Summit Orchards North
Traffic Impact Study
Lee's Summit, Missouri

January 16th, 2024

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INTRODUCTION

The purpose of this traffic impact study is to assess the potential impact on traffic with the Summit Orchards North development on the northeast corner of the intersection of Ward Road and Blue Parkway in Lee's Summit, Missouri. The location of the development in relation to the street network is shown in Figure 1. The site plan for the development is shown in Figure 2.

Figure 1 – Development Location

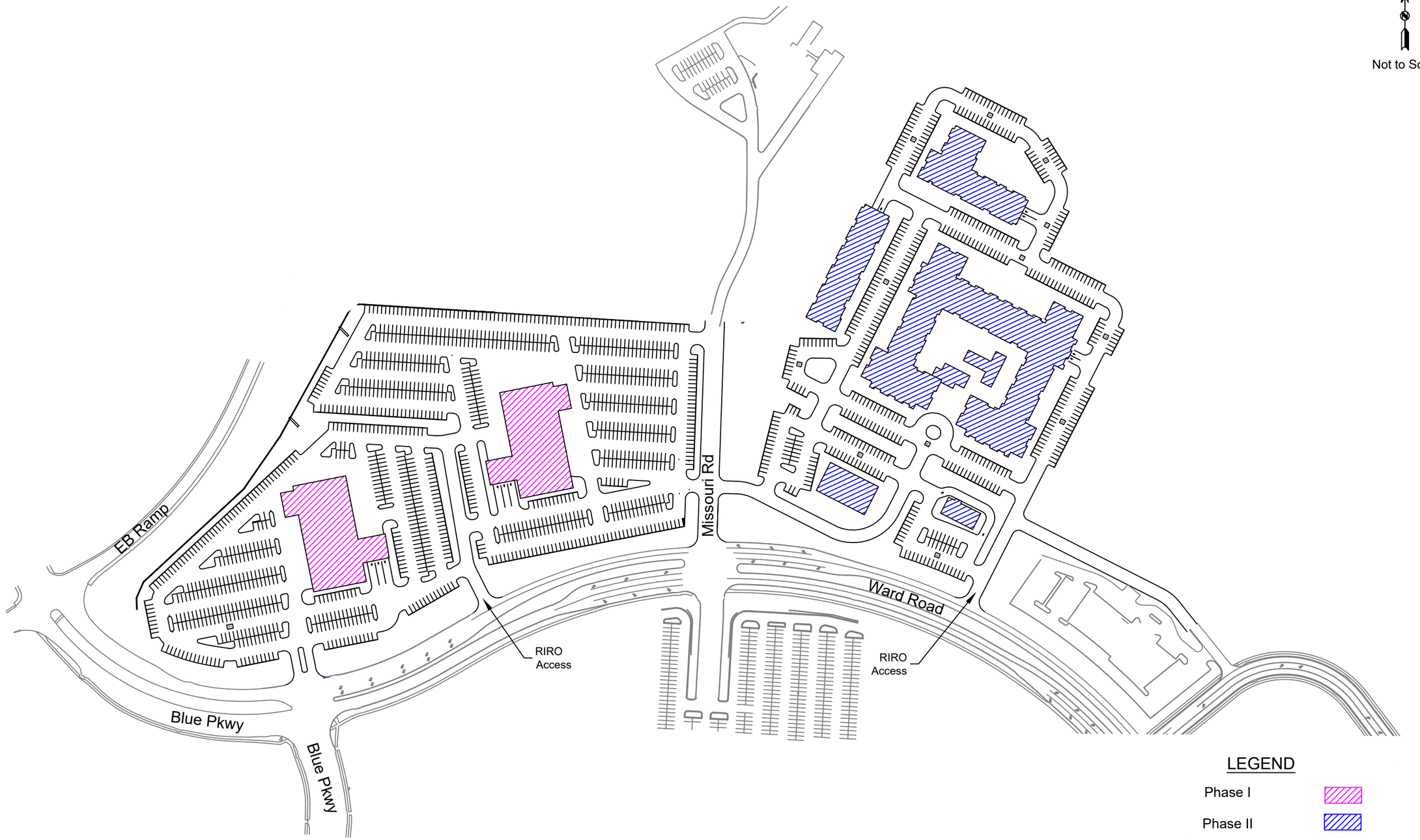


Figure 2 - Site Plan

EXISTING CONDITIONS

The site is in Lee's Summit, Missouri, in the northeast quadrant of the intersection of Blue Parkway and Ward Road. The current land use of the planned development is undeveloped. The land use of the surrounding areas is undeveloped to the north with the exception of a utility facility, commercial/retail/light industrial to the south, highway right-of-way to the west, and undeveloped to the east.

Street Network and Traffic Control

The development is bordered on the south by Ward Road and on the west by the eastbound I-470 ramp.

Blue Parkway is a four-lane north-south median divided major arterial with a posted speed limit of 35 miles per hour (mph) that becomes Ward Road at the signalized intersection southwest of the eastbound I-470 ramp. The roadway continues as Ward Road to the east and south. The south leg of the signalized intersection is Blue Parkway and is also a four-lane median divided roadway.

The I-470 westbound and eastbound ramps provide access to Pryor Road to the west and to I-470. The intersections of the ramps with Blue Parkway are signalized with right and left-turn lanes in all directions.

Missouri Road is located within the development site and is a north-south local roadway north of Ward Road and provides access to the former Cerner building south of Ward Road. The intersection of Missouri Road with Ward Road is stop-controlled with Missouri Road stopping. There are existing east and westbound right and left-turn lanes at the intersection.

Outerview Road is located south of the development site and is a two-lane unmarked north-south private drive with no posted speed limit. The intersection of Outerview Road and Ward Road is stop-controlled, with Outerview Road stopping and aligning with Innovation Parkway on the east side of Ward Road.

Tudor Road is a four-lane east-west median divided minor arterial roadway. There is a posted speed limit of 35 mph. The intersection of Tudor Road and Ward Road is a signalized T-intersection with a proposed west leg of the intersection expected with construction of the Summit Orchard West development.

North, Midway, and South Access along Blue Parkway provide access to the Summit Fair shopping center to the west of Blue Parkway and the former Cerner buildings to the east. All three intersections are signalized.

Traffic Volumes

Intersections counted for analysis in this study were:

- Blue Parkway and WB I-470 Ramp
- Blue Parkway and EB I-470 Ramp
- Blue Parkway and Ward Road
- Blue Parkway and North Access
- Blue Parkway and Center/Midway Access
- Blue Parkway and South Access
- Ward Road and Missouri Road
- Ward Road and Outerview Road
- Ward Road and Tudor Road

The turning movement traffic counts were completed on Wednesday, August 23rd, 2023, Tuesday, August 29th, 2023, and Wednesday, August 30th, 2023, for the peak volume time periods. Morning traffic counts were conducted from 7:00 AM until 9:00 AM and afternoon traffic counts were from 4:00 PM until 6:00 PM The morning peak period was determined to be from 8:00 AM until 9:00 AM and the afternoon peak period was determined to be from 5:00 PM until 6:00 PM.

For both the Ward Road and Outerview Road intersection and the Ward Road and Tudor Road intersection, traffic volumes were used from the *Summit Orchard West* traffic impact study (McCurdy Engineers, *Summit Orchards West Traffic Impact Study*, September 2022). These volumes included traffic generated from adjacent developments as part of the 2016 McClure and 2018 Olsson traffic impact studies (McClure Engineering Co, *Summit Orchards Traffic Impact Study*, March 2016 and Olsson Engineers, *Tudor Road Development Traffic Impact Study*, July 2021).

The generated existing traffic volumes are shown on Figure 3. The July 2022 counts and the previous study traffic/trip generation volumes are included in the Appendix.

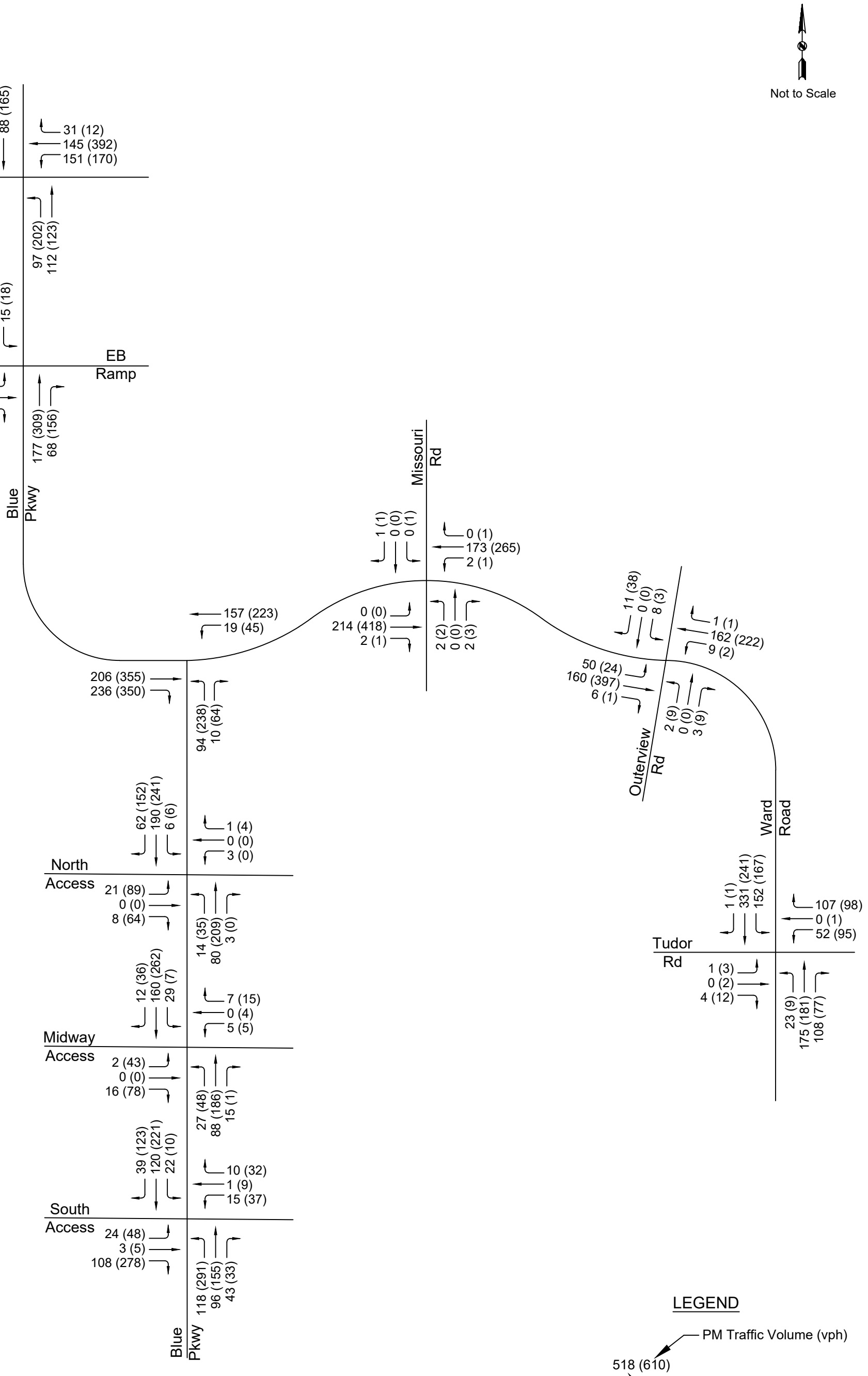


Figure 3 - Existing Volumes

PROPOSED CONDITIONS

Summit Orchards North is expected to be constructed in two phases. The first phase will be west of Missouri Road and will include two car dealerships. The second phase will be on the east side of Missouri Road and will include a fast-food restaurant with drive-through window, a sit-down restaurant, and a residential multi-family housing complex with 350 units.

Access Plan

The site will be accessed from the south from Ward Road) via four accesses and from the east via one access from Outerview Road. Missouri Road will provide interconnectivity between the sites.

The three westmost accesses from Ward Road will be constructed during Phase I of the development. These will consist of a north leg of the existing Ward Road and Blue Parkway signalized intersection, a reconstruction of the north leg of Missouri Road, and a right-in/right-out (RIRO) access point centered between Blue Parkway and Missouri Road.

Access for Phase II of the development will consist of an additional RIRO centered between Missouri Road and Outerview Road and an extension of the Holiday Inn access from Outerview Road.

Sight Distance

Sight distance was measured at the proposed accesses using the methodology recommending by the American Association of State Highway and Transportation Engineers (AASHTO) for the 35 mph speed limits on Ward Road and 25 mph on Outerview Road as City code states that a speed limit of 25 mph governs areas with no posted speed limit.

For 35 mph, AASHTO requires a minimum intersection sight distance of 390 feet and a stopping sight distance of 250 feet. The AASHTO required intersection site distance at 25 mph is 280 feet and 155 feet for stopping sight distance.

Ward Road and Blue Parkway/West Car Dealership Access

No sight distance was measured as this is an existing intersection.

Ward Road and Car Dealership RIRO Access

Based on field measurements, the available sight distance is approximately 420 feet and is adequate for the speed limit.

Ward Road and Missouri Road

No sight distance was measured as this is an existing intersection.

Ward Road and Commercial RIRO Access

The available sight distance, based on field measurements, is greater than 400 feet and is adequate for the 35 mph speed limit.

Outerview Road and Holiday Inn Access

No sight distance was measured as this is an existing signalized intersection.

Crash Analysis

Crashes at the study intersections were analyzed over a three-year period (September 2020 to September 2023) from City of Lee's Summit Police Department data to identify existing crash patterns. There were a total of 71 crashes reported during the crash study time period, and no fatal crashes within the study area.

The Ward Road and Missouri Road intersection had no crashes reported during the study period.

Blue Parkway and WB I-470 Ramp

There were 14 reported crashes at the intersection during the study period—averaging approximately five crashes a year.

Based on the analysis of the crashes, a majority were angle crashes (10) and the remaining were rear-end crashes. The crashes were almost evenly divided between injury (6) and property damage only (PDO). Primarily, the cause for the crashes were red light running and inattentive drivers.

Blue Parkway and EB I-470 Ramp

There were 15 reported crashes at the intersection which averages to five crashes a year.

The crashes varied between angle, rear-end, sideswipe, and fixed object with the crashes caused by inattentive drivers and red light running. Six of the crashes resulted in crashes and nine were PDO.

Ward Road and Blue Parkway

There were 11 reported crashes at the intersection during the study period—averaging almost four crashes a year.

Based on the analysis of the 11 crashes, there were two rear-end, three sideswipe, four angle, and two fixed object crashes. The crashes were all PDO crashes and were the result of weather conditions, inattentive driving, red light running, DWI, and reckless driving.

Blue Parkway and North Access

There were six reported crashes at the intersection during the study period which averages to two crashes per study year.

A majority of the crashes (5) were angle crashes and one was a rear end crash—only one crash resulted in injuries. The cause of a majority of the crashes was attributed to inattentive driving and red light running.

Blue Parkway and Center/Midway Access

There were four reported crashes at Midway Access and Blue Parkway during the crash study period.

The crashes were equally divided between rear-end and angle crashes with inattentive drivers being the primary cause of the crashes.

Blue Parkway and South Access

There were 15 reported crashes at the intersection during the study period—five crashes a year.

Based on the analysis of the crashes, there were four angle, eight rear-end, two rear-end, three sideswipe, and one fixed object crashes. There were no reported injury crashes during the study period.

Ward Road and Outerview Road

The through movements of Ward Road are not stop-controlled and are therefore operating in a free-flow condition. The through and turning movements on Outerview Road operate at LOS B or better and the intersection has sufficient capacity for queuing vehicles.

Ward Road and Tudor Road

There were five reported crashes at the intersection during the study period—four fixed object crashes and two angle crashes with one injury.

Crashes at the study intersections could be reduced by:

- I-470 Ramps and Blue Parkway - Switch the existing 5-section signal heads with flashing yellow signal heads to reduce confusion when the turning movement is protected versus permitted.
- Blue Parkway and Ward Road – Install white skip lane pavement markings for the dual right turns to guide vehicles within their lanes.
- At all signalized intersections – Increase yellow change interval to allow vehicles more time to travel through intersection.

Detailed crash summaries are included in the Appendix.

Throat Length Analysis

The throat lengths for the proposed entrances into the site from Ward Road were compared to City of Lee's Summit *Access Management Code*, March 2018 requirements for drives adjacent to arterial roadways based on vehicles per hour. As Outerview Road is a private roadway, there is no specific guidance provided for throat lengths. However, this drive will have at least a 50-foot throat which exceeds the expected queue.

Throat lengths for entrances from Ward Road are provided in Table 1.

Table 1 – Ward Road Driveway Throat Lengths

Intersection	Recommended Throat Length (feet)	Site Plan Measured Throat Length (feet)
Ward Road and Blue Parkway/West Car Dealership Access	125	80
Ward Road and Car Dealership RIRO	125	75
Ward Road and Missouri Road	125	115
Ward Road and Commercial RIRO	125	75

While the accesses onto Ward Road are less than the required length, the longest expected queue length for southbound traffic is 30 feet, which is less than the storage provided by a minimum 75-foot throat and will be sufficient to prevent vehicles interfering with circulation or parking areas within the site.

Trip Generation

The expected trip generation for the development was estimated using the 11th Edition of the Trip Generation Handbook published by the Institute of Transportation Engineers. The trip generation was based on Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 AM along with Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 PM criteria.

Estimates for the expected trips generated by the development are provided in Table 2.

Table 2 – Trip Generation

ITE Land Use Code	Units	A.M.		P.M.	
		Trips In (vph)	Trips Out (vph)	Trips In (vph)	Trips Out (vph)
840 – Automobile Sales (New)	70,000 sq ft	95	35	59	89
Phase I Total		**95**	**35**	**59**	**89**
840 - Multifamily Housing (Low-Rise)	350 dwelling units	31	100	108	63
932- High-Turnover (Sit-Down) Restaurant	8,400 sq ft	44	36	46	30
934- Fast-Food Restaurant with Drive-Through Window	3,300 sq ft	75	72	57	52
Phase II Total		**150**	**208**	**211**	**145**
Full Build Out Total		**245**	**243**	**270**	**234**

Trip Distribution

The trip distribution pattern was determined for the site based on the existing directional traffic pattern of the peak period and based on a general analysis of the surrounding area. The detailed distribution patterns can be found in the appendix. Based on the existing traffic patterns, the type of development, location of nearby schools, and the metropolitan population centers, the new trips were assigned onto the roadway network, as shown below for the morning and afternoon periods.

Trip distribution during the morning peak period:

- 15% to/10% from the north
- 25% to/60% from I-470
- 35% to/10% from the south (Blue Parkway)
- 15% to/10% from the south (Ward Road)
- 10% to/10% from the east (Tudor Road)

Trip distribution during the afternoon peak period:

- 10% to/10% from the north
- 40% to/55% from I-470
- 25% to/15% from the south (Blue Parkway)
- 15% to/10% from the south (Ward Road)
- 10% to/10% from the east (Tudor Road)

Existing Plus Site Traffic Volumes

The expected development site-generated traffic volumes were added to the existing plus approved traffic scenario. The volumes are shown on Figures 4, 5, 6, and 7.

Future Traffic Volumes

Future traffic volumes were generated at a rate of 2% annual growth over a twenty-year period. The calculated traffic volumes were added to the existing plus site traffic. The volumes for the future morning and afternoon peak hours are shown on Figure 8.

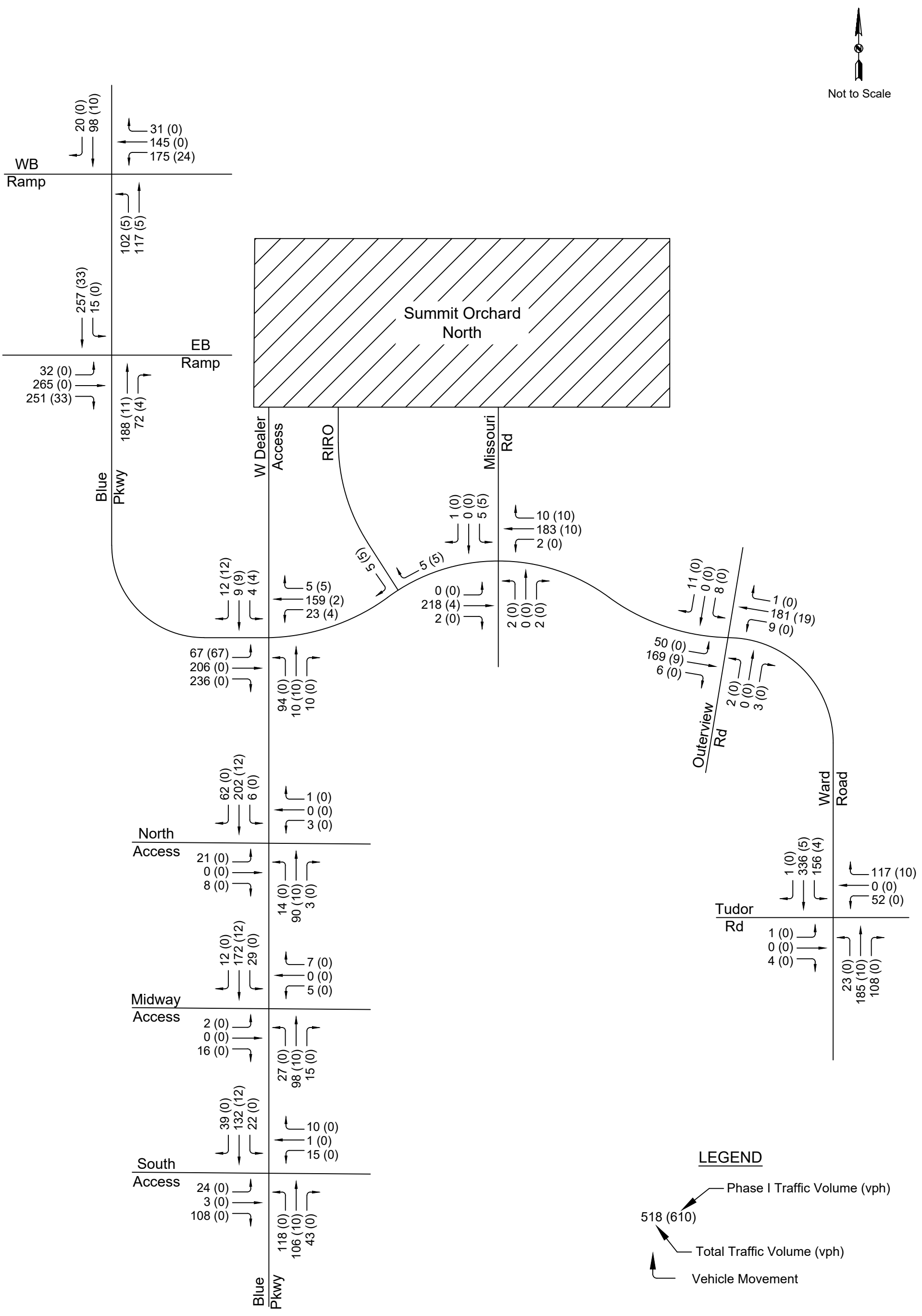


Figure 4 - Existing plus Site AM (Phase I) Volumes

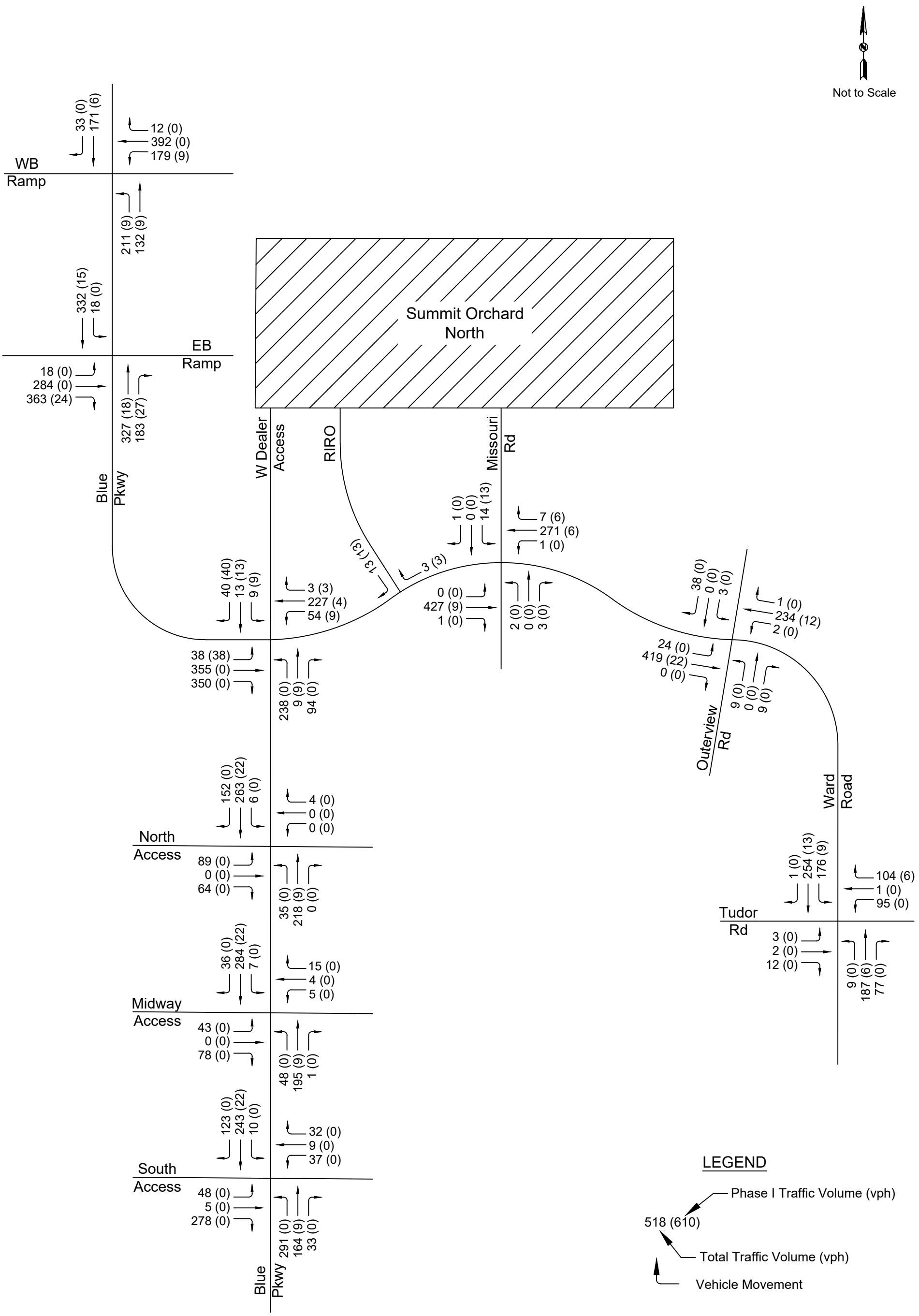


Figure 5 - Existing plus Site PM (Phase I) Volumes

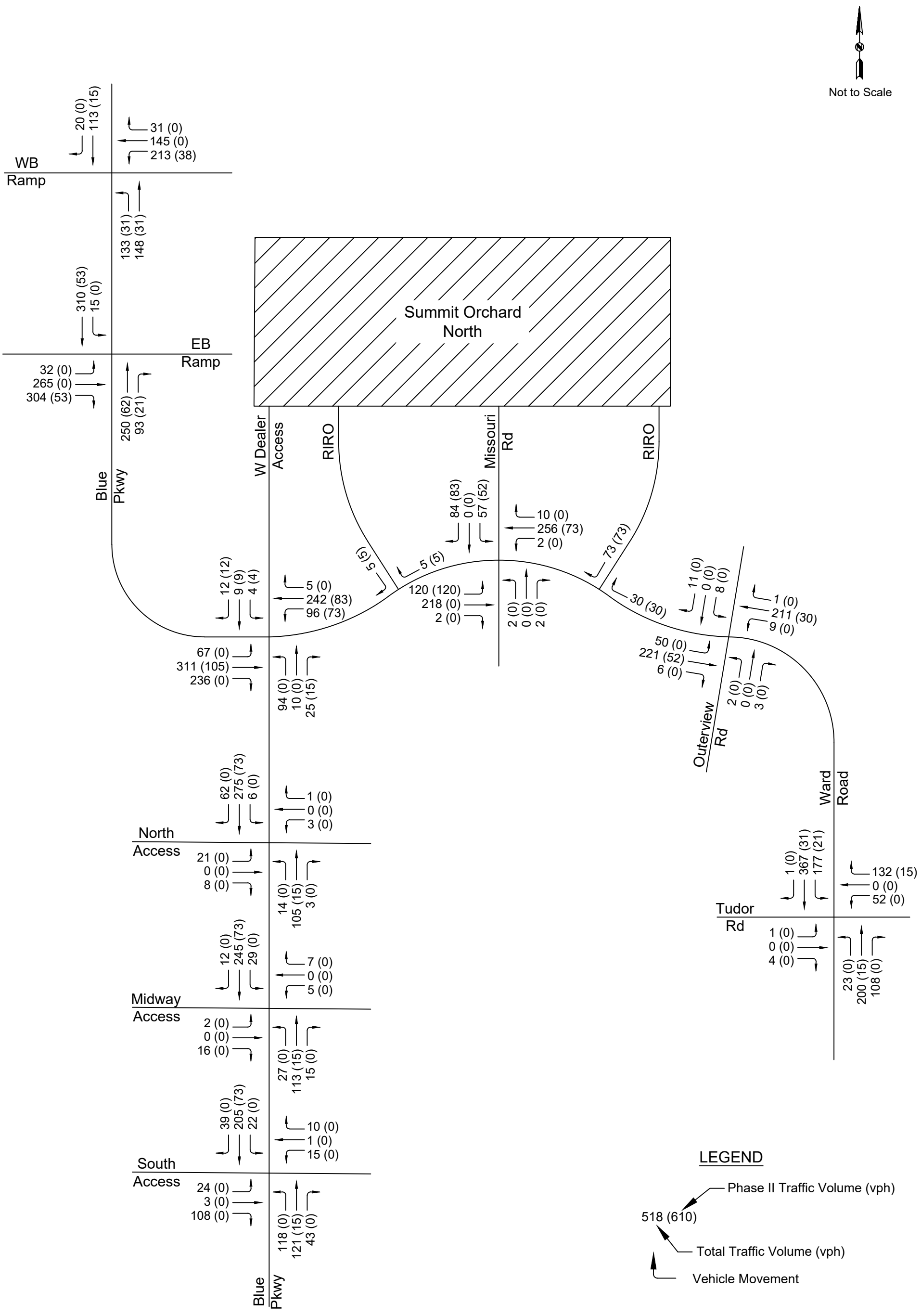


Figure 6 - Existing plus Site AM (Phase I & II) Volumes

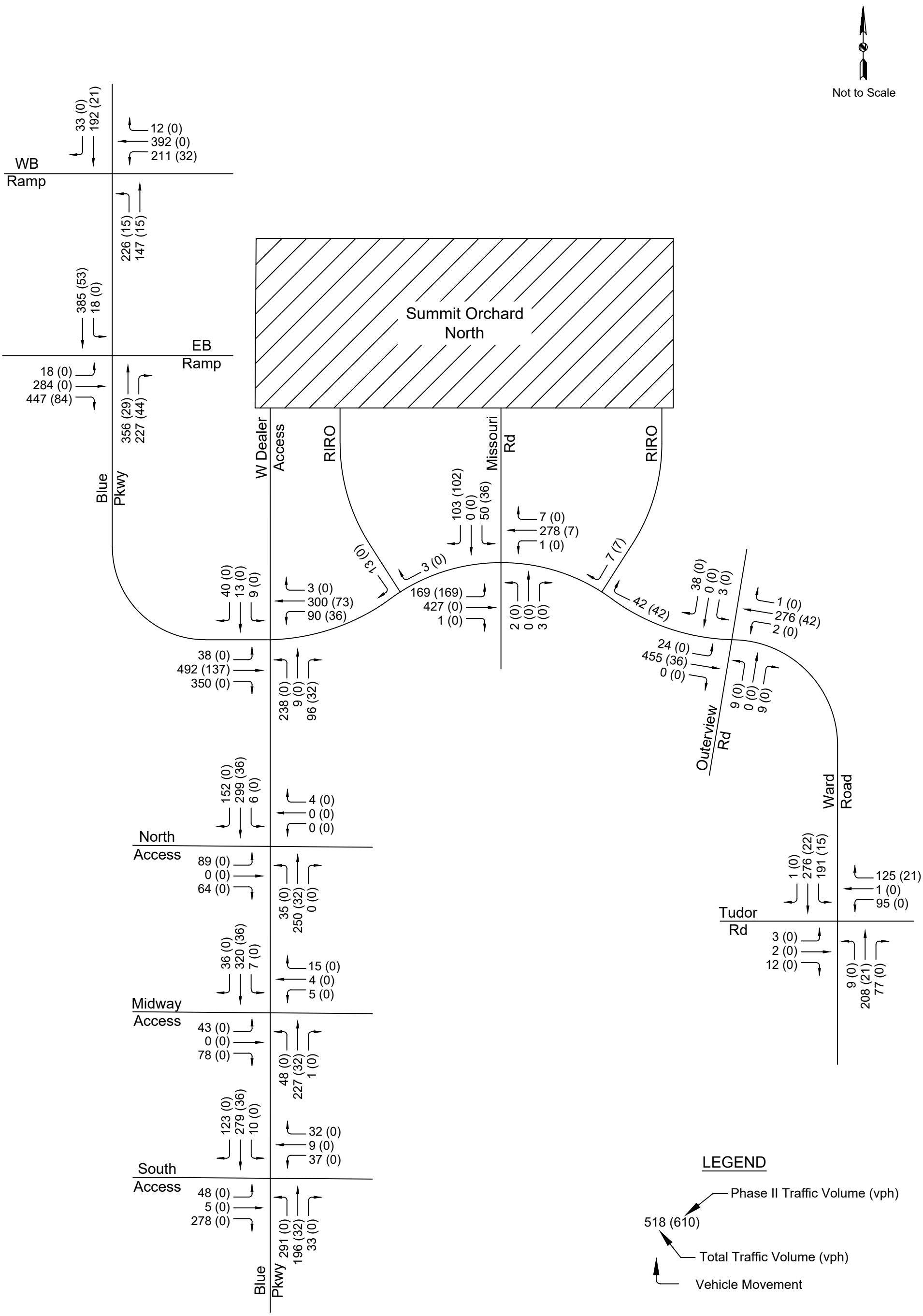


Figure 7 - Existing plus Site PM (Phase I & II) Volumes

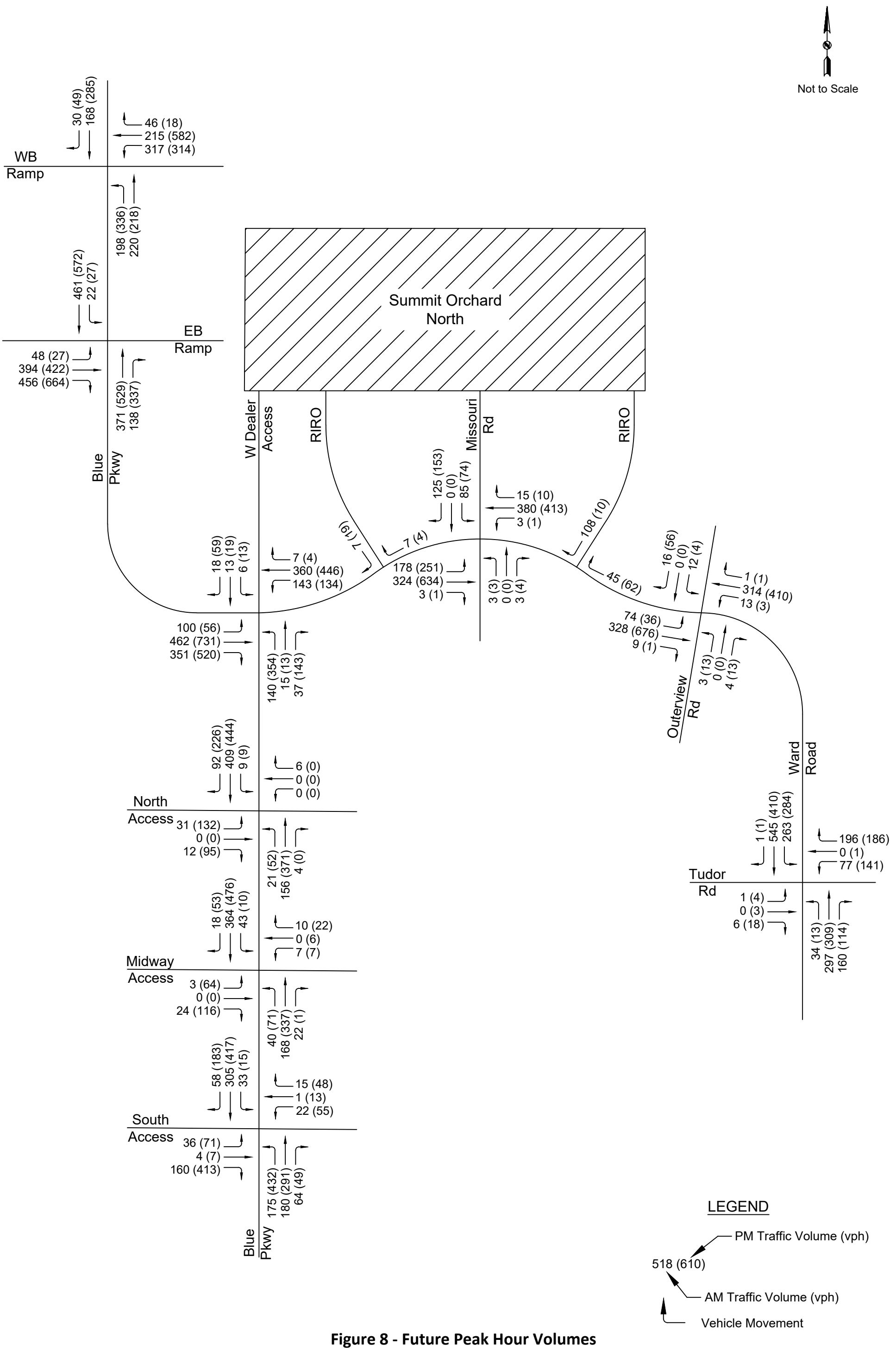


Figure 8 - Future Peak Hour Volumes

Signal Warrant Study

It may be considered justified to install a traffic signal at a location if one or more of the traffic signal warrants listed in the 2009 MUTCD is met. The traffic signal warrants are:

Warrant 1: Eight-Hour Vehicular Volume
Warrant 2: Four-Hour Vehicular Volume
Warrant 3: Peak Hour
Warrant 4: Pedestrian Volume
Warrant 5: School Crossing
Warrant 6: Coordinated Signal System
Warrant 7: Crash Experience
Warrant 8: Roadway Network
Warrant 9: Intersection Near at Grade Crossing

Warrant 3 was evaluated at Ward Road and Outerview Road and at Ward Road and Missouri Road as part of this study for the existing plus site (Phase I & II) and future conditions.

Warrant 3: Peak Hour

The peak hour warrant is satisfied if either of the two following conditions are met:

A: This condition is satisfied if any of the following conditions are met for a period of one hour during an average day:

1. The total stopped time delay experienced by the traffic on one minor-street approach (one direction only) controlled by a stop sign equals or exceeds: 4 vehicles-hours for a one-lane approach or five vehicle hours for a two-land approach and
2. The volume on the same minor-street approach (one directions only) equals or exceeds 100 vehicles per hour for one moving lane of traffic or 150 vehicles per hour for two moving lanes and
3. The total entering volume serviced during the hour equals or exceeds 650 vehicles per hour for intersections with three approaches or 800 vehicles per hour for intersections with four or more approaches.

(Condition A is not being examined in this study)

B: The peak hour warrant is satisfied if the vehicles per hour on both approaches of the major street and the vehicles on the higher volume approach of the minor street for one hour fall above the 2009 MUTCD Warrant 3 curve.

Warrant Analysis

The traffic volumes are not expected to warrant a traffic signal at the Ward Road and Outerview Road or at Ward Road and Missouri Road intersections for the existing plus site conditions, however, the traffic volumes approach the signal warrant criteria for the future condition at Ward Road and Missouri Road. The raw data and curves from the 2009 MUTCD are included in the Appendix.

Right-Turn and Left-Turn Lane Warrants

The need for right and left-turn lanes at the site entrances was evaluated using the City of Lee's Summit *Access Management Code*, March 2018 turning lane guidelines as part of this study for the existing plus site (Phase I & II) condition.

Left-Turn Warrant

Left-turn lane guidelines per City of Lee's Summit *Access Management Code*:

> 16.1.E. Left-turn lanes shall be provided at all median openings on roadways with medians.
>
> 16.1.H. The minimum length of left-turn lane should be 250 feet plus taper on an arterial street intersecting another arterial street and 200 feet plus taper on an arterial street at other locations. The minimum length of left-turn lane on collectors should be 150 feet plus taper. The minimum length of left-turn lane on connectors should meet the driveway throat length requirements.

Left-turn lanes will be required eastbound on Ward Road and Blue Parkway as Ward Road is a median divided arterial roadway. A left-turn lane for the eastbound movement at Ward Road and Missouri Road has already been constructed.

Right-Turn Warrant

Right-turn lane guidelines per City of Lee's Summit *Access Management Code*:

> 16.2.A. Required on arterial streets at each intersecting street or driveway where the right-turn volume on the major arterial street is or is projected to be at least 30 vehicles in any hour, or the right-turn volume on the minor arterial street is or is projected to be at least 60 vehicles in any hour. Minimum length should be 250 feet plus the taper on a major arterial at the intersection of another arterial street or 200 feet plus the taper on a minor arterial at the intersection with another arterial street or on a major arterial at the intersection of a collector and 150 feet plus the taper at other locations along arterial streets.

The traffic volumes are expected to meet the right-turning volume criteria at the Commercial Access (east RIRO) and Ward Road.

The raw analysis data is included in the Appendix.

CAPACITY

The capacity analysis for the study intersections was completed using the methodology outlined in the Highway Capacity Manual, 6th Edition. The volume and capacity analysis was completed using Trafficware SYNCHRO software (latest version). The criteria for determining Level of Service (LOS) for signalized and unsignalized study intersections and access points are based on the average vehicle delay and is outlined in Table 3 below. Level of Service is defined as the measure of the quality of traffic flow and is graded from "A" to "F"—with "A" being the best situation and "F" being the worst.

Table 3 – Intersection Level of Service

Level of Service (LOS)	Average Control Delay (sec/veh)	
	Unsignalized	Signalized
A	< 10	< 10
B	< 15	< 20
C	< 25	< 35
D	< 35	< 55
E	< 50	< 80
F	≥ 50	≥ 80

Existing Conditions

Blue Parkway and WB I-470 Ramp

All approaches operate at a LOS D or better for the morning and afternoon peak periods and the intersection has sufficient capacity for queuing vehicles. The overall LOS for the signal is a LOS C during the morning and afternoon peak periods.

Blue Parkway and EB I-470 Ramp

All approaches operate at a LOS C or better for the morning and afternoon peak periods and the intersection has sufficient capacity for queuing vehicles. The overall LOS for the signal is a LOS B during the morning and afternoon peak periods.

Ward Road and Blue Parkway

All approaches operate at a LOS C or better for the morning and afternoon peak periods and the intersection has sufficient capacity for queuing vehicles. The overall LOS for the signal is a LOS B during the morning and afternoon peak periods.

Blue Parkway and North Access

All approaches operate at a LOS D or better for the morning and afternoon peak periods and the intersection has sufficient capacity for queuing vehicles. The overall LOS for the signal is a LOS A during the morning and a LOS B during the afternoon peak period.

Blue Parkway and Center/Midway Access

All approaches operate at a LOS D or better for the morning and afternoon peak periods and the intersection has sufficient capacity for queuing vehicles. The overall LOS for the signal is a LOS B during the morning and afternoon peak periods.

Blue Parkway and South Access

All approaches operate at a LOS D or better for the morning and afternoon peak periods and the intersection has sufficient capacity for queuing vehicles. The overall LOS for the signal is a LOS B during the morning and a LOS C during the afternoon peak period.

Ward Road and Missouri Road

The through movements of Ward Road are not stop-controlled and are therefore operating in a free-flow condition. The northbound and southbound movements operate at a LOS B and have sufficient capacity for queuing vehicles.

Outerview Road and Holiday Inn Access

No detailed analysis of this intersection is included in the study as traffic volumes are expected to be low.

Ward Road and Outerview Road

The through movements of Ward Road are not stop-controlled and are therefore operating in a free-flow condition. The through and turning movements on Outerview Road operate at LOS B or better and the intersection has sufficient capacity for queuing vehicles.

Ward Road and Tudor Road

All approaches operate at a LOS C or above for the morning and afternoon peak periods and the intersection has sufficient capacity for queuing vehicles. The overall LOS for the signal is a LOS B during the morning and afternoon peak periods.

The results of the capacity analysis for the existing morning and afternoon peak hour conditions along with lane configuration and queue lengths are shown on Figures 9 and 10.

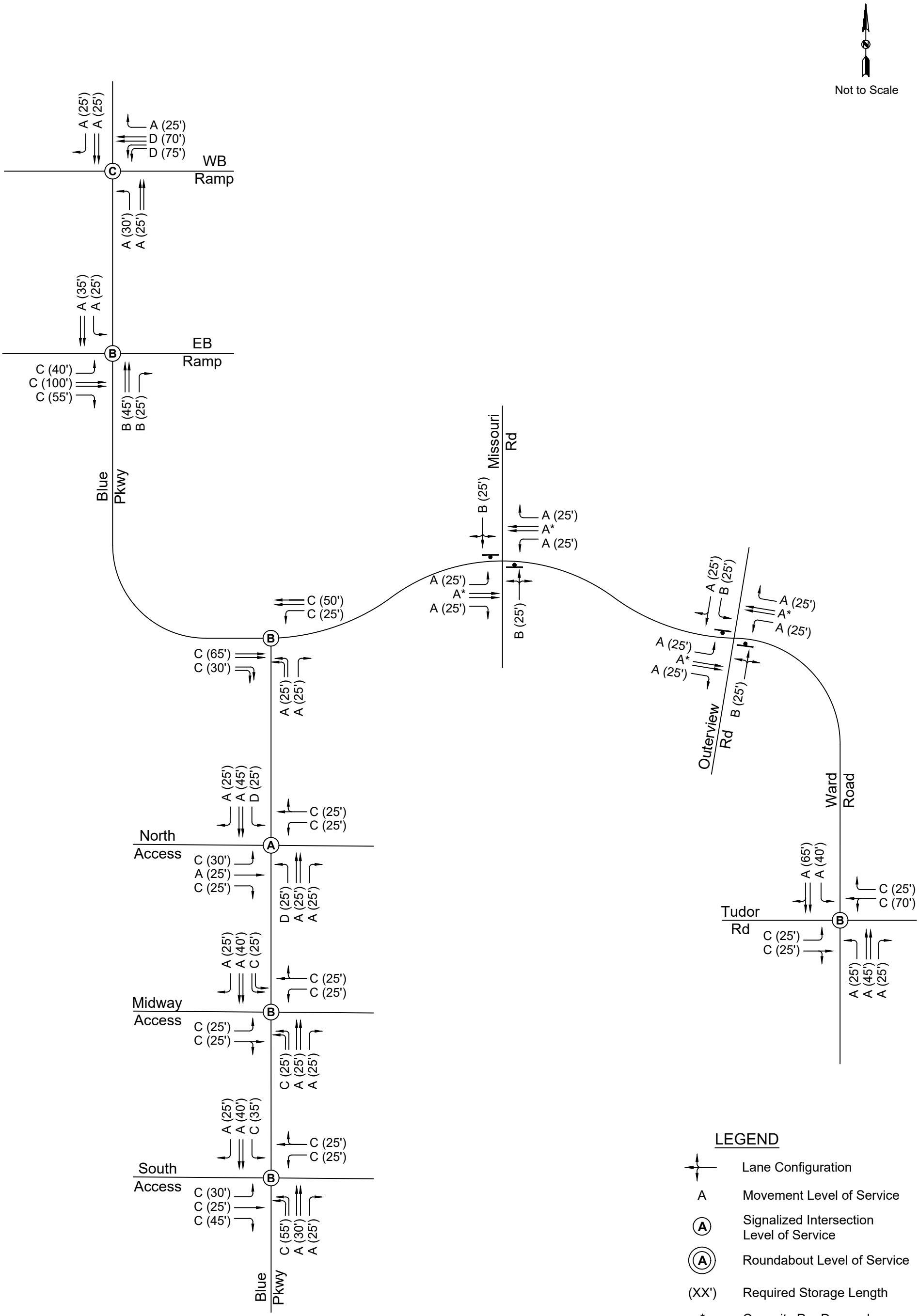


Figure 9 - Existing AM Level of Service

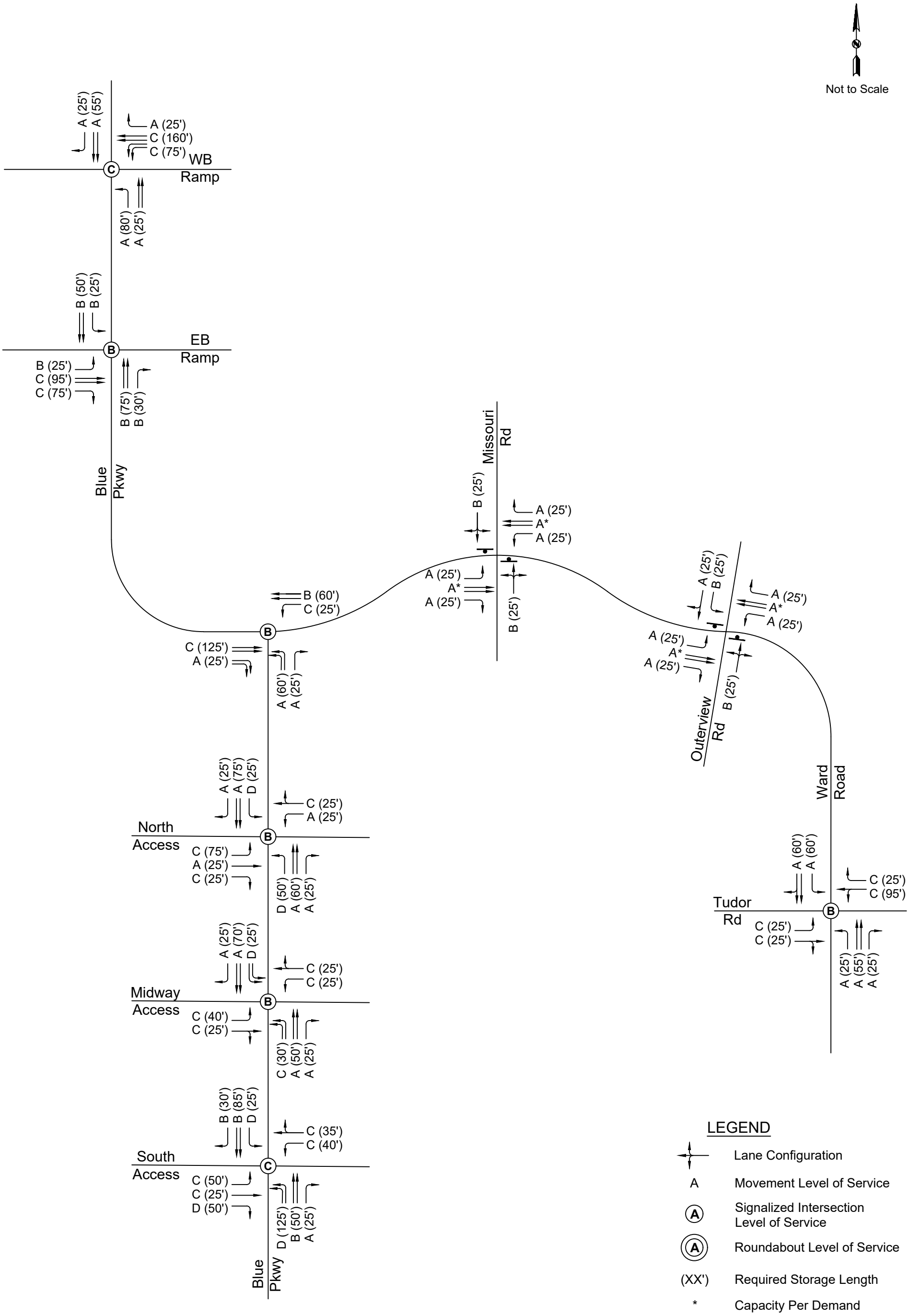


Figure 10 - Existing PM Level of Service

Existing Plus Phase I Site Conditions

Signal timings were optimized to account for the additional traffic.

