.9
Vehicle Extension (s)		3.8	3.8	3.0	3.4					1.5	1.5	1.5
Lane Grp Cap (vph)		2591	640	447	2450					338	325	302
v/s Ratio Prot		c0.36		c0.24	0.47							
v/s Ratio Perm			0.14							0.19	0.19	0.13
v/c Ratio		0.85	0.33	0.93	0.66					0.92	0.93	0.60
Uniform Delay, d1		41.9	31.3	57.5	12.1					62.0	62.2	57.3
Progression Factor		0.93	0.82	0.74	0.57					1.07	1.07	1.09
Incremental Delay, d2		1.4	0.5	21.5	1.1					15.0	17.5	1.0
Delay (s)		40.3	26.0	63.9	8.0					81.1	83.9	63.4
Level of Service		D	C	E	A					F	F	E
Approach Delay (s)		38.2			19.4			0.0			77.3	
Approach LOS		D			B			A			E	

Intersection Summary			
HCM 2000 Control Delay	37.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	17.5
Intersection Capacity Utilization	95.9%	ICU Level of Service	F
Analysis Period (min)	15		

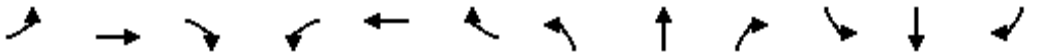
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	550	2010	0	0	1645	400	265	115	460	0	0	0
Future Volume (vph)	550	2010	0	0	1645	400	265	115	460	0	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	5.6	5.6			5.6	5.6	5.9	5.9	5.9			
Lane Util. Factor	0.97	0.95			0.91	1.00	0.95	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.98	1.00			
Satd. Flow (prot)	3310	3413			4903	1527	1621	1673	1527			
Flt Permitted	0.95	1.00			1.00	1.00	0.95	0.98	1.00			
Satd. Flow (perm)	3310	3413			4903	1527	1621	1673	1527			
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	585	2138	0	0	1750	426	282	122	489	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	183	0	0	182	0	0	0
Lane Group Flow (vph)	585	2138	0	0	1750	243	200	204	307	0	0	0
Turn Type	Prot	NA			NA	Perm	Perm	NA	custom			
Protected Phases	1	6			2			4				
Permitted Phases						2	4		7 5			
Actuated Green, G (s)	28.5	96.4			89.6	89.6	24.8	24.8	55.0			
Effective Green, g (s)	28.5	96.4			89.6	89.6	24.8	24.8	55.0			
Actuated g/C Ratio	0.18	0.60			0.56	0.56	0.16	0.16	0.34			
Clearance Time (s)	5.6	5.6			5.6	5.6	5.9	5.9				
Vehicle Extension (s)	1.5	3.3			3.6	3.6	2.0	2.0				
Lane Grp Cap (vph)	589	2056			2745	855	251	259	524			
v/s Ratio Prot	0.18	c0.63			c0.36							
v/s Ratio Perm						0.16	c0.12	0.12	0.20			
v/c Ratio	0.99	1.04			0.64	0.28	0.80	0.79	0.59			
Uniform Delay, d1	65.7	31.8			24.1	18.4	65.2	65.1	43.1			
Progression Factor	0.33	0.90			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	24.6	25.8			1.1	0.8	15.0	13.5	1.1			
Delay (s)	46.5	54.4			25.2	19.3	80.2	78.6	44.2			
Level of Service	D	D			C	B	F	E	D			
Approach Delay (s)		52.7			24.1			60.1			0.0	
Approach LOS		D			C			E			A	

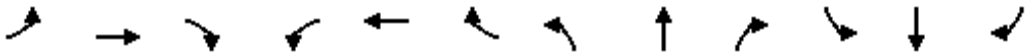
Intersection Summary			
HCM 2000 Control Delay	43.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.97		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	20.1
Intersection Capacity Utilization	95.9%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group



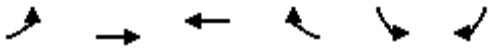
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	35	1645	15	175	25	0	0	45	45
Future Volume (vph)	0	0	0	35	1645	15	175	25	0	0	45	45
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)				5.6	5.6		5.5	5.5			5.5	5.5
Lane Util. Factor				1.00	0.86		1.00	1.00			1.00	1.00
Frpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	0.97
Flpb, ped/bikes				1.00	1.00		0.99	1.00			1.00	1.00
Frt				1.00	1.00		1.00	1.00			1.00	0.85
Flt Protected				0.95	1.00		0.95	1.00			1.00	1.00
Satd. Flow (prot)				1706	6168		1683	1796			1796	1487
Flt Permitted				0.95	1.00		0.73	1.00			1.00	1.00
Satd. Flow (perm)				1706	6168		1286	1796			1796	1487
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	0	0	37	1750	16	186	27	0	0	48	48
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	15
Lane Group Flow (vph)	0	0	0	37	1766	0	186	27	0	0	48	33
Confl. Peds. (#/hr)	5					5	6					6
Turn Type				Perm	NA		Perm	NA			NA	Perm
Protected Phases					2			4			8	
Permitted Phases				2			4					8
Actuated Green, G (s)				120.6	120.6		28.3	28.3			28.3	28.3
Effective Green, g (s)				120.6	120.6		28.3	28.3			28.3	28.3
Actuated g/C Ratio				0.75	0.75		0.18	0.18			0.18	0.18
Clearance Time (s)				5.6	5.6		5.5	5.5			5.5	5.5
Vehicle Extension (s)				2.5	2.5		2.0	2.0			2.8	2.8
Lane Grp Cap (vph)				1285	4649		227	317			317	263
v/s Ratio Prot					c0.29			0.02			0.03	
v/s Ratio Perm				0.02			c0.14					0.02
v/c Ratio				0.03	0.38		0.82	0.09			0.15	0.13
Uniform Delay, d1				5.0	6.8		63.4	55.0			55.7	55.4
Progression Factor				1.00	1.00		0.51	0.47			1.00	1.00
Incremental Delay, d2				0.0	0.2		17.0	0.0			0.2	0.2
Delay (s)				5.0	7.0		49.4	25.7			55.9	55.6
Level of Service				A	A		D	C			E	E
Approach Delay (s)		0.0			7.0			46.4			55.8	
Approach LOS		A			A			D			E	

Intersection Summary			
HCM 2000 Control Delay	13.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.46		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	11.1
Intersection Capacity Utilization	93.8%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



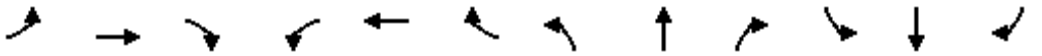
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	65	2425	280	0	0	0	0	135	80	45	35	0
Future Volume (vph)	65	2425	280	0	0	0	0	135	80	45	35	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)		5.8	5.8					5.7		5.7	5.7	
Lane Util. Factor		0.91	1.00					0.95		1.00	1.00	
Frpb, ped/bikes		1.00	0.95					1.00		1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00		1.00	1.00	
Frt		1.00	0.85					0.94		1.00	1.00	
Flt Protected		1.00	1.00					1.00		0.95	1.00	
Satd. Flow (prot)		4897	1455					3223		1706	1796	
Flt Permitted		1.00	1.00					1.00		0.46	1.00	
Satd. Flow (perm)		4897	1455					3223		829	1796	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	69	2580	298	0	0	0	0	144	85	48	37	0
RTOR Reduction (vph)	0	0	56	0	0	0	0	10	0	0	0	0
Lane Group Flow (vph)	0	2649	242	0	0	0	0	219	0	48	37	0
Confl. Peds. (#/hr)			9	9			15					15
Turn Type	Perm	NA	Perm					NA		Perm	NA	
Protected Phases		6						4			8	
Permitted Phases	6		6							8		
Actuated Green, G (s)		130.1	130.1					18.4		18.4	18.4	
Effective Green, g (s)		130.1	130.1					18.4		18.4	18.4	
Actuated g/C Ratio		0.81	0.81					0.11		0.11	0.11	
Clearance Time (s)		5.8	5.8					5.7		5.7	5.7	
Vehicle Extension (s)		2.0	2.0					2.0		2.0	2.0	
Lane Grp Cap (vph)		3981	1183					370		95	206	
v/s Ratio Prot								c0.07			0.02	
v/s Ratio Perm		0.54	0.17							0.06		
v/c Ratio		0.67	0.20					0.59		0.51	0.18	
Uniform Delay, d1		6.1	3.4					67.2		66.5	64.0	
Progression Factor		0.40	0.00					1.00		0.65	0.65	
Incremental Delay, d2		0.4	0.2					1.7		1.5	0.2	
Delay (s)		2.8	0.2					68.9		44.6	42.1	
Level of Service		A	A					E		D	D	
Approach Delay (s)		2.6			0.0			68.9			43.5	
Approach LOS		A			A			E			D	

Intersection Summary			
HCM 2000 Control Delay	8.3	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	11.5
Intersection Capacity Utilization	93.8%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



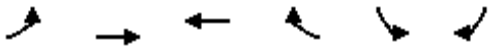
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	120	1240	825	45	175	175
Future Volume (vph)	120	1240	825	45	175	175
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850
Total Lost time (s)	5.5	5.5	5.5		5.5	5.5
Lane Util. Factor	1.00	0.95	0.95		1.00	1.00
Frpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Frt	1.00	1.00	0.99		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1706	3413	3381		1706	1527
Flt Permitted	0.27	1.00	1.00		0.95	1.00
Satd. Flow (perm)	478	3413	3381		1706	1527
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	128	1319	878	48	186	186
RTOR Reduction (vph)	0	0	1	0	0	161
Lane Group Flow (vph)	128	1319	925	0	186	25
Confl. Peds. (#/hr)	3			3		
Turn Type	pm+pt	NA	NA		Prot	Perm
Protected Phases	1	6	2		3	
Permitted Phases	6					7
Actuated Green, G (s)	127.2	127.2	115.3		21.8	21.8
Effective Green, g (s)	127.2	127.2	115.3		21.8	21.8
Actuated g/C Ratio	0.80	0.80	0.72		0.14	0.14
Clearance Time (s)	5.5	5.5	5.5		5.5	5.5
Vehicle Extension (s)	1.0	6.2	6.2		2.0	2.0
Lane Grp Cap (vph)	429	2713	2436		232	208
v/s Ratio Prot	0.01	c0.39	0.27		c0.11	
v/s Ratio Perm	0.23					0.02
v/c Ratio	0.30	0.49	0.38		0.80	0.12
Uniform Delay, d1	4.8	5.5	8.6		67.0	60.7
Progression Factor	0.54	0.43	1.00		1.00	1.00
Incremental Delay, d2	0.1	0.3	0.5		16.9	0.1
Delay (s)	2.7	2.7	9.0		83.9	60.8
Level of Service	A	A	A		F	E
Approach Delay (s)		2.7	9.0		72.3	
Approach LOS		A	A		E	

Intersection Summary			
HCM 2000 Control Delay	14.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	19.5
Intersection Capacity Utilization	55.4%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



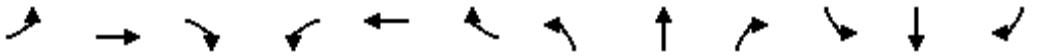
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	275	585	120	425	1085	260	145	1385	310	435	1885	265
Future Volume (vph)	275	585	120	425	1085	260	145	1385	310	435	1885	265
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.91	1.00	0.97	0.91	1.00
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00	0.98	1.00	1.00	0.97	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3310	3413	1496	3310	3413	1500	3310	4903	1487	3310	4903	1504
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3310	3413	1496	3310	3413	1500	3310	4903	1487	3310	4903	1504
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	293	622	128	452	1154	277	154	1473	330	463	2005	282
RTOR Reduction (vph)	0	0	98	0	0	191	0	0	196	0	0	151
Lane Group Flow (vph)	293	622	30	452	1154	86	154	1473	134	463	2005	131
Confl. Peds. (#/hr)	3		5	5		3	2		11	11		2
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases			6			2			4			8
Actuated Green, G (s)	13.6	37.6	37.6	25.6	49.6	49.6	7.6	46.6	46.6	20.6	59.6	59.6
Effective Green, g (s)	13.6	37.6	37.6	25.6	49.6	49.6	7.6	46.6	46.6	20.6	59.6	59.6
Actuated g/C Ratio	0.08	0.24	0.24	0.16	0.31	0.31	0.05	0.29	0.29	0.13	0.37	0.37
Clearance Time (s)	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4
Vehicle Extension (s)	2.0	5.0	5.0	2.0	5.0	5.0	2.0	5.0	5.0	2.0	5.0	5.0
Lane Grp Cap (vph)	281	802	351	529	1058	465	157	1427	433	426	1826	560
v/s Ratio Prot	0.09	c0.18		0.14	c0.34		0.05	c0.30		0.14	c0.41	
v/s Ratio Perm			0.02			0.06			0.09			0.09
v/c Ratio	1.04	0.78	0.09	0.85	1.09	0.18	0.98	1.03	0.31	1.09	1.10	0.23
Uniform Delay, d1	73.2	57.3	47.8	65.4	55.2	40.4	76.1	56.7	44.2	69.7	50.2	34.5
Progression Factor	1.00	1.00	1.00	0.77	0.73	0.79	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	65.3	7.2	0.5	7.8	50.7	0.5	65.7	32.5	0.9	69.0	53.3	0.5
Delay (s)	138.5	64.5	48.3	58.1	91.2	32.6	141.8	89.2	45.0	138.7	103.5	35.0
Level of Service	F	E	D	E	F	C	F	F	D	F	F	C
Approach Delay (s)		83.3			74.6			85.9			102.4	
Approach LOS		F			E			F			F	

Intersection Summary			
HCM 2000 Control Delay	88.7	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.13		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	29.6
Intersection Capacity Utilization	106.8%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			



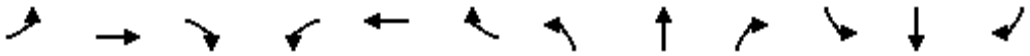
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	155	1280	1595	80	215	260
Future Volume (vph)	155	1280	1595	80	215	260
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850
Total Lost time (s)	6.3	6.3	6.3	6.3	6.3	6.3
Lane Util. Factor	1.00	0.95	0.95	1.00	0.97	1.00
Frpb, ped/bikes	1.00	1.00	1.00	0.98	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1706	3413	3413	1500	3310	1519
Flt Permitted	0.07	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	125	3413	3413	1500	3310	1519
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	165	1362	1697	85	229	277
RTOR Reduction (vph)	0	0	0	32	0	18
Lane Group Flow (vph)	165	1362	1697	53	229	259
Confl. Peds. (#/hr)	3			3		2
Turn Type	pm+pt	NA	NA	Perm	Prot	pm+ov
Protected Phases	1	6	2		3	1
Permitted Phases	6			2		3
Actuated Green, G (s)	132.2	132.2	99.2	99.2	15.2	41.9
Effective Green, g (s)	132.2	132.2	99.2	99.2	15.2	41.9
Actuated g/C Ratio	0.83	0.83	0.62	0.62	0.09	0.26
Clearance Time (s)	6.3	6.3	6.3	6.3	6.3	6.3
Vehicle Extension (s)	3.0	4.0	4.0	4.0	3.0	3.0
Lane Grp Cap (vph)	367	2819	2116	930	314	457
v/s Ratio Prot	0.07	0.40	c0.50		c0.07	c0.09
v/s Ratio Perm	0.30			0.04		0.08
v/c Ratio	0.45	0.48	0.80	0.06	0.73	0.57
Uniform Delay, d1	35.0	4.0	23.0	12.0	70.4	51.2
Progression Factor	0.71	0.33	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.6	0.4	3.3	0.1	8.2	1.6
Delay (s)	25.6	1.7	26.3	12.1	78.6	52.8
Level of Service	C	A	C	B	E	D
Approach Delay (s)		4.3	25.6		64.5	
Approach LOS		A	C		E	

Intersection Summary			
HCM 2000 Control Delay	22.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	18.9
Intersection Capacity Utilization	76.2%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	490	160	135	320	0	0	0	0	215	1995	120
Future Volume (vph)	0	490	160	135	320	0	0	0	0	215	1995	120
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)		5.4		5.4	5.4						5.8	5.8
Lane Util. Factor		0.95		1.00	0.95						0.91	1.00
Frpb, ped/bikes		1.00		1.00	1.00						1.00	0.98
Flpb, ped/bikes		1.00		1.00	1.00						1.00	1.00
Frt		0.96		1.00	1.00						1.00	0.85
Flt Protected		1.00		0.95	1.00						1.00	1.00
Satd. Flow (prot)		3273		1706	3413						4877	1490
Flt Permitted		1.00		0.17	1.00						1.00	1.00
Satd. Flow (perm)		3273		301	3413						4877	1490
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	521	170	144	340	0	0	0	0	229	2122	128
RTOR Reduction (vph)	0	40	0	0	0	0	0	0	0	0	0	73
Lane Group Flow (vph)	0	651	0	144	340	0	0	0	0	0	2351	55
Confl. Peds. (#/hr)	15		4	4		15	12		5	5		12
Turn Type		NA		pm+pt	NA					Perm	NA	Perm
Protected Phases		8		7	4						6	
Permitted Phases				4						6		6
Actuated Green, G (s)		18.5		34.2	34.2						34.6	34.6
Effective Green, g (s)		18.5		34.2	34.2						34.6	34.6
Actuated g/C Ratio		0.23		0.43	0.43						0.43	0.43
Clearance Time (s)		5.4		5.4	5.4						5.8	5.8
Vehicle Extension (s)		2.0		1.5	2.0						2.5	2.5
Lane Grp Cap (vph)		756		309	1459						2109	644
v/s Ratio Prot		c0.20		c0.06	0.10							
v/s Ratio Perm				0.14							0.48	0.04
v/c Ratio		0.86		0.47	0.23						1.11	0.09
Uniform Delay, d1		29.5		16.1	14.6						22.7	13.4
Progression Factor		1.00		1.30	1.30						1.00	1.00
Incremental Delay, d2		9.6		0.2	0.0						58.9	0.3
Delay (s)		39.1		21.2	19.0						81.6	13.6
Level of Service		D		C	B						F	B
Approach Delay (s)		39.1			19.6			0.0			78.1	
Approach LOS		D			B			A			E	

Intersection Summary			
HCM 2000 Control Delay	63.0	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	16.6
Intersection Capacity Utilization	94.7%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

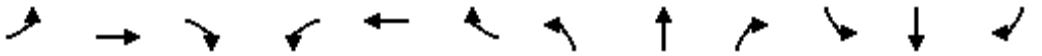


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	225	510	0	0	325	275	165	2280	165	0	0	0
Future Volume (vph)	225	510	0	0	325	275	165	2280	165	0	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	5.7	5.7			5.7			5.8	5.8			
Lane Util. Factor	1.00	0.95			0.95			0.91	1.00			
Frpb, ped/bikes	1.00	1.00			0.99			1.00	0.98			
Flpb, ped/bikes	1.00	1.00			1.00			1.00	1.00			
Frt	1.00	1.00			0.93			1.00	0.85			
Flt Protected	0.95	1.00			1.00			1.00	1.00			
Satd. Flow (prot)	1706	3413			3152			4887	1502			
Flt Permitted	0.18	1.00			1.00			1.00	1.00			
Satd. Flow (perm)	329	3413			3152			4887	1502			
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	239	543	0	0	346	293	176	2426	176	0	0	0
RTOR Reduction (vph)	0	0	0	0	29	0	0	0	99	0	0	0
Lane Group Flow (vph)	239	543	0	0	610	0	0	2602	77	0	0	0
Confl. Peds. (#/hr)	6		4	4		6			4	4		
Turn Type	pm+pt	NA			NA		Perm	NA	Perm			
Protected Phases	3	8			4			2				
Permitted Phases	8						2		2			
Actuated Green, G (s)	33.4	33.4			19.5			35.1	35.1			
Effective Green, g (s)	33.4	33.4			19.5			35.1	35.1			
Actuated g/C Ratio	0.42	0.42			0.24			0.44	0.44			
Clearance Time (s)	5.7	5.7			5.7			5.8	5.8			
Vehicle Extension (s)	1.0	2.0			2.0			2.5	2.5			
Lane Grp Cap (vph)	278	1424			768			2144	659			
v/s Ratio Prot	c0.09	0.16			0.19							
v/s Ratio Perm	c0.27							0.53	0.05			
v/c Ratio	0.86	0.38			0.79			1.21	0.12			
Uniform Delay, d1	17.6	16.1			28.4			22.4	13.3			
Progression Factor	1.75	0.64			1.11			0.35	0.08			
Incremental Delay, d2	11.3	0.0			5.2			97.2	0.1			
Delay (s)	42.1	10.4			36.7			105.0	1.2			
Level of Service	D	B			D			F	A			
Approach Delay (s)		20.1			36.7			98.4			0.0	
Approach LOS		C			D			F			A	

Intersection Summary			
HCM 2000 Control Delay	74.5	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.10		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	17.2
Intersection Capacity Utilization	94.7%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	710	45	70	455	110	310
Future Volume (vph)	710	45	70	455	110	310
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850
Total Lost time (s)	5.5			5.5	5.3	5.3
Lane Util. Factor	0.95			0.95	1.00	1.00
Frpb, ped/bikes	1.00			1.00	1.00	0.99
Flpb, ped/bikes	1.00			1.00	1.00	1.00
Frt	0.99			1.00	1.00	0.85
Flt Protected	1.00			0.99	0.95	1.00
Satd. Flow (prot)	3378			3390	1706	1505
Flt Permitted	1.00			0.77	0.95	1.00
Satd. Flow (perm)	3378			2617	1706	1505
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	755	48	74	484	117	330
RTOR Reduction (vph)	2	0	0	0	0	287
Lane Group Flow (vph)	801	0	0	558	117	43
Confl. Peds. (#/hr)		1	1			1
Turn Type	NA		Perm	NA	Prot	Perm
Protected Phases	6			2	7	
Permitted Phases			2			3
Actuated Green, G (s)	58.8			58.8	10.4	10.4
Effective Green, g (s)	58.8			58.8	10.4	10.4
Actuated g/C Ratio	0.73			0.73	0.13	0.13
Clearance Time (s)	5.5			5.5	5.3	5.3
Vehicle Extension (s)	2.0			2.0	2.0	0.2
Lane Grp Cap (vph)	2482			1923	221	195
v/s Ratio Prot	c0.24				c0.07	
v/s Ratio Perm				0.21		0.03
v/c Ratio	0.32			0.29	0.53	0.22
Uniform Delay, d1	3.7			3.6	32.5	31.2
Progression Factor	0.65			1.00	0.63	0.04
Incremental Delay, d2	0.3			0.4	1.0	0.2
Delay (s)	2.7			4.0	21.7	1.5
Level of Service	A			A	C	A
Approach Delay (s)	2.7			4.0	6.8	
Approach LOS	A			A	A	

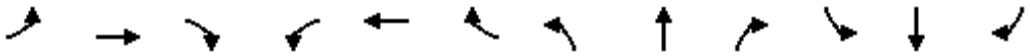
Intersection Summary			
HCM 2000 Control Delay	4.1	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.38		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	16.1
Intersection Capacity Utilization	56.9%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	530	2150	0	0	0	0	0	2030	285
Future Volume (vph)	0	0	0	530	2150	0	0	0	0	0	2030	285
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)				5.8	5.8						5.8	5.8
Lane Util. Factor				0.81	0.81						0.86	0.86
Frpb, ped/bikes				1.00	1.00						1.00	0.98
Flpb, ped/bikes				1.00	1.00						1.00	1.00
Frt				1.00	1.00						1.00	0.85
Flt Protected				0.95	1.00						1.00	1.00
Satd. Flow (prot)				1375	5812						4623	1282
Flt Permitted				0.95	1.00						1.00	1.00
Satd. Flow (perm)				1375	5812						4623	1282
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	0	0	564	2287	0	0	0	0	0	2160	303
RTOR Reduction (vph)	0	0	0	24	24	0	0	0	0	0	0	20
Lane Group Flow (vph)	0	0	0	484	2319	0	0	0	0	0	2190	253
Confl. Peds. (#/hr)	14		4	4		14	11		5	5		11
Turn Type				Perm	NA						NA	Perm
Protected Phases					1						2	
Permitted Phases				1								2
Actuated Green, G (s)				30.2	30.2						38.2	38.2
Effective Green, g (s)				30.2	30.2						38.2	38.2
Actuated g/C Ratio				0.38	0.38						0.48	0.48
Clearance Time (s)				5.8	5.8						5.8	5.8
Lane Grp Cap (vph)				519	2194						2207	612
v/s Ratio Prot											c0.47	
v/s Ratio Perm				0.35	0.40							0.20
v/c Ratio				0.93	1.06						0.99	0.41
Uniform Delay, d1				23.9	24.9						20.8	13.6
Progression Factor				0.26	0.30						0.17	0.13
Incremental Delay, d2				3.9	27.0						4.2	0.2
Delay (s)				10.0	34.5						7.8	2.0
Level of Service				B	C						A	A
Approach Delay (s)		0.0			30.2			0.0			7.2	
Approach LOS		A			C			A			A	

Intersection Summary			
HCM 2000 Control Delay	19.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	1.02		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	11.6
Intersection Capacity Utilization	84.8%	ICU Level of Service	E
Analysis Period (min)	15		

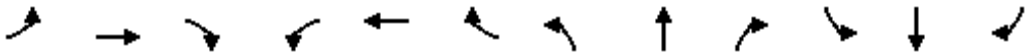
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	2200	335	475	2195	0	0	0	0
Future Volume (vph)	0	0	0	0	2200	335	475	2195	0	0	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)					6.0	6.0	6.0	6.0				
Lane Util. Factor					0.81	0.81	0.86	0.86				
Frpb, ped/bikes					1.00	0.98	1.00	1.00				
Flpb, ped/bikes					1.00	1.00	1.00	1.00				
Frt					1.00	0.85	1.00	1.00				
Flt Protected					1.00	1.00	0.95	1.00				
Satd. Flow (prot)					5805	1215	1462	4629				
Flt Permitted					1.00	1.00	0.95	1.00				
Satd. Flow (perm)					5805	1215	1462	4629				
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	0	0	0	2340	356	505	2335	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	1	26	22	22	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	2375	294	432	2364	0	0	0	0
Confl. Peds. (#/hr)	6		6	6		6	3		6	6		3
Turn Type					NA	Perm	Perm	NA				
Protected Phases					1			2				
Permitted Phases						1	2					
Actuated Green, G (s)					30.0	30.0	38.0	38.0				
Effective Green, g (s)					30.0	30.0	38.0	38.0				
Actuated g/C Ratio					0.38	0.38	0.48	0.48				
Clearance Time (s)					6.0	6.0	6.0	6.0				
Lane Grp Cap (vph)					2176	455	694	2198				
v/s Ratio Prot					c0.41							
v/s Ratio Perm						0.24	0.30	0.51				
v/c Ratio					1.09	0.65	0.62	1.08				
Uniform Delay, d1					25.0	20.6	15.7	21.0				
Progression Factor					0.79	0.71	0.41	0.39				
Incremental Delay, d2					46.8	4.5	0.4	35.1				
Delay (s)					66.5	19.1	6.9	43.3				
Level of Service					E	B	A	D				
Approach Delay (s)		0.0			60.9			37.5			0.0	
Approach LOS		A			E			D			A	

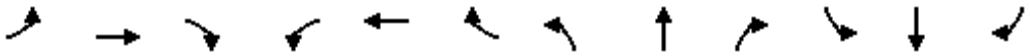
Intersection Summary			
HCM 2000 Control Delay	48.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.08		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	84.8%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	190	2205	50	260	195	0	0	95	45
Future Volume (vph)	0	0	0	190	2205	50	260	195	0	0	95	45
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)					5.4		5.3	5.3			5.3	
Lane Util. Factor					0.86		0.97	1.00			1.00	
Frpb, ped/bikes					1.00		1.00	1.00			1.00	
Flpb, ped/bikes					1.00		1.00	1.00			1.00	
Frt					1.00		1.00	1.00			0.96	
Flt Protected					1.00		0.95	1.00			1.00	
Satd. Flow (prot)					6127		3310	1796			1718	
Flt Permitted					1.00		0.95	1.00			1.00	
Satd. Flow (perm)					6127		3310	1796			1718	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	0	0	202	2346	53	277	207	0	0	101	48
RTOR Reduction (vph)	0	0	0	0	3	0	0	0	0	0	10	0
Lane Group Flow (vph)	0	0	0	0	2598	0	277	207	0	0	139	0
Confl. Peds. (#/hr)	11		6	6		11			8	8		
Turn Type				Perm	NA		Prot	NA			NA	
Protected Phases					2		7	4			8	
Permitted Phases				2								
Actuated Green, G (s)					43.8		9.5	25.5			10.7	
Effective Green, g (s)					43.8		9.5	25.5			10.7	
Actuated g/C Ratio					0.55		0.12	0.32			0.13	
Clearance Time (s)					5.4		5.3	5.3			5.3	
Vehicle Extension (s)					3.7		1.5	1.5			1.5	
Lane Grp Cap (vph)					3354		393	572			229	
v/s Ratio Prot							c0.08	0.12			c0.08	
v/s Ratio Perm					0.42							
v/c Ratio					0.77		0.70	0.36			0.61	
Uniform Delay, d1					14.2		33.9	21.0			32.7	
Progression Factor					1.00		0.54	0.54			0.90	
Incremental Delay, d2					1.8		4.4	0.1			3.1	
Delay (s)					16.0		22.7	11.5			32.6	
Level of Service					B		C	B			C	
Approach Delay (s)		0.0			16.0			17.9			32.6	
Approach LOS		A			B			B			C	

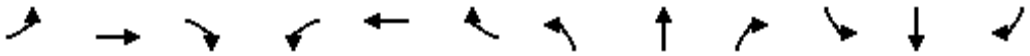
Intersection Summary			
HCM 2000 Control Delay	17.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	91.7%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	2580	235	0	0	0	0	0	0	535	2015	0
Future Volume (vph)	0	2580	235	0	0	0	0	0	0	535	2015	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)		5.9	5.9							5.9	5.9	
Lane Util. Factor		0.81	0.81							0.86	0.86	
Frpb, ped/bikes		1.00	0.97							1.00	1.00	
Flpb, ped/bikes		1.00	1.00							0.99	1.00	
Frt		1.00	0.85							1.00	1.00	
Flt Protected		1.00	1.00							0.95	1.00	
Satd. Flow (prot)		5810	1205							1457	4627	
Flt Permitted		1.00	1.00							0.95	1.00	
Satd. Flow (perm)		5810	1205							1457	4627	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	2745	250	0	0	0	0	0	0	569	2144	0
RTOR Reduction (vph)	0	1	23	0	0	0	0	0	0	23	23	0
Lane Group Flow (vph)	0	2769	202	0	0	0	0	0	0	489	2178	0
Confl. Peds. (#/hr)	14		13	13		14	21		7	7		21
Turn Type		NA	Perm							Perm	NA	
Protected Phases		1									2	
Permitted Phases			1							2		
Actuated Green, G (s)		34.1	34.1							34.1	34.1	
Effective Green, g (s)		34.1	34.1							34.1	34.1	
Actuated g/C Ratio		0.43	0.43							0.43	0.43	
Clearance Time (s)		5.9	5.9							5.9	5.9	
Lane Grp Cap (vph)		2476	513							621	1972	
v/s Ratio Prot		c0.48										
v/s Ratio Perm			0.17							0.34	0.47	
v/c Ratio		1.12	0.39							0.79	1.10	
Uniform Delay, d1		22.9	15.8							19.8	22.9	
Progression Factor		1.00	1.00							0.99	0.94	
Incremental Delay, d2		59.5	2.3							2.7	49.4	
Delay (s)		82.4	18.1							22.4	71.0	
Level of Service		F	B							C	E	
Approach Delay (s)		77.6			0.0			0.0			61.8	
Approach LOS		E			A			A			E	

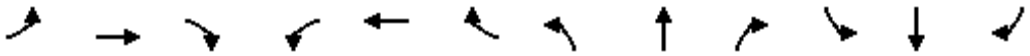
Intersection Summary				
HCM 2000 Control Delay	70.1	HCM 2000 Level of Service	E	
HCM 2000 Volume to Capacity ratio	1.11			
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	11.8	
Intersection Capacity Utilization	88.0%	ICU Level of Service	E	
Analysis Period (min)	15			

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	510	2655	0	0	0	0	0	2165	670	0	0	0
Future Volume (vph)	510	2655	0	0	0	0	0	2165	670	0	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	5.6	5.6						6.0	6.0			
Lane Util. Factor	0.81	0.81						0.91	0.88			
Frpb, ped/bikes	1.00	1.00						1.00	0.99			
Flpb, ped/bikes	1.00	1.00						1.00	1.00			
Frt	1.00	1.00						1.00	0.85			
Flt Protected	0.95	1.00						1.00	1.00			
Satd. Flow (prot)	1376	5813						4903	2651			
Flt Permitted	0.95	1.00						1.00	1.00			
Satd. Flow (perm)	1376	5813						4903	2651			
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	543	2824	0	0	0	0	0	2303	713	0	0	0
RTOR Reduction (vph)	47	47	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	442	2831	0	0	0	0	0	2303	713	0	0	0
Confl. Peds. (#/hr)	5		17	17		5	1		5	5		1
Turn Type	Perm	NA						NA	custom			
Protected Phases		8						2				
Permitted Phases	8								5			
Actuated Green, G (s)	34.4	34.4						34.0	80.0			
Effective Green, g (s)	34.4	34.4						34.0	80.0			
Actuated g/C Ratio	0.43	0.43						0.42	1.00			
Clearance Time (s)	5.6	5.6						6.0	6.0			
Vehicle Extension (s)	5.0	5.0						5.0	0.2			
Lane Grp Cap (vph)	591	2499						2083	2651			
v/s Ratio Prot								c0.47				
v/s Ratio Perm	0.32	0.49							0.27			
v/c Ratio	0.75	1.13						1.11	0.27			
Uniform Delay, d1	19.2	22.8						23.0	0.0			
Progression Factor	0.82	0.78						0.79	1.00			
Incremental Delay, d2	0.8	60.4						51.6	0.1			
Delay (s)	16.6	78.2						69.7	0.1			
Level of Service	B	E						E	A			
Approach Delay (s)		69.3			0.0			53.3			0.0	
Approach LOS		E			A			D			A	

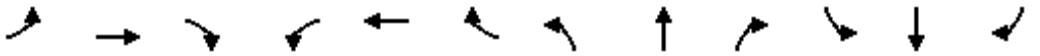
Intersection Summary			
HCM 2000 Control Delay	61.7	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.77		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	14.6
Intersection Capacity Utilization	90.6%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	160	2930	205	0	0	0	0	370	360	130	195	0
Future Volume (vph)	160	2930	205	0	0	0	0	370	360	130	195	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	5.7	5.7						5.7	5.7	5.7	5.7	
Lane Util. Factor	1.00	0.86						0.95	1.00	1.00	0.95	
Frpb, ped/bikes	1.00	1.00						1.00	1.00	1.00	1.00	
Flpb, ped/bikes	1.00	1.00						1.00	1.00	1.00	1.00	
Frt	1.00	0.99						1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00						1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1705	6110						3399	1527	1706	3399	
Flt Permitted	0.95	1.00						1.00	1.00	0.34	1.00	
Satd. Flow (perm)	1705	6110						3399	1527	613	3399	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	170	3117	218	0	0	0	0	394	383	138	207	0
RTOR Reduction (vph)	0	12	0	0	0	0	0	0	89	0	0	0
Lane Group Flow (vph)	170	3323	0	0	0	0	0	394	294	138	207	0
Confl. Peds. (#/hr)	1		9	9		1	9					9
Bus Blockages (#/hr)	0	0	0	0	0	0	0	2	0	0	2	0
Turn Type	Perm	NA						NA	Perm	pm+pt	NA	
Protected Phases		6						4		3	8	
Permitted Phases	6								4	8		
Actuated Green, G (s)	39.8	39.8						17.9	17.9	28.8	28.8	
Effective Green, g (s)	39.8	39.8						17.9	17.9	28.8	28.8	
Actuated g/C Ratio	0.50	0.50						0.22	0.22	0.36	0.36	
Clearance Time (s)	5.7	5.7						5.7	5.7	5.7	5.7	
Vehicle Extension (s)	4.8	4.8						1.7	1.7	1.0	1.7	
Lane Grp Cap (vph)	848	3039						760	341	291	1223	
v/s Ratio Prot		c0.54						0.12		c0.03	0.06	
v/s Ratio Perm	0.10								c0.19	0.14		
v/c Ratio	0.20	1.09						0.52	0.86	0.47	0.17	
Uniform Delay, d1	11.2	20.1						27.3	29.9	18.3	17.4	
Progression Factor	0.30	0.25						1.00	1.00	0.67	0.68	
Incremental Delay, d2	0.2	44.1						0.2	18.8	0.4	0.0	
Delay (s)	3.6	49.1						27.5	48.7	12.6	11.8	
Level of Service	A	D						C	D	B	B	
Approach Delay (s)		46.9			0.0			38.0			12.1	
Approach LOS		D			A			D			B	

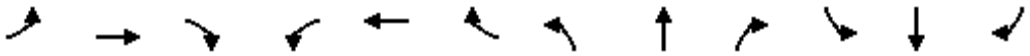
Intersection Summary			
HCM 2000 Control Delay	42.8	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.98		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	17.1
Intersection Capacity Utilization	91.7%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	745	75	220	690	0	0	0	0	340	2000	135
Future Volume (vph)	0	745	75	220	690	0	0	0	0	340	2000	135
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)		5.5		5.5	5.5					6.0	6.0	6.0
Lane Util. Factor		0.95		1.00	0.95					0.86	0.81	0.86
Frpb, ped/bikes		1.00		1.00	1.00					1.00	1.00	0.98
Flpb, ped/bikes		1.00		1.00	1.00					0.99	1.00	1.00
Frt		0.99		1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00		0.95	1.00					0.95	1.00	1.00
Satd. Flow (prot)		3357		1706	3413					1458	4356	1285
Flt Permitted		1.00		0.15	1.00					0.95	1.00	1.00
Satd. Flow (perm)		3357		276	3413					1458	4356	1285
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	793	80	234	734	0	0	0	0	362	2128	144
RTOR Reduction (vph)	0	10	0	0	0	0	0	0	0	0	1	60
Lane Group Flow (vph)	0	863	0	234	734	0	0	0	0	326	2177	70
Confl. Peds. (#/hr)	16		14	14		16	9		6	6		9
Turn Type		NA		pm+pt	NA					Perm	NA	Perm
Protected Phases		8		7	4						6	
Permitted Phases				4						6		6
Actuated Green, G (s)		20.5		32.5	32.5					36.0	36.0	36.0
Effective Green, g (s)		20.5		32.5	32.5					36.0	36.0	36.0
Actuated g/C Ratio		0.26		0.41	0.41					0.45	0.45	0.45
Clearance Time (s)		5.5		5.5	5.5					6.0	6.0	6.0
Vehicle Extension (s)		2.5		2.0	2.5					6.0	6.0	6.0
Lane Grp Cap (vph)		860		228	1386					656	1960	578
v/s Ratio Prot		0.26		c0.08	0.22							
v/s Ratio Perm				c0.33						0.22	0.50	0.05
v/c Ratio		1.00		1.03	0.53					0.50	1.11	0.12
Uniform Delay, d1		29.8		30.4	18.0					15.6	22.0	12.8
Progression Factor		1.00		0.30	0.20					0.24	0.26	0.00
Incremental Delay, d2		31.6		52.9	0.2					1.0	53.0	0.2
Delay (s)		61.4		62.0	3.7					4.7	58.6	0.2
Level of Service		E		E	A					A	E	A
Approach Delay (s)		61.4			17.8			0.0			49.1	
Approach LOS		E			B			A			D	

Intersection Summary			
HCM 2000 Control Delay	44.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.13		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	17.0
Intersection Capacity Utilization	90.0%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

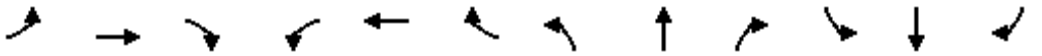


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	240	920	0	0	765	260	140	2020	160	0	0	0
Future Volume (vph)	240	920	0	0	765	260	140	2020	160	0	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	5.7	5.7			5.7	5.7	6.0	6.0	6.0			
Lane Util. Factor	1.00	0.95			0.95	1.00	1.00	0.91	1.00			
Frpb, ped/bikes	1.00	1.00			1.00	0.98	1.00	1.00	0.98			
Flpb, ped/bikes	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1706	3413			3413	1496	1698	4903	1490			
Flt Permitted	0.18	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	329	3413			3413	1496	1698	4903	1490			
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	255	979	0	0	814	277	149	2149	170	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	87	0	0	65	0	0	0
Lane Group Flow (vph)	255	979	0	0	814	190	149	2149	105	0	0	0
Confl. Peds. (#/hr)	7		20	20		7	5		13	13		5
Turn Type	pm+pt	NA			NA	Perm	Perm	NA	Perm			
Protected Phases	3	8			4			2				
Permitted Phases	8					4	2		2			
Actuated Green, G (s)	33.3	33.3			21.3	21.3	35.0	35.0	35.0			
Effective Green, g (s)	33.3	33.3			21.3	21.3	35.0	35.0	35.0			
Actuated g/C Ratio	0.42	0.42			0.27	0.27	0.44	0.44	0.44			
Clearance Time (s)	5.7	5.7			5.7	5.7	6.0	6.0	6.0			
Vehicle Extension (s)	1.0	2.5			2.5	2.5	2.5	2.5	2.5			
Lane Grp Cap (vph)	245	1420			908	398	742	2145	651			
v/s Ratio Prot	c0.08	0.29			0.24			c0.44				
v/s Ratio Perm	c0.35					0.13	0.09		0.07			
v/c Ratio	1.04	0.69			0.90	0.48	0.20	1.00	0.16			
Uniform Delay, d1	28.9	19.1			28.3	24.7	13.9	22.5	13.6			
Progression Factor	0.48	0.35			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	54.1	0.7			13.3	4.0	0.6	19.9	0.5			
Delay (s)	68.0	7.5			41.6	28.7	14.5	42.4	14.2			
Level of Service	E	A			D	C	B	D	B			
Approach Delay (s)		20.0			38.4			38.7			0.0	
Approach LOS		B			D			D			A	

Intersection Summary			
HCM 2000 Control Delay	33.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	1.08		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	17.4
Intersection Capacity Utilization	90.0%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

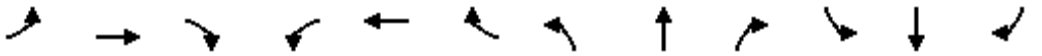
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	185	890	125	65	840	220	125	340	40	120	305	140
Future Volume (vph)	185	890	125	65	840	220	125	340	40	120	305	140
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	5.7	5.7		5.7	5.7		5.7	5.7		5.7	5.7	5.7
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.98		1.00	0.97		1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1706	3340		1706	3296		1700	3351		1703	3413	1488
Flt Permitted	0.13	1.00		0.14	1.00		0.50	1.00		0.46	1.00	1.00
Satd. Flow (perm)	241	3340		243	3296		887	3351		833	3413	1488
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	197	947	133	69	894	234	133	362	43	128	324	149
RTOR Reduction (vph)	0	12	0	0	25	0	0	12	0	0	0	119
Lane Group Flow (vph)	197	1068	0	69	1103	0	133	393	0	128	324	30
Confl. Peds. (#/hr)	3		12	12		3	14		8	8		14
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases	6			2			4			8		8
Actuated Green, G (s)	34.1	29.8		33.7	29.6		21.7	16.5		19.7	15.5	15.5
Effective Green, g (s)	34.1	29.8		33.7	29.6		21.7	16.5		19.7	15.5	15.5
Actuated g/C Ratio	0.44	0.39		0.44	0.38		0.28	0.21		0.25	0.20	0.20
Clearance Time (s)	5.7	5.7		5.7	5.7		5.7	5.7		5.7	5.7	5.7
Vehicle Extension (s)	1.0	5.0		1.0	5.0		1.0	2.0		1.2	5.0	5.0
Lane Grp Cap (vph)	187	1285		183	1260		303	714		259	683	297
v/s Ratio Prot	c0.06	0.32		0.02	0.33		c0.03	c0.12		0.03	0.09	
v/s Ratio Perm	c0.40			0.14			0.09			0.10		0.02
v/c Ratio	1.05	0.83		0.38	0.88		0.44	0.55		0.49	0.47	0.10
Uniform Delay, d1	19.6	21.5		14.8	22.2		21.8	27.1		23.4	27.4	25.3
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	80.6	5.3		0.5	7.6		0.4	0.5		0.5	1.1	0.3
Delay (s)	100.2	26.8		15.2	29.8		22.1	27.7		24.0	28.4	25.6
Level of Service	F	C		B	C		C	C		C	C	C
Approach Delay (s)		38.1			29.0			26.3			26.8	
Approach LOS		D			C			C			C	

Intersection Summary			
HCM 2000 Control Delay	31.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	77.4	Sum of lost time (s)	22.8
Intersection Capacity Utilization	80.7%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



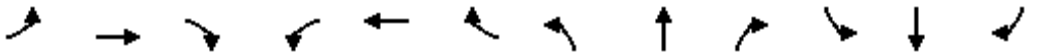
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	130	1795	370	485	1410	50	190	280	410	170	700	405
Future Volume (vph)	130	1795	370	485	1410	50	190	280	410	170	700	405
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	6.5	6.5	6.5	6.5	6.5	6.5	6.3	6.3	6.5	6.3	6.3	6.3
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95	0.88	0.97	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.98	1.00	1.00	0.98	1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3310	3413	1506	3310	3413	1492	3310	3413	2623	3310	3413	1484
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3310	3413	1506	3310	3413	1492	3310	3413	2623	3310	3413	1484
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	138	1910	394	516	1500	53	202	298	436	181	745	431
RTOR Reduction (vph)	0	0	87	0	0	24	0	0	79	0	0	126
Lane Group Flow (vph)	138	1910	307	516	1500	29	202	298	357	181	745	305
Confl. Peds. (#/hr)	6		1	1		6	9		7	7		9
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4	5	3	8	
Permitted Phases			6			2			4			8
Actuated Green, G (s)	8.4	77.5	77.5	19.5	88.6	88.6	7.7	26.9	46.4	10.5	29.7	29.7
Effective Green, g (s)	8.4	77.5	77.5	19.5	88.6	88.6	7.7	26.9	46.4	10.5	29.7	29.7
Actuated g/C Ratio	0.05	0.48	0.48	0.12	0.55	0.55	0.05	0.17	0.29	0.07	0.19	0.19
Clearance Time (s)	6.5	6.5	6.5	6.5	6.5	6.5	6.3	6.3	6.5	6.3	6.3	6.3
Vehicle Extension (s)	2.0	5.0	5.0	2.0	5.0	5.0	2.0	1.0	2.0	2.0	1.0	1.0
Lane Grp Cap (vph)	173	1653	729	403	1889	826	159	573	760	217	633	275
v/s Ratio Prot	0.04	c0.56		c0.16	0.44		c0.06	0.09	0.06	0.05	c0.22	
v/s Ratio Perm			0.20			0.02			0.08			0.21
v/c Ratio	0.80	1.16	0.42	1.28	0.79	0.04	1.27	0.52	0.47	0.83	1.18	1.11
Uniform Delay, d1	75.0	41.2	26.7	70.2	28.4	16.3	76.2	60.7	46.7	73.9	65.2	65.2
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.98	0.98	0.99
Incremental Delay, d2	20.7	77.3	1.8	144.0	3.5	0.1	161.7	0.4	0.2	15.1	90.1	75.7
Delay (s)	95.7	118.5	28.5	214.3	32.0	16.3	237.9	61.1	46.9	87.8	154.1	140.0
Level of Service	F	F	C	F	C	B	F	E	D	F	F	F
Approach Delay (s)		102.7			77.0			92.6			140.8	
Approach LOS		F			E			F			F	

Intersection Summary			
HCM 2000 Control Delay	101.1	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.18		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	25.6
Intersection Capacity Utilization	112.7%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			



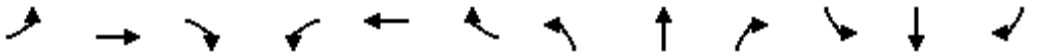
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	240	640	305	295	635	190	75	480	75	75	600	65
Future Volume (vph)	240	640	305	295	635	190	75	480	75	75	600	65
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	6.3	6.3		6.3	6.3		5.7	5.7		5.7	5.7	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	0.99		1.00	0.99		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.95		1.00	0.97		1.00	0.98		1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1706	3217		1706	3278		1706	3331		1706	3356	
Flt Permitted	0.21	1.00		0.07	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	383	3217		135	3278		1706	3331		1706	3356	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	255	681	324	314	676	202	80	511	80	80	638	69
RTOR Reduction (vph)	0	36	0	0	16	0	0	7	0	0	5	0
Lane Group Flow (vph)	255	969	0	314	862	0	80	584	0	80	702	0
Confl. Peds. (#/hr)	6		10	10		6	4		10	10		4
Turn Type	pm+pt	NA		pm+pt	NA		Prot	NA		Prot	NA	
Protected Phases	3	8		7	4		5	2		1	6	
Permitted Phases	8			4								
Actuated Green, G (s)	72.9	53.7		88.2	62.7		10.3	44.6		9.5	43.8	
Effective Green, g (s)	72.9	53.7		88.2	62.7		10.3	44.6		9.5	43.8	
Actuated g/C Ratio	0.46	0.34		0.55	0.39		0.06	0.28		0.06	0.27	
Clearance Time (s)	6.3	6.3		6.3	6.3		5.7	5.7		5.7	5.7	
Vehicle Extension (s)	1.2	4.0		1.2	4.0		1.2	4.0		1.2	4.0	
Lane Grp Cap (vph)	333	1079		351	1284		109	928		101	918	
v/s Ratio Prot	0.09	0.30		c0.16	0.26		0.05	c0.18		0.05	c0.21	
v/s Ratio Perm	0.26			c0.34								
v/c Ratio	0.77	0.90		0.89	0.67		0.73	0.63		0.79	0.76	
Uniform Delay, d1	29.7	50.5		49.4	40.1		73.5	50.5		74.3	53.4	
Progression Factor	1.00	1.00		1.00	1.00		0.56	0.39		1.12	0.28	
Incremental Delay, d2	9.1	10.2		23.4	1.5		18.4	3.0		23.5	4.3	
Delay (s)	38.9	60.7		72.8	41.7		59.5	22.7		107.0	19.3	
Level of Service	D	E		E	D		E	C		F	B	
Approach Delay (s)		56.3			49.9			27.1			28.2	
Approach LOS		E			D			C			C	

Intersection Summary			
HCM 2000 Control Delay	43.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	24.0
Intersection Capacity Utilization	93.7%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	540	1695	170	265	1140	85	185	490	275	170	375	340
Future Volume (vph)	540	1695	170	265	1140	85	185	490	275	170	375	340
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	6.4	6.4	6.4	6.4	6.4		6.4	6.4	6.4	6.4	6.4	6.4
Lane Util. Factor	0.97	0.95	1.00	0.97	0.91		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	0.98	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3310	3413	1527	3310	4847		1706	3413	1502	1706	3413	1506
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3310	3413	1527	3310	4847		1706	3413	1502	1706	3413	1506
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	574	1803	181	282	1213	90	197	521	293	181	399	362
RTOR Reduction (vph)	0	0	61	0	5	0	0	0	123	0	0	298
Lane Group Flow (vph)	574	1803	120	282	1298	0	197	521	170	181	399	64
Confl. Peds. (#/hr)	3					3	1		3	3		1
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases			6						4			8
Actuated Green, G (s)	30.1	70.6	70.6	10.6	51.1		24.7	32.1	32.1	21.1	28.5	28.5
Effective Green, g (s)	30.1	70.6	70.6	10.6	51.1		24.7	32.1	32.1	21.1	28.5	28.5
Actuated g/C Ratio	0.19	0.44	0.44	0.07	0.32		0.15	0.20	0.20	0.13	0.18	0.18
Clearance Time (s)	6.4	6.4	6.4	6.4	6.4		6.4	6.4	6.4	6.4	6.4	6.4
Vehicle Extension (s)	2.0	5.0	5.0	2.0	5.0		2.0	3.0	3.0	2.0	2.5	2.5
Lane Grp Cap (vph)	622	1505	673	219	1548		263	684	301	224	607	268
v/s Ratio Prot	0.17	c0.53		c0.09	0.27		c0.12	c0.15		0.11	0.12	
v/s Ratio Perm			0.08						0.11			0.04
v/c Ratio	0.92	1.20	0.18	1.29	0.84		0.75	0.76	0.56	0.81	0.66	0.24
Uniform Delay, d1	63.8	44.7	27.1	74.7	50.6		64.7	60.3	57.6	67.5	61.2	56.5
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.07	0.93	1.03	1.00	1.00	1.00
Incremental Delay, d2	19.1	95.8	0.6	159.3	5.6		8.0	4.1	1.9	17.9	2.3	0.3
Delay (s)	82.9	140.5	27.7	234.0	56.2		77.4	60.0	61.3	85.4	63.5	56.8
Level of Service	F	F	C	F	E		E	E	E	F	E	E
Approach Delay (s)		119.6			87.8			63.8			65.1	
Approach LOS		F			F			E			E	

Intersection Summary			
HCM 2000 Control Delay	93.7	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.05		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	25.6
Intersection Capacity Utilization	102.1%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	1085	300	345	650	5	245	15	590	0	50	30
Future Volume (vph)	10	1085	300	345	650	5	245	15	590	0	50	30
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	6.2	6.2	6.2	6.2	6.2		6.6	6.6	6.2		6.2	
Lane Util. Factor	1.00	0.95	1.00	0.97	0.95		0.95	0.95	0.88		1.00	
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	
Frt	1.00	1.00	0.85	1.00	1.00		1.00	1.00	0.85		0.94	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	0.96	1.00		1.00	
Satd. Flow (prot)	1706	3413	1527	3310	3408		1621	1634	2687		1695	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	0.96	1.00		1.00	
Satd. Flow (perm)	1706	3413	1527	3310	3408		1621	1634	2687		1695	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	11	1154	319	367	691	5	261	16	628	0	53	32
RTOR Reduction (vph)	0	0	162	0	0	0	0	0	478	0	21	0
Lane Group Flow (vph)	11	1154	157	367	696	0	138	139	150	0	64	0
Confl. Peds. (#/hr)	1					1						
Turn Type	Prot	NA	Perm	Prot	NA		Split	NA	pm+ov	Split	NA	
Protected Phases	1	6		5	2		8	8	5	4	4	
Permitted Phases			6						8			
Actuated Green, G (s)	1.4	63.9	63.9	19.7	82.2		11.4	11.4	31.1		9.8	
Effective Green, g (s)	1.4	63.9	63.9	19.7	82.2		11.4	11.4	31.1		9.8	
Actuated g/C Ratio	0.01	0.49	0.49	0.15	0.63		0.09	0.09	0.24		0.08	
Clearance Time (s)	6.2	6.2	6.2	6.2	6.2		6.6	6.6	6.2		6.2	
Vehicle Extension (s)	2.0	2.0	2.0	2.0	4.0		2.0	2.0	2.0		2.0	
Lane Grp Cap (vph)	18	1677	750	501	2154		142	143	642		127	
v/s Ratio Prot	0.01	c0.34		c0.11	0.20		c0.09	0.09	0.04		c0.04	
v/s Ratio Perm			0.10						0.02			
v/c Ratio	0.61	0.69	0.21	0.73	0.32		0.97	0.97	0.23		0.50	
Uniform Delay, d1	64.0	25.4	18.7	52.6	11.0		59.1	59.1	39.9		57.8	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	
Incremental Delay, d2	36.2	2.3	0.6	4.7	0.4		66.4	66.2	0.1		1.1	
Delay (s)	100.2	27.7	19.4	57.4	11.4		125.5	125.3	39.9		58.9	
Level of Service	F	C	B	E	B		F	F	D		E	
Approach Delay (s)		26.5			27.3			66.1			58.9	
Approach LOS		C			C			E			E	

Intersection Summary			
HCM 2000 Control Delay	37.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	25.2
Intersection Capacity Utilization	70.8%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

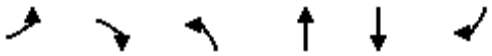
2028 Concept V1 (MUT) Intermediate (AM Peak Hour)

Previously Referred to as Concept H-B



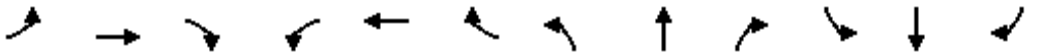
Movement	EBT	WBT	WBR	WBR2	NBL	NBT	NBR
Lane Configurations							
Traffic Volume (vph)	340	315	170	160	500	2730	675
Future Volume (vph)	340	315	170	160	500	2730	675
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850
Lane Width	14	14	14	14	14	14	14
Total Lost time (s)	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	0.95	0.95	1.00		1.00	0.86	0.86
Frt	1.00	1.00	0.85		1.00	1.00	0.85
Flt Protected	1.00	1.00	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3605	3605	1613		1803	4878	1387
Flt Permitted	1.00	1.00	1.00		0.95	1.00	1.00
Satd. Flow (perm)	3605	3605	1613		1803	4878	1387
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	378	350	189	178	556	3033	750
RTOR Reduction (vph)	0	0	5	0	0	2	62
Lane Group Flow (vph)	378	350	362	0	556	3106	613
Turn Type	NA	NA	Perm		Perm	NA	Perm
Protected Phases	4	8				2	
Permitted Phases			8		2		2
Actuated Green, G (s)	45.0	45.0	45.0		107.0	107.0	107.0
Effective Green, g (s)	45.0	45.0	45.0		107.0	107.0	107.0
Actuated g/C Ratio	0.28	0.28	0.28		0.67	0.67	0.67
Clearance Time (s)	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)	2.5	2.5	2.5		2.5	2.5	2.5
Lane Grp Cap (vph)	1013	1013	453		1205	3262	927
v/s Ratio Prot	0.10	0.10				c0.64	
v/s Ratio Perm			c0.22		0.31		0.44
v/c Ratio	0.37	0.35	0.80		0.46	0.95	0.66
Uniform Delay, d1	46.2	45.8	53.3		12.7	24.2	15.7
Progression Factor	0.53	0.94	0.92		0.63	0.89	0.57
Incremental Delay, d2	1.0	0.9	13.4		0.1	5.4	1.1
Delay (s)	25.7	43.7	62.5		8.2	26.8	10.1
Level of Service	C	D	E		A	C	B
Approach Delay (s)	25.7	53.3				21.8	
Approach LOS	C	D				C	

Intersection Summary			
HCM 2000 Control Delay	26.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.91		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	87.0%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



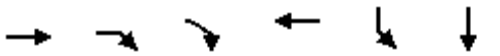
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	310	0	0	3595	0	0
Future Volume (vph)	310	0	0	3595	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850
Lane Width	14	14	14	14	14	14
Total Lost time (s)	4.0			4.0		
Lane Util. Factor	0.97			0.86		
Frt	1.00			1.00		
Flt Protected	0.95			1.00		
Satd. Flow (prot)	3497			6527		
Flt Permitted	0.95			1.00		
Satd. Flow (perm)	3497			6527		
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	344	0	0	3994	0	0
RTOR Reduction (vph)	2	0	0	0	0	0
Lane Group Flow (vph)	342	0	0	3994	0	0
Turn Type	Prot			NA		
Protected Phases	4			2		
Permitted Phases						
Actuated Green, G (s)	20.2			131.8		
Effective Green, g (s)	20.2			131.8		
Actuated g/C Ratio	0.13			0.82		
Clearance Time (s)	4.0			4.0		
Vehicle Extension (s)	2.5			2.5		
Lane Grp Cap (vph)	441			5376		
v/s Ratio Prot	c0.10			c0.61		
v/s Ratio Perm						
v/c Ratio	0.78			0.74		
Uniform Delay, d1	67.7			6.4		
Progression Factor	0.74			0.99		
Incremental Delay, d2	7.3			1.0		
Delay (s)	57.5			7.3		
Level of Service	E			A		
Approach Delay (s)	57.5			7.3	0.0	
Approach LOS	E			A	A	

Intersection Summary			
HCM 2000 Control Delay	11.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	69.3%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



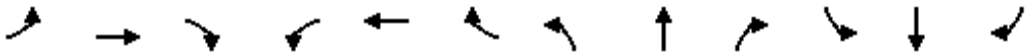
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	135	535	0	0	0	0	0	1385	460
Future Volume (vph)	0	0	0	135	535	0	0	0	0	0	1385	460
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Lane Width	14	14	14	14	14	14	14	14	14	14	14	14
Total Lost time (s)					4.0						4.0	4.0
Lane Util. Factor					0.95						0.91	1.00
Frt					1.00						1.00	0.85
Flt Protected					0.99						1.00	1.00
Satd. Flow (prot)					3569						5180	1613
Flt Permitted					0.99						1.00	1.00
Satd. Flow (perm)					3569						5180	1613
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	150	594	0	0	0	0	0	1539	511
RTOR Reduction (vph)	0	0	0	0	17	0	0	0	0	0	0	37
Lane Group Flow (vph)	0	0	0	0	727	0	0	0	0	0	1539	474
Turn Type				Perm	NA						NA	Perm
Protected Phases					8						6	
Permitted Phases				8								6
Actuated Green, G (s)					39.1						112.9	112.9
Effective Green, g (s)					39.1						112.9	112.9
Actuated g/C Ratio					0.24						0.71	0.71
Clearance Time (s)					4.0						4.0	4.0
Vehicle Extension (s)					2.5						2.5	2.5
Lane Grp Cap (vph)					872						3655	1138
v/s Ratio Prot											c0.30	
v/s Ratio Perm					0.20							0.29
v/c Ratio					0.83						0.42	0.42
Uniform Delay, d1					57.4						9.9	9.8
Progression Factor					0.96						0.25	0.15
Incremental Delay, d2					6.3						0.3	0.9
Delay (s)					61.3						2.7	2.4
Level of Service					E						A	A
Approach Delay (s)		0.0			61.3			0.0			2.6	
Approach LOS		A			E			A			A	

Intersection Summary			
HCM 2000 Control Delay	18.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	55.1%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBT	EBR	EBR2	WBT	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	340	115	35	315	195	1325
Future Volume (vph)	340	115	35	315	195	1325
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850
Lane Width	14	14	14	14	14	14
Total Lost time (s)	4.0		4.0	4.0		4.0
Lane Util. Factor	0.91		0.91	0.95		0.91
Frt	0.96		0.85	1.00		1.00
Flt Protected	1.00		1.00	1.00		0.99
Satd. Flow (prot)	3319		1468	3605		5147
Flt Permitted	1.00		1.00	1.00		0.99
Satd. Flow (perm)	3319		1468	3605		5147
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	378	128	39	350	217	1472
RTOR Reduction (vph)	0	0	17	0	0	0
Lane Group Flow (vph)	510	0	18	350	0	1689
Turn Type	NA		Perm	NA	Perm	NA
Protected Phases	4			8		6
Permitted Phases			4		6	
Actuated Green, G (s)	82.6		82.6	82.6		69.4
Effective Green, g (s)	82.6		82.6	82.6		69.4
Actuated g/C Ratio	0.52		0.52	0.52		0.43
Clearance Time (s)	4.0		4.0	4.0		4.0
Vehicle Extension (s)	2.5		2.5	2.5		2.5
Lane Grp Cap (vph)	1713		757	1861		2232
v/s Ratio Prot	c0.15			0.10		
v/s Ratio Perm			0.01			0.33
v/c Ratio	0.30		0.02	0.19		0.76
Uniform Delay, d1	22.1		19.0	20.7		38.2
Progression Factor	0.63		0.34	0.27		0.48
Incremental Delay, d2	0.4		0.1	0.2		1.3
Delay (s)	14.4		6.5	5.8		19.5
Level of Service	B		A	A		B
Approach Delay (s)	13.9			5.8		19.5
Approach LOS	B			A		B

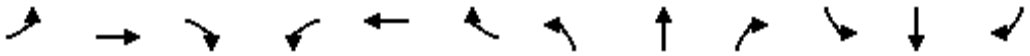
Intersection Summary			
HCM 2000 Control Delay	16.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	50.8%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	235	1075	0	0	0	0	0	2470	245	0	0	0
Future Volume (vph)	235	1075	0	0	0	0	0	2470	245	0	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	4.0	4.0						4.0	4.0			
Lane Util. Factor	0.97	0.91						0.91	1.00			
Frt	1.00	1.00						1.00	0.85			
Flt Protected	0.95	1.00						1.00	1.00			
Satd. Flow (prot)	3278	4856						4856	1512			
Flt Permitted	0.95	1.00						1.00	1.00			
Satd. Flow (perm)	3278	4856						4856	1512			
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	261	1194	0	0	0	0	0	2744	272	0	0	0
RTOR Reduction (vph)	5	0	0	0	0	0	0	0	2	0	0	0
Lane Group Flow (vph)	256	1194	0	0	0	0	0	2744	270	0	0	0
Turn Type	Perm	NA						NA	Perm			
Protected Phases		4						2				
Permitted Phases	4								2			
Actuated Green, G (s)	49.0	49.0						103.0	103.0			
Effective Green, g (s)	49.0	49.0						103.0	103.0			
Actuated g/C Ratio	0.31	0.31						0.64	0.64			
Clearance Time (s)	4.0	4.0						4.0	4.0			
Vehicle Extension (s)	2.5	2.5						2.5	2.5			
Lane Grp Cap (vph)	1003	1487						3126	973			
v/s Ratio Prot		c0.25						c0.57				
v/s Ratio Perm	0.08								0.18			
v/c Ratio	0.26	0.80						0.88	0.28			
Uniform Delay, d1	41.8	51.1						23.3	12.4			
Progression Factor	0.29	0.61						0.77	1.14			
Incremental Delay, d2	0.6	4.4						1.1	0.0			
Delay (s)	12.9	35.4						19.1	14.1			
Level of Service	B	D						B	B			
Approach Delay (s)		31.4			0.0			18.6			0.0	
Approach LOS		C			A			B			A	

Intersection Summary			
HCM 2000 Control Delay	22.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	77.0%	ICU Level of Service	D
Analysis Period (min)	15		

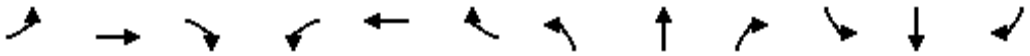
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1155	215	0	0	0	0	0	0	155	1600	0
Future Volume (vph)	0	1155	215	0	0	0	0	0	0	155	1600	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)		4.0	4.0							4.0	4.0	
Lane Util. Factor		0.76	0.76							1.00	0.91	
Frt		1.00	0.85							1.00	1.00	
Flt Protected		1.00	1.00							0.95	1.00	
Satd. Flow (prot)		6741	1149							1690	4856	
Flt Permitted		1.00	1.00							0.95	1.00	
Satd. Flow (perm)		6741	1149							1690	4856	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	1283	239	0	0	0	0	0	0	172	1778	0
RTOR Reduction (vph)	0	2	9	0	0	0	0	0	0	5	0	0
Lane Group Flow (vph)	0	1305	206	0	0	0	0	0	0	167	1778	0
Turn Type		NA	Perm							Perm	NA	
Protected Phases		4									6	
Permitted Phases			4							6		
Actuated Green, G (s)		76.1	76.1							75.9	75.9	
Effective Green, g (s)		76.1	76.1							75.9	75.9	
Actuated g/C Ratio		0.48	0.48							0.47	0.47	
Clearance Time (s)		4.0	4.0							4.0	4.0	
Vehicle Extension (s)		2.5	2.5							2.5	2.5	
Lane Grp Cap (vph)		3206	546							801	2303	
v/s Ratio Prot		c0.19									c0.37	
v/s Ratio Perm			0.18							0.10		
v/c Ratio		0.41	0.38							0.21	0.77	
Uniform Delay, d1		27.3	26.8							24.5	34.9	
Progression Factor		1.00	1.00							0.00	0.22	
Incremental Delay, d2		0.4	2.0							0.1	1.1	
Delay (s)		27.7	28.8							0.1	8.8	
Level of Service		C	C							A	A	
Approach Delay (s)		27.8			0.0			0.0			8.0	
Approach LOS		C			A			A			A	

Intersection Summary			
HCM 2000 Control Delay	16.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	68.7%	ICU Level of Service	C
Analysis Period (min)	15		

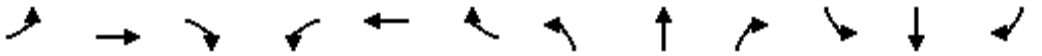
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	210	115	0	275	0	0	0	0	15	1465	130
Future Volume (vph)	0	210	115	0	275	0	0	0	0	15	1465	130
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)		4.0	4.0		4.0					4.0	4.0	
Lane Util. Factor		0.91	0.91		1.00					1.00	0.91	
Frt		0.99	0.85		1.00					1.00	0.99	
Flt Protected		1.00	1.00		1.00					0.95	1.00	
Satd. Flow (prot)		3201	1376		1779					1690	4797	
Flt Permitted		1.00	1.00		1.00					0.95	1.00	
Satd. Flow (perm)		3201	1376		1779					1690	4797	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	233	128	0	306	0	0	0	0	17	1628	144
RTOR Reduction (vph)	0	6	10	0	0	0	0	0	0	0	14	0
Lane Group Flow (vph)	0	246	99	0	306	0	0	0	0	17	1758	0
Turn Type		NA	Perm		NA					Perm	NA	
Protected Phases		4			8						6	
Permitted Phases			4							6		
Actuated Green, G (s)		33.4	33.4		33.4					38.6	38.6	
Effective Green, g (s)		33.4	33.4		33.4					38.6	38.6	
Actuated g/C Ratio		0.42	0.42		0.42					0.48	0.48	
Clearance Time (s)		4.0	4.0		4.0					4.0	4.0	
Vehicle Extension (s)		2.5	2.5		2.5					2.5	2.5	
Lane Grp Cap (vph)		1336	574		742					815	2314	
v/s Ratio Prot		0.08			c0.17						c0.37	
v/s Ratio Perm			0.07							0.01		
v/c Ratio		0.18	0.17		0.41					0.02	0.76	
Uniform Delay, d1		14.7	14.6		16.4					10.8	16.9	
Progression Factor		1.00	1.00		0.38					1.00	1.00	
Incremental Delay, d2		0.3	0.7		0.9					0.0	1.4	
Delay (s)		15.0	15.3		7.0					10.8	18.3	
Level of Service		B	B		A					B	B	
Approach Delay (s)		15.1			7.0			0.0			18.2	
Approach LOS		B			A			A			B	

Intersection Summary			
HCM 2000 Control Delay	16.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	100.7%	ICU Level of Service	G
Analysis Period (min)	15		

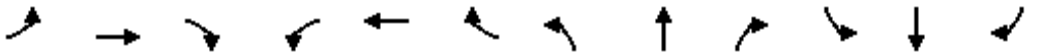
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	425	1915	0	0	0	0	0	1355	220
Future Volume (vph)	0	0	0	425	1915	0	0	0	0	0	1355	220
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)				4.0	4.0						4.0	4.0
Lane Util. Factor				0.86	0.86						0.91	1.00
Frt				1.00	1.00						1.00	0.85
Flt Protected				0.95	1.00						1.00	1.00
Satd. Flow (prot)				1453	4584						4856	1512
Flt Permitted				0.95	1.00						1.00	1.00
Satd. Flow (perm)				1453	4584						4856	1512
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	472	2128	0	0	0	0	0	1506	244
RTOR Reduction (vph)	0	0	0	3	3	0	0	0	0	0	0	4
Lane Group Flow (vph)	0	0	0	422	2172	0	0	0	0	0	1506	240
Turn Type				Perm	NA						NA	Perm
Protected Phases					8						6	
Permitted Phases				8								6
Actuated Green, G (s)				94.7	94.7						57.3	57.3
Effective Green, g (s)				94.7	94.7						57.3	57.3
Actuated g/C Ratio				0.59	0.59						0.36	0.36
Clearance Time (s)				4.0	4.0						4.0	4.0
Vehicle Extension (s)				2.5	2.5						2.5	2.5
Lane Grp Cap (vph)				859	2713						1739	541
v/s Ratio Prot											c0.31	
v/s Ratio Perm				0.29	0.47							0.16
v/c Ratio				0.49	0.80						0.87	0.44
Uniform Delay, d1				18.8	25.3						47.8	39.2
Progression Factor				0.01	0.37						0.72	0.67
Incremental Delay, d2				0.9	1.4						3.7	0.3
Delay (s)				1.0	10.8						38.2	26.7
Level of Service				A	B						D	C
Approach Delay (s)		0.0			9.2			0.0			36.6	
Approach LOS		A			A			A			D	

Intersection Summary			
HCM 2000 Control Delay	20.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	105.5%	ICU Level of Service	G
Analysis Period (min)	15		

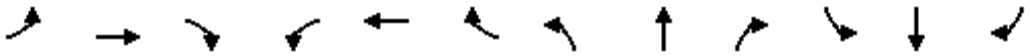
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	190	35	0	0	0	60	275	2130	10	0	0	0
Future Volume (vph)	190	35	0	0	0	60	275	2130	10	0	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	4.0	4.0				4.0		4.0				
Lane Util. Factor	1.00	1.00				1.00		0.91				
Frt	1.00	1.00				0.86		1.00				
Flt Protected	0.95	1.00				1.00		0.99				
Satd. Flow (prot)	1690	1779				1539		4826				
Flt Permitted	0.95	1.00				1.00		0.99				
Satd. Flow (perm)	1690	1779				1539		4826				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	211	39	0	0	0	67	306	2367	11	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	23	0	1	0	0	0	0
Lane Group Flow (vph)	211	39	0	0	0	44	0	2683	0	0	0	0
Turn Type	Split	NA				Perm	Perm	NA				
Protected Phases	4	4						2				
Permitted Phases						2	2					
Actuated Green, G (s)	19.3	19.3				52.7		52.7				
Effective Green, g (s)	19.3	19.3				52.7		52.7				
Actuated g/C Ratio	0.24	0.24				0.66		0.66				
Clearance Time (s)	4.0	4.0				4.0		4.0				
Vehicle Extension (s)	2.5	2.5				2.5		2.5				
Lane Grp Cap (vph)	407	429				1013		3179				
v/s Ratio Prot	c0.12	0.02										
v/s Ratio Perm						0.03		0.56				
v/c Ratio	0.52	0.09				0.04		0.84				
Uniform Delay, d1	26.3	23.5				4.8		10.5				
Progression Factor	1.00	0.86				1.00		1.02				
Incremental Delay, d2	4.6	0.4				0.0		0.8				
Delay (s)	30.9	20.6				4.8		11.5				
Level of Service	C	C				A		B				
Approach Delay (s)		29.3			4.8			11.5			0.0	
Approach LOS		C			A			B			A	

Intersection Summary			
HCM 2000 Control Delay	12.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	100.7%	ICU Level of Service	G
Analysis Period (min)	15		

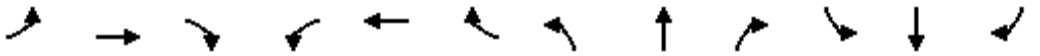
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	1845	170	495	2245	0	0	0	0
Future Volume (vph)	0	0	0	0	1845	170	495	2245	0	0	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)					4.0	4.0	4.0	4.0				
Lane Util. Factor					0.86	1.00	0.86	0.86				
Frt					1.00	0.85	1.00	1.00				
Flt Protected					1.00	1.00	0.95	1.00				
Satd. Flow (prot)					6119	1512	1453	4584				
Flt Permitted					1.00	1.00	0.95	1.00				
Satd. Flow (perm)					6119	1512	1453	4584				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	0	2050	189	550	2494	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	4	3	3	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	2050	185	492	2546	0	0	0	0
Turn Type					NA	Perm	Perm	NA				
Protected Phases					8			2				
Permitted Phases						8	2					
Actuated Green, G (s)					60.0	60.0	92.0	92.0				
Effective Green, g (s)					60.0	60.0	92.0	92.0				
Actuated g/C Ratio					0.38	0.38	0.58	0.58				
Clearance Time (s)					4.0	4.0	4.0	4.0				
Vehicle Extension (s)					2.5	2.5	2.5	2.5				
Lane Grp Cap (vph)					2294	567	835	2635				
v/s Ratio Prot					c0.34							
v/s Ratio Perm						0.12	0.34	0.56				
v/c Ratio					0.89	0.33	0.59	0.97				
Uniform Delay, d1					47.0	35.6	21.9	32.5				
Progression Factor					0.88	0.93	0.63	0.72				
Incremental Delay, d2					5.6	1.4	0.4	7.2				
Delay (s)					47.0	34.4	14.1	30.7				
Level of Service					D	C	B	C				
Approach Delay (s)		0.0			46.0			28.0			0.0	
Approach LOS		A			D			C			A	