Blue Parkway and WB I-470 Ramp

There is no significant change in the operations of this intersection from the existing conditions. All approaches continue to operate at a LOS D or better for the morning and afternoon peak periods and the intersection has sufficient capacity for queuing vehicles.

Blue Parkway and EB I-470 Ramp

There is no significant change in the operations of this intersection from the existing conditions. All approaches continue to operate at a LOS C or better for the morning and afternoon peak periods and the intersection has sufficient capacity for queuing vehicles.

Ward Road and Blue Parkway/West Car Dealership Access

The intersection was analyzed with a southbound lane configuration of shared/right and a left-turn lane, an eastbound left-turn lane, and restriping the northbound dual left-turn lanes to a left-turn lane and a through lane.

The additional traffic causes the eastbound left-turn, westbound left-turn, and eastbound dual right-turns to operate at a LOS D for the afternoon peak period. All other approaches operate at a LOS C or better for the morning and afternoon peak periods and the intersection has sufficient capacity for queuing vehicles. The overall LOS for the signal is a LOS C during the morning and afternoon peak periods.

Blue Parkway and North Access

There is no significant change in the operations of this intersection from the existing conditions. All approaches continue to operate at a LOS D or better for the morning and afternoon peak periods and the intersection has sufficient capacity for queuing vehicles.

Blue Parkway and Center/Midway Access

There is no significant change in the operations of this intersection from the existing conditions. All approaches continue to operate at a LOS D or better for the morning and afternoon peak periods and the intersection has sufficient capacity for queuing vehicles.

Blue Parkway and South Access

There is no significant change in the operations of this intersection from the existing conditions. All approaches continue to operate at a LOS D or better for the morning and afternoon peak periods and the intersection has sufficient capacity for queuing vehicles.

Ward Road and Car Dealership RIRO Access

The through movements of Ward Road are not stop-controlled and are therefore operating in a free-flow condition. The southbound right-turn lane operates at a LOS A and has sufficient capacity for queuing vehicles.

Ward Road and Missouri Road

There is no significant change in the operations of this intersection from the existing conditions. All approaches continue to operate at a LOS B or better for the morning and afternoon peak periods and the intersection has sufficient capacity for queuing vehicles.

Outerview Road and Holiday Inn Access

No detailed analysis of this intersection is included in the study as traffic volumes are expected to be low.

Ward Road and Outerview Road

There is no significant change in the operations of this intersection from the existing conditions. All approaches continue to operate at a LOS B or better for the morning and afternoon peak periods and the intersection has sufficient capacity for queuing vehicles.

Ward Road and Tudor Road

There is no significant change in the operations of this intersection from the existing conditions. All approaches continue to operate at a LOS C or better for the morning and afternoon peak periods and the intersection has sufficient capacity for queuing vehicles.

The results of the capacity analysis for the existing plus phase I morning and afternoon peak hour conditions along with lane configuration and queue lengths are shown on Figures 11 and 12.

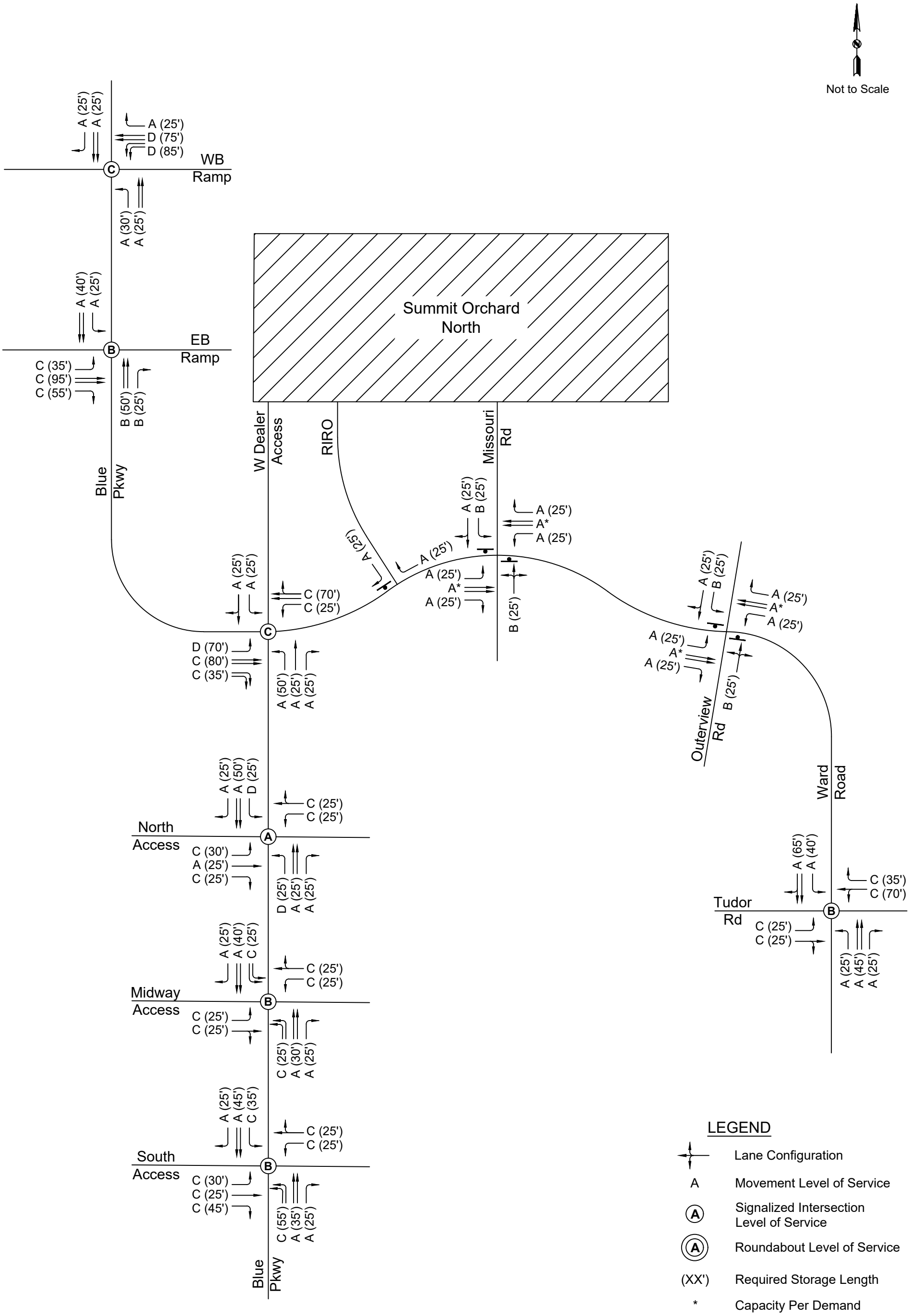


Figure 11 - Existing plus Site AM (Phase I) Level of Service

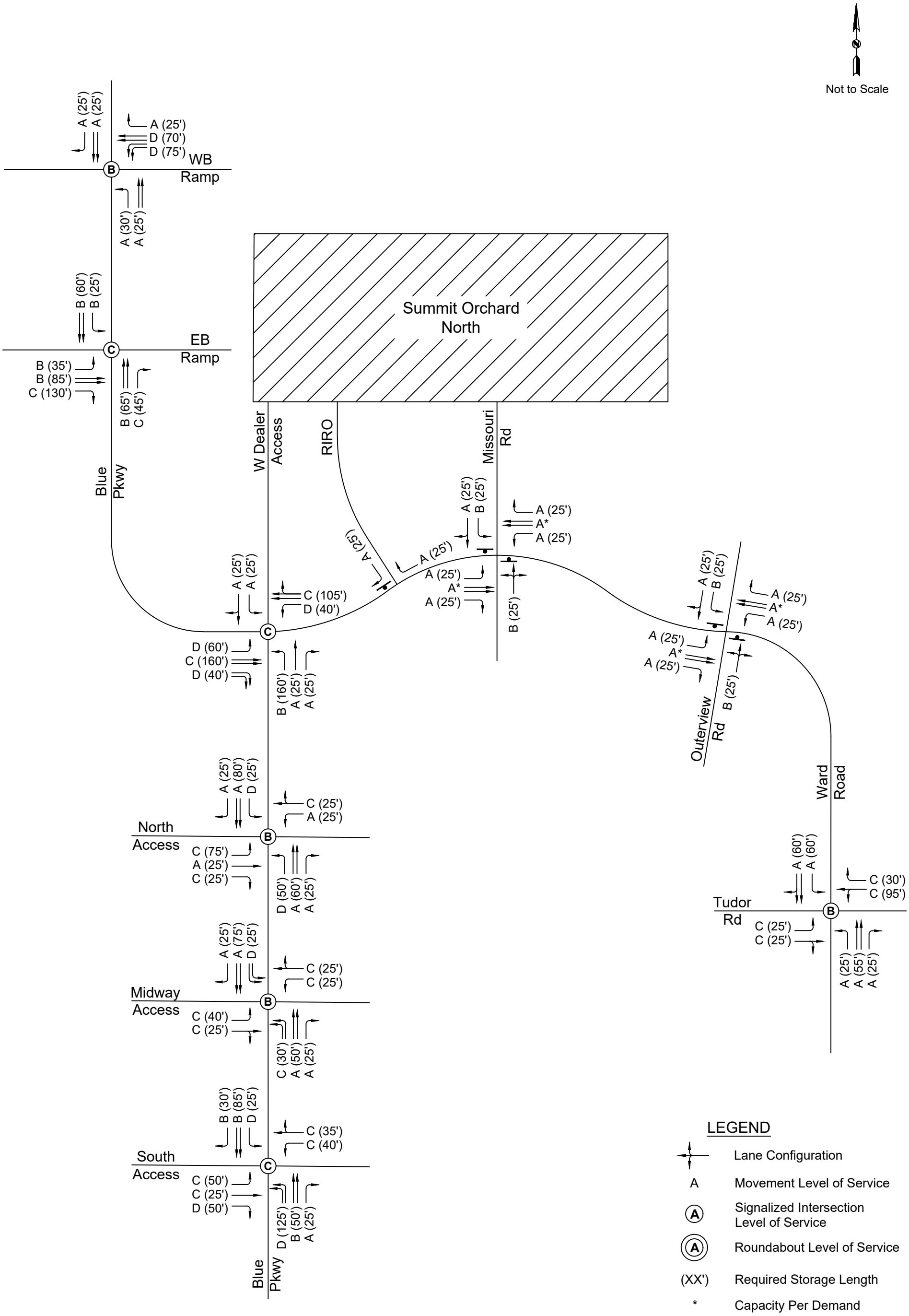


Figure 12 - Existing plus Site PM (Phase I) Level of Service

Existing Plus Phase I & II Site Conditions

Signal timings were optimized to account for the additional traffic.

Blue Parkway and WB I-470 Ramp

There is no significant change in the operations of this intersection from the existing or existing plus phase I conditions. All approaches continue to operate at a LOS D or better for the morning and afternoon peak periods and the intersection has sufficient capacity for queuing vehicles.

Blue Parkway and EB I-470 Ramp

There is no significant change in the operations of this intersection from the existing or existing plus phase I conditions. All approaches continue to operate at a LOS C or better for the morning and afternoon peak periods and the intersection has sufficient capacity for queuing vehicles.

Ward Road and Blue Parkway/West Car Dealership Access

There is no significant change in the operations of this intersection from the existing or existing plus phase I conditions. All approaches continue to operate at a LOS D or better for the morning and afternoon peak periods and the intersection has sufficient capacity for queuing vehicles.

Blue Parkway and North Access

There is no significant change in the operations of this intersection from the existing or existing plus phase I conditions. All approaches continue to operate at a LOS D or better for the morning and afternoon peak periods and the intersection has sufficient capacity for queuing vehicles.

Blue Parkway and Center/Midway Access

There is no significant change in the operations of this intersection from the existing or existing plus phase I conditions. All approaches continue to operate at a LOS D or better for the morning and afternoon peak periods and the intersection has sufficient capacity for queuing vehicles.

Blue Parkway and South Access

There is no significant change in the operations of this intersection from the existing or existing plus phase I conditions. All approaches continue to operate at a LOS D or better for the morning and afternoon peak periods and the intersection has sufficient capacity for queuing vehicles.

Ward Road and Car Dealership RIRO Access

The southbound right-turn lane continues to operate at a LOS A during the morning peak period and drops to a LOS B during the afternoon peak period. The intersection has sufficient capacity for queuing vehicles.

Ward Road and Missouri Road

The southbound and northbound movements drop to a LOS C or better for the morning peak period and a LOS D or better for the afternoon peak period with the additional traffic. The intersection has sufficient capacity for queuing vehicles.

Ward Road and Commercial RIRO Access

The through movements of Ward Road are not stop-controlled and are therefore operating in a free-flow condition. The southbound right-turn lane operates at a LOS A and has sufficient capacity for queuing vehicles.

Outerview Road and Holiday Inn Access

No detailed analysis of this intersection is included in the study as traffic volumes are expected to be low.

Ward Road and Outerview Road

There is no significant change in the operations of this intersection from the existing or existing plus phase I conditions. All approaches continue to operate at a LOS B or better for the morning and afternoon peak periods and the intersection has sufficient capacity for queuing vehicles.

Ward Road and Tudor Road

There is no significant change in the operations of this intersection from the existing or existing plus phase I conditions. All approaches continue to operate at a LOS C or better for the morning and afternoon peak periods and the intersection has sufficient capacity for queuing vehicles.

The results of the capacity analysis for the existing plus phase I & II morning and afternoon peak hour conditions along with lane configuration and queue lengths are shown on Figures 13 and 14.

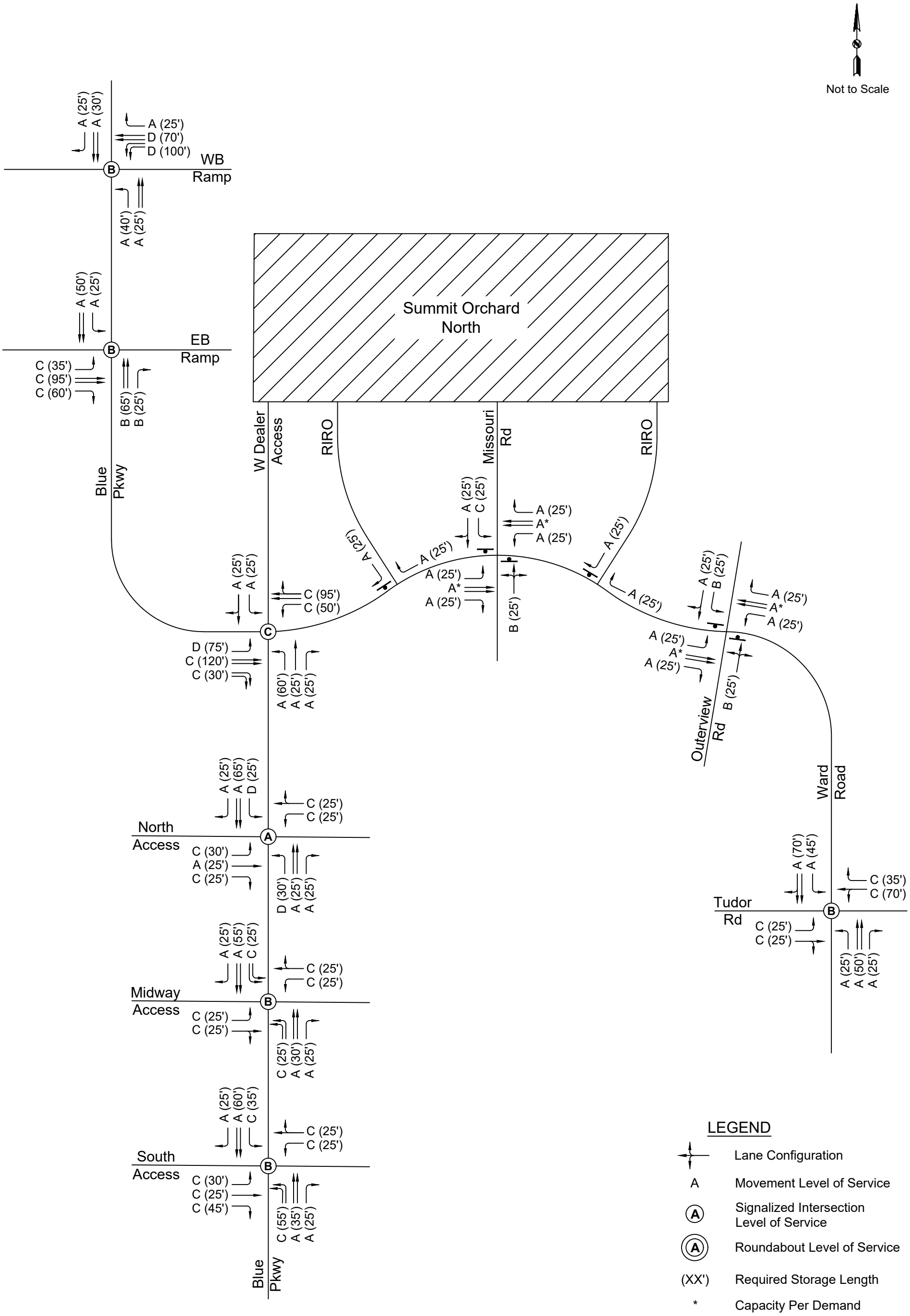


Figure 13 - Existing plus Site AM (Phase I & II) Level of Service

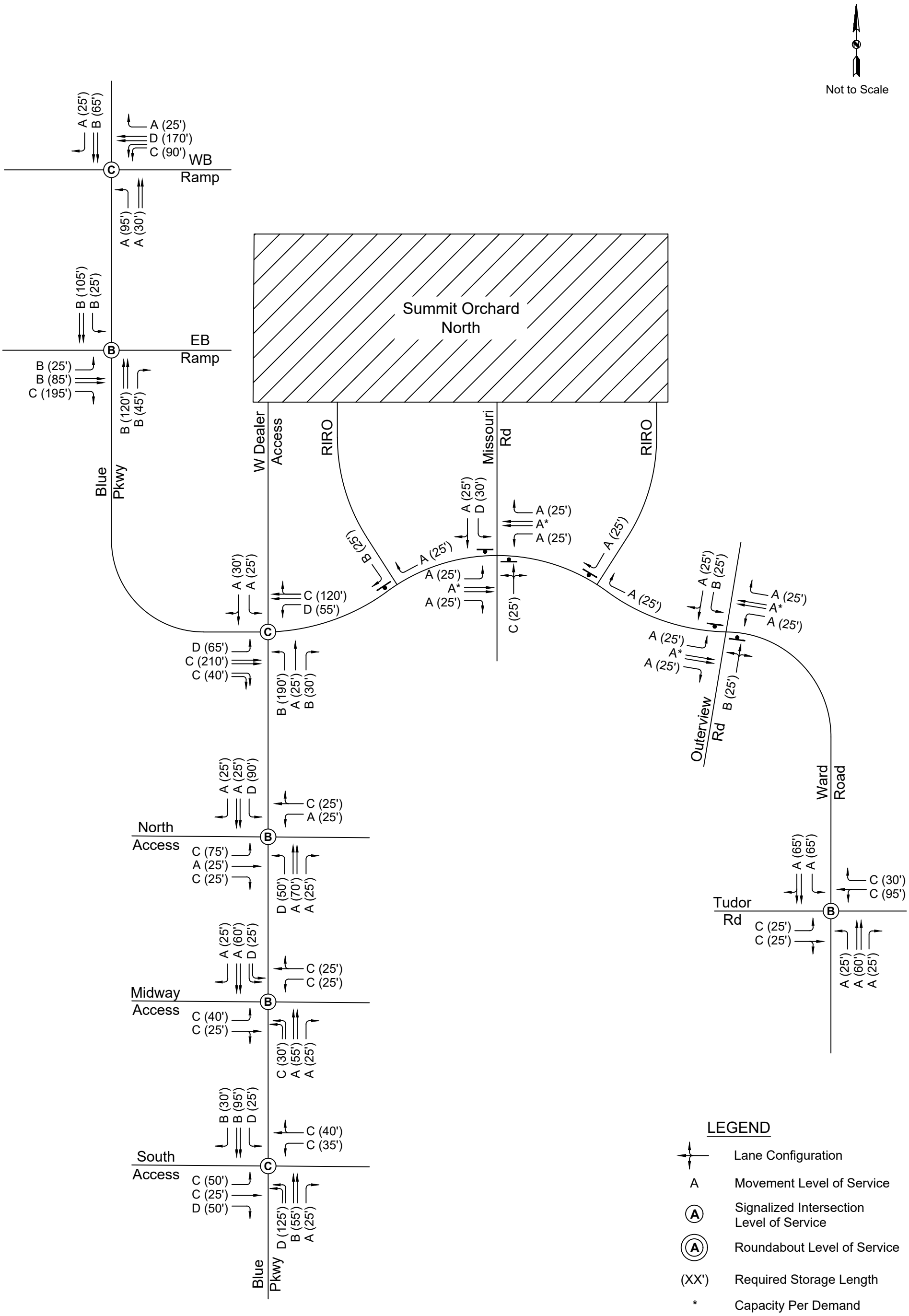


Figure 14 - Existing plus Site PM (Phase I & II) Level of Service

Future Conditions

Future analysis is intended to provide a high-level overview of increases in trips as other development occurs and to provide recommendations for reserving right-of-way for future expansion. Signal timings of intersection movements were optimized to account for the additional traffic.

Blue Parkway and WB I-470 Ramp

All approaches are expected to operate at a LOS D or better for the morning and afternoon peak periods and the intersection has sufficient capacity for queuing vehicles.

Blue Parkway and EB I-470 Ramp

All approaches are expected to operate at a LOS D or better for the morning and afternoon peak periods and the intersection has sufficient capacity for queuing vehicles.

Ward Road and Blue Parkway/West Car Dealership Access

All approaches are expected to operate at a LOS D or better for the morning and afternoon peak periods and the intersection has sufficient capacity for queuing vehicles.

Blue Parkway and North Access

All approaches are expected to operate at a LOS D or better for the morning and afternoon peak periods and the intersection has sufficient capacity for queuing vehicles.

Blue Parkway and Center/Midway Access

All approaches are expected to operate at a LOS D or better for the morning and afternoon peak periods and the intersection has sufficient capacity for queuing vehicles.

Blue Parkway and South Access

All approaches are expected to operate at a LOS D or better for the morning and afternoon peak periods and the intersection has sufficient capacity for queuing vehicles.

Ward Road and Car Dealership RIRO Access

The southbound right-turn lane is expected to operate at a LOS B during the morning and afternoon peak period. The intersection has sufficient capacity for queuing vehicles.

Ward Road and Missouri Road

As a stop-controlled intersection: The southbound left-turn movement operates at a LOS F and the northbound movement a LOS E.

As a signalized intersection: All approaches operate at a LOS D or better, and the intersection has sufficient capacity for queuing vehicles.

Ward Road and Commercial RIRO Access

The southbound right-turn lane operates at a LOS B and has sufficient capacity for queuing vehicles.

Outerview Road and Holiday Inn Access

No detailed analysis of this intersection is included in the study as traffic volumes are expected to be low.

Ward Road and Outerview Road

All approaches operate at a LOS C or better for the morning and afternoon peak periods and the intersection has sufficient capacity for queuing vehicles.

Ward Road and Tudor Road

All approaches operate at a LOS D or better for the morning and afternoon peak periods and the intersection has sufficient capacity for queuing vehicles.

The results of the capacity analysis for the future morning and afternoon peak hour conditions along with lane configuration and queue lengths are shown on Figures 15 and 16.

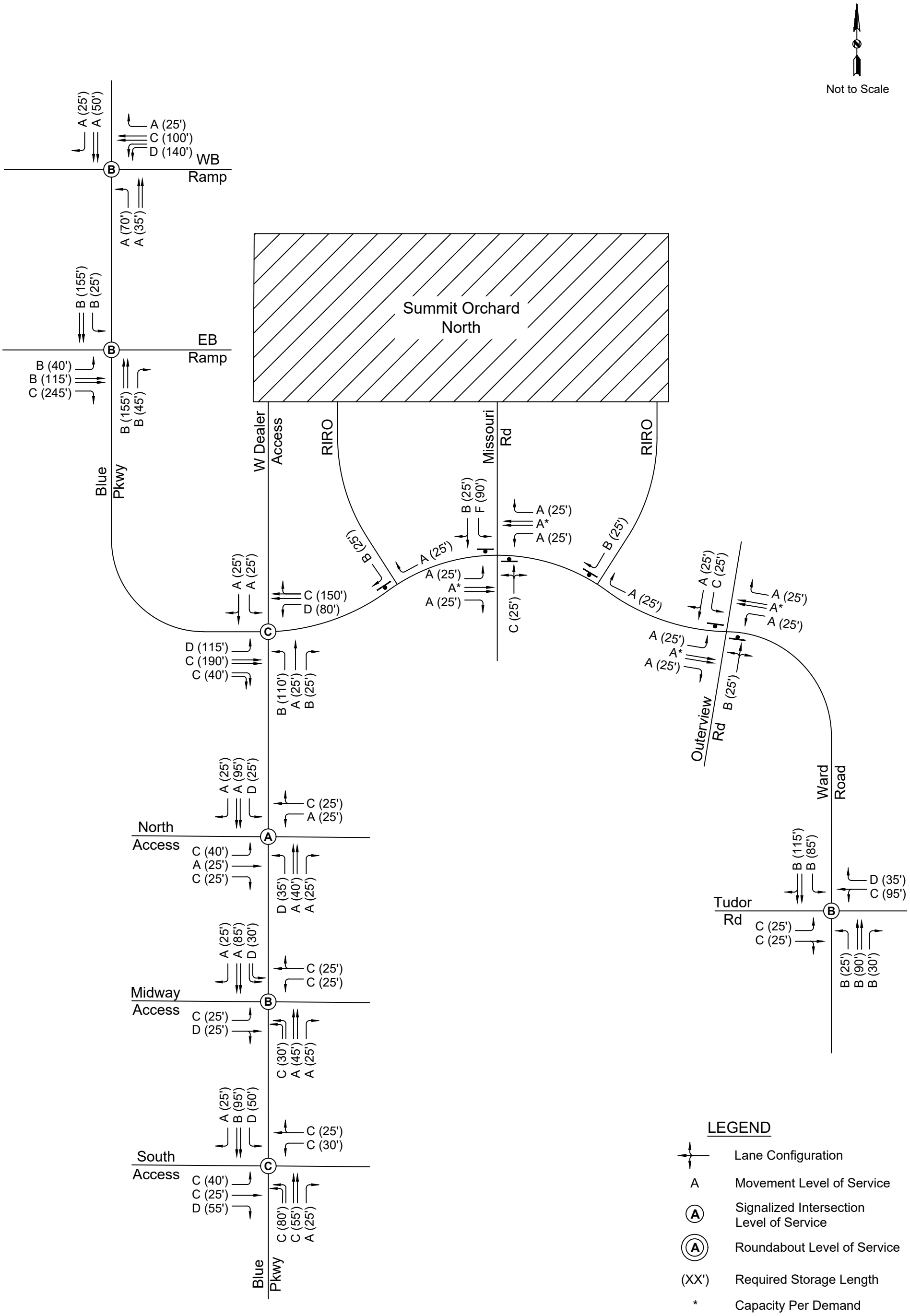


Figure 15 - Future AM Level of Service

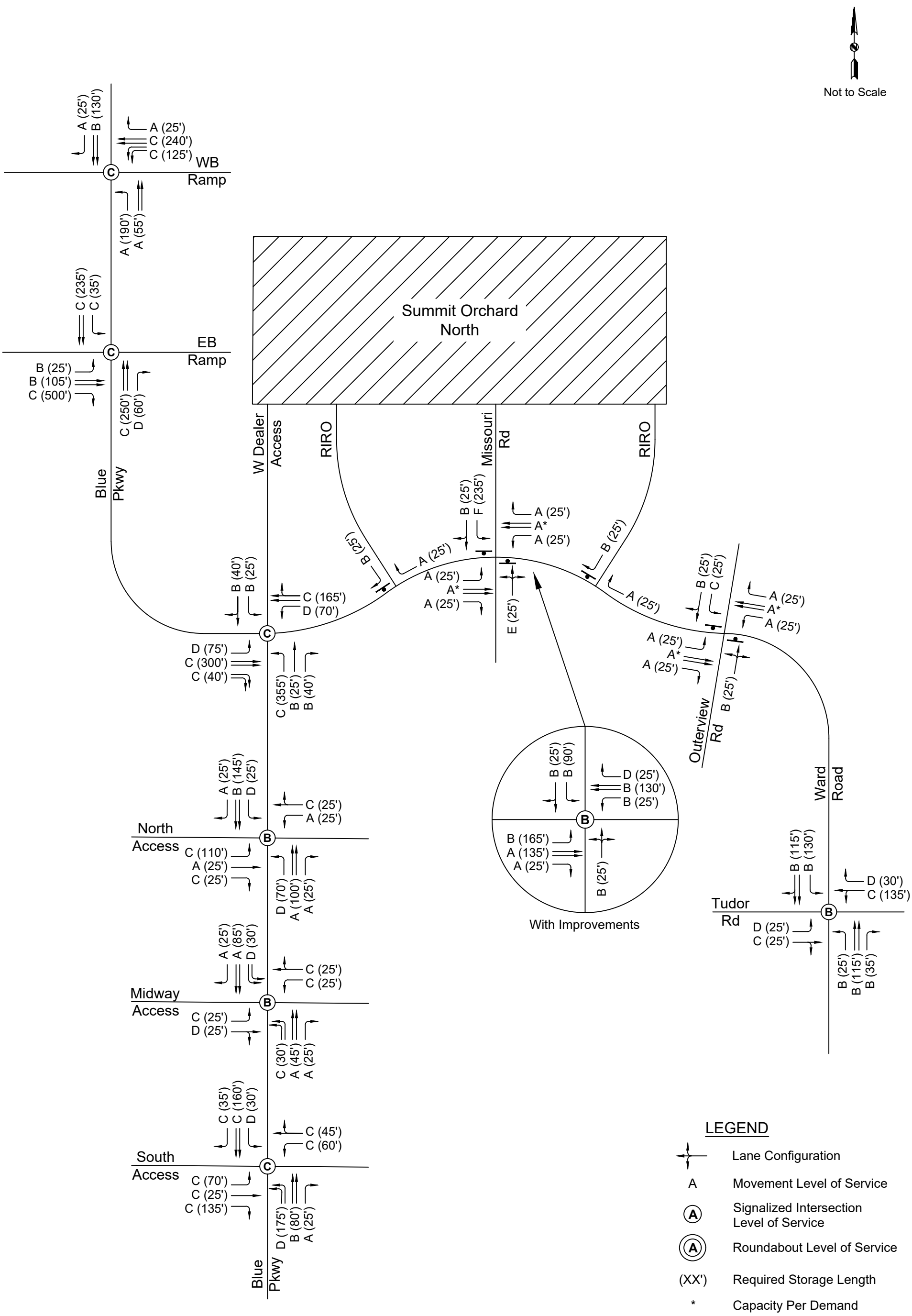


Figure 16 - Future PM Level of Service

RECOMMENDATIONS

This study documents the findings of the traffic analysis of the expected traffic for the Summit Orchards North development in Lee's Summit, Missouri. The study includes an analysis of the existing, existing plus Phase I site, existing plus Phase I & II site, and future conditions.

Based on the results of the SYNCHRO analysis, observations from the field, and engineering judgment, the following recommendations are made:

- Discuss signal and pavement marking improvements related to crash history with City and MoDOT staff.

When the Phase I development is constructed:

- Construct an eastbound left-turn lane (200 feet plus taper) at the intersection of Ward Road and Blue Parkway.
- Install the southbound signal mast arm and pole with pedestrian equipment and optimize/adjust signal timings as necessary at Ward Road and Blue Parkway. Reconfigure northbound leg of intersection to a left-turn, through, and right-turn lane configuration. The southbound leg of the intersection should be a left-turn lane (150 feet plus taper) and a shared through/right-turn lane.
- Optimize signal timings at all study intersections.
- Reconstruct the southbound Missouri Road and Ward Road intersection to consist of a left-turn lane and a shared through/right-turn lane.

When the Phase II development is constructed:

- Construct a westbound right-turn lane (200 feet plus taper) at the intersection of Commercial Access and Ward Road.
- The need for future roadway improvements should be reevaluated as additional development occurs.

APPENDIX

7/12/2022
Chipman & Ward Rd
AM

	Eastbound				Westbound				Northbound				Southbound				
Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Int. Total
7:00	3	13	1	17	7	17	6	30	1	6	8	15	3	6	1	10	72
7:15	7	15	2	24	8	29	12	49	6	20	8	34	7	5	2	14	121
7:30	5	26	4	35	4	25	9	38	3	18	7	28	5	7	7	19	120
7:45	5	29	2	36	12	31	7	50	3	22	15	40	9	10	2	21	147
8:00	9	34	4	47	7	27	5	39	6	24	9	39	2	7	6	15	140
8:15	5	38	0	43	11	33	8	52	8	23	18	49	6	12	5	23	167
8:30	4	27	4	35	5	35	9	49	4	17	18	39	4	16	8	28	151
8:45	14	39	1	54	10	30	4	44	5	18	12	35	6	10	6	22	155
Total	**52**	**221**	**18**	**291**	**64**	**227**	**60**	**351**	**36**	**148**	**95**	**279**	**42**	**73**	**37**	**152**	**1073**

					PHF					PHF					PHF					PHF	
Time	EB Left	EB Thru	EB Right	EB Total		WB Left	WB Thru	WB Right	WB Total		NB Left	NB Thru	NB Right	NB Total		SB Left	SB Thru	SB Right	SB Total		Int. Total
8:00	9	34	4	47	**0.83**	7	27	5	39	**0.88**	6	24	9	39	**0.83**	2	7	6	15	**0.79**	140
8:15	5	38	0	43		11	33	8	52		8	23	18	49		6	12	5	23		167
8:30	4	27	4	35		5	35	9	49		4	17	18	39		4	16	8	28		151
8:45	14	39	1	54		10	30	4	44		5	18	12	35		6	10	6	22		155
Total	32	138	9	179		33	125	26	184		23	82	57	162		18	45	25	88		613

Chipman & Donovan Rd
AM

	Eastbound				Westbound				Northbound				Southbound				
Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Int. Total
7:00	1	26	5	32	4	28	8	40	1	3	6	10	2	12	2	16	98
7:15	3	28	1	32	6	43	2	51	1	3	11	15	4	2	2	8	106
7:30	3	32	0	35	9	36	3	48	2	3	10	15	8	2	1	11	109
7:45	1	56	0	57	16	43	3	62	2	6	18	26	3	3	1	7	152
8:00	5	38	0	43	9	44	9	62	2	6	8	16	4	2	1	7	128
8:15	4	52	1	57	7	48	6	61	1	2	12	15	7	5	2	14	147
8:30	2	50	1	53	9	55	5	69	0	2	8	10	7	4	0	11	143
8:45	2	54	4	60	20	45	6	71	0	3	13	16	2	0	2	4	151
Total	**21**	**336**	**12**	**369**	**80**	**342**	**42**	**464**	**9**	**28**	**86**	**123**	**37**	**30**	**11**	**78**	**1034**

					PHF					PHF					PHF					PHF	
Time	EB Left	EB Thru	EB Right	EB Total		WB Left	WB Thru	WB Right	WB Total		NB Left	NB Thru	NB Right	NB Total		SB Left	SB Thru	SB Right	SB Total		Int. Total
8:00	5	38	0	43	**0.89**	9	44	9	62	**0.93**	2	6	8	16	**0.89**	4	2	1	7	**0.64**	128
8:15	4	52	1	57		7	48	6	61		1	2	12	15		7	5	2	14		147
8:30	2	50	1	53		9	55	5	69		0	2	8	10		7	4	0	11		143
8:45	2	54	4	60		20	45	6	71		0	3	13	16		2	0	2	4		151
Total	13	194	6	213		45	192	26	263		3	13	41	57		20	11	5	36		569

Ward & Tudor Rd
AM

	Eastbound				Westbound				Northbound				Southbound				
Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Int. Total
7:00	0	0	0	0	4	0	19	23	0	16	9	25	23	13	0	36	84
7:15	0	0	0	0	7	0	31	38	0	30	13	43	30	23	0	53	134
7:30	0	0	0	0	8	0	43	51	0	34	9	43	16	21	0	37	131
7:45	0	0	0	0	13	0	22	35	0	32	12	44	37	20	0	57	136
8:00	0	0	0	0	6	0	20	26	0	32	19	51	22	17	0	39	116
8:15	0	0	0	0	8	0	24	32	0	32	32	64	29	11	0	40	136
8:30	0	0	0	0	16	0	25	41	0	26	20	46	26	10	0	36	123
8:45	0	0	0	0	18	0	29	47	0	24	19	43	38	28	0	66	156
Total	**0**	**0**	**0**	**0**	**80**	**0**	**213**	**293**	**0**	**226**	**133**	**359**	**221**	**143**	**0**	**364**	**1016**

	PHF																			
Time	EB Left	EB Thru	EB Right	EB Total	PHF	WB Left	WB Thru	WB Right	WB Total	PHF	NB Left	NB Thru	NB Right	NB Total	PHF	SB Left	SB Thru	SB Right	SB Total	PHF	Int. Total
8:00	0	0	0	0	#DIV/0!	6	0	20	26	0.78	0	32	19	51	0.8	22	17	0	39	0.69	116
8:15	0	0	0	0		8	0	24	32		0	32	32	64		29	11	0	40		136
8:30	0	0	0	0		16	0	25	41		0	26	20	46		26	10	0	36		123
8:45	0	0	0	0		18	0	29	47		0	24	19	43		38	28	0	66		156
Total	0	0	0	0		48	0	98	146		0	114	90	204		115	66	0	181		531

Ward & Outerview Rd
AM

	Eastbound				Westbound				Northbound				Southbound				
Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Int. Total
7:00	0	0	2	2	1	0	3	4	2	34	0	36	1	31	2	34	76
7:15	0	0	1	1	2	0	2	4	4	57	0	61	3	52	4	59	125
7:30	0	0	1	1	1	0	2	3	4	71	2	77	6	37	3	46	127
7:45	0	0	0	0	1	0	4	5	1	50	0	51	19	54	5	78	134
8:00	1	0	1	2	2	0	2	4	3	50	0	53	19	34	4	57	116
8:15	0	0	0	0	1	0	5	6	2	52	1	55	12	36	1	49	110
8:30	0	0	1	1	3	0	2	5	2	47	0	49	11	34	1	46	101
8:45	1	0	1	2	2	0	2	4	2	50	0	52	8	61	0	69	127
Total	**2**	**0**	**7**	**9**	**13**	**0**	**22**	**35**	**20**	**411**	**3**	**434**	**79**	**339**	**20**	**438**	**916**

	PHF																			
Time	EB Left	EB Thru	EB Right	EB Total	PHF	WB Left	WB Thru	WB Right	WB Total	PHF	NB Left	NB Thru	NB Right	NB Total	PHF	SB Left	SB Thru	SB Right	SB Total	PHF	Int. Total
8:00	1	0	1	2	0.63	2	0	2	4	0.79	3	50	0	53	0.95	19	34	4	57	0.80	116
8:15	0	0	0	0		1	0	5	6		2	52	1	55		12	36	1	49		110
8:30	0	0	1	1		3	0	2	5		2	47	0	49		11	34	1	46		101
8:45	1	0	1	2		2	0	2	4		2	50	0	52		8	61	0	69		127
Total	2	0	3	5		8	0	11	19		9	199	1	209		50	165	6	221		454

Donovan & Ward Rd
AM

	Eastbound				Westbound				Northbound				Southbound				
Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Int. Total
7:00	0	0	0	0	0	0	17	17	0	0	1	1	6	0	0	6	24
7:15	0	0	0	0	0	0	11	11	0	0	2	2	7	0	0	7	20
7:30	0	0	0	0	0	0	24	24	1	0	1	2	9	0	0	9	35
7:45	0	0	0	0	4	0	15	19	0	0	3	3	6	0	0	6	28
8:00	0	0	0	0	4	0	15	19	0	0	0	0	1	0	0	1	20
8:15	0	0	0	0	5	0	11	16	0	0	0	0	3	0	0	3	19
8:30	0	0	0	0	2	0	15	17	0	0	3	3	6	0	0	6	26
8:45	0	0	0	0	1	0	1	2	0	0	1	1	8	0	0	8	11
Total	**0**	**0**	**0**	**0**	**16**	**0**	**109**	**125**	**1**	**0**	**11**	**12**	**46**	**0**	**0**	**46**	**183**

	PHF																			
Time	EB Left	EB Thru	EB Right	EB Total	PHF	WB Left	WB Thru	WB Right	WB Total	PHF	NB Left	NB Thru	NB Right	NB Total	PHF	SB Left	SB Thru	SB Right	SB Total	PHF	Int. Total
8:00	0	0	0	0	#DIV/0!	4	0	15	19	0.71	0	0	0	0	0.33	1	0	0	1	0.56	20
8:15	0	0	0	0		5	0	11	16		0	0	0	0		3	0	0	3		19
8:30	0	0	0	0		2	0	15	17		0	0	3	3		6	0	0	6		26
8:45	0	0	0	0		1	0	1	2		0	0	1	1		8	0	0	8		11
Total	0	0	0	0		12	0	42	54		0	0	4	4		18	0	0	18		76

Chipman & Outerview Rd
AM

	Eastbound				Westbound				Northbound				Southbound				
Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Int. Total
7:00	0	0	0	0	0	0	6	6	0	0	0	0	0	0	0	0	6
7:15	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1
7:30	0	0	0	0	0	0	2	2	0	0	0	0	0	0	1	1	3
7:45	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1
8:00	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1
8:15	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1	1	2
8:30	0	0	0	0	0	0	3	3	0	0	0	0	0	0	1	1	4
8:45	0	0	0	0	0	0	3	3	0	0	0	0	0	0	0	0	3
Total	**0**	**0**	**0**	**0**	**0**	**0**	**18**	**18**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**3**	**21**

	PHF																			
Time	EB Left	EB Thru	EB Right	EB Total	PHF	WB Left	WB Thru	WB Right	WB Total	PHF	NB Left	NB Thru	NB Right	NB Total	PHF	SB Left	SB Thru	SB Right	SB Total	PHF	Int. Total
8:00	0	0	0	0	#DIV/0!	0	0	1	1	0.67	0	0	0	0	#DIV/0!	0	0	0	0	0.50	1
8:15	0	0	0	0		0	0	1	1		0	0	0	0		0	0	1	1		2
8:30	0	0	0	0		0	0	3	3		0	0	0	0		0	0	1	1		4
8:45	0	0	0	0		0	0	3	3		0	0	0	0		0	0	0	0		3
Total	0	0	0	0		0	0	8	8		0	0	0	0		0	0	2	2		10

Ward & Aldi Entrance
AM

	Eastbound				Westbound				Northbound				Southbound				
Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Int. Total
7:00	0	0	1	1	0	0	1	1	0	0	0	0	0	0	0	0	2
7:15	0	0	2	2	0	0	2	2	0	0	3	3	1	0	0	1	8
7:30	0	0	3	3	0	0	3	3	0	0	1	1	1	0	0	1	8
7:45	0	0	1	1	0	0	1	1	0	0	1	1	2	0	0	2	5
8:00	0	0	4	4	0	0	4	4	0	0	2	2	5	0	0	5	15
8:15	0	0	2	2	0	0	2	2	0	0	3	3	0	0	0	0	7
8:30	0	0	4	4	0	0	4	4	0	0	7	7	1	0	0	1	16
8:45	0	0	3	3	0	0	3	3	0	0	6	6	1	0	0	1	13
Total	**0**	**0**	**20**	**20**	**0**	**0**	**20**	**20**	**0**	**0**	**23**	**23**	**11**	**0**	**0**	**11**	**74**

					PHF					PHF					PHF					PHF	
Time	EB Left	EB Thru	EB Right	EB Total		WB Left	WB Thru	WB Right	WB Total		NB Left	NB Thru	NB Right	NB Total		SB Left	SB Thru	SB Right	SB Total		Int. Total
8:00	0	0	4	4	**0.81**	0	0	4	4	**0.81**	0	0	2	2	**0.64**	5	0	0	5	**0.35**	15
8:15	0	0	2	2		0	0	2	2		0	0	3	3		0	0	0	0		7
8:30	0	0	4	4		0	0	4	4		0	0	7	7		1	0	0	1		16
8:45	0	0	3	3		0	0	3	3		0	0	6	6		1	0	0	1		13
Total	0	0	13	13		0	0	13	13		0	0	18	18		7	0	0	7		51

Outerview Rd & South Entrance
AM

	Eastbound				Westbound				Northbound				Southbound				
Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Int. Total
7:00	2	0	0	2	0	0	0	0	0	0	0	0	0	0	1	1	3
7:15	1	0	0	1	0	0	0	0	1	0	0	1	0	0	0	0	2
7:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2
7:45	0	0	1	1	0	0	0	0	1	0	0	1	0	0	0	0	2
8:00	2	0	0	2	0	0	0	0	0	0	0	0	0	0	2	2	4
8:15	0	0	1	1	0	0	0	0	3	0	0	3	0	0	1	1	5
8:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2
8:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	**5**	**0**	**2**	**7**	**0**	**0**	**0**	**0**	**5**	**0**	**0**	**5**	**0**	**0**	**8**	**8**	**20**

					PHF					PHF					PHF					PHF	
Time	EB Left	EB Thru	EB Right	EB Total		WB Left	WB Thru	WB Right	WB Total		NB Left	NB Thru	NB Right	NB Total		SB Left	SB Thru	SB Right	SB Total		Int. Total
8:00	2	0	0	2	**0.38**	0	0	0	0	**#DIV/0!**	0	0	0	0	**0.25**	0	0	2	2	**0.63**	4
8:15	0	0	1	1		0	0	0	0		3	0	0	3		0	0	1	1		5
8:30	0	0	0	0		0	0	0	0		0	0	0	0		0	0	2	2		2
8:45	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		0
Total	2	0	1	3		0	0	0	0		3	0	0	3		0	0	5	5		11

Outerview Rd & North Entrance
AM

	Eastbound				Westbound				Northbound				Southbound				
Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Int. Total
7:00	1	0	1	2	0	0	0	0	0	0	0	0	0	0	1	1	3
7:15	0	0	1	1	0	0	0	0	1	0	0	1	0	0	0	0	2
7:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45	0	0	1	1	0	0	0	0	1	0	0	1	0	0	1	1	3
8:00	1	0	0	1	0	0	0	0	1	0	0	1	0	0	1	1	3
8:15	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	2
8:30	1	0	2	3	0	0	0	0	1	0	0	1	0	0	1	1	5
8:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2
Total	**3**	**0**	**5**	**8**	**0**	**0**	**0**	**0**	**6**	**0**	**0**	**6**	**0**	**0**	**6**	**6**	**20**