Intersection Summary			
HCM 2000 Control Delay	35.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	101.2%	ICU Level of Service	G
Analysis Period (min)	15		

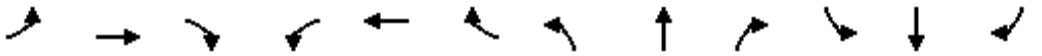
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	325	50	140	175	0	190	0	165	0	240	600
Future Volume (vph)	0	325	50	140	175	0	190	0	165	0	240	600
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Lane Width	14	14	14	14	14	14	14	14	14	14	14	14
Total Lost time (s)		6.0		6.0	6.0		6.0		6.0		6.0	6.0
Lane Util. Factor		0.91		1.00	0.95		0.97		1.00		0.95	1.00
Frpb, ped/bikes		1.00		1.00	1.00		1.00		0.99		1.00	0.97
Flpb, ped/bikes		1.00		1.00	1.00		1.00		1.00		1.00	1.00
Frt		0.98		1.00	1.00		1.00		0.85		1.00	0.85
Flt Protected		1.00		0.95	1.00		0.95		1.00		1.00	1.00
Satd. Flow (prot)		5056		1795	3605		3497		1589		3605	1557
Flt Permitted		1.00		0.48	1.00		0.95		1.00		1.00	1.00
Satd. Flow (perm)		5056		903	3605		3497		1589		3605	1557
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	361	56	156	194	0	211	0	183	0	267	667
RTOR Reduction (vph)	0	9	0	0	0	0	0	0	29	0	0	268
Lane Group Flow (vph)	0	408	0	156	194	0	211	0	154	0	267	399
Confl. Peds. (#/hr)			8	8			13		3	3		13
Turn Type		NA		D.P+P	NA		Prot		pm+ov		NA	Perm
Protected Phases		6		5	2		7		5		8	
Permitted Phases				6			7		4			8
Actuated Green, G (s)		65.2		76.7	82.7		12.9		76.8		46.4	46.4
Effective Green, g (s)		65.2		76.7	82.7		12.9		76.8		46.4	46.4
Actuated g/C Ratio		0.41		0.48	0.52		0.08		0.48		0.29	0.29
Clearance Time (s)		6.0		6.0	6.0		6.0		6.0		6.0	6.0
Vehicle Extension (s)		5.5		1.0	5.5		1.0		1.0		2.0	2.0
Lane Grp Cap (vph)		2060		496	1863		281		822		1045	451
v/s Ratio Prot		0.08		c0.02	0.05		c0.06		0.01		0.07	
v/s Ratio Perm				c0.13					0.08			c0.26
v/c Ratio		0.20		0.31	0.10		0.75		0.19		0.26	0.89
Uniform Delay, d1		30.5		23.8	19.7		72.0		23.8		43.6	54.3
Progression Factor		1.00		0.77	0.07		1.00		1.00		0.72	0.51
Incremental Delay, d2		0.2		0.1	0.1		9.6		0.0		0.0	16.1
Delay (s)		30.8		18.5	1.6		81.6		23.8		31.3	43.7
Level of Service		C		B	A		F		C		C	D
Approach Delay (s)		30.8			9.1			54.8			40.1	
Approach LOS		C			A			D			D	

Intersection Summary			
HCM 2000 Control Delay	35.8	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.55		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	24.0
Intersection Capacity Utilization	69.1%	ICU Level of Service	C
Analysis Period (min)	15		

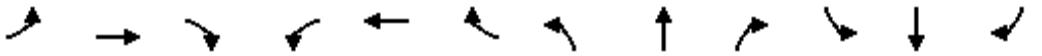
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	65	995	85	335	1410	135	165	260	275	45	210	60
Future Volume (vph)	65	995	85	335	1410	135	165	260	275	45	210	60
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	6.5	6.5	6.8	6.5	6.5	6.8	6.8	6.8	6.5	6.8	6.8	6.5
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95	0.88	0.97	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00	0.99	1.00	1.00	0.98	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3278	3380	1486	3278	3380	1493	3278	3366	2609	3278	3366	1490
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3278	3380	1486	3278	3380	1493	3278	3366	2609	3278	3366	1490
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	72	1106	94	372	1567	150	183	289	306	50	233	67
RTOR Reduction (vph)	0	0	39	0	0	47	0	0	85	0	0	58
Lane Group Flow (vph)	72	1106	55	372	1567	103	183	289	221	50	233	9
Confl. Peds. (#/hr)	1		5	5		1	5		10	10		5
Bus Blockages (#/hr)	0	0	0	0	0	0	0	2	0	0	2	0
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	1	6	7	5	2	3	7	4	5	3	8	1
Permitted Phases			6			2			4			8
Actuated Green, G (s)	5.5	81.3	94.0	23.7	99.5	109.7	12.7	18.2	41.9	10.2	15.7	21.2
Effective Green, g (s)	5.5	81.3	94.0	23.7	99.5	109.7	12.7	18.2	41.9	10.2	15.7	21.2
Actuated g/C Ratio	0.03	0.51	0.59	0.15	0.62	0.69	0.08	0.11	0.26	0.06	0.10	0.13
Clearance Time (s)	6.5	6.5	6.8	6.5	6.5	6.8	6.8	6.8	6.5	6.8	6.8	6.5
Vehicle Extension (s)	2.0	5.0	1.0	3.0	5.0	2.0	1.0	2.0	3.0	2.0	2.0	2.0
Lane Grp Cap (vph)	112	1717	873	485	2101	1087	260	382	683	208	330	257
v/s Ratio Prot	0.02	c0.33	0.01	0.11	c0.46	0.01	c0.06	c0.09	0.05	0.02	0.07	0.00
v/s Ratio Perm			0.03			0.06			0.04			0.00
v/c Ratio	0.64	0.64	0.06	0.77	0.75	0.09	0.70	0.76	0.32	0.24	0.71	0.03
Uniform Delay, d1	76.3	28.8	14.1	65.5	21.3	8.5	71.8	68.8	47.6	71.2	69.9	60.5
Progression Factor	1.00	1.00	1.00	1.10	0.68	1.20	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	9.1	1.9	0.0	5.0	1.7	0.0	6.9	7.4	0.3	0.2	5.5	0.0
Delay (s)	85.4	30.6	14.1	77.3	16.1	10.2	78.7	76.2	47.9	71.4	75.4	60.5
Level of Service	F	C	B	E	B	B	E	E	D	E	E	E
Approach Delay (s)		32.5			26.6			65.6			72.0	
Approach LOS		C			C			E			E	

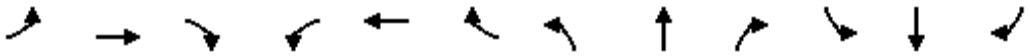
Intersection Summary			
HCM 2000 Control Delay	38.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	26.6
Intersection Capacity Utilization	85.0%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



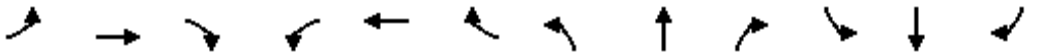
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1300	75	255	1850	0	0	0	0	65	30	125
Future Volume (vph)	0	1300	75	255	1850	0	0	0	0	65	30	125
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)		5.8		5.8	5.8						5.9	5.9
Lane Util. Factor		0.86		0.97	0.95						1.00	1.00
Frpb, ped/bikes		1.00		1.00	1.00						1.00	0.98
Flpb, ped/bikes		1.00		1.00	1.00						1.00	1.00
Frt		0.99		1.00	1.00						1.00	0.85
Flt Protected		1.00		0.95	1.00						0.97	1.00
Satd. Flow (prot)		6069		3278	3380						1720	1489
Flt Permitted		1.00		0.95	1.00						0.97	1.00
Satd. Flow (perm)		6069		3278	3380						1720	1489
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	1444	83	283	2056	0	0	0	0	72	33	139
RTOR Reduction (vph)	0	4	0	0	0	0	0	0	0	0	0	54
Lane Group Flow (vph)	0	1523	0	283	2056	0	0	0	0	0	105	85
Confl. Peds. (#/hr)	10					10	2					2
Turn Type		NA		Prot	NA					Perm	NA	Perm
Protected Phases		6		5	2						8	
Permitted Phases										8		8
Actuated Green, G (s)		109.1		19.0	133.9						14.4	14.4
Effective Green, g (s)		109.1		19.0	133.9						14.4	14.4
Actuated g/C Ratio		0.68		0.12	0.84						0.09	0.09
Clearance Time (s)		5.8		5.8	5.8						5.9	5.9
Vehicle Extension (s)		3.8		3.0	3.4						1.5	1.5
Lane Grp Cap (vph)		4138		389	2828						154	134
v/s Ratio Prot		0.25		0.09	c0.61							
v/s Ratio Perm											0.06	0.06
v/c Ratio		0.37		0.73	0.73						0.68	0.64
Uniform Delay, d1		10.8		68.0	5.4						70.6	70.3
Progression Factor		0.56		1.29	0.62						0.55	0.79
Incremental Delay, d2		0.2		5.5	1.4						8.3	6.1
Delay (s)		6.2		93.4	4.7						47.3	61.9
Level of Service		A		F	A						D	E
Approach Delay (s)		6.2			15.5			0.0			55.6	
Approach LOS		A			B			A			E	

Intersection Summary			
HCM 2000 Control Delay	14.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	17.5
Intersection Capacity Utilization	74.0%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



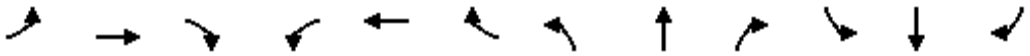
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	105	1260	0	0	1705	240	400	65	450	0	0	0
Future Volume (vph)	105	1260	0	0	1705	240	400	65	450	0	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	5.6	5.6			5.6		5.9	5.9	5.9			
Lane Util. Factor	0.97	0.95			0.86		0.95	0.95	1.00			
Frpb, ped/bikes	1.00	1.00			1.00		1.00	1.00	1.00			
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00	1.00			
Frt	1.00	1.00			0.98		1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00		0.95	0.97	1.00			
Satd. Flow (prot)	3278	3380			6006		1605	1631	1512			
Flt Permitted	0.95	1.00			1.00		0.95	0.97	1.00			
Satd. Flow (perm)	3278	3380			6006		1605	1631	1512			
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	117	1400	0	0	1894	267	444	72	500	0	0	0
RTOR Reduction (vph)	0	0	0	0	15	0	0	0	260	0	0	0
Lane Group Flow (vph)	117	1400	0	0	2146	0	258	258	240	0	0	0
Confl. Peds. (#/hr)			7	7								
Turn Type	Prot	NA			NA		Perm	NA	custom			
Protected Phases	1	6			2			4				
Permitted Phases							4		7 5			
Actuated Green, G (s)	10.4	109.9			103.3		29.2	29.2	41.5			
Effective Green, g (s)	10.4	109.9			103.3		29.2	29.2	41.5			
Actuated g/C Ratio	0.07	0.69			0.65		0.18	0.18	0.26			
Clearance Time (s)	5.6	5.6			5.6		5.9	5.9				
Vehicle Extension (s)	1.5	3.3			3.6		2.0	2.0				
Lane Grp Cap (vph)	213	2321			3877		292	297	392			
v/s Ratio Prot	0.04	c0.41			0.36							
v/s Ratio Perm							c0.16	0.16	c0.16			
v/c Ratio	0.55	0.60			0.55		0.88	0.87	0.61			
Uniform Delay, d1	72.5	13.4			15.6		63.7	63.5	52.2			
Progression Factor	0.68	0.23			1.00		1.00	1.00	1.00			
Incremental Delay, d2	1.5	1.1			0.6		24.9	21.9	2.0			
Delay (s)	51.1	4.2			16.2		88.6	85.4	54.2			
Level of Service	D	A			B		F	F	D			
Approach Delay (s)		7.8			16.2			70.8			0.0	
Approach LOS		A			B			E			A	

Intersection Summary			
HCM 2000 Control Delay	25.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	20.1
Intersection Capacity Utilization	74.0%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	80	1820	15	60	20	0	0	35	80
Future Volume (vph)	0	0	0	80	1820	15	60	20	0	0	35	80
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)				5.6	5.6		5.5	5.5			5.5	5.5
Lane Util. Factor				1.00	0.86		1.00	1.00			1.00	1.00
Frpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	0.97
Flpb, ped/bikes				1.00	1.00		0.99	1.00			1.00	1.00
Frt				1.00	1.00		1.00	1.00			1.00	0.85
Flt Protected				0.95	1.00		0.95	1.00			1.00	1.00
Satd. Flow (prot)				1690	6110		1667	1779			1779	1473
Flt Permitted				0.95	1.00		0.73	1.00			1.00	1.00
Satd. Flow (perm)				1690	6110		1284	1779			1779	1473
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	89	2022	17	67	22	0	0	39	89
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	19
Lane Group Flow (vph)	0	0	0	89	2039	0	67	22	0	0	39	70
Confl. Peds. (#/hr)	5					5	6					6
Turn Type				Perm	NA		Perm	NA			NA	Perm
Protected Phases					2			4			8	
Permitted Phases				2			4					8
Actuated Green, G (s)				130.7	130.7		18.2	18.2			18.2	18.2
Effective Green, g (s)				130.7	130.7		18.2	18.2			18.2	18.2
Actuated g/C Ratio				0.82	0.82		0.11	0.11			0.11	0.11
Clearance Time (s)				5.6	5.6		5.5	5.5			5.5	5.5
Vehicle Extension (s)				2.5	2.5		2.0	2.0			2.8	2.8
Lane Grp Cap (vph)				1380	4991		146	202			202	167
v/s Ratio Prot					c0.33			0.01			0.02	
v/s Ratio Perm				0.05			c0.05					0.05
v/c Ratio				0.06	0.41		0.46	0.11			0.19	0.42
Uniform Delay, d1				2.8	4.0		66.3	63.6			64.2	66.0
Progression Factor				1.00	1.00		0.59	0.59			1.00	1.00
Incremental Delay, d2				0.1	0.2		0.8	0.1			0.4	1.5
Delay (s)				2.9	4.3		39.6	37.3			64.7	67.5
Level of Service				A	A		D	D			E	E
Approach Delay (s)		0.0			4.2			39.1			66.7	
Approach LOS		A			A			D			E	

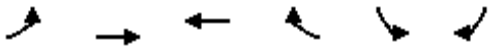
Intersection Summary			
HCM 2000 Control Delay	8.9	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	11.1
Intersection Capacity Utilization	71.5%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	1080	115	0	0	0	0	80	30	30	80	0
Future Volume (vph)	30	1080	115	0	0	0	0	80	30	30	80	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)		5.8	5.8					5.7		5.7	5.7	
Lane Util. Factor		0.91	1.00					0.95		1.00	1.00	
Frpb, ped/bikes		1.00	0.95					1.00		1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00		1.00	1.00	
Frt		1.00	0.85					0.96		1.00	1.00	
Flt Protected		1.00	1.00					1.00		0.95	1.00	
Satd. Flow (prot)		4850	1441					3243		1690	1779	
Flt Permitted		1.00	1.00					1.00		0.67	1.00	
Satd. Flow (perm)		4850	1441					3243		1200	1779	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	33	1200	128	0	0	0	0	89	33	33	89	0
RTOR Reduction (vph)	0	0	24	0	0	0	0	28	0	0	0	0
Lane Group Flow (vph)	0	1233	104	0	0	0	0	94	0	33	89	0
Confl. Peds. (#/hr)			9	9			15					15
Turn Type	Perm	NA	Perm					NA		Perm	NA	
Protected Phases		6						4			8	
Permitted Phases	6		6							8		
Actuated Green, G (s)		130.5	130.5					18.0		18.0	18.0	
Effective Green, g (s)		130.5	130.5					18.0		18.0	18.0	
Actuated g/C Ratio		0.82	0.82					0.11		0.11	0.11	
Clearance Time (s)		5.8	5.8					5.7		5.7	5.7	
Vehicle Extension (s)		2.0	2.0					2.0		2.0	2.0	
Lane Grp Cap (vph)		3955	1175					364		135	200	
v/s Ratio Prot								0.03			c0.05	
v/s Ratio Perm		0.25	0.07							0.03		
v/c Ratio		0.31	0.09					0.26		0.24	0.45	
Uniform Delay, d1		3.6	2.9					64.9		64.8	66.3	
Progression Factor		0.22	0.00					1.00		0.84	0.85	
Incremental Delay, d2		0.1	0.1					0.1		0.3	0.6	
Delay (s)		1.0	0.1					65.0		54.7	56.8	
Level of Service		A	A					E		D	E	
Approach Delay (s)		0.9			0.0			65.0			56.2	
Approach LOS		A			A			E			E	

Intersection Summary			
HCM 2000 Control Delay	10.0	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.33		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	11.5
Intersection Capacity Utilization	71.5%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	50	745	580	40	70	65
Future Volume (vph)	50	745	580	40	70	65
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850
Total Lost time (s)	5.5	5.5	5.5		5.5	5.5
Lane Util. Factor	1.00	0.95	0.95		1.00	1.00
Frpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Frt	1.00	1.00	0.99		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1688	3380	3341		1690	1512
Flt Permitted	0.37	1.00	1.00		0.95	1.00
Satd. Flow (perm)	651	3380	3341		1690	1512
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	56	828	644	44	78	72
RTOR Reduction (vph)	0	0	1	0	0	67
Lane Group Flow (vph)	56	828	687	0	78	5
Confl. Peds. (#/hr)	3			3		
Turn Type	pm+pt	NA	NA		Prot	Perm
Protected Phases	1	6	2		3	
Permitted Phases	6					7
Actuated Green, G (s)	137.1	137.1	127.6		11.9	11.9
Effective Green, g (s)	137.1	137.1	127.6		11.9	11.9
Actuated g/C Ratio	0.86	0.86	0.80		0.07	0.07
Clearance Time (s)	5.5	5.5	5.5		5.5	5.5
Vehicle Extension (s)	1.0	6.2	6.2		2.0	2.0
Lane Grp Cap (vph)	583	2896	2664		125	112
v/s Ratio Prot	0.00	c0.24	0.21		c0.05	
v/s Ratio Perm	0.08					0.00
v/c Ratio	0.10	0.29	0.26		0.62	0.05
Uniform Delay, d1	1.9	2.2	4.1		71.9	68.8
Progression Factor	0.84	0.76	1.00		1.00	1.00
Incremental Delay, d2	0.0	0.2	0.2		6.8	0.1
Delay (s)	1.6	1.9	4.4		78.7	68.9
Level of Service	A	A	A		E	E
Approach Delay (s)		1.8	4.4		74.0	
Approach LOS		A	A		E	

Intersection Summary			
HCM 2000 Control Delay	9.1	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.33		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	19.5
Intersection Capacity Utilization	42.9%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

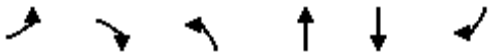
2028 Concept V1 (MUT) Intermediate (PM Peak Hour)

Previously Referred to as Concept H-B



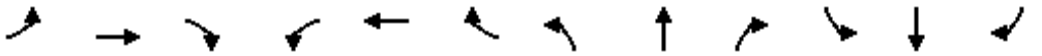
Movement	EBT	WBT	WBR	WBR2	NBL	NBT	NBR
Lane Configurations							
Traffic Volume (vph)	505	550	470	225	215	1845	615
Future Volume (vph)	505	550	470	225	215	1845	615
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850
Lane Width	14	14	14	14	14	14	14
Total Lost time (s)	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	0.95	0.95	1.00		1.00	0.86	0.86
Frt	1.00	1.00	0.85		1.00	0.99	0.85
Flt Protected	1.00	1.00	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3640	3640	1628		1820	4917	1400
Flt Permitted	1.00	1.00	1.00		0.95	1.00	1.00
Satd. Flow (perm)	3640	3640	1628		1820	4917	1400
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	537	585	500	239	229	1963	654
RTOR Reduction (vph)	0	0	3	0	0	2	152
Lane Group Flow (vph)	537	585	736	0	229	2033	430
Turn Type	NA	NA	Perm		Perm	NA	Perm
Protected Phases	4	8				2	
Permitted Phases			8		2		2
Actuated Green, G (s)	81.0	81.0	81.0		71.0	71.0	71.0
Effective Green, g (s)	81.0	81.0	81.0		71.0	71.0	71.0
Actuated g/C Ratio	0.51	0.51	0.51		0.44	0.44	0.44
Clearance Time (s)	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)	2.5	2.5	2.5		2.5	2.5	2.5
Lane Grp Cap (vph)	1842	1842	824		807	2181	621
v/s Ratio Prot	0.15	0.16				c0.41	
v/s Ratio Perm			c0.45		0.13		0.31
v/c Ratio	0.29	0.32	0.89		0.28	0.93	0.69
Uniform Delay, d1	22.9	23.2	35.6		28.3	42.2	35.7
Progression Factor	0.03	0.73	0.83		0.93	0.72	0.64
Incremental Delay, d2	0.2	0.4	13.3		0.1	7.3	2.8
Delay (s)	0.9	17.5	43.0		26.4	37.8	25.8
Level of Service	A	B	D		C	D	C
Approach Delay (s)	0.9	31.7				34.4	
Approach LOS	A	C				C	

Intersection Summary			
HCM 2000 Control Delay	29.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.91		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	92.2%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	575	0	0	2100	0	0
Future Volume (vph)	575	0	0	2100	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850
Lane Width	14	14	14	14	14	14
Total Lost time (s)	4.0			4.0		
Lane Util. Factor	0.97			0.86		
Frt	1.00			1.00		
Flt Protected	0.95			1.00		
Satd. Flow (prot)	3531			6591		
Flt Permitted	0.95			1.00		
Satd. Flow (perm)	3531			6591		
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	612	0	0	2234	0	0
RTOR Reduction (vph)	11	0	0	0	0	0
Lane Group Flow (vph)	601	0	0	2234	0	0
Turn Type	Prot			NA		
Protected Phases	4			2		
Permitted Phases						
Actuated Green, G (s)	33.1			118.9		
Effective Green, g (s)	33.1			118.9		
Actuated g/C Ratio	0.21			0.74		
Clearance Time (s)	4.0			4.0		
Vehicle Extension (s)	2.5			2.5		
Lane Grp Cap (vph)	730			4897		
v/s Ratio Prot	c0.17			c0.34		
v/s Ratio Perm						
v/c Ratio	0.82			0.46		
Uniform Delay, d1	60.7			8.0		
Progression Factor	0.99			0.86		
Incremental Delay, d2	3.1			0.3		
Delay (s)	63.3			7.2		
Level of Service	E			A		
Approach Delay (s)	63.3			7.2	0.0	
Approach LOS	E			A	A	

Intersection Summary			
HCM 2000 Control Delay	19.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	54.8%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	405	280	0	0	0	0	0	2555	420
Future Volume (vph)	0	0	0	405	280	0	0	0	0	0	2555	420
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Lane Width	14	14	14	14	14	14	14	14	14	14	14	14
Total Lost time (s)					4.0						4.0	4.0
Lane Util. Factor					0.95						0.91	1.00
Frt					1.00						1.00	0.85
Flt Protected					0.97						1.00	1.00
Satd. Flow (prot)					3536						5230	1628
Flt Permitted					0.97						1.00	1.00
Satd. Flow (perm)					3536						5230	1628
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	0	0	431	298	0	0	0	0	0	2718	447
RTOR Reduction (vph)	0	0	0	0	5	0	0	0	0	0	0	79
Lane Group Flow (vph)	0	0	0	0	724	0	0	0	0	0	2718	368
Turn Type				Perm	NA						NA	Perm
Protected Phases					8						6	
Permitted Phases				8								6
Actuated Green, G (s)					38.2						113.8	113.8
Effective Green, g (s)					38.2						113.8	113.8
Actuated g/C Ratio					0.24						0.71	0.71
Clearance Time (s)					4.0						4.0	4.0
Vehicle Extension (s)					2.5						2.5	2.5
Lane Grp Cap (vph)					844						3719	1157
v/s Ratio Prot											c0.52	
v/s Ratio Perm					0.20							0.23
v/c Ratio					0.98dl						0.73	0.32
Uniform Delay, d1					58.3						13.9	8.6
Progression Factor					0.80						1.35	1.12
Incremental Delay, d2					8.4						0.6	0.3
Delay (s)					55.0						19.4	10.0
Level of Service					E						B	A
Approach Delay (s)		0.0			55.0			0.0			18.0	
Approach LOS		A			E			A			B	

Intersection Summary			
HCM 2000 Control Delay	25.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	80.4%	ICU Level of Service	D
Analysis Period (min)	15		

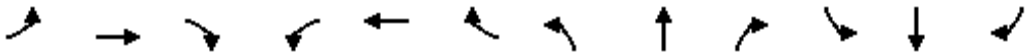
dl Defacto Left Lane. Recode with 1 though lane as a left lane.

c Critical Lane Group



Movement	EBT	EBR	EBR2	WBT	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	505	275	355	550	300	2660
Future Volume (vph)	505	275	355	550	300	2660
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850
Lane Width	14	14	14	14	14	14
Total Lost time (s)	4.0		4.0	4.0		4.0
Lane Util. Factor	0.91		0.91	0.95		0.91
Frt	0.94		0.85	1.00		1.00
Flt Protected	1.00		1.00	1.00		0.99
Satd. Flow (prot)	3287		1482	3640		5204
Flt Permitted	1.00		1.00	1.00		0.99
Satd. Flow (perm)	3287		1482	3640		5204
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	537	293	378	585	319	2830
RTOR Reduction (vph)	1	0	5	0	0	0
Lane Group Flow (vph)	867	0	335	585	0	3149
Turn Type	NA		Perm	NA	Perm	NA
Protected Phases	4			8		6
Permitted Phases			4		6	
Actuated Green, G (s)	48.0		48.0	48.0		104.0
Effective Green, g (s)	48.0		48.0	48.0		104.0
Actuated g/C Ratio	0.30		0.30	0.30		0.65
Clearance Time (s)	4.0		4.0	4.0		4.0
Vehicle Extension (s)	2.5		2.5	2.5		2.5
Lane Grp Cap (vph)	986		444	1092		3382
v/s Ratio Prot	c0.26			0.16		
v/s Ratio Perm			0.23			0.61
v/c Ratio	0.88		0.75	0.54		0.93
Uniform Delay, d1	53.2		50.7	46.7		24.8
Progression Factor	0.79		0.65	0.53		0.54
Incremental Delay, d2	10.4		10.7	1.8		3.8
Delay (s)	52.4		43.8	26.7		17.3
Level of Service	D		D	C		B
Approach Delay (s)	50.0			26.7		17.3
Approach LOS	D			C		B

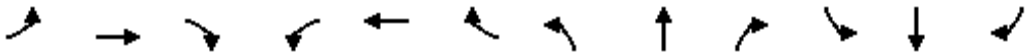
Intersection Summary			
HCM 2000 Control Delay	26.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.91		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	93.0%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	580	2000	0	0	0	0	0	1780	385	0	0	0
Future Volume (vph)	580	2000	0	0	0	0	0	1780	385	0	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	4.0	4.0						4.0	4.0			
Lane Util. Factor	0.97	0.91						0.91	1.00			
Frt	1.00	1.00						1.00	0.85			
Flt Protected	0.95	1.00						1.00	1.00			
Satd. Flow (prot)	3310	4903						4903	1527			
Flt Permitted	0.95	1.00						1.00	1.00			
Satd. Flow (perm)	3310	4903						4903	1527			
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	617	2128	0	0	0	0	0	1894	410	0	0	0
RTOR Reduction (vph)	3	0	0	0	0	0	0	0	4	0	0	0
Lane Group Flow (vph)	614	2128	0	0	0	0	0	1894	406	0	0	0
Turn Type	Perm	NA						NA	Perm			
Protected Phases		4						2				
Permitted Phases	4								2			
Actuated Green, G (s)	81.9	81.9						70.1	70.1			
Effective Green, g (s)	81.9	81.9						70.1	70.1			
Actuated g/C Ratio	0.51	0.51						0.44	0.44			
Clearance Time (s)	4.0	4.0						4.0	4.0			
Vehicle Extension (s)	2.5	2.5						2.5	2.5			
Lane Grp Cap (vph)	1694	2509						2148	669			
v/s Ratio Prot		c0.43						c0.39				
v/s Ratio Perm	0.19								0.27			
v/c Ratio	0.36	0.85						0.88	0.61			
Uniform Delay, d1	23.4	33.7						41.2	34.4			
Progression Factor	0.00	0.13						0.49	0.40			
Incremental Delay, d2	0.2	2.0						2.1	0.7			
Delay (s)	0.2	6.4						22.2	14.7			
Level of Service	A	A						C	B			
Approach Delay (s)		5.0			0.0			20.9			0.0	
Approach LOS		A			A			C			A	

Intersection Summary			
HCM 2000 Control Delay	12.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	81.7%	ICU Level of Service	D
Analysis Period (min)	15		

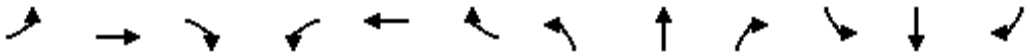
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	2320	670	0	0	0	0	0	0	260	2230	0
Future Volume (vph)	0	2320	670	0	0	0	0	0	0	260	2230	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)		4.0	4.0							4.0	4.0	
Lane Util. Factor		0.76	0.76							1.00	0.91	
Frt		0.99	0.85							1.00	1.00	
Flt Protected		1.00	1.00							0.95	1.00	
Satd. Flow (prot)		6734	1160							1706	4903	
Flt Permitted		1.00	1.00							0.95	1.00	
Satd. Flow (perm)		6734	1160							1706	4903	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	2468	713	0	0	0	0	0	0	277	2372	0
RTOR Reduction (vph)	0	1	4	0	0	0	0	0	0	3	0	0
Lane Group Flow (vph)	0	2709	467	0	0	0	0	0	0	274	2372	0
Turn Type		NA	Perm							Perm	NA	
Protected Phases		4									6	
Permitted Phases			4							6		
Actuated Green, G (s)		70.2	70.2							81.8	81.8	
Effective Green, g (s)		70.2	70.2							81.8	81.8	
Actuated g/C Ratio		0.44	0.44							0.51	0.51	
Clearance Time (s)		4.0	4.0							4.0	4.0	
Vehicle Extension (s)		2.5	2.5							2.5	2.5	
Lane Grp Cap (vph)		2954	508							872	2506	
v/s Ratio Prot		0.40									c0.48	
v/s Ratio Perm			c0.40							0.16		
v/c Ratio		0.92	0.92							0.31	0.95	
Uniform Delay, d1		42.2	42.2							22.8	37.0	
Progression Factor		1.00	1.00							0.31	0.44	
Incremental Delay, d2		5.8	24.2							0.1	5.2	
Delay (s)		48.0	66.5							7.1	21.5	
Level of Service		D	E							A	C	
Approach Delay (s)		50.7			0.0			0.0			20.0	
Approach LOS		D			A			A			B	

Intersection Summary			
HCM 2000 Control Delay	36.8	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.93		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	81.6%	ICU Level of Service	D
Analysis Period (min)	15		

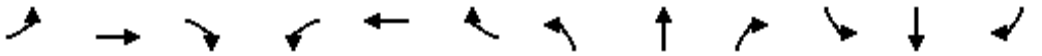
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	560	360	0	155	0	0	0	0	130	1870	135
Future Volume (vph)	0	560	360	0	155	0	0	0	0	130	1870	135
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)		4.0	4.0		4.0					4.0	4.0	
Lane Util. Factor		0.91	0.91		1.00					1.00	0.91	
Frt		0.98	0.85		1.00					1.00	0.99	
Flt Protected		1.00	1.00		1.00					0.95	1.00	
Satd. Flow (prot)		3206	1389		1796					1706	4854	
Flt Permitted		1.00	1.00		1.00					0.95	1.00	
Satd. Flow (perm)		3206	1389		1796					1706	4854	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	596	383	0	165	0	0	0	0	138	1989	144
RTOR Reduction (vph)	0	4	9	0	0	0	0	0	0	0	10	0
Lane Group Flow (vph)	0	680	286	0	165	0	0	0	0	138	2123	0
Turn Type		NA	Perm		NA					Perm	NA	
Protected Phases		4			8						6	
Permitted Phases			4							6		
Actuated Green, G (s)		30.1	30.1		30.1					41.9	41.9	
Effective Green, g (s)		30.1	30.1		30.1					41.9	41.9	
Actuated g/C Ratio		0.38	0.38		0.38					0.52	0.52	
Clearance Time (s)		4.0	4.0		4.0					4.0	4.0	
Vehicle Extension (s)		2.5	2.5		2.5					2.5	2.5	
Lane Grp Cap (vph)		1206	522		675					893	2542	
v/s Ratio Prot		c0.21			0.09						c0.44	
v/s Ratio Perm			0.21							0.08		
v/c Ratio		0.56	0.55		0.24					0.15	0.83	
Uniform Delay, d1		19.8	19.6		17.1					9.9	16.1	
Progression Factor		1.00	1.00		1.38					1.00	1.00	
Incremental Delay, d2		1.9	4.1		0.3					0.1	2.5	
Delay (s)		21.7	23.7		23.9					9.9	18.6	
Level of Service		C	C		C					A	B	
Approach Delay (s)		22.3			23.9			0.0			18.1	
Approach LOS		C			C			A			B	

Intersection Summary			
HCM 2000 Control Delay	19.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	117.3%	ICU Level of Service	H
Analysis Period (min)	15		

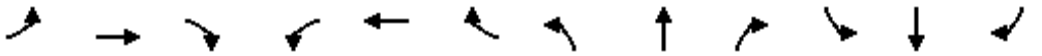
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	490	1685	0	0	0	0	0	1975	255
Future Volume (vph)	0	0	0	490	1685	0	0	0	0	0	1975	255
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)				4.0	4.0						4.0	4.0
Lane Util. Factor				0.86	0.86						0.91	1.00
Frt				1.00	1.00						1.00	0.85
Flt Protected				0.95	1.00						1.00	1.00
Satd. Flow (prot)				1467	4627						4903	1527
Flt Permitted				0.95	1.00						1.00	1.00
Satd. Flow (perm)				1467	4627						4903	1527
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	0	0	521	1793	0	0	0	0	0	2101	271
RTOR Reduction (vph)	0	0	0	4	4	0	0	0	0	0	0	4
Lane Group Flow (vph)	0	0	0	465	1841	0	0	0	0	0	2101	267
Turn Type				Perm	NA						NA	Perm
Protected Phases					8						6	
Permitted Phases				8								6
Actuated Green, G (s)				74.7	74.7						77.3	77.3
Effective Green, g (s)				74.7	74.7						77.3	77.3
Actuated g/C Ratio				0.47	0.47						0.48	0.48
Clearance Time (s)				4.0	4.0						4.0	4.0
Vehicle Extension (s)				2.5	2.5						2.5	2.5
Lane Grp Cap (vph)				684	2160						2368	737
v/s Ratio Prot											c0.43	
v/s Ratio Perm				0.32	0.40							0.18
v/c Ratio				0.68	0.85						0.89	0.36
Uniform Delay, d1				33.3	37.8						37.4	25.9
Progression Factor				0.06	0.42						0.77	0.64
Incremental Delay, d2				3.5	3.2						2.8	0.1
Delay (s)				5.5	19.2						31.4	16.8
Level of Service				A	B						C	B
Approach Delay (s)		0.0			16.4			0.0			29.8	
Approach LOS		A			B			A			C	

Intersection Summary			
HCM 2000 Control Delay	23.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	111.8%	ICU Level of Service	H
Analysis Period (min)	15		

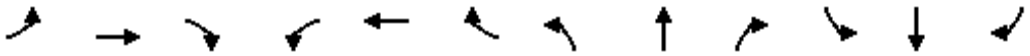
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	505	185	0	0	0	45	155	1980	70	0	0	0
Future Volume (vph)	505	185	0	0	0	45	155	1980	70	0	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	4.0	4.0				4.0		4.0				
Lane Util. Factor	1.00	1.00				1.00		0.91				
Frt	1.00	1.00				0.86		1.00				
Flt Protected	0.95	1.00				1.00		1.00				
Satd. Flow (prot)	1706	1796				1554		4863				
Flt Permitted	0.95	1.00				1.00		1.00				
Satd. Flow (perm)	1706	1796				1554		4863				
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	537	197	0	0	0	48	165	2106	74	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	23	0	4	0	0	0	0
Lane Group Flow (vph)	537	197	0	0	0	25	0	2341	0	0	0	0
Turn Type	Split	NA				Perm	Perm	NA				
Protected Phases	4	4						2				
Permitted Phases						2	2					
Actuated Green, G (s)	31.0	31.0				41.0		41.0				
Effective Green, g (s)	31.0	31.0				41.0		41.0				
Actuated g/C Ratio	0.39	0.39				0.51		0.51				
Clearance Time (s)	4.0	4.0				4.0		4.0				
Vehicle Extension (s)	2.5	2.5				2.5		2.5				
Lane Grp Cap (vph)	661	695				796		2492				
v/s Ratio Prot	c0.31	0.11										
v/s Ratio Perm						0.02		0.48				
v/c Ratio	0.81	0.28				0.03		0.94				
Uniform Delay, d1	21.9	16.9				9.7		18.3				
Progression Factor	0.21	1.44				1.00		0.93				
Incremental Delay, d2	8.9	1.0				0.0		4.9				
Delay (s)	13.4	25.3				9.7		22.0				
Level of Service	B	C				A		C				
Approach Delay (s)		16.6			9.7			22.0			0.0	
Approach LOS		B			A			C			A	

Intersection Summary			
HCM 2000 Control Delay	20.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	117.3%	ICU Level of Service	H
Analysis Period (min)	15		