	PHF																			
Time	EB Left	EB Thru	EB Right	EB Total	PHF	WB Left	WB Thru	WB Right	WB Total	PHF	NB Left	NB Thru	NB Right	NB Total	PHF	SB Left	SB Thru	SB Right	SB Total	PHF	Int. Total
8:00	1	0	0	1	0.33	0	0	0	0	#DIV/0!	1	0	0	1	0.5	0	0	1	1	0.50	3
8:15	0	0	0	0		0	0	0	0		2	0	0	2		0	0	0	0		2
8:30	1	0	2	3		0	0	0	0		1	0	0	1		0	0	1	1		5
8:45	0	0	0	0		0	0	0	0		0	0	0	0		0	0	2	2		2
Total	2	0	2	4		0	0	0	0		4	0	0	4		0	0	4	4		12

Blue Parkway and Ward/Blue Parkway (north intersection)
AM

	Eastbound				Westbound				Northbound				Southbound				
Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Int. Total
7:00	0	50	30	80	7	49	0	56	12	0	1	13	0	0	0	0	149
7:15	1	42	44	87	4	42	0	46	29	0	4	33	0	0	0	0	166
7:30	0	62	51	113	4	54	0	58	25	0	6	31	0	0	0	0	202
7:45	0	54	74	128	5	47	0	52	24	0	2	26	0	0	0	0	206
8:00	0	47	51	98	4	51	0	55	29	0	0	29	0	0	0	0	182
8:15	2	58	53	113	1	40	0	41	20	0	1	21	0	0	0	0	175
8:30	0	52	55	107	7	34	0	41	29	0	4	33	0	0	0	0	181
8:45	0	45	77	122	7	31	0	38	16	0	5	21	0	0	0	0	181
Total	**3**	**410**	**435**	**848**	**39**	**348**	**0**	**387**	**184**	**0**	**23**	**207**	**0**	**0**	**0**	**0**	**1442**

	PHF																			
Time	EB Left	EB Thru	EB Right	EB Total	PHF	WB Left	WB Thru	WB Right	WB Total	PHF	NB Left	NB Thru	NB Right	NB Total	PHF	SB Left	SB Thru	SB Right	SB Total	PHF	Int. Total
8:00	0	47	51	98	0.9	4	51	0	55	0.8	29	0	0	29	0.79	0	0	0	0	#DIV/0!	182
8:15	2	58	53	113		1	40	0	41		20	0	1	21		0	0	0	0		175
8:30	0	52	55	107		7	34	0	41		29	0	4	33		0	0	0	0		181
8:45	0	45	77	122		7	31	0	38		16	0	5	21		0	0	0	0		181
Total	2	202	236	440		19	156	0	175		94	0	10	104		0	0	0	0		719

Blue Parkway & Mid/Center Access
AM

	Eastbound				Westbound				Northbound				Southbound				
Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Int. Total
7:00	0	0	4	4	1	0	4	5	1	12	1	14	6	37	0	43	66
7:15	0	0	7	7	1	1	1	3	4	29	4	37	4	25	1	30	77
7:30	0	0	1	1	0	0	1	1	4	18	2	24	10	43	5	58	84
7:45	0	1	0	1	0	0	3	3	4	15	2	21	14	55	3	72	97
8:00	0	0	2	2	0	0	0	0	6	25	1	32	5	29	0	34	68
8:15	1	0	2	3	1	0	3	4	5	16	4	25	8	33	1	42	74
8:30	0	0	8	8	2	0	2	4	9	20	7	36	6	30	4	40	88
8:45	1	0	4	5	2	0	1	3	7	27	3	37	10	38	7	55	100
Total	**2**	**1**	**28**	**31**	**7**	**1**	**15**	**23**	**40**	**162**	**24**	**226**	**63**	**290**	**21**	**374**	**654**

					PHF					PHF					PHF					PHF	
Time	EB Left	EB Thru	EB Right	EB Total		WB Left	WB Thru	WB Right	WB Total		NB Left	NB Thru	NB Right	NB Total		SB Left	SB Thru	SB Right	SB Total		Int. Total
8:00	0	0	2	2	**0.56**	0	0	0	0	**0.69**	6	25	1	32	**0.88**	5	29	0	34	**0.78**	68
8:15	1	0	2	3		1	0	3	4		5	16	4	25		8	33	1	42		74
8:30	0	0	8	8		2	0	2	4		9	20	7	36		6	30	4	40		88
8:45	1	0	4	5		2	0	1	3		7	27	3	37		10	38	7	55		100
Total	2	0	16	18		5	0	6	11		27	88	15	130		29	130	12	171		330

Blue Parkway & North Access
AM

	Eastbound				Westbound				Northbound				Southbound				
Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Int. Total
7:00	3	0	2	5	0	0	0	0	1	11	0	12	2	29	3	34	51
7:15	12	0	1	13	0	0	0	0	0	20	0	20	0	34	15	49	82
7:30	2	0	0	2	0	0	0	0	1	30	1	32	0	47	9	56	90
7:45	6	0	6	12	0	0	1	1	4	18	1	23	4	59	9	72	108
8:00	3	0	1	4	1	0	0	1	2	27	1	30	1	45	10	56	91
8:15	1	0	2	3	1	0	0	1	1	19	1	21	0	44	11	55	80
8:30	14	0	3	17	1	0	1	2	1	18	1	20	0	43	17	60	99
8:45	4	0	2	6	0	0	0	0	10	16	0	26	2	58	24	84	116
Total	**45**	**0**	**17**	**62**	**3**	**0**	**2**	**5**	**20**	**159**	**5**	**184**	**9**	**359**	**98**	**466**	**717**

					PHF					PHF					PHF					PHF	
Time	EB Left	EB Thru	EB Right	EB Total		WB Left	WB Thru	WB Right	WB Total		NB Left	NB Thru	NB Right	NB Total		SB Left	SB Thru	SB Right	SB Total		Int. Total
8:00	3	0	1	4	**0.44**	1	0	0	1	**0.5**	2	27	1	30	**0.81**	1	45	10	56	**0.76**	91
8:15	1	0	2	3		1	0	0	1		1	19	1	21		0	44	11	55		80
8:30	14	0	3	17		1	0	1	2		1	18	1	20		0	43	17	60		99
8:45	4	0	2	6		0	0	0	0		10	16	0	26		2	58	24	84		116
Total	22	0	8	30		3	0	1	4		14	80	3	97		3	190	62	255		386

Blue Parkway & South Access
AM

	Eastbound				Westbound				Northbound				Southbound				
Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Int. Total
7:00	5	2	14	21	4	1	1	6	11	8	8	27	16	13	9	38	92
7:15	4	1	13	18	1	1	0	2	15	30	8	53	6	19	8	33	106
7:30	3	0	21	24	1	0	1	2	22	18	11	51	11	30	4	45	122
7:45	5	0	22	27	5	1	1	7	29	17	12	58	9	37	7	53	145
8:00	9	1	29	39	3	1	3	7	34	22	13	69	6	19	10	35	150
8:15	6	0	33	39	3	0	3	6	31	16	9	56	7	22	7	36	137
8:30	8	1	27	36	4	0	2	6	22	25	9	56	4	26	9	39	137
8:45	3	1	19	23	5	0	2	7	31	33	12	76	5	25	13	43	149
Total	**43**	**6**	**178**	**227**	**26**	**4**	**13**	**43**	**195**	**169**	**82**	**446**	**64**	**191**	**67**	**322**	**1038**

	PHF																			
Time	EB Left	EB Thru	EB Right	EB Total	PHF	WB Left	WB Thru	WB Right	WB Total	PHF	NB Left	NB Thru	NB Right	NB Total	PHF	SB Left	SB Thru	SB Right	SB Total	PHF	Int. Total
8:00	9	1	29	39	**0.88**	3	1	3	7	**0.93**	34	22	13	69	**0.85**	6	19	10	35	**0.89**	150
8:15	6	0	33	39		3	0	3	6		31	16	9	56		7	22	7	36		137
8:30	8	1	27	36		4	0	2	6		22	25	9	56		4	26	9	39		137
8:45	3	1	19	23		5	0	2	7		31	33	12	76		5	25	13	43		149
Total	26	3	108	137		15	1	10	26		118	96	43	257		22	92	39	153		573

Blue Parkway & Hwy 50 WB Ramp
AM

	Eastbound				Westbound				Northbound				Southbound				
Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Int. Total
7:00	0	0	0	0	21	31	5	57	26	19	0	45	0	19	2	21	123
7:15	0	0	0	0	32	28	3	63	40	35	0	75	0	19	6	25	163
7:30	0	0	0	0	53	63	17	133	33	32	0	65	0	17	10	27	225
7:45	0	0	0	0	40	56	12	108	24	35	0	59	0	25	7	32	199
8:00	0	0	0	0	33	27	9	69	29	34	0	63	0	12	4	16	148
8:15	0	0	0	0	44	33	7	84	22	26	0	48	0	22	6	28	160
8:30	0	0	0	0	32	38	3	73	29	29	0	58	0	23	6	29	160
8:45	0	0	0	0	40	47	12	99	16	23	0	39	0	27	4	31	169
Total	**0**	**0**	**0**	**0**	**295**	**323**	**68**	**686**	**219**	**233**	**0**	**452**	**0**	**164**	**45**	**209**	**1347**

	PHF																			
Time	EB Left	EB Thru	EB Right	EB Total	PHF	WB Left	WB Thru	WB Right	WB Total	PHF	NB Left	NB Thru	NB Right	NB Total	PHF	SB Left	SB Thru	SB Right	SB Total	PHF	Int. Total
8:00	0	0	0	0	**#DIV/0!**	33	27	9	69	**0.82**	29	34	0	63	**0.83**	0	12	4	16	**0.84**	148
8:15	0	0	0	0		44	33	7	84		22	26	0	48		0	22	6	28		160
8:30	0	0	0	0		32	38	3	73		29	29	0	58		0	23	6	29		160
8:45	0	0	0	0		40	47	12	99		16	23	0	39		0	27	4	31		169
Total	0	0	0	0		149	145	31	325		96	112	0	208		0	84	20	104		637

Blue Parkway & Hwy 50 EB Ramp
AM

	Eastbound				Westbound				Northbound				Southbound				
Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Int. Total
7:00	3	49	30	82	0	0	0	0	0	42	7	49	2	37	0	39	170
7:15	11	70	35	116	0	0	0	0	0	63	19	82	1	50	0	51	249
7:30	5	80	49	134	0	0	0	0	0	57	16	73	5	66	0	71	278
7:45	12	89	54	155	0	0	0	0	0	50	17	67	5	63	0	68	290
8:00	5	69	36	110	0	0	0	0	0	55	16	71	1	43	0	44	225
8:15	10	67	58	135	0	0	0	0	0	38	14	52	4	64	0	68	255
8:30	5	54	49	108	0	0	0	0	0	54	17	71	5	52	0	57	236
8:45	12	75	54	141	0	0	0	0	0	29	21	50	5	63	0	68	259
Total	**63**	**553**	**365**	**981**	**0**	**0**	**0**	**0**	**0**	**388**	**127**	**515**	**28**	**438**	**0**	**466**	**1962**

	PHF																			
Time	EB Left	EB Thru	EB Right	EB Total	PHF	WB Left	WB Thru	WB Right	WB Total	PHF	NB Left	NB Thru	NB Right	NB Total	PHF	SB Left	SB Thru	SB Right	SB Total	PHF	Int. Total
8:00	5	69	36	110	**0.88**	0	0	0	0	**#DIV/0!**	0	55	16	71	**0.86**	1	43	0	44	**0.87**	225
8:15	10	67	58	135		0	0	0	0		0	38	14	52		4	64	0	68		255
8:30	5	54	49	108		0	0	0	0		0	54	17	71		5	52	0	57		236
8:45	12	75	54	141		0	0	0	0		0	29	21	50		5	63	0	68		259
Total	32	265	197	494		0	0	0	0		0	176	68	244		15	222	0	237		975

7/12/2022
Chipman & Ward Rd
PM

	Eastbound				Westbound				Northbound				Southbound				
Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Int. Total
19:00	14	60	2	76	14	66	11	91	9	9	13	31	10	13	7	30	228
19:15	15	46	7	68	13	44	9	66	4	16	19	39	14	16	6	36	209
19:30	13	64	3	80	13	59	3	75	13	27	17	57	20	25	7	52	264
19:45	24	74	9	107	19	44	10	73	7	12	17	36	26	35	6	67	283
20:00	17	61	4	82	16	47	9	72	4	27	16	47	11	33	7	51	252
20:15	8	59	0	67	18	59	7	84	5	13	14	32	15	29	2	46	229
20:30	15	75	6	96	11	38	11	60	9	23	10	42	18	24	6	48	246
20:45	15	48	3	66	11	42	12	65	3	16	14	33	17	27	4	48	212
Total	**121**	**487**	**34**	**642**	**115**	**399**	**72**	**586**	**54**	**143**	**120**	**317**	**131**	**202**	**45**	**378**	**1923**

					PHF					PHF					PHF					PHF	
Time	EB Left	EB Thru	EB Right	EB Total		WB Left	WB Thru	WB Right	WB Total		NB Left	NB Thru	NB Right	NB Total		SB Left	SB Thru	SB Right	SB Total		Int. Total
20:00	17	61	4	82	**0.81**	16	47	9	72	**0.84**	4	27	16	47	**0.82**	11	33	7	51	**0.95**	252
20:15	8	59	0	67		18	59	7	84		5	13	14	32		15	29	2	46		229
20:30	15	75	6	96		11	38	11	60		9	23	10	42		18	24	6	48		246
20:45	15	48	3	66		11	42	12	65		3	16	14	33		17	27	4	48		212
Total	55	243	13	311		56	186	39	281		21	79	54	154		61	113	19	193		939

Chipman & Donovan Rd
PM

	Eastbound				Westbound				Northbound				Southbound				
Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Int. Total
19:00	4	82	3	89	20	87	11	118	1	4	17	22	19	8	1	28	257
19:15	6	77	2	85	12	56	23	91	3	3	6	12	17	6	3	26	214
19:30	5	85	6	96	15	71	11	97	1	2	10	13	15	4	1	20	226
19:45	4	98	3	105	11	75	17	103	0	4	15	19	16	6	3	25	252
20:00	4	89	3	96	22	79	18	119	2	5	11	18	24	4	1	29	262
20:15	6	80	4	90	18	84	15	117	1	5	13	19	20	4	2	26	252
20:30	5	91	1	97	12	52	13	77	0	3	10	13	11	7	5	23	210
20:45	5	72	3	80	16	67	17	100	0	3	11	14	15	7	2	24	218
Total	**39**	**674**	**25**	**738**	**126**	**571**	**125**	**822**	**8**	**29**	**93**	**130**	**137**	**46**	**18**	**201**	**1891**

					PHF					PHF					PHF					PHF	
Time	EB Left	EB Thru	EB Right	EB Total		WB Left	WB Thru	WB Right	WB Total		NB Left	NB Thru	NB Right	NB Total		SB Left	SB Thru	SB Right	SB Total		Int. Total
20:00	4	89	3	96	**0.94**	22	79	18	119	**0.87**	2	5	11	18	**0.84**	24	4	1	29	**0.88**	262
20:15	6	80	4	90		18	84	15	117		1	5	13	19		20	4	2	26		252
20:30	5	91	1	97		12	52	13	77		0	3	10	13		11	7	5	23		210
20:45	5	72	3	80		16	67	17	100		0	3	11	14		15	7	2	24		218
Total	20	332	11	363		68	282	63	413		3	16	45	64		70	22	10	102		942

Ward & Tudor Rd
PM

	Eastbound				Westbound				Northbound				Southbound				
Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Int. Total
19:00	0	0	0	0	19	0	48	67	0	35	24	59	60	38	0	98	224
19:15	0	0	0	0	28	0	40	68	0	26	16	42	57	42	0	99	209
19:30	0	0	0	0	26	0	51	77	0	51	29	80	49	56	0	105	262
19:45	0	0	0	0	24	0	46	70	0	41	28	69	59	66	0	125	264
20:00	0	0	0	0	20	0	55	75	0	45	21	66	77	63	0	140	281
20:15	0	0	0	0	28	0	61	89	1	36	14	51	58	63	0	121	261
20:30	0	0	0	0	17	0	48	65	2	45	21	68	47	57	0	104	237
20:45	0	0	0	0	12	0	34	46	2	43	16	61	54	47	0	101	208
Total	**0**	**0**	**0**	**0**	**174**	**0**	**383**	**557**	**5**	**322**	**169**	**496**	**461**	**432**	**0**	**893**	**1946**

	PHF																			
Time	EB Left	EB Thru	EB Right	EB Total	PHF	WB Left	WB Thru	WB Right	WB Total	PHF	NB Left	NB Thru	NB Right	NB Total	PHF	SB Left	SB Thru	SB Right	SB Total	PHF	Int. Total
20:00	0	0	0	0	#DIV/0!	20	0	55	75	0.77	0	45	21	66	0.9	77	63	0	140	0.83	281
20:15	0	0	0	0		28	0	61	89		1	36	14	51		58	63	0	121		261
20:30	0	0	0	0		17	0	48	65		2	45	21	68		47	57	0	104		237
20:45	0	0	0	0		12	0	34	46		2	43	16	61		54	47	0	101		208
Total	0	0	0	0		77	0	198	275		5	169	72	246		236	230	0	466		987

Ward & Outerview Rd
PM

	Eastbound				Westbound				Northbound				Southbound				
Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Int. Total
19:00	4	0	2	6	0	0	8	8	0	81	2	83	3	100	0	103	200
19:15	1	0	3	4	0	0	3	3	1	63	1	65	4	88	1	93	165
19:30	6	0	4	10	1	0	2	3	0	100	3	103	8	96	0	104	220
19:45	4	1	6	11	0	0	3	3	1	85	0	86	5	126	0	131	231
20:00	3	0	4	7	1	0	6	7	1	97	1	99	3	126	0	129	242
20:15	2	0	3	5	2	0	20	22	1	96	1	98	7	113	1	121	246
20:30	2	0	2	4	0	0	9	9	0	89	2	91	2	109	0	111	215
20:45	0	0	0	0	0	0	3	3	0	76	1	77	12	97	0	109	189
Total	**22**	**1**	**24**	**47**	**4**	**0**	**54**	**58**	**4**	**687**	**11**	**702**	**44**	**855**	**2**	**901**	**1708**

	PHF																			
Time	EB Left	EB Thru	EB Right	EB Total	PHF	WB Left	WB Thru	WB Right	WB Total	PHF	NB Left	NB Thru	NB Right	NB Total	PHF	SB Left	SB Thru	SB Right	SB Total	PHF	Int. Total
20:00	3	0	4	7	0.57	1	0	6	7	0.47	1	97	1	99	0.92	3	126	0	129	0.91	242
20:15	2	0	3	5		2	0	20	22		1	96	1	98		7	113	1	121		246
20:30	2	0	2	4		0	0	9	9		0	89	2	91		2	109	0	111		215
20:45	0	0	0	0		0	0	3	3		0	76	1	77		12	97	0	109		189
Total	7	0	9	16		3	0	38	41		2	358	5	365		24	445	1	470		892

Donovan & Ward Rd
PM

	Eastbound				Westbound				Northbound				Southbound				
Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Int. Total
19:00	0	0	0	0	4	0	18	22	0	0	4	4	28	0	0	28	54
19:15	0	0	0	0	7	0	25	32	0	0	2	2	20	0	1	21	55
19:30	0	0	0	0	7	0	18	25	0	1	2	3	31	0	0	31	59
19:45	0	0	0	0	10	0	22	32	0	0	3	3	33	0	0	33	68
20:00	0	1	0	1	3	0	23	26	0	0	0	0	35	0	0	35	62
20:15	0	0	0	0	6	0	20	26	0	0	1	1	36	0	0	36	63
20:30	0	0	0	0	7	0	19	26	0	0	0	0	28	0	0	28	54
20:45	0	0	0	0	2	0	7	9	0	0	3	3	11	0	0	11	23
Total	**0**	**1**	**0**	**1**	**46**	**0**	**152**	**198**	**0**	**1**	**15**	**16**	**222**	**0**	**1**	**223**	**438**

	PHF																			
Time	EB Left	EB Thru	EB Right	EB Total	PHF	WB Left	WB Thru	WB Right	WB Total	PHF	NB Left	NB Thru	NB Right	NB Total	PHF	SB Left	SB Thru	SB Right	SB Total	PHF	Int. Total
20:00	0	1	0	1	**0.25**	3	0	23	26	**0.84**	0	0	0	0	**0.33**	35	0	0	35	**0.76**	62
20:15	0	0	0	0		6	0	20	26		0	0	1	1		36	0	0	36		63
20:30	0	0	0	0		7	0	19	26		0	0	0	0		28	0	0	28		54
20:45	0	0	0	0		2	0	7	9		0	0	3	3		11	0	0	11		23
Total	0	1	0	1		18	0	69	87		0	0	4	4		110	0	0	110		202

Chipman & Outerview Rd
PM

	Eastbound				Westbound				Northbound				Southbound				
Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Int. Total
19:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:15	0	0	0	0	0	0	1	1	0	0	0	0	0	0	3	3	4
19:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	7	7
19:45	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1	1	2
20:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20:45	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1
Total	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**11**	**11**	**14**

	PHF																			
Time	EB Left	EB Thru	EB Right	EB Total	PHF	WB Left	WB Thru	WB Right	WB Total	PHF	NB Left	NB Thru	NB Right	NB Total	PHF	SB Left	SB Thru	SB Right	SB Total	PHF	Int. Total
20:00	0	0	0	0	**#DIV/0!**	0	0	0	0	**0.25**	0	0	0	0	**#DIV/0!**	0	0	0	0	**#DIV/0!**	0
20:15	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		0
20:30	0	0	0	0		0	0	0	0		0	0	0	0		0	0	0	0		0
20:45	0	0	0	0		0	0	1	1		0	0	0	0		0	0	0	0		1
Total	0	0	0	0		0	0	1	1		0	0	0	0		0	0	0	0		1

Ward & Aldi Entrance
PM

	Eastbound				Westbound				Northbound				Southbound				
Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Int. Total
19:00	0	0	7	7	0	0	7	7	0	0	5	5	1	0	0	1	20
19:15	0	0	9	9	0	0	9	9	0	0	7	7	3	0	0	3	28
19:30	0	0	7	7	0	0	7	7	0	0	11	11	0	0	0	0	25
19:45	0	0	13	13	0	0	13	13	0	0	16	16	2	0	0	2	44
20:00	0	0	16	16	0	0	16	16	0	0	14	14	4	0	0	4	50
20:15	0	0	10	10	0	0	10	10	0	0	12	12	3	0	0	3	35
20:30	0	0	18	18	0	0	18	18	0	0	22	22	6	0	0	6	64
20:45	0	0	9	9	0	0	9	9	0	0	9	9	4	0	0	4	31
Total	**0**	**0**	**89**	**89**	**0**	**0**	**89**	**89**	**0**	**0**	**96**	**96**	**23**	**0**	**0**	**23**	**297**

	PHF																			
Time	EB Left	EB Thru	EB Right	EB Total	PHF	WB Left	WB Thru	WB Right	WB Total	PHF	NB Left	NB Thru	NB Right	NB Total	PHF	SB Left	SB Thru	SB Right	SB Total	PHF	Int. Total
20:00	0	0	16	16	**0.74**	0	0	16	16	**0.74**	0	0	14	14	**0.65**	4	0	0	4	**0.71**	50
20:15	0	0	10	10		0	0	10	10		0	0	12	12		3	0	0	3		35
20:30	0	0	18	18		0	0	18	18		0	0	22	22		6	0	0	6		64
20:45	0	0	9	9		0	0	9	9		0	0	9	9		4	0	0	4		31
Total	0	0	53	53		0	0	53	53		0	0	57	57		17	0	0	17		180

Outerview Rd & South Entrance
PM

	Eastbound				Westbound				Northbound				Southbound				
Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Int. Total
19:00	2	0	0	2	0	0	0	0	2	0	0	2	0	0	0	0	4
19:15	3	0	3	6	0	0	0	0	0	0	0	0	0	0	2	2	8
19:30	4	0	1	5	0	0	0	0	4	0	0	4	0	0	1	1	10
19:45	5	0	2	7	0	0	0	0	2	0	0	2	0	0	0	0	9
20:00	2	0	4	6	0	0	0	0	1	0	0	1	0	0	0	0	7
20:15	3	0	0	3	0	0	0	0	1	0	0	1	0	0	3	3	7
20:30	1	0	0	1	0	0	0	0	3	0	0	3	0	0	1	1	5
20:45	0	0	2	2	0	0	0	0	1	0	0	1	0	0	2	2	5
Total	**20**	**0**	**12**	**32**	**0**	**0**	**0**	**0**	**14**	**0**	**0**	**14**	**0**	**0**	**9**	**9**	**55**

	PHF																			
Time	EB Left	EB Thru	EB Right	EB Total	PHF	WB Left	WB Thru	WB Right	WB Total	PHF	NB Left	NB Thru	NB Right	NB Total	PHF	SB Left	SB Thru	SB Right	SB Total	PHF	Int. Total
20:00	2	0	4	6	**0.5**	0	0	0	0	**#DIV/0!**	1	0	0	1	**0.5**	0	0	0	0	**0.50**	7
20:15	3	0	0	3		0	0	0	0		1	0	0	1		0	0	3	3		7
20:30	1	0	0	1		0	0	0	0		3	0	0	3		0	0	1	1		5
20:45	0	0	2	2		0	0	0	0		1	0	0	1		0	0	2	2		5
Total	6	0	6	12		0	0	0	0		6	0	0	6		0	0	6	6		24

Outerview Rd & North Entrance
PM

	Eastbound				Westbound				Northbound				Southbound				
Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Int. Total
19:00	1	0	0	1	0	0	0	0	3	0	0	3	0	0	2	2	6
19:15	0	0	2	2	0	0	0	0	0	0	0	0	0	0	2	2	4
19:30	2	0	2	4	0	0	0	0	1	0	0	1	0	0	0	0	5
19:45	0	0	1	1	0	0	0	0	0	0	0	0	0	0	2	2	3
20:00	1	0	3	4	0	0	0	0	0	0	0	0	0	0	1	1	5
20:15	1	0	0	1	0	0	0	0	1	0	0	1	0	0	2	2	4
20:30	2	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	3
20:45	0	0	0	0	0	0	0	0	1	0	0	1	0	0	1	1	2
Total	**7**	**0**	**9**	**16**	**0**	**0**	**0**	**0**	**6**	**0**	**0**	**6**	**0**	**0**	**10**	**10**	**32**

	PHF																			
Time	EB Left	EB Thru	EB Right	EB Total	PHF	WB Left	WB Thru	WB Right	WB Total	PHF	NB Left	NB Thru	NB Right	NB Total	PHF	SB Left	SB Thru	SB Right	SB Total	PHF	Int. Total
20:00	1	0	3	4	**0.5**	0	0	0	0	**#DIV/0!**	0	0	0	0	**0.5**	0	0	1	1	**0.50**	5
20:15	1	0	0	1		0	0	0	0		1	0	0	1		0	0	2	2		4
20:30	2	0	1	3		0	0	0	0		0	0	0	0		0	0	0	0		3
20:45	0	0	0	0		0	0	0	0		1	0	0	1		0	0	1	1		2
Total	4	0	4	8		0	0	0	0		2	0	0	2		0	0	4	4		14

Blue Parkway and Ward/Blue Parkway (north intersection)
PM

	Eastbound				Westbound				Northbound				Southbound				
Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Int. Total
19:00		54	76	130	12	56	0	68	103	0	12	115	0	0	0	0	313
19:15	1	62	61	124	10	36	0	46	57	0	10	67	0	0	0	0	237
19:30	0	76	75	151	9	62	0	71	65	0	9	74	0	0	0	0	296
19:45	0	88	73	161	8	48	0	56	59	0	12	71	0	0	0	0	288
20:00	0	78	94	172	12	39	0	51	64	0	19	83	0	0	0	0	306
20:15	0	68	100	168	11	50	0	61	61	0	18	79	0	0	0	0	308
20:30	0	89	72	161	12	42	0	54	62	0	12	74	0	0	0	0	289
20:45	1	108	84	193	10	77	0	87	51	0	15	66	0	0	0	0	346
Total	**2**	**623**	**635**	**1260**	**84**	**410**	**0**	**494**	**522**	**0**	**107**	**629**	**0**	**0**	**0**	**0**	**2383**

	PHF																			
Time	EB Left	EB Thru	EB Right	EB Total	PHF	WB Left	WB Thru	WB Right	WB Total	PHF	NB Left	NB Thru	NB Right	NB Total	PHF	SB Left	SB Thru	SB Right	SB Total	PHF	Int. Total
20:00	0	78	94	172	**0.9**	12	39	0	51	**0.73**	64	0	19	83	**0.91**	0	0	0	0	**#DIV/0!**	306
20:15	0	68	100	168		11	50	0	61		61	0	18	79		0	0	0	0		308
20:30	0	89	72	161		12	42	0	54		62	0	12	74		0	0	0	0		289
20:45	1	108	84	193		10	77	0	87		51	0	15	66		0	0	0	0		346
Total	1	343	350	694		45	208	0	253		238	0	64	302		0	0	0	0		1249

Blue Parkway & Mid/Center Access
PM

	Eastbound				Westbound				Northbound				Southbound				
Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Int. Total
19:00	9	0	22	31	5	0	22	27	14	52	0	66	8	66	5	79	203
19:15	7	0	14	21	8	1	6	15	16	29	0	45	0	59	7	66	147
19:30	5	0	19	24	7	0	15	22	14	46	1	61	4	36	6	46	153
19:45	10	1	19	30	0	1	4	5	19	43	1	63	0	69	8	77	175
20:00	3	0	18	21	0	2	5	7	10	47	1	58	4	64	7	75	161
20:15	9	0	15	24	4	0	1	5	15	41	0	56	2	67	10	79	164
20:30	12	0	20	32	0	2	7	9	10	37	0	47	0	64	12	76	164
20:45	19	0	25	44	1	0	2	3	13	31	0	44	1	53	7	61	152
Total	**74**	**1**	**152**	**227**	**25**	**6**	**62**	**93**	**111**	**326**	**3**	**440**	**19**	**478**	**62**	**559**	**1319**

					PHF					PHF					PHF					PHF	
Time	EB Left	EB Thru	EB Right	EB Total		WB Left	WB Thru	WB Right	WB Total		NB Left	NB Thru	NB Right	NB Total		SB Left	SB Thru	SB Right	SB Total		Int. Total
20:00	3	0	18	21	**0.69**	0	2	5	7	**0.67**	10	47	1	58	**0.88**	4	64	7	75	**0.92**	161
20:15	9	0	15	24		4	0	1	5		15	41	0	56		2	67	10	79		164
20:30	12	0	20	32		0	2	7	9		10	37	0	47		0	64	12	76		164
20:45	19	0	25	44		1	0	2	3		13	31	0	44		1	53	7	61		152
Total	43	0	78	121		5	4	15	24		48	156	1	205		7	248	36	291		641

Blue Parkway & North Access
PM

	Eastbound				Westbound				Northbound				Southbound				
Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Int. Total
19:00	23	0	13	36	0	0	2	2	9	88	0	97	0	54	35	89	224
19:15	22	0	11	33	1	0	3	4	5	43	0	48	0	47	25	72	157
19:30	21	0	16	37	1	0	1	2	7	59	0	66	0	56	26	82	187
19:45	14	0	12	26	0	0	2	2	4	53	0	57	0	58	23	81	166
20:00	25	0	14	39	0	0	2	2	9	61	0	70	0	71	35	106	217
20:15	31	0	18	49	0	0	0	0	11	52	0	63	0	70	41	111	223
20:30	17	0	18	35	0	0	1	1	9	52	0	61	1	48	34	83	180
20:45	16	0	14	30	0	0	1	1	6	48	0	54	1	54	42	97	182
Total	**169**	**0**	**116**	**285**	**2**	**0**	**12**	**14**	**60**	**456**	**0**	**516**	**2**	**458**	**261**	**721**	**1536**

					PHF					PHF					PHF					PHF	
Time	EB Left	EB Thru	EB Right	EB Total		WB Left	WB Thru	WB Right	WB Total		NB Left	NB Thru	NB Right	NB Total		SB Left	SB Thru	SB Right	SB Total		Int. Total
20:00	25	0	14	39	**0.78**	0	0	2	2	**0.5**	9	61	0	70	**0.89**	0	71	35	106	**0.89**	217
20:15	31	0	18	49		0	0	0	0		11	52	0	63		0	70	41	111		223
20:30	17	0	18	35		0	0	1	1		9	52	0	61		1	48	34	83		180
20:45	16	0	14	30		0	0	1	1		6	48	0	54		1	54	42	97		182
Total	89	0	64	153		0	0	4	4		35	213	0	248		2	243	152	397		802

Blue Parkway & South Access
PM

	Eastbound				Westbound				Northbound				Southbound				
Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Int. Total
19:00	6	0	52	58	16	0	23	39	53	35	10	98	6	59	22	87	282
19:15	13	0	58	71	12	1	4	17	54	29	6	89	0	63	27	90	267
19:30	11	0	51	62	10	4	9	23	51	42	7	100	3	49	16	68	253
19:45	11	0	79	90	5	1	4	10	80	47	7	134	5	50	28	83	317
20:00	9	2	65	76	14	0	10	24	49	36	10	95	4	52	26	82	277
20:15	12	1	66	79	9	5	7	21	78	41	6	125	0	70	25	95	320
20:30	19	1	81	101	6	2	6	14	82	24	4	110	1	50	37	88	313
20:45	8	1	66	75	8	2	9	19	82	26	13	121	1	49	35	85	300
Total	**89**	**5**	**518**	**612**	**80**	**15**	**72**	**167**	**529**	**280**	**63**	**872**	**20**	**442**	**216**	**678**	**2329**

	PHF																			
Time	EB Left	EB Thru	EB Right	EB Total	PHF	WB Left	WB Thru	WB Right	WB Total	PHF	NB Left	NB Thru	NB Right	NB Total	PHF	SB Left	SB Thru	SB Right	SB Total	PHF	Int. Total
20:00	9	2	65	76	**0.82**	14	0	10	24	**0.81**	49	36	10	95	**0.9**	4	52	26	82	**0.92**	277
20:15	12	1	66	79		9	5	7	21		78	41	6	125		0	70	25	95		320
20:30	19	1	81	101		6	2	6	14		82	24	4	110		1	50	37	88		313
20:45	8	1	66	75		8	2	9	19		82	26	13	121		1	49	35	85		300
Total	48	5	278	331		37	9	32	78		291	127	33	451		6	221	123	350		1210

Blue Parkway & Hwy 50 WB Ramp
PM

	Eastbound				Westbound				Northbound				Southbound				
Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Int. Total
19:00	0	0	0	0	41	75	5	121	48	36	0	84	0	35	8	43	248
7:15	0	0	0	0	41	77	5	123	41	33	0	74	0	26	9	35	232
7:30	0	0	0	0	36	83	2	121	55	42	0	97	0	49	15	64	282
7:45	0	0	0	0	40	96	2	138	37	35	0	72	0	27	9	36	246
8:00	0	0	0	0	44	97	4	145	46	39	0	85	0	50	11	61	291
8:15	0	0	0	0	47	112	1	160	31	29	0	60	0	38	9	47	267
8:30	0	0	0	0	37	103	3	143	52	22	0	74	0	36	5	41	258
8:45	0	0	0	0	37	80	4	121	65	33	0	98	0	39	8	47	266
Total	**0**	**0**	**0**	**0**	**323**	**723**	**26**	**1072**	**375**	**269**	**0**	**644**	**0**	**300**	**74**	**374**	**2090**

	PHF																			
Time	EB Left	EB Thru	EB Right	EB Total	PHF	WB Left	WB Thru	WB Right	WB Total	PHF	NB Left	NB Thru	NB Right	NB Total	PHF	SB Left	SB Thru	SB Right	SB Total	PHF	Int. Total
8:00	0	0	0	0	**#DIV/0!**	44	97	4	145	**0.89**	46	39	0	85	**0.81**	0	50	11	61	**0.80**	291
8:15	0	0	0	0		47	112	1	160		31	29	0	60		0	38	9	47		267
8:30	0	0	0	0		37	103	3	143		52	22	0	74		0	36	5	41		258
8:45	0	0	0	0		37	80	4	121		65	33	0	98		0	39	8	47		266
Total	0	0	0	0		165	392	12	569		194	123	0	317		0	163	33	196		1082

Blue Parkway & Hwy 50 EB Ramp
PM

	Eastbound				Westbound				Northbound				Southbound				
Time	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Int. Total
7:00	10	79	56	145	0	0	0	0	0	80	56	136	12	67	0	79	360
7:15	7	70	59	136	0	0	0	0	0	73	28	101	7	68	0	75	312
7:30	10	83	58	151	0	0	0	0	0	78	56	134	10	77	0	87	372
7:45	11	76	79	166	0	0	0	0	1	65	34	100	1	75	0	76	342
8:00	9	73	80	162	0	0	0	0	0	73	43	116	8	85	0	93	371
8:15	2	68	89	159	0	0	0	0	0	56	44	100	2	81	0	83	342
8:30	2	66	81	149	0	0	0	0	0	77	37	114	4	77	0	81	344
8:45	5	77	84	166	0	0	0	0	0	96	32	128	4	72	0	76	370
Total	**56**	**592**	**586**	**1234**	**0**	**0**	**0**	**0**	**1**	**598**	**330**	**929**	**48**	**602**	**0**	**650**	**2813**

	PHF																				
Time	EB Left	EB Thru	EB Right	EB Total	PHF	WB Left	WB Thru	WB Right	WB Total	PHF	NB Left	NB Thru	NB Right	NB Total	PHF	SB Left	SB Thru	SB Right	SB Total	PHF	Int. Total
8:00	9	73	80	162	**0.96**	0	0	0	0	**#DIV/0!**	0	73	43	116	**0.89**	8	85	0	93	**0.90**	371
8:15	2	68	89	159		0	0	0	0		0	56	44	100		2	81	0	83		342
8:30	2	66	81	149		0	0	0	0		0	77	37	114		4	77	0	81		344
8:45	5	77	84	166		0	0	0	0		0	96	32	128		4	72	0	76		370
Total	18	284	334	636		0	0	0	0		0	302	156	458		18	315	0	333		1427

Summit Orchard North TIS

ITE Trip Generation Manual - 11th Edition

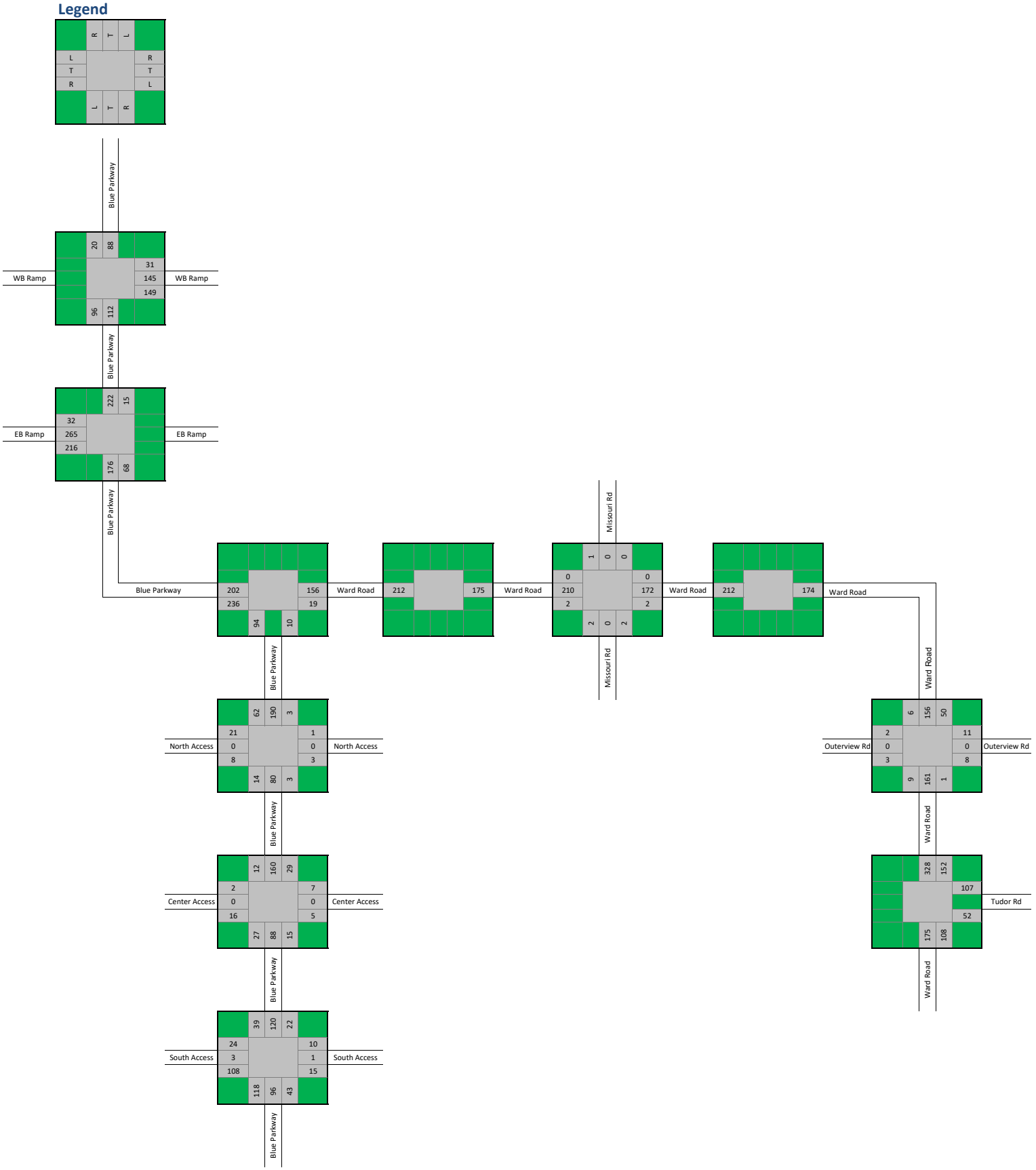
Highlighted text indicates trips used in Synchro and Warrant Analysis

Land Use	ITE Code	Size	Units	Equation	Trips (Eq.)	Av. Rate	Trips (Av. Rate)	In%	Out%	Trips In	Trips Out
PHASE I											
Automobile Sales (New) **(Weekday)**	840	70	1000 SF GFA	T=28.65(X)-29.45	1976	27.84	1949	50%	50%	988	988
Automobile Sales (New) **(AM)**	840	70	1000 SF GFA	n/a	n/a	1.86	130	73%	27%	95	35
Automobile Sales (New) **(PM)**	840	70	1000 SF GFA	T=1.81(X)+20.91	148	2.42	169	40%	60%	59	89
PHASE II											
Multifamily Housing (Low-Rise) **(Weekday)**	220	350	Dwelling Units	T=6.41(X)+75.31	2319	6.74	2359	50%	50%	1160	1159
High-Turnover (Sit-Down) Restaurant	932	8.4	1000 Sq Ft	n/a	n/a	107.2	900	50%	50%	450	450
Fast-Food Restaurant with Drive-Through Window	934	3.3	1000 Sq Ft	n/a	n/a	467.48	1543	50%	50%	772	771
										2382	2380
Multifamily Housing (Low-Rise) **(AM)**	220	350	Dwelling Units	T=0.31(X)+22.85	131	0.4	140	24%	76%	31	100
High-Turnover (Sit-Down) Restaurant	932	8.4	1000 Sq Ft	n/a	n/a	9.57	80	55%	45%	44	36
Fast-Food Restaurant with Drive-Through Window	934	3.3	1000 Sq Ft	n/a	n/a	44.61	147	51%	49%	75	72
										150	208
Multifamily Housing (Low-Rise) **(PM)**	220	350	Dwelling Units	T=0.43(X)+20.55	171	0.51	179	63%	37%	108	63
High-Turnover (Sit-Down) Restaurant	932	8.4	1000 Sq Ft	n/a	n/a	9.05	76	61%	39%	46	30
Fast-Food Restaurant with Drive-Through Window	934	3.3	1000 Sq Ft	n/a	n/a	33.03	109	52%	48%	57	52
										211	145

Existing AM Peak Hour Counts

Notes - Ward & Outerview and Ward & Tudor counts from Summit Orchards West TIS (2022) which inlcude Lees Summit Logistics and Summit Orchard counts. 2022 trips were done when Chipman and Hwy 50 intersection was closed so the previous trips were balanced with the new (2023) trips at other study intersections.

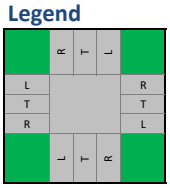
Legend

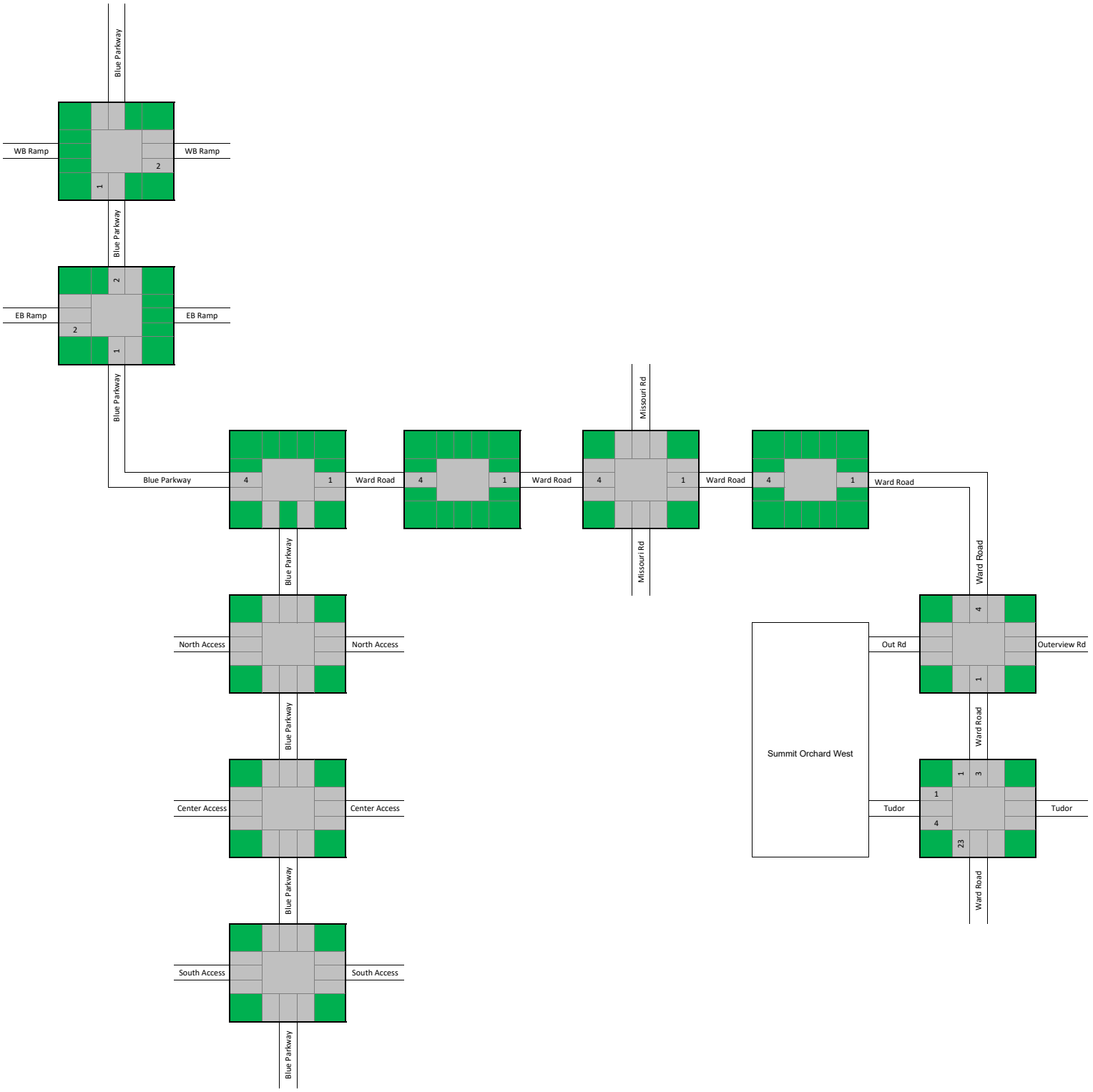


AM Approved Trips from Summit Orchard West TIS (2022)

Notes - these trips were from phase I & II of the Summit Orchard West TIS and were distributed through the network

Legend

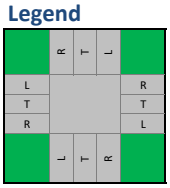


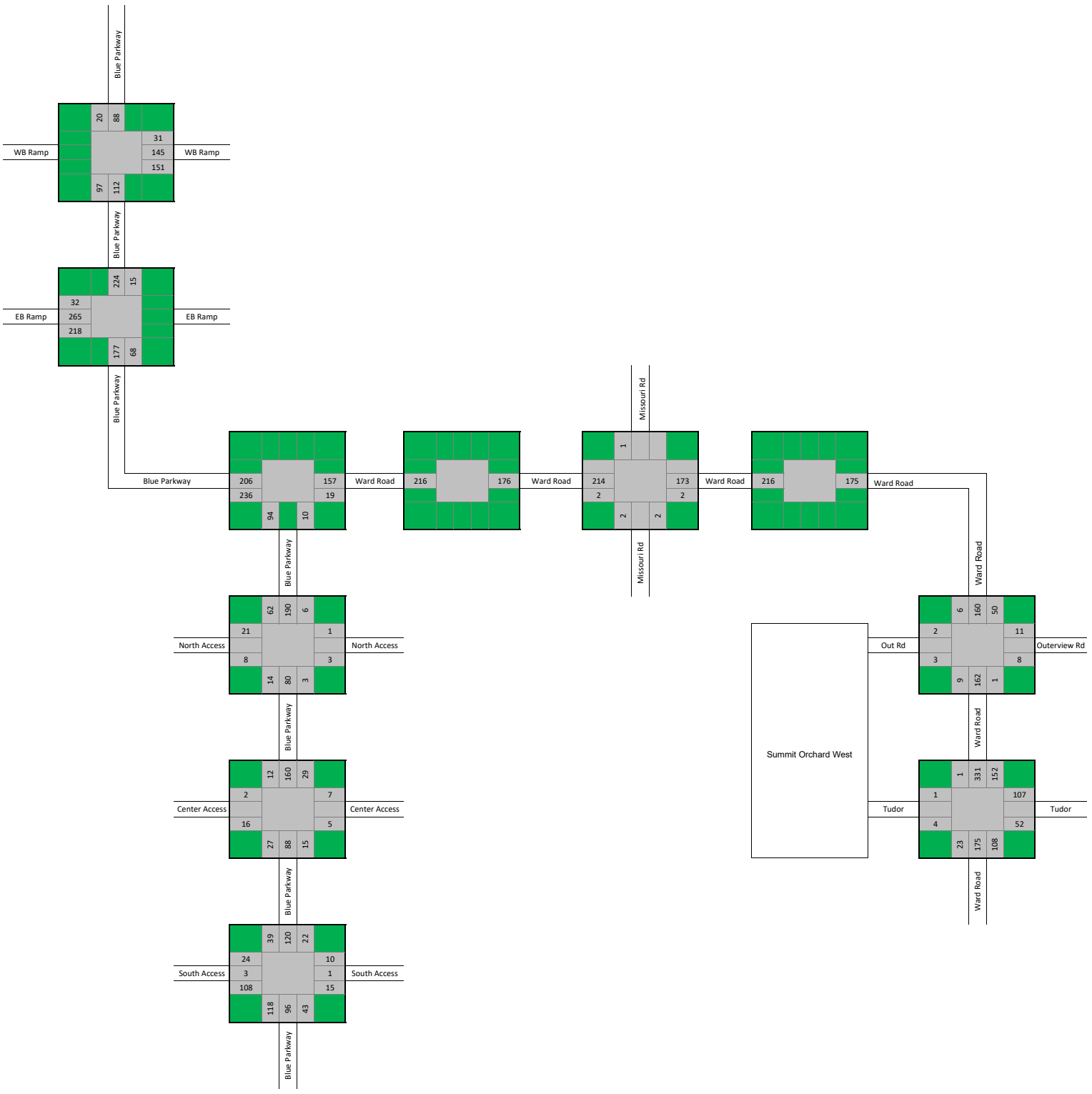


AM Existing Peak Hour Traffic

Notes - Includes balanced counts and approved trips

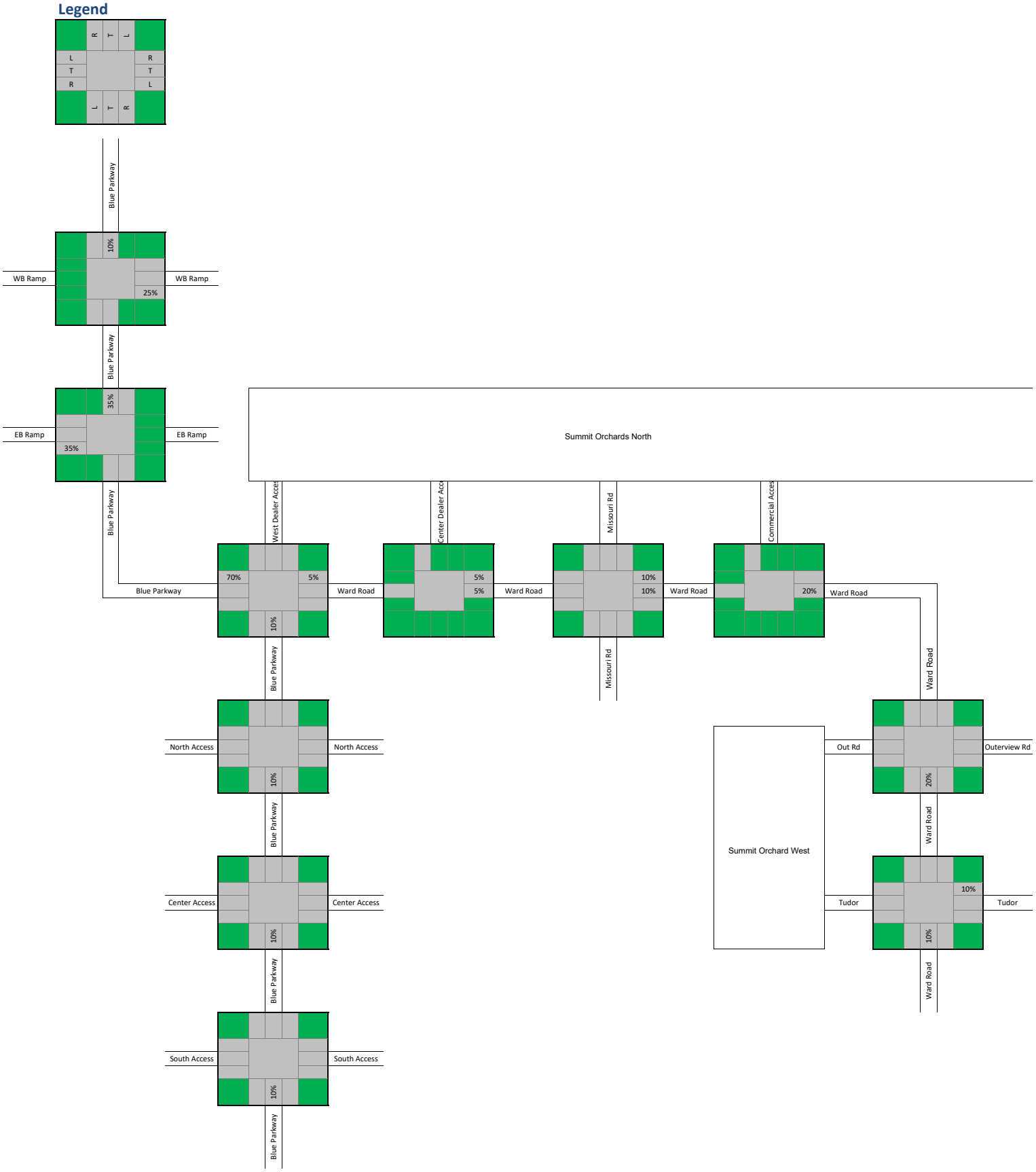
Legend





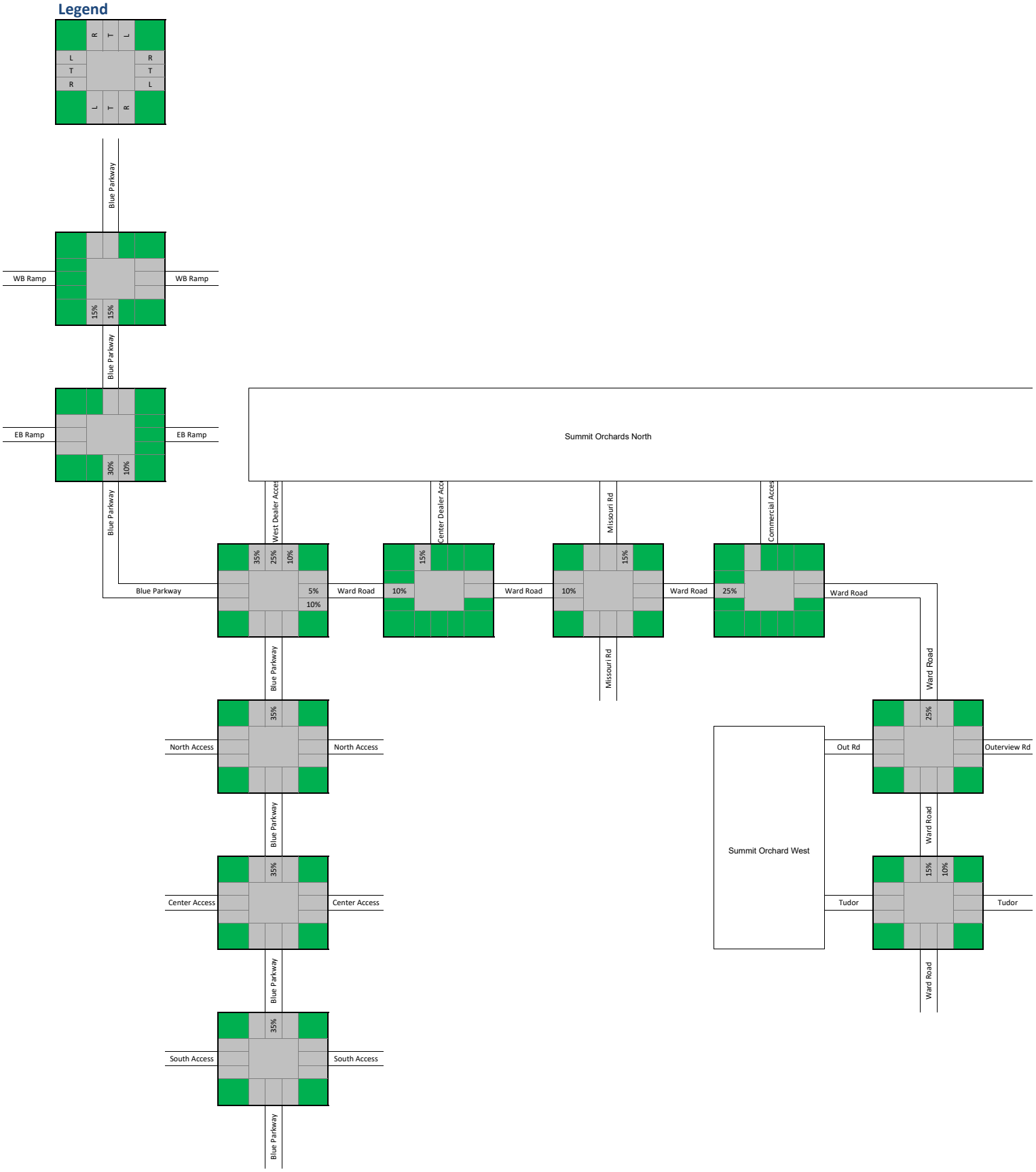
AM Distribution In - Phase I

Legend



AM Distribution Out - Phase I

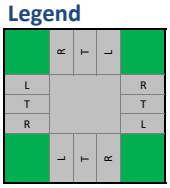
Legend

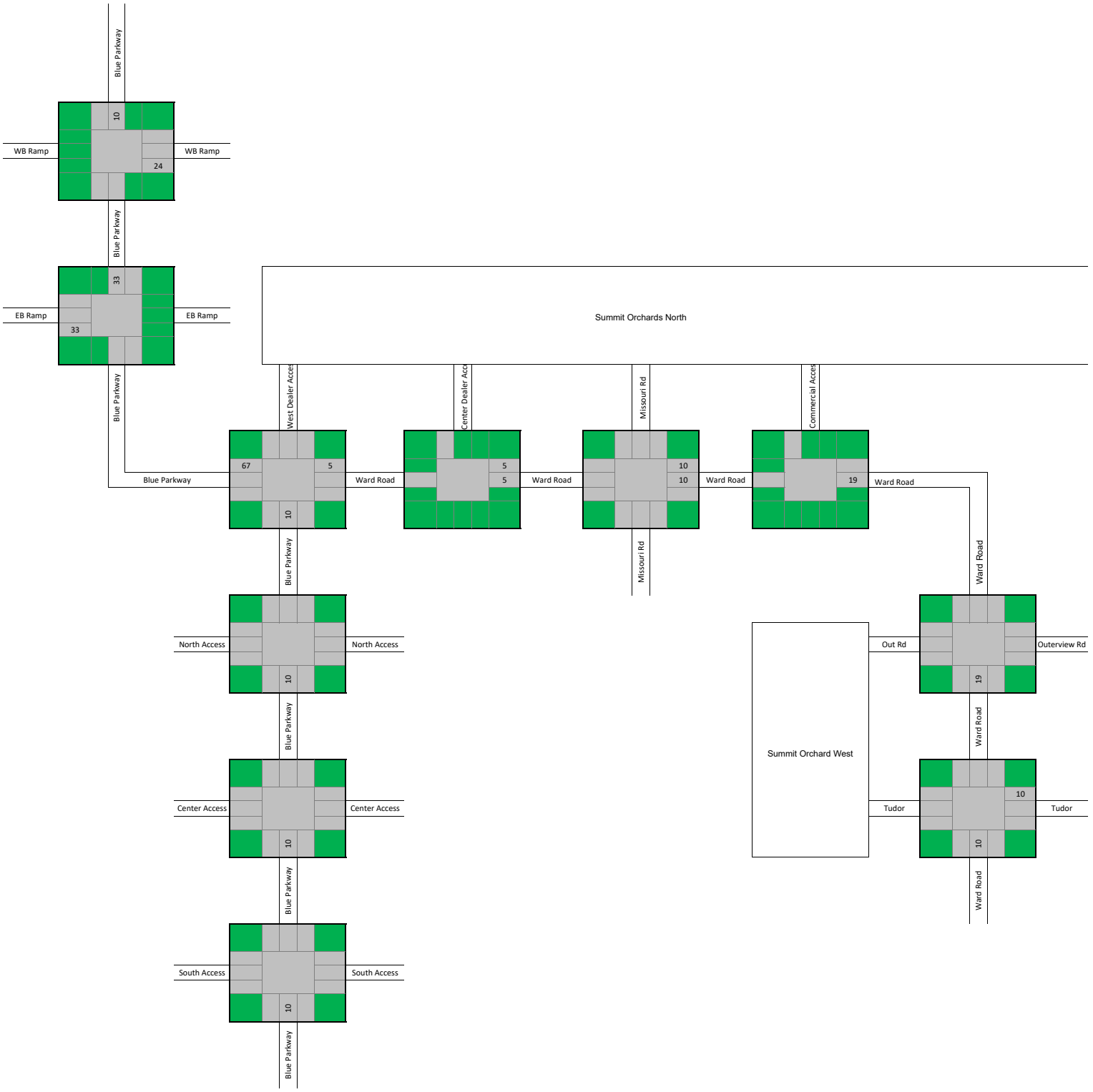


AM Trips In - Phase I

Trips
95

Legend

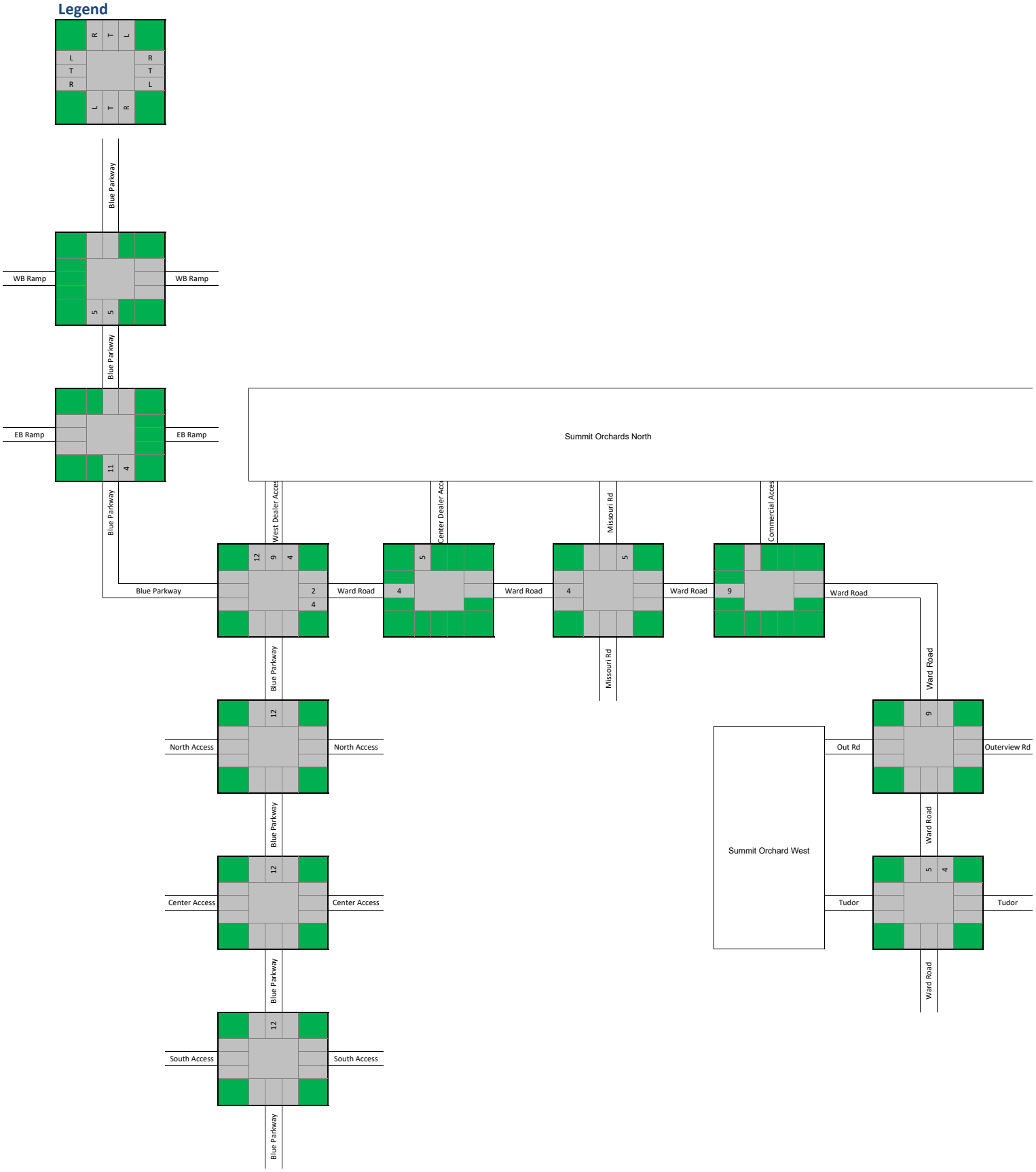




AM Trips Out - Phase I

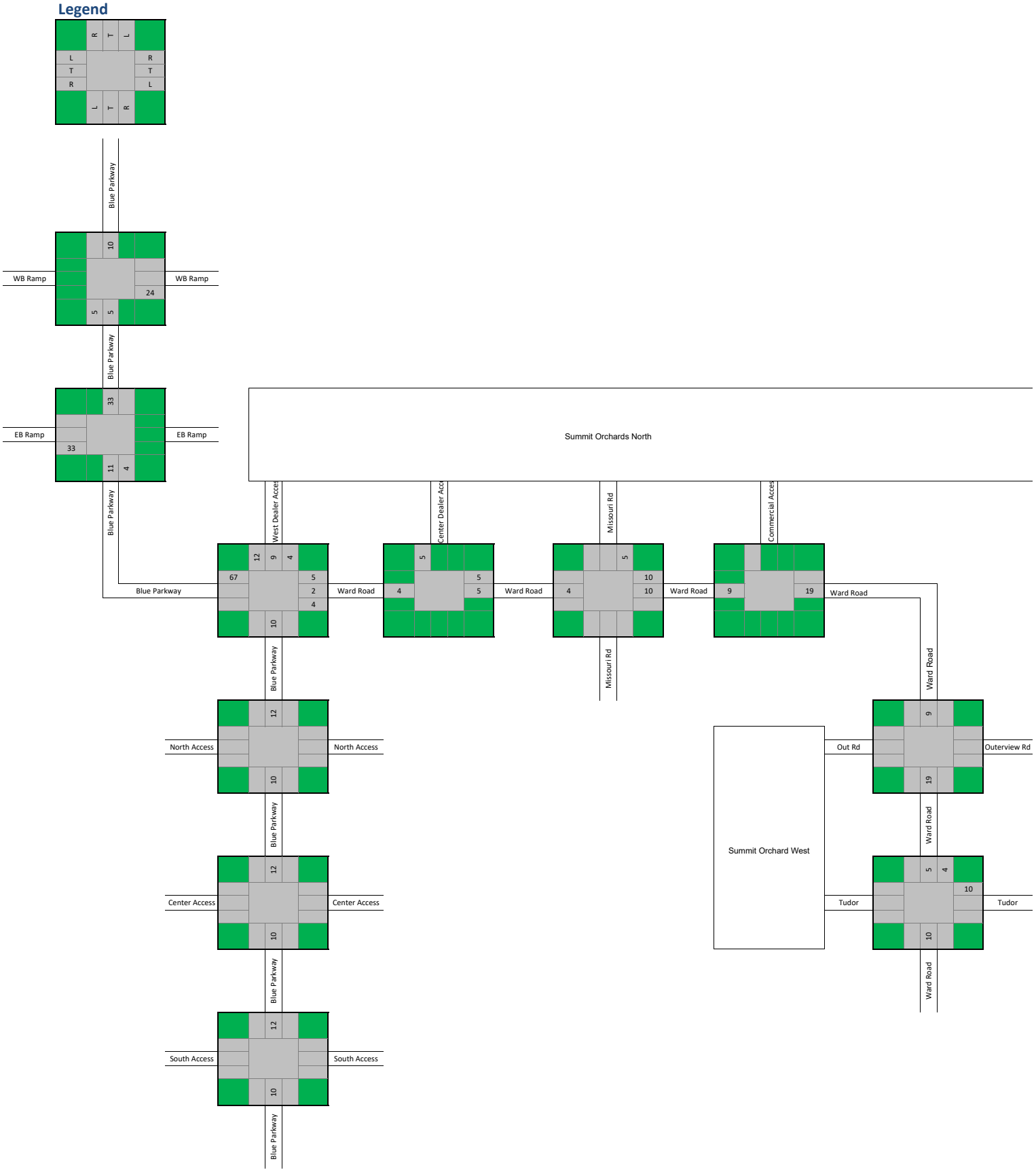
Trips
35

Legend



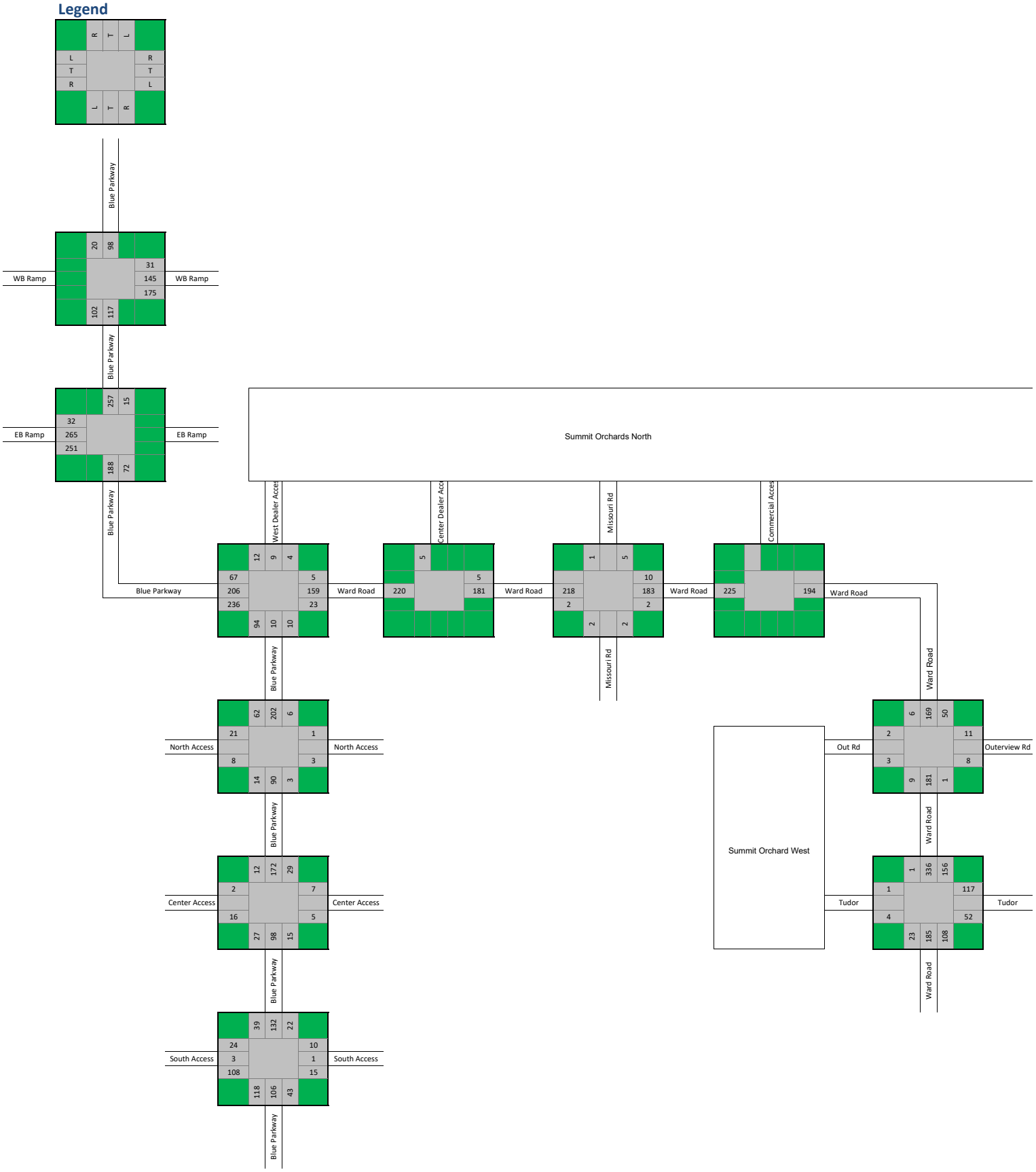
AM Trips - Phase I

Legend



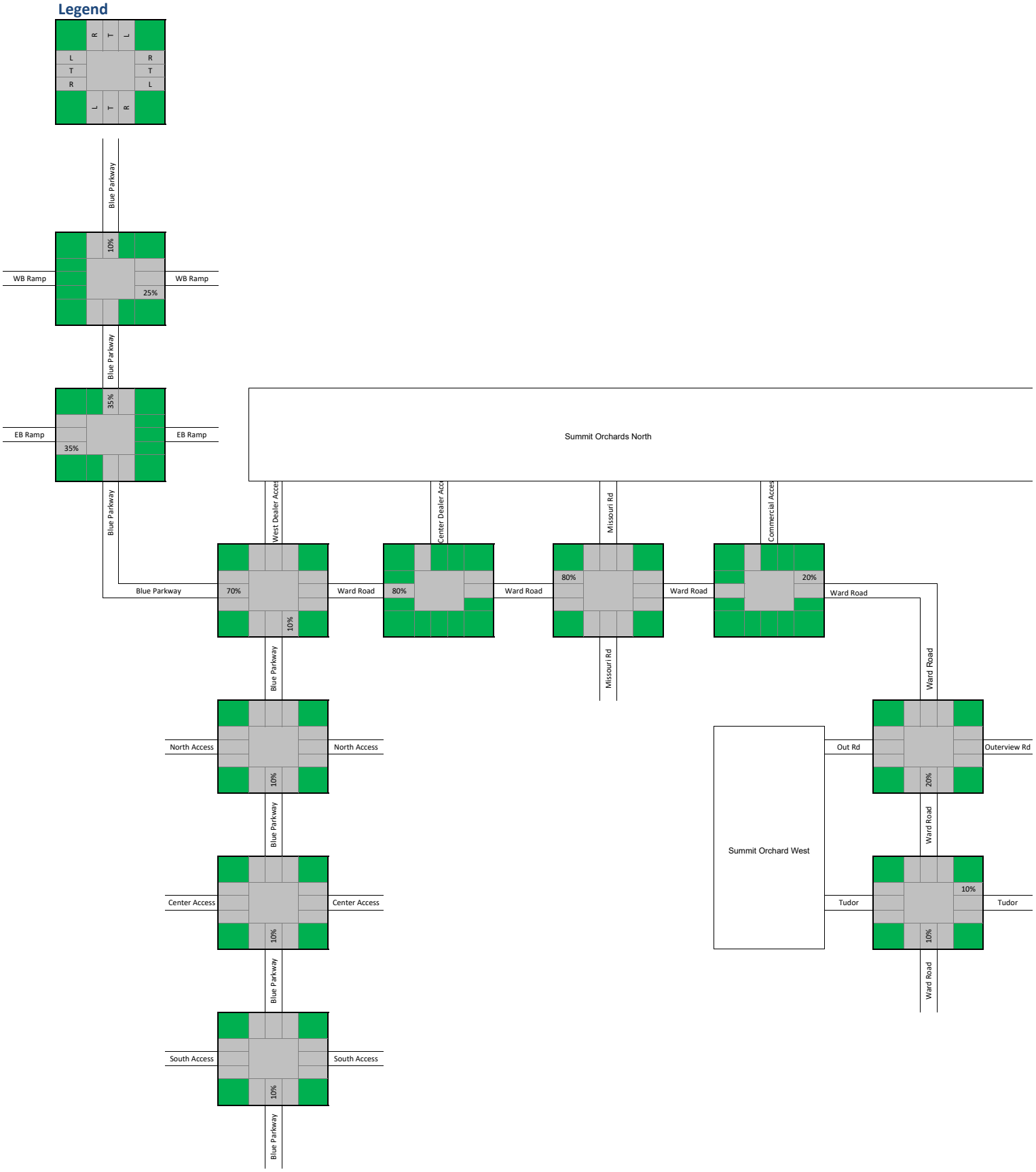
Existing Traffic plus AM Trips - Phase I

Legend



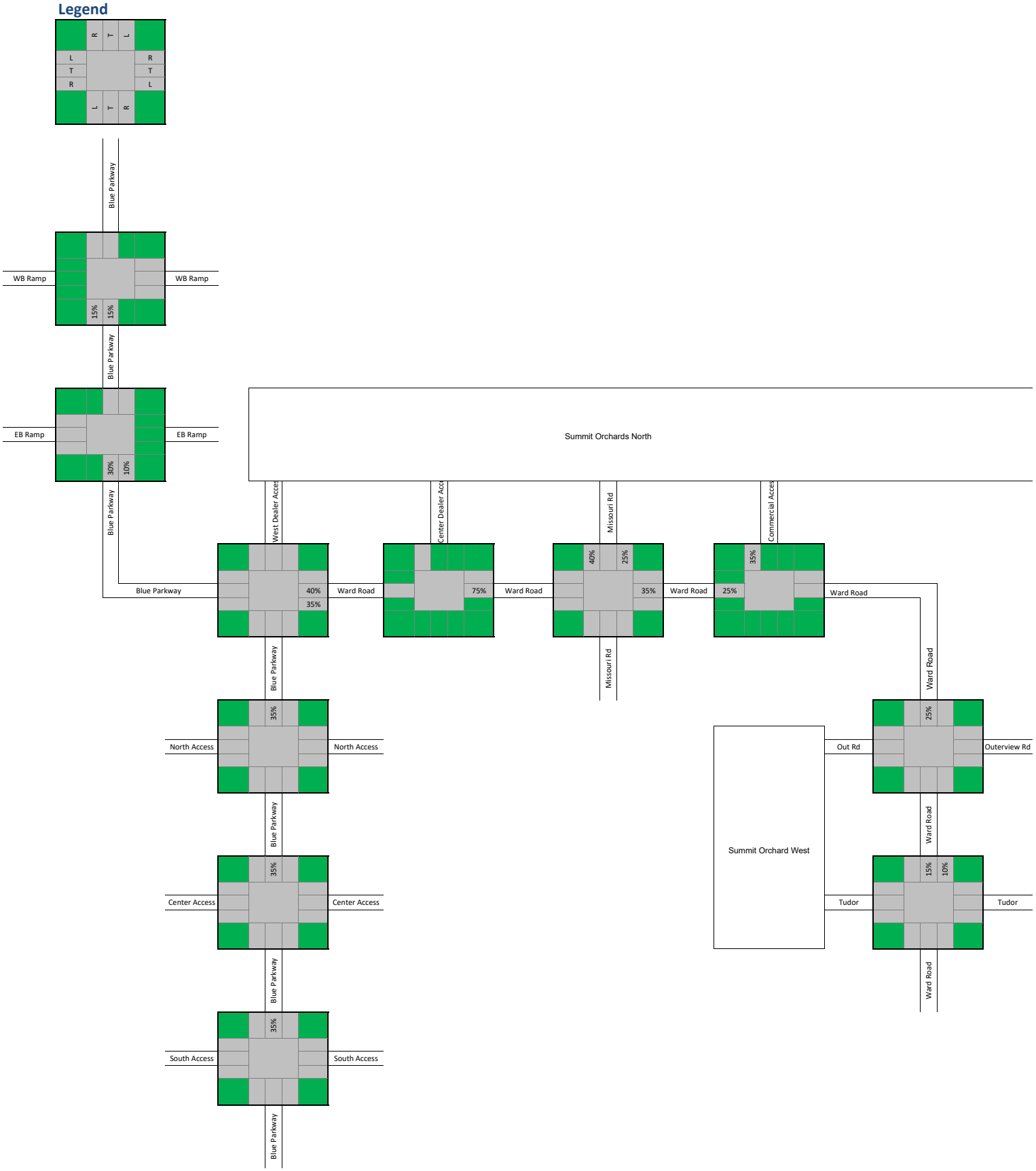
AM Distribution In - Phase 2

Legend



AM Distribution Out - Phase 2

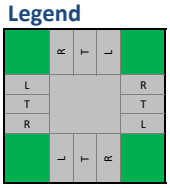
Legend

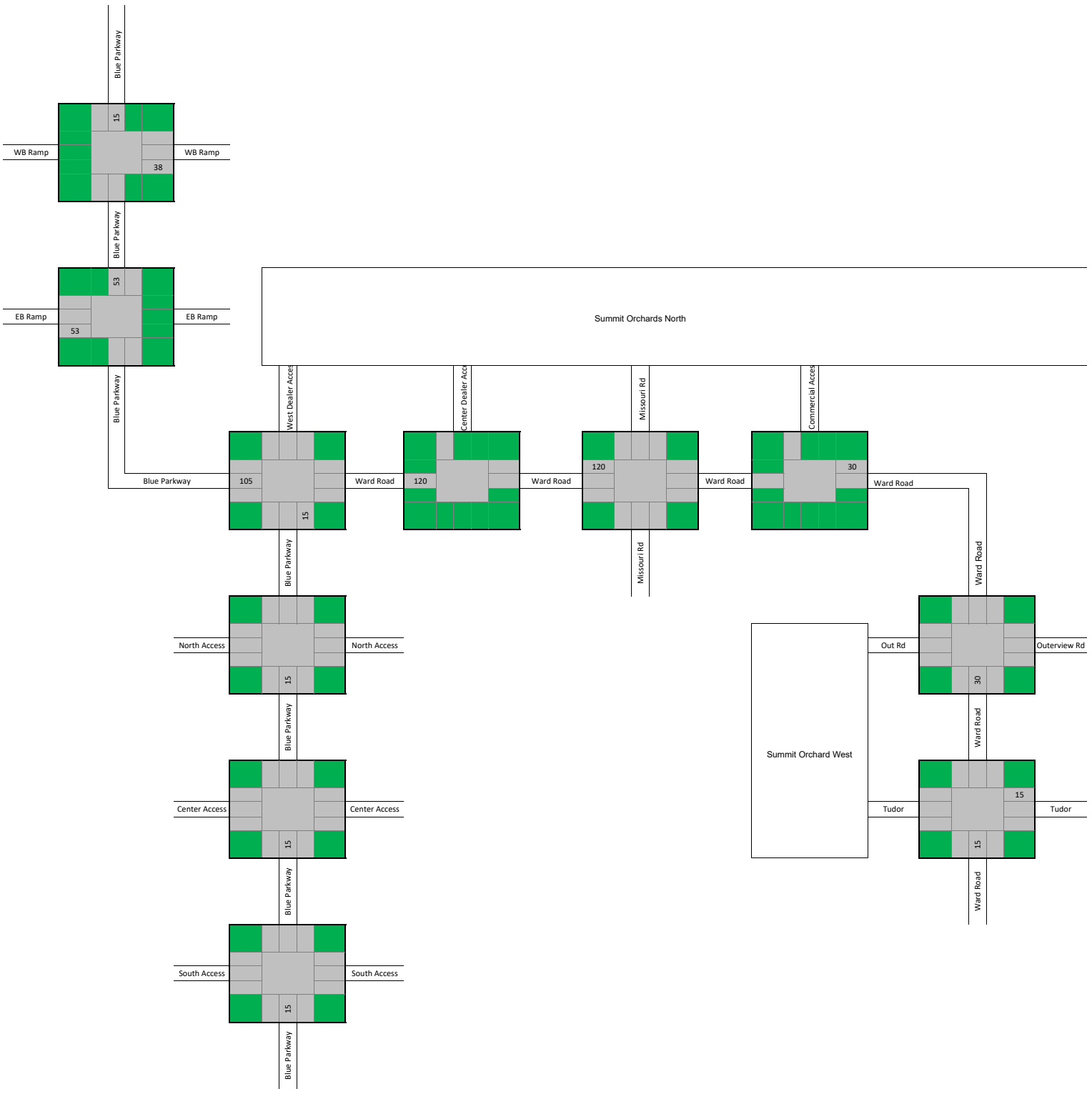


AM Trips In - Phase 2

Trips
150

Legend

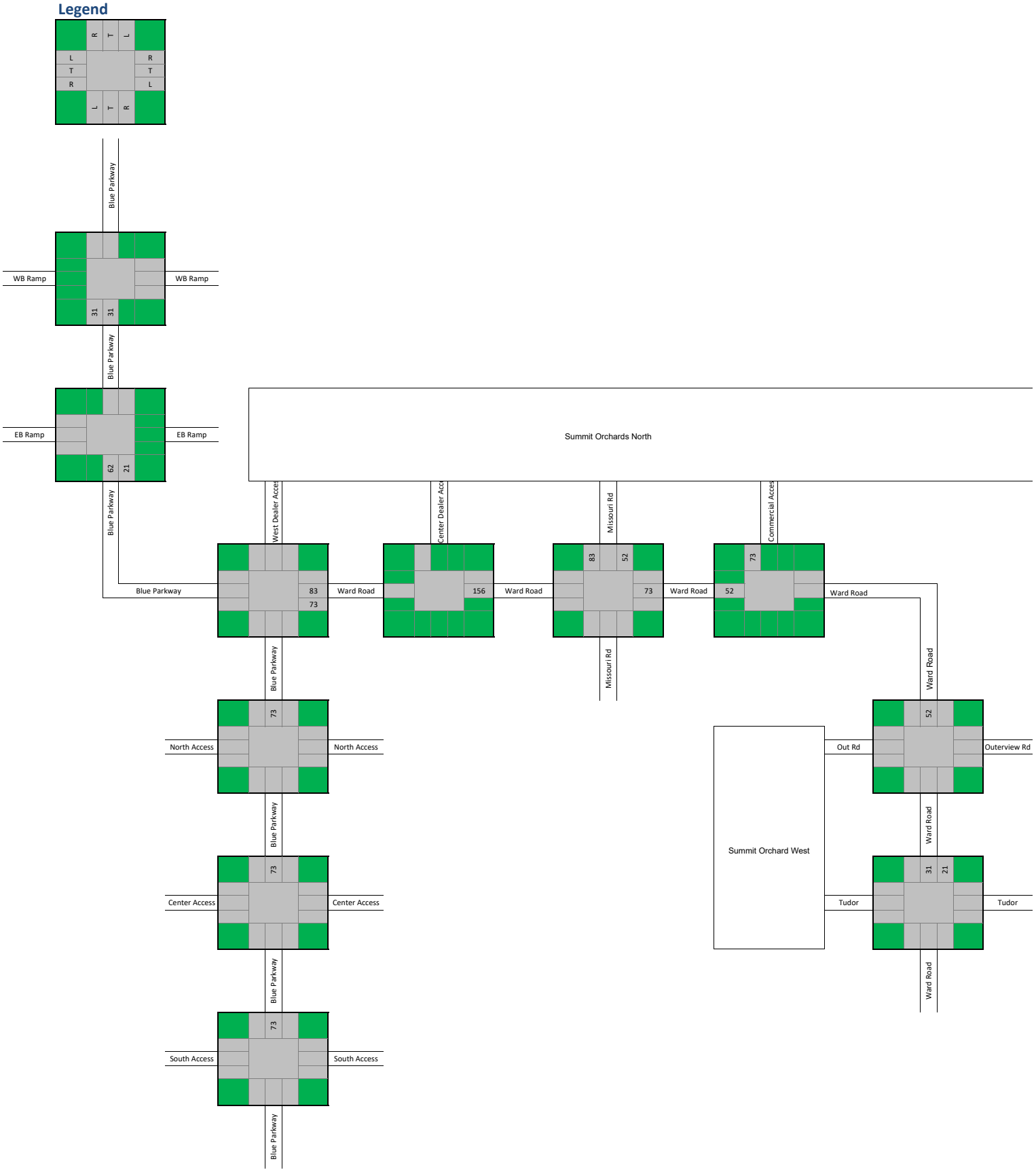




AM Trips Out - Phase 2

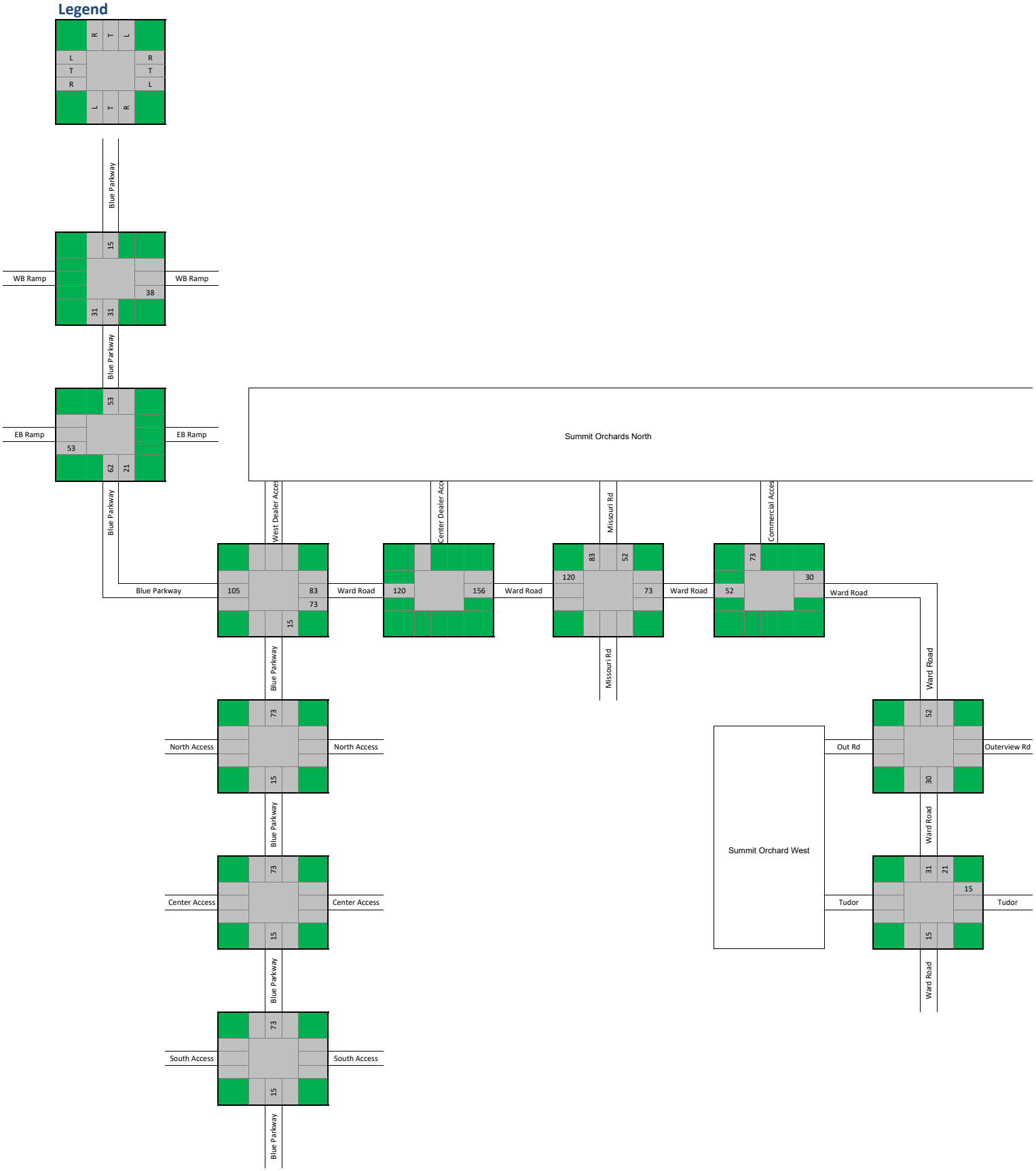
Trips
208

Legend



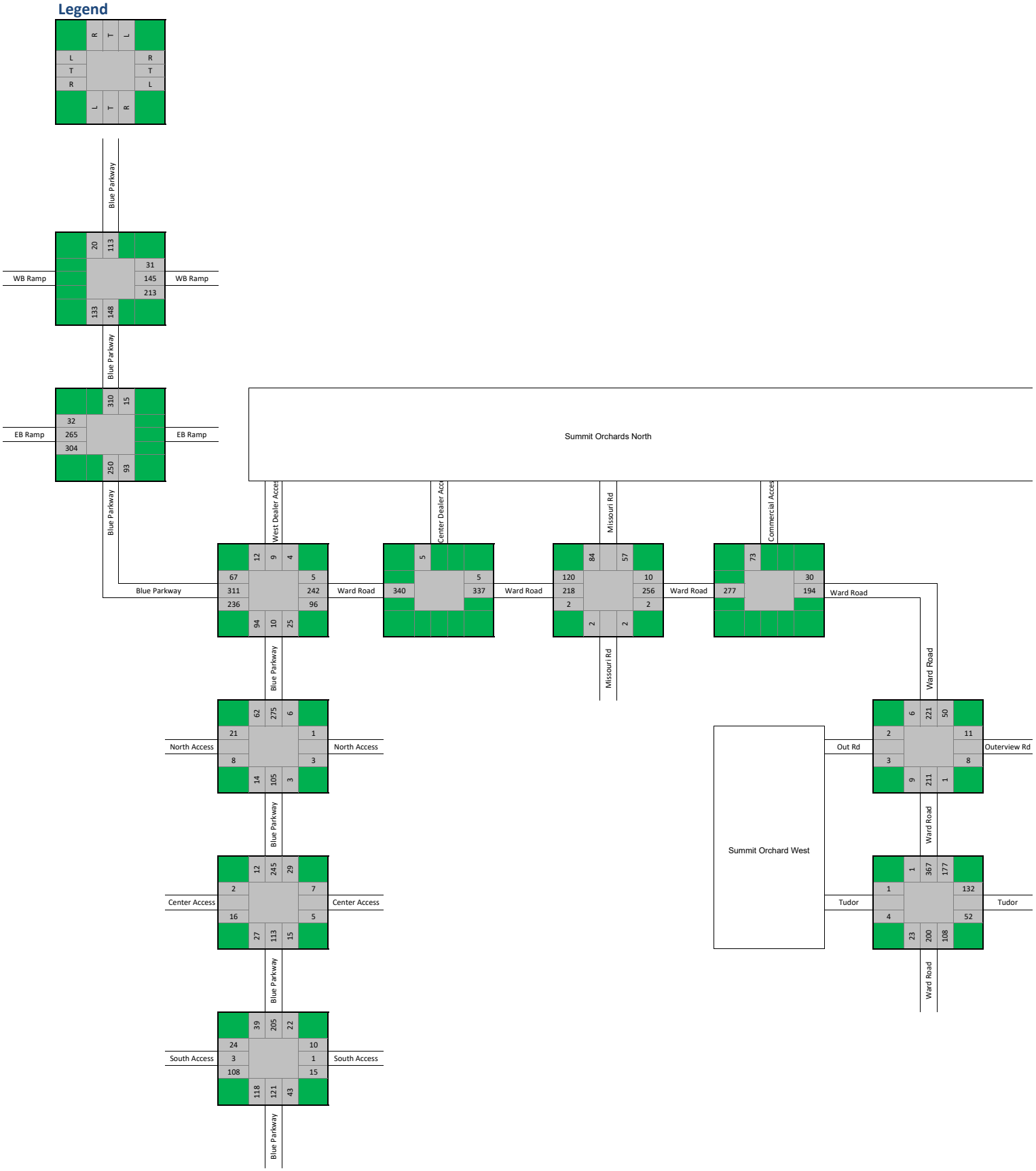
AM Trips - Phase 2

Legend



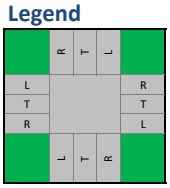
Existing Traffic plus AM Trips - Phase 1 and 2

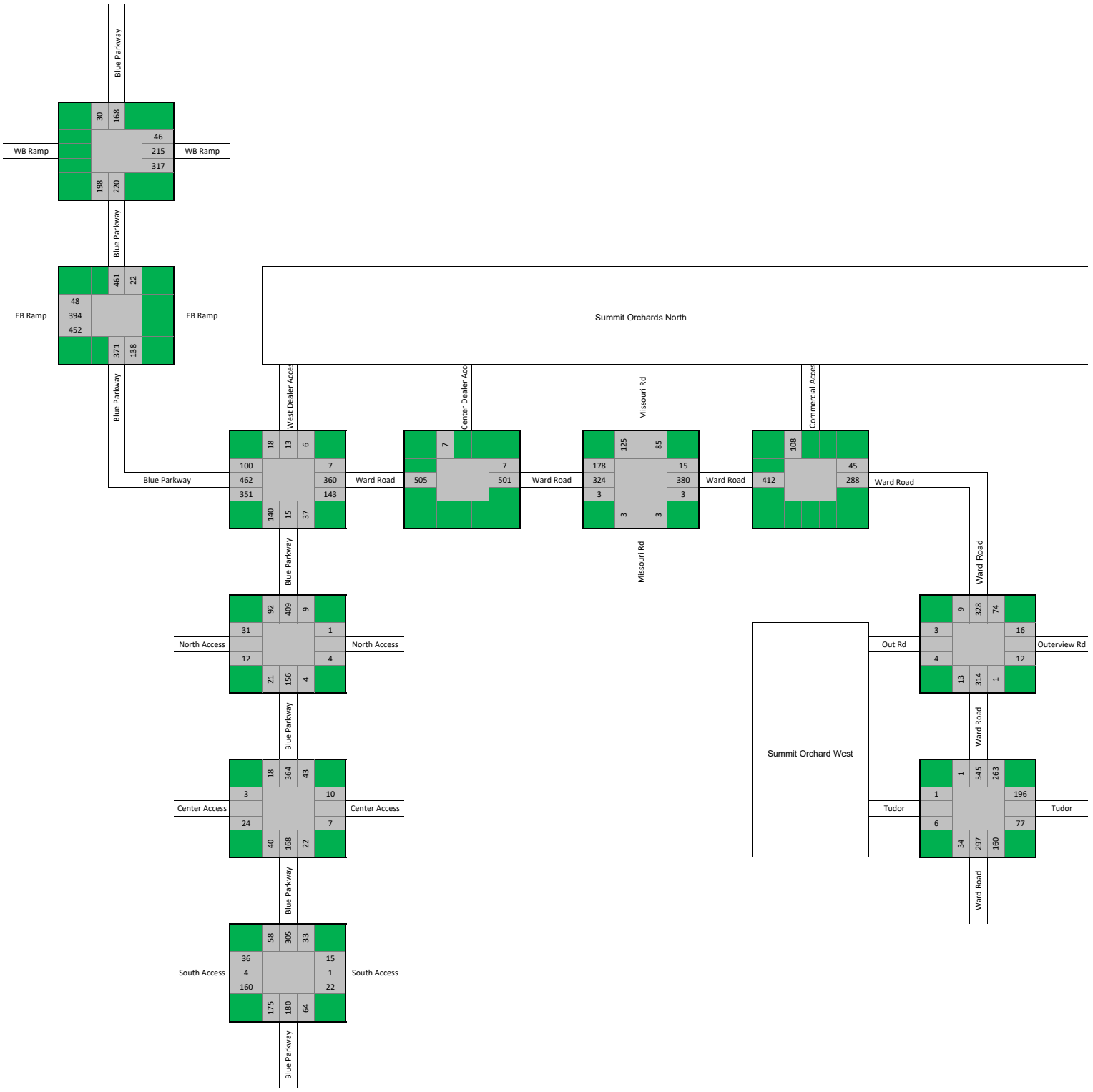
Legend



AM Future Traffic

Legend

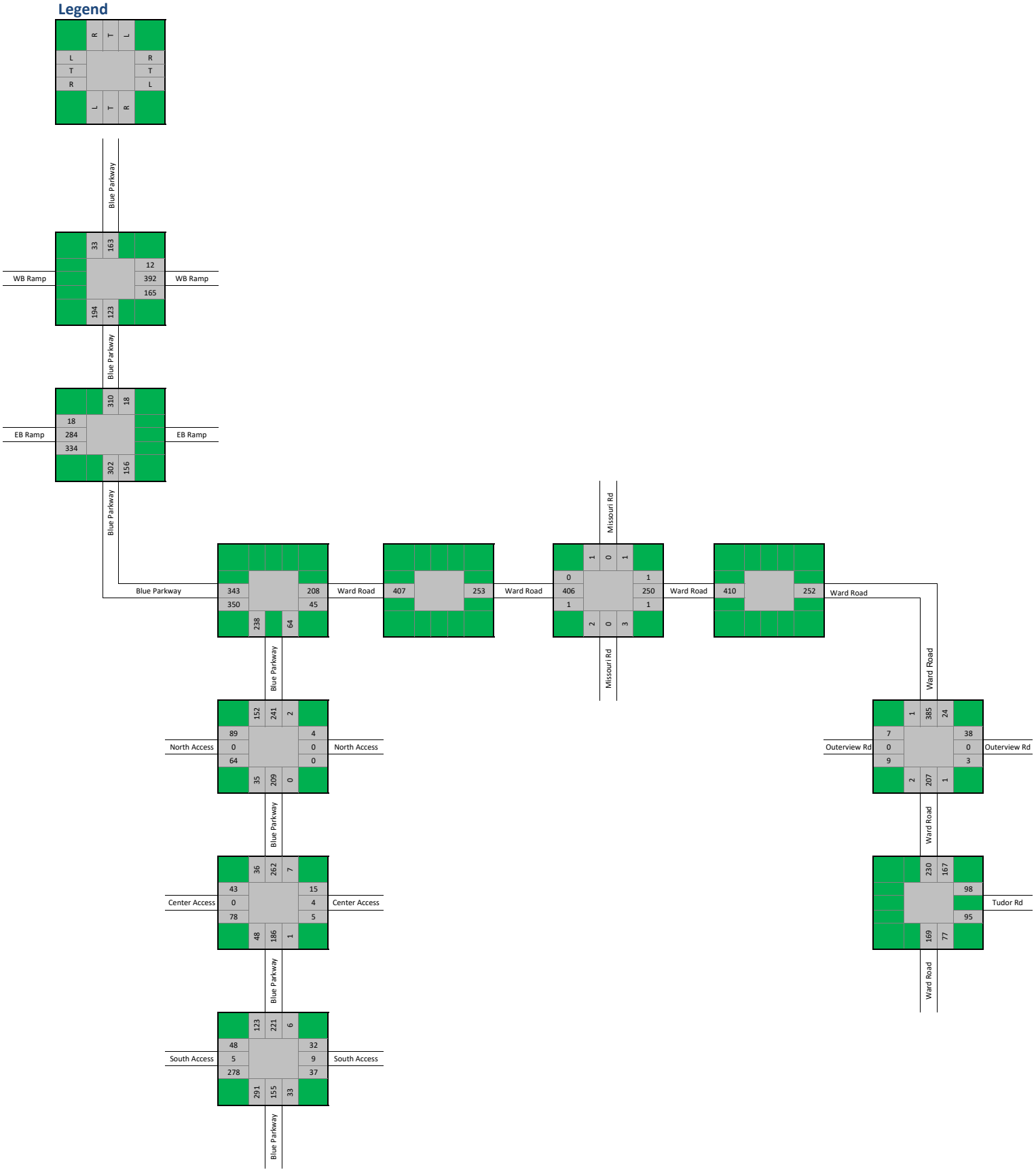




Existing PM Peak Hour Counts

Notes - Ward & Outerview and Ward & Tudor counts from Summit Orchards West TIS (2022) which inlcude Lees Summit Logistics and Summit Orchard counts. 2022 trips were done when Chipman and Hwy 50 intersection was closed so the previous trips were balanced with the new (2023) trips at other study intersections.