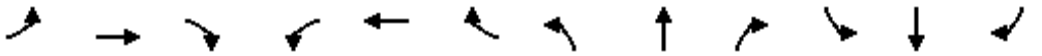
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	1750	195	425	2010	0	0	0	0
Future Volume (vph)	0	0	0	0	1750	195	425	2010	0	0	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)					4.0	4.0	4.0	4.0				
Lane Util. Factor					0.86	1.00	0.86	0.86				
Frt					1.00	0.85	1.00	1.00				
Flt Protected					1.00	1.00	0.95	1.00				
Satd. Flow (prot)					6179	1527	1467	4629				
Flt Permitted					1.00	1.00	0.95	1.00				
Satd. Flow (perm)					6179	1527	1467	4629				
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	0	0	0	1862	207	452	2138	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	4	3	3	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	1862	203	404	2180	0	0	0	0
Turn Type					NA	Perm	Perm	NA				
Protected Phases					8			2				
Permitted Phases						8	2					
Actuated Green, G (s)					64.0	64.0	88.0	88.0				
Effective Green, g (s)					64.0	64.0	88.0	88.0				
Actuated g/C Ratio					0.40	0.40	0.55	0.55				
Clearance Time (s)					4.0	4.0	4.0	4.0				
Vehicle Extension (s)					2.5	2.5	2.5	2.5				
Lane Grp Cap (vph)					2471	610	806	2545				
v/s Ratio Prot					c0.30							
v/s Ratio Perm						0.13	0.28	0.47				
v/c Ratio					0.75	0.33	0.50	0.86				
Uniform Delay, d1					41.2	33.2	22.4	30.6				
Progression Factor					0.84	0.84	0.06	0.35				
Incremental Delay, d2					2.1	1.4	0.2	2.2				
Delay (s)					36.8	29.4	1.6	12.9				
Level of Service					D	C	A	B				
Approach Delay (s)		0.0			36.1			11.1			0.0	
Approach LOS		A			D			B			A	

Intersection Summary			
HCM 2000 Control Delay	22.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	107.5%	ICU Level of Service	G
Analysis Period (min)	15		

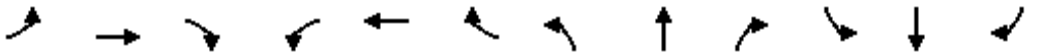
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	920	105	115	435	0	400	0	215	0	345	165
Future Volume (vph)	0	920	105	115	435	0	400	0	215	0	345	165
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Lane Width	14	14	14	14	14	14	14	14	14	14	14	14
Total Lost time (s)		6.0		6.0	6.0		6.0		6.0		6.0	6.0
Lane Util. Factor		0.91		1.00	0.95		0.97		1.00		0.95	1.00
Frpb, ped/bikes		1.00		1.00	1.00		1.00		0.99		1.00	0.97
Flpb, ped/bikes		1.00		1.00	1.00		1.00		1.00		1.00	1.00
Frt		0.98		1.00	1.00		1.00		0.85		1.00	0.85
Flt Protected		1.00		0.95	1.00		0.95		1.00		1.00	1.00
Satd. Flow (prot)		5134		1819	3640		3531		1605		3640	1572
Flt Permitted		1.00		0.20	1.00		0.95		1.00		1.00	1.00
Satd. Flow (perm)		5134		389	3640		3531		1605		3640	1572
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	979	112	122	463	0	426	0	229	0	367	176
RTOR Reduction (vph)	0	6	0	0	0	0	0	0	13	0	0	153
Lane Group Flow (vph)	0	1085	0	122	463	0	426	0	216	0	367	23
Confl. Peds. (#/hr)			8	8			13		3	3		13
Turn Type		NA		D.P+P	NA		Prot		pm+ov		NA	Perm
Protected Phases		6		5	2		7		5		8	
Permitted Phases				6			7		4			8
Actuated Green, G (s)		84.3		92.7	98.7		22.8		57.7		20.5	20.5
Effective Green, g (s)		84.3		92.7	98.7		22.8		57.7		20.5	20.5
Actuated g/C Ratio		0.53		0.58	0.62		0.14		0.36		0.13	0.13
Clearance Time (s)		6.0		6.0	6.0		6.0		6.0		6.0	6.0
Vehicle Extension (s)		5.5		1.0	5.5		1.0		1.0		2.0	2.0
Lane Grp Cap (vph)		2704		300	2245		503		638		466	201
v/s Ratio Prot		0.21		0.02	0.13		c0.12		c0.02		c0.10	
v/s Ratio Perm				c0.21					0.12			0.01
v/c Ratio		0.40		0.41	0.21		0.85		0.34		0.79	0.11
Uniform Delay, d1		22.7		16.2	13.5		66.9		37.3		67.6	61.7
Progression Factor		1.00		1.42	0.00		1.00		1.00		0.83	2.31
Incremental Delay, d2		0.4		0.3	0.2		12.0		0.1		7.0	0.1
Delay (s)		23.2		23.3	0.2		78.9		37.4		63.3	142.8
Level of Service		C		C	A		E		D		E	F
Approach Delay (s)		23.2			5.0			64.4			89.0	
Approach LOS		C			A			E			F	

Intersection Summary			
HCM 2000 Control Delay	41.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	24.0
Intersection Capacity Utilization	71.8%	ICU Level of Service	C
Analysis Period (min)	15		

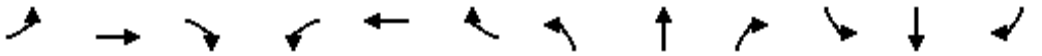
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	90	1100	280	345	1305	100	200	435	785	290	445	110
Future Volume (vph)	90	1100	280	345	1305	100	200	435	785	290	445	110
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	6.5	6.5	6.8	6.5	6.5	6.8	6.8	6.8	6.5	6.8	6.8	6.5
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95	0.88	0.97	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00	0.99	1.00	1.00	0.98	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3310	3413	1503	3310	3413	1509	3310	3399	2624	3310	3399	1503
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3310	3413	1503	3310	3413	1509	3310	3399	2624	3310	3399	1503
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	96	1170	298	367	1388	106	213	463	835	309	473	117
RTOR Reduction (vph)	0	0	34	0	0	26	0	0	79	0	0	91
Lane Group Flow (vph)	96	1170	264	367	1388	80	213	463	756	309	473	26
Confl. Peds. (#/hr)	1		5	5		1	5		10	10		5
Bus Blockages (#/hr)	0	0	0	0	0	0	0	2	0	0	2	0
Turn Type	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	1	6	7	5	2	3	7	4	5	3	8	1
Permitted Phases			6			2			4			8
Actuated Green, G (s)	6.5	65.4	82.9	24.0	82.9	101.0	17.5	25.9	49.9	18.1	26.5	33.0
Effective Green, g (s)	6.5	65.4	82.9	24.0	82.9	101.0	17.5	25.9	49.9	18.1	26.5	33.0
Actuated g/C Ratio	0.04	0.41	0.52	0.15	0.52	0.63	0.11	0.16	0.31	0.11	0.17	0.21
Clearance Time (s)	6.5	6.5	6.8	6.5	6.5	6.8	6.8	6.8	6.5	6.8	6.8	6.5
Vehicle Extension (s)	2.0	5.0	1.0	3.0	5.0	2.0	1.0	2.0	3.0	2.0	2.0	2.0
Lane Grp Cap (vph)	134	1395	778	496	1768	1016	362	550	818	374	562	371
v/s Ratio Prot	0.03	c0.34	0.04	0.11	0.41	0.01	0.06	0.14	c0.14	c0.09	0.14	0.00
v/s Ratio Perm			0.14			0.04			0.15			0.01
v/c Ratio	0.72	0.84	0.34	0.74	0.79	0.08	0.59	0.84	0.92	0.83	0.84	0.07
Uniform Delay, d1	75.8	42.6	22.5	65.0	31.3	11.4	67.8	65.1	53.2	69.4	64.7	51.1
Progression Factor	1.00	1.00	1.00	1.09	0.61	0.43	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	14.1	6.2	0.1	4.5	2.8	0.0	1.6	10.8	15.9	13.2	10.6	0.0
Delay (s)	89.9	48.7	22.6	75.3	21.8	5.0	69.4	75.8	69.1	82.6	75.3	51.2
Level of Service	F	D	C	E	C	A	E	E	E	F	E	D
Approach Delay (s)		46.3			31.4			71.2			74.7	
Approach LOS		D			C			E			E	

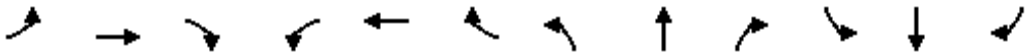
Intersection Summary			
HCM 2000 Control Delay	52.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	26.6
Intersection Capacity Utilization	88.2%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1950	325	420	1640	0	0	0	0	165	20	95
Future Volume (vph)	0	1950	325	420	1640	0	0	0	0	165	20	95
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)		5.8		5.8	5.8						5.9	5.9
Lane Util. Factor		0.86		0.97	0.95						1.00	1.00
Frpb, ped/bikes		1.00		1.00	1.00						1.00	0.98
Flpb, ped/bikes		1.00		1.00	1.00						1.00	1.00
Frt		0.98		1.00	1.00						1.00	0.85
Flt Protected		1.00		0.95	1.00						0.96	1.00
Satd. Flow (prot)		6046		3310	3413						1719	1503
Flt Permitted		1.00		0.95	1.00						0.96	1.00
Satd. Flow (perm)		6046		3310	3413						1719	1503
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	2074	346	447	1745	0	0	0	0	176	21	101
RTOR Reduction (vph)	0	15	0	0	0	0	0	0	0	0	0	51
Lane Group Flow (vph)	0	2405	0	447	1745	0	0	0	0	0	197	50
Confl. Peds. (#/hr)	10					10	2					2
Turn Type		NA		Prot	NA					Perm	NA	Perm
Protected Phases		6		5	2						8	
Permitted Phases										8		8
Actuated Green, G (s)		93.5		26.8	126.1						22.2	22.2
Effective Green, g (s)		93.5		26.8	126.1						22.2	22.2
Actuated g/C Ratio		0.58		0.17	0.79						0.14	0.14
Clearance Time (s)		5.8		5.8	5.8						5.9	5.9
Vehicle Extension (s)		3.8		3.0	3.4						1.5	1.5
Lane Grp Cap (vph)		3533		554	2689						238	208
v/s Ratio Prot		c0.40		c0.14	0.51							
v/s Ratio Perm											0.11	0.03
v/c Ratio		0.68		0.81	0.65						0.83	0.24
Uniform Delay, d1		22.9		64.1	7.4						67.0	61.4
Progression Factor		0.77		1.06	0.48						0.72	0.57
Incremental Delay, d2		0.6		7.3	1.1						8.7	0.1
Delay (s)		18.3		75.1	4.6						56.8	35.2
Level of Service		B		E	A						E	D
Approach Delay (s)		18.3			19.0			0.0			49.5	
Approach LOS		B			B			A			D	

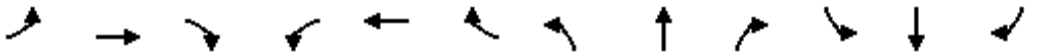
Intersection Summary			
HCM 2000 Control Delay	20.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	17.5
Intersection Capacity Utilization	80.3%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	240	1875	0	0	1885	235	175	25	275	0	0	0
Future Volume (vph)	240	1875	0	0	1885	235	175	25	275	0	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	5.6	5.6			5.6		5.9	5.9	5.9			
Lane Util. Factor	0.97	0.95			0.86		0.95	0.95	1.00			
Frpb, ped/bikes	1.00	1.00			1.00		1.00	1.00	1.00			
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00	1.00			
Frt	1.00	1.00			0.98		1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00		0.95	0.96	1.00			
Satd. Flow (prot)	3310	3413			6076		1621	1645	1527			
Flt Permitted	0.95	1.00			1.00		0.95	0.96	1.00			
Satd. Flow (perm)	3310	3413			6076		1621	1645	1527			
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	255	1995	0	0	2005	250	186	27	293	0	0	0
RTOR Reduction (vph)	0	0	0	0	10	0	0	0	237	0	0	0
Lane Group Flow (vph)	255	1995	0	0	2245	0	106	107	56	0	0	0
Confl. Peds. (#/hr)			7	7								
Turn Type	Prot	NA			NA		Perm	NA	custom			
Protected Phases	1	6			2			4				
Permitted Phases							4		7 5			
Actuated Green, G (s)	18.4	124.7			109.3		15.2	15.2	26.7			
Effective Green, g (s)	18.4	124.7			109.3		15.2	15.2	26.7			
Actuated g/C Ratio	0.11	0.78			0.68		0.09	0.09	0.17			
Clearance Time (s)	5.6	5.6			5.6		5.9	5.9				
Vehicle Extension (s)	1.5	3.3			3.6		2.0	2.0				
Lane Grp Cap (vph)	380	2660			4150		153	156	254			
v/s Ratio Prot	0.08	c0.58			c0.37							
v/s Ratio Perm							c0.07	0.07	0.04			
v/c Ratio	0.67	0.75			0.54		0.69	0.69	0.22			
Uniform Delay, d1	67.9	9.4			12.7		70.1	70.1	57.7			
Progression Factor	0.60	0.92			1.00		1.00	1.00	1.00			
Incremental Delay, d2	2.7	1.5			0.5		10.4	9.5	0.2			
Delay (s)	43.5	10.1			13.3		80.6	79.6	57.8			
Level of Service	D	B			B		F	E	E			
Approach Delay (s)		13.9			13.3			67.2			0.0	
Approach LOS		B			B			E			A	

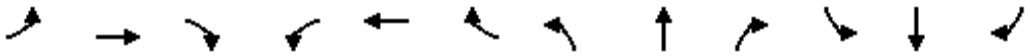
Intersection Summary			
HCM 2000 Control Delay	19.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	20.1
Intersection Capacity Utilization	80.3%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



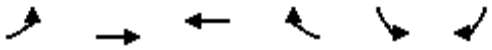
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	30	1705	15	145	75	0	0	50	55
Future Volume (vph)	0	0	0	30	1705	15	145	75	0	0	50	55
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)				5.6	5.6		5.5	5.5			5.5	5.5
Lane Util. Factor				1.00	0.86		1.00	1.00			1.00	1.00
Frpb, ped/bikes				1.00	1.00		1.00	1.00			1.00	0.97
Flpb, ped/bikes				1.00	1.00		0.99	1.00			1.00	1.00
Frt				1.00	1.00		1.00	1.00			1.00	0.85
Flt Protected				0.95	1.00		0.95	1.00			1.00	1.00
Satd. Flow (prot)				1706	6168		1683	1796			1796	1487
Flt Permitted				0.95	1.00		0.72	1.00			1.00	1.00
Satd. Flow (perm)				1706	6168		1280	1796			1796	1487
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	0	0	32	1814	16	154	80	0	0	53	59
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	15
Lane Group Flow (vph)	0	0	0	32	1830	0	154	80	0	0	53	44
Confl. Peds. (#/hr)	5					5	6					6
Turn Type				Perm	NA		Perm	NA			NA	Perm
Protected Phases					2			4			8	
Permitted Phases				2			4					8
Actuated Green, G (s)				124.2	124.2		24.7	24.7			24.7	24.7
Effective Green, g (s)				124.2	124.2		24.7	24.7			24.7	24.7
Actuated g/C Ratio				0.78	0.78		0.15	0.15			0.15	0.15
Clearance Time (s)				5.6	5.6		5.5	5.5			5.5	5.5
Vehicle Extension (s)				2.5	2.5		2.0	2.0			2.8	2.8
Lane Grp Cap (vph)				1324	4787		197	277			277	229
v/s Ratio Prot					c0.30			0.04			0.03	
v/s Ratio Perm				0.02			c0.12					0.03
v/c Ratio				0.02	0.38		0.78	0.29			0.19	0.19
Uniform Delay, d1				4.1	5.7		65.1	59.9			58.9	58.9
Progression Factor				1.00	1.00		0.55	0.56			1.00	1.00
Incremental Delay, d2				0.0	0.2		15.4	0.2			0.3	0.4
Delay (s)				4.1	5.9		51.3	33.5			59.2	59.3
Level of Service				A	A		D	C			E	E
Approach Delay (s)		0.0			5.9			45.2			59.3	
Approach LOS		A			A			D			E	

Intersection Summary			
HCM 2000 Control Delay	12.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.45		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	11.1
Intersection Capacity Utilization	85.9%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	85	2005	360	0	0	0	0	135	70	35	45	0
Future Volume (vph)	85	2005	360	0	0	0	0	135	70	35	45	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)		5.8	5.8					5.7		5.7	5.7	
Lane Util. Factor		0.91	1.00					0.95		1.00	1.00	
Frpb, ped/bikes		1.00	0.95					1.00		1.00	1.00	
Flpb, ped/bikes		1.00	1.00					1.00		1.00	1.00	
Frt		1.00	0.85					0.95		1.00	1.00	
Flt Protected		1.00	1.00					1.00		0.95	1.00	
Satd. Flow (prot)		4893	1455					3239		1706	1796	
Flt Permitted		1.00	1.00					1.00		0.48	1.00	
Satd. Flow (perm)		4893	1455					3239		863	1796	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	90	2133	383	0	0	0	0	144	74	37	48	0
RTOR Reduction (vph)	0	0	71	0	0	0	0	20	0	0	0	0
Lane Group Flow (vph)	0	2223	312	0	0	0	0	198	0	37	48	0
Confl. Peds. (#/hr)			9	9			15					15
Turn Type	Perm	NA	Perm					NA		Perm	NA	
Protected Phases		6						4			8	
Permitted Phases	6		6							8		
Actuated Green, G (s)		130.4	130.4					18.1		18.1	18.1	
Effective Green, g (s)		130.4	130.4					18.1		18.1	18.1	
Actuated g/C Ratio		0.82	0.82					0.11		0.11	0.11	
Clearance Time (s)		5.8	5.8					5.7		5.7	5.7	
Vehicle Extension (s)		2.0	2.0					2.0		2.0	2.0	
Lane Grp Cap (vph)		3987	1185					366		97	203	
v/s Ratio Prot								c0.06			0.03	
v/s Ratio Perm		0.45	0.21							0.04		
v/c Ratio		0.56	0.26					0.54		0.38	0.24	
Uniform Delay, d1		5.0	3.5					67.0		65.8	64.7	
Progression Factor		0.24	0.00					1.00		0.56	0.56	
Incremental Delay, d2		0.3	0.3					0.8		0.9	0.2	
Delay (s)		1.5	0.3					67.8		38.0	36.7	
Level of Service		A	A					E		D	D	
Approach Delay (s)		1.4			0.0			67.8			37.3	
Approach LOS		A			A			E			D	

Intersection Summary			
HCM 2000 Control Delay	7.4	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	11.5
Intersection Capacity Utilization	85.9%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

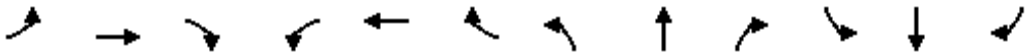


Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	110	930	870	50	190	240
Future Volume (vph)	110	930	870	50	190	240
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850
Total Lost time (s)	5.5	5.5	5.5		5.5	5.5
Lane Util. Factor	1.00	0.95	0.95		1.00	1.00
Frpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Frt	1.00	1.00	0.99		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1706	3413	3379		1706	1527
Flt Permitted	0.25	1.00	1.00		0.95	1.00
Satd. Flow (perm)	444	3413	3379		1706	1527
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	117	989	926	53	202	255
RTOR Reduction (vph)	0	0	1	0	0	218
Lane Group Flow (vph)	117	989	978	0	202	37
Confl. Peds. (#/hr)	3			3		
Turn Type	pm+pt	NA	NA		Prot	Perm
Protected Phases	1	6	2		3	
Permitted Phases	6					7
Actuated Green, G (s)	125.7	125.7	113.9		23.3	23.3
Effective Green, g (s)	125.7	125.7	113.9		23.3	23.3
Actuated g/C Ratio	0.79	0.79	0.71		0.15	0.15
Clearance Time (s)	5.5	5.5	5.5		5.5	5.5
Vehicle Extension (s)	1.0	6.2	6.2		2.0	2.0
Lane Grp Cap (vph)	398	2681	2405		248	222
v/s Ratio Prot	0.01	c0.29	c0.29		c0.12	
v/s Ratio Perm	0.22					0.02
v/c Ratio	0.29	0.37	0.41		0.81	0.17
Uniform Delay, d1	5.3	5.2	9.3		66.3	59.9
Progression Factor	0.21	0.17	1.00		1.00	1.00
Incremental Delay, d2	0.1	0.3	0.5		17.4	0.1
Delay (s)	1.2	1.2	9.9		83.6	60.0
Level of Service	A	A	A		F	E
Approach Delay (s)		1.2	9.9		70.4	
Approach LOS		A	A		E	

Intersection Summary			
HCM 2000 Control Delay	17.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	19.5
Intersection Capacity Utilization	57.2%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

2028 Concept V2 (LR) Intermediate (AM Peak Hour)

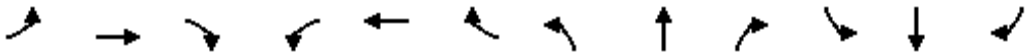
Previously Referred to as Concept H-C2



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	115	535	0	0	485	160	500	2615	480	0	0	0
Future Volume (vph)	115	535	0	0	485	160	500	2615	480	0	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	4.0	4.0			4.0	4.0	4.0	4.0	4.0			
Lane Util. Factor	0.97	0.95			0.95	1.00	1.00	0.91	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	3278	3380			3380	1512	1690	4856	1512			
Flt Permitted	0.25	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	863	3380			3380	1512	1690	4856	1512			
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	128	594	0	0	539	178	556	2906	533	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	5	0	0	15	0	0	0
Lane Group Flow (vph)	128	594	0	0	539	173	556	2906	518	0	0	0
Turn Type	Perm	NA			NA	Perm	Perm	NA	Perm			
Protected Phases		4			8			2				
Permitted Phases	4					8	2		2			
Actuated Green, G (s)	41.0	41.0			41.0	41.0	111.0	111.0	111.0			
Effective Green, g (s)	41.0	41.0			41.0	41.0	111.0	111.0	111.0			
Actuated g/C Ratio	0.26	0.26			0.26	0.26	0.69	0.69	0.69			
Clearance Time (s)	4.0	4.0			4.0	4.0	4.0	4.0	4.0			
Vehicle Extension (s)	2.5	2.5			2.5	2.5	2.5	2.5	2.5			
Lane Grp Cap (vph)	221	866			866	387	1172	3368	1048			
v/s Ratio Prot		c0.18			0.16			c0.60				
v/s Ratio Perm	0.15					0.11	0.33		0.34			
v/c Ratio	0.58	0.69			0.62	0.45	0.47	0.86	0.49			
Uniform Delay, d1	52.0	53.7			52.7	50.0	11.2	18.7	11.4			
Progression Factor	0.77	1.25			0.92	0.92	0.98	0.94	0.97			
Incremental Delay, d2	10.4	4.1			3.3	3.6	0.2	2.5	0.3			
Delay (s)	50.3	71.0			51.8	49.4	11.1	20.0	11.4			
Level of Service	D	E			D	D	B	B	B			
Approach Delay (s)		67.3			51.2			17.6			0.0	
Approach LOS		E			D			B			A	

Intersection Summary			
HCM 2000 Control Delay	28.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	81.5%	ICU Level of Service	D
Analysis Period (min)	15		

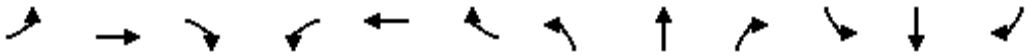
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	235	1075	0	0	0	0	0	2470	245	0	0	0
Future Volume (vph)	235	1075	0	0	0	0	0	2470	245	0	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	4.0	4.0						4.0	4.0			
Lane Util. Factor	0.97	0.91						0.91	1.00			
Frt	1.00	1.00						1.00	0.85			
Flt Protected	0.95	1.00						1.00	1.00			
Satd. Flow (prot)	3278	4856						4856	1512			
Flt Permitted	0.95	1.00						1.00	1.00			
Satd. Flow (perm)	3278	4856						4856	1512			
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	261	1194	0	0	0	0	0	2744	272	0	0	0
RTOR Reduction (vph)	5	0	0	0	0	0	0	0	2	0	0	0
Lane Group Flow (vph)	256	1194	0	0	0	0	0	2744	270	0	0	0
Turn Type	Perm	NA						NA	Perm			
Protected Phases		4						2				
Permitted Phases	4								2			
Actuated Green, G (s)	49.0	49.0						103.0	103.0			
Effective Green, g (s)	49.0	49.0						103.0	103.0			
Actuated g/C Ratio	0.31	0.31						0.64	0.64			
Clearance Time (s)	4.0	4.0						4.0	4.0			
Vehicle Extension (s)	2.5	2.5						2.5	2.5			
Lane Grp Cap (vph)	1003	1487						3126	973			
v/s Ratio Prot		c0.25						c0.57				
v/s Ratio Perm	0.08								0.18			
v/c Ratio	0.26	0.80						0.88	0.28			
Uniform Delay, d1	41.8	51.1						23.3	12.4			
Progression Factor	0.35	0.54						0.60	0.30			
Incremental Delay, d2	0.6	4.4						1.3	0.1			
Delay (s)	15.0	31.9						15.4	3.9			
Level of Service	B	C						B	A			
Approach Delay (s)		28.9			0.0			14.3			0.0	
Approach LOS		C			A			B			A	

Intersection Summary			
HCM 2000 Control Delay	19.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	78.7%	ICU Level of Service	D
Analysis Period (min)	15		

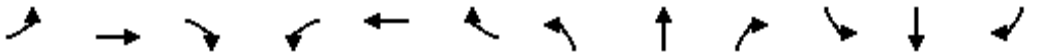
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1155	185	0	0	0	0	0	0	155	1600	0
Future Volume (vph)	0	1155	185	0	0	0	0	0	0	155	1600	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)		4.0	4.0							4.0	4.0	
Lane Util. Factor		0.76	0.76							1.00	0.91	
Frt		1.00	0.85							1.00	1.00	
Flt Protected		1.00	1.00							0.95	1.00	
Satd. Flow (prot)		6743	1149							1690	4856	
Flt Permitted		1.00	1.00							0.95	1.00	
Satd. Flow (perm)		6743	1149							1690	4856	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	1283	206	0	0	0	0	0	0	172	1778	0
RTOR Reduction (vph)	0	1	11	0	0	0	0	0	0	4	0	0
Lane Group Flow (vph)	0	1303	174	0	0	0	0	0	0	168	1778	0
Turn Type		NA	Perm							Perm	NA	
Protected Phases		4									6	
Permitted Phases			4							6		
Actuated Green, G (s)		75.0	75.0							77.0	77.0	
Effective Green, g (s)		75.0	75.0							77.0	77.0	
Actuated g/C Ratio		0.47	0.47							0.48	0.48	
Clearance Time (s)		4.0	4.0							4.0	4.0	
Vehicle Extension (s)		2.5	2.5							2.5	2.5	
Lane Grp Cap (vph)		3160	538							813	2336	
v/s Ratio Prot		c0.19									c0.37	
v/s Ratio Perm			0.15							0.10		
v/c Ratio		0.41	0.32							0.21	0.76	
Uniform Delay, d1		28.0	26.6							23.9	34.0	
Progression Factor		1.00	1.00							0.01	0.23	
Incremental Delay, d2		0.4	1.6							0.1	1.0	
Delay (s)		28.4	28.2							0.4	8.8	
Level of Service		C	C							A	A	
Approach Delay (s)		28.4			0.0			0.0			8.1	
Approach LOS		C			A			A			A	

Intersection Summary			
HCM 2000 Control Delay	16.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	68.7%	ICU Level of Service	C
Analysis Period (min)	15		

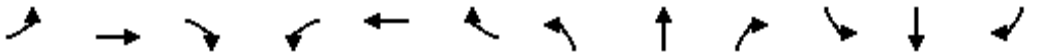
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	210	115	0	275	0	0	0	0	15	1465	130
Future Volume (vph)	0	210	115	0	275	0	0	0	0	15	1465	130
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)		4.0	4.0		4.0					4.0	4.0	4.0
Lane Util. Factor		0.91	0.91		0.95					0.86	0.86	1.00
Frt		0.99	0.85		1.00					1.00	1.00	0.85
Flt Protected		1.00	1.00		1.00					0.95	1.00	1.00
Satd. Flow (prot)		3201	1376		3380					1453	4589	1512
Flt Permitted		1.00	1.00		1.00					0.95	1.00	1.00
Satd. Flow (perm)		3201	1376		3380					1453	4589	1512
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	233	128	0	306	0	0	0	0	17	1628	144
RTOR Reduction (vph)	0	3	28	0	0	0	0	0	0	0	0	72
Lane Group Flow (vph)	0	249	81	0	306	0	0	0	0	15	1630	72
Turn Type		NA	Perm		NA					Perm	NA	Perm
Protected Phases		4			8						6	
Permitted Phases			4							6		6
Actuated Green, G (s)		72.2	72.2		72.2					79.8	79.8	79.8
Effective Green, g (s)		72.2	72.2		72.2					79.8	79.8	79.8
Actuated g/C Ratio		0.45	0.45		0.45					0.50	0.50	0.50
Clearance Time (s)		4.0	4.0		4.0					4.0	4.0	4.0
Vehicle Extension (s)		2.5	2.5		2.5					2.5	2.5	2.5
Lane Grp Cap (vph)		1444	620		1525					724	2288	754
v/s Ratio Prot		0.08			c0.09							
v/s Ratio Perm			0.06							0.01	0.36	0.05
v/c Ratio		0.17	0.13		0.20					0.02	0.71	0.10
Uniform Delay, d1		26.1	25.6		26.5					20.3	31.2	21.1
Progression Factor		1.00	1.00		0.45					1.00	1.00	0.98
Incremental Delay, d2		0.3	0.4		0.3					0.0	1.0	0.0
Delay (s)		26.4	26.0		12.1					20.3	32.2	20.8
Level of Service		C	C		B					C	C	C
Approach Delay (s)		26.3			12.1			0.0			31.2	
Approach LOS		C			B			A			C	

Intersection Summary			
HCM 2000 Control Delay	28.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.47		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	104.4%	ICU Level of Service	G
Analysis Period (min)	15		

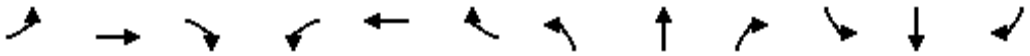
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	425	1915	0	0	0	0	0	1355	220
Future Volume (vph)	0	0	0	425	1915	0	0	0	0	0	1355	220
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)				4.0	4.0						4.0	4.0
Lane Util. Factor				0.86	0.86						0.91	1.00
Frt				1.00	1.00						1.00	0.85
Flt Protected				0.95	1.00						1.00	1.00
Satd. Flow (prot)				1453	4584						4856	1512
Flt Permitted				0.95	1.00						1.00	1.00
Satd. Flow (perm)				1453	4584						4856	1512
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	472	2128	0	0	0	0	0	1506	244
RTOR Reduction (vph)	0	0	0	3	3	0	0	0	0	0	0	4
Lane Group Flow (vph)	0	0	0	422	2172	0	0	0	0	0	1506	240
Turn Type				Perm	NA						NA	Perm
Protected Phases					8						6	
Permitted Phases				8								6
Actuated Green, G (s)				94.7	94.7						57.3	57.3
Effective Green, g (s)				94.7	94.7						57.3	57.3
Actuated g/C Ratio				0.59	0.59						0.36	0.36
Clearance Time (s)				4.0	4.0						4.0	4.0
Vehicle Extension (s)				2.5	2.5						2.5	2.5
Lane Grp Cap (vph)				859	2713						1739	541
v/s Ratio Prot											c0.31	
v/s Ratio Perm				0.29	0.47							0.16
v/c Ratio				0.49	0.80						0.87	0.44
Uniform Delay, d1				18.8	25.3						47.8	39.2
Progression Factor				0.00	0.39						0.46	0.25
Incremental Delay, d2				0.9	1.8						4.3	0.4
Delay (s)				0.9	11.6						26.1	10.0
Level of Service				A	B						C	B
Approach Delay (s)		0.0			9.8			0.0			23.9	
Approach LOS		A			A			A			C	

Intersection Summary			
HCM 2000 Control Delay	15.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	108.9%	ICU Level of Service	G
Analysis Period (min)	15		

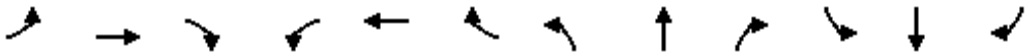
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	190	35	0	0	0	60	275	2130	10	0	0	0
Future Volume (vph)	190	35	0	0	0	60	275	2130	10	0	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	4.0	4.0				4.0	4.0	4.0	4.0			
Lane Util. Factor	0.95	0.95				1.00	1.00	0.95	1.00			
Frt	1.00	1.00				0.86	1.00	1.00	0.85			
Flt Protected	0.95	0.97				1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1605	1634				1539	1690	3380	1512			
Flt Permitted	0.95	0.97				1.00	0.95	1.00	1.00			
Satd. Flow (perm)	1605	1634				1539	1690	3380	1512			
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	211	39	0	0	0	67	306	2367	11	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	13	0	0	2	0	0	0
Lane Group Flow (vph)	124	126	0	0	0	54	306	2367	9	0	0	0
Turn Type	Perm	NA				Perm	Perm	NA	Perm			
Protected Phases		4						2				
Permitted Phases	4					2	2		2			
Actuated Green, G (s)	22.0	22.0				130.0	130.0	130.0	130.0			
Effective Green, g (s)	22.0	22.0				130.0	130.0	130.0	130.0			
Actuated g/C Ratio	0.14	0.14				0.81	0.81	0.81	0.81			
Clearance Time (s)	4.0	4.0				4.0	4.0	4.0	4.0			
Vehicle Extension (s)	2.5	2.5				2.5	2.5	2.5	2.5			
Lane Grp Cap (vph)	220	224				1250	1373	2746	1228			
v/s Ratio Prot								c0.70				
v/s Ratio Perm	c0.08	0.08				0.04	0.18		0.01			
v/c Ratio	0.56	0.56				0.04	0.22	0.86	0.01			
Uniform Delay, d1	64.5	64.5				2.9	3.4	9.4	2.8			
Progression Factor	0.80	0.82				1.00	0.21	1.34	0.00			
Incremental Delay, d2	10.0	9.8				0.0	0.0	1.5	0.0			
Delay (s)	61.3	62.8				2.9	0.7	14.1	0.0			
Level of Service	E	E				A	A	B	A			
Approach Delay (s)		62.1			2.9			12.5			0.0	
Approach LOS		E			A			B			A	

Intersection Summary			
HCM 2000 Control Delay	16.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	104.4%	ICU Level of Service	G
Analysis Period (min)	15		

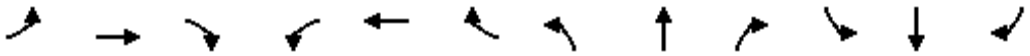
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	1845	170	495	2245	0	0	0	0
Future Volume (vph)	0	0	0	0	1845	170	495	2245	0	0	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)					4.0	4.0	4.0	4.0				
Lane Util. Factor					0.86	1.00	0.97	0.91				
Frt					1.00	0.85	1.00	1.00				
Flt Protected					1.00	1.00	0.95	1.00				
Satd. Flow (prot)					6119	1512	3278	4856				
Flt Permitted					1.00	1.00	0.95	1.00				
Satd. Flow (perm)					6119	1512	3278	4856				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	0	2050	189	550	2494	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	4	3	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	2050	185	547	2494	0	0	0	0
Turn Type					NA	Perm	Perm	NA				
Protected Phases					8			2				
Permitted Phases						8	2					
Actuated Green, G (s)					61.4	61.4	90.6	90.6				
Effective Green, g (s)					61.4	61.4	90.6	90.6				
Actuated g/C Ratio					0.38	0.38	0.57	0.57				
Clearance Time (s)					4.0	4.0	4.0	4.0				
Vehicle Extension (s)					2.5	2.5	2.5	2.5				
Lane Grp Cap (vph)					2348	580	1856	2749				
v/s Ratio Prot					c0.34			c0.51				
v/s Ratio Perm						0.12	0.17					
v/c Ratio					0.87	0.32	0.29	0.91				
Uniform Delay, d1					45.7	34.6	18.1	31.0				
Progression Factor					0.90	0.89	0.08	0.45				
Incremental Delay, d2					4.6	1.4	0.0	2.9				
Delay (s)					45.9	32.3	1.5	16.9				
Level of Service					D	C	A	B				
Approach Delay (s)		0.0			44.8			14.1			0.0	
Approach LOS		A			D			B			A	

Intersection Summary			
HCM 2000 Control Delay	27.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	104.6%	ICU Level of Service	G
Analysis Period (min)	15		

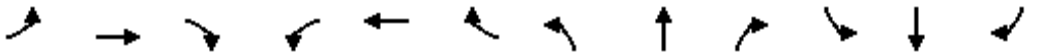
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	300	50	140	710	135	190	30	135	215	240	150
Future Volume (vph)	30	300	50	140	710	135	190	30	135	215	240	150
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00	0.97	1.00	1.00	1.00	0.95	
Frt	1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.94	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1690	3307		1690	3380	1512	3278	1779	1512	1690	3185	
Flt Permitted	0.30	1.00		0.50	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	538	3307		897	3380	1512	3278	1779	1512	1690	3185	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	33	333	56	156	789	150	211	33	150	239	267	167
RTOR Reduction (vph)	0	5	0	0	0	61	0	0	140	0	79	0
Lane Group Flow (vph)	33	384	0	156	789	89	211	33	10	239	355	0
Turn Type	D.P+P	NA		D.P+P	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases	2			6		2			4			
Actuated Green, G (s)	99.0	89.6		99.0	94.7	94.7	14.6	10.7	10.7	26.3	22.4	
Effective Green, g (s)	99.0	89.6		99.0	94.7	94.7	14.6	10.7	10.7	26.3	22.4	
Actuated g/C Ratio	0.62	0.56		0.62	0.59	0.59	0.09	0.07	0.07	0.16	0.14	
Clearance Time (s)	6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	
Vehicle Extension (s)	1.0	5.5		1.0	5.5	5.5	1.0	2.0	2.0	1.0	2.0	
Lane Grp Cap (vph)	363	1851		601	2000	894	299	118	101	277	445	
v/s Ratio Prot	0.00	0.12		c0.02	c0.23		c0.06	0.02		c0.14	0.11	
v/s Ratio Perm	0.05			0.15		0.06			0.01			
v/c Ratio	0.09	0.21		0.26	0.39	0.10	0.71	0.28	0.10	0.86	0.80	
Uniform Delay, d1	12.5	17.5		12.8	17.4	14.2	70.6	71.0	70.1	65.1	66.6	
Progression Factor	1.00	1.00		1.17	0.74	0.77	1.00	1.00	1.00	0.69	0.61	
Incremental Delay, d2	0.0	0.3		0.1	0.5	0.2	6.1	0.5	0.2	19.6	7.7	
Delay (s)	12.5	17.8		15.1	13.3	11.0	76.7	71.5	70.3	64.6	48.2	
Level of Service	B	B		B	B	B	E	E	E	E	D	
Approach Delay (s)		17.4			13.3			73.8			54.0	
Approach LOS		B			B			E			D	