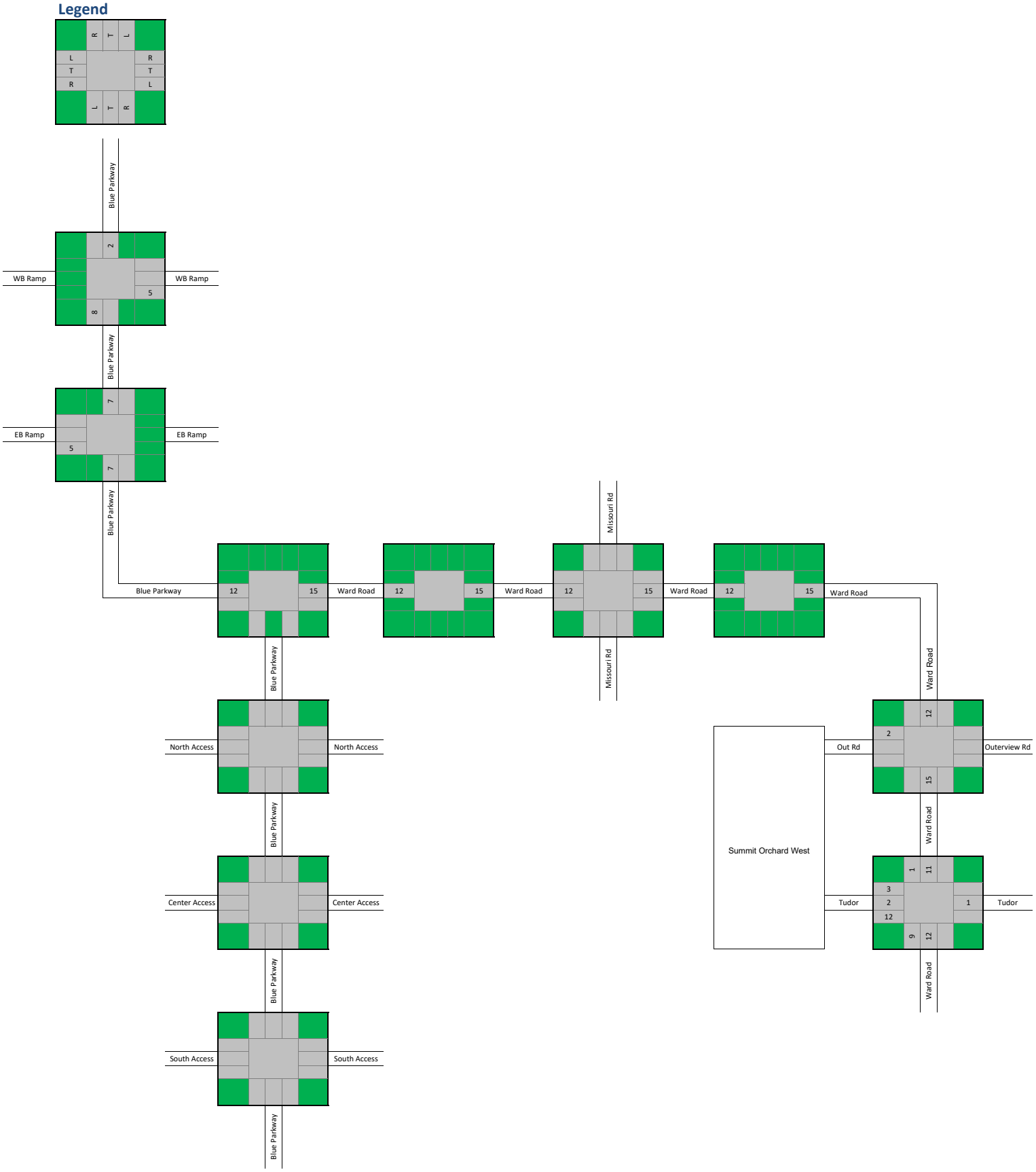
Legend



PM Approved Trips from Summit Orchard West TIS (2022)

Notes - these trips were from phase I & II of the Summit Orchard West TIS and were distributed through the network

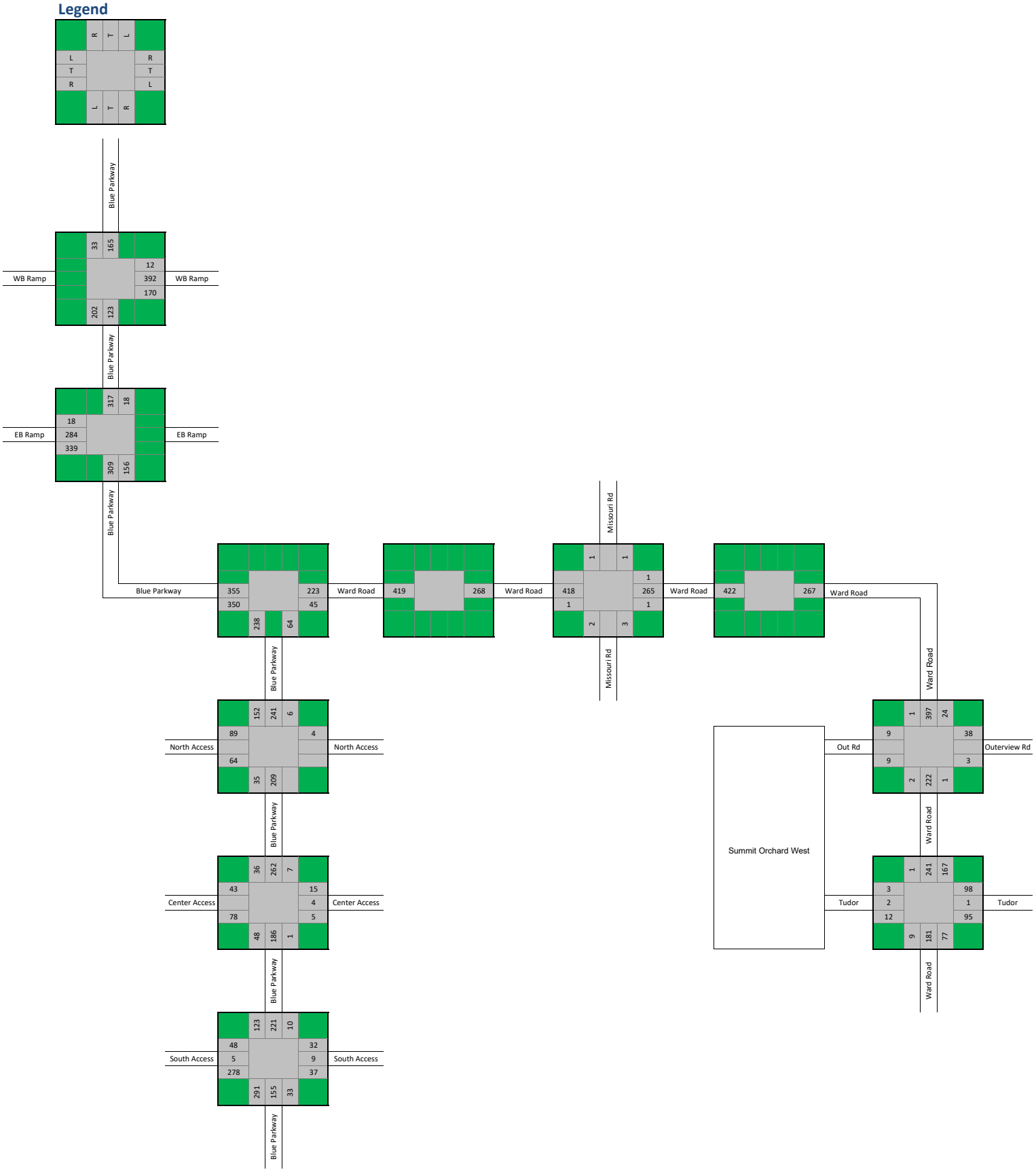
Legend



PM Existing Peak Hour Traffic

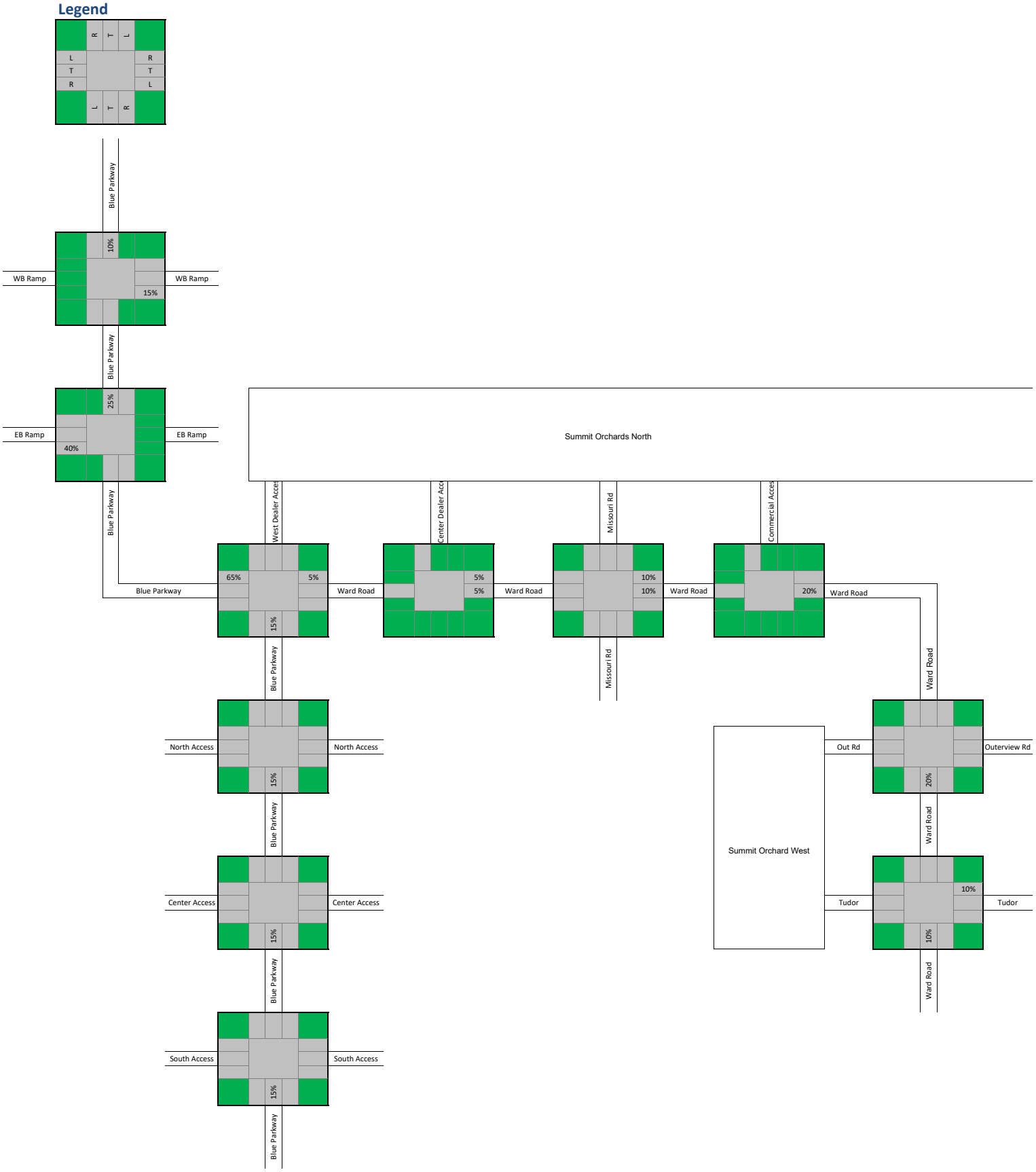
Notes - Includes balanced counts and approved trips

Legend



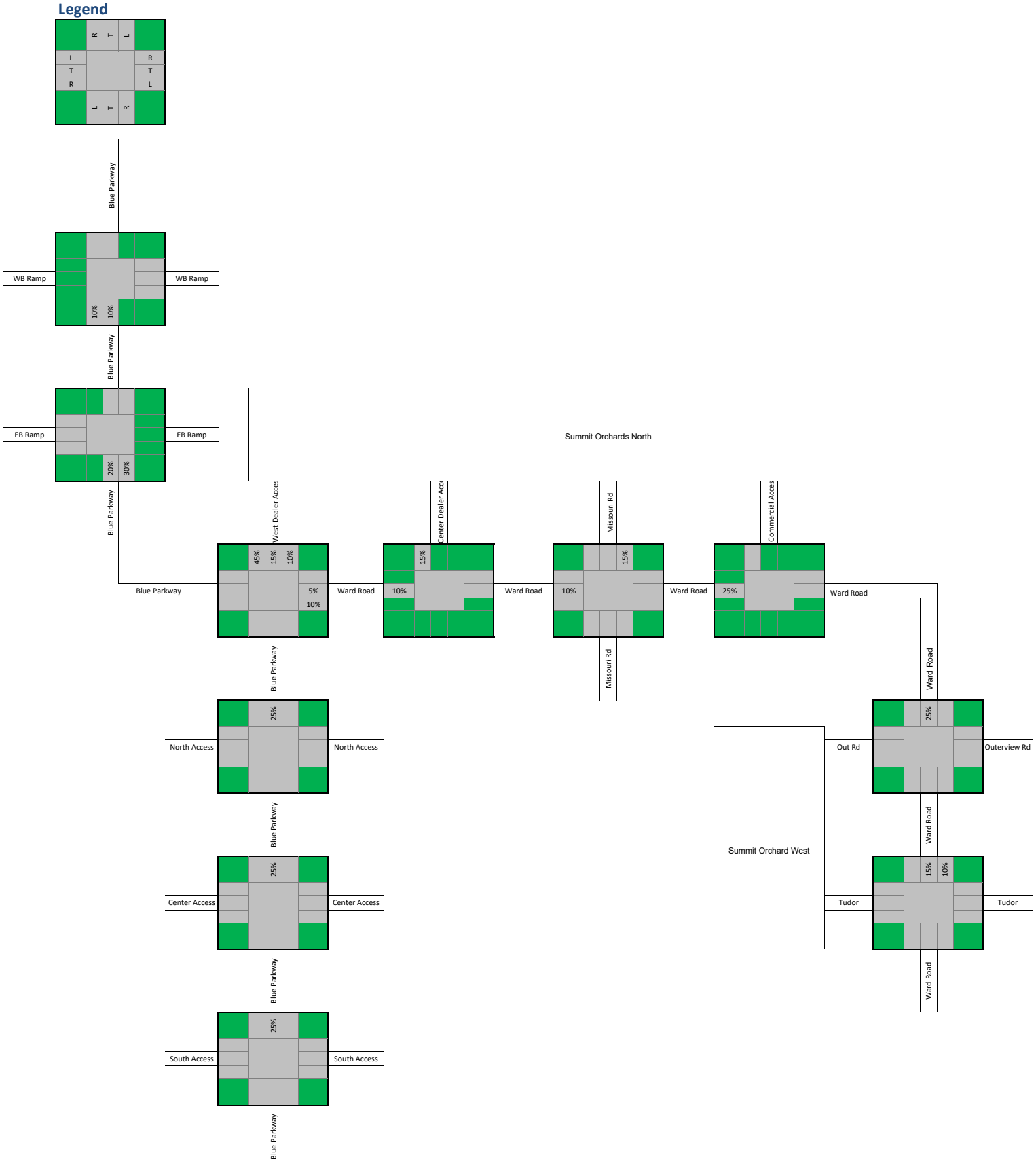
PM Distribution In - Phase I

Legend



PM Distribution Out - Phase I

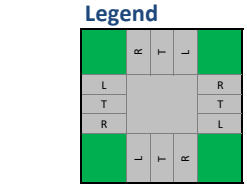
Legend

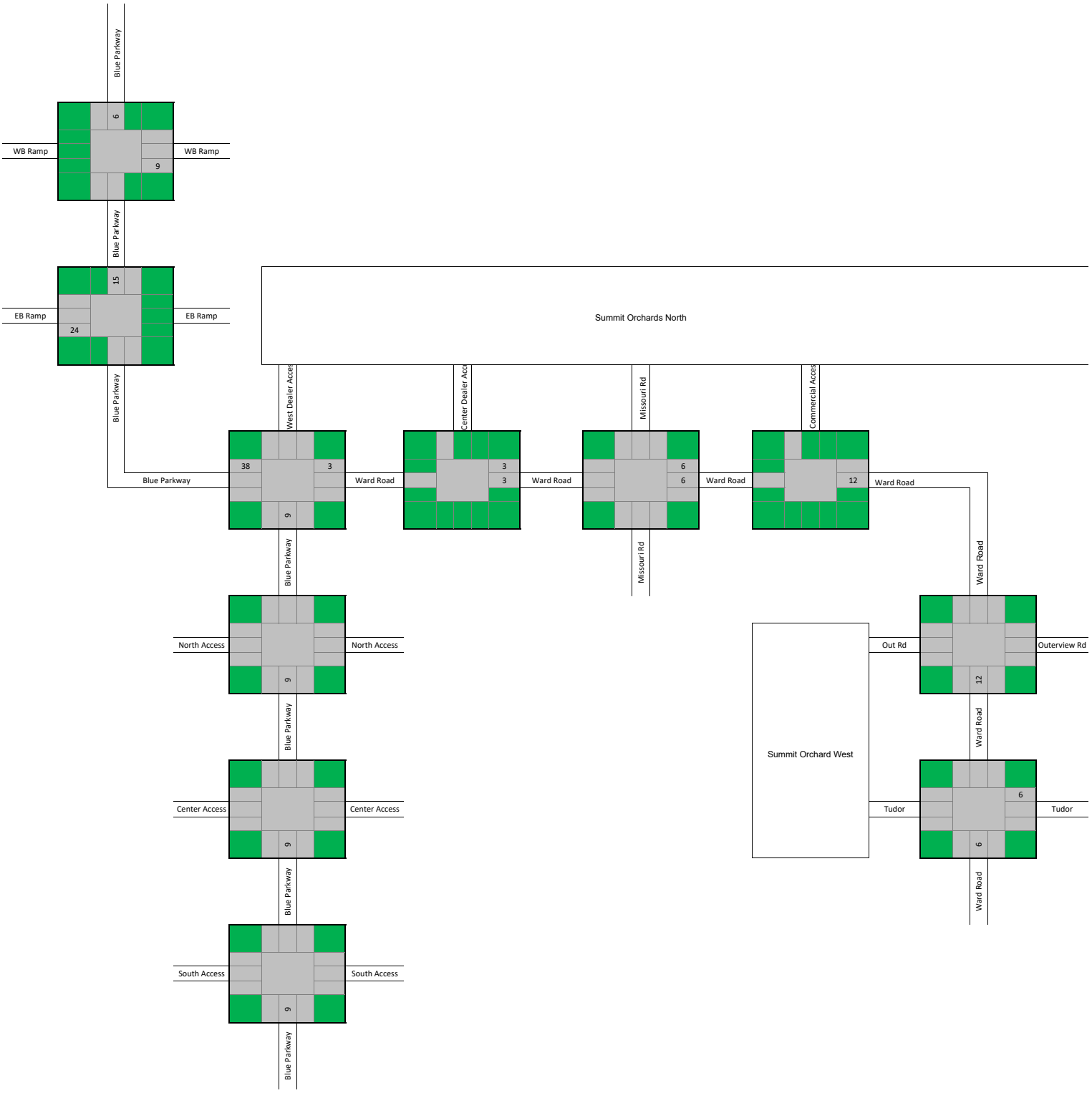


PM Trips In - Phase I

Trips
59

Legend

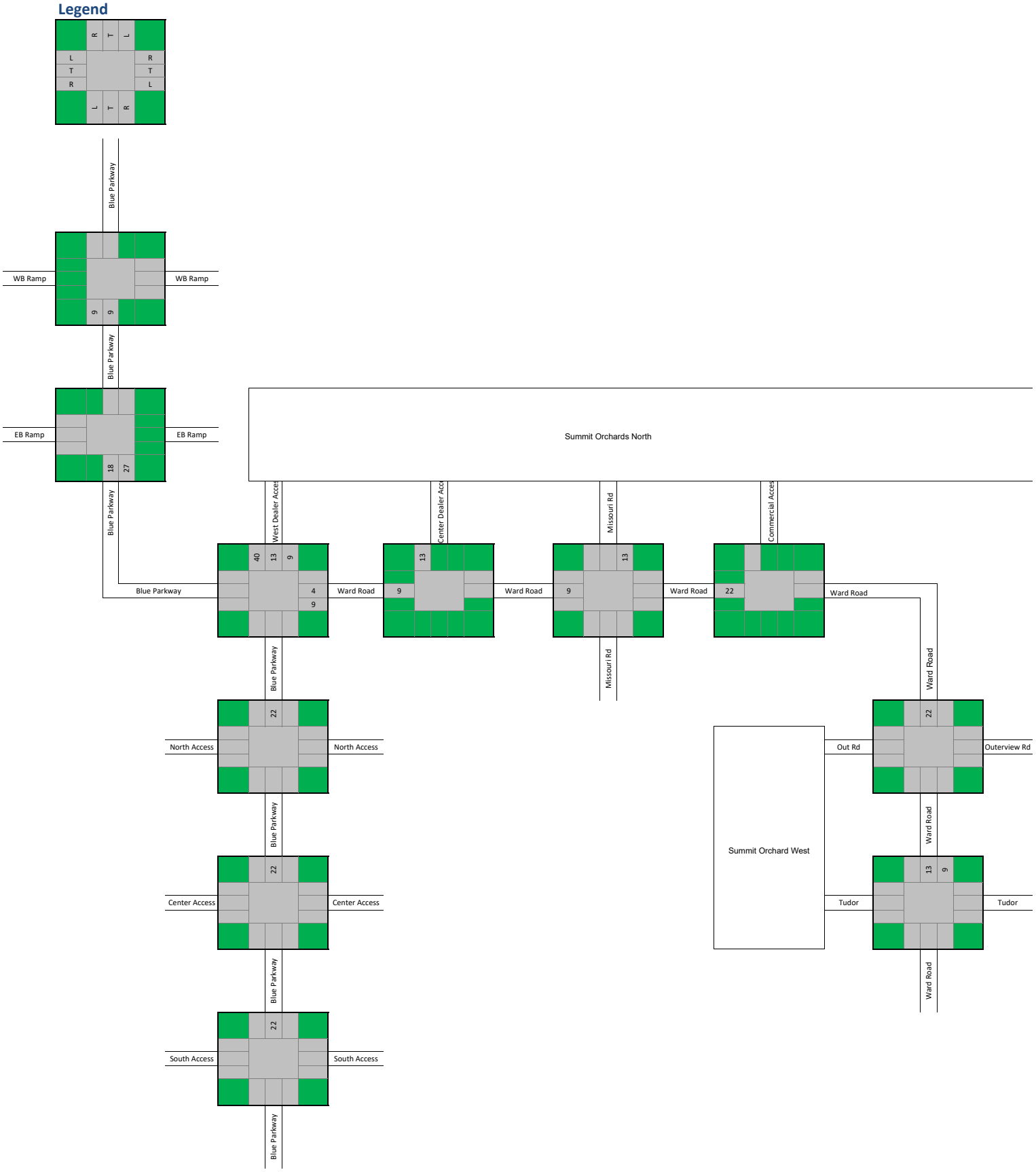




PM Trips Out - Phase I

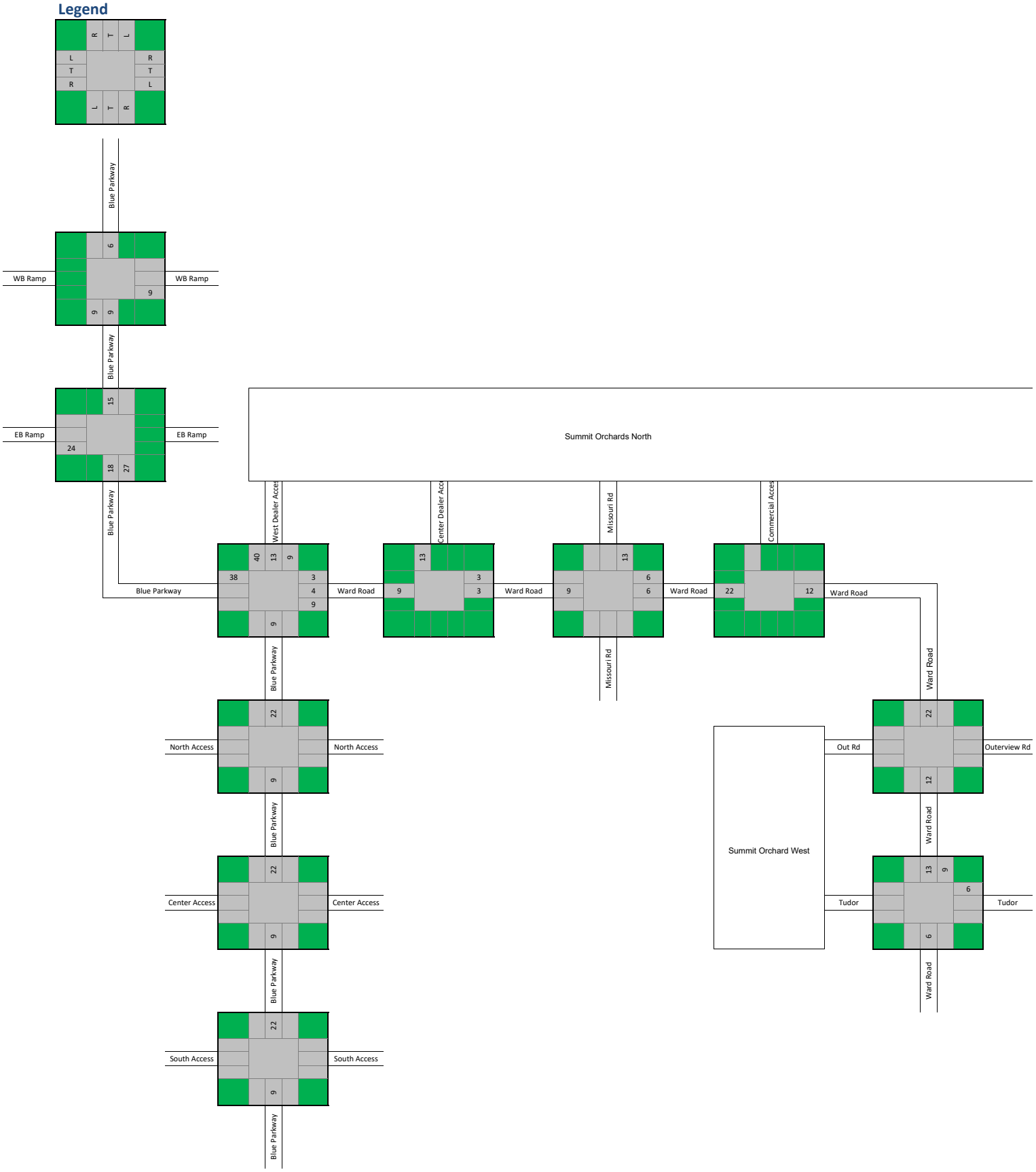
Trips
89

Legend



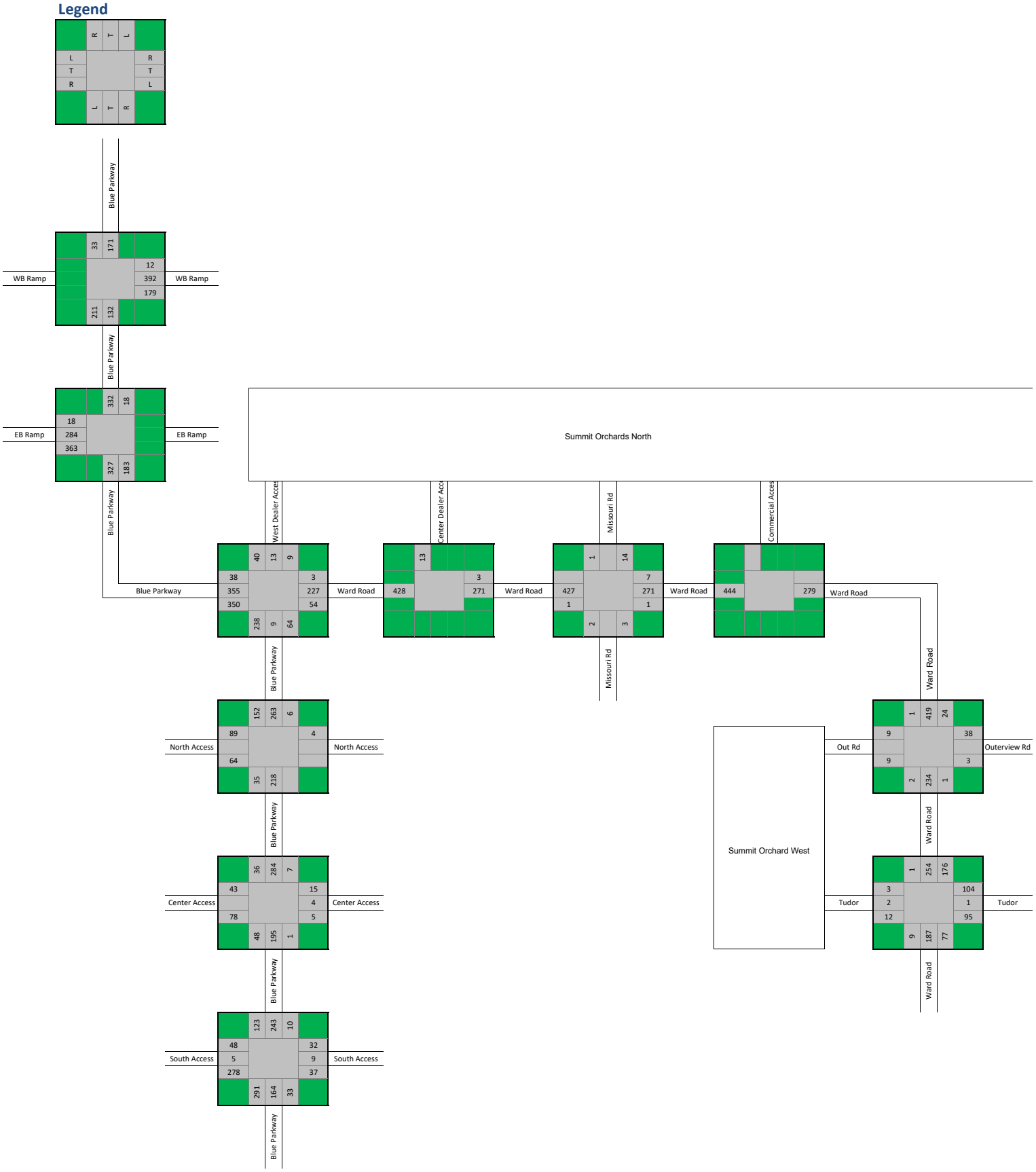
PM Trips - Phase I

Legend



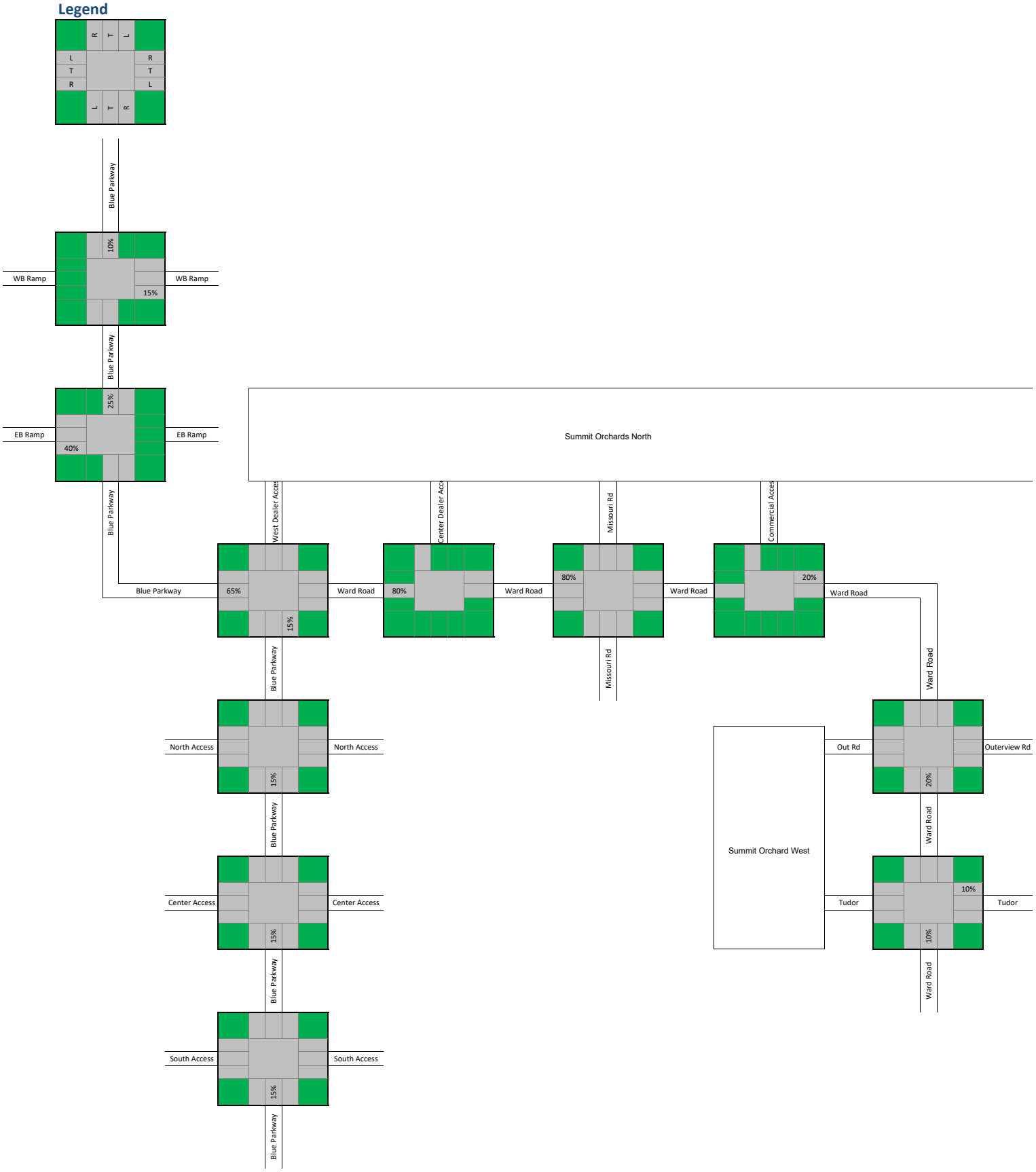
Existing Traffic plus PM Trips - Phase I

Legend



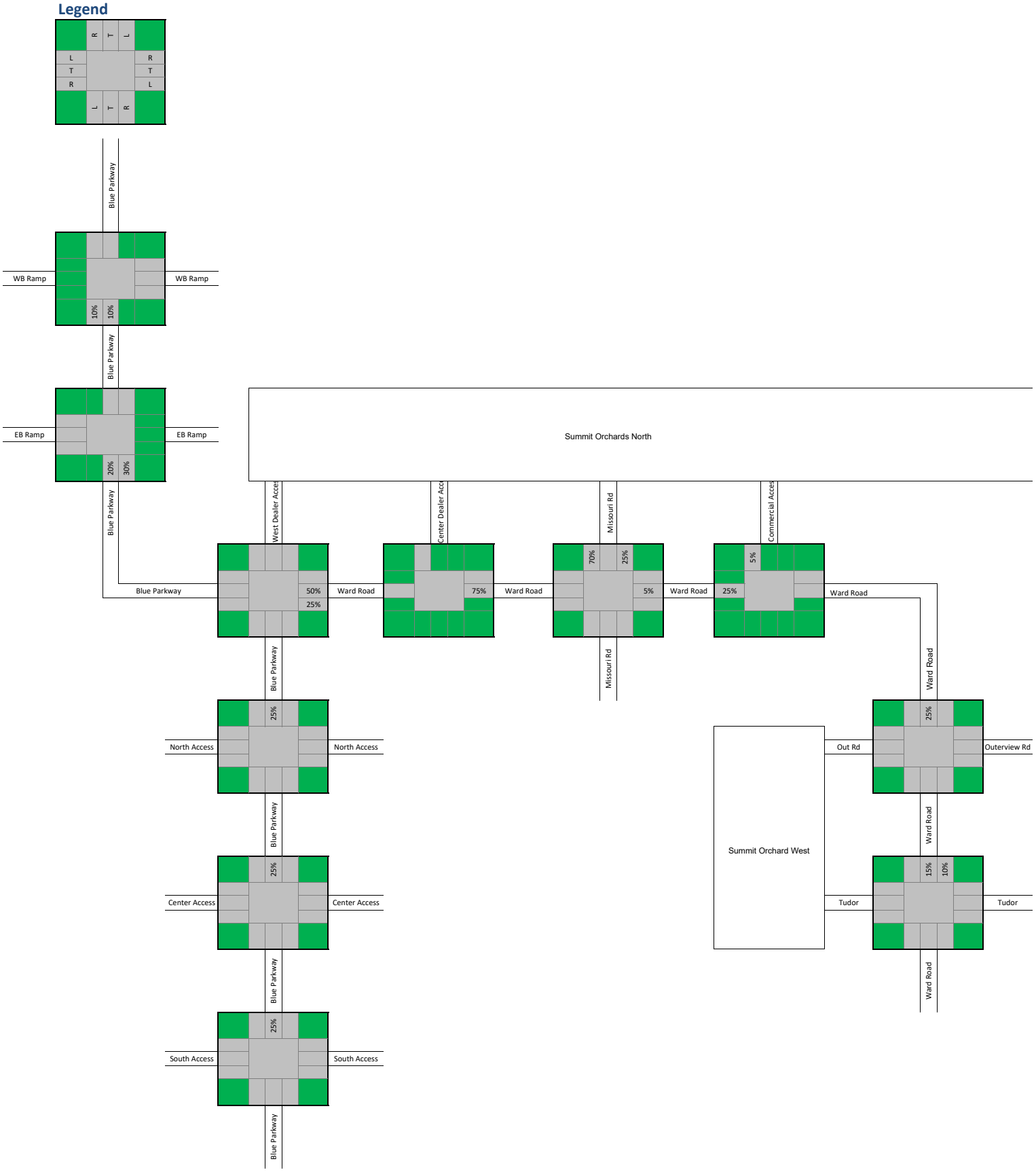
PM Distribution In - Phase 2

Legend



PM Distribution Out - Phase 2

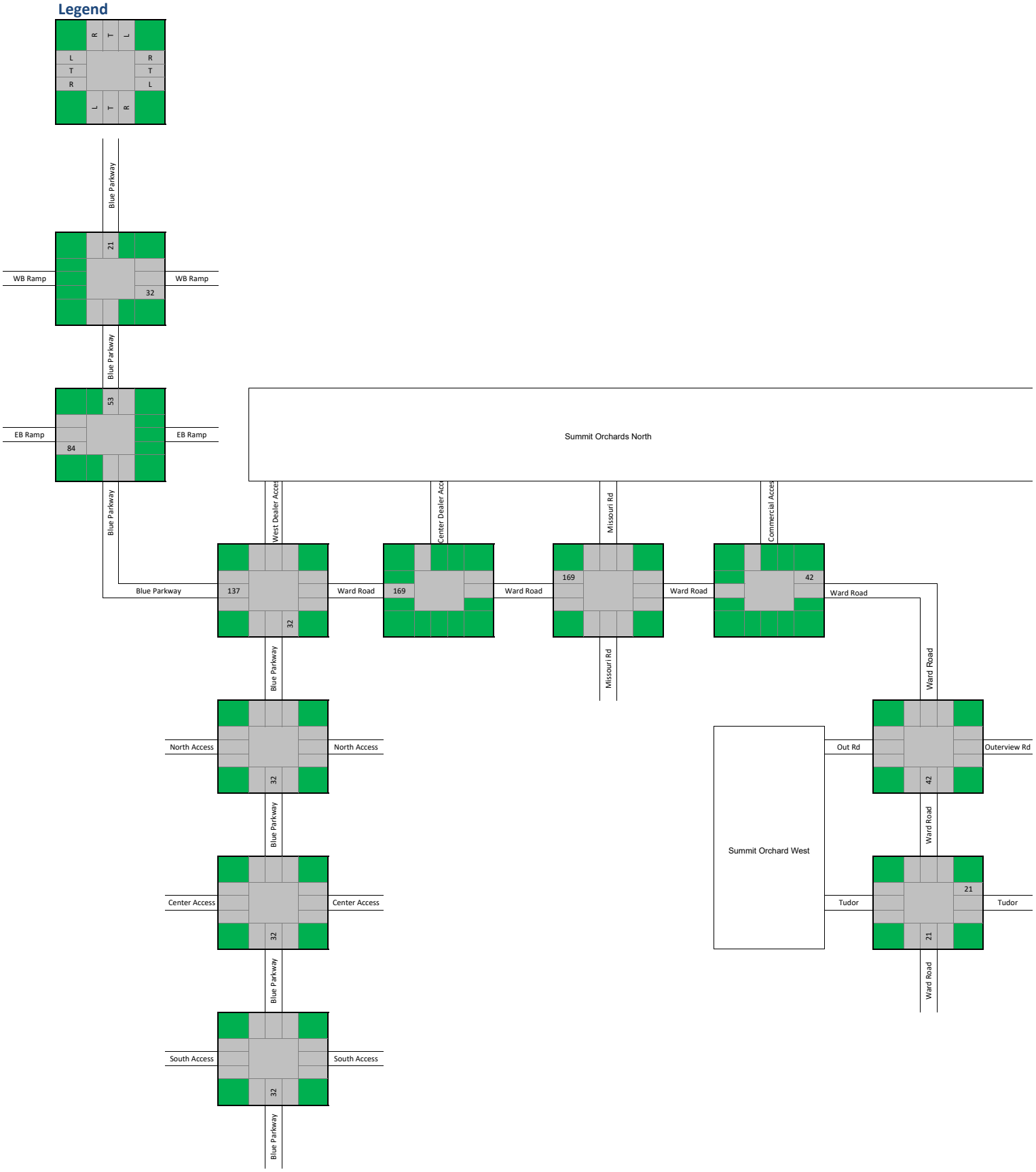
Legend



PM Trips In - Phase 2

Trips
211

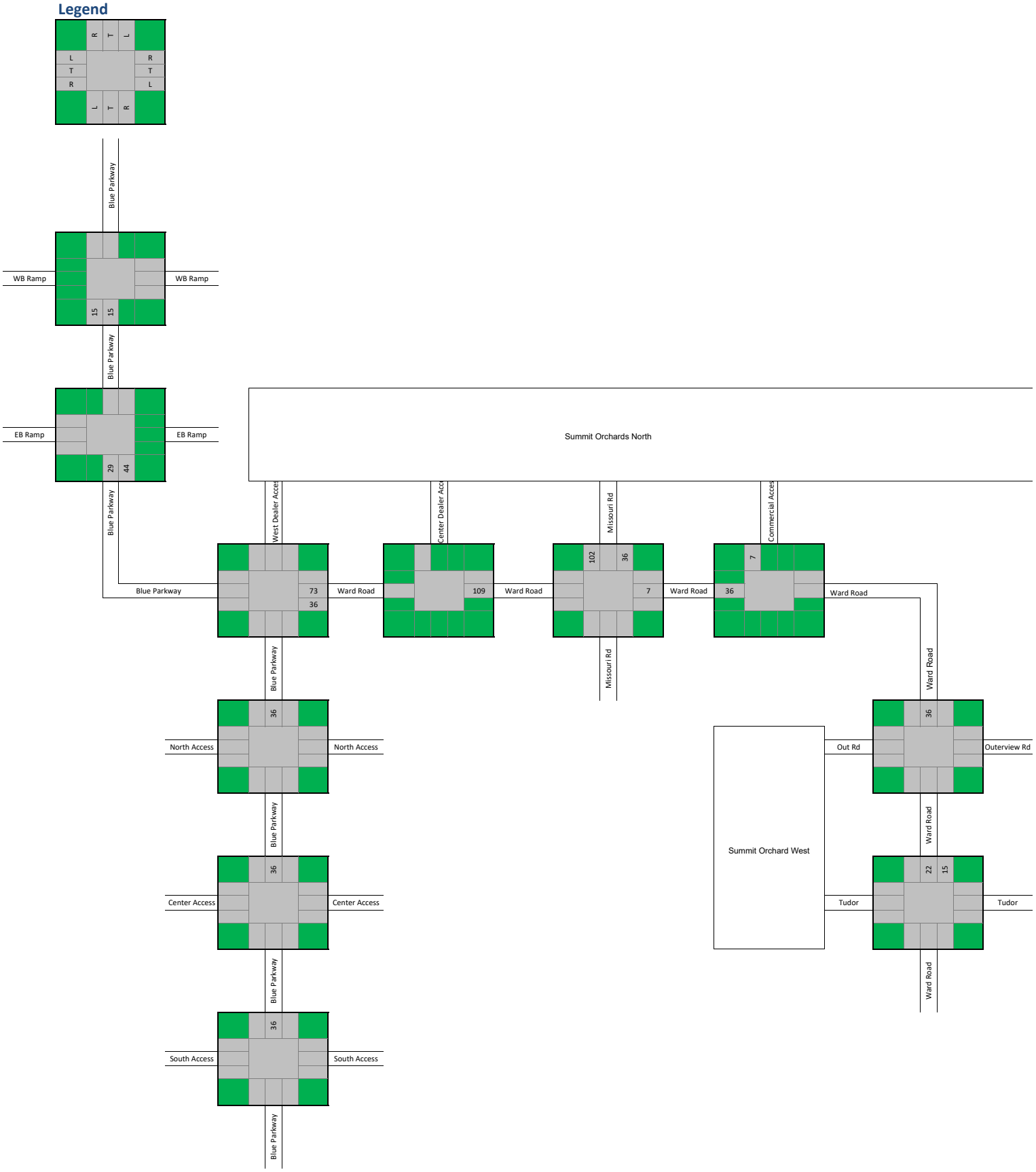
Legend



PM Trips Out - Phase 2

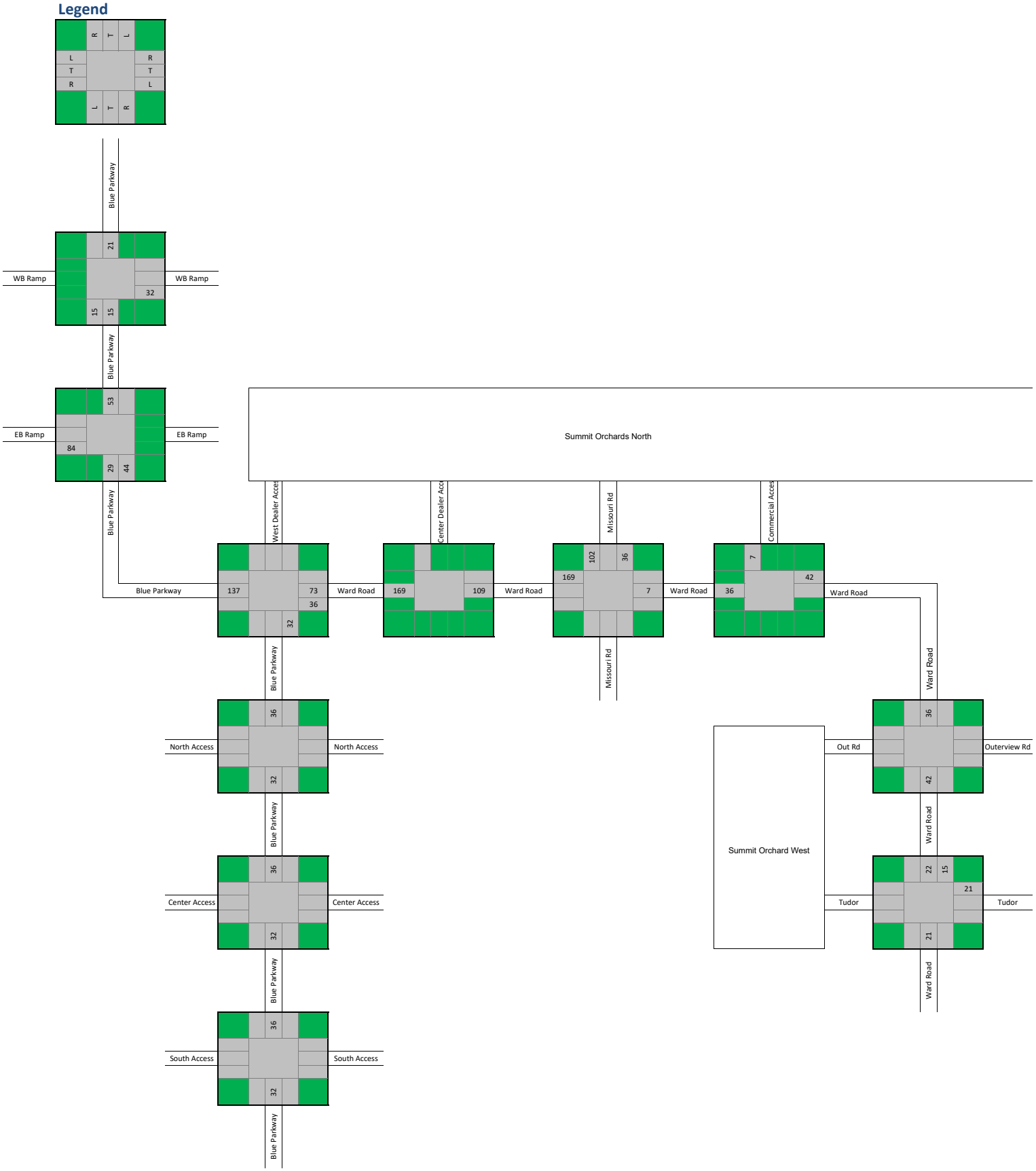
Trips
145

Legend



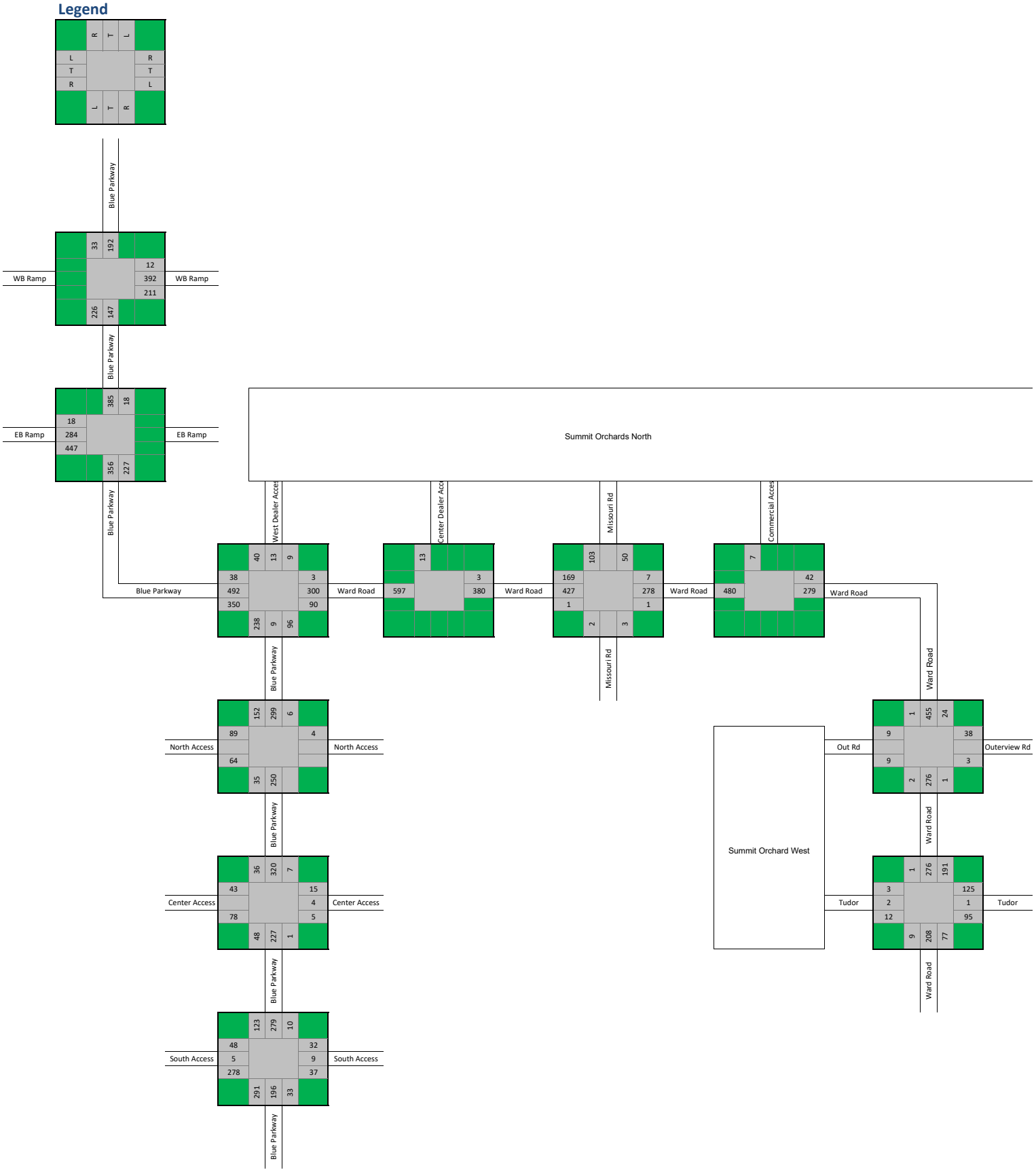
PM Trips - Phase 2

Legend



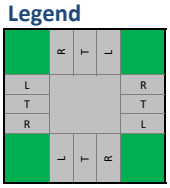
Existing Traffic plus PM Trips - Phase 1 and 2

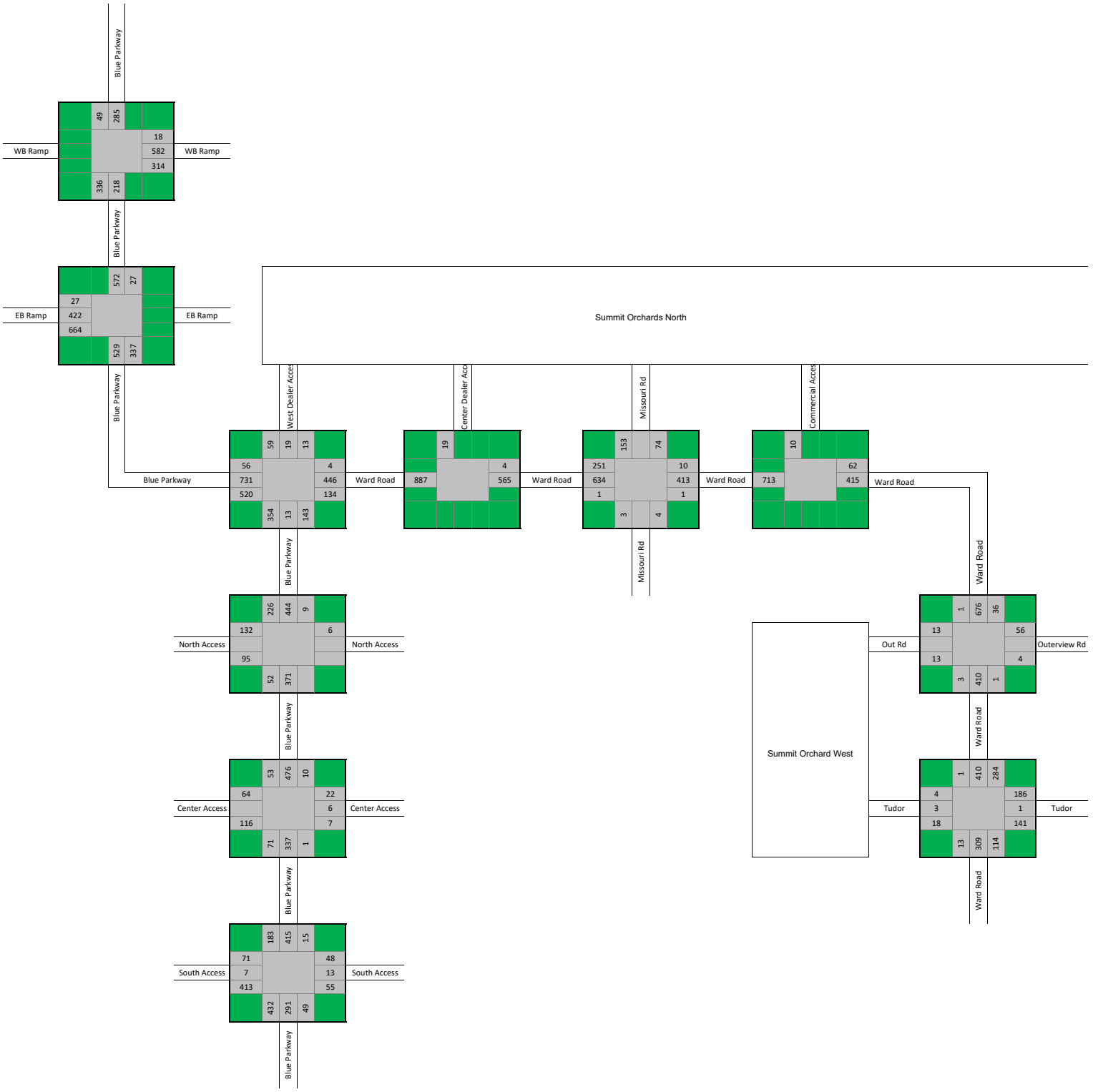
Legend



PM Future Traffic

Legend

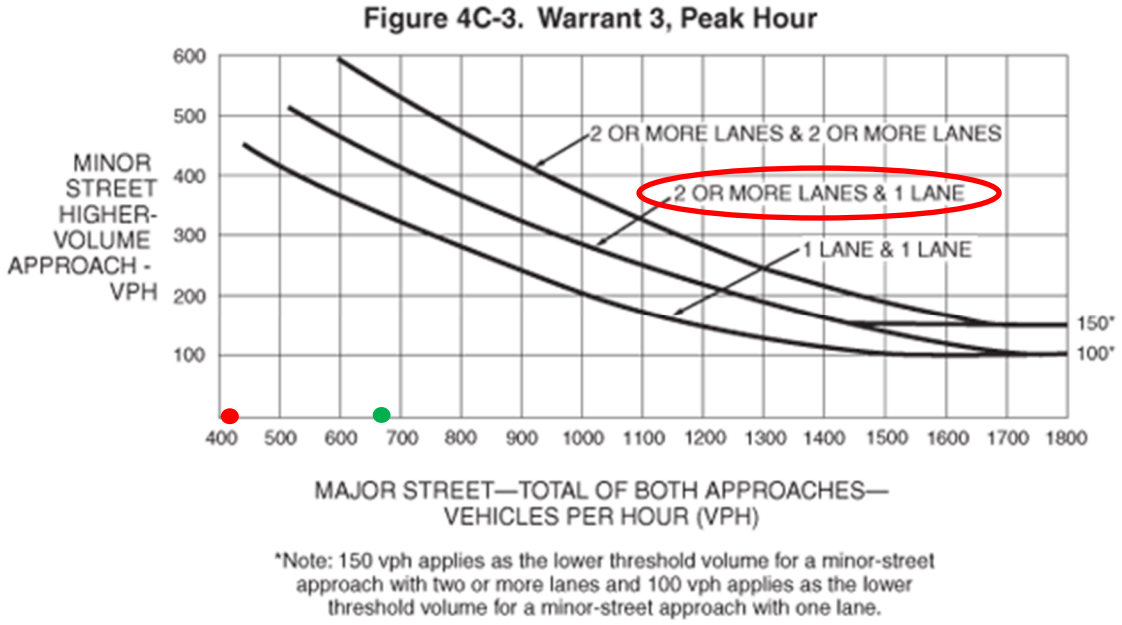




EXISTING

Ward Road and Missouri Road – AM & PM

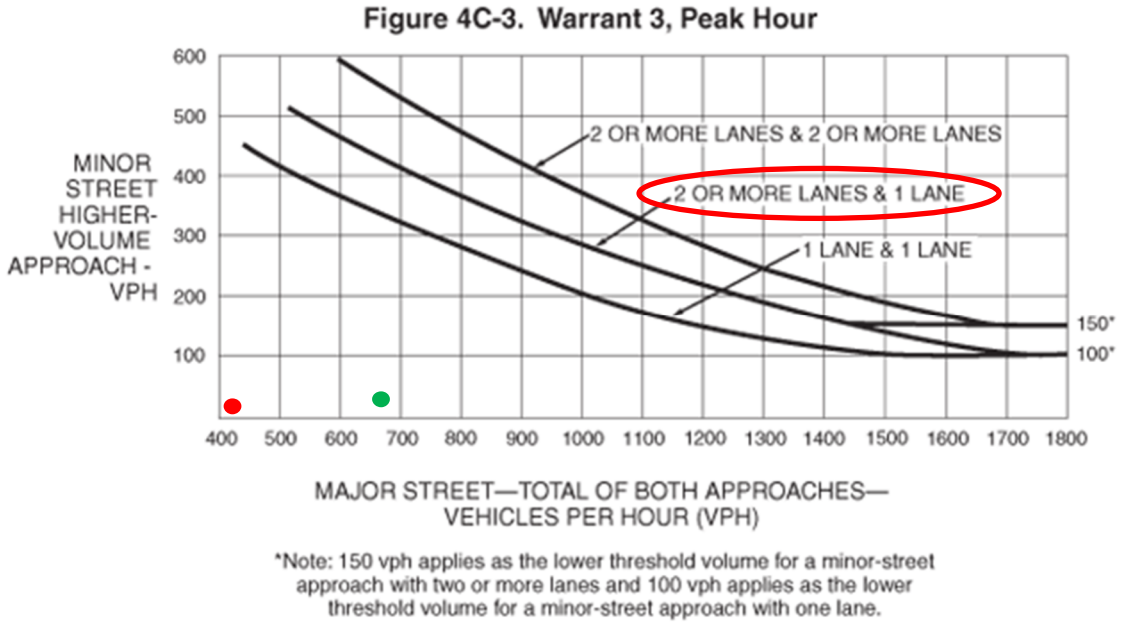
Not Warranted



*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Ward Road and Outerview Road – AM & PM

Not Warranted

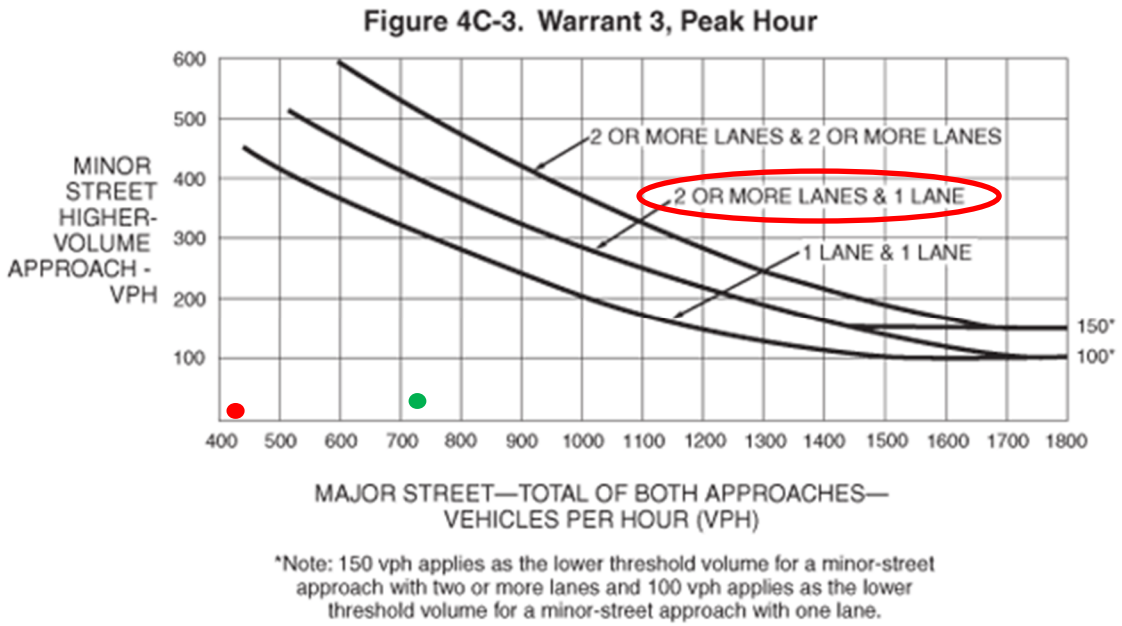


*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

EXISTING PLUS SITE (PHASE I)

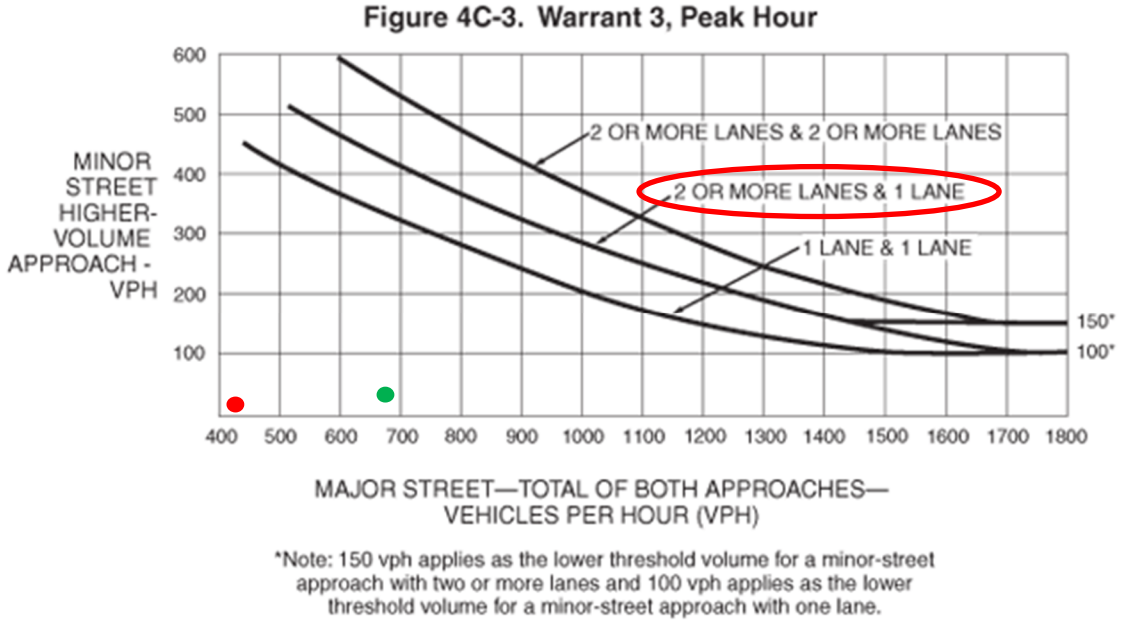
Ward Road and Missouri Road – AM & PM

Not Warranted



Ward Road and Outerview Road – AM & PM

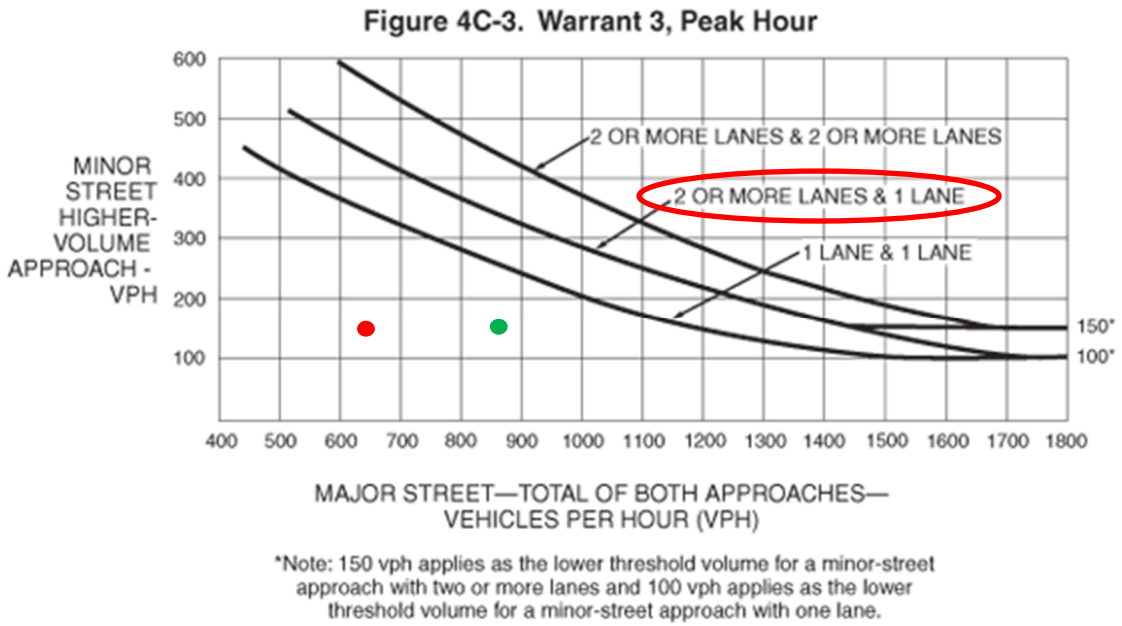
Not Warranted



EXISTING PLUS SITE (PHASE I & II)

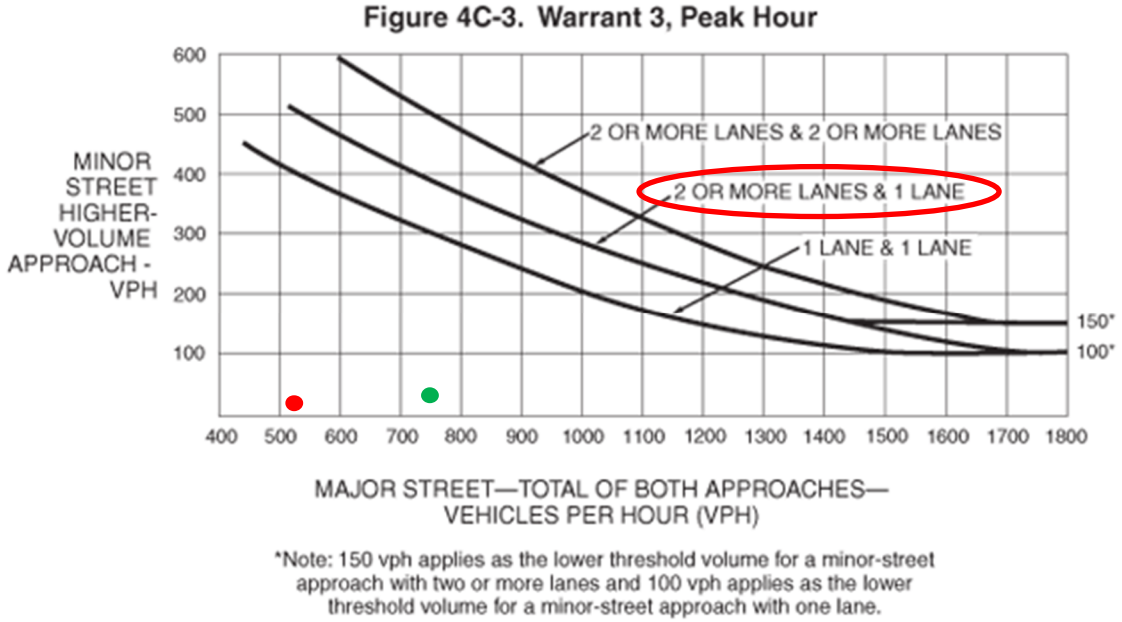
Ward Road and Missouri Road – AM & PM

Not Warranted



Ward Road and Outerview Road – AM & PM

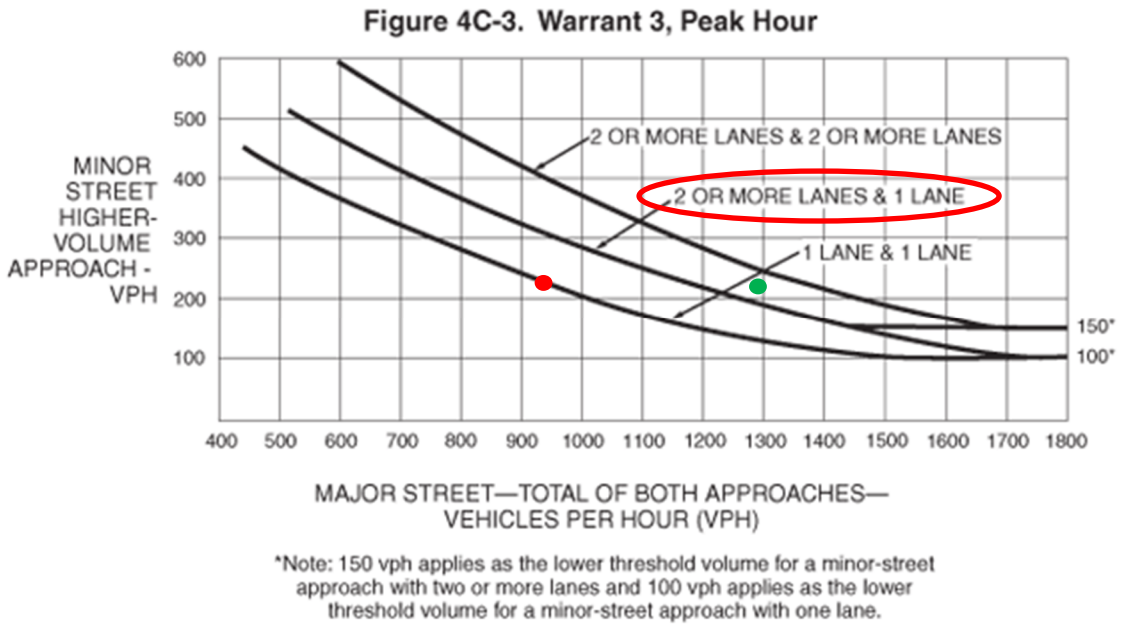
Not Warranted



FUTURE

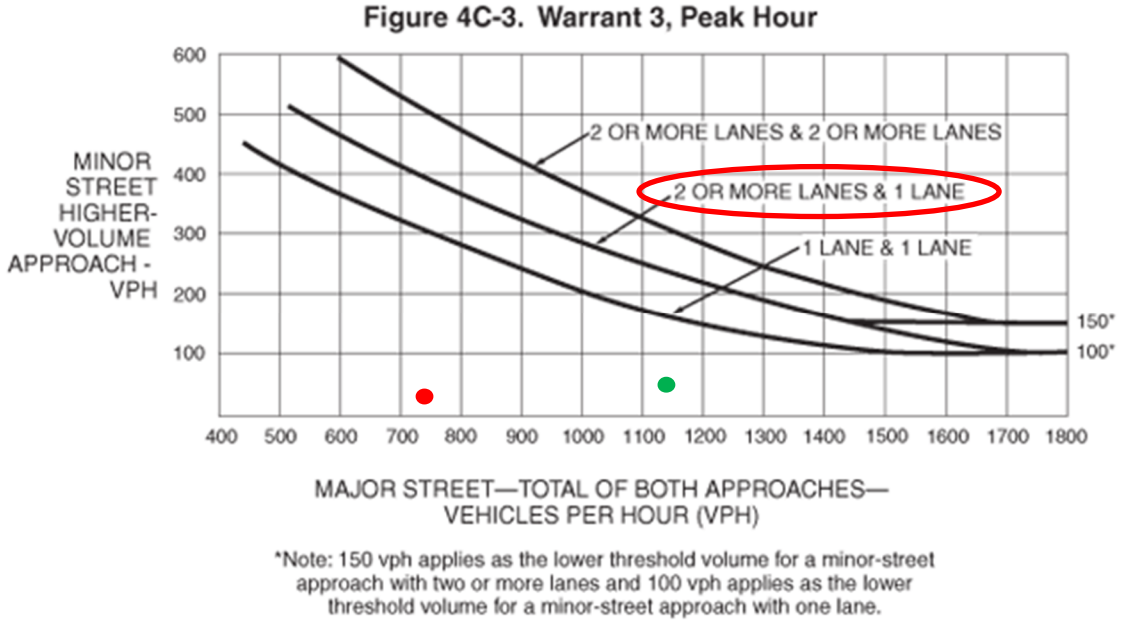
Ward Road and Missouri Road – AM & PM

Warranted



Ward Road and Outerview Road – AM & PM

Not Warranted



Crash Summaries (Previous 3 Years)				
ID	Year	PDO/Injury/Fatality	Type of Crash	Intersection
9702	2022	PDO	Rear End	Blue/Ward and Blue
8677	2022	PDO	Sideswipe	Blue/Ward and Blue
7095	2022	PDO	Angle	Blue/Ward and Blue
5093	2022	PDO	Angle	Blue/Ward and Blue
3340	2022	PDO	Sideswipe	Blue/Ward and Blue
3171	2022	PDO	Rear End	Blue/Ward and Blue
1141	2022	PDO	Angle	Blue/Ward and Blue
3139	2021	PDO	Sideswipe	Blue/Ward and Blue
831	2021	PDO	Fixed Object	Blue/Ward and Blue
332	2021	PDO	Fixed Object	Blue/Ward and Blue
9911	2020	PDO	Angle	Blue/Ward and Blue
5015	2023	Injury	Angle	I-470 EB Ramp and Blue
3491	2023	PDO	Angle	I-470 EB Ramp and Blue
2640	2023	Injury	Angle	I-470 EB Ramp and Blue
1185	2023	PDO	Sideswipe	I-470 EB Ramp and Blue
9076	2023	PDO	Rear End	I-470 EB Ramp and Blue
7108	2022	PDO	Angle	I-470 EB Ramp and Blue
6801	2022	Injury	Fixed Object	I-470 EB Ramp and Blue
6801	2022	Injury	Fixed Object	I-470 EB Ramp and Blue
5987	2022	PDO	Angle	I-470 EB Ramp and Blue
5275	2022	PDO	Rear End	I-470 EB Ramp and Blue
3004	2022	Injury	Angle	I-470 EB Ramp and Blue
2736	2022	PDO	Sideswipe	I-470 EB Ramp and Blue
841	2022	PDO	Angle	I-470 EB Ramp and Blue
6849	2021	PDO	Rear End	I-470 EB Ramp and Blue
3102	2021	Injury	Angle	I-470 EB Ramp and Blue
7071	2022	PDO	Angle	I-470 WB Ramp and Blue
6873	2022	Injury	Rear End	I-470 WB Ramp and Blue
6873	2022	Injury	Rear End	I-470 WB Ramp and Blue
6640	2022	PDO	Angle	I-470 WB Ramp and Blue
6616	2022	PDO	Angle	I-470 WB Ramp and Blue
5598	2022	Injury	Angle	I-470 WB Ramp and Blue
5562	2022	PDO	Angle	I-470 WB Ramp and Blue
4286	2022	Injury	Angle	I-470 WB Ramp and Blue
4194	2022	PDO	Rear End	I-470 WB Ramp and Blue
3572	2022	PDO	Angle	I-470 WB Ramp and Blue
3277	2022	PDO	Rear End	I-470 WB Ramp and Blue
3143	2022	PDO	Angle	I-470 WB Ramp and Blue
6067	2021	Injury	Angle	I-470 WB Ramp and Blue
5857	2021	Injury	Angle	I-470 WB Ramp and Blue
6196	2023	Injury	Angle	Midway and Blue
1081	2023	PDO	Angle	Midway and Blue
826	2022	PDO	Rear End	Midway and Blue
2090	2021	PDO	Rear End	Midway and Blue
1953	2023	PDO	Angle	Northern and Blue

1718	2023	PDO	Angle	Northern and Blue
6549	2022	PDO	Angle	Northern and Blue
2751	2022	Injury	Angle	Northern and Blue
7131	2021	PDO	Angle	Northern and Blue
5149	2021	PDO	Rear End	Northern and Blue
5871	2023	PDO	Angle	Southern and Blue
3458	2023	PDO	Angle	Southern and Blue
2335	2023	PDO	Rear End	Southern and Blue
748	2023	PDO	Sideswipe	Southern and Blue
126	2023	PDO	Rear End	Southern and Blue
8735	2022	PDO	Rear End	Southern and Blue
7733	2022	PDO	Sideswipe	Southern and Blue
6355	2022	PDO	Angle	Southern and Blue
5565	2022	PDO	Rear End	Southern and Blue
8738	2021	PDO	Sideswipe	Southern and Blue
8208	2021	PDO	Rear End	Southern and Blue
7690	2021	PDO	Angle	Southern and Blue
2009	2021	PDO	Rear End	Southern and Blue
1640	2021	PDO	Rear End	Southern and Blue
1357	2021	PDO	Fixed Object	Southern and Blue
7331	2023	PDO	Fixed Object	Tudor and Main
8952	2023	PDO	Fixed Object	Tudor and Ward
7077	2022	PDO	Angle	Tudor and Ward
5743	2021	PDO	Fixed Object	Tudor and Ward
9396	2020	PDO	Angle	Tudor and Ward
5907	2020	Injury	Fixed Object	Tudor and Ward

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	214	2	2	173	0	2	0	2	0	0	1
Future Vol, veh/h	0	214	2	2	173	0	2	0	2	0	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	210	-	160	215	-	215	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	80	80	80	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	238	2	3	216	0	2	0	2	0	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	216	0	0	240	0	0	352	460	119	341	462	108
Stage 1	-	-	-	-	-	-	238	238	-	222	222	-
Stage 2	-	-	-	-	-	-	114	222	-	119	240	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1351	-	-	1324	-	-	578	497	910	589	495	925
Stage 1	-	-	-	-	-	-	744	707	-	760	718	-
Stage 2	-	-	-	-	-	-	879	718	-	873	706	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1351	-	-	1324	-	-	576	496	910	587	494	925
Mov Cap-2 Maneuver	-	-	-	-	-	-	576	496	-	587	494	-
Stage 1	-	-	-	-	-	-	744	707	-	760	717	-
Stage 2	-	-	-	-	-	-	876	717	-	871	706	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.1	10.1	8.9
HCM LOS			B	A

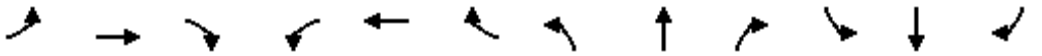
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	705	1351	-	-	1324	-	-	925
HCM Lane V/C Ratio	0.006	-	-	-	0.002	-	-	0.001
HCM Control Delay (s)	10.1	0	-	-	7.7	-	-	8.9
HCM Lane LOS	B	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	1	4	68	137	25	219	135	220	481
v/c Ratio	0.01	0.01	0.35	0.38	0.04	0.12	0.15	0.27	0.19
Control Delay	26.0	0.0	33.0	8.1	3.8	9.9	2.2	4.7	6.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	26.0	0.0	33.0	8.1	3.8	9.9	2.2	4.7	6.2
Queue Length 50th (ft)	0	0	24	0	2	23	0	23	27
Queue Length 95th (ft)	4	0	66	24	9	42	15	39	61
Internal Link Dist (ft)		394	448			689			1243
Turn Bay Length (ft)					200		90	150	
Base Capacity (vph)	533	890	522	704	676	1804	881	1043	2475
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.00	0.00	0.13	0.19	0.04	0.12	0.15	0.21	0.19

Intersection Summary

HCM 6th Signalized Intersection Summary
15: Ward Rd & Tudor Rd

AM Existing



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	0	4	52	1	107	23	175	108	152	331	1
Future Volume (veh/h)	1	0	4	52	1	107	23	175	108	152	331	1
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1	0	4	67	1	137	25	219	135	220	480	1
Peak Hour Factor	0.92	0.92	0.92	0.78	0.92	0.78	0.92	0.80	0.80	0.69	0.69	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	293	0	190	270	3	190	632	1854	827	816	2272	5
Arrive On Green	0.12	0.00	0.12	0.12	0.12	0.12	0.03	0.52	0.52	0.12	0.62	0.62
Sat Flow, veh/h	1416	0	1585	1371	27	1585	1781	3554	1585	1781	3638	8
Grp Volume(v), veh/h	1	0	4	68	0	137	25	219	135	220	234	247
Grp Sat Flow(s),veh/h/ln	1416	0	1585	1398	0	1585	1781	1777	1585	1781	1777	1869
Q Serve(g_s), s	0.0	0.0	0.2	3.0	0.0	5.7	0.4	2.1	3.0	3.5	3.9	3.9
Cycle Q Clear(g_c), s	0.0	0.0	0.2	3.1	0.0	5.7	0.4	2.1	3.0	3.5	3.9	3.9
Prop In Lane	1.00		1.00	0.99		1.00	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	293	0	190	273	0	190	632	1854	827	816	1110	1167
V/C Ratio(X)	0.00	0.00	0.02	0.25	0.00	0.72	0.04	0.12	0.16	0.27	0.21	0.21
Avail Cap(c_a), veh/h	653	0	594	613	0	571	779	1854	827	1146	1110	1167
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.4	0.0	26.4	27.8	0.0	28.8	7.0	8.3	8.5	5.1	5.5	5.5
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.5	0.0	5.0	0.0	0.1	0.4	0.2	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.1	1.0	0.0	2.3	0.1	0.8	1.0	1.0	1.2	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.4	0.0	26.5	28.2	0.0	33.9	7.0	8.4	8.9	5.3	6.0	5.9
LnGrp LOS	C	A	C	C	A	C	A	A	A	A	A	A
Approach Vol, veh/h		5			205			379			701	
Approach Delay, s/veh		26.4			32.0			8.5			5.8	
Approach LOS		C			C			A			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	13.4	41.0		13.7	6.4	48.0		13.7				
Change Period (Y+Rc), s	5.5	5.5		* 5.5	4.5	5.5		5.5				
Max Green Setting (Gmax), s	20.5	28.5		* 26	7.5	42.5		24.5				
Max Q Clear Time (g_c+I1), s	5.5	5.0		2.2	2.4	5.9		7.7				
Green Ext Time (p_c), s	0.5	1.8		0.0	0.0	3.0		0.7				

Intersection Summary	
HCM 6th Ctrl Delay	10.8
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	0	3	8	0	11	9	162	1	50	160	6
Future Vol, veh/h	2	0	3	8	0	11	9	162	1	50	160	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	25	-	-	200	-	145	190	-	190
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	63	63	92	79	79	92	95	95	95	80	80	80
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	0	3	10	0	12	9	171	1	63	200	8

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	430	516	100	415	523	86	208	0	0	172	0	0
Stage 1	326	326	-	189	189	-	-	-	-	-	-	-
Stage 2	104	190	-	226	334	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	509	461	936	522	457	956	1360	-	-	1402	-	-
Stage 1	661	647	-	795	743	-	-	-	-	-	-	-
Stage 2	890	742	-	756	642	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	483	437	936	500	433	956	1360	-	-	1402	-	-
Mov Cap-2 Maneuver	483	437	-	500	433	-	-	-	-	-	-	-
Stage 1	656	618	-	789	738	-	-	-	-	-	-	-
Stage 2	873	737	-	720	613	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.7	10.4	0.4	1.8
HCM LOS	B	B		

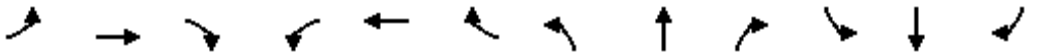
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1360	-	-	640	500	956	1402	-	-
HCM Lane V/C Ratio	0.007	-	-	0.01	0.02	0.013	0.045	-	-
HCM Control Delay (s)	7.7	-	-	10.7	12.3	8.8	7.7	-	-
HCM Lane LOS	A	-	-	B	B	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0.1	0	0.1	-	-

Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	184	177	38	117	135	105	24
v/c Ratio	0.46	0.43	0.15	0.13	0.05	0.05	0.02
Control Delay	38.6	37.9	2.5	3.3	2.9	7.2	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	38.6	37.9	2.5	3.3	2.9	7.2	0.1
Queue Length 50th (ft)	47	46	0	13	7	10	0
Queue Length 95th (ft)	71	70	1	26	14	21	0
Internal Link Dist (ft)		962			586	245	
Turn Bay Length (ft)	425		310	480			135
Base Capacity (vph)	1247	1285	626	1090	2673	2249	1035
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.15	0.14	0.06	0.11	0.05	0.05	0.02

Intersection Summary

HCM 6th Signalized Intersection Summary
38: Blue Pkwy & I-470 WB Ramp

AM Existing



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	151	145	31	97	112	0	0	88	20
Future Volume (veh/h)	0	0	0	151	145	31	97	112	0	0	88	20
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1870	1870	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				184	177	0	117	135	0	0	105	0
Peak Hour Factor				0.82	0.82	0.82	0.83	0.83	0.83	0.84	0.84	0.84
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				333	342		1020	2745	0	0	2254	
Arrive On Green				0.10	0.10	0.00	0.07	0.77	0.00	0.00	0.63	0.00
Sat Flow, veh/h				3456	3554	1585	1781	3647	0	0	3647	1585
Grp Volume(v), veh/h				184	177	0	117	135	0	0	105	0
Grp Sat Flow(s),veh/h/ln				1728	1777	1585	1781	1777	0	0	1777	1585
Q Serve(g_s), s				4.2	3.9	0.0	1.6	0.7	0.0	0.0	0.9	0.0
Cycle Q Clear(g_c), s				4.2	3.9	0.0	1.6	0.7	0.0	0.0	0.9	0.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				333	342		1020	2745	0	0	2254	
V/C Ratio(X)				0.55	0.52		0.11	0.05	0.00	0.00	0.05	
Avail Cap(c_a), veh/h				1284	1321		1531	2745	0	0	2254	
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				35.5	35.4	0.0	3.2	2.2	0.0	0.0	5.7	0.0
Incr Delay (d2), s/veh				1.4	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				1.8	1.7	0.0	0.4	0.2	0.0	0.0	0.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				36.9	36.6	0.0	3.3	2.2	0.0	0.0	5.7	0.0
LnGrp LOS				D	D		A	A	A	A	A	
Approach Vol, veh/h					361			252			105	
Approach Delay, s/veh					36.8			2.7			5.7	
Approach LOS					D			A			A	

Timer - Assigned Phs	2		5	6		8						
Phs Duration (G+Y+Rc), s	69.0		11.4	57.6		13.3						
Change Period (Y+Rc), s	* 5.4		* 5.4	* 5.4		5.4						
Max Green Setting (Gmax), s	* 64		* 30	* 29		30.6						
Max Q Clear Time (g_c+I1), s	2.7		3.6	2.9		6.2						
Green Ext Time (p_c), s	0.9		0.3	0.6		1.7						

Intersection Summary		
HCM 6th Ctrl Delay	20.3	
HCM 6th LOS	C	

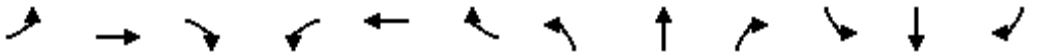
Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	36	301	248	206	79	17	257
v/c Ratio	0.12	0.50	0.52	0.09	0.08	0.02	0.11
Control Delay	25.5	29.7	8.1	6.5	2.5	4.8	4.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	25.5	29.7	8.1	6.5	2.5	4.8	4.6
Queue Length 50th (ft)	14	64	0	13	0	2	17
Queue Length 95th (ft)	36	97	51	42	17	9	34
Internal Link Dist (ft)		816		542			586
Turn Bay Length (ft)	230		230		280	780	
Base Capacity (vph)	1121	2241	1093	2281	1050	818	2389
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.03	0.13	0.23	0.09	0.08	0.02	0.11