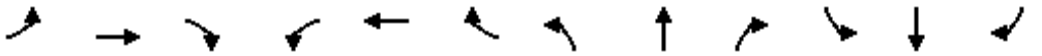
Intersection Summary			
HCM 2000 Control Delay	33.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	24.0
Intersection Capacity Utilization	64.9%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	65	995	85	335	1410	135	165	260	275	45	210	60
Future Volume (vph)	65	995	85	335	1410	135	165	260	275	45	210	60
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	6.5	6.5	6.5	6.5	6.5	6.5	6.8	6.8	6.5	6.8	6.8	6.8
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95	0.88	0.97	0.95	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3278	3380	1512	3278	3380	1512	3278	3366	2661	3278	3366	1512
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3278	3380	1512	3278	3380	1512	3278	3366	2661	3278	3366	1512
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	72	1106	94	372	1567	150	183	289	306	50	233	67
RTOR Reduction (vph)	0	0	46	0	0	56	0	0	83	0	0	60
Lane Group Flow (vph)	72	1106	48	372	1567	94	183	289	223	50	233	7
Bus Blockages (#/hr)	0	0	0	0	0	0	0	2	0	0	2	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4	5	3	8	
Permitted Phases			6			2			4			8
Actuated Green, G (s)	5.6	81.7	81.7	23.7	99.8	99.8	10.7	21.1	44.8	6.9	17.3	17.3
Effective Green, g (s)	5.6	81.7	81.7	23.7	99.8	99.8	10.7	21.1	44.8	6.9	17.3	17.3
Actuated g/C Ratio	0.03	0.51	0.51	0.15	0.62	0.62	0.07	0.13	0.28	0.04	0.11	0.11
Clearance Time (s)	6.5	6.5	6.5	6.5	6.5	6.5	6.8	6.8	6.5	6.8	6.8	6.8
Vehicle Extension (s)	2.0	5.0	5.0	3.0	5.0	5.0	1.0	2.0	3.0	2.0	2.0	2.0
Lane Grp Cap (vph)	114	1725	772	485	2108	943	219	443	745	141	363	163
v/s Ratio Prot	0.02	c0.33		0.11	c0.46		0.06	c0.09	0.04	0.02	c0.07	
v/s Ratio Perm			0.03			0.06			0.04			0.00
v/c Ratio	0.63	0.64	0.06	0.77	0.74	0.10	0.84	0.65	0.30	0.35	0.64	0.04
Uniform Delay, d1	76.2	28.5	19.8	65.5	21.1	12.1	73.8	66.0	45.3	74.4	68.4	63.9
Progression Factor	1.00	1.00	1.00	1.16	0.51	0.29	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	8.1	1.8	0.2	5.0	1.7	0.1	22.3	2.6	0.2	0.6	2.9	0.0
Delay (s)	84.3	30.3	19.9	81.2	12.4	3.6	96.1	68.6	45.5	74.9	71.3	64.0
Level of Service	F	C	B	F	B	A	F	E	D	E	E	E
Approach Delay (s)		32.6			24.0			66.0			70.4	
Approach LOS		C			C			E			E	

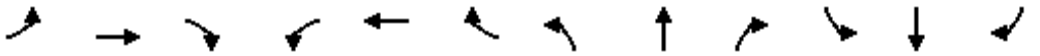
Intersection Summary			
HCM 2000 Control Delay	37.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	26.6
Intersection Capacity Utilization	81.2%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1300	75	255	1850	0	0	0	0	65	30	125
Future Volume (vph)	0	1300	75	255	1850	0	0	0	0	65	30	125
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)		5.8	5.8	5.8	5.8						5.9	5.9
Lane Util. Factor		0.86	1.00	1.00	0.95						1.00	1.00
Frt		1.00	0.85	1.00	1.00						1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00						0.97	1.00
Satd. Flow (prot)		6119	1512	1690	3380						1720	1512
Flt Permitted		1.00	1.00	0.95	1.00						0.97	1.00
Satd. Flow (perm)		6119	1512	1690	3380						1720	1512
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	1444	83	283	2056	0	0	0	0	72	33	139
RTOR Reduction (vph)	0	0	33	0	0	0	0	0	0	0	0	54
Lane Group Flow (vph)	0	1444	50	283	2056	0	0	0	0	0	105	85
Turn Type		NA	Perm	Prot	NA					Perm	NA	Perm
Protected Phases		6		5	2						8	
Permitted Phases			6							8		8
Actuated Green, G (s)		96.2	96.2	32.0	134.0						14.3	14.3
Effective Green, g (s)		96.2	96.2	32.0	134.0						14.3	14.3
Actuated g/C Ratio		0.60	0.60	0.20	0.84						0.09	0.09
Clearance Time (s)		5.8	5.8	5.8	5.8						5.9	5.9
Vehicle Extension (s)		3.8	3.8	3.0	3.4						1.5	1.5
Lane Grp Cap (vph)		3679	909	338	2830						153	135
v/s Ratio Prot		0.24		c0.17	c0.61							
v/s Ratio Perm			0.03								0.06	0.06
v/c Ratio		0.39	0.05	0.84	0.73						0.69	0.63
Uniform Delay, d1		16.6	13.2	61.5	5.4						70.7	70.3
Progression Factor		0.56	0.18	1.30	0.74						0.66	0.50
Incremental Delay, d2		0.3	0.1	13.3	1.3						8.6	6.1
Delay (s)		9.5	2.5	93.3	5.3						55.2	41.2
Level of Service		A	A	F	A						E	D
Approach Delay (s)		9.2			15.9			0.0			47.2	
Approach LOS		A			B			A			D	

Intersection Summary			
HCM 2000 Control Delay	15.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	17.5
Intersection Capacity Utilization	74.0%	ICU Level of Service	D
Analysis Period (min)	15		

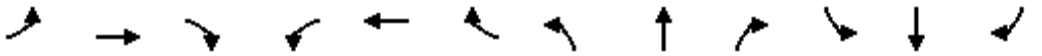
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	105	1260	0	0	1705	240	400	65	450	0	0	0
Future Volume (vph)	105	1260	0	0	1705	240	400	65	450	0	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	5.6	5.6			5.6	5.6	5.9	5.9	5.9			
Lane Util. Factor	0.97	0.95			0.91	1.00	0.95	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.97	1.00			
Satd. Flow (prot)	3278	3380			4856	1512	1605	1631	1512			
Flt Permitted	0.95	1.00			1.00	1.00	0.95	0.97	1.00			
Satd. Flow (perm)	3278	3380			4856	1512	1605	1631	1512			
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	117	1400	0	0	1894	267	444	72	500	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	95	0	0	260	0	0	0
Lane Group Flow (vph)	117	1400	0	0	1894	172	258	258	240	0	0	0
Turn Type	Prot	NA			NA	Perm	Perm	NA	custom			
Protected Phases	1	6			2			4				
Permitted Phases						2	4		7 5			
Actuated Green, G (s)	10.4	109.9			103.3	103.3	29.2	29.2	41.5			
Effective Green, g (s)	10.4	109.9			103.3	103.3	29.2	29.2	41.5			
Actuated g/C Ratio	0.07	0.69			0.65	0.65	0.18	0.18	0.26			
Clearance Time (s)	5.6	5.6			5.6	5.6	5.9	5.9				
Vehicle Extension (s)	1.5	3.3			3.6	3.6	2.0	2.0				
Lane Grp Cap (vph)	213	2321			3135	976	292	297	392			
v/s Ratio Prot	0.04	c0.41			0.39							
v/s Ratio Perm						0.11	c0.16	0.16	c0.16			
v/c Ratio	0.55	0.60			0.60	0.18	0.88	0.87	0.61			
Uniform Delay, d1	72.5	13.4			16.5	11.3	63.7	63.5	52.2			
Progression Factor	0.63	0.33			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	1.5	1.1			0.9	0.4	24.9	21.9	2.0			
Delay (s)	47.2	5.5			17.3	11.7	88.6	85.4	54.2			
Level of Service	D	A			B	B	F	F	D			
Approach Delay (s)		8.7			16.7			70.8			0.0	
Approach LOS		A			B			E			A	

Intersection Summary			
HCM 2000 Control Delay	25.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	20.1
Intersection Capacity Utilization	74.0%	ICU Level of Service	D
Analysis Period (min)	15		

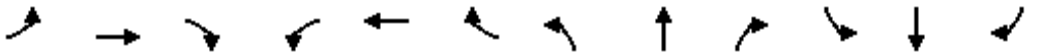
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	80	1820	15	60	20	0	0	35	80
Future Volume (vph)	0	0	0	80	1820	15	60	20	0	0	35	80
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)				5.6	5.6		5.5	5.5			5.5	5.5
Lane Util. Factor				1.00	0.86		1.00	1.00			1.00	1.00
Frt				1.00	1.00		1.00	1.00			1.00	0.85
Flt Protected				0.95	1.00		0.95	1.00			1.00	1.00
Satd. Flow (prot)				1690	6112		1690	1779			1779	1512
Flt Permitted				0.95	1.00		0.73	1.00			1.00	1.00
Satd. Flow (perm)				1690	6112		1301	1779			1779	1512
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	89	2022	17	67	22	0	0	39	89
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	20
Lane Group Flow (vph)	0	0	0	89	2039	0	67	22	0	0	39	69
Turn Type				Perm	NA		Perm	NA			NA	Perm
Protected Phases					2			4			8	
Permitted Phases				2			4					8
Actuated Green, G (s)				130.8	130.8		18.1	18.1			18.1	18.1
Effective Green, g (s)				130.8	130.8		18.1	18.1			18.1	18.1
Actuated g/C Ratio				0.82	0.82		0.11	0.11			0.11	0.11
Clearance Time (s)				5.6	5.6		5.5	5.5			5.5	5.5
Vehicle Extension (s)				2.5	2.5		2.0	2.0			2.8	2.8
Lane Grp Cap (vph)				1381	4996		147	201			201	171
v/s Ratio Prot					c0.33			0.01			0.02	
v/s Ratio Perm				0.05			c0.05					0.05
v/c Ratio				0.06	0.41		0.46	0.11			0.19	0.41
Uniform Delay, d1				2.8	4.0		66.3	63.7			64.3	66.0
Progression Factor				1.00	1.00		0.58	0.58			1.00	1.00
Incremental Delay, d2				0.1	0.2		0.8	0.1			0.4	1.4
Delay (s)				2.9	4.2		39.2	37.1			64.8	67.4
Level of Service				A	A		D	D			E	E
Approach Delay (s)		0.0			4.2			38.7			66.6	
Approach LOS		A			A			D			E	

Intersection Summary			
HCM 2000 Control Delay	8.9	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	11.1
Intersection Capacity Utilization	71.2%	ICU Level of Service	C
Analysis Period (min)	15		

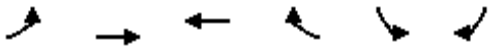
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	1080	115	0	0	0	0	80	30	30	80	0
Future Volume (vph)	30	1080	115	0	0	0	0	80	30	30	80	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)		5.8	5.8					5.7		5.7	5.7	
Lane Util. Factor		0.91	1.00					0.95		1.00	1.00	
Frt		1.00	0.85					0.96		1.00	1.00	
Flt Protected		1.00	1.00					1.00		0.95	1.00	
Satd. Flow (prot)		4850	1512					3243		1690	1779	
Flt Permitted		1.00	1.00					1.00		0.67	1.00	
Satd. Flow (perm)		4850	1512					3243		1200	1779	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	33	1200	128	0	0	0	0	89	33	33	89	0
RTOR Reduction (vph)	0	0	24	0	0	0	0	28	0	0	0	0
Lane Group Flow (vph)	0	1233	104	0	0	0	0	94	0	33	89	0
Turn Type	Perm	NA	Perm					NA		Perm	NA	
Protected Phases		6						4			8	
Permitted Phases	6		6							8		
Actuated Green, G (s)		130.5	130.5					18.0		18.0	18.0	
Effective Green, g (s)		130.5	130.5					18.0		18.0	18.0	
Actuated g/C Ratio		0.82	0.82					0.11		0.11	0.11	
Clearance Time (s)		5.8	5.8					5.7		5.7	5.7	
Vehicle Extension (s)		2.0	2.0					2.0		2.0	2.0	
Lane Grp Cap (vph)		3955	1233					364		135	200	
v/s Ratio Prot								0.03			c0.05	
v/s Ratio Perm		0.25	0.07							0.03		
v/c Ratio		0.31	0.08					0.26		0.24	0.45	
Uniform Delay, d1		3.6	2.9					64.9		64.8	66.3	
Progression Factor		0.15	0.00					1.00		0.84	0.84	
Incremental Delay, d2		0.1	0.1					0.1		0.3	0.6	
Delay (s)		0.7	0.1					65.0		54.5	56.5	
Level of Service		A	A					E		D	E	
Approach Delay (s)		0.6			0.0			65.0			56.0	
Approach LOS		A			A			E			E	

Intersection Summary			
HCM 2000 Control Delay	9.7	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.33		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	11.5
Intersection Capacity Utilization	71.2%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



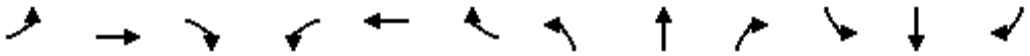
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	50	745	580	40	70	65
Future Volume (vph)	50	745	580	40	70	65
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850
Total Lost time (s)	5.5	5.5	5.5		5.5	5.5
Lane Util. Factor	1.00	0.95	0.95		1.00	1.00
Frt	1.00	1.00	0.99		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1690	3380	3347		1690	1512
Flt Permitted	0.37	1.00	1.00		0.95	1.00
Satd. Flow (perm)	651	3380	3347		1690	1512
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	56	828	644	44	78	72
RTOR Reduction (vph)	0	0	1	0	0	67
Lane Group Flow (vph)	56	828	687	0	78	5
Turn Type	pm+pt	NA	NA		Prot	Perm
Protected Phases	1	6	2		3	
Permitted Phases	6					7
Actuated Green, G (s)	137.1	137.1	127.6		11.9	11.9
Effective Green, g (s)	137.1	137.1	127.6		11.9	11.9
Actuated g/C Ratio	0.86	0.86	0.80		0.07	0.07
Clearance Time (s)	5.5	5.5	5.5		5.5	5.5
Vehicle Extension (s)	1.0	6.2	6.2		2.0	2.0
Lane Grp Cap (vph)	583	2896	2669		125	112
v/s Ratio Prot	0.00	c0.24	0.21		c0.05	
v/s Ratio Perm	0.08					0.00
v/c Ratio	0.10	0.29	0.26		0.62	0.05
Uniform Delay, d1	1.9	2.2	4.1		71.9	68.8
Progression Factor	0.44	0.38	1.00		1.00	1.00
Incremental Delay, d2	0.0	0.2	0.2		6.8	0.1
Delay (s)	0.9	1.0	4.4		78.7	68.9
Level of Service	A	A	A		E	E
Approach Delay (s)		1.0	4.4		74.0	
Approach LOS		A	A		E	

Intersection Summary			
HCM 2000 Control Delay	8.7	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.33		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	19.5
Intersection Capacity Utilization	41.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

2028 Concept V2 (LR) Intermediate (PM Peak Hour)

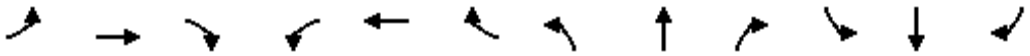
Previously Referred to as Concept H-C2



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	275	805	0	0	1020	225	215	1570	315	0	0	0
Future Volume (vph)	275	805	0	0	1020	225	215	1570	315	0	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	4.0	4.0			4.0	4.0	4.0	4.0	4.0			
Lane Util. Factor	0.97	0.95			0.95	1.00	1.00	0.91	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (prot)	3310	3413			3413	1527	1706	4903	1527			
Flt Permitted	0.19	1.00			1.00	1.00	0.95	1.00	1.00			
Satd. Flow (perm)	654	3413			3413	1527	1706	4903	1527			
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	293	856	0	0	1085	239	229	1670	335	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	3	0	0	100	0	0	0
Lane Group Flow (vph)	293	856	0	0	1085	236	229	1670	235	0	0	0
Turn Type	Perm	NA			NA	Perm	Perm	NA	Perm			
Protected Phases		4			8			2				
Permitted Phases	4					8	2		2			
Actuated Green, G (s)	93.5	93.5			93.5	93.5	58.5	58.5	58.5			
Effective Green, g (s)	93.5	93.5			93.5	93.5	58.5	58.5	58.5			
Actuated g/C Ratio	0.58	0.58			0.58	0.58	0.37	0.37	0.37			
Clearance Time (s)	4.0	4.0			4.0	4.0	4.0	4.0	4.0			
Vehicle Extension (s)	2.5	2.5			2.5	2.5	2.5	2.5	2.5			
Lane Grp Cap (vph)	382	1994			1994	892	623	1792	558			
v/s Ratio Prot		0.25			0.32			c0.34				
v/s Ratio Perm	c0.45					0.15	0.13		0.15			
v/c Ratio	0.77	0.43			0.54	0.26	0.37	0.93	0.42			
Uniform Delay, d1	25.0	18.4			20.3	16.3	37.2	48.8	38.1			
Progression Factor	1.14	0.50			0.69	0.70	0.89	0.86	0.80			
Incremental Delay, d2	12.5	0.5			1.0	0.7	0.3	9.3	0.4			
Delay (s)	41.1	9.7			15.0	12.1	33.4	51.4	30.9			
Level of Service	D	A			B	B	C	D	C			
Approach Delay (s)		17.7			14.5			46.5			0.0	
Approach LOS		B			B			D			A	

Intersection Summary			
HCM 2000 Control Delay	30.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	78.2%	ICU Level of Service	D
Analysis Period (min)	15		

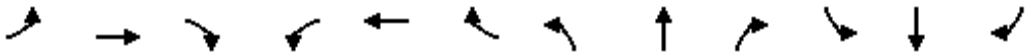
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	575	2000	0	0	0	0	0	1780	385	0	0	0
Future Volume (vph)	575	2000	0	0	0	0	0	1780	385	0	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	4.0	4.0						4.0	4.0			
Lane Util. Factor	0.97	0.91						0.91	1.00			
Frt	1.00	1.00						1.00	0.85			
Flt Protected	0.95	1.00						1.00	1.00			
Satd. Flow (prot)	3310	4903						4903	1527			
Flt Permitted	0.95	1.00						1.00	1.00			
Satd. Flow (perm)	3310	4903						4903	1527			
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	612	2128	0	0	0	0	0	1894	410	0	0	0
RTOR Reduction (vph)	3	0	0	0	0	0	0	0	4	0	0	0
Lane Group Flow (vph)	609	2128	0	0	0	0	0	1894	406	0	0	0
Turn Type	Perm	NA						NA	Perm			
Protected Phases		4						2				
Permitted Phases	4								2			
Actuated Green, G (s)	82.0	82.0						70.0	70.0			
Effective Green, g (s)	82.0	82.0						70.0	70.0			
Actuated g/C Ratio	0.51	0.51						0.44	0.44			
Clearance Time (s)	4.0	4.0						4.0	4.0			
Vehicle Extension (s)	2.5	2.5						2.5	2.5			
Lane Grp Cap (vph)	1696	2512						2145	668			
v/s Ratio Prot		c0.43						c0.39				
v/s Ratio Perm	0.18								0.27			
v/c Ratio	0.36	0.85						0.88	0.61			
Uniform Delay, d1	23.3	33.6						41.2	34.5			
Progression Factor	0.00	0.14						0.41	0.75			
Incremental Delay, d2	0.2	2.0						1.5	1.3			
Delay (s)	0.2	6.6						18.6	27.2			
Level of Service	A	A						B	C			
Approach Delay (s)		5.2			0.0			20.2			0.0	
Approach LOS		A			A			C			A	

Intersection Summary			
HCM 2000 Control Delay	12.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	81.7%	ICU Level of Service	D
Analysis Period (min)	15		

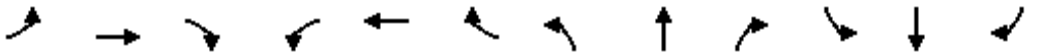
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	2315	700	0	0	0	0	0	0	260	2225	0
Future Volume (vph)	0	2315	700	0	0	0	0	0	0	260	2225	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)		4.0	4.0							4.0	4.0	
Lane Util. Factor		0.76	0.76							1.00	0.91	
Frt		0.99	0.85							1.00	1.00	
Flt Protected		1.00	1.00							0.95	1.00	
Satd. Flow (prot)		6725	1160							1706	4903	
Flt Permitted		1.00	1.00							0.95	1.00	
Satd. Flow (perm)		6725	1160							1706	4903	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	2463	745	0	0	0	0	0	0	277	2367	0
RTOR Reduction (vph)	0	1	4	0	0	0	0	0	0	3	0	0
Lane Group Flow (vph)	0	2730	473	0	0	0	0	0	0	274	2367	0
Turn Type		NA	Perm							Perm	NA	
Protected Phases		4									6	
Permitted Phases			4							6		
Actuated Green, G (s)		71.1	71.1							80.9	80.9	
Effective Green, g (s)		71.1	71.1							80.9	80.9	
Actuated g/C Ratio		0.44	0.44							0.51	0.51	
Clearance Time (s)		4.0	4.0							4.0	4.0	
Vehicle Extension (s)		2.5	2.5							2.5	2.5	
Lane Grp Cap (vph)		2988	515							862	2479	
v/s Ratio Prot		0.41									c0.48	
v/s Ratio Perm			c0.41							0.16		
v/c Ratio		0.91	0.92							0.32	0.95	
Uniform Delay, d1		41.6	41.7							23.3	37.8	
Progression Factor		1.00	1.00							0.26	0.43	
Incremental Delay, d2		5.6	23.9							0.1	6.0	
Delay (s)		47.2	65.6							6.2	22.1	
Level of Service		D	E							A	C	
Approach Delay (s)		49.9			0.0			0.0			20.5	
Approach LOS		D			A			A			C	

Intersection Summary			
HCM 2000 Control Delay	36.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	81.6%	ICU Level of Service	D
Analysis Period (min)	15		

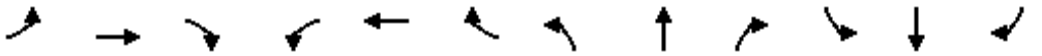
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	560	360	0	155	0	0	0	0	130	1870	135
Future Volume (vph)	0	560	360	0	155	0	0	0	0	130	1870	135
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)		4.0	4.0		4.0					4.0	4.0	4.0
Lane Util. Factor		0.91	0.91		0.95					0.86	0.86	1.00
Frt		0.98	0.85		1.00					1.00	1.00	0.85
Flt Protected		1.00	1.00		1.00					0.95	1.00	1.00
Satd. Flow (prot)		3206	1389		3413					1467	4632	1527
Flt Permitted		1.00	1.00		1.00					0.95	1.00	1.00
Satd. Flow (perm)		3206	1389		3413					1467	4632	1527
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	596	383	0	165	0	0	0	0	138	1989	144
RTOR Reduction (vph)	0	7	7	0	0	0	0	0	0	0	0	51
Lane Group Flow (vph)	0	677	288	0	165	0	0	0	0	124	2003	93
Turn Type		NA	Perm		NA					Perm	NA	Perm
Protected Phases		4			8						6	
Permitted Phases			4							6		6
Actuated Green, G (s)		64.6	64.6		64.6					87.4	87.4	87.4
Effective Green, g (s)		64.6	64.6		64.6					87.4	87.4	87.4
Actuated g/C Ratio		0.40	0.40		0.40					0.55	0.55	0.55
Clearance Time (s)		4.0	4.0		4.0					4.0	4.0	4.0
Vehicle Extension (s)		2.5	2.5		2.5					2.5	2.5	2.5
Lane Grp Cap (vph)		1294	560		1377					801	2530	834
v/s Ratio Prot		c0.21			0.05							
v/s Ratio Perm			0.21							0.08	0.43	0.06
v/c Ratio		0.52	0.52		0.12					0.15	0.79	0.11
Uniform Delay, d1		36.1	35.9		29.9					18.0	29.0	17.5
Progression Factor		1.00	1.00		0.80					1.00	1.00	0.98
Incremental Delay, d2		1.5	3.4		0.2					0.1	1.7	0.0
Delay (s)		37.6	39.3		24.1					18.0	30.7	17.3
Level of Service		D	D		C					B	C	B
Approach Delay (s)		38.1			24.1			0.0			29.2	
Approach LOS		D			C			A			C	

Intersection Summary			
HCM 2000 Control Delay	31.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	120.6%	ICU Level of Service	H
Analysis Period (min)	15		

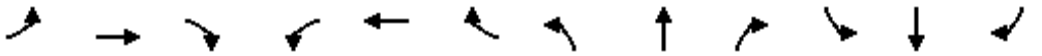
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	490	1685	0	0	0	0	0	1975	255
Future Volume (vph)	0	0	0	490	1685	0	0	0	0	0	1975	255
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)				4.0	4.0						4.0	4.0
Lane Util. Factor				0.86	0.86						0.91	1.00
Frt				1.00	1.00						1.00	0.85
Flt Protected				0.95	1.00						1.00	1.00
Satd. Flow (prot)				1467	4627						4903	1527
Flt Permitted				0.95	1.00						1.00	1.00
Satd. Flow (perm)				1467	4627						4903	1527
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	0	0	521	1793	0	0	0	0	0	2101	271
RTOR Reduction (vph)	0	0	0	4	4	0	0	0	0	0	0	4
Lane Group Flow (vph)	0	0	0	465	1841	0	0	0	0	0	2101	267
Turn Type				Perm	NA						NA	Perm
Protected Phases					8						6	
Permitted Phases				8								6
Actuated Green, G (s)				74.8	74.8						77.2	77.2
Effective Green, g (s)				74.8	74.8						77.2	77.2
Actuated g/C Ratio				0.47	0.47						0.48	0.48
Clearance Time (s)				4.0	4.0						4.0	4.0
Vehicle Extension (s)				2.5	2.5						2.5	2.5
Lane Grp Cap (vph)				685	2163						2365	736
v/s Ratio Prot											c0.43	
v/s Ratio Perm				0.32	0.40							0.18
v/c Ratio				0.68	0.85						0.89	0.36
Uniform Delay, d1				33.2	37.7						37.5	26.0
Progression Factor				0.07	0.37						0.59	0.16
Incremental Delay, d2				3.7	3.6						3.3	0.1
Delay (s)				5.9	17.6						25.3	4.3
Level of Service				A	B						C	A
Approach Delay (s)		0.0			15.2			0.0			22.9	
Approach LOS		A			B			A			C	

Intersection Summary			
HCM 2000 Control Delay	19.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	115.1%	ICU Level of Service	H
Analysis Period (min)	15		

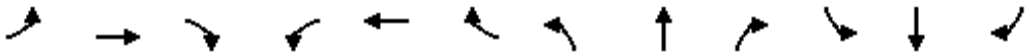
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	505	185	0	0	0	45	155	1980	70	0	0	0
Future Volume (vph)	505	185	0	0	0	45	155	1980	70	0	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	4.0	4.0				4.0	4.0	4.0	4.0			
Lane Util. Factor	0.95	0.95				1.00	1.00	0.95	1.00			
Frt	1.00	1.00				0.86	1.00	1.00	0.85			
Flt Protected	0.95	0.98				1.00	0.95	1.00	1.00			
Satd. Flow (prot)	1621	1667				1554	1706	3413	1527			
Flt Permitted	0.95	0.98				1.00	0.95	1.00	1.00			
Satd. Flow (perm)	1621	1667				1554	1706	3413	1527			
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	537	197	0	0	0	48	165	2106	74	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	16	0	0	17	0	0	0
Lane Group Flow (vph)	360	374	0	0	0	32	165	2106	57	0	0	0
Turn Type	Perm	NA				Perm	Perm	NA	Perm			
Protected Phases		4						2				
Permitted Phases	4					2	2		2			
Actuated Green, G (s)	45.0	45.0				107.0	107.0	107.0	107.0			
Effective Green, g (s)	45.0	45.0				107.0	107.0	107.0	107.0			
Actuated g/C Ratio	0.28	0.28				0.67	0.67	0.67	0.67			
Clearance Time (s)	4.0	4.0				4.0	4.0	4.0	4.0			
Vehicle Extension (s)	2.5	2.5				2.5	2.5	2.5	2.5			
Lane Grp Cap (vph)	455	468				1039	1140	2282	1021			
v/s Ratio Prot								c0.62				
v/s Ratio Perm	0.22	0.22				0.02	0.10		0.04			
v/c Ratio	0.79	0.80				0.03	0.14	0.92	0.06			
Uniform Delay, d1	53.2	53.3				9.0	9.7	22.9	9.1			
Progression Factor	0.64	0.76				1.00	0.24	0.44	0.01			
Incremental Delay, d2	11.6	12.9				0.0	0.0	4.7	0.0			
Delay (s)	45.4	53.5				9.0	2.3	14.7	0.1			
Level of Service	D	D				A	A	B	A			
Approach Delay (s)		49.5			9.0			13.4			0.0	
Approach LOS		D			A			B			A	

Intersection Summary			
HCM 2000 Control Delay	21.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	120.6%	ICU Level of Service	H
Analysis Period (min)	15		

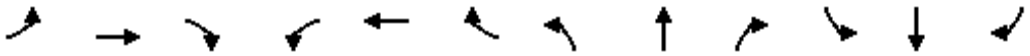
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	1750	195	425	2010	0	0	0	0
Future Volume (vph)	0	0	0	0	1750	195	425	2010	0	0	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)					4.0	4.0	4.0	4.0				
Lane Util. Factor					0.86	1.00	0.97	0.91				
Frt					1.00	0.85	1.00	1.00				
Flt Protected					1.00	1.00	0.95	1.00				
Satd. Flow (prot)					6179	1527	3310	4903				
Flt Permitted					1.00	1.00	0.95	1.00				
Satd. Flow (perm)					6179	1527	3310	4903				
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	0	0	0	1862	207	452	2138	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	4	3	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	1862	203	449	2138	0	0	0	0
Turn Type					NA	Perm	Perm	NA				
Protected Phases					8			2				
Permitted Phases						8	2					
Actuated Green, G (s)					67.0	67.0	85.0	85.0				
Effective Green, g (s)					67.0	67.0	85.0	85.0				
Actuated g/C Ratio					0.42	0.42	0.53	0.53				
Clearance Time (s)					4.0	4.0	4.0	4.0				
Vehicle Extension (s)					2.5	2.5	2.5	2.5				
Lane Grp Cap (vph)					2587	639	1758	2604				
v/s Ratio Prot					c0.30			c0.44				
v/s Ratio Perm						0.13	0.14					
v/c Ratio					0.72	0.32	0.26	0.82				
Uniform Delay, d1					38.7	31.2	20.3	31.2				
Progression Factor					0.83	0.88	0.06	0.40				
Incremental Delay, d2					1.7	1.2	0.0	1.6				
Delay (s)					33.9	28.6	1.2	14.1				
Level of Service					C	C	A	B				
Approach Delay (s)		0.0			33.4			11.9			0.0	
Approach LOS		A			C			B			A	

Intersection Summary			
HCM 2000 Control Delay	21.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	110.8%	ICU Level of Service	H
Analysis Period (min)	15		

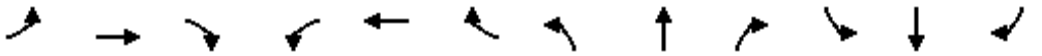
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	325	600	105	120	710	405	400	100	115	365	345	105
Future Volume (vph)	325	600	105	120	710	405	400	100	115	365	345	105
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00	0.97	1.00	1.00	1.00	0.95	
Frt	1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.96	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1706	3336		1706	3413	1527	3310	1796	1527	1706	3293	
Flt Permitted	0.18	1.00		0.28	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	328	3336		495	3413	1527	3310	1796	1527	1706	3293	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	346	638	112	128	755	431	426	106	122	388	367	112
RTOR Reduction (vph)	0	8	0	0	0	296	0	0	110	0	20	0
Lane Group Flow (vph)	346	742	0	128	755	135	426	106	12	388	459	0
Turn Type	D.P+P	NA		D.P+P	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases	2			6		2			4			
Actuated Green, G (s)	83.0	73.5		83.0	50.2	50.2	26.3	15.2	15.2	37.8	26.7	
Effective Green, g (s)	83.0	73.5		83.0	50.2	50.2	26.3	15.2	15.2	37.8	26.7	
Actuated g/C Ratio	0.52	0.46		0.52	0.31	0.31	0.16	0.09	0.09	0.24	0.17	
Clearance Time (s)	6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	
Vehicle Extension (s)	1.0	5.5		1.0	5.5	5.5	1.0	2.0	2.0	1.0	2.0	
Lane Grp Cap (vph)	452	1532		328	1070	479	544	170	145	403	549	
v/s Ratio Prot	c0.16	0.22		0.02	0.22		c0.13	0.06		c0.23	0.14	
v/s Ratio Perm	c0.24			0.18		0.09			0.01			
v/c Ratio	0.77	0.48		0.39	0.71	0.28	0.78	0.62	0.08	0.96	0.84	
Uniform Delay, d1	29.0	30.1		21.3	48.4	41.3	64.1	69.6	66.0	60.4	64.5	
Progression Factor	1.00	1.00		0.73	0.78	0.69	1.00	1.00	1.00	0.85	0.78	
Incremental Delay, d2	6.8	1.1		0.3	3.4	1.3	6.7	5.0	0.1	28.5	7.6	
Delay (s)	35.8	31.2		15.8	41.0	29.8	70.8	74.7	66.1	80.2	58.0	
Level of Service	D	C		B	D	C	E	E	E	F	E	
Approach Delay (s)		32.6			34.9			70.6			67.9	
Approach LOS		C			C			E			E	

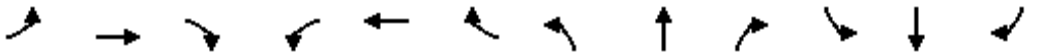
Intersection Summary			
HCM 2000 Control Delay	47.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	24.0
Intersection Capacity Utilization	87.8%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	90	1100	280	345	1305	100	200	435	785	290	445	110
Future Volume (vph)	90	1100	280	345	1305	100	200	435	785	290	445	110
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	6.5	6.5	6.5	6.5	6.5	6.5	6.8	6.8	6.5	6.8	6.8	6.8
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95	0.88	0.97	0.95	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3310	3413	1527	3310	3413	1527	3310	3399	2687	3310	3399	1527
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3310	3413	1527	3310	3413	1527	3310	3399	2687	3310	3399	1527
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	96	1170	298	367	1388	106	213	463	835	309	473	117
RTOR Reduction (vph)	0	0	168	0	0	51	0	0	80	0	0	94
Lane Group Flow (vph)	96	1170	130	367	1388	55	213	463	755	309	473	23
Bus Blockages (#/hr)	0	0	0	0	0	0	0	2	0	0	2	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4	5	3	8	
Permitted Phases			6			2			4			8
Actuated Green, G (s)	6.5	66.8	66.8	22.6	82.9	82.9	13.1	25.9	48.5	18.1	30.9	30.9
Effective Green, g (s)	6.5	66.8	66.8	22.6	82.9	82.9	13.1	25.9	48.5	18.1	30.9	30.9
Actuated g/C Ratio	0.04	0.42	0.42	0.14	0.52	0.52	0.08	0.16	0.30	0.11	0.19	0.19
Clearance Time (s)	6.5	6.5	6.5	6.5	6.5	6.5	6.8	6.8	6.5	6.8	6.8	6.8
Vehicle Extension (s)	2.0	5.0	5.0	3.0	5.0	5.0	1.0	2.0	3.0	2.0	2.0	2.0
Lane Grp Cap (vph)	134	1424	637	467	1768	791	271	550	814	374	656	294
v/s Ratio Prot	0.03	c0.34		0.11	0.41		0.06	0.14	c0.13	c0.09	0.14	
v/s Ratio Perm			0.08			0.04			0.15			0.01
v/c Ratio	0.72	0.82	0.20	0.79	0.79	0.07	0.79	0.84	0.93	0.83	0.72	0.08
Uniform Delay, d1	75.8	41.3	29.7	66.4	31.3	19.3	72.1	65.1	54.0	69.4	60.5	52.9
Progression Factor	1.00	1.00	1.00	1.14	0.62	0.37	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	14.1	5.5	0.7	6.7	2.8	0.1	12.9	10.8	16.4	13.2	3.3	0.0
Delay (s)	89.9	46.8	30.4	82.1	22.3	7.3	85.0	75.8	70.4	82.6	63.8	52.9
Level of Service	F	D	C	F	C	A	F	E	E	F	E	D
Approach Delay (s)		46.3			33.3			74.1			68.9	
Approach LOS		D			C			E			E	

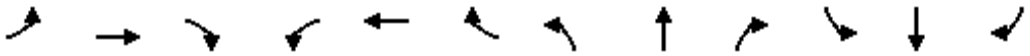
Intersection Summary			
HCM 2000 Control Delay	52.8	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	26.6
Intersection Capacity Utilization	84.4%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1950	325	420	1640	0	0	0	0	165	20	95
Future Volume (vph)	0	1950	325	420	1640	0	0	0	0	165	20	95
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)		5.8	5.8	5.8	5.8						5.9	5.9
Lane Util. Factor		0.86	1.00	1.00	0.95						1.00	1.00
Frt		1.00	0.85	1.00	1.00						1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00						0.96	1.00
Satd. Flow (prot)		6179	1527	1706	3413						1719	1527
Flt Permitted		1.00	1.00	0.95	1.00						0.96	1.00
Satd. Flow (perm)		6179	1527	1706	3413						1719	1527
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	2074	346	447	1745	0	0	0	0	176	21	101
RTOR Reduction (vph)	0	0	143	0	0	0	0	0	0	0	0	51
Lane Group Flow (vph)	0	2074	203	447	1745	0	0	0	0	0	197	50
Turn Type		NA	Perm	Prot	NA					Perm	NA	Perm
Protected Phases		6		5	2						8	
Permitted Phases			6							8		8
Actuated Green, G (s)		74.4	74.4	46.3	126.5						21.8	21.8
Effective Green, g (s)		74.4	74.4	46.3	126.5						21.8	21.8
Actuated g/C Ratio		0.47	0.47	0.29	0.79						0.14	0.14
Clearance Time (s)		5.8	5.8	5.8	5.8						5.9	5.9
Vehicle Extension (s)		3.8	3.8	3.0	3.4						1.5	1.5
Lane Grp Cap (vph)		2873	710	493	2698						234	208
v/s Ratio Prot		c0.34		c0.26	0.51							
v/s Ratio Perm			0.13								0.11	0.03
v/c Ratio		0.72	0.29	0.91	0.65						0.84	0.24
Uniform Delay, d1		34.5	26.4	54.8	7.2						67.4	61.7
Progression Factor		0.82	0.74	0.83	0.24						0.78	0.55
Incremental Delay, d2		0.9	0.6	17.3	1.0						12.3	0.1
Delay (s)		29.2	20.1	62.9	2.8						65.1	34.0
Level of Service		C	C	E	A						E	C
Approach Delay (s)		27.9			15.0			0.0			54.6	
Approach LOS		C			B			A			D	

Intersection Summary			
HCM 2000 Control Delay	23.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	17.5
Intersection Capacity Utilization	80.3%	ICU Level of Service	D
Analysis Period (min)	15		

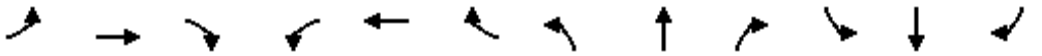
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	240	1875	0	0	1885	235	175	25	275	0	0	0
Future Volume (vph)	240	1875	0	0	1885	235	175	25	275	0	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	5.6	5.6			5.6	5.6	5.9	5.9	5.9			
Lane Util. Factor	0.97	0.95			0.91	1.00	0.95	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.96	1.00			
Satd. Flow (prot)	3310	3413			4903	1527	1621	1645	1527			
Flt Permitted	0.95	1.00			1.00	1.00	0.95	0.96	1.00			
Satd. Flow (perm)	3310	3413			4903	1527	1621	1645	1527			
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	255	1995	0	0	2005	250	186	27	293	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	79	0	0	237	0	0	0
Lane Group Flow (vph)	255	1995	0	0	2005	171	106	107	56	0	0	0
Turn Type	Prot	NA			NA	Perm	Perm	NA	custom			
Protected Phases	1	6			2			4				
Permitted Phases						2	4		7 5			
Actuated Green, G (s)	18.4	124.7			109.3	109.3	15.2	15.2	26.7			
Effective Green, g (s)	18.4	124.7			109.3	109.3	15.2	15.2	26.7			
Actuated g/C Ratio	0.11	0.78			0.68	0.68	0.09	0.09	0.17			
Clearance Time (s)	5.6	5.6			5.6	5.6	5.9	5.9				
Vehicle Extension (s)	1.5	3.3			3.6	3.6	2.0	2.0				
Lane Grp Cap (vph)	380	2660			3349	1043	153	156	254			
v/s Ratio Prot	0.08	c0.58			c0.41							
v/s Ratio Perm						0.11	c0.07	0.07	0.04			
v/c Ratio	0.67	0.75			0.60	0.16	0.69	0.69	0.22			
Uniform Delay, d1	67.9	9.4			13.6	9.0	70.1	70.1	57.6			
Progression Factor	0.50	2.02			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	2.5	1.4			0.8	0.3	10.4	9.5	0.2			
Delay (s)	36.8	20.3			14.4	9.4	80.6	79.6	57.8			
Level of Service	D	C			B	A	F	E	E			
Approach Delay (s)		22.1			13.8			67.2			0.0	
Approach LOS		C			B			E			A	

Intersection Summary			
HCM 2000 Control Delay	23.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	20.1
Intersection Capacity Utilization	80.3%	ICU Level of Service	D
Analysis Period (min)	15		

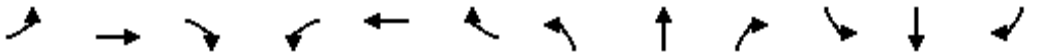
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	30	1705	15	145	75	0	0	50	55
Future Volume (vph)	0	0	0	30	1705	15	145	75	0	0	50	55
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)				5.6	5.6		5.5	5.5			5.5	5.5
Lane Util. Factor				1.00	0.86		1.00	1.00			1.00	1.00
Frt				1.00	1.00		1.00	1.00			1.00	0.85
Flt Protected				0.95	1.00		0.95	1.00			1.00	1.00
Satd. Flow (prot)				1706	6171		1706	1796			1796	1527
Flt Permitted				0.95	1.00		0.72	1.00			1.00	1.00
Satd. Flow (perm)				1706	6171		1298	1796			1796	1527
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	0	0	32	1814	16	154	80	0	0	53	59
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	15
Lane Group Flow (vph)	0	0	0	32	1830	0	154	80	0	0	53	44
Turn Type				Perm	NA		Perm	NA			NA	Perm
Protected Phases					2			4			8	
Permitted Phases				2			4					8
Actuated Green, G (s)				124.4	124.4		24.5	24.5			24.5	24.5
Effective Green, g (s)				124.4	124.4		24.5	24.5			24.5	24.5
Actuated g/C Ratio				0.78	0.78		0.15	0.15			0.15	0.15
Clearance Time (s)				5.6	5.6		5.5	5.5			5.5	5.5
Vehicle Extension (s)				2.5	2.5		2.0	2.0			2.8	2.8
Lane Grp Cap (vph)				1326	4797		198	275			275	233
v/s Ratio Prot					c0.30			0.04			0.03	
v/s Ratio Perm				0.02			c0.12					0.03
v/c Ratio				0.02	0.38		0.78	0.29			0.19	0.19
Uniform Delay, d1				4.0	5.6		65.1	60.1			59.1	59.1
Progression Factor				1.00	1.00		0.60	0.60			1.00	1.00
Incremental Delay, d2				0.0	0.2		14.6	0.2			0.3	0.3
Delay (s)				4.1	5.9		53.8	36.1			59.4	59.4
Level of Service				A	A		D	D			E	E
Approach Delay (s)		0.0			5.8			47.7			59.4	
Approach LOS		A			A			D			E	

Intersection Summary			
HCM 2000 Control Delay	13.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.45		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	11.1
Intersection Capacity Utilization	85.9%	ICU Level of Service	E
Analysis Period (min)	15		

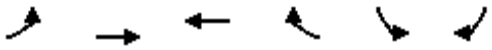
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	85	2005	360	0	0	0	0	135	70	35	45	0
Future Volume (vph)	85	2005	360	0	0	0	0	135	70	35	45	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)		5.8	5.8					5.7		5.7	5.7	
Lane Util. Factor		0.91	1.00					0.95		1.00	1.00	
Frt		1.00	0.85					0.95		1.00	1.00	
Flt Protected		1.00	1.00					1.00		0.95	1.00	
Satd. Flow (prot)		4893	1527					3239		1706	1796	
Flt Permitted		1.00	1.00					1.00		0.48	1.00	
Satd. Flow (perm)		4893	1527					3239		863	1796	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	90	2133	383	0	0	0	0	144	74	37	48	0
RTOR Reduction (vph)	0	0	71	0	0	0	0	21	0	0	0	0
Lane Group Flow (vph)	0	2223	312	0	0	0	0	197	0	37	48	0
Turn Type	Perm	NA	Perm					NA		Perm	NA	
Protected Phases		6						4			8	
Permitted Phases	6		6							8		
Actuated Green, G (s)		130.4	130.4					18.1		18.1	18.1	
Effective Green, g (s)		130.4	130.4					18.1		18.1	18.1	
Actuated g/C Ratio		0.82	0.82					0.11		0.11	0.11	
Clearance Time (s)		5.8	5.8					5.7		5.7	5.7	
Vehicle Extension (s)		2.0	2.0					2.0		2.0	2.0	
Lane Grp Cap (vph)		3987	1244					366		97	203	
v/s Ratio Prot								c0.06			0.03	
v/s Ratio Perm		0.45	0.20							0.04		
v/c Ratio		0.56	0.25					0.54		0.38	0.24	
Uniform Delay, d1		5.0	3.4					67.0		65.8	64.7	
Progression Factor		0.13	0.00					1.00		0.62	0.62	
Incremental Delay, d2		0.3	0.3					0.8		0.9	0.2	
Delay (s)		1.0	0.3					67.8		41.6	40.3	
Level of Service		A	A					E		D	D	
Approach Delay (s)		0.9			0.0			67.8			40.9	
Approach LOS		A			A			E			D	

Intersection Summary			
HCM 2000 Control Delay	7.1	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.55		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	11.5
Intersection Capacity Utilization	85.9%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



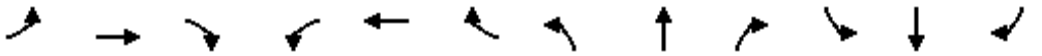
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	110	930	870	50	190	240
Future Volume (vph)	110	930	870	50	190	240
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850
Total Lost time (s)	5.5	5.5	5.5		5.5	5.5
Lane Util. Factor	1.00	0.95	0.95		1.00	1.00
Frt	1.00	1.00	0.99		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1706	3413	3385		1706	1527
Flt Permitted	0.25	1.00	1.00		0.95	1.00
Satd. Flow (perm)	444	3413	3385		1706	1527
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	117	989	926	53	202	255
RTOR Reduction (vph)	0	0	1	0	0	218
Lane Group Flow (vph)	117	989	978	0	202	37
Turn Type	pm+pt	NA	NA		Prot	Perm
Protected Phases	1	6	2		3	
Permitted Phases	6					7
Actuated Green, G (s)	125.7	125.7	113.9		23.3	23.3
Effective Green, g (s)	125.7	125.7	113.9		23.3	23.3
Actuated g/C Ratio	0.79	0.79	0.71		0.15	0.15
Clearance Time (s)	5.5	5.5	5.5		5.5	5.5
Vehicle Extension (s)	1.0	6.2	6.2		2.0	2.0
Lane Grp Cap (vph)	398	2681	2409		248	222
v/s Ratio Prot	0.01	c0.29	c0.29		c0.12	
v/s Ratio Perm	0.22					0.02
v/c Ratio	0.29	0.37	0.41		0.81	0.17
Uniform Delay, d1	5.3	5.2	9.3		66.3	59.9
Progression Factor	1.22	1.11	1.00		1.00	1.00
Incremental Delay, d2	0.1	0.4	0.5		17.4	0.1
Delay (s)	6.6	6.1	9.8		83.6	60.0
Level of Service	A	A	A		F	E
Approach Delay (s)		6.2	9.8		70.4	
Approach LOS		A	A		E	

Intersection Summary			
HCM 2000 Control Delay	19.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	19.5
Intersection Capacity Utilization	57.2%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

2028 Concept C-D Intermediate (AM Peak Hour)

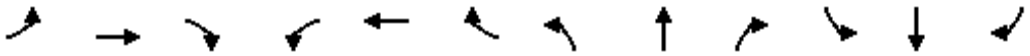
Previously Referred to as Concept H-J



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	115	535	0	0	485	160	500	2615	480	0	0	0
Future Volume (vph)	115	535	0	0	485	160	500	2615	480	0	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	4.0	4.0			4.0	4.0		4.0				
Lane Util. Factor	0.97	0.95			0.91	1.00		0.86				
Frt	1.00	1.00			1.00	0.85		0.98				
Flt Protected	0.95	1.00			1.00	1.00		0.99				
Satd. Flow (prot)	3278	3380			4856	1512		5955				
Flt Permitted	0.31	1.00			1.00	1.00		0.99				
Satd. Flow (perm)	1063	3380			4856	1512		5955				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	128	594	0	0	539	178	556	2906	533	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	5	0	10	0	0	0	0
Lane Group Flow (vph)	128	594	0	0	539	173	0	3985	0	0	0	0
Turn Type	Perm	NA			NA	Perm	Perm	NA				
Protected Phases		4			8			2				
Permitted Phases	4					8	2					
Actuated Green, G (s)	37.0	37.0			37.0	37.0		115.0				
Effective Green, g (s)	37.0	37.0			37.0	37.0		115.0				
Actuated g/C Ratio	0.23	0.23			0.23	0.23		0.72				
Clearance Time (s)	4.0	4.0			4.0	4.0		4.0				
Vehicle Extension (s)	2.5	2.5			2.5	2.5		2.5				
Lane Grp Cap (vph)	245	781			1122	349		4280				
v/s Ratio Prot		c0.18			0.11							
v/s Ratio Perm	0.12					0.11		0.67				
v/c Ratio	0.52	0.76			0.48	0.49		0.93				
Uniform Delay, d1	53.8	57.4			53.2	53.4		19.1				
Progression Factor	0.71	1.03			0.92	0.92		0.96				
Incremental Delay, d2	7.6	6.5			1.4	4.8		4.4				
Delay (s)	45.9	65.8			50.5	53.8		22.9				
Level of Service	D	E			D	D		C				
Approach Delay (s)		62.3			51.3			22.9			0.0	
Approach LOS		E			D			C			A	

Intersection Summary			
HCM 2000 Control Delay	31.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	81.0%	ICU Level of Service	D
Analysis Period (min)	15		

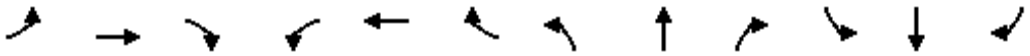
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	235	1075	0	0	0	0	0	2470	245	0	0	0
Future Volume (vph)	235	1075	0	0	0	0	0	2470	245	0	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	4.0	4.0						4.0	4.0			
Lane Util. Factor	0.81	0.81						0.86	1.00			
Frt	1.00	1.00						1.00	0.85			
Flt Protected	0.95	1.00						1.00	1.00			
Satd. Flow (prot)	1369	5757						6119	1512			
Flt Permitted	0.95	1.00						1.00	1.00			
Satd. Flow (perm)	1369	5757						6119	1512			
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	261	1194	0	0	0	0	0	2744	272	0	0	0
RTOR Reduction (vph)	5	5	0	0	0	0	0	0	3	0	0	0
Lane Group Flow (vph)	230	1215	0	0	0	0	0	2744	269	0	0	0
Turn Type	Perm	NA						NA	Perm			
Protected Phases		4						2				
Permitted Phases	4								2			
Actuated Green, G (s)	55.6	55.6						96.4	96.4			
Effective Green, g (s)	55.6	55.6						96.4	96.4			
Actuated g/C Ratio	0.35	0.35						0.60	0.60			
Clearance Time (s)	4.0	4.0						4.0	4.0			
Vehicle Extension (s)	2.5	2.5						2.5	2.5			
Lane Grp Cap (vph)	475	2000						3686	910			
v/s Ratio Prot								c0.45				
v/s Ratio Perm	0.17	0.21							0.18			
v/c Ratio	0.49	0.61						0.74	0.30			
Uniform Delay, d1	41.0	43.2						22.9	15.4			
Progression Factor	0.47	0.66						0.80	0.28			
Incremental Delay, d2	3.3	1.3						0.2	0.1			
Delay (s)	22.7	29.8						18.6	4.5			
Level of Service	C	C						B	A			
Approach Delay (s)		28.7			0.0			17.3			0.0	
Approach LOS		C			A			B			A	

Intersection Summary			
HCM 2000 Control Delay	21.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	70.9%	ICU Level of Service	C
Analysis Period (min)	15		

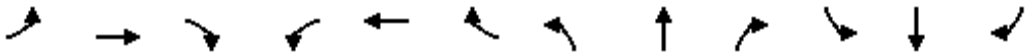
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1155	185	0	0	0	0	0	0	155	1600	0
Future Volume (vph)	0	1155	185	0	0	0	0	0	0	155	1600	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)		4.0	4.0							4.0	4.0	
Lane Util. Factor		0.76	0.76							0.81	0.81	
Frt		1.00	0.85							1.00	1.00	
Flt Protected		1.00	1.00							0.95	1.00	
Satd. Flow (prot)		6743	1149							1369	5761	
Flt Permitted		1.00	1.00							0.95	1.00	
Satd. Flow (perm)		6743	1149							1369	5761	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	1283	206	0	0	0	0	0	0	172	1778	0
RTOR Reduction (vph)	0	1	6	0	0	0	0	0	0	8	4	0
Lane Group Flow (vph)	0	1303	179	0	0	0	0	0	0	147	1791	0
Turn Type		NA	Perm							Perm	NA	
Protected Phases		4									6	
Permitted Phases			4							6		
Actuated Green, G (s)		87.0	87.0							65.0	65.0	
Effective Green, g (s)		87.0	87.0							65.0	65.0	
Actuated g/C Ratio		0.54	0.54							0.41	0.41	
Clearance Time (s)		4.0	4.0							4.0	4.0	
Vehicle Extension (s)		2.5	2.5							2.5	2.5	
Lane Grp Cap (vph)		3666	624							556	2340	
v/s Ratio Prot		c0.19										
v/s Ratio Perm			0.16							0.11	0.31	
v/c Ratio		0.36	0.29							0.26	0.77	
Uniform Delay, d1		20.6	19.7							31.6	40.9	
Progression Factor		1.00	1.00							0.01	0.27	
Incremental Delay, d2		0.3	1.2							0.1	1.0	
Delay (s)		20.9	20.9							0.3	12.1	
Level of Service		C	C							A	B	
Approach Delay (s)		20.9			0.0			0.0			11.1	
Approach LOS		C			A			A			B	

Intersection Summary			
HCM 2000 Control Delay	15.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	68.7%	ICU Level of Service	C
Analysis Period (min)	15		

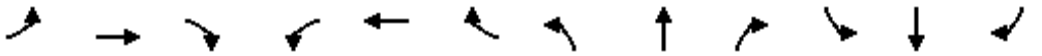
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	210	115	0	275	0	0	0	0	15	1465	130
Future Volume (vph)	0	210	115	0	275	0	0	0	0	15	1465	130
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)		4.0	4.0		4.0					4.0	4.0	
Lane Util. Factor		0.95	1.00		0.95					1.00	0.91	
Frt		1.00	0.85		1.00					1.00	0.99	
Flt Protected		1.00	1.00		1.00					0.95	1.00	
Satd. Flow (prot)		3380	1512		3380					1690	4797	
Flt Permitted		1.00	1.00		1.00					0.95	1.00	
Satd. Flow (perm)		3380	1512		3380					1690	4797	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	233	128	0	306	0	0	0	0	17	1628	144
RTOR Reduction (vph)	0	0	28	0	0	0	0	0	0	0	10	0
Lane Group Flow (vph)	0	233	100	0	306	0	0	0	0	17	1762	0
Turn Type		NA	Perm		NA					Perm	NA	
Protected Phases		4			8						6	
Permitted Phases			4							6		
Actuated Green, G (s)		66.9	66.9		66.9					85.1	85.1	
Effective Green, g (s)		66.9	66.9		66.9					85.1	85.1	
Actuated g/C Ratio		0.42	0.42		0.42					0.53	0.53	
Clearance Time (s)		4.0	4.0		4.0					4.0	4.0	
Vehicle Extension (s)		2.5	2.5		2.5					2.5	2.5	
Lane Grp Cap (vph)		1413	632		1413					898	2551	
v/s Ratio Prot		0.07			c0.09						c0.37	
v/s Ratio Perm			0.07							0.01		
v/c Ratio		0.16	0.16		0.22					0.02	0.69	
Uniform Delay, d1		29.1	29.0		29.8					17.7	27.7	
Progression Factor		1.00	1.00		0.79					1.00	1.00	
Incremental Delay, d2		0.3	0.5		0.3					0.0	0.8	
Delay (s)		29.3	29.5		23.8					17.7	28.5	
Level of Service		C	C		C					B	C	
Approach Delay (s)		29.4			23.8			0.0			28.4	
Approach LOS		C			C			A			C	

Intersection Summary			
HCM 2000 Control Delay	28.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	96.5%	ICU Level of Service	F
Analysis Period (min)	15		

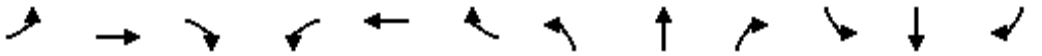
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	425	1915	0	0	0	0	0	1355	220
Future Volume (vph)	0	0	0	425	1915	0	0	0	0	0	1355	220
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)				4.0	4.0						4.0	4.0
Lane Util. Factor				0.86	0.86						0.91	1.00
Frt				1.00	1.00						1.00	0.85
Flt Protected				0.95	1.00						1.00	1.00
Satd. Flow (prot)				1453	4584						4856	1512
Flt Permitted				0.95	1.00						1.00	1.00
Satd. Flow (perm)				1453	4584						4856	1512
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	472	2128	0	0	0	0	0	1506	244
RTOR Reduction (vph)	0	0	0	3	3	0	0	0	0	0	0	4
Lane Group Flow (vph)	0	0	0	422	2172	0	0	0	0	0	1506	240
Turn Type				Perm	NA						NA	Perm
Protected Phases					8						6	
Permitted Phases				8								6
Actuated Green, G (s)				94.7	94.7						57.3	57.3
Effective Green, g (s)				94.7	94.7						57.3	57.3
Actuated g/C Ratio				0.59	0.59						0.36	0.36
Clearance Time (s)				4.0	4.0						4.0	4.0
Vehicle Extension (s)				2.5	2.5						2.5	2.5
Lane Grp Cap (vph)				859	2713						1739	541
v/s Ratio Prot											c0.31	
v/s Ratio Perm				0.29	0.47							0.16
v/c Ratio				0.49	0.80						0.87	0.44
Uniform Delay, d1				18.8	25.3						47.8	39.2
Progression Factor				0.00	0.34						0.51	0.42
Incremental Delay, d2				0.9	1.8						4.2	0.4
Delay (s)				0.9	10.5						28.7	16.7
Level of Service				A	B						C	B
Approach Delay (s)		0.0			8.9			0.0			27.1	
Approach LOS		A			A			A			C	

Intersection Summary			
HCM 2000 Control Delay	16.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	108.9%	ICU Level of Service	G
Analysis Period (min)	15		

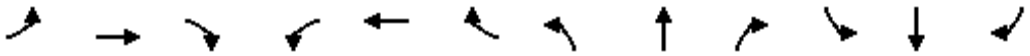
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	190	35	0	0	0	60	275	2130	10	0	0	0
Future Volume (vph)	190	35	0	0	0	60	275	2130	10	0	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	4.0	4.0				4.0	4.0	4.0				
Lane Util. Factor	0.95	0.95				1.00	1.00	0.91				
Frt	1.00	1.00				0.86	1.00	1.00				
Flt Protected	0.95	0.97				1.00	0.95	1.00				
Satd. Flow (prot)	1605	1634				1539	1690	4853				
Flt Permitted	0.95	0.97				1.00	0.95	1.00				
Satd. Flow (perm)	1605	1634				1539	1690	4853				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	211	39	0	0	0	67	306	2367	11	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	17	0	0	0	0	0	0
Lane Group Flow (vph)	124	126	0	0	0	50	306	2378	0	0	0	0
Turn Type	Perm	NA				Perm	Perm	NA				
Protected Phases		4						2				
Permitted Phases	4					2	2					
Actuated Green, G (s)	33.0	33.0				119.0	119.0	119.0				
Effective Green, g (s)	33.0	33.0				119.0	119.0	119.0				
Actuated g/C Ratio	0.21	0.21				0.74	0.74	0.74				
Clearance Time (s)	4.0	4.0				4.0	4.0	4.0				
Vehicle Extension (s)	2.5	2.5				2.5	2.5	2.5				
Lane Grp Cap (vph)	331	337				1144	1256	3609				
v/s Ratio Prot								c0.49				
v/s Ratio Perm	c0.08	0.08				0.03	0.18					
v/c Ratio	0.37	0.37				0.04	0.24	0.66				
Uniform Delay, d1	54.6	54.6				5.4	6.4	10.3				
Progression Factor	0.49	0.67				1.00	0.23	0.15				
Incremental Delay, d2	3.2	3.1				0.0	0.0	0.2				
Delay (s)	30.1	39.7				5.4	1.5	1.8				
Level of Service	C	D				A	A	A				
Approach Delay (s)		34.9			5.4			1.7			0.0	
Approach LOS		C			A			A			A	

Intersection Summary			
HCM 2000 Control Delay	4.6	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	96.5%	ICU Level of Service	F
Analysis Period (min)	15		

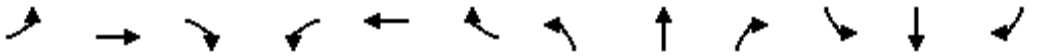
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	1845	170	495	2245	0	0	0	0
Future Volume (vph)	0	0	0	0	1845	170	495	2245	0	0	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)					4.0	4.0	4.0	4.0				
Lane Util. Factor					0.86	1.00	0.97	0.91				
Frt					1.00	0.85	1.00	1.00				
Flt Protected					1.00	1.00	0.95	1.00				
Satd. Flow (prot)					6119	1512	3278	4856				
Flt Permitted					1.00	1.00	0.95	1.00				
Satd. Flow (perm)					6119	1512	3278	4856				
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	0	2050	189	550	2494	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	4	3	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	2050	185	547	2494	0	0	0	0
Turn Type					NA	Perm	Perm	NA				
Protected Phases					8			2				
Permitted Phases						8	2					
Actuated Green, G (s)					61.4	61.4	90.6	90.6				
Effective Green, g (s)					61.4	61.4	90.6	90.6				
Actuated g/C Ratio					0.38	0.38	0.57	0.57				
Clearance Time (s)					4.0	4.0	4.0	4.0				
Vehicle Extension (s)					2.5	2.5	2.5	2.5				
Lane Grp Cap (vph)					2348	580	1856	2749				
v/s Ratio Prot					c0.34			c0.51				
v/s Ratio Perm						0.12	0.17					
v/c Ratio					0.87	0.32	0.29	0.91				
Uniform Delay, d1					45.7	34.6	18.1	31.0				
Progression Factor					0.90	0.90	0.13	0.30				
Incremental Delay, d2					4.6	1.4	0.0	3.7				
Delay (s)					45.7	32.7	2.4	12.8				
Level of Service					D	C	A	B				
Approach Delay (s)		0.0			44.6			11.0			0.0	
Approach LOS		A			D			B			A	

Intersection Summary			
HCM 2000 Control Delay	25.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	104.6%	ICU Level of Service	G
Analysis Period (min)	15		

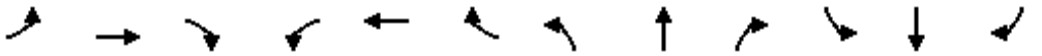
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	300	50	140	710	135	190	30	135	215	240	150
Future Volume (vph)	30	300	50	140	710	135	190	30	135	215	240	150
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00	0.97	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1690	3307		1690	3380	1512	3278	1779	1512	1690	1779	1512
Flt Permitted	0.29	1.00		0.49	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	522	3307		879	3380	1512	3278	1779	1512	1690	1779	1512
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	33	333	56	156	789	150	211	33	150	239	267	167
RTOR Reduction (vph)	0	6	0	0	0	63	0	0	141	0	0	117
Lane Group Flow (vph)	33	383	0	156	789	87	211	33	9	239	267	50
Turn Type	D.P+P	NA		D.P+P	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases	2			6		2			4			8
Actuated Green, G (s)	93.4	80.0		93.4	89.4	89.4	13.7	10.1	10.1	32.5	28.9	28.9
Effective Green, g (s)	93.4	80.0		93.4	89.4	89.4	13.7	10.1	10.1	32.5	28.9	28.9
Actuated g/C Ratio	0.58	0.50		0.58	0.56	0.56	0.09	0.06	0.06	0.20	0.18	0.18
Clearance Time (s)	6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Vehicle Extension (s)	1.0	5.5		1.0	5.5	5.5	1.0	2.0	2.0	1.0	2.0	2.0
Lane Grp Cap (vph)	333	1653		581	1888	844	280	112	95	343	321	273
v/s Ratio Prot	0.00	0.12		c0.02	c0.23		0.06	0.02		c0.14	c0.15	
v/s Ratio Perm	0.06			0.13		0.06			0.01			0.03
v/c Ratio	0.10	0.23		0.27	0.42	0.10	0.75	0.29	0.10	0.70	0.83	0.18
Uniform Delay, d1	22.1	22.6		18.9	20.3	16.5	71.5	71.5	70.7	59.2	63.2	55.5
Progression Factor	1.00	1.00		0.95	0.53	0.01	1.00	1.00	1.00	0.83	0.62	1.39
Incremental Delay, d2	0.0	0.3		0.0	0.5	0.2	9.8	0.5	0.2	4.3	14.2	0.1
Delay (s)	22.1	22.9		17.9	11.3	0.3	81.3	72.1	70.8	53.7	53.5	77.0
Level of Service	C	C		B	B	A	F	E	E	D	D	E
Approach Delay (s)		22.9			10.8			76.5			59.4	
Approach LOS		C			B			E			E	

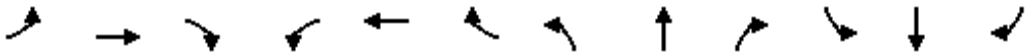
Intersection Summary			
HCM 2000 Control Delay	35.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.55		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	24.0
Intersection Capacity Utilization	64.9%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	65	995	85	335	1410	135	165	260	275	45	210	60
Future Volume (vph)	65	995	85	335	1410	135	165	260	275	45	210	60
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	6.5	6.5	6.5	6.5	6.5	6.5	6.8	6.8	6.5	6.8	6.8	6.8
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95	0.88	0.97	0.95	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3278	3380	1512	3278	3380	1512	3278	3366	2661	3278	3366	1512
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3278	3380	1512	3278	3380	1512	3278	3366	2661	3278	3366	1512
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	72	1106	94	372	1567	150	183	289	306	50	233	67
RTOR Reduction (vph)	0	0	45	0	0	59	0	0	82	0	0	60
Lane Group Flow (vph)	72	1106	49	372	1567	91	183	289	224	50	233	7
Bus Blockages (#/hr)	0	0	0	0	0	0	0	2	0	0	2	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4	5	3	8	
Permitted Phases			6			2			4			8
Actuated Green, G (s)	8.1	83.0	83.0	22.6	97.5	97.5	10.7	23.6	46.2	4.2	17.1	17.1
Effective Green, g (s)	8.1	83.0	83.0	22.6	97.5	97.5	10.7	23.6	46.2	4.2	17.1	17.1
Actuated g/C Ratio	0.05	0.52	0.52	0.14	0.61	0.61	0.07	0.15	0.29	0.03	0.11	0.11
Clearance Time (s)	6.5	6.5	6.5	6.5	6.5	6.5	6.8	6.8	6.5	6.8	6.8	6.8
Vehicle Extension (s)	2.0	5.0	5.0	3.0	5.0	5.0	1.0	2.0	3.0	2.0	2.0	2.0
Lane Grp Cap (vph)	165	1753	784	463	2059	921	219	496	768	86	359	161
v/s Ratio Prot	0.02	c0.33		0.11	c0.46		c0.06	c0.09	0.04	0.02	0.07	
v/s Ratio Perm			0.03			0.06			0.04			0.00
v/c Ratio	0.44	0.63	0.06	0.80	0.76	0.10	0.84	0.58	0.29	0.58	0.65	0.04
Uniform Delay, d1	73.7	27.5	19.1	66.5	22.8	13.0	73.8	63.6	44.2	77.0	68.6	64.1
Progression Factor	1.00	1.00	1.00	0.85	0.53	0.08	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.7	1.7	0.2	6.6	1.8	0.1	22.3	1.1	0.2	6.3	3.0	0.0
Delay (s)	74.4	29.3	19.3	62.8	13.9	1.2	96.1	64.7	44.4	83.3	71.6	64.2
Level of Service	E	C	B	E	B	A	F	E	D	F	E	E
Approach Delay (s)		31.1			21.7			64.1			71.8	
Approach LOS		C			C			E			E	

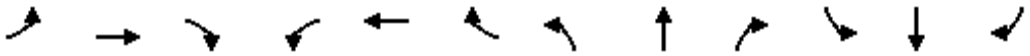
Intersection Summary			
HCM 2000 Control Delay	35.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	26.6
Intersection Capacity Utilization	81.2%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1300	75	255	1850	0	0	0	0	65	30	125
Future Volume (vph)	0	1300	75	255	1850	0	0	0	0	65	30	125
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)		5.8	5.8	5.8	5.8					5.9	5.9	
Lane Util. Factor		0.86	1.00	1.00	0.95					1.00	1.00	
Frt		1.00	0.85	1.00	1.00					1.00	0.88	
Flt Protected		1.00	1.00	0.95	1.00					0.95	1.00	
Satd. Flow (prot)		6119	1512	1690	3380					1690	1563	
Flt Permitted		1.00	1.00	0.95	1.00					0.95	1.00	
Satd. Flow (perm)		6119	1512	1690	3380					1690	1563	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	1444	83	283	2056	0	0	0	0	72	33	139
RTOR Reduction (vph)	0	0	36	0	0	0	0	0	0	0	24	0
Lane Group Flow (vph)	0	1444	47	283	2056	0	0	0	0	72	148	0
Turn Type		NA	Perm	Prot	NA					Perm	NA	
Protected Phases		6		5	2						8	
Permitted Phases			6							8		
Actuated Green, G (s)		91.5	91.5	32.0	129.3					19.0	19.0	
Effective Green, g (s)		91.5	91.5	32.0	129.3					19.0	19.0	
Actuated g/C Ratio		0.57	0.57	0.20	0.81					0.12	0.12	
Clearance Time (s)		5.8	5.8	5.8	5.8					5.9	5.9	
Vehicle Extension (s)		3.8	3.8	3.0	3.4					1.5	1.5	
Lane Grp Cap (vph)		3499	864	338	2731					200	185	
v/s Ratio Prot		0.24		c0.17	c0.61						c0.09	
v/s Ratio Perm			0.03							0.04		
v/c Ratio		0.41	0.05	0.84	0.75					0.36	0.80	
Uniform Delay, d1		19.2	15.1	61.5	7.5					64.9	68.7	
Progression Factor		0.49	0.31	1.31	0.49					0.53	0.46	
Incremental Delay, d2		0.3	0.1	13.3	1.5					0.4	18.6	
Delay (s)		9.7	4.8	94.1	5.2					34.5	50.2	
Level of Service		A	A	F	A					C	D	
Approach Delay (s)		9.5			16.0			0.0			45.6	
Approach LOS		A			B			A			D	

Intersection Summary			
HCM 2000 Control Delay	15.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	17.5
Intersection Capacity Utilization	74.0%	ICU Level of Service	D
Analysis Period (min)	15		

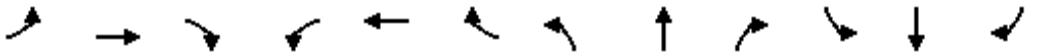
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	105	1260	0	0	1705	240	400	65	450	0	0	0
Future Volume (vph)	105	1260	0	0	1705	240	400	65	450	0	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	5.6	5.6			5.6	5.6	5.9	5.9	5.9			
Lane Util. Factor	0.97	0.95			0.91	1.00	0.95	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.97	1.00			
Satd. Flow (prot)	3278	3380			4856	1512	1605	1631	1512			
Flt Permitted	0.95	1.00			1.00	1.00	0.95	0.97	1.00			
Satd. Flow (perm)	3278	3380			4856	1512	1605	1631	1512			
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	117	1400	0	0	1894	267	444	72	500	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	95	0	0	260	0	0	0
Lane Group Flow (vph)	117	1400	0	0	1894	172	258	258	240	0	0	0
Turn Type	Prot	NA			NA	Perm	Perm	NA	custom			
Protected Phases	1	6			2			4				
Permitted Phases						2	4		7 5			
Actuated Green, G (s)	10.4	109.9			103.3	103.3	29.2	29.2	41.5			
Effective Green, g (s)	10.4	109.9			103.3	103.3	29.2	29.2	41.5			
Actuated g/C Ratio	0.07	0.69			0.65	0.65	0.18	0.18	0.26			
Clearance Time (s)	5.6	5.6			5.6	5.6	5.9	5.9				
Vehicle Extension (s)	1.5	3.3			3.6	3.6	2.0	2.0				
Lane Grp Cap (vph)	213	2321			3135	976	292	297	392			
v/s Ratio Prot	0.04	c0.41			0.39							
v/s Ratio Perm						0.11	c0.16	0.16	c0.16			
v/c Ratio	0.55	0.60			0.60	0.18	0.88	0.87	0.61			
Uniform Delay, d1	72.5	13.4			16.5	11.3	63.7	63.5	52.2			
Progression Factor	0.70	0.61			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	1.4	1.1			0.9	0.4	24.9	21.9	2.0			
Delay (s)	52.3	9.3			17.3	11.7	88.6	85.4	54.2			
Level of Service	D	A			B	B	F	F	D			
Approach Delay (s)		12.6			16.7			70.8			0.0	
Approach LOS		B			B			E			A	

Intersection Summary			
HCM 2000 Control Delay	27.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	20.1
Intersection Capacity Utilization	74.0%	ICU Level of Service	D
Analysis Period (min)	15		

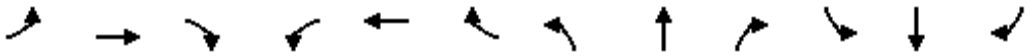
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	80	1820	15	60	20	0	0	35	80
Future Volume (vph)	0	0	0	80	1820	15	60	20	0	0	35	80
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)				5.6	5.6		5.5	5.5			5.5	5.5
Lane Util. Factor				1.00	0.86		1.00	1.00			1.00	1.00
Frt				1.00	1.00		1.00	1.00			1.00	0.85
Flt Protected				0.95	1.00		0.95	1.00			1.00	1.00
Satd. Flow (prot)				1690	6112		1690	1779			1779	1512
Flt Permitted				0.95	1.00		0.73	1.00			1.00	1.00
Satd. Flow (perm)				1690	6112		1301	1779			1779	1512
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	0	0	89	2022	17	67	22	0	0	39	89
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	20
Lane Group Flow (vph)	0	0	0	89	2039	0	67	22	0	0	39	69
Turn Type				Perm	NA		Perm	NA			NA	Perm
Protected Phases					2			4			8	
Permitted Phases				2			4					8
Actuated Green, G (s)				130.8	130.8		18.1	18.1			18.1	18.1
Effective Green, g (s)				130.8	130.8		18.1	18.1			18.1	18.1
Actuated g/C Ratio				0.82	0.82		0.11	0.11			0.11	0.11
Clearance Time (s)				5.6	5.6		5.5	5.5			5.5	5.5
Vehicle Extension (s)				2.5	2.5		2.0	2.0			2.8	2.8
Lane Grp Cap (vph)				1381	4996		147	201			201	171
v/s Ratio Prot					c0.33			0.01			0.02	
v/s Ratio Perm				0.05			c0.05					0.05
v/c Ratio				0.06	0.41		0.46	0.11			0.19	0.41
Uniform Delay, d1				2.8	4.0		66.3	63.7			64.3	66.0
Progression Factor				1.00	1.00		0.56	0.55			1.00	1.00
Incremental Delay, d2				0.1	0.2		0.8	0.1			0.4	1.4
Delay (s)				2.9	4.2		37.6	35.1			64.8	67.4
Level of Service				A	A		D	D			E	E
Approach Delay (s)		0.0			4.2			37.0			66.6	
Approach LOS		A			A			D			E	