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	32	265	218	0	0	0	0	177	68	15	224	0
Future Volume (veh/h)	32	265	218	0	0	0	0	177	68	15	224	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	36	301	248				0	206	79	17	257	0
Peak Hour Factor	0.88	0.88	0.88				0.86	0.86	0.86	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	380	758	338				0	1936	863	745	2279	0
Arrive On Green	0.21	0.21	0.21				0.00	0.54	0.54	0.02	0.64	0.00
Sat Flow, veh/h	1781	3554	1585				0	3647	1585	1781	3647	0
Grp Volume(v), veh/h	36	301	248				0	206	79	17	257	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585				0	1777	1585	1781	1777	0
Q Serve(g_s), s	1.2	5.5	11.0				0.0	2.1	1.8	0.3	2.1	0.0
Cycle Q Clear(g_c), s	1.2	5.5	11.0				0.0	2.1	1.8	0.3	2.1	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	380	758	338				0	1936	863	745	2279	0
V/C Ratio(X)	0.09	0.40	0.73				0.00	0.11	0.09	0.02	0.11	0.00
Avail Cap(c_a), veh/h	1072	2138	954				0	1936	863	974	2279	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	23.9	25.6	27.7				0.0	8.3	8.3	6.4	5.2	0.0
Incr Delay (d2), s/veh	0.1	0.3	3.1				0.0	0.1	0.2	0.0	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	2.3	4.3				0.0	0.8	0.6	0.1	0.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.0	25.9	30.8				0.0	8.4	8.5	6.4	5.3	0.0
LnGrp LOS	C	C	C				A	A	A	A	A	A
Approach Vol, veh/h		585						285			274	
Approach Delay, s/veh		27.9						8.4			5.4	
Approach LOS		C						A			A	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	7.3	46.7		21.6		54.0
Change Period (Y+Rc), s	5.5	5.5		5.5		5.5
Max Green Setting (Gmax), s	11.5	31.5		45.5		48.5
Max Q Clear Time (g_c+I1), s	2.3	4.1		13.0		4.1
Green Ext Time (p_c), s	0.0	1.6		3.1		1.8

Intersection Summary			
HCM 6th Ctrl Delay			17.7
HCM 6th LOS			B

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	229	262	24	196	119	13
v/c Ratio	0.39	0.38	0.07	0.33	0.05	0.01
Control Delay	23.2	5.1	20.1	22.5	4.0	2.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	23.2	5.1	20.1	22.5	4.0	2.4
Queue Length 50th (ft)	37	0	3	32	6	0
Queue Length 95th (ft)	65	27	10	50	12	4
Internal Link Dist (ft)	383			624	526	
Turn Bay Length (ft)		360	325			210
Base Capacity (vph)	3462	2732	2153	3462	2261	1047
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.07	0.10	0.01	0.06	0.05	0.01

Intersection Summary

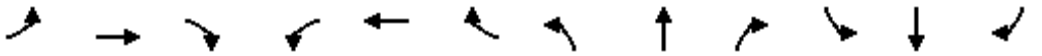
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	206	236	19	157	94	10
Future Volume (veh/h)	206	236	19	157	94	10
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	229	262	24	196	119	13
Peak Hour Factor	0.90	0.90	0.80	0.80	0.79	0.79
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	599	470	498	599	2275	1043
Arrive On Green	0.17	0.17	0.17	0.17	0.66	0.66
Sat Flow, veh/h	3647	2790	2234	3647	3456	1585
Grp Volume(v), veh/h	229	262	24	196	119	13
Grp Sat Flow(s),veh/h/ln	1777	1395	1117	1777	1728	1585
Q Serve(g_s), s	3.3	5.0	0.6	2.8	0.7	0.2
Cycle Q Clear(g_c), s	3.3	5.0	3.9	2.8	0.7	0.2
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	599	470	498	599	2275	1043
V/C Ratio(X)	0.38	0.56	0.05	0.33	0.05	0.01
Avail Cap(c_a), veh/h	3509	2755	2328	3509	2275	1043
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.3	22.0	23.0	21.1	3.5	3.4
Incr Delay (d2), s/veh	0.4	1.0	0.0	0.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	1.6	0.1	1.1	0.2	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	21.7	23.1	23.1	21.4	3.5	3.4
LnGrp LOS	C	C	C	C	A	A
Approach Vol, veh/h	491			220	132	
Approach Delay, s/veh	22.4			21.6	3.5	
Approach LOS	C			C	A	

Timer - Assigned Phs	2	4	8
Phs Duration (G+Y+Rc), s	43.0	14.7	14.7
Change Period (Y+Rc), s	5.0	5.0	5.0
Max Green Setting (Gmax), s	38.0	57.0	57.0
Max Q Clear Time (g_c+I1), s	2.7	7.0	5.9
Green Ext Time (p_c), s	0.4	2.7	1.5

Intersection Summary	
HCM 6th Ctrl Delay	19.3
HCM 6th LOS	B

Lane Group	EBL	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	23	9	3	1	15	87	3	7	207	67
v/c Ratio	0.11	0.01	0.01	0.00	0.08	0.03	0.00	0.04	0.08	0.05
Control Delay	23.1	0.0	21.7	0.0	27.5	5.3	0.0	27.5	5.0	1.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	23.1	0.0	21.7	0.0	27.5	5.3	0.0	27.5	5.0	1.1
Queue Length 50th (ft)	8	0	1	0	5	3	0	2	7	0
Queue Length 95th (ft)	26	0	7	0	23	21	0	15	44	12
Internal Link Dist (ft)				394		623			526	
Turn Bay Length (ft)	110				290		210	290		155
Base Capacity (vph)	511	1092	391	1130	392	2625	1500	363	2619	1515
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.05	0.01	0.01	0.00	0.04	0.03	0.00	0.02	0.08	0.04

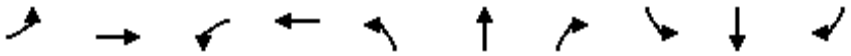
Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	21	0	8	3	0	1	14	80	3	6	190	62
Future Volume (veh/h)	21	0	8	3	0	1	14	80	3	6	190	62
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	23	0	9	3	0	1	15	87	3	7	207	67
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	208	87	74	160	0	31	40	2231	1003	20	2191	1028
Arrive On Green	0.03	0.00	0.05	0.00	0.00	0.02	0.02	0.63	0.63	0.01	0.62	0.62
Sat Flow, veh/h	1781	1870	1585	1781	0	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	23	0	9	3	0	1	15	87	3	7	207	67
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	0	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	0.7	0.0	0.3	0.1	0.0	0.0	0.5	0.5	0.0	0.2	1.4	0.9
Cycle Q Clear(g_c), s	0.7	0.0	0.3	0.1	0.0	0.0	0.5	0.5	0.0	0.2	1.4	0.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	208	87	74	160	0	31	40	2231	1003	20	2191	1028
V/C Ratio(X)	0.11	0.00	0.12	0.02	0.00	0.03	0.38	0.04	0.00	0.36	0.09	0.07
Avail Cap(c_a), veh/h	687	820	695	535	0	559	414	2231	1003	383	2191	1028
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.5	0.0	26.6	27.7	0.0	28.0	28.0	4.1	3.9	28.5	4.5	3.7
Incr Delay (d2), s/veh	0.2	0.0	0.7	0.0	0.0	0.4	5.9	0.0	0.0	10.6	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.1	0.0	0.0	0.0	0.3	0.1	0.0	0.1	0.4	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.7	0.0	27.3	27.8	0.0	28.4	33.9	4.2	3.9	39.1	4.6	3.9
LnGrp LOS	C	A	C	C	A	C	C	A	A	D	A	A
Approach Vol, veh/h		32			4			105			281	
Approach Delay, s/veh		26.9			27.9			8.4			5.3	
Approach LOS		C			C			A			A	

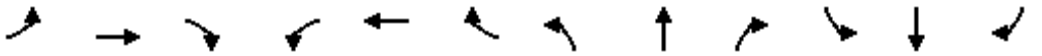
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.1	41.0	4.8	7.2	5.8	40.4	6.4	5.6
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	12.5	36.5	12.5	25.5	13.5	35.5	17.5	20.5
Max Q Clear Time (g_c+I1), s	2.2	2.5	2.1	2.3	2.5	3.4	2.7	2.0
Green Ext Time (p_c), s	0.0	0.5	0.0	0.0	0.0	1.6	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	7.9
HCM 6th LOS	A



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	4	29	7	10	31	100	17	37	205	15
v/c Ratio	0.02	0.03	0.03	0.01	0.09	0.04	0.01	0.10	0.07	0.01
Control Delay	22.0	0.1	22.0	0.0	29.1	7.3	0.0	28.9	6.7	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	22.0	0.1	22.0	0.0	29.1	7.3	0.0	28.9	6.7	0.0
Queue Length 50th (ft)	1	0	2	0	4	0	0	4	0	0
Queue Length 95th (ft)	5	0	9	0	19	24	0	18	38	0
Internal Link Dist (ft)		404		466		564			623	
Turn Bay Length (ft)					240		170	240		300
Base Capacity (vph)	449	1052	452	1142	807	2792	1281	807	2796	1283
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.01	0.03	0.02	0.01	0.04	0.04	0.01	0.05	0.07	0.01

Intersection Summary



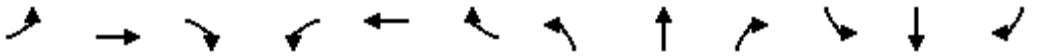
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	0	16	5	0	7	27	88	15	29	160	12
Future Volume (veh/h)	2	0	16	5	0	7	27	88	15	29	160	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	4	0	29	7	0	10	31	100	17	37	205	15
Peak Hour Factor	0.56	0.56	0.56	0.69	0.69	0.69	0.88	0.88	0.88	0.78	0.78	0.78
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	197	0	79	182	0	86	139	2019	907	158	2038	908
Arrive On Green	0.01	0.00	0.05	0.01	0.00	0.06	0.04	0.57	0.57	0.05	0.57	0.57
Sat Flow, veh/h	1781	0	1562	1781	0	1562	3456	3554	1565	3456	3554	1565
Grp Volume(v), veh/h	4	0	29	7	0	10	31	100	17	37	205	15
Grp Sat Flow(s),veh/h/ln	1781	0	1562	1781	0	1562	1728	1777	1565	1728	1777	1565
Q Serve(g_s), s	0.1	0.0	1.1	0.2	0.0	0.4	0.5	0.8	0.3	0.6	1.6	0.3
Cycle Q Clear(g_c), s	0.1	0.0	1.1	0.2	0.0	0.4	0.5	0.8	0.3	0.6	1.6	0.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	197	0	79	182	0	86	139	2019	907	158	2038	908
V/C Ratio(X)	0.02	0.00	0.37	0.04	0.00	0.12	0.22	0.05	0.02	0.23	0.10	0.02
Avail Cap(c_a), veh/h	591	0	558	567	0	558	785	2019	907	785	2038	908
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.4	0.0	28.3	27.2	0.0	27.7	28.6	5.9	5.5	28.4	5.9	5.5
Incr Delay (d2), s/veh	0.0	0.0	2.8	0.1	0.0	0.6	0.8	0.0	0.0	0.8	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.5	0.1	0.0	0.1	0.2	0.2	0.1	0.3	0.5	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.5	0.0	31.1	27.3	0.0	28.3	29.5	6.0	5.6	29.1	6.0	5.5
LnGrp LOS	C	A	C	C	A	C	C	A	A	C	A	A
Approach Vol, veh/h		33			17			148			257	
Approach Delay, s/veh		30.7			27.9			10.8			9.3	
Approach LOS		C			C			B			A	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.8	40.0	5.7	8.1	7.5	40.3	5.4	8.4
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	14.0	35.0	14.0	22.0	14.0	35.0	14.0	22.0
Max Q Clear Time (g_c+I1), s	2.6	2.8	2.2	3.1	2.5	3.6	2.1	2.4
Green Ext Time (p_c), s	0.0	0.7	0.0	0.1	0.0	1.4	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	12.1
HCM 6th LOS	B

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	27	3	123	16	12	139	113	51	25	135	44
v/c Ratio	0.09	0.02	0.45	0.08	0.07	0.34	0.05	0.04	0.15	0.08	0.04
Control Delay	21.6	30.0	12.4	26.3	19.0	31.2	9.8	1.2	32.8	12.7	1.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	21.6	30.0	12.4	26.3	19.0	31.2	9.8	1.2	32.8	12.7	1.0
Queue Length 50th (ft)	9	1	0	6	0	28	8	0	10	17	0
Queue Length 95th (ft)	27	8	42	20	16	54	29	7	33	37	6
Internal Link Dist (ft)		380			478		1188			564	
Turn Bay Length (ft)						170		260	310		325
Base Capacity (vph)	404	820	767	299	643	806	2096	1299	311	1647	1216
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.07	0.00	0.16	0.05	0.02	0.17	0.05	0.04	0.08	0.08	0.04

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	24	3	108	15	1	10	118	96	43	22	120	39
Future Volume (veh/h)	24	3	108	15	1	10	118	96	43	22	120	39
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	27	3	123	16	1	11	139	113	51	25	135	44
Peak Hour Factor	0.88	0.88	0.88	0.93	0.93	0.93	0.85	0.85	0.85	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	299	199	169	288	13	138	299	1851	863	60	1664	799
Arrive On Green	0.04	0.11	0.11	0.02	0.09	0.09	0.09	0.52	0.52	0.03	0.47	0.47
Sat Flow, veh/h	1781	1870	1585	1781	134	1472	3456	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	27	3	123	16	0	12	139	113	51	25	135	44
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	0	1605	1728	1777	1585	1781	1777	1585
Q Serve(g_s), s	0.8	0.1	4.8	0.5	0.0	0.4	2.4	1.0	1.0	0.9	1.3	0.9
Cycle Q Clear(g_c), s	0.8	0.1	4.8	0.5	0.0	0.4	2.4	1.0	1.0	0.9	1.3	0.9
Prop In Lane	1.00		1.00	1.00		0.92	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	299	199	169	288	0	150	299	1851	863	60	1664	799
V/C Ratio(X)	0.09	0.02	0.73	0.06	0.00	0.08	0.46	0.06	0.06	0.42	0.08	0.06
Avail Cap(c_a), veh/h	601	886	751	527	0	684	873	1851	863	337	1664	799
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.4	25.3	27.4	24.9	0.0	26.2	27.5	7.5	6.8	30.0	9.3	8.0
Incr Delay (d2), s/veh	0.1	0.0	5.9	0.1	0.0	0.2	1.1	0.1	0.1	4.5	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	2.0	0.2	0.0	0.2	1.0	0.3	0.3	0.4	0.5	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.5	25.4	33.4	25.0	0.0	26.4	28.7	7.6	6.9	34.5	9.4	8.1
LnGrp LOS	C	C	C	C	A	C	C	A	A	C	A	A
Approach Vol, veh/h		153			28			303			204	
Approach Delay, s/veh		31.6			25.6			17.1			12.2	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.1	38.0	6.5	11.7	10.5	34.7	7.3	10.9
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	12.0	33.0	10.0	30.0	16.0	29.0	13.0	27.0
Max Q Clear Time (g_c+I1), s	2.9	3.0	2.5	6.8	4.4	3.3	2.8	2.4
Green Ext Time (p_c), s	0.0	0.8	0.0	0.4	0.3	0.9	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	19.2
HCM 6th LOS	B

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	418	1	1	265	1	2	0	3	1	0	1
Future Vol, veh/h	0	418	1	1	265	1	2	0	3	1	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	210	-	160	215	-	215	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	464	1	1	294	1	2	0	4	1	0	1

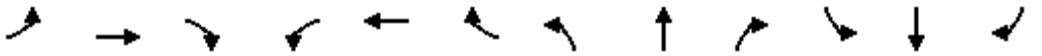
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	295	0	0	465	0	0	613	761	232	528	761	147
Stage 1	-	-	-	-	-	-	464	464	-	296	296	-
Stage 2	-	-	-	-	-	-	149	297	-	232	465	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1263	-	-	1093	-	-	377	334	770	433	334	873
Stage 1	-	-	-	-	-	-	548	562	-	688	667	-
Stage 2	-	-	-	-	-	-	838	666	-	750	561	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1263	-	-	1093	-	-	376	334	770	431	334	873
Mov Cap-2 Maneuver	-	-	-	-	-	-	376	334	-	431	334	-
Stage 1	-	-	-	-	-	-	548	562	-	688	666	-
Stage 2	-	-	-	-	-	-	836	665	-	747	561	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0	11.7	11.3
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	543	1263	-	-	1093	-	-	577
HCM Lane V/C Ratio	0.011	-	-	-	0.001	-	-	0.004
HCM Control Delay (s)	11.7	0	-	-	8.3	-	-	11.3
HCM Lane LOS	B	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	3	15	124	127	13	201	86	201	291
v/c Ratio	0.01	0.05	0.54	0.33	0.02	0.12	0.11	0.26	0.13
Control Delay	24.7	14.8	36.3	7.3	4.4	12.0	1.1	6.0	6.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	24.7	14.8	36.3	7.3	4.4	12.0	1.1	6.0	6.2
Queue Length 50th (ft)	1	1	47	0	1	23	0	26	18
Queue Length 95th (ft)	8	16	91	24	6	52	9	57	54
Internal Link Dist (ft)		394	448			689			1243
Turn Bay Length (ft)					200		90	150	
Base Capacity (vph)	575	746	609	796	812	1623	800	986	2278
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.01	0.02	0.20	0.16	0.02	0.12	0.11	0.20	0.13

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	2	12	95	1	98	9	181	77	167	241	1
Future Volume (veh/h)	3	2	12	95	1	98	9	181	77	167	241	1
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	3	2	13	123	1	127	13	201	86	201	290	1
Peak Hour Factor	0.92	0.92	0.92	0.77	0.77	0.77	0.70	0.90	0.90	0.83	0.83	0.83
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	155	29	189	278	1	214	781	1850	825	837	2287	8
Arrive On Green	0.13	0.13	0.13	0.13	0.13	0.13	0.02	0.52	0.52	0.11	0.63	0.63
Sat Flow, veh/h	1262	216	1402	1307	11	1585	1781	3554	1585	1781	3632	13
Grp Volume(v), veh/h	3	0	15	124	0	127	13	201	86	201	142	149
Grp Sat Flow(s),veh/h/ln	1262	0	1618	1317	0	1585	1781	1777	1585	1781	1777	1868
Q Serve(g_s), s	0.2	0.0	0.6	6.0	0.0	5.3	0.2	2.0	1.9	3.3	2.3	2.3
Cycle Q Clear(g_c), s	6.7	0.0	0.6	6.6	0.0	5.3	0.2	2.0	1.9	3.3	2.3	2.3
Prop In Lane	1.00		0.87	0.99		1.00	1.00		1.00	1.00		0.01
Lane Grp Cap(c), veh/h	155	0	218	279	0	214	781	1850	825	837	1119	1176
V/C Ratio(X)	0.02	0.00	0.07	0.44	0.00	0.59	0.02	0.11	0.10	0.24	0.13	0.13
Avail Cap(c_a), veh/h	547	0	721	715	0	707	966	1850	825	1231	1119	1176
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.5	0.0	26.7	29.5	0.0	28.7	4.5	8.6	8.6	5.4	5.3	5.3
Incr Delay (d2), s/veh	0.0	0.0	0.1	1.1	0.0	2.6	0.0	0.1	0.3	0.1	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.2	2.0	0.0	2.1	0.1	0.7	0.7	1.0	0.7	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.5	0.0	26.8	30.7	0.0	31.4	4.5	8.7	8.8	5.6	5.5	5.5
LnGrp LOS	C	A	C	C	A	C	A	A	A	A	A	A
Approach Vol, veh/h		18			251			300			492	
Approach Delay, s/veh		27.8			31.0			8.6			5.5	
Approach LOS		C			C			A			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	13.3	42.3		15.0	5.6	50.0		15.0				
Change Period (Y+Rc), s	5.5	5.5		5.5	4.5	5.5		5.5				
Max Green Setting (Gmax), s	23.5	28.5		31.5	8.5	44.5		31.5				
Max Q Clear Time (g_c+I1), s	5.3	4.0		8.7	2.2	4.3		8.6				
Green Ext Time (p_c), s	0.5	1.5		0.0	0.0	1.7		1.0				

Intersection Summary			
HCM 6th Ctrl Delay		12.8	
HCM 6th LOS		B	

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	9	0	9	3	0	38	2	222	1	24	397	1
Future Vol, veh/h	9	0	9	3	0	38	2	222	1	24	397	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	25	-	-	200	-	145	190	-	190
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	57	57	92	47	47	92	92	92	92	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	16	0	10	6	0	41	2	241	1	26	436	1

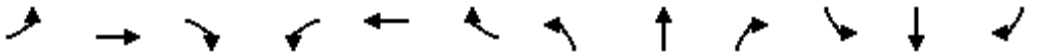
Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	613	734	218	515	734	121	437	0	0	242	0	0
Stage 1	488	488	-	245	245	-	-	-	-	-	-	-
Stage 2	125	246	-	270	489	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	377	346	786	443	346	908	1119	-	-	1322	-	-
Stage 1	530	548	-	737	702	-	-	-	-	-	-	-
Stage 2	866	701	-	713	548	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	354	338	786	430	338	908	1119	-	-	1322	-	-
Mov Cap-2 Maneuver	354	338	-	430	338	-	-	-	-	-	-	-
Stage 1	529	537	-	736	701	-	-	-	-	-	-	-
Stage 2	825	700	-	690	537	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	13.5	9.8	0.1	0.4
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1119	-	-	448	430	908	1322	-	-
HCM Lane V/C Ratio	0.002	-	-	0.057	0.015	0.045	0.02	-	-
HCM Control Delay (s)	8.2	-	-	13.5	13.5	9.2	7.8	-	-
HCM Lane LOS	A	-	-	B	B	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0	0.1	0.1	-	-

Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	207	478	15	243	148	196	39
v/c Ratio	0.30	0.67	0.04	0.31	0.06	0.11	0.05
Control Delay	30.4	37.0	0.2	7.0	5.4	13.1	0.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	30.4	37.0	0.2	7.0	5.4	13.1	0.8
Queue Length 50th (ft)	50	128	0	44	12	28	0
Queue Length 95th (ft)	72	159	0	80	24	53	3
Internal Link Dist (ft)		962			586	245	
Turn Bay Length (ft)	425		310	480			135
Base Capacity (vph)	1407	1450	694	931	2396	1770	831
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.15	0.33	0.02	0.26	0.06	0.11	0.05

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	170	392	12	202	123	0	0	165	33
Future Volume (veh/h)	0	0	0	170	392	12	202	123	0	0	165	33
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1870	1870	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				207	478	0	243	148	0	0	196	0
Peak Hour Factor				0.82	0.82	0.82	0.83	0.83	0.83	0.84	0.84	0.84
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				674	693		841	2424	0	0	1902	
Arrive On Green				0.19	0.19	0.00	0.09	0.68	0.00	0.00	0.54	0.00
Sat Flow, veh/h				3456	3554	1585	1781	3647	0	0	3647	1585
Grp Volume(v), veh/h				207	478	0	243	148	0	0	196	0
Grp Sat Flow(s),veh/h/ln				1728	1777	1585	1781	1777	0	0	1777	1585
Q Serve(g_s), s				4.4	10.8	0.0	4.8	1.2	0.0	0.0	2.3	0.0
Cycle Q Clear(g_c), s				4.4	10.8	0.0	4.8	1.2	0.0	0.0	2.3	0.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				674	693		841	2424	0	0	1902	
V/C Ratio(X)				0.31	0.69		0.29	0.06	0.00	0.00	0.10	
Avail Cap(c_a), veh/h				1427	1468		1240	2424	0	0	1902	
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				29.7	32.3	0.0	6.4	4.5	0.0	0.0	9.9	0.0
Incr Delay (d2), s/veh				0.3	1.2	0.0	0.2	0.0	0.0	0.0	0.1	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				1.8	4.6	0.0	1.6	0.4	0.0	0.0	0.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				30.0	33.5	0.0	6.6	4.6	0.0	0.0	10.0	0.0
LnGrp LOS				C	C		A	A	A	A	A	
Approach Vol, veh/h					685			391			196	
Approach Delay, s/veh					32.4			5.9			10.0	
Approach LOS					C			A			A	

Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		64.0			12.7	51.3		22.2				
Change Period (Y+Rc), s		* 5.2			* 5.2	* 5.2		5.4				
Max Green Setting (Gmax), s		* 59			* 27	* 27		35.6				
Max Q Clear Time (g_c+I1), s		3.2			6.8	4.3		12.8				
Green Ext Time (p_c), s		1.0			0.7	1.2		4.0				

Intersection Summary		
HCM 6th Ctrl Delay	20.8	
HCM 6th LOS	C	

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

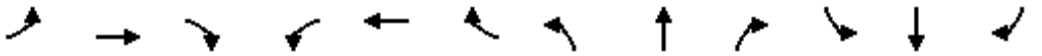
Unsignalized Delay for [EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	20	323	385	359	181	21	364
v/c Ratio	0.09	0.47	0.65	0.16	0.17	0.03	0.16
Control Delay	25.2	26.0	9.6	7.1	2.3	5.2	5.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	25.2	26.0	9.6	7.1	2.3	5.2	5.3
Queue Length 50th (ft)	8	62	11	25	0	3	25
Queue Length 95th (ft)	22	94	71	72	28	11	50
Internal Link Dist (ft)		816		542			586
Turn Bay Length (ft)	230		230		280	780	
Base Capacity (vph)	1351	2666	1279	2203	1054	705	2309
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.01	0.12	0.30	0.16	0.17	0.03	0.16

Intersection Summary

HCM 6th Signalized Intersection Summary
43: Blue Pkwy & I-470 EB Ramp

PM Existing



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	284	339	0	0	0	0	309	156	18	317	0
Future Volume (veh/h)	18	284	339	0	0	0	0	309	156	18	317	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	20	323	385				0	359	181	21	364	0
Peak Hour Factor	0.88	0.88	0.88				0.86	0.86	0.86	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	536	1069	477				0	1751	781	513	2044	0
Arrive On Green	0.30	0.30	0.30				0.00	0.49	0.49	0.02	0.58	0.00
Sat Flow, veh/h	1781	3554	1585				0	3647	1585	1781	3647	0
Grp Volume(v), veh/h	20	323	385				0	359	181	21	364	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585				0	1777	1585	1781	1777	0
Q Serve(g_s), s	0.6	5.3	17.2				0.0	4.4	5.0	0.4	3.7	0.0
Cycle Q Clear(g_c), s	0.6	5.3	17.2				0.0	4.4	5.0	0.4	3.7	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	536	1069	477				0	1751	781	513	2044	0
V/C Ratio(X)	0.04	0.30	0.81				0.00	0.21	0.23	0.04	0.18	0.00
Avail Cap(c_a), veh/h	1199	2392	1067				0	1751	781	669	2044	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	18.9	20.6	24.7				0.0	11.0	11.1	8.4	7.7	0.0
Incr Delay (d2), s/veh	0.0	0.2	3.3				0.0	0.3	0.7	0.0	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	2.1	6.5				0.0	1.6	1.8	0.1	1.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.9	20.7	28.0				0.0	11.2	11.8	8.4	7.9	0.0
LnGrp LOS	B	C	C				A	B	B	A	A	A
Approach Vol, veh/h		728						540			385	
Approach Delay, s/veh		24.5						11.4			7.9	
Approach LOS		C						B			A	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	6.3	42.7		27.5		49.0
Change Period (Y+Rc), s	4.5	5.0		4.5		5.0
Max Green Setting (Gmax), s	8.5	31.0		51.5		44.0
Max Q Clear Time (g_c+I1), s	2.4	7.0		19.2		5.7
Green Ext Time (p_c), s	0.0	3.0		3.8		2.6

Intersection Summary	
HCM 6th Ctrl Delay	16.4
HCM 6th LOS	B

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Group Flow (vph)	394	389	62	305	262	70
v/c Ratio	0.56	0.16	0.17	0.29	0.14	0.08
Control Delay	27.9	0.4	30.6	17.2	9.5	3.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	27.9	0.4	30.6	17.2	9.5	3.4
Queue Length 50th (ft)	82	0	12	47	28	0
Queue Length 95th (ft)	125	8	25	58	56	20
Internal Link Dist (ft)	383			624	526	
Turn Bay Length (ft)		360	325			210
Base Capacity (vph)	2201	2442	800	3180	1868	893
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.18	0.16	0.08	0.10	0.14	0.08

Intersection Summary

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	355	350	45	223	238	64
Future Volume (veh/h)	355	350	45	223	238	64
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	394	389	62	305	262	70
Peak Hour Factor	0.90	0.90	0.73	0.73	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	704	1999	211	1184	1792	822
Arrive On Green	0.20	0.20	0.06	0.33	0.52	0.52
Sat Flow, veh/h	3647	2790	3456	3647	3456	1585
Grp Volume(v), veh/h	394	389	62	305	262	70
Grp Sat Flow(s),veh/h/ln	1777	1395	1728	1777	1728	1585
Q Serve(g_s), s	6.7	3.1	1.2	4.2	2.7	1.5
Cycle Q Clear(g_c), s	6.7	3.1	1.2	4.2	2.7	1.5
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	704	1999	211	1184	1792	822
V/C Ratio(X)	0.56	0.19	0.29	0.26	0.15	0.09
Avail Cap(c_a), veh/h	2106	3100	768	3159	1792	822
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.4	3.1	30.3	16.4	8.5	8.2
Incr Delay (d2), s/veh	0.7	0.0	0.8	0.1	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	2.8	0.5	1.6	0.9	0.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	25.1	3.2	31.1	16.5	8.6	8.4
LnGrp LOS	C	A	C	B	A	A
Approach Vol, veh/h	783			367	332	
Approach Delay, s/veh	14.2			19.0	8.6	
Approach LOS	B			B	A	

Timer - Assigned Phs		2	3	4		8
Phs Duration (G+Y+Rc), s		40.0	9.1	18.4		27.5
Change Period (Y+Rc), s		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s		35.0	15.0	40.0		60.0
Max Q Clear Time (g_c+I1), s		4.7	3.2	8.7		6.2
Green Ext Time (p_c), s		1.2	0.1	4.6		2.2

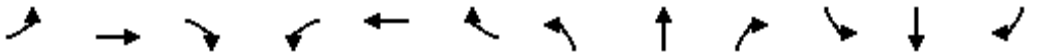
Intersection Summary	
HCM 6th Ctrl Delay	14.1
HCM 6th LOS	B

Lane Group	EBL	EBR	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	114	82	8	39	235	7	271	171
v/c Ratio	0.38	0.11	0.01	0.20	0.11	0.04	0.13	0.12
Control Delay	25.9	0.3	0.0	30.9	7.4	31.5	9.4	1.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	25.9	0.3	0.0	30.9	7.4	31.5	9.4	1.2
Queue Length 50th (ft)	33	0	0	12	12	2	14	0
Queue Length 95th (ft)	71	0	0	47	60	16	73	20
Internal Link Dist (ft)			394		623		526	
Turn Bay Length (ft)	110			290		290		155
Base Capacity (vph)	587	1133	933	368	2201	282	2042	1458
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.19	0.07	0.01	0.11	0.11	0.02	0.13	0.12

Intersection Summary

HCM 6th Signalized Intersection Summary
48: Blue Pkwy & North Access

PM Existing



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	89	0	64	0	0	4	35	209	0	6	241	152
Future Volume (veh/h)	89	0	64	0	0	4	35	209	0	6	241	152
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	114	0	82	0	0	8	39	235	0	7	271	171
Peak Hour Factor	0.78	0.78	0.78	0.50	0.50	0.50	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	346	431	366	207	0	116	83	1861	706	19	1735	900
Arrive On Green	0.08	0.00	0.23	0.00	0.00	0.07	0.05	0.52	0.00	0.01	0.49	0.49
Sat Flow, veh/h	1781	1870	1585	1781	0	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	114	0	82	0	0	8	39	235	0	7	271	171
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	0	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	3.7	0.0	2.8	0.0	0.0	0.3	1.4	2.2	5.2	0.3	2.8	3.5
Cycle Q Clear(g_c), s	3.7	0.0	2.8	0.0	0.0	0.3	1.4	2.2	5.2	0.3	2.8	3.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	346	431	366	207	0	116	83	1861	706	19	1735	900
V/C Ratio(X)	0.33	0.00	0.22	0.00	0.00	0.07	0.47	0.13	0.00	0.36	0.16	0.19
Avail Cap(c_a), veh/h	735	946	801	365	0	472	343	1861	706	263	1735	900
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.8	0.0	20.7	0.0	0.0	28.7	30.9	8.1	0.0	32.6	9.4	7.0
Incr Delay (d2), s/veh	0.6	0.0	0.3	0.0	0.0	0.2	4.1	0.1	0.0	10.8	0.2	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	0.0	1.0	0.0	0.0	0.1	0.7	0.8	0.0	0.2	1.0	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.3	0.0	21.0	0.0	0.0	28.9	35.0	8.2	0.0	43.4	9.6	7.4
LnGrp LOS	C	A	C	A	A	C	D	A	A	D	A	A
Approach Vol, veh/h		196			8			274			449	
Approach Delay, s/veh		23.0			28.9			12.0			9.3	
Approach LOS		C			C			B			A	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.9	40.0	0.0	20.5	8.3	37.6	10.5	10.1
Change Period (Y+Rc), s	* 5.2	* 5.2	* 5.2	* 5.2	* 5.2	* 5.2	* 5.2	* 5.2
Max Green Setting (Gmax), s	* 9.8	* 35	* 6	* 34	* 13	* 32	* 20	* 20
Max Q Clear Time (g_c+I1), s	2.3	7.2	0.0	4.8	3.4	5.5	5.7	2.3
Green Ext Time (p_c), s	0.0	1.5	0.0	0.2	0.0	2.4	0.2	0.0

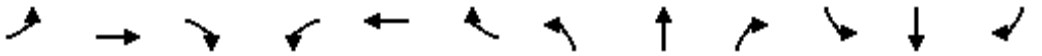
Intersection Summary	
HCM 6th Ctrl Delay	13.2
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	62	113	7	28	55	211	1	8	285	39
v/c Ratio	0.24	0.15	0.03	0.16	0.16	0.08	0.00	0.03	0.13	0.03
Control Delay	25.3	0.4	22.8	19.7	32.0	6.3	0.0	33.3	8.9	0.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	25.3	0.4	22.8	19.7	32.0	6.3	0.0	33.3	8.9	0.8
Queue Length 50th (ft)	22	0	3	2	10	8	0	1	24	0
Queue Length 95th (ft)	40	0	9	17	29	47	0	8	66	6
Internal Link Dist (ft)		404		466		564			623	
Turn Bay Length (ft)					240		170	240		300
Base Capacity (vph)	421	1022	348	599	702	2523	1415	494	2276	1363
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.15	0.11	0.02	0.05	0.08	0.08	0.00	0.02	0.13	0.03

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	43	0	78	5	4	15	48	186	1	7	262	36
Future Volume (veh/h)	43	0	78	5	4	15	48	186	1	7	262	36
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	62	0	113	7	6	22	55	211	1	8	285	39
Peak Hour Factor	0.69	0.69	0.69	0.67	0.67	0.67	0.88	0.88	0.88	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	275	0	179	182	25	91	166	2119	959	36	1985	967
Arrive On Green	0.05	0.00	0.11	0.01	0.07	0.07	0.05	0.60	0.60	0.01	0.56	0.56
Sat Flow, veh/h	1781	0	1585	1781	351	1287	3456	3554	1585	3456	3554	1585
Grp Volume(v), veh/h	62	0	113	7	0	28	55	211	1	8	285	39
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1781	0	1639	1728	1777	1585	1728	1777	1585
Q Serve(g_s), s	2.1	0.0	4.5	0.2	0.0	1.1	1.0	1.7	0.0	0.2	2.6	0.7
Cycle Q Clear(g_c), s	2.1	0.0	4.5	0.2	0.0	1.1	1.0	1.7	0.0	0.2	2.6	0.7
Prop In Lane	1.00		1.00	1.00		0.79	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	275	0	179	182	0	116	166	2119	959	36	1985	967
V/C Ratio(X)	0.23	0.00	0.63	0.04	0.00	0.24	0.33	0.10	0.00	0.22	0.14	0.04
Avail Cap(c_a), veh/h	574	0	658	448	0	581	704	2119	959	495	1985	967
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.2	0.0	28.1	28.2	0.0	29.1	30.5	5.7	5.2	32.5	7.0	5.2
Incr Delay (d2), s/veh	0.4	0.0	3.7	0.1	0.0	1.1	1.2	0.1	0.0	3.1	0.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	1.8	0.1	0.0	0.4	0.4	0.5	0.0	0.1	0.9	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.6	0.0	31.7	28.3	0.0	30.2	31.7	5.8	5.2	35.6	7.2	5.2
LnGrp LOS	C	A	C	C	A	C	C	A	A	D	A	A
Approach Vol, veh/h		175			35			267			332	
Approach Delay, s/veh		29.9			29.8			11.2			7.6	
Approach LOS		C			C			B			A	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.2	44.0	5.1	12.0	7.7	41.5	7.9	9.2
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	9.5	39.5	10.5	27.5	13.5	35.5	14.5	23.5
Max Q Clear Time (g_c+I1), s	2.2	3.7	2.2	6.5	3.0	4.6	4.1	3.1
Green Ext Time (p_c), s	0.0	1.4	0.0	0.6	0.1	2.1	0.1	0.1

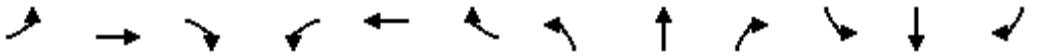
Intersection Summary	
HCM 6th Ctrl Delay	14.6
HCM 6th LOS	B

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	59	6	339	46	51	323	172	37	11	240	134
v/c Ratio	0.19	0.03	0.70	0.18	0.24	0.56	0.08	0.03	0.07	0.17	0.13
Control Delay	22.1	29.2	12.2	23.1	17.2	31.8	8.3	1.0	35.1	16.4	2.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	22.1	29.2	12.2	23.1	17.2	31.8	8.3	1.0	35.1	16.4	2.5
Queue Length 50th (ft)	19	2	0	15	4	64	13	0	4	34	0
Queue Length 95th (ft)	47	12	48	38	31	123	45	6	22	74	26
Internal Link Dist (ft)		380			478		1188			564	
Turn Bay Length (ft)						170		260	310		325
Base Capacity (vph)	356	912	948	261	754	1078	2132	1223	168	1390	1032
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.17	0.01	0.36	0.18	0.07	0.30	0.08	0.03	0.07	0.17	0.13

Intersection Summary

HCM 6th Signalized Intersection Summary
54: Blue Pkwy & South Access

PM Existing



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	48	5	278	37	9	32	291	155	33	10	221	123
Future Volume (veh/h)	48	5	278	37	9	32	291	155	33	10	221	123
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	59	6	339	46	11	40	323	172	37	11	240	134
Peak Hour Factor	0.82	0.82	0.82	0.81	0.81	0.81	0.90	0.90	0.90	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	455	454	385	403	84	305	432	1733	835	24	1337	667
Arrive On Green	0.04	0.24	0.24	0.04	0.24	0.24	0.13	0.49	0.49	0.01	0.38	0.38
Sat Flow, veh/h	1781	1870	1585	1781	354	1285	3456	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	59	6	339	46	0	51	323	172	37	11	240	134
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	0	1639	1728	1777	1585	1781	1777	1585
Q Serve(g_s), s	2.0	0.2	17.1	1.6	0.0	2.0	7.5	2.2	0.9	0.5	3.8	4.4
Cycle Q Clear(g_c), s	2.0	0.2	17.1	1.6	0.0	2.0	7.5	2.2	0.9	0.5	3.8	4.4
Prop In Lane	1.00		1.00	1.00		0.78	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	455	454	385	403	0	389	432	1733	835	24	1337	667
V/C Ratio(X)	0.13	0.01	0.88	0.11	0.00	0.13	0.75	0.10	0.04	0.46	0.18	0.20
Avail Cap(c_a), veh/h	579	754	639	472	0	602	895	1733	835	139	1337	667
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.2	23.9	30.3	22.3	0.0	24.9	35.1	11.5	9.5	40.7	17.3	15.2
Incr Delay (d2), s/veh	0.1	0.0	7.9	0.1	0.0	0.2	2.6	0.1	0.1	13.0	0.3	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.1	7.1	0.7	0.0	0.8	3.2	0.8	0.3	0.3	1.5	1.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.3	23.9	38.2	22.4	0.0	25.1	37.7	11.6	9.6	53.6	17.6	15.9
LnGrp LOS	C	C	D	C	A	C	D	B	A	D	B	B
Approach Vol, veh/h		404			97			532			385	
Approach Delay, s/veh		35.7			23.8			27.3			18.0	
Approach LOS		D			C			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.6	45.0	7.8	24.7	14.9	35.7	8.2	24.2
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	6.5	40.5	6.5	33.5	21.5	25.5	9.5	30.5
Max Q Clear Time (g_c+I1), s	2.5	4.2	3.6	19.1	9.5	6.4	4.0	4.0
Green Ext Time (p_c), s	0.0	1.3	0.0	1.1	0.9	1.8	0.0	0.2

Intersection Summary	
HCM 6th Ctrl Delay	26.9
HCM 6th LOS	C

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	218	2	2	183	10	2	0	2	5	0	1
Future Vol, veh/h	0	218	2	2	183	10	2	0	2	5	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	210	-	160	215	-	215	-	-	-	200	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	80	80	80	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	242	2	3	229	13	2	0	2	5	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	242	0	0	244	0	0	363	490	121	356	479	115
Stage 1	-	-	-	-	-	-	242	242	-	235	235	-
Stage 2	-	-	-	-	-	-	121	248	-	121	244	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1322	-	-	1319	-	-	568	477	908	575	484	916
Stage 1	-	-	-	-	-	-	740	704	-	747	709	-
Stage 2	-	-	-	-	-	-	870	700	-	870	703	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1322	-	-	1319	-	-	566	476	908	573	483	916
Mov Cap-2 Maneuver	-	-	-	-	-	-	566	476	-	573	483	-
Stage 1	-	-	-	-	-	-	740	704	-	747	708	-
Stage 2	-	-	-	-	-	-	867	699	-	868	703	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.1	10.2	10.9
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	697	1322	-	-	1319	-	-	573	916
HCM Lane V/C Ratio	0.006	-	-	-	0.002	-	-	0.009	0.001
HCM Control Delay (s)	10.2	0	-	-	7.7	-	-	11.3	8.9
HCM Lane LOS	B	A	-	-	A	-	-	B	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0	0

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	220	181	5	0	5
Future Vol, veh/h	0	220	181	5	0	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	239	197	5	0	5

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	101
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	-	0	935
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	935
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	8.9
HCM LOS			A

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	935
HCM Lane V/C Ratio	-	-	-	0.006
HCM Control Delay (s)	-	-	-	8.9
HCM Lane LOS	-	-	-	A
HCM 95th %tile Q(veh)	-	-	-	0

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑	↱		↱
Traffic Vol, veh/h	0	225	194	0	0	0
Future Vol, veh/h	0	225	194	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	200	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	245	211	0	0	0

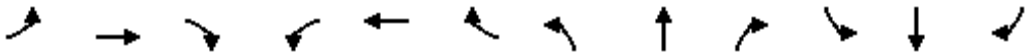
Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	106
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	-	0	928
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	928
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	-	-	0
HCM Lane LOS	-	-	-	A
HCM 95th %tile Q(veh)	-	-	-	-

Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	1	4	68	150	25	231	135	226	488
v/c Ratio	0.00	0.01	0.36	0.43	0.04	0.14	0.16	0.29	0.22
Control Delay	26.0	0.0	33.5	9.6	3.9	10.3	2.2	5.0	6.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	26.0	0.0	33.5	9.6	3.9	10.3	2.2	5.0	6.5
Queue Length 50th (ft)	0	0	24	0	2	24	0	24	27
Queue Length 95th (ft)	4	0	66	31	9	44	15	40	62
Internal Link Dist (ft)		394	448			689			1243
Turn Bay Length (ft)					200		90	150	
Base Capacity (vph)	508	865	497	678	635	1695	837	983	2256
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.00	0.00	0.14	0.22	0.04	0.14	0.16	0.23	0.22

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	0	4	52	1	117	23	185	108	156	336	1
Future Volume (veh/h)	1	0	4	52	1	117	23	185	108	156	336	1
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1	0	4	67	1	150	25	231	135	226	487	1
Peak Hour Factor	0.92	0.92	0.92	0.78	0.92	0.78	0.92	0.80	0.80	0.69	0.69	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	303	0	204	280	3	204	623	1836	819	800	2250	5
Arrive On Green	0.13	0.00	0.13	0.13	0.13	0.13	0.03	0.52	0.52	0.11	0.62	0.62
Sat Flow, veh/h	1416	0	1585	1373	27	1585	1781	3554	1585	1781	3638	7
Grp Volume(v), veh/h	1	0	4	68	0	150	25	231	135	226	238	250
Grp Sat Flow(s),veh/h/ln	1416	0	1585	1400	0	1585	1781	1777	1585	1781	1777	1869
Q Serve(g_s), s	0.0	0.0	0.2	3.0	0.0	6.3	0.4	2.3	3.1	3.7	4.1	4.1
Cycle Q Clear(g_c), s	0.0	0.0	0.2	3.1	0.0	6.3	0.4	2.3	3.1	3.7	4.1	4.1
Prop In Lane	1.00		1.00	0.99		1.00	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	303	0	204	284	0	204	623	1836	819	800	1099	1156
V/C Ratio(X)	0.00	0.00	0.02	0.24	0.00	0.74	0.04	0.13	0.16	0.28	0.22	0.22
Avail Cap(c_a), veh/h	647	0	588	607	0	565	768	1836	819	1127	1099	1156
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.1	0.0	26.2	27.5	0.0	28.8	7.2	8.6	8.8	5.4	5.8	5.8
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.4	0.0	5.1	0.0	0.1	0.4	0.2	0.5	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.1	1.0	0.0	2.5	0.2	0.8	1.0	1.0	1.3	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.1	0.0	26.2	27.9	0.0	33.9	7.3	8.7	9.2	5.6	6.2	6.2
LnGrp LOS	C	A	C	C	A	C	A	A	A	A	A	A
Approach Vol, veh/h		5			218			391			714	
Approach Delay, s/veh		26.2			32.1			8.8			6.0	
Approach LOS		C			C			A			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	13.4	41.0		14.3	6.4	48.0		14.3				
Change Period (Y+Rc), s	5.5	5.5		* 5.5	4.5	5.5		5.5				
Max Green Setting (Gmax), s	20.5	28.5		* 26	7.5	42.5		24.5				
Max Q Clear Time (g_c+I1), s	5.7	5.1		2.2	2.4	6.1		8.3				
Green Ext Time (p_c), s	0.5	1.9		0.0	0.0	3.0		0.7				

Intersection Summary	
HCM 6th Ctrl Delay	11.2
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	0	3	8	0	11	9	181	1	50	169	6
Future Vol, veh/h	2	0	3	8	0	11	9	181	1	50	169	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	25	-	-	200	-	145	190	-	190
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	63	63	92	79	79	92	95	95	95	80	80	80
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	0	3	10	0	12	9	191	1	63	211	8

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	451	547	106	441	554	96	219	0	0	192	0	0
Stage 1	337	337	-	209	209	-	-	-	-	-	-	-
Stage 2	114	210	-	232	345	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	492	443	928	500	439	942	1348	-	-	1379	-	-
Stage 1	651	640	-	774	728	-	-	-	-	-	-	-
Stage 2	879	727	-	750	635	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	466	420	928	479	416	942	1348	-	-	1379	-	-
Mov Cap-2 Maneuver	466	420	-	479	416	-	-	-	-	-	-	-
Stage 1	646	611	-	769	723	-	-	-	-	-	-	-
Stage 2	862	722	-	713	606	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.8	10.6	0.4	1.7
HCM LOS	B	B		

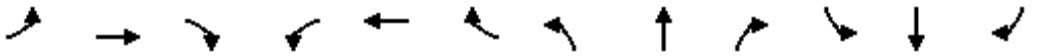
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1348	-	-	623	479	942	1379	-	-
HCM Lane V/C Ratio	0.007	-	-	0.01	0.021	0.013	0.045	-	-
HCM Control Delay (s)	7.7	-	-	10.8	12.7	8.9	7.7	-	-
HCM Lane LOS	A	-	-	B	B	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0.1	0	0.1	-	-

Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	213	177	38	123	141	117	24
v/c Ratio	0.50	0.41	0.14	0.12	0.05	0.07	0.03
Control Delay	39.5	37.6	2.2	3.5	3.1	9.0	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	39.5	37.6	2.2	3.5	3.1	9.0	0.1
Queue Length 50th (ft)	56	47	0	14	8	12	0
Queue Length 95th (ft)	81	71	1	28	15	24	0
Internal Link Dist (ft)		962			586	567	
Turn Bay Length (ft)	425		310	480			135
Base Capacity (vph)	1181	1217	597	1118	2657	1941	904
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.18	0.15	0.06	0.11	0.05	0.06	0.03

Intersection Summary

HCM 6th Signalized Intersection Summary
38: Blue Pkwy & I-470 WB Ramp

AM Existing plus Site (Phase I)



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	175	145	31	102	117	0	0	98	20
Future Volume (veh/h)	0	0	0	175	145	31	102	117	0	0	98	20
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1870	1870	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				213	177	0	123	141	0	0	117	0
Peak Hour Factor				0.82	0.82	0.82	0.83	0.83	0.83	0.84	0.84	0.84
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				360	371		1002	2727	0	0	2246	
Arrive On Green				0.10	0.10	0.00	0.07	0.77	0.00	0.00	0.63	0.00
Sat Flow, veh/h				3456	3554	1585	1781	3647	0	0	3647	1585
Grp Volume(v), veh/h				213	177	0	123	141	0	0	117	0
Grp Sat Flow(s),veh/h/ln				1728	1777	1585	1781	1777	0	0	1777	1585
Q Serve(g_s), s				5.0	4.0	0.0	1.7	0.8	0.0	0.0	1.1	0.0
Cycle Q Clear(g_c), s				5.0	4.0	0.0	1.7	0.8	0.0	0.0	1.1	0.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				360	371		1002	2727	0	0	2246	
V/C Ratio(X)				0.59	0.48		0.12	0.05	0.00	0.00	0.05	
Avail Cap(c_a), veh/h				1215	1250		1502	2727	0	0	2246	
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				36.0	35.5	0.0	3.4	2.4	0.0	0.0	5.9	0.0
Incr Delay (d2), s/veh				1.5	1.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				2.1	1.7	0.0	0.5	0.2	0.0	0.0	0.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				37.5	36.5	0.0	3.5	2.4	0.0	0.0	5.9	0.0
LnGrp LOS				D	D		A	A	A	A	A	
Approach Vol, veh/h					390			264			117	
Approach Delay, s/veh					37.1			2.9			5.9	
Approach LOS					D			A			A	