Intersection Summary			
HCM 2000 Control Delay	8.8	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	11.1
Intersection Capacity Utilization	71.2%	ICU Level of Service	C
Analysis Period (min)	15		

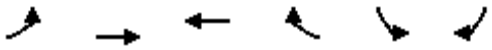
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	1080	115	0	0	0	0	80	30	30	80	0
Future Volume (vph)	30	1080	115	0	0	0	0	80	30	30	80	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)		5.8	5.8					5.7		5.7	5.7	
Lane Util. Factor		0.91	1.00					0.95		1.00	1.00	
Frt		1.00	0.85					0.96		1.00	1.00	
Flt Protected		1.00	1.00					1.00		0.95	1.00	
Satd. Flow (prot)		4850	1512					3243		1690	1779	
Flt Permitted		1.00	1.00					1.00		0.67	1.00	
Satd. Flow (perm)		4850	1512					3243		1200	1779	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	33	1200	128	0	0	0	0	89	33	33	89	0
RTOR Reduction (vph)	0	0	24	0	0	0	0	28	0	0	0	0
Lane Group Flow (vph)	0	1233	104	0	0	0	0	94	0	33	89	0
Turn Type	Perm	NA	Perm					NA		Perm	NA	
Protected Phases		6						4			8	
Permitted Phases	6		6							8		
Actuated Green, G (s)		130.5	130.5					18.0		18.0	18.0	
Effective Green, g (s)		130.5	130.5					18.0		18.0	18.0	
Actuated g/C Ratio		0.82	0.82					0.11		0.11	0.11	
Clearance Time (s)		5.8	5.8					5.7		5.7	5.7	
Vehicle Extension (s)		2.0	2.0					2.0		2.0	2.0	
Lane Grp Cap (vph)		3955	1233					364		135	200	
v/s Ratio Prot								0.03			c0.05	
v/s Ratio Perm		0.25	0.07							0.03		
v/c Ratio		0.31	0.08					0.26		0.24	0.45	
Uniform Delay, d1		3.6	2.9					64.9		64.8	66.3	
Progression Factor		0.15	0.00					1.00		0.84	0.84	
Incremental Delay, d2		0.2	0.1					0.1		0.3	0.6	
Delay (s)		0.7	0.1					65.0		54.5	56.5	
Level of Service		A	A					E		D	E	
Approach Delay (s)		0.7			0.0			65.0			56.0	
Approach LOS		A			A			E			E	

Intersection Summary			
HCM 2000 Control Delay	9.8	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.33		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	11.5
Intersection Capacity Utilization	71.2%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



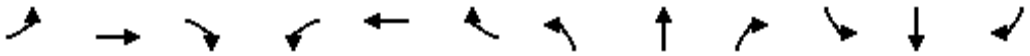
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	50	745	580	40	70	65
Future Volume (vph)	50	745	580	40	70	65
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850
Total Lost time (s)	5.5	5.5	5.5		5.5	5.5
Lane Util. Factor	1.00	0.95	0.95		1.00	1.00
Frt	1.00	1.00	0.99		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1690	3380	3347		1690	1512
Flt Permitted	0.37	1.00	1.00		0.95	1.00
Satd. Flow (perm)	651	3380	3347		1690	1512
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	56	828	644	44	78	72
RTOR Reduction (vph)	0	0	1	0	0	67
Lane Group Flow (vph)	56	828	687	0	78	5
Turn Type	pm+pt	NA	NA		Prot	Perm
Protected Phases	1	6	2		3	
Permitted Phases	6					7
Actuated Green, G (s)	137.1	137.1	127.6		11.9	11.9
Effective Green, g (s)	137.1	137.1	127.6		11.9	11.9
Actuated g/C Ratio	0.86	0.86	0.80		0.07	0.07
Clearance Time (s)	5.5	5.5	5.5		5.5	5.5
Vehicle Extension (s)	1.0	6.2	6.2		2.0	2.0
Lane Grp Cap (vph)	583	2896	2669		125	112
v/s Ratio Prot	0.00	c0.24	0.21		c0.05	
v/s Ratio Perm	0.08					0.00
v/c Ratio	0.10	0.29	0.26		0.62	0.05
Uniform Delay, d1	1.9	2.2	4.1		71.9	68.8
Progression Factor	0.68	0.62	1.00		1.00	1.00
Incremental Delay, d2	0.0	0.1	0.2		6.8	0.1
Delay (s)	1.3	1.5	4.4		78.7	68.9
Level of Service	A	A	A		E	E
Approach Delay (s)		1.5	4.4		74.0	
Approach LOS		A	A		E	

Intersection Summary			
HCM 2000 Control Delay	8.9	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.33		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	19.5
Intersection Capacity Utilization	41.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

2028 Concept C-D Intermediate (PM Peak Hour)

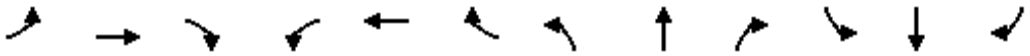
Previously Referred to as Concept H-J



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	275	805	0	0	1020	225	215	1570	315	0	0	0
Future Volume (vph)	275	805	0	0	1020	225	215	1570	315	0	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	4.0	4.0			4.0	4.0		4.0				
Lane Util. Factor	0.97	0.95			0.91	1.00		0.86				
Frt	1.00	1.00			1.00	0.85		0.98				
Flt Protected	0.95	1.00			1.00	1.00		0.99				
Satd. Flow (prot)	3310	3413			4903	1527		6009				
Flt Permitted	0.21	1.00			1.00	1.00		0.99				
Satd. Flow (perm)	718	3413			4903	1527		6009				
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	293	856	0	0	1085	239	229	1670	335	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	3	0	20	0	0	0	0
Lane Group Flow (vph)	293	856	0	0	1085	236	0	2214	0	0	0	0
Turn Type	Perm	NA			NA	Perm	Perm	NA				
Protected Phases		4			8			2				
Permitted Phases	4					8	2					
Actuated Green, G (s)	89.3	89.3			89.3	89.3		62.7				
Effective Green, g (s)	89.3	89.3			89.3	89.3		62.7				
Actuated g/C Ratio	0.56	0.56			0.56	0.56		0.39				
Clearance Time (s)	4.0	4.0			4.0	4.0		4.0				
Vehicle Extension (s)	2.5	2.5			2.5	2.5		2.5				
Lane Grp Cap (vph)	400	1904			2736	852		2354				
v/s Ratio Prot		0.25			0.22							
v/s Ratio Perm	c0.41					0.15		0.37				
v/c Ratio	0.73	0.45			0.40	0.28		0.94				
Uniform Delay, d1	26.4	20.9			20.1	18.5		46.9				
Progression Factor	1.01	0.41			0.71	0.66		0.85				
Incremental Delay, d2	10.0	0.5			0.4	0.8		8.3				
Delay (s)	36.8	9.0			14.6	13.0		48.3				
Level of Service	D	A			B	B		D				
Approach Delay (s)		16.1			14.3			48.3			0.0	
Approach LOS		B			B			D			A	

Intersection Summary			
HCM 2000 Control Delay	30.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	70.4%	ICU Level of Service	C
Analysis Period (min)	15		

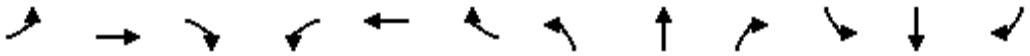
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	575	2000	0	0	0	0	0	1780	385	0	0	0
Future Volume (vph)	575	2000	0	0	0	0	0	1780	385	0	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	4.0	4.0						4.0	4.0			
Lane Util. Factor	0.81	0.81						0.86	1.00			
Frt	1.00	1.00						1.00	0.85			
Flt Protected	0.95	1.00						1.00	1.00			
Satd. Flow (prot)	1382	5808						6179	1527			
Flt Permitted	0.95	1.00						1.00	1.00			
Satd. Flow (perm)	1382	5808						6179	1527			
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	612	2128	0	0	0	0	0	1894	410	0	0	0
RTOR Reduction (vph)	3	3	0	0	0	0	0	0	4	0	0	0
Lane Group Flow (vph)	523	2211	0	0	0	0	0	1894	406	0	0	0
Turn Type	Perm	NA						NA	Perm			
Protected Phases		4						2				
Permitted Phases	4								2			
Actuated Green, G (s)	91.8	91.8						60.2	60.2			
Effective Green, g (s)	91.8	91.8						60.2	60.2			
Actuated g/C Ratio	0.57	0.57						0.38	0.38			
Clearance Time (s)	4.0	4.0						4.0	4.0			
Vehicle Extension (s)	2.5	2.5						2.5	2.5			
Lane Grp Cap (vph)	792	3332						2324	574			
v/s Ratio Prot								c0.31				
v/s Ratio Perm	0.38	0.38							0.27			
v/c Ratio	0.66	0.66						0.81	0.71			
Uniform Delay, d1	23.4	23.5						44.9	42.4			
Progression Factor	0.06	0.23						0.52	0.75			
Incremental Delay, d2	2.7	0.7						0.7	3.7			
Delay (s)	4.0	6.2						24.2	35.5			
Level of Service	A	A						C	D			
Approach Delay (s)		5.8			0.0			26.2			0.0	
Approach LOS		A			A			C			A	

Intersection Summary			
HCM 2000 Control Delay	15.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	72.2%	ICU Level of Service	C
Analysis Period (min)	15		

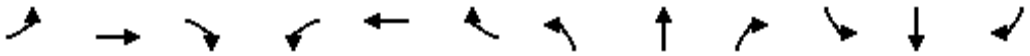
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	2315	700	0	0	0	0	0	0	260	2225	0
Future Volume (vph)	0	2315	700	0	0	0	0	0	0	260	2225	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)		4.0	4.0							4.0	4.0	
Lane Util. Factor		0.76	0.76							1.00	0.86	
Frt		0.99	0.85							1.00	1.00	
Flt Protected		1.00	1.00							0.95	1.00	
Satd. Flow (prot)		6725	1160							1706	6179	
Flt Permitted		1.00	1.00							0.95	1.00	
Satd. Flow (perm)		6725	1160							1706	6179	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	2463	745	0	0	0	0	0	0	277	2367	0
RTOR Reduction (vph)	0	0	3	0	0	0	0	0	0	4	0	0
Lane Group Flow (vph)	0	2731	474	0	0	0	0	0	0	273	2367	0
Turn Type		NA	Perm							Perm	NA	
Protected Phases		4									6	
Permitted Phases			4							6		
Actuated Green, G (s)		84.4	84.4							67.6	67.6	
Effective Green, g (s)		84.4	84.4							67.6	67.6	
Actuated g/C Ratio		0.53	0.53							0.42	0.42	
Clearance Time (s)		4.0	4.0							4.0	4.0	
Vehicle Extension (s)		2.5	2.5							2.5	2.5	
Lane Grp Cap (vph)		3547	611							720	2610	
v/s Ratio Prot		0.41									c0.38	
v/s Ratio Perm			c0.41							0.16		
v/c Ratio		0.77	0.78							0.38	0.91	
Uniform Delay, d1		30.1	30.2							31.8	43.3	
Progression Factor		1.00	1.00							0.21	0.50	
Incremental Delay, d2		1.7	9.3							0.1	2.9	
Delay (s)		31.7	39.5							6.6	24.5	
Level of Service		C	D							A	C	
Approach Delay (s)		32.9			0.0			0.0			22.7	
Approach LOS		C			A			A			C	

Intersection Summary			
HCM 2000 Control Delay	28.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	78.6%	ICU Level of Service	D
Analysis Period (min)	15		

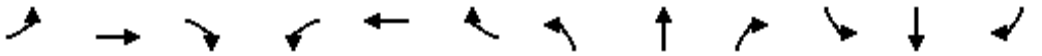
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	560	360	0	155	0	0	0	0	130	1870	135
Future Volume (vph)	0	560	360	0	155	0	0	0	0	130	1870	135
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)		4.0	4.0		4.0					4.0	4.0	
Lane Util. Factor		0.95	1.00		0.95					1.00	0.91	
Frt		1.00	0.85		1.00					1.00	0.99	
Flt Protected		1.00	1.00		1.00					0.95	1.00	
Satd. Flow (prot)		3413	1527		3413					1706	4854	
Flt Permitted		1.00	1.00		1.00					0.95	1.00	
Satd. Flow (perm)		3413	1527		3413					1706	4854	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	596	383	0	165	0	0	0	0	138	1989	144
RTOR Reduction (vph)	0	0	5	0	0	0	0	0	0	0	5	0
Lane Group Flow (vph)	0	596	378	0	165	0	0	0	0	138	2128	0
Turn Type		NA	Perm		NA					Perm	NA	
Protected Phases		4			8						6	
Permitted Phases			4							6		
Actuated Green, G (s)		67.8	67.8		67.8					84.2	84.2	
Effective Green, g (s)		67.8	67.8		67.8					84.2	84.2	
Actuated g/C Ratio		0.42	0.42		0.42					0.53	0.53	
Clearance Time (s)		4.0	4.0		4.0					4.0	4.0	
Vehicle Extension (s)		2.5	2.5		2.5					2.5	2.5	
Lane Grp Cap (vph)		1446	647		1446					897	2554	
v/s Ratio Prot		0.17			0.05						c0.44	
v/s Ratio Perm			c0.25							0.08		
v/c Ratio		0.41	0.58		0.11					0.15	0.83	
Uniform Delay, d1		32.2	35.3		27.9					19.5	32.0	
Progression Factor		1.00	1.00		0.91					1.00	1.00	
Incremental Delay, d2		0.9	3.8		0.2					0.1	2.4	
Delay (s)		33.1	39.2		25.7					19.6	34.4	
Level of Service		C	D		C					B	C	
Approach Delay (s)		35.4			25.7			0.0			33.5	
Approach LOS		D			C			A			C	

Intersection Summary			
HCM 2000 Control Delay	33.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	118.6%	ICU Level of Service	H
Analysis Period (min)	15		

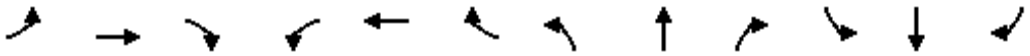
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	490	1685	0	0	0	0	0	1975	255
Future Volume (vph)	0	0	0	490	1685	0	0	0	0	0	1975	255
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)				4.0	4.0						4.0	4.0
Lane Util. Factor				0.86	0.86						0.91	1.00
Frt				1.00	1.00						1.00	0.85
Flt Protected				0.95	1.00						1.00	1.00
Satd. Flow (prot)				1467	4627						4903	1527
Flt Permitted				0.95	1.00						1.00	1.00
Satd. Flow (perm)				1467	4627						4903	1527
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	0	0	521	1793	0	0	0	0	0	2101	271
RTOR Reduction (vph)	0	0	0	4	4	0	0	0	0	0	0	4
Lane Group Flow (vph)	0	0	0	465	1841	0	0	0	0	0	2101	267
Turn Type				Perm	NA						NA	Perm
Protected Phases					8						6	
Permitted Phases				8								6
Actuated Green, G (s)				74.8	74.8						77.2	77.2
Effective Green, g (s)				74.8	74.8						77.2	77.2
Actuated g/C Ratio				0.47	0.47						0.48	0.48
Clearance Time (s)				4.0	4.0						4.0	4.0
Vehicle Extension (s)				2.5	2.5						2.5	2.5
Lane Grp Cap (vph)				685	2163						2365	736
v/s Ratio Prot											c0.43	
v/s Ratio Perm				0.32	0.40							0.18
v/c Ratio				0.68	0.85						0.89	0.36
Uniform Delay, d1				33.2	37.7						37.5	26.0
Progression Factor				0.07	0.35						0.49	0.25
Incremental Delay, d2				3.7	3.6						2.9	0.1
Delay (s)				6.1	16.7						21.4	6.7
Level of Service				A	B						C	A
Approach Delay (s)		0.0			14.6			0.0			19.7	
Approach LOS		A			B			A			B	

Intersection Summary			
HCM 2000 Control Delay	17.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	115.1%	ICU Level of Service	H
Analysis Period (min)	15		

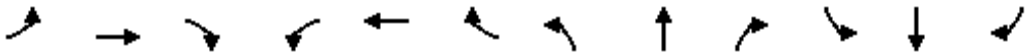
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	505	185	0	0	0	45	155	1980	70	0	0	0
Future Volume (vph)	505	185	0	0	0	45	155	1980	70	0	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	4.0	4.0				4.0	4.0	4.0				
Lane Util. Factor	0.95	0.95				1.00	1.00	0.91				
Frt	1.00	1.00				0.86	1.00	0.99				
Flt Protected	0.95	0.98				1.00	0.95	1.00				
Satd. Flow (prot)	1621	1667				1554	1706	4878				
Flt Permitted	0.95	0.98				1.00	0.95	1.00				
Satd. Flow (perm)	1621	1667				1554	1706	4878				
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	537	197	0	0	0	48	165	2106	74	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	22	0	2	0	0	0	0
Lane Group Flow (vph)	360	374	0	0	0	26	165	2178	0	0	0	0
Turn Type	Perm	NA				Perm	Perm	NA				
Protected Phases		4						2				
Permitted Phases	4					2	2					
Actuated Green, G (s)	64.7	64.7				87.3	87.3	87.3				
Effective Green, g (s)	64.7	64.7				87.3	87.3	87.3				
Actuated g/C Ratio	0.40	0.40				0.55	0.55	0.55				
Clearance Time (s)	4.0	4.0				4.0	4.0	4.0				
Vehicle Extension (s)	2.5	2.5				2.5	2.5	2.5				
Lane Grp Cap (vph)	655	674				847	930	2661				
v/s Ratio Prot								c0.45				
v/s Ratio Perm	0.22	0.22				0.02	0.10					
v/c Ratio	0.55	0.55				0.03	0.18	0.82				
Uniform Delay, d1	36.5	36.6				16.8	18.3	29.8				
Progression Factor	0.66	0.75				1.00	0.23	0.18				
Incremental Delay, d2	3.1	3.2				0.0	0.0	1.3				
Delay (s)	27.1	30.5				16.8	4.3	6.7				
Level of Service	C	C				B	A	A				
Approach Delay (s)		28.8			16.8			6.5			0.0	
Approach LOS		C			B			A			A	

Intersection Summary			
HCM 2000 Control Delay	11.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	118.6%	ICU Level of Service	H
Analysis Period (min)	15		

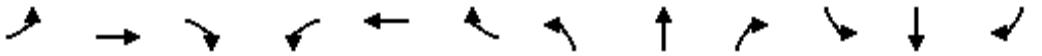
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	1750	195	425	2010	0	0	0	0
Future Volume (vph)	0	0	0	0	1750	195	425	2010	0	0	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)					4.0	4.0	4.0	4.0				
Lane Util. Factor					0.86	1.00	0.97	0.91				
Frt					1.00	0.85	1.00	1.00				
Flt Protected					1.00	1.00	0.95	1.00				
Satd. Flow (prot)					6179	1527	3310	4903				
Flt Permitted					1.00	1.00	0.95	1.00				
Satd. Flow (perm)					6179	1527	3310	4903				
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	0	0	0	1862	207	452	2138	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	4	3	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	1862	203	449	2138	0	0	0	0
Turn Type					NA	Perm	Perm	NA				
Protected Phases					8			2				
Permitted Phases						8	2					
Actuated Green, G (s)					67.0	67.0	85.0	85.0				
Effective Green, g (s)					67.0	67.0	85.0	85.0				
Actuated g/C Ratio					0.42	0.42	0.53	0.53				
Clearance Time (s)					4.0	4.0	4.0	4.0				
Vehicle Extension (s)					2.5	2.5	2.5	2.5				
Lane Grp Cap (vph)					2587	639	1758	2604				
v/s Ratio Prot					c0.30			c0.44				
v/s Ratio Perm						0.13	0.14					
v/c Ratio					0.72	0.32	0.26	0.82				
Uniform Delay, d1					38.7	31.2	20.3	31.2				
Progression Factor					0.83	0.87	0.09	0.39				
Incremental Delay, d2					1.7	1.2	0.0	1.5				
Delay (s)					33.7	28.5	1.8	13.7				
Level of Service					C	C	A	B				
Approach Delay (s)		0.0			33.2			11.6			0.0	
Approach LOS		A			C			B			A	

Intersection Summary			
HCM 2000 Control Delay	21.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	110.8%	ICU Level of Service	H
Analysis Period (min)	15		

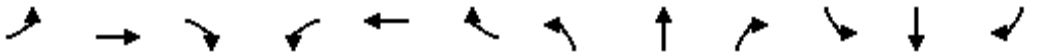
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	325	600	105	120	710	405	400	100	115	365	345	105
Future Volume (vph)	325	600	105	120	710	405	400	100	115	365	345	105
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00	0.97	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1706	3336		1706	3413	1527	3310	1796	1527	1706	1796	1527
Flt Permitted	0.16	1.00		0.26	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	285	3336		462	3413	1527	3310	1796	1527	1706	1796	1527
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	346	638	112	128	755	431	426	106	122	388	367	112
RTOR Reduction (vph)	0	8	0	0	0	254	0	0	106	0	0	87
Lane Group Flow (vph)	346	742	0	128	755	177	426	106	16	388	367	25
Turn Type	D.P+P	NA		D.P+P	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases	2			6		2			4			8
Actuated Green, G (s)	76.6	67.1		76.6	46.3	46.3	23.1	21.6	21.6	37.8	36.3	36.3
Effective Green, g (s)	76.6	67.1		76.6	46.3	46.3	23.1	21.6	21.6	37.8	36.3	36.3
Actuated g/C Ratio	0.48	0.42		0.48	0.29	0.29	0.14	0.14	0.14	0.24	0.23	0.23
Clearance Time (s)	6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Vehicle Extension (s)	1.0	5.5		1.0	5.5	5.5	1.0	2.0	2.0	1.0	2.0	2.0
Lane Grp Cap (vph)	405	1399		295	987	441	477	242	206	403	407	346
v/s Ratio Prot	c0.16	0.22		0.03	0.22		c0.13	0.06		c0.23	0.20	
v/s Ratio Perm	c0.25			0.18		0.12			0.01			0.02
v/c Ratio	0.85	0.53		0.43	0.76	0.40	0.89	0.44	0.08	0.96	0.90	0.07
Uniform Delay, d1	37.0	34.7		25.1	51.9	45.7	67.2	63.6	60.5	60.4	60.1	48.6
Progression Factor	1.00	1.00		0.57	0.65	0.42	1.00	1.00	1.00	0.75	0.74	0.69
Incremental Delay, d2	15.4	1.4		0.3	5.1	2.4	18.3	0.5	0.1	29.8	18.2	0.0
Delay (s)	52.4	36.1		14.6	39.0	21.7	85.5	64.1	60.6	75.2	62.8	33.8
Level of Service	D	D		B	D	C	F	E	E	E	E	C
Approach Delay (s)		41.3			31.0			77.4			64.6	
Approach LOS		D			C			E			E	

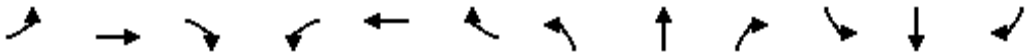
Intersection Summary			
HCM 2000 Control Delay	49.0	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	24.0
Intersection Capacity Utilization	89.0%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	90	1100	280	345	1305	100	200	435	785	290	445	110
Future Volume (vph)	90	1100	280	345	1305	100	200	435	785	290	445	110
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	6.5	6.5	6.5	6.5	6.5	6.5	6.8	6.8	6.5	6.8	6.8	6.8
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.95	0.88	0.97	0.95	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3310	3413	1527	3310	3413	1527	3310	3399	2687	3310	3399	1527
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3310	3413	1527	3310	3413	1527	3310	3399	2687	3310	3399	1527
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	96	1170	298	367	1388	106	213	463	835	309	473	117
RTOR Reduction (vph)	0	0	168	0	0	51	0	0	80	0	0	94
Lane Group Flow (vph)	96	1170	130	367	1388	55	213	463	755	309	473	23
Bus Blockages (#/hr)	0	0	0	0	0	0	0	2	0	0	2	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	Perm
Protected Phases	1	6		5	2		7	4	5	3	8	
Permitted Phases			6			2			4			8
Actuated Green, G (s)	6.5	66.8	66.8	22.6	82.9	82.9	13.1	25.9	48.5	18.1	30.9	30.9
Effective Green, g (s)	6.5	66.8	66.8	22.6	82.9	82.9	13.1	25.9	48.5	18.1	30.9	30.9
Actuated g/C Ratio	0.04	0.42	0.42	0.14	0.52	0.52	0.08	0.16	0.30	0.11	0.19	0.19
Clearance Time (s)	6.5	6.5	6.5	6.5	6.5	6.5	6.8	6.8	6.5	6.8	6.8	6.8
Vehicle Extension (s)	2.0	5.0	5.0	3.0	5.0	5.0	1.0	2.0	3.0	2.0	2.0	2.0
Lane Grp Cap (vph)	134	1424	637	467	1768	791	271	550	814	374	656	294
v/s Ratio Prot	0.03	c0.34		0.11	0.41		0.06	0.14	c0.13	c0.09	0.14	
v/s Ratio Perm			0.08			0.04			0.15			0.01
v/c Ratio	0.72	0.82	0.20	0.79	0.79	0.07	0.79	0.84	0.93	0.83	0.72	0.08
Uniform Delay, d1	75.8	41.3	29.7	66.4	31.3	19.3	72.1	65.1	54.0	69.4	60.5	52.9
Progression Factor	1.00	1.00	1.00	1.12	0.63	0.39	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	14.1	5.5	0.7	6.8	2.8	0.1	12.9	10.8	16.4	13.2	3.3	0.0
Delay (s)	89.9	46.8	30.4	81.0	22.7	7.6	85.0	75.8	70.4	82.6	63.8	52.9
Level of Service	F	D	C	F	C	A	F	E	E	F	E	D
Approach Delay (s)		46.3			33.3			74.1			68.9	
Approach LOS		D			C			E			E	

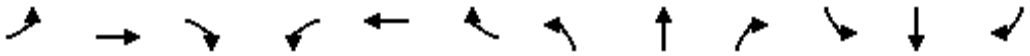
Intersection Summary			
HCM 2000 Control Delay	52.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	26.6
Intersection Capacity Utilization	84.4%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1950	325	420	1640	0	0	0	0	165	20	95
Future Volume (vph)	0	1950	325	420	1640	0	0	0	0	165	20	95
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)		5.8	5.8	5.8	5.8					5.9	5.9	
Lane Util. Factor		0.86	1.00	1.00	0.95					1.00	1.00	
Frt		1.00	0.85	1.00	1.00					1.00	0.88	
Flt Protected		1.00	1.00	0.95	1.00					0.95	1.00	
Satd. Flow (prot)		6179	1527	1706	3413					1706	1573	
Flt Permitted		1.00	1.00	0.95	1.00					0.95	1.00	
Satd. Flow (perm)		6179	1527	1706	3413					1706	1573	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	2074	346	447	1745	0	0	0	0	176	21	101
RTOR Reduction (vph)	0	0	141	0	0	0	0	0	0	0	42	0
Lane Group Flow (vph)	0	2074	205	447	1745	0	0	0	0	176	80	0
Turn Type		NA	Perm	Prot	NA					Perm	NA	
Protected Phases		6		5	2						8	
Permitted Phases			6							8		
Actuated Green, G (s)		75.7	75.7	46.4	127.9					20.4	20.4	
Effective Green, g (s)		75.7	75.7	46.4	127.9					20.4	20.4	
Actuated g/C Ratio		0.47	0.47	0.29	0.80					0.13	0.13	
Clearance Time (s)		5.8	5.8	5.8	5.8					5.9	5.9	
Vehicle Extension (s)		3.8	3.8	3.0	3.4					1.5	1.5	
Lane Grp Cap (vph)		2923	722	494	2728					217	200	
v/s Ratio Prot		c0.34		c0.26	0.51						0.05	
v/s Ratio Perm			0.13							c0.10		
v/c Ratio		0.71	0.28	0.90	0.64					0.81	0.40	
Uniform Delay, d1		33.4	25.7	54.7	6.6					67.9	64.2	
Progression Factor		0.82	0.74	0.84	0.26					0.73	0.56	
Incremental Delay, d2		0.8	0.5	17.0	1.0					11.3	0.3	
Delay (s)		28.3	19.6	63.1	2.7					60.9	36.2	
Level of Service		C	B	E	A					E	D	
Approach Delay (s)		27.1			15.0			0.0			50.8	
Approach LOS		C			B			A			D	

Intersection Summary			
HCM 2000 Control Delay	23.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	17.5
Intersection Capacity Utilization	80.3%	ICU Level of Service	D
Analysis Period (min)	15		

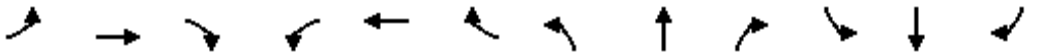
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	240	1875	0	0	1885	235	175	25	275	0	0	0
Future Volume (vph)	240	1875	0	0	1885	235	175	25	275	0	0	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)	5.6	5.6			5.6	5.6	5.9	5.9	5.9			
Lane Util. Factor	0.97	0.95			0.91	1.00	0.95	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.96	1.00			
Satd. Flow (prot)	3310	3413			4903	1527	1621	1645	1527			
Flt Permitted	0.95	1.00			1.00	1.00	0.95	0.96	1.00			
Satd. Flow (perm)	3310	3413			4903	1527	1621	1645	1527			
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	255	1995	0	0	2005	250	186	27	293	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	79	0	0	237	0	0	0
Lane Group Flow (vph)	255	1995	0	0	2005	171	106	107	56	0	0	0
Turn Type	Prot	NA			NA	Perm	Perm	NA	custom			
Protected Phases	1	6			2			4				
Permitted Phases						2	4		7 5			
Actuated Green, G (s)	18.4	124.7			109.3	109.3	15.2	15.2	26.7			
Effective Green, g (s)	18.4	124.7			109.3	109.3	15.2	15.2	26.7			
Actuated g/C Ratio	0.11	0.78			0.68	0.68	0.09	0.09	0.17			
Clearance Time (s)	5.6	5.6			5.6	5.6	5.9	5.9				
Vehicle Extension (s)	1.5	3.3			3.6	3.6	2.0	2.0				
Lane Grp Cap (vph)	380	2660			3349	1043	153	156	254			
v/s Ratio Prot	0.08	c0.58			c0.41							
v/s Ratio Perm						0.11	c0.07	0.07	0.04			
v/c Ratio	0.67	0.75			0.60	0.16	0.69	0.69	0.22			
Uniform Delay, d1	67.9	9.4			13.6	9.0	70.1	70.1	57.6			
Progression Factor	0.50	1.97			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	2.6	1.4			0.8	0.3	10.4	9.5	0.2			
Delay (s)	36.7	19.9			14.4	9.4	80.6	79.6	57.8			
Level of Service	D	B			B	A	F	E	E			
Approach Delay (s)		21.8			13.8			67.2			0.0	
Approach LOS		C			B			E			A	

Intersection Summary			
HCM 2000 Control Delay	22.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	20.1
Intersection Capacity Utilization	80.3%	ICU Level of Service	D
Analysis Period (min)	15		

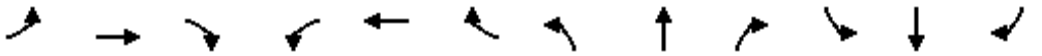
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	30	1705	15	145	75	0	0	50	55
Future Volume (vph)	0	0	0	30	1705	15	145	75	0	0	50	55
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)				5.6	5.6		5.5	5.5			5.5	5.5
Lane Util. Factor				1.00	0.86		1.00	1.00			1.00	1.00
Frt				1.00	1.00		1.00	1.00			1.00	0.85
Flt Protected				0.95	1.00		0.95	1.00			1.00	1.00
Satd. Flow (prot)				1706	6171		1706	1796			1796	1527
Flt Permitted				0.95	1.00		0.72	1.00			1.00	1.00
Satd. Flow (perm)				1706	6171		1298	1796			1796	1527
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	0	0	32	1814	16	154	80	0	0	53	59
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	15
Lane Group Flow (vph)	0	0	0	32	1830	0	154	80	0	0	53	44
Turn Type				Perm	NA		Perm	NA			NA	Perm
Protected Phases					2			4			8	
Permitted Phases				2			4					8
Actuated Green, G (s)				124.4	124.4		24.5	24.5			24.5	24.5
Effective Green, g (s)				124.4	124.4		24.5	24.5			24.5	24.5
Actuated g/C Ratio				0.78	0.78		0.15	0.15			0.15	0.15
Clearance Time (s)				5.6	5.6		5.5	5.5			5.5	5.5
Vehicle Extension (s)				2.5	2.5		2.0	2.0			2.8	2.8
Lane Grp Cap (vph)				1326	4797		198	275			275	233
v/s Ratio Prot					c0.30			0.04			0.03	
v/s Ratio Perm				0.02			c0.12					0.03
v/c Ratio				0.02	0.38		0.78	0.29			0.19	0.19
Uniform Delay, d1				4.0	5.6		65.1	60.1			59.1	59.1
Progression Factor				1.00	1.00		0.59	0.61			1.00	1.00
Incremental Delay, d2				0.0	0.2		14.6	0.2			0.3	0.3
Delay (s)				4.1	5.9		53.0	36.9			59.4	59.4
Level of Service				A	A		D	D			E	E
Approach Delay (s)		0.0			5.8			47.5			59.4	
Approach LOS		A			A			D			E	

Intersection Summary			
HCM 2000 Control Delay	13.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.45		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	11.1
Intersection Capacity Utilization	85.9%	ICU Level of Service	E
Analysis Period (min)	15		

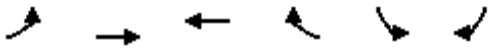
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	85	2005	360	0	0	0	0	135	70	35	45	0
Future Volume (vph)	85	2005	360	0	0	0	0	135	70	35	45	0
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850	1850
Total Lost time (s)		5.8	5.8					5.7		5.7	5.7	
Lane Util. Factor		0.91	1.00					0.95		1.00	1.00	
Frt		1.00	0.85					0.95		1.00	1.00	
Flt Protected		1.00	1.00					1.00		0.95	1.00	
Satd. Flow (prot)		4893	1527					3239		1706	1796	
Flt Permitted		1.00	1.00					1.00		0.48	1.00	
Satd. Flow (perm)		4893	1527					3239		863	1796	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	90	2133	383	0	0	0	0	144	74	37	48	0
RTOR Reduction (vph)	0	0	71	0	0	0	0	21	0	0	0	0
Lane Group Flow (vph)	0	2223	312	0	0	0	0	197	0	37	48	0
Turn Type	Perm	NA	Perm					NA		Perm	NA	
Protected Phases		6						4			8	
Permitted Phases	6		6							8		
Actuated Green, G (s)		130.4	130.4					18.1		18.1	18.1	
Effective Green, g (s)		130.4	130.4					18.1		18.1	18.1	
Actuated g/C Ratio		0.82	0.82					0.11		0.11	0.11	
Clearance Time (s)		5.8	5.8					5.7		5.7	5.7	
Vehicle Extension (s)		2.0	2.0					2.0		2.0	2.0	
Lane Grp Cap (vph)		3987	1244					366		97	203	
v/s Ratio Prot								c0.06			0.03	
v/s Ratio Perm		0.45	0.20							0.04		
v/c Ratio		0.56	0.25					0.54		0.38	0.24	
Uniform Delay, d1		5.0	3.4					67.0		65.8	64.7	
Progression Factor		0.21	0.05					1.00		0.56	0.56	
Incremental Delay, d2		0.4	0.4					0.8		0.9	0.2	
Delay (s)		1.5	0.5					67.8		37.6	36.5	
Level of Service		A	A					E		D	D	
Approach Delay (s)		1.4			0.0			67.8			37.0	
Approach LOS		A			A			E			D	

Intersection Summary			
HCM 2000 Control Delay	7.4	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.55		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	11.5
Intersection Capacity Utilization	85.9%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	110	930	870	50	190	240
Future Volume (vph)	110	930	870	50	190	240
Ideal Flow (vphpl)	1850	1850	1850	1850	1850	1850
Total Lost time (s)	5.5	5.5	5.5		5.5	5.5
Lane Util. Factor	1.00	0.95	0.95		1.00	1.00
Frt	1.00	1.00	0.99		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1706	3413	3385		1706	1527
Flt Permitted	0.25	1.00	1.00		0.95	1.00
Satd. Flow (perm)	444	3413	3385		1706	1527
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	117	989	926	53	202	255
RTOR Reduction (vph)	0	0	1	0	0	218
Lane Group Flow (vph)	117	989	978	0	202	37
Turn Type	pm+pt	NA	NA		Prot	Perm
Protected Phases	1	6	2		3	
Permitted Phases	6					7
Actuated Green, G (s)	125.7	125.7	113.9		23.3	23.3
Effective Green, g (s)	125.7	125.7	113.9		23.3	23.3
Actuated g/C Ratio	0.79	0.79	0.71		0.15	0.15
Clearance Time (s)	5.5	5.5	5.5		5.5	5.5
Vehicle Extension (s)	1.0	6.2	6.2		2.0	2.0
Lane Grp Cap (vph)	398	2681	2409		248	222
v/s Ratio Prot	0.01	c0.29	c0.29		c0.12	
v/s Ratio Perm	0.22					0.02
v/c Ratio	0.29	0.37	0.41		0.81	0.17
Uniform Delay, d1	5.3	5.2	9.3		66.3	59.9
Progression Factor	1.06	1.16	1.00		1.00	1.00
Incremental Delay, d2	0.1	0.3	0.5		17.4	0.1
Delay (s)	5.8	6.3	9.8		83.6	60.0
Level of Service	A	A	A		F	E
Approach Delay (s)		6.3	9.8		70.4	
Approach LOS		A	A		E	

Intersection Summary			
HCM 2000 Control Delay	19.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	160.0	Sum of lost time (s)	19.5
Intersection Capacity Utilization	57.2%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

ATTACHMENT F – FORECASTED SAFETY PERFORMANCE MEMO

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TECHNICAL MEMORANDUM

Seward Highway: Midtown Congestion Relief

Concept Evaluation

Forecasted Traffic Operations and Safety Performance

Date: August 6, 2019 Project #: 21302

To: Steve Noble, PE, DOWL

From: Andrew Ooms, PE; Miao Gao, and Wende Wilber, AICP, PTP

This memorandum documents the quantitative Midtown Congestion Relief (MCR) operations and safety evaluation criteria results concepts under consideration. Kittelson extracted speed, travel time, and volume-to-capacity (v/c) results from project's travel demand model, based on the latest available AMATS model. Kittelson also applied crash prediction methodologies to estimate relative crash frequency, severity, and crashes by mode for each concept.

SEWARD HIGHWAY CORRIDOR OPERATIONS

Tables 1 and 2 report the speed, v/c ratio, and travel time for concepts during the weekday a.m. and p.m. peak period. The travel demand models in Tables 1 and 2 are based on concepts shown in Appendix 1. A summary of the output and a discussion of the assumptions and limitations of the results follows.

- Average speed for all concepts is within 4 miles per hour of the 60-mph free flow speed.
- Volume to capacity ratios vary from 0.49 to 0.79.
- Travel times vary up to 20 percent across concepts for each direction and time period.
- Concepts A and E generally have best mainline Seward Highway operational results.
- Mainline travel speed and v/c ratio do not preclude any of these concepts moving forward and the similarity of the results indicates these factors are not key concept differentiators.

Table 1 Seward Highway: Tudor Road to 20th AM Peak Period Operations Summary

Concept	Direction	Average Speed (mph)	V/C ratio	Travel Time (minutes)
Concept A	NB	59	0.50	1.74
	SB	59	0.55	1.71
Concept B, C1 and C2	NB	58	0.49	1.90
	SB	58	0.63	1.95
Concept E	NB	58	0.53	2.00
	SB	59	0.50	1.95
Concept F, G, and J	NB	58	0.54	1.81
	SB	58	0.67	1.64

Table 2 Seward Highway: Tudor Road to 20th PM Peak Period Operations Summary

Concept	Direction	Average Speed (mph)	V/C ratio	Travel Time (minutes)
Concept A	NB	57	0.72	1.78
	SB	58	0.61	1.73
Concept B, C1 and C2	NB	57	0.70	1.93
	SB	57	0.68	1.98
Concept E	NB	57	0.73	2.04
	SB	58	0.58	1.96
Concept F, G, and J	NB	56	0.79	1.88
	SB	57	0.71	1.67

Operations modeling notes and assumptions:

- Concepts C1/C2 are expected to be substantially similar to the Concept B results. Similarly, Concepts F and J are expected to be similar to Concept G.
- Model volumes vary across concepts based on ramp locations and frontage road configurations.
- The beginning and ending points of the study corridor vary by concept by up to 0.3 miles based on the on/off ramps location at 20th Avenue and Tudor Road, making the average speed and v/c ratio more equitable criteria.
- The congested travel time is a direct output from the model delay function, shown below. The values of the Alpha (0.15) and Beta (4) calibration parameters were set by the AMATS modeling team. As a result, the impact of v/c ratio on travel time is limited.

$$TT = FFT(1 + \alpha(v/c)^{\beta})$$

where,

TT: predicted travel time,
FFT: free-flow travel time,
v: traffic volume,
c: capacity, and
α, β : parameters.

- The average congested speed is calculated by dividing corridor length by the congested travel time.
- The reported v/c ratio is the average over all segments within the study corridor.

SAFETY PREDICTION EVALUATION

Kittelson completed the future intersection crash prediction using safety performance functions. FHWA's *Scale and Scope of Safety Assessment Methods in the Project Development Process* affirms that safety can be predicted via AADT-only safety performance functions (SPF) for new facility alternative assessments. In fact, AADT-only SPF's is the preferred analysis method when sufficient detail for crash modification factors (CMFs), such as lane widths, turn lanes, signal phases, etc., is not available at the concept stage.

NCHRP 17-58 *Safety Prediction Models for Six-Lane and One-Way Urban and Suburban Arterials* methods were applied to predict the safety of the concepts' intersections. This is because frontage road and six-lane arterial intersection crash prediction models are not included in the current Highway Safety Manual (HSM) or NCHRP 17-45 *Enhanced Safety Prediction Methodology and Analysis Tool for Freeways and Interchanges* methods. Although NCHRP 17-58 has not yet been publicly released it has been approved by FHWA for inclusion in the Second Edition of the HSM which Kittelson is developing.

The safety prediction process was completed in two stages:

1. Initial 2040 concept screening on Concepts A, B, C, E, F, and G (concepts shown in Appendix 1)
2. Refined concept screening, including
    a. 2028 interim Concepts H-B and H-C2/J (concepts shown in Appendix 2)
    b. 2040 refined Concepts B, C2 and J (concepts shown in Appendix 3)

Safety Prediction Metrics

The crash prediction methodology provides outputs that include the following metrics.

Intersection Crash Frequency

A relative estimated number of total intersection crashes was calculated for each alternative based on the corresponding SPF and generalized CMFs based on default intersection characteristics. To provide as much consistency for comparison across concepts, intersection crashes are reported for the following intersections:

- Seward Highway Frontage Roads at:
    - Fireweed Lane
    - Northern Lights Boulevard
    - Benson Boulevard
    - 36th Avenue (including median u-turn intersections)

  - Tudor Road
- Old Seward Highway/Two-way Frontage Road at:
  - 36th Avenue
  - Tudor Road

The 17-58 SPFs have not been calibrated to Alaska conditions, so a calibration factor of 3.66 was applied to all crashes based on recommended values for Alaska Central Region urban signalized intersections for HSM SPFs.

Non-Motorized Crashes

A generalized estimate of non-motorized crashes is reported. Per 17-58 methods, bicycle crashes are based on a percentage of total estimated intersection crashes and pedestrian crashes are determined by a SPF using general values for factors such as number of lanes crossed.

Crash Severity

Combined fatal and injury crashes were estimated using a 17-58 SPFs and default proportions.

Initial Concept Safety Results

Results for the six initial corridor concepts are shown in Table 3. Concepts B and C and Concepts F and G were grouped together in Tables 1 and 2 as they are based on the same travel demand model network. However, they were analyzed separately in Table 3.

Table 3 MCR Predicted Relative Annual Intersection Crash Summary: Initial Concepts

Concept	Number of Study Intersections	Relative Total Crashes		Relative Fatal and Injury Crashes		Relative Vehicle-Pedestrian Crashes		Relative Vehicle-Bicycle Crashes	
		Total	Per Intersection	Total	Per Intersection	Total	Per Intersection	Total	Per Intersection
A	10	226	22.6	54	5.4	2	0.2	3	0.3
B	12	253	21.1	71	5.9	4	0.3	3	0.3
C	12	254	21.2	71	5.9	4	0.3	3	0.3
E	9	322	35.8	103	11.4	3	0.3	5	0.6
F	9	293	32.6	83	9.2	3	0.3	4	0.4
G	8	286	35.8	95	11.9	3	0.4	4	0.5

In summary:

- The SPFs demonstrate that one-way frontage roads result in fewer intersection crashes than two-way roads, likely due to fewer conflict points. As a result, the one-way frontage road alternatives—Concepts A, B, and C—have an average of 22 percent fewer crashes despite having more intersections than the two-way frontage road concepts—Concepts E, F, and G.
- The results also show that intersections of roads with fewer through lanes are generally predicted to have fewer crashes.

- One-Way Frontage Road Concepts
    - Concept A has the fewest total crashes and fewer intersections than Concepts B and C as it does not include Benson Boulevard intersections. However, the frontage roads are larger than Concepts B and C and Northern Lights is two-way, resulting in more crashes per intersection.
    - Concept B has the lowest crash frequency per intersection due to one-way frontage roads with fewer lanes than Concept A.
    - Concept C is very similar to Concept B with small frontage road volume differences due to ramp locations around 36th Avenue.
- Two-Way Frontage Road Concepts
    - Concept E has the most predicted crashes and the most per intersection, due to two-way, six-lane Old Seward Highway/Frontage Road intersections.
    - Concept F has fewer crashes due to reduced volume on Old Seward Highway compared to Concept E
    - Concept G has reduced crashes from Concept F based on one fewer intersection.

Refined Concept Safety Results

The project team screened and refined the initial concepts down to three 2048 concepts (B, C2, and J) and two interim 2028 concepts (H-B and H-C2/J). The safety prediction results for the 2028 and 2048 concepts are summarized in Tables 4 and 5, respectively. The predicted number of crashes shown in Tables 4 and 5 are based on refined lane configurations, traffic volume projections, and other factors and can be used to assess the relative intersection safety performance among concepts in each table but are not comparable to the results shown in Table 3.

2028 Interim Concepts

The interim 2028 concepts do not include a freeway element and serve all Seward Highway corridor vehicles at surface intersections. Concepts H-C2 and H-J are identical in the 2028 interim period.

Table 4: Predicted Relative Annual Intersection Crash Summary: Refined 2028 Concepts

Concept	Number of Study Intersections	Relative Total Crashes		Relative Fatal and Injury Crashes		Relative Vehicle-Pedestrian Crashes		Relative Vehicle-Bicycle Crashes	
		Total	Per Intersection	Total	Per Intersection	Total	Per Intersection	Total	Per Intersection
H-B	14	310	22.1	82	5.9	4	0.3	4	0.3
H-C2/J	11	258	23.5	73	6.6	4	0.4	4	0.4

Concept H-B includes a pair of median u-turn intersections at 36th Avenue and results in more total crashes and intersections, but fewer crashes per intersection.

Concept H-C2/J replaces the southbound Seward Highway at 36th Avenue intersection with a grade separation, which moves the vehicle conflicts to the Old Seward Highway/36th Avenue intersection and

to where the merge lanes interface with the Seward Highway. This results in fewer total intersections and fewer crashes, but more crashes per intersection than Concept H-B.

2048 Refined Concepts

Table 5 Predicted Relative Annual Intersection Crash Summary: Refined 2048 Concepts

Concept	Number of Study Intersections	Relative Total Crashes		Relative Fatal and Injury Crashes		Relative Vehicle-Pedestrian Crashes		Relative Vehicle-Bicycle Crashes	
		Total	Per Intersection	Total	Per Intersection	Total	Per Intersection	Total	Per Intersection
B	14	312	22.3	85	6.1	4	0.3	4	0.3
C2	11	253	23.0	73	6.6	4	0.4	3	0.3
J	11	329	29.9	88	8.0	4	0.4	4	0.4

In summary:

- Concept B generally has simpler and smaller intersections and the fewest crashes per intersection, but the larger number of intersections results in 23 percent more total predicted crashes than Concept C2.
- Concept C2 reduces the number of vehicle conflicts and intersections through grade separation at 36th Avenue, reducing the total number of total predicted crashes.
- Concept J includes larger intersections and higher north/south traffic volumes at surface intersections than the other 2048 concepts. These factors result in the highest number of total crashes, approximately 30 percent more than Concept C2.

DATA LIMITATIONS AND ASSUMPTIONS

- The reported number of crashes is useful and defensible as relative predictions to differentiate concepts but should not be considered to be accurate estimates due to the lack of CMF detail and poor SPF calibration to Alaska conditions.
- These challenges also mean that a meaningful comparison to existing crash frequency can't be reliably calculated at this stage but could be described with further design refinement via CMFs and general interchange form comparisons. Also, concept crash safety should be compared against a 2048 no build scenario, not 2028 or existing conditions.
- Pedestrian and bicycle crash risk and frequency is heavily dependent on activity level and detailed design factors that are not yet established, such as the presence and radii of free right turns. All concepts currently have the same non-motorized concept and the non-motorized crash totals are based on the same SPF default values.
- Crash severity estimates in the HSM and also in NCHRP 17-58 are based on a combination of separate SPFs as well as some California proportionality data.
- The NCHRP 17-58 methodology does not reflect the turn restrictions at the median u-turn intersections in Concepts H-B and B. To capture the safety benefits of these intersections, the number of predicted crashes was reduced by 9 percent for property damage crashes and 30 percent for fatal/injury crashes per the FHWA Median U-Turn Informational Guide.

Appendix 1 Initial Concepts (October 2018)

KEY FEATURES

- Mainline could be over or under cross streets
- Accommodates future southbound off and northbound on ramps north of Fireweed Lane
- Includes redesign of Benson Blvd/Northern Lights Blvd to be two-way roads east of A Street to accommodate ramp spacing
- Benson Blvd is free-flowing crossing with greater focus on commercial access
- Active transportation free-flow crossing at Benson Blvd

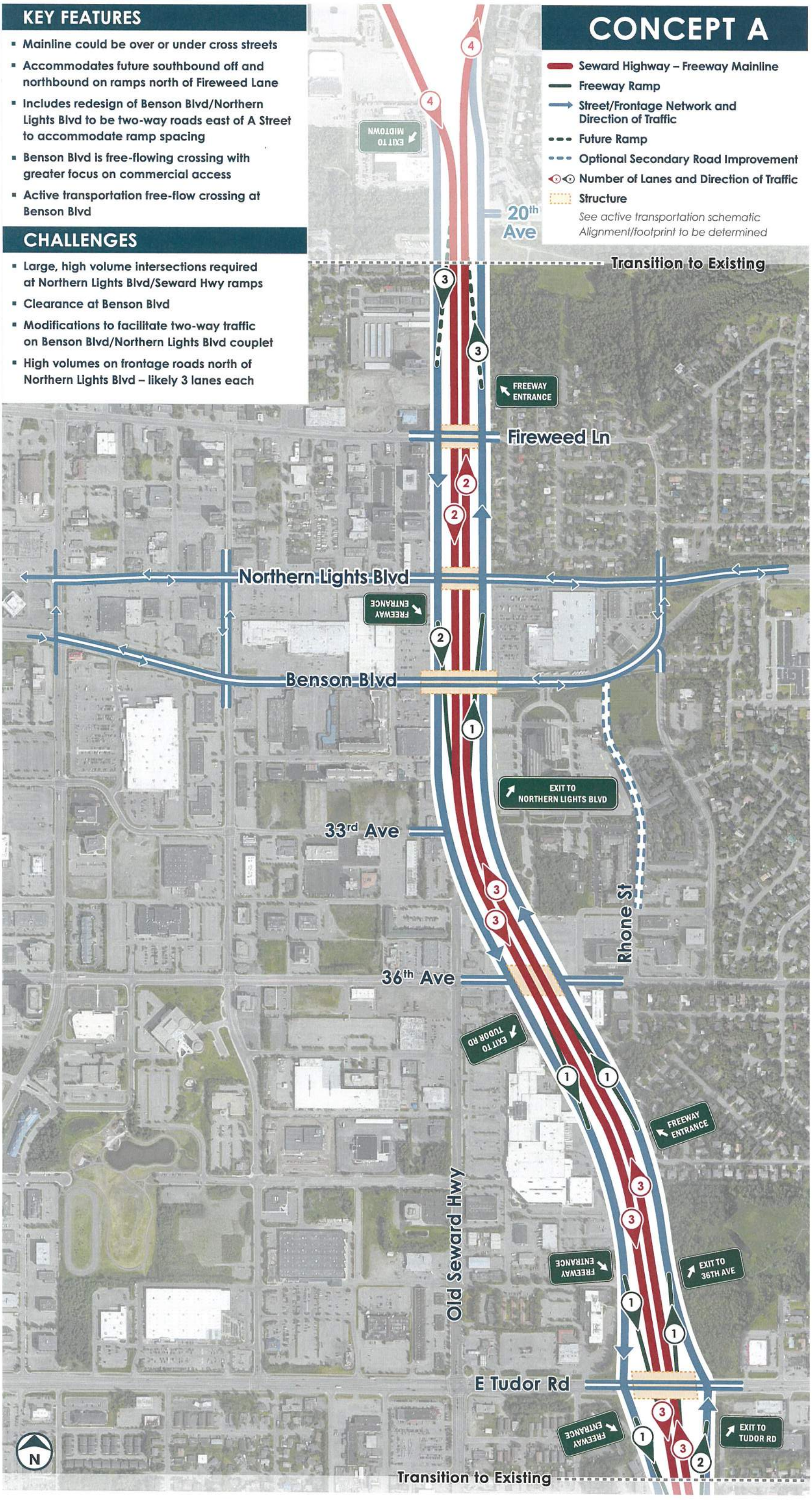
CHALLENGES

- Large, high volume intersections required at Northern Lights Blvd/Seward Hwy ramps
- Clearance at Benson Blvd
- Modifications to facilitate two-way traffic on Benson Blvd/Northern Lights Blvd couplet
- High volumes on frontage roads north of Northern Lights Blvd – likely 3 lanes each

CONCEPT A

- Seward Highway – Freeway Mainline
- Freeway Ramp
- Street/Frontage Network and Direction of Traffic
- Future Ramp
- Optional Secondary Road Improvement
- Number of Lanes and Direction of Traffic
- Structure

See active transportation schematic
Alignment/footprint to be determined



KEY FEATURES

- Ramps north of Northern Lights Blvd avoid signalized intersection at Fireweed Lane and reduce frontage road volumes

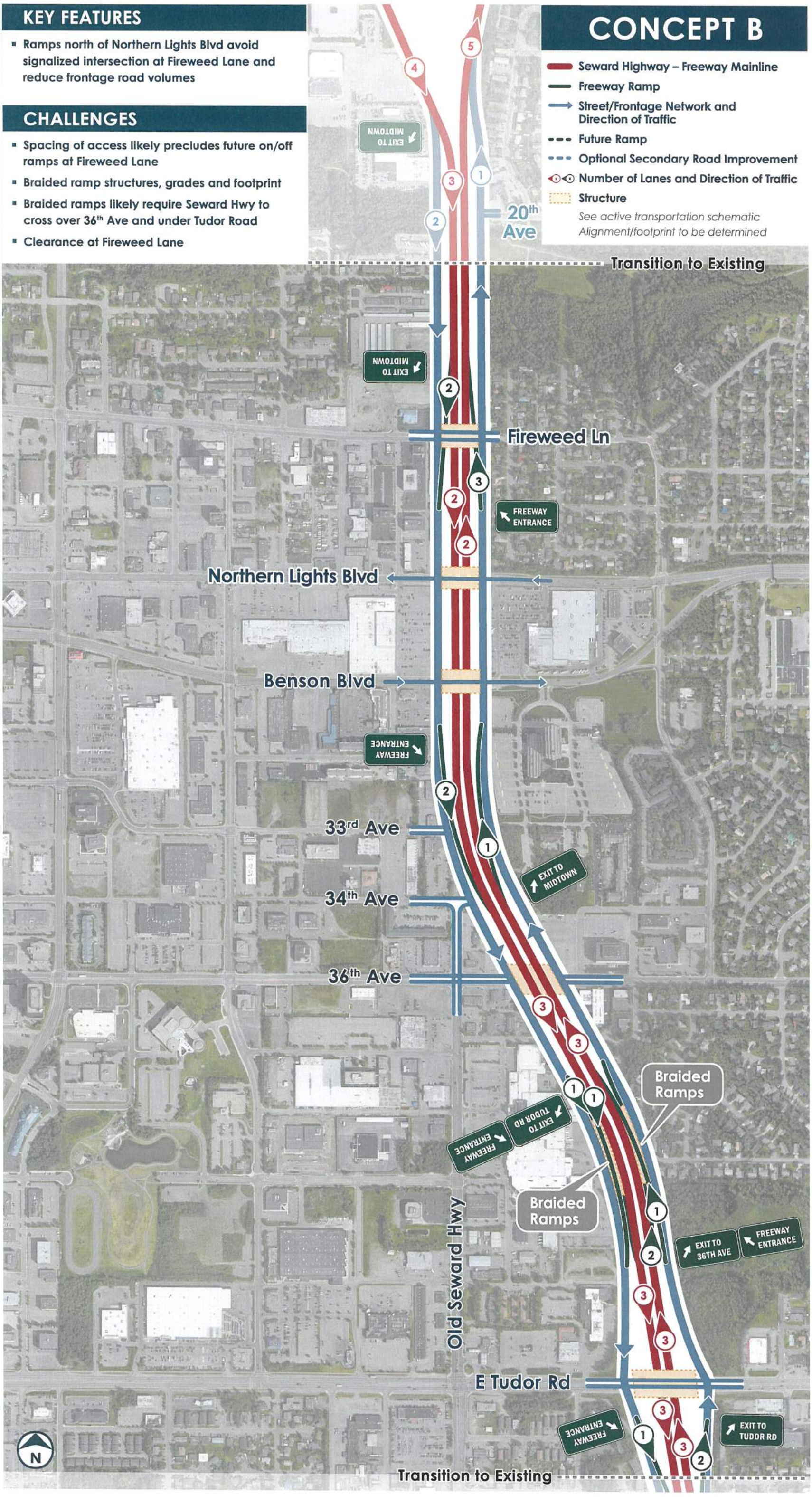
CHALLENGES

- Spacing of access likely precludes future on/off ramps at Fireweed Lane
- Braided ramp structures, grades and footprint
- Braided ramps likely require Seward Hwy to cross over 36th Ave and under Tudor Road
- Clearance at Fireweed Lane

CONCEPT B

- Seward Highway – Freeway Mainline
- Freeway Ramp
- Street/Frontage Network and Direction of Traffic
- Future Ramp
- Optional Secondary Road Improvement
- Number of Lanes and Direction of Traffic
- Structure

See active transportation schematic
Alignment/footprint to be determined



KEY FEATURES

- Benson Blvd, Northern Lights Blvd, and Fireweed Lane operate as a split diamond
- Full access is provided to 36th Ave
- Accommodates future southbound off and northbound on ramps north of Fireweed Lane
- Manages volume on frontage roads north of Northern Lights Blvd

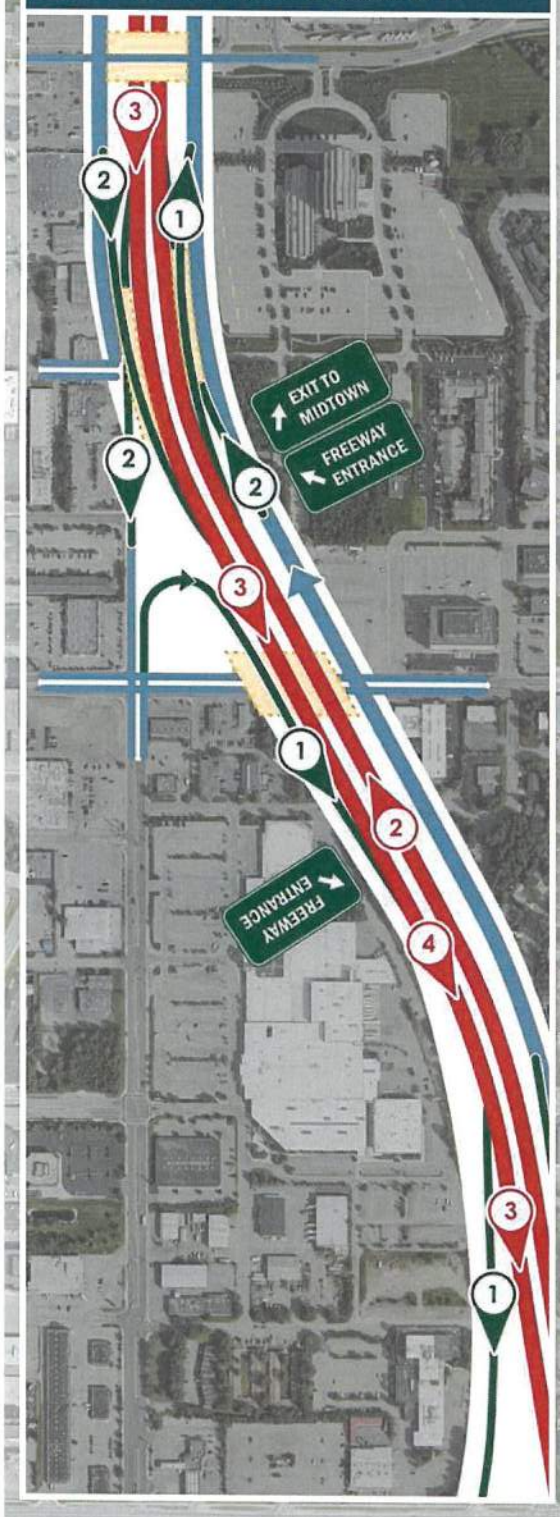
CHALLENGES

- Braided ramp structures, grades and footprint
- Braided ramps likely require Seward Hwy to cross over 36th Ave and under Benson Blvd
- Active transportation connection across Seward Hwy to 33rd Ave would conflict with braided ramps

VARIANT KEY FEATURES

- Reduces the number of intersections along 36th Ave
- Tight weaving and additional lane required along Seward Hwy between 36th Ave and Tudor Rd in southbound direction
- Braided exit ramp ties directly to arterial roadway

BRAIDED RAMP TO OLD SEWARD VARIANT



CONCEPT C

- Seward Highway – Freeway Mainline
- Freeway Ramp
- Street/Frontage Network and Direction of Traffic
- Future Ramp
- Optional Secondary Road Improvement
- Number of Lanes and Direction of Traffic
- Structure

See active transportation schematic
Alignment/footprint to be determined

CONCEPT E

KEY FEATURES

- Mainline could be over or under cross streets
- Traditional two-way road next to the Seward Hwy for Midtown access
- Direct access to businesses may be difficult due to traffic volumes
- Additional structures required crossing mainline to end frontage
- Accommodates future southbound off and northbound on ramps north of Fireweed Lane

CHALLENGES

- High volumes on frontage roads – likely 3 lanes each direction
- Limits ability to add ramps
- Closely spaced intersections along 36th Ave
- Old Seward Hwy to Seward Hwy connection results in high signalized turning movements at Tudor Road and 36th Ave

Seward Highway – Freeway Mainline
Freeway Ramp
Street/Frontage Network and Direction of Traffic
Future Ramp
Optional Secondary Road Improvement
Number of Lanes and Direction of Traffic
Structure
See active transportation schematic
Alignment/footprint to be determined

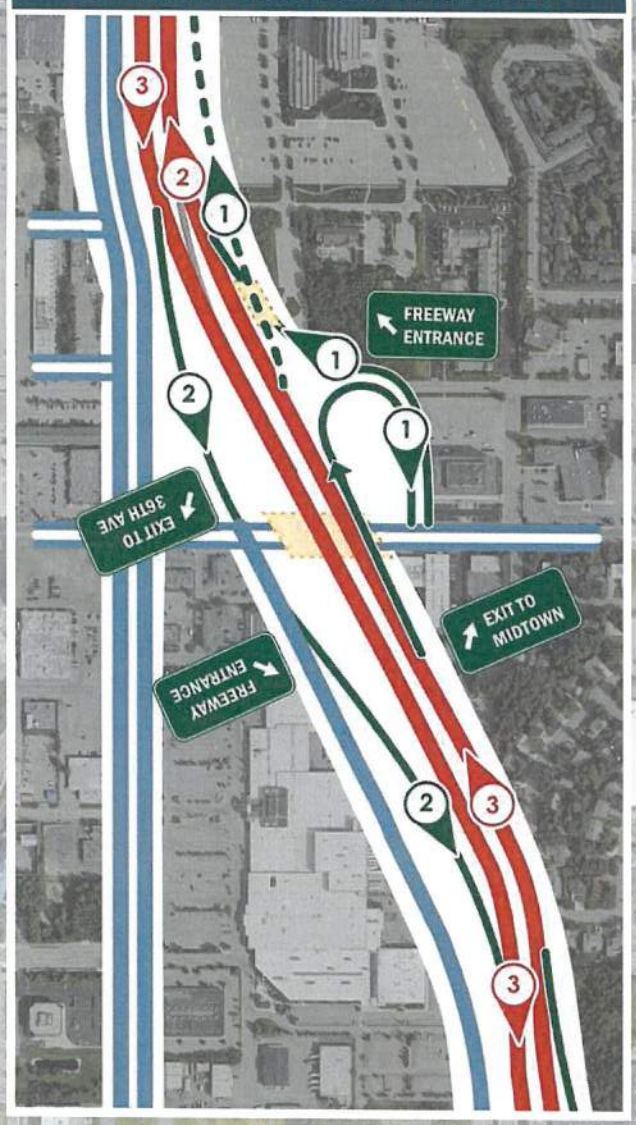
VARIANT KEY FEATURES

- Full access to 36th Ave

VARIANT CHALLENGES

- Braided ramp, structure, grade and footprint

36TH AVE ACCESS VARIANT



KEY FEATURES

- Mainline could be over or under cross streets
- Traditional two-way road next to the Seward Hwy for Midtown access
- Direct access to businesses may be difficult due to traffic volumes
- Additional structures required crossing mainline to begin and end frontage
- Accommodates future southbound off and northbound on ramps north of Fireweed Lane

CHALLENGES

- High volumes on frontage roads – likely 3 lanes each direction
- Limits ability to add ramps
- Long structures required to cross the mainline

CONCEPT F

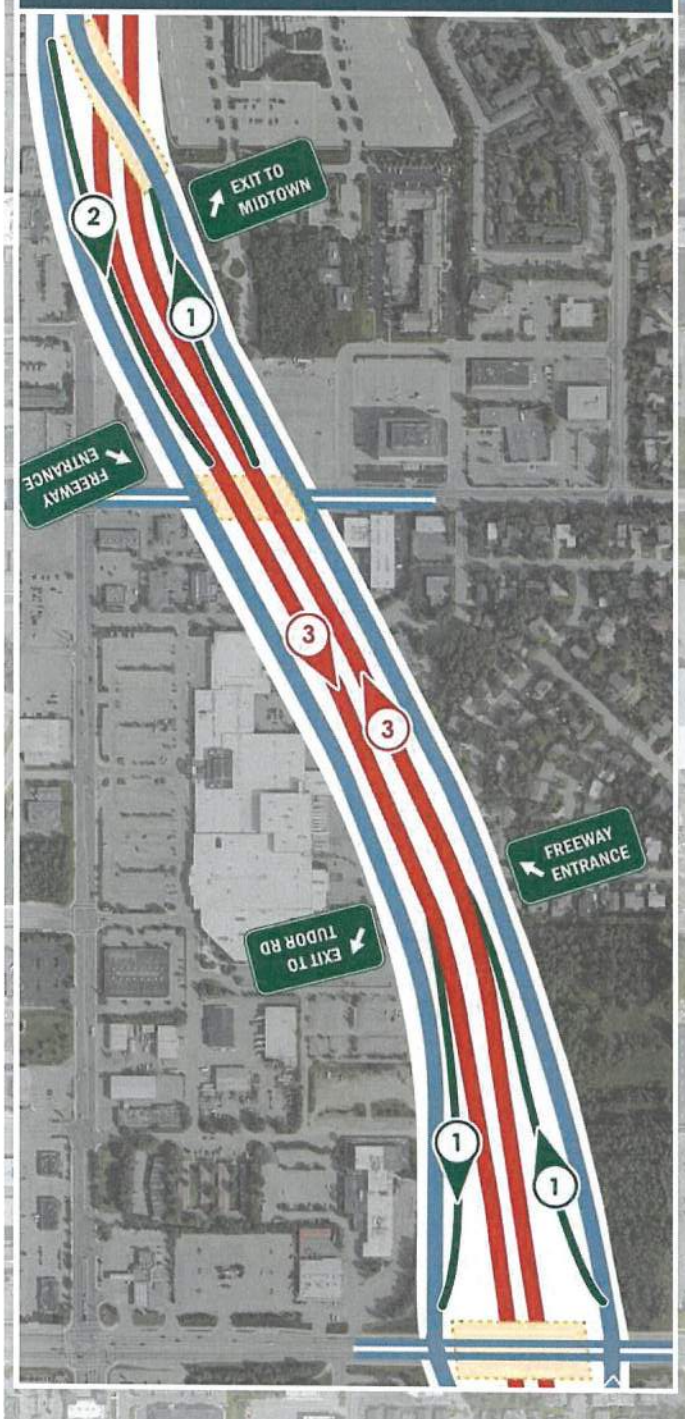
- Seward Highway – Freeway Mainline
- Freeway Ramp
- Street/Frontage Network and Direction of Traffic
- Future Ramp
- Optional Secondary Road Improvement
- Number of Lanes and Direction of Traffic
- Structure

See active transportation schematic
Alignment/footprint to be determined

VARIANT KEY FEATURES

- Access to 36th Ave via frontage road only

FLIPPED RAMP VARIANT



EXIT TO MIDTOWN
20th Ave
Transition to Existing
FREEWAY ENTRANCE
Fireweed Ln
Northern Lights Blvd
Benson Blvd
33rd Ave
34th Ave
EXIT TO 36TH AVE
FREEWAY ENTRANCE
36th Ave
Old Seward Hwy
FREEWAY ENTRANCE
EXIT TO MIDTOWN
E Tudor Rd
FREEWAY ENTRANCE
EXIT TO TUDOR RD
Transition to Existing
N

KEY FEATURES

- Mainline could be over or under cross streets
- Traditional two-way road next to the Seward Hwy for Midtown access
- Direct access to businesses may be difficult due to traffic volumes
- Additional structures required crossing mainline to begin and end frontage
- Accommodates future southbound off and northbound on ramps north of Fireweed Lane

CHALLENGES

- Long structure required to cross mainline
- High volumes on frontage roads – likely 3 lanes each direction
- Limits ability to add ramps
- Braided ramp structures, grades and footprint

CONCEPT G

- Seward Highway – Freeway Mainline
- Freeway Ramp
- Street/Frontage Network and Direction of Traffic
- Future Ramp
- Optional Secondary Road Improvement
- Number of Lanes and Direction of Traffic
- Structure

See active transportation schematic
Alignment/footprint to be determined



Appendix 2 Interim 2028 Concepts (June 2019)

Map - Midtown Congestion Relief PEL

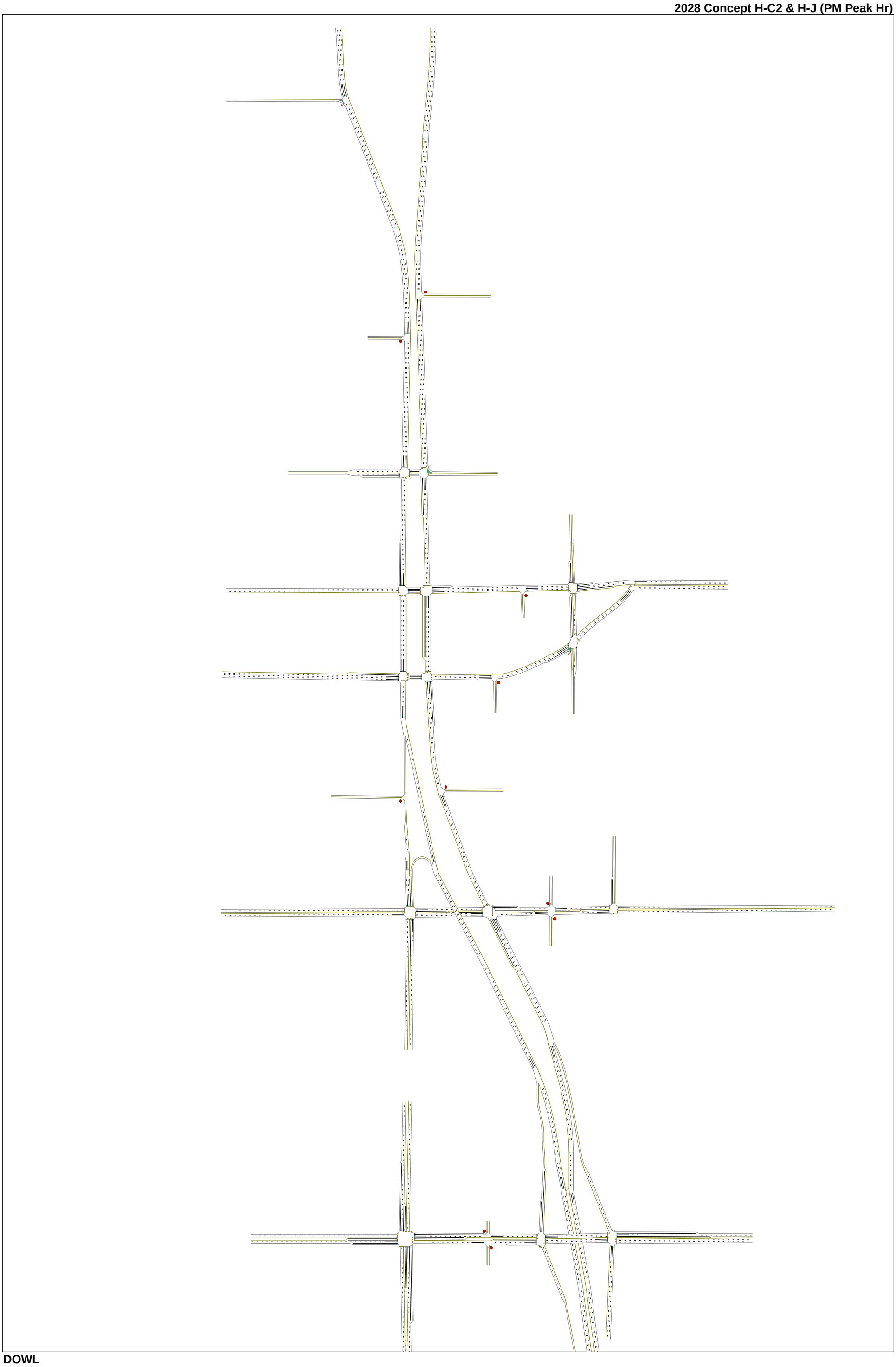
Midtown Congestion Relief PEL
2028 Concept H-B (PM Peak Hr)



DOWL
06/15/2019

Map - Midtown Congestion Relief PEL

Midtown Congestion Relief PEL
2028 Concept H-C2 & H-J (PM Peak Hr)



DOWL
06/15/2019

Appendix 3 2048 Refined Concepts (June 2019)

Map - Midtown Congestion Relief PEL

Midtown Congestion Relief PEL
2048



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05/10/2019

Map - Midtown Congestion Relief PEL

Midtown Congestion Relief PEL
2048 Concept C2 (PM Peak Hr)



DOWL
05/10/2019

Map - Midtown Congestion Relief PEL

Midtown Congestion Relief PEL
2048 Concept J (PM Peak Hr)



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05/28/2019