Timer - Assigned Phs	2		5	6		8						
Phs Duration (G+Y+Rc), s	70.0		11.4	58.6		14.2						
Change Period (Y+Rc), s	* 5.4		* 5.4	* 5.4		5.4						
Max Green Setting (Gmax), s	* 65		* 30	* 30		29.6						
Max Q Clear Time (g_c+I1), s	2.8		3.7	3.1		7.0						
Green Ext Time (p_c), s	1.0		0.3	0.7		1.8						

Intersection Summary		
HCM 6th Ctrl Delay	20.6	
HCM 6th LOS	C	

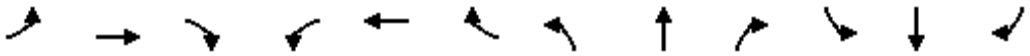
Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	36	301	285	219	84	17	295
v/c Ratio	0.11	0.48	0.55	0.10	0.08	0.02	0.13
Control Delay	24.3	28.2	7.9	6.8	2.8	5.1	4.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	24.3	28.2	7.9	6.8	2.8	5.1	4.9
Queue Length 50th (ft)	13	62	0	14	0	2	20
Queue Length 95th (ft)	35	94	53	46	20	9	40
Internal Link Dist (ft)		816		542			586
Turn Bay Length (ft)	230		230		280	780	
Base Capacity (vph)	1200	2400	1165	2238	1032	788	2349
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.03	0.13	0.24	0.10	0.08	0.02	0.13

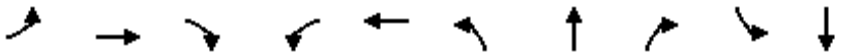
Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	32	265	251	0	0	0	0	188	72	15	257	0
Future Volume (veh/h)	32	265	251	0	0	0	0	188	72	15	257	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	36	301	285				0	219	84	17	295	0
Peak Hour Factor	0.88	0.88	0.88				0.86	0.86	0.86	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	422	842	376				0	1849	824	706	2193	0
Arrive On Green	0.24	0.24	0.24				0.00	0.52	0.52	0.02	0.62	0.00
Sat Flow, veh/h	1781	3554	1585				0	3647	1585	1781	3647	0
Grp Volume(v), veh/h	36	301	285				0	219	84	17	295	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585				0	1777	1585	1781	1777	0
Q Serve(g_s), s	1.2	5.3	12.6				0.0	2.4	2.0	0.3	2.6	0.0
Cycle Q Clear(g_c), s	1.2	5.3	12.6				0.0	2.4	2.0	0.3	2.6	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	422	842	376				0	1849	824	706	2193	0
V/C Ratio(X)	0.09	0.36	0.76				0.00	0.12	0.10	0.02	0.13	0.00
Avail Cap(c_a), veh/h	1123	2240	999				0	1849	824	912	2193	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	22.4	24.0	26.7				0.0	9.2	9.2	7.1	6.0	0.0
Incr Delay (d2), s/veh	0.1	0.3	3.2				0.0	0.1	0.2	0.0	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	2.2	4.9				0.0	0.9	0.7	0.1	0.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.5	24.2	29.9				0.0	9.4	9.4	7.2	6.2	0.0
LnGrp LOS	C	C	C				A	A	A	A	A	A
Approach Vol, veh/h		622						303			312	
Approach Delay, s/veh		26.7						9.4			6.2	
Approach LOS		C						A			A	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	7.3	44.7		23.4		52.0
Change Period (Y+Rc), s	5.5	5.5		5.5		5.5
Max Green Setting (Gmax), s	10.5	30.5		47.5		46.5
Max Q Clear Time (g_c+I1), s	2.3	4.4		14.6		4.6
Green Ext Time (p_c), s	0.0	1.7		3.3		2.1

Intersection Summary			
HCM 6th Ctrl Delay			17.3
HCM 6th LOS			B

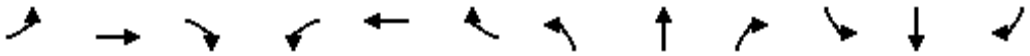


Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	73	229	262	29	204	119	11	13	4	23
v/c Ratio	0.35	0.29	0.32	0.10	0.42	0.15	0.01	0.01	0.00	0.02
Control Delay	34.1	24.1	5.0	32.0	31.1	9.6	8.7	0.0	8.5	5.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	34.1	24.1	5.0	32.0	31.1	9.6	8.7	0.0	8.5	5.8
Queue Length 50th (ft)	30	38	0	6	43	24	2	0	1	2
Queue Length 95th (ft)	69	80	31	17	67	49	10	0	5	13
Internal Link Dist (ft)		383			346		526			358
Turn Bay Length (ft)	200		360	325				210	150	
Base Capacity (vph)	581	2066	1736	576	1493	786	1060	950	805	988
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.13	0.11	0.15	0.05	0.14	0.15	0.01	0.01	0.00	0.02

Intersection Summary

HCM 6th Signalized Intersection Summary
46: Blue Pkwy & Ward Rd & West Dealership Access

AM Existing plus Site (Phase I)



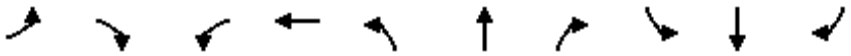
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	67	206	236	23	159	5	94	10	10	4	9	12
Future Volume (veh/h)	67	206	236	23	159	5	94	10	10	4	9	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	73	229	262	29	199	5	119	11	13	4	10	13
Peak Hour Factor	0.92	0.90	0.90	0.80	0.80	0.92	0.79	0.92	0.79	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	99	560	439	108	471	12	924	1110	941	938	438	569
Arrive On Green	0.06	0.16	0.16	0.03	0.13	0.13	0.59	0.59	0.59	0.59	0.59	0.59
Sat Flow, veh/h	1781	3554	2790	3456	3542	89	1388	1870	1585	1404	738	960
Grp Volume(v), veh/h	73	229	262	29	100	104	119	11	13	4	0	23
Grp Sat Flow(s),veh/h/ln	1781	1777	1395	1728	1777	1854	1388	1870	1585	1404	0	1698
Q Serve(g_s), s	2.7	3.9	5.8	0.5	3.4	3.4	2.6	0.2	0.2	0.1	0.0	0.4
Cycle Q Clear(g_c), s	2.7	3.9	5.8	0.5	3.4	3.4	2.9	0.2	0.2	0.2	0.0	0.4
Prop In Lane	1.00		1.00	1.00		0.05	1.00		1.00	1.00		0.57
Lane Grp Cap(c), veh/h	99	560	439	108	236	247	924	1110	941	938	0	1007
V/C Ratio(X)	0.74	0.41	0.60	0.27	0.42	0.42	0.13	0.01	0.01	0.00	0.00	0.02
Avail Cap(c_a), veh/h	602	2136	1676	597	774	808	924	1110	941	938	0	1007
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	30.9	25.2	26.1	31.5	26.5	26.5	6.2	5.5	5.5	5.6	0.0	5.6
Incr Delay (d2), s/veh	10.1	0.5	1.3	1.3	1.2	1.2	0.3	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	1.6	1.9	0.2	1.5	1.5	0.7	0.1	0.1	0.0	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	41.1	25.7	27.4	32.8	27.7	27.7	6.5	5.5	5.6	5.6	0.0	5.6
LnGrp LOS	D	C	C	C	C	C	A	A	A	A	A	A
Approach Vol, veh/h		564			233			143			27	
Approach Delay, s/veh		28.5			28.3			6.3			5.6	
Approach LOS		C			C			A			A	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		44.5	6.6	15.5		44.5	8.2	13.9				
Change Period (Y+Rc), s		5.0	4.5	5.0		* 5	4.5	5.0				
Max Green Setting (Gmax), s		39.0	11.5	40.0		* 40	22.5	29.0				
Max Q Clear Time (g_c+I1), s		4.9	2.5	7.8		2.4	4.7	5.4				
Green Ext Time (p_c), s		0.4	0.0	2.7		0.1	0.1	1.1				

Intersection Summary		
HCM 6th Ctrl Delay		24.5
HCM 6th LOS		C

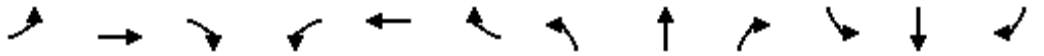
Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Lane Group	EBL	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	23	9	3	1	15	98	3	7	220	67
v/c Ratio	0.12	0.01	0.02	0.00	0.09	0.04	0.00	0.04	0.08	0.05
Control Delay	26.3	0.0	24.7	0.0	30.7	4.9	0.0	30.7	4.6	1.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	26.3	0.0	24.7	0.0	30.7	4.9	0.0	30.7	4.6	1.0
Queue Length 50th (ft)	9	0	1	0	6	3	0	3	7	0
Queue Length 95th (ft)	28	0	8	0	25	23	0	15	46	11
Internal Link Dist (ft)				394		623			526	
Turn Bay Length (ft)	110				290		210	290		155
Base Capacity (vph)	372	1003	331	1088	329	2700	1499	303	2693	1504
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.06	0.01	0.01	0.00	0.05	0.04	0.00	0.02	0.08	0.04

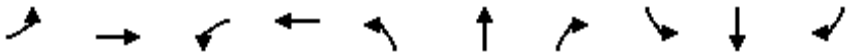
Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	21	0	8	3	0	1	14	90	3	6	202	62
Future Volume (veh/h)	21	0	8	3	0	1	14	90	3	6	202	62
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	23	0	9	3	0	1	15	98	3	7	220	67
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	194	86	73	148	0	31	39	2342	1052	20	2303	1077
Arrive On Green	0.03	0.00	0.05	0.00	0.00	0.02	0.02	0.66	0.66	0.01	0.65	0.65
Sat Flow, veh/h	1781	1870	1585	1781	0	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	23	0	9	3	0	1	15	98	3	7	220	67
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	0	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	0.8	0.0	0.4	0.1	0.0	0.0	0.5	0.6	0.0	0.3	1.5	0.9
Cycle Q Clear(g_c), s	0.8	0.0	0.4	0.1	0.0	0.0	0.5	0.6	0.0	0.3	1.5	0.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	194	86	73	148	0	31	39	2342	1052	20	2303	1077
V/C Ratio(X)	0.12	0.00	0.12	0.02	0.00	0.03	0.38	0.04	0.00	0.36	0.10	0.06
Avail Cap(c_a), veh/h	511	624	529	457	0	479	345	2342	1052	318	2303	1077
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.4	0.0	29.5	30.8	0.0	31.0	31.1	3.9	3.6	31.7	4.3	3.5
Incr Delay (d2), s/veh	0.3	0.0	0.8	0.1	0.0	0.4	6.1	0.0	0.0	10.7	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.1	0.0	0.0	0.0	0.3	0.2	0.0	0.2	0.4	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.7	0.0	30.3	30.8	0.0	31.5	37.2	3.9	3.7	42.4	4.3	3.6
LnGrp LOS	C	A	C	C	A	C	D	A	A	D	A	A
Approach Vol, veh/h		32			4			116			294	
Approach Delay, s/veh		29.9			31.0			8.2			5.1	
Approach LOS		C			C			A			A	

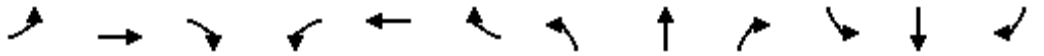
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.2	47.0	4.8	7.5	5.9	46.3	6.5	5.7
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	11.5	42.5	11.5	21.5	12.5	41.5	13.5	19.5
Max Q Clear Time (g_c+I1), s	2.3	2.6	2.1	2.4	2.5	3.5	2.8	2.0
Green Ext Time (p_c), s	0.0	0.6	0.0	0.0	0.0	1.7	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	7.9
HCM 6th LOS	A



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	4	29	7	10	31	111	17	37	221	15
v/c Ratio	0.02	0.04	0.03	0.01	0.09	0.04	0.01	0.11	0.08	0.01
Control Delay	24.0	0.1	24.0	0.0	31.0	6.8	0.0	30.9	6.3	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	24.0	0.1	24.0	0.0	31.0	6.8	0.0	30.9	6.3	0.0
Queue Length 50th (ft)	1	0	2	0	4	0	0	5	0	0
Queue Length 95th (ft)	6	0	10	0	19	26	0	19	40	0
Internal Link Dist (ft)		404		466		564			623	
Turn Bay Length (ft)					240		170	240		300
Base Capacity (vph)	384	1004	386	1103	700	2829	1281	700	2832	1282
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.01	0.03	0.02	0.01	0.04	0.04	0.01	0.05	0.08	0.01

Intersection Summary



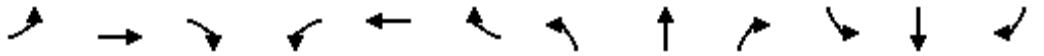
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	0	16	5	0	7	27	98	15	29	172	12
Future Volume (veh/h)	2	0	16	5	0	7	27	98	15	29	172	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	4	0	29	7	0	10	31	111	17	37	221	15
Peak Hour Factor	0.56	0.56	0.56	0.69	0.69	0.69	0.88	0.88	0.88	0.78	0.78	0.78
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	188	0	77	172	0	85	136	2102	943	155	2121	944
Arrive On Green	0.01	0.00	0.05	0.01	0.00	0.05	0.04	0.59	0.59	0.04	0.60	0.60
Sat Flow, veh/h	1781	0	1562	1781	0	1562	3456	3554	1565	3456	3554	1565
Grp Volume(v), veh/h	4	0	29	7	0	10	31	111	17	37	221	15
Grp Sat Flow(s),veh/h/ln	1781	0	1562	1781	0	1562	1728	1777	1565	1728	1777	1565
Q Serve(g_s), s	0.1	0.0	1.2	0.2	0.0	0.4	0.6	0.9	0.3	0.7	1.8	0.3
Cycle Q Clear(g_c), s	0.1	0.0	1.2	0.2	0.0	0.4	0.6	0.9	0.3	0.7	1.8	0.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	188	0	77	172	0	85	136	2102	943	155	2121	944
V/C Ratio(X)	0.02	0.00	0.37	0.04	0.00	0.12	0.23	0.05	0.02	0.24	0.10	0.02
Avail Cap(c_a), veh/h	501	0	497	477	0	497	681	2102	943	681	2121	944
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.4	0.0	30.3	29.2	0.0	29.7	30.7	5.7	5.3	30.4	5.7	5.2
Incr Delay (d2), s/veh	0.0	0.0	3.0	0.1	0.0	0.6	0.8	0.0	0.0	0.8	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.5	0.1	0.0	0.2	0.2	0.3	0.1	0.3	0.6	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.5	0.0	33.3	29.3	0.0	30.3	31.5	5.7	5.3	31.2	5.8	5.3
LnGrp LOS	C	A	C	C	A	C	C	A	A	C	A	A
Approach Vol, veh/h		33			17			159			273	
Approach Delay, s/veh		32.9			29.9			10.7			9.2	
Approach LOS		C			C			B			A	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.0	44.0	5.7	8.3	7.6	44.4	5.4	8.6
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	13.0	39.0	12.0	21.0	13.0	39.0	12.0	21.0
Max Q Clear Time (g_c+I1), s	2.7	2.9	2.2	3.2	2.6	3.8	2.1	2.4
Green Ext Time (p_c), s	0.0	0.8	0.0	0.1	0.0	1.5	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	12.1
HCM 6th LOS	B

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	27	3	123	16	12	139	125	51	25	148	44
v/c Ratio	0.09	0.02	0.45	0.08	0.07	0.34	0.06	0.04	0.15	0.09	0.04
Control Delay	21.6	30.0	12.4	26.3	19.0	31.2	9.7	1.2	32.8	12.6	1.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	21.6	30.0	12.4	26.3	19.0	31.2	9.7	1.2	32.8	12.6	1.0
Queue Length 50th (ft)	9	1	0	6	0	28	10	0	10	19	0
Queue Length 95th (ft)	27	8	42	20	16	54	32	7	33	41	6
Internal Link Dist (ft)		380			478		1188			564	
Turn Bay Length (ft)						170		260	310		325
Base Capacity (vph)	404	820	767	299	643	806	2096	1299	311	1647	1216
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.07	0.00	0.16	0.05	0.02	0.17	0.06	0.04	0.08	0.09	0.04

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	24	3	108	15	1	10	118	106	43	22	132	39
Future Volume (veh/h)	24	3	108	15	1	10	118	106	43	22	132	39
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	27	3	123	16	1	11	139	125	51	25	148	44
Peak Hour Factor	0.88	0.88	0.88	0.93	0.93	0.93	0.85	0.85	0.85	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	299	199	169	288	13	138	299	1851	863	60	1664	799
Arrive On Green	0.04	0.11	0.11	0.02	0.09	0.09	0.09	0.52	0.52	0.03	0.47	0.47
Sat Flow, veh/h	1781	1870	1585	1781	134	1472	3456	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	27	3	123	16	0	12	139	125	51	25	148	44
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	0	1605	1728	1777	1585	1781	1777	1585
Q Serve(g_s), s	0.8	0.1	4.8	0.5	0.0	0.4	2.4	1.1	1.0	0.9	1.5	0.9
Cycle Q Clear(g_c), s	0.8	0.1	4.8	0.5	0.0	0.4	2.4	1.1	1.0	0.9	1.5	0.9
Prop In Lane	1.00		1.00	1.00		0.92	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	299	199	169	288	0	150	299	1851	863	60	1664	799
V/C Ratio(X)	0.09	0.02	0.73	0.06	0.00	0.08	0.46	0.07	0.06	0.42	0.09	0.06
Avail Cap(c_a), veh/h	601	886	751	527	0	684	873	1851	863	337	1664	799
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.4	25.3	27.4	24.9	0.0	26.2	27.5	7.5	6.8	30.0	9.3	8.0
Incr Delay (d2), s/veh	0.1	0.0	5.9	0.1	0.0	0.2	1.1	0.1	0.1	4.5	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	2.0	0.2	0.0	0.2	1.0	0.4	0.3	0.4	0.5	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.5	25.4	33.4	25.0	0.0	26.4	28.7	7.6	6.9	34.5	9.5	8.1
LnGrp LOS	C	C	C	C	A	C	C	A	A	C	A	A
Approach Vol, veh/h		153			28			315			217	
Approach Delay, s/veh		31.6			25.6			16.8			12.1	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.1	38.0	6.5	11.7	10.5	34.7	7.3	10.9
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	12.0	33.0	10.0	30.0	16.0	29.0	13.0	27.0
Max Q Clear Time (g_c+I1), s	2.9	3.1	2.5	6.8	4.4	3.5	2.8	2.4
Green Ext Time (p_c), s	0.0	0.9	0.0	0.4	0.3	1.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	18.9
HCM 6th LOS	B

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	427	1	1	271	7	2	0	3	14	0	1
Future Vol, veh/h	0	427	1	1	271	7	2	0	3	14	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	210	-	160	215	-	215	-	-	-	200	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	474	1	1	301	8	2	0	4	16	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	309	0	0	475	0	0	627	785	237	540	778	151
Stage 1	-	-	-	-	-	-	474	474	-	303	303	-
Stage 2	-	-	-	-	-	-	153	311	-	237	475	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1248	-	-	1083	-	-	368	323	764	425	326	868
Stage 1	-	-	-	-	-	-	540	556	-	681	662	-
Stage 2	-	-	-	-	-	-	834	657	-	745	556	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1248	-	-	1083	-	-	367	323	764	423	326	868
Mov Cap-2 Maneuver	-	-	-	-	-	-	367	323	-	423	326	-
Stage 1	-	-	-	-	-	-	540	556	-	681	661	-
Stage 2	-	-	-	-	-	-	832	656	-	742	556	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0	11.8	13.6
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	533	1248	-	-	1083	-	-	423	868
HCM Lane V/C Ratio	0.011	-	-	-	0.001	-	-	0.039	0.001
HCM Control Delay (s)	11.8	0	-	-	8.3	-	-	13.9	9.2
HCM Lane LOS	B	A	-	-	A	-	-	B	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.1	0

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	428	271	3	0	13
Future Vol, veh/h	0	428	271	3	0	13
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	73	73	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	476	371	4	0	14

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	188
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	-	0	822
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	822
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	9.5
HCM LOS			A

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	822
HCM Lane V/C Ratio	-	-	-	0.017
HCM Control Delay (s)	-	-	-	9.5
HCM Lane LOS	-	-	-	A
HCM 95th %tile Q(veh)	-	-	-	0.1

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑	↱		↱
Traffic Vol, veh/h	0	444	279	0	0	0
Future Vol, veh/h	0	444	279	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	200	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	73	73	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	493	382	0	0	0

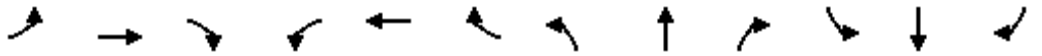
Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	191
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	-	0	818
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	818
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s)	-	-	-	0
HCM Lane LOS	-	-	-	A
HCM 95th %tile Q(veh)	-	-	-	-

Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	3	15	124	135	13	208	86	212	307
v/c Ratio	0.01	0.05	0.55	0.35	0.02	0.13	0.11	0.28	0.13
Control Delay	25.3	15.0	37.0	8.2	4.4	12.0	1.1	6.1	6.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	25.3	15.0	37.0	8.2	4.4	12.0	1.1	6.1	6.2
Queue Length 50th (ft)	1	1	48	0	1	24	0	28	20
Queue Length 95th (ft)	8	16	92	28	6	53	9	60	57
Internal Link Dist (ft)		394	448			689			1243
Turn Bay Length (ft)					200		90	150	
Base Capacity (vph)	548	711	580	765	805	1641	807	993	2295
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.01	0.02	0.21	0.18	0.02	0.13	0.11	0.21	0.13

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	2	12	95	1	104	9	187	77	176	254	1
Future Volume (veh/h)	3	2	12	95	1	104	9	187	77	176	254	1
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	3	2	13	123	1	135	13	208	86	212	306	1
Peak Hour Factor	0.92	0.92	0.92	0.77	0.77	0.77	0.70	0.90	0.90	0.83	0.83	0.83
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	153	29	189	276	1	213	772	1868	833	834	2302	8
Arrive On Green	0.13	0.13	0.13	0.13	0.13	0.13	0.02	0.53	0.53	0.11	0.63	0.63
Sat Flow, veh/h	1253	216	1402	1306	11	1585	1781	3554	1585	1781	3633	12
Grp Volume(v), veh/h	3	0	15	124	0	135	13	208	86	212	150	157
Grp Sat Flow(s),veh/h/ln	1253	0	1618	1317	0	1585	1781	1777	1585	1781	1777	1868
Q Serve(g_s), s	0.2	0.0	0.6	6.1	0.0	5.8	0.2	2.1	2.0	3.5	2.4	2.4
Cycle Q Clear(g_c), s	6.8	0.0	0.6	6.7	0.0	5.8	0.2	2.1	2.0	3.5	2.4	2.4
Prop In Lane	1.00		0.87	0.99		1.00	1.00		1.00	1.00		0.01
Lane Grp Cap(c), veh/h	153	0	218	277	0	213	772	1868	833	834	1126	1184
V/C Ratio(X)	0.02	0.00	0.07	0.45	0.00	0.63	0.02	0.11	0.10	0.25	0.13	0.13
Avail Cap(c_a), veh/h	516	0	687	684	0	673	954	1868	833	1247	1126	1184
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.0	0.0	27.1	30.1	0.0	29.4	4.5	8.6	8.5	5.5	5.3	5.3
Incr Delay (d2), s/veh	0.1	0.0	0.1	1.1	0.0	3.1	0.0	0.1	0.2	0.2	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.2	2.0	0.0	2.3	0.1	0.8	0.7	1.0	0.8	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.1	0.0	27.3	31.2	0.0	32.5	4.5	8.7	8.8	5.6	5.5	5.5
LnGrp LOS	C	A	C	C	A	C	A	A	A	A	A	A
Approach Vol, veh/h		18			259			307			519	
Approach Delay, s/veh		28.2			31.8			8.5			5.5	
Approach LOS		C			C			A			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	13.4	43.3		15.2	5.6	51.0		15.2				
Change Period (Y+Rc), s	5.5	5.5		5.5	4.5	5.5		5.5				
Max Green Setting (Gmax), s	24.5	28.5		30.5	8.5	45.5		30.5				
Max Q Clear Time (g_c+I1), s	5.5	4.1		8.8	2.2	4.4		8.7				
Green Ext Time (p_c), s	0.5	1.6		0.0	0.0	1.8		1.0				

Intersection Summary			
HCM 6th Ctrl Delay		12.9	
HCM 6th LOS		B	

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	9	0	9	3	0	38	2	234	1	24	419	1
Future Vol, veh/h	9	0	9	3	0	38	2	234	1	24	419	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	25	-	-	200	-	145	190	-	190
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	57	57	92	47	47	92	92	92	92	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	16	0	10	6	0	41	2	254	1	26	460	1

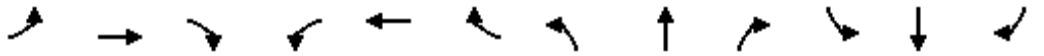
Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	643	771	230	540	771	127	461	0	0	255	0	0
Stage 1	512	512	-	258	258	-	-	-	-	-	-	-
Stage 2	131	259	-	282	513	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	358	329	772	425	329	900	1096	-	-	1307	-	-
Stage 1	513	535	-	724	693	-	-	-	-	-	-	-
Stage 2	859	692	-	701	534	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	336	322	772	413	322	900	1096	-	-	1307	-	-
Mov Cap-2 Maneuver	336	322	-	413	322	-	-	-	-	-	-	-
Stage 1	512	524	-	723	692	-	-	-	-	-	-	-
Stage 2	818	691	-	678	523	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	13.9	9.8	0.1	0.4
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1096	-	-	429	413	900	1307	-	-
HCM Lane V/C Ratio	0.002	-	-	0.06	0.015	0.046	0.02	-	-
HCM Control Delay (s)	8.3	-	-	13.9	13.9	9.2	7.8	-	-
HCM Lane LOS	A	-	-	B	B	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0	0.1	0.1	-	-

Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	199	177	38	136	255	114	24
v/c Ratio	0.48	0.41	0.15	0.15	0.10	0.05	0.02
Control Delay	38.1	36.8	3.0	3.4	3.1	7.5	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	38.1	36.8	3.0	3.4	3.1	7.5	0.1
Queue Length 50th (ft)	51	45	0	15	14	11	0
Queue Length 95th (ft)	75	69	3	30	25	23	0
Internal Link Dist (ft)		962			586	567	
Turn Bay Length (ft)	425		310	480			135
Base Capacity (vph)	1298	1338	646	1062	2660	2131	984
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.15	0.13	0.06	0.13	0.10	0.05	0.02

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	163	145	31	113	212	0	0	96	20
Future Volume (veh/h)	0	0	0	163	145	31	113	212	0	0	96	20
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1870	1870	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				199	177	0	136	255	0	0	114	0
Peak Hour Factor				0.82	0.82	0.82	0.83	0.83	0.83	0.84	0.84	0.84
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				351	361		1009	2732	0	0	2256	
Arrive On Green				0.10	0.10	0.00	0.07	0.77	0.00	0.00	0.63	0.00
Sat Flow, veh/h				3456	3554	1585	1781	3647	0	0	3647	1585
Grp Volume(v), veh/h				199	177	0	136	255	0	0	114	0
Grp Sat Flow(s),veh/h/ln				1728	1777	1585	1781	1777	0	0	1777	1585
Q Serve(g_s), s				4.5	3.8	0.0	1.8	1.5	0.0	0.0	1.0	0.0
Cycle Q Clear(g_c), s				4.5	3.8	0.0	1.8	1.5	0.0	0.0	1.0	0.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				351	361		1009	2732	0	0	2256	
V/C Ratio(X)				0.57	0.49		0.13	0.09	0.00	0.00	0.05	
Avail Cap(c_a), veh/h				1337	1375		1469	2732	0	0	2256	
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				35.0	34.7	0.0	3.3	2.4	0.0	0.0	5.6	0.0
Incr Delay (d2), s/veh				1.4	1.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				1.9	1.7	0.0	0.5	0.3	0.0	0.0	0.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				36.4	35.7	0.0	3.4	2.4	0.0	0.0	5.7	0.0
LnGrp LOS				D	D		A	A	A	A	A	
Approach Vol, veh/h					376			391			114	
Approach Delay, s/veh					36.1			2.7			5.7	
Approach LOS					D			A			A	

Timer - Assigned Phs	2		5	6		8						
Phs Duration (G+Y+Rc), s	68.0		10.9	57.1		13.7						
Change Period (Y+Rc), s	* 5.2		* 5.2	* 5.2		5.4						
Max Green Setting (Gmax), s	* 63		* 27	* 31		31.6						
Max Q Clear Time (g_c+I1), s	3.5		3.8	3.0		6.5						
Green Ext Time (p_c), s	1.8		0.3	0.7		1.8						

Intersection Summary		
HCM 6th Ctrl Delay	17.4	
HCM 6th LOS	B	

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

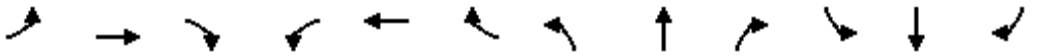
Unsignalized Delay for [EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	36	301	568	234	345	17	280
v/c Ratio	0.11	0.36	0.78	0.11	0.32	0.02	0.13
Control Delay	21.6	23.2	13.5	9.1	2.7	7.9	7.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	21.6	23.2	13.5	9.1	2.7	7.9	7.2
Queue Length 50th (ft)	14	57	38	16	0	2	20
Queue Length 95th (ft)	31	85	126	63	42	13	58
Internal Link Dist (ft)		816		542			586
Turn Bay Length (ft)	230		230		280	780	
Base Capacity (vph)	1286	2537	1265	2115	1085	699	2197
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.03	0.12	0.45	0.11	0.32	0.02	0.13

Intersection Summary

HCM 6th Signalized Intersection Summary
43: Blue Pkwy & I-470 EB Ramp

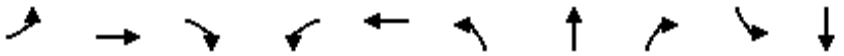
PM Existing plus Site (Phase I)



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	32	265	500	0	0	0	0	201	297	15	244	0
Future Volume (veh/h)	32	265	500	0	0	0	0	201	297	15	244	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	36	301	568				0	234	345	17	280	0
Peak Hour Factor	0.88	0.88	0.88				0.86	0.86	0.86	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	719	1433	639				0	1497	668	432	1744	0
Arrive On Green	0.40	0.40	0.40				0.00	0.42	0.42	0.02	0.49	0.00
Sat Flow, veh/h	1781	3554	1585				0	3647	1585	1781	3647	0
Grp Volume(v), veh/h	36	301	568				0	234	345	17	280	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585				0	1777	1585	1781	1777	0
Q Serve(g_s), s	1.1	5.0	29.9				0.0	3.7	14.4	0.5	3.9	0.0
Cycle Q Clear(g_c), s	1.1	5.0	29.9				0.0	3.7	14.4	0.5	3.9	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	719	1433	639				0	1497	668	432	1744	0
V/C Ratio(X)	0.05	0.21	0.89				0.00	0.16	0.52	0.04	0.16	0.00
Avail Cap(c_a), veh/h	1023	2041	910				0	1497	668	507	1744	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	16.3	17.4	24.9				0.0	16.1	19.2	13.2	12.6	0.0
Incr Delay (d2), s/veh	0.0	0.1	7.9				0.0	0.2	2.8	0.0	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	2.0	12.0				0.0	1.5	5.6	0.2	1.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.3	17.5	32.8				0.0	16.3	22.0	13.3	12.8	0.0
LnGrp LOS	B	B	C				A	B	C	B	B	A
Approach Vol, veh/h		905						579			297	
Approach Delay, s/veh		27.1						19.7			12.8	
Approach LOS		C						B			B	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	6.2	42.8		40.7		49.0
Change Period (Y+Rc), s	4.5	5.0		4.5		5.0
Max Green Setting (Gmax), s	5.5	34.0		51.5		44.0
Max Q Clear Time (g_c+I1), s	2.5	16.4		31.9		5.9
Green Ext Time (p_c), s	0.0	2.6		4.3		2.0

Intersection Summary	
HCM 6th Ctrl Delay	22.3
HCM 6th LOS	C

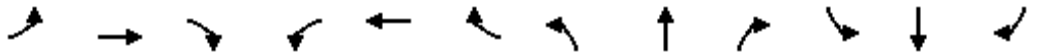


Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	41	394	389	74	314	262	10	70	10	57
v/c Ratio	0.28	0.57	0.45	0.26	0.40	0.34	0.01	0.07	0.01	0.06
Control Delay	45.9	36.5	5.1	43.7	32.2	13.4	11.1	3.1	10.9	5.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	45.9	36.5	5.1	43.7	32.2	13.4	11.1	3.1	10.9	5.0
Queue Length 50th (ft)	23	111	0	21	85	78	2	0	2	3
Queue Length 95th (ft)	59	160	39	36	102	159	11	20	11	23
Internal Link Dist (ft)		383			346		526			358
Turn Bay Length (ft)	200		360	325				210	150	
Base Capacity (vph)	228	1109	1140	384	1070	780	1084	952	822	988
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.18	0.36	0.34	0.19	0.29	0.34	0.01	0.07	0.01	0.06

Intersection Summary

HCM 6th Signalized Intersection Summary
46: Blue Pkwy & Ward Rd & West Dealership Access

PM Existing plus Site (Phase I)



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	38	355	350	54	227	3	238	9	64	9	13	40
Future Volume (veh/h)	38	355	350	54	227	3	238	9	64	9	13	40
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	41	394	389	74	311	3	262	10	70	10	14	43
Peak Hour Factor	0.92	0.90	0.90	0.73	0.73	0.92	0.91	0.91	0.91	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	63	689	541	194	793	8	845	1091	925	846	236	725
Arrive On Green	0.04	0.19	0.19	0.06	0.22	0.22	0.58	0.58	0.58	0.58	0.58	0.58
Sat Flow, veh/h	1781	3554	2790	3456	3606	35	1346	1870	1585	1319	404	1242
Grp Volume(v), veh/h	41	394	389	74	153	161	262	10	70	10	0	57
Grp Sat Flow(s),veh/h/ln	1781	1777	1395	1728	1777	1864	1346	1870	1585	1319	0	1647
Q Serve(g_s), s	2.0	9.0	11.8	1.9	6.6	6.6	9.4	0.2	1.7	0.3	0.0	1.3
Cycle Q Clear(g_c), s	2.0	9.0	11.8	1.9	6.6	6.6	10.7	0.2	1.7	0.5	0.0	1.3
Prop In Lane	1.00		1.00	1.00		0.02	1.00		1.00	1.00		0.75
Lane Grp Cap(c), veh/h	63	689	541	194	391	410	845	1091	925	846	0	961
V/C Ratio(X)	0.65	0.57	0.72	0.38	0.39	0.39	0.31	0.01	0.08	0.01	0.00	0.06
Avail Cap(c_a), veh/h	228	1106	868	384	533	559	845	1091	925	846	0	961
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	42.8	32.9	34.0	41.0	30.0	30.0	10.4	7.9	8.2	8.0	0.0	8.1
Incr Delay (d2), s/veh	10.5	0.8	1.8	1.2	0.6	0.6	1.0	0.0	0.2	0.0	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	3.9	4.0	0.8	2.9	3.0	2.8	0.1	0.6	0.1	0.0	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	53.3	33.6	35.8	42.2	30.6	30.6	11.4	7.9	8.3	8.0	0.0	8.2
LnGrp LOS	D	C	D	D	C	C	B	A	A	A	A	A
Approach Vol, veh/h		824			388			342			67	
Approach Delay, s/veh		35.6			32.8			10.6			8.2	
Approach LOS		D			C			B			A	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		57.5	10.1	22.4		57.5	7.7	24.8				
Change Period (Y+Rc), s		5.0	5.0	5.0		* 5	4.5	5.0				
Max Green Setting (Gmax), s		52.0	10.0	28.0		* 53	11.5	27.0				
Max Q Clear Time (g_c+I1), s		12.7	3.9	13.8		3.3	4.0	8.6				
Green Ext Time (p_c), s		1.1	0.1	3.7		0.4	0.0	1.6				

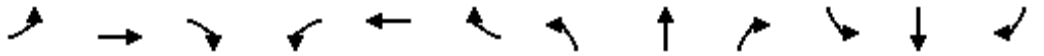
Intersection Summary	
HCM 6th Ctrl Delay	28.6
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBR	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	114	82	8	39	245	7	296	171
v/c Ratio	0.38	0.11	0.01	0.20	0.11	0.04	0.14	0.12
Control Delay	26.5	0.3	0.0	31.5	7.3	32.0	9.3	1.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	26.5	0.3	0.0	31.5	7.3	32.0	9.3	1.1
Queue Length 50th (ft)	34	0	0	12	13	2	16	0
Queue Length 95th (ft)	72	0	0	47	63	16	79	20
Internal Link Dist (ft)			394		623		526	
Turn Bay Length (ft)	110			290		290		155
Base Capacity (vph)	551	1097	921	362	2219	277	2063	1451
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.21	0.07	0.01	0.11	0.11	0.03	0.14	0.12

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	89	0	64	0	0	4	35	218	0	6	263	152
Future Volume (veh/h)	89	0	64	0	0	4	35	218	0	6	263	152
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	114	0	82	0	0	8	39	245	0	7	296	171
Peak Hour Factor	0.78	0.78	0.78	0.50	0.50	0.50	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	342	426	361	205	0	115	82	1884	718	19	1759	909
Arrive On Green	0.08	0.00	0.23	0.00	0.00	0.07	0.05	0.53	0.00	0.01	0.50	0.50
Sat Flow, veh/h	1781	1870	1585	1781	0	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	114	0	82	0	0	8	39	245	0	7	296	171
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	0	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	3.8	0.0	2.8	0.0	0.0	0.3	1.4	2.3	5.2	0.3	3.1	3.5
Cycle Q Clear(g_c), s	3.8	0.0	2.8	0.0	0.0	0.3	1.4	2.3	5.2	0.3	3.1	3.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	342	426	361	205	0	115	82	1884	718	19	1759	909
V/C Ratio(X)	0.33	0.00	0.23	0.00	0.00	0.07	0.47	0.13	0.00	0.36	0.17	0.19
Avail Cap(c_a), veh/h	698	903	765	360	0	465	338	1884	718	259	1759	909
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.3	0.0	21.2	0.0	0.0	29.2	31.4	8.0	0.0	33.2	9.4	6.9
Incr Delay (d2), s/veh	0.6	0.0	0.3	0.0	0.0	0.3	4.2	0.1	0.0	10.8	0.2	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	0.0	1.0	0.0	0.0	0.1	0.7	0.8	0.0	0.2	1.1	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.8	0.0	21.5	0.0	0.0	29.4	35.6	8.1	0.0	44.0	9.6	7.3
LnGrp LOS	C	A	C	A	A	C	D	A	A	D	A	A
Approach Vol, veh/h		196			8			284			474	
Approach Delay, s/veh		23.5			29.4			11.9			9.3	
Approach LOS		C			C			B			A	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.9	41.0	0.0	20.6	8.3	38.6	10.5	10.1
Change Period (Y+Rc), s	* 5.2	* 5.2	* 5.2	* 5.2	* 5.2	* 5.2	* 5.2	* 5.2
Max Green Setting (Gmax), s	* 9.8	* 36	* 6	* 33	* 13	* 33	* 19	* 20
Max Q Clear Time (g_c+I1), s	2.3	7.2	0.0	4.8	3.4	5.5	5.8	2.3
Green Ext Time (p_c), s	0.0	1.6	0.0	0.2	0.0	2.6	0.2	0.0

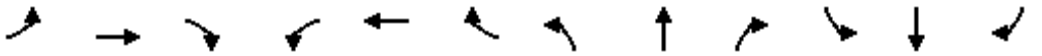
Intersection Summary	
HCM 6th Ctrl Delay	13.1
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	62	113	7	28	55	222	1	8	309	39
v/c Ratio	0.24	0.15	0.03	0.16	0.16	0.09	0.00	0.03	0.14	0.03
Control Delay	25.5	0.4	23.0	19.8	32.3	6.3	0.0	33.6	8.9	0.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	25.5	0.4	23.0	19.8	32.3	6.3	0.0	33.6	8.9	0.8
Queue Length 50th (ft)	22	0	3	2	10	9	0	1	26	0
Queue Length 95th (ft)	40	0	9	17	29	49	0	8	71	6
Internal Link Dist (ft)		404		466		564			623	
Turn Bay Length (ft)					240		170	240		300
Base Capacity (vph)	419	1009	346	596	646	2529	1415	491	2285	1364
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.15	0.11	0.02	0.05	0.09	0.09	0.00	0.02	0.14	0.03

Intersection Summary



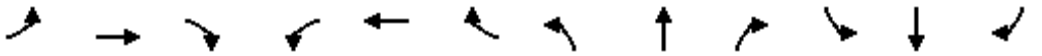
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	43	0	78	5	4	15	48	195	1	7	284	36
Future Volume (veh/h)	43	0	78	5	4	15	48	195	1	7	284	36
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	62	0	113	7	6	22	55	222	1	8	309	39
Peak Hour Factor	0.69	0.69	0.69	0.67	0.67	0.67	0.88	0.88	0.88	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	275	0	179	182	25	91	166	2119	959	36	1985	967
Arrive On Green	0.05	0.00	0.11	0.01	0.07	0.07	0.05	0.60	0.60	0.01	0.56	0.56
Sat Flow, veh/h	1781	0	1585	1781	351	1287	3456	3554	1585	3456	3554	1585
Grp Volume(v), veh/h	62	0	113	7	0	28	55	222	1	8	309	39
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1781	0	1639	1728	1777	1585	1728	1777	1585
Q Serve(g_s), s	2.1	0.0	4.5	0.2	0.0	1.1	1.0	1.8	0.0	0.2	2.8	0.7
Cycle Q Clear(g_c), s	2.1	0.0	4.5	0.2	0.0	1.1	1.0	1.8	0.0	0.2	2.8	0.7
Prop In Lane	1.00		1.00	1.00		0.79	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	275	0	179	182	0	116	166	2119	959	36	1985	967
V/C Ratio(X)	0.23	0.00	0.63	0.04	0.00	0.24	0.33	0.10	0.00	0.22	0.16	0.04
Avail Cap(c_a), veh/h	574	0	658	448	0	581	652	2119	959	495	1985	967
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.2	0.0	28.1	28.2	0.0	29.1	30.5	5.8	5.2	32.5	7.1	5.2
Incr Delay (d2), s/veh	0.4	0.0	3.7	0.1	0.0	1.1	1.2	0.1	0.0	3.1	0.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	1.8	0.1	0.0	0.4	0.4	0.6	0.0	0.1	0.9	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.6	0.0	31.7	28.3	0.0	30.2	31.7	5.9	5.2	35.6	7.2	5.2
LnGrp LOS	C	A	C	C	A	C	C	A	A	D	A	A
Approach Vol, veh/h		175			35			278			356	
Approach Delay, s/veh		29.9			29.8			11.0			7.7	
Approach LOS		C			C			B			A	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.2	44.0	5.1	12.0	7.7	41.5	7.9	9.2
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	9.5	39.5	10.5	27.5	12.5	36.5	14.5	23.5
Max Q Clear Time (g_c+I1), s	2.2	3.8	2.2	6.5	3.0	4.8	4.1	3.1
Green Ext Time (p_c), s	0.0	1.5	0.0	0.6	0.1	2.3	0.1	0.1

Intersection Summary	
HCM 6th Ctrl Delay	14.3
HCM 6th LOS	B

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	59	6	339	46	51	323	182	37	11	264	134
v/c Ratio	0.19	0.03	0.70	0.18	0.24	0.56	0.09	0.03	0.07	0.19	0.13
Control Delay	22.1	29.2	12.2	23.1	17.2	31.8	8.2	1.0	35.1	16.5	2.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	22.1	29.2	12.2	23.1	17.2	31.8	8.2	1.0	35.1	16.5	2.5
Queue Length 50th (ft)	19	2	0	15	4	64	14	0	4	38	0
Queue Length 95th (ft)	47	12	48	38	31	123	47	6	22	81	26
Internal Link Dist (ft)		380			478		1188			564	
Turn Bay Length (ft)						170		260	310		325
Base Capacity (vph)	356	912	948	261	754	1078	2132	1223	168	1390	1032
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.17	0.01	0.36	0.18	0.07	0.30	0.09	0.03	0.07	0.19	0.13

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	48	5	278	37	9	32	291	164	33	10	243	123
Future Volume (veh/h)	48	5	278	37	9	32	291	164	33	10	243	123
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	59	6	339	46	11	40	323	182	37	11	264	134
Peak Hour Factor	0.82	0.82	0.82	0.81	0.81	0.81	0.90	0.90	0.90	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	455	454	385	403	84	305	432	1733	835	24	1337	667
Arrive On Green	0.04	0.24	0.24	0.04	0.24	0.24	0.13	0.49	0.49	0.01	0.38	0.38
Sat Flow, veh/h	1781	1870	1585	1781	354	1285	3456	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	59	6	339	46	0	51	323	182	37	11	264	134
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	0	1639	1728	1777	1585	1781	1777	1585
Q Serve(g_s), s	2.0	0.2	17.1	1.6	0.0	2.0	7.5	2.3	0.9	0.5	4.2	4.4
Cycle Q Clear(g_c), s	2.0	0.2	17.1	1.6	0.0	2.0	7.5	2.3	0.9	0.5	4.2	4.4
Prop In Lane	1.00		1.00	1.00		0.78	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	455	454	385	403	0	389	432	1733	835	24	1337	667
V/C Ratio(X)	0.13	0.01	0.88	0.11	0.00	0.13	0.75	0.11	0.04	0.46	0.20	0.20
Avail Cap(c_a), veh/h	579	754	639	472	0	602	895	1733	835	139	1337	667
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.2	23.9	30.3	22.3	0.0	24.9	35.1	11.5	9.5	40.7	17.5	15.2
Incr Delay (d2), s/veh	0.1	0.0	7.9	0.1	0.0	0.2	2.6	0.1	0.1	13.0	0.3	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.1	7.1	0.7	0.0	0.8	3.2	0.9	0.3	0.3	1.7	1.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.3	23.9	38.2	22.4	0.0	25.1	37.7	11.6	9.6	53.6	17.8	15.9
LnGrp LOS	C	C	D	C	A	C	D	B	A	D	B	B
Approach Vol, veh/h		404			97			542			409	
Approach Delay, s/veh		35.7			23.8			27.0			18.1	
Approach LOS		D			C			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.6	45.0	7.8	24.7	14.9	35.7	8.2	24.2
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	6.5	40.5	6.5	33.5	21.5	25.5	9.5	30.5
Max Q Clear Time (g_c+I1), s	2.5	4.3	3.6	19.1	9.5	6.4	4.0	4.0
Green Ext Time (p_c), s	0.0	1.3	0.0	1.1	0.9	2.0	0.0	0.2

Intersection Summary	
HCM 6th Ctrl Delay	26.7
HCM 6th LOS	C

Intersection	
Int Delay, s/veh	3.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	120	218	2	2	256	10	2	0	2	57	0	84
Future Vol, veh/h	120	218	2	2	256	10	2	0	2	57	0	84
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	210	-	160	215	-	215	-	-	-	200	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	80	80	80	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	133	242	2	3	320	13	2	0	2	62	0	91

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	333	0	0	244	0	0	674	847	121	713	836	160
Stage 1	-	-	-	-	-	-	508	508	-	326	326	-
Stage 2	-	-	-	-	-	-	166	339	-	387	510	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1223	-	-	1319	-	-	340	297	908	319	302	857
Stage 1	-	-	-	-	-	-	516	537	-	661	647	-
Stage 2	-	-	-	-	-	-	820	638	-	608	536	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1223	-	-	1319	-	-	278	264	908	291	268	857
Mov Cap-2 Maneuver	-	-	-	-	-	-	278	264	-	291	268	-
Stage 1	-	-	-	-	-	-	460	478	-	589	646	-
Stage 2	-	-	-	-	-	-	731	637	-	541	478	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	2.9	0.1	13.5	14.1
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	426	1223	-	-	1319	-	-	291	857
HCM Lane V/C Ratio	0.01	0.109	-	-	0.002	-	-	0.213	0.107
HCM Control Delay (s)	13.5	8.3	-	-	7.7	-	-	20.7	9.7
HCM Lane LOS	B	A	-	-	A	-	-	C	A
HCM 95th %tile Q(veh)	0	0.4	-	-	0	-	-	0.8	0.4

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	340	337	5	0	5
Future Vol, veh/h	0	340	337	5	0	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	80	80	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	378	421	6	0	5

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	214
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	-	0	791
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	791
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	9.6
HCM LOS			A

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	791
HCM Lane V/C Ratio	-	-	-	0.007
HCM Control Delay (s)	-	-	-	9.6
HCM Lane LOS	-	-	-	A
HCM 95th %tile Q(veh)	-	-	-	0

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑	↱		↱
Traffic Vol, veh/h	0	277	194	30	0	73
Future Vol, veh/h	0	277	194	30	0	73
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	200	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	80	80	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	308	243	38	0	79

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	122
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	-	0	906
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	906
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	9.4
HCM LOS			A

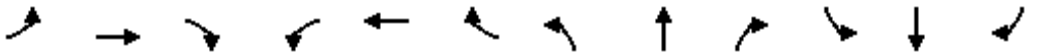
Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	906
HCM Lane V/C Ratio	-	-	-	0.088
HCM Control Delay (s)	-	-	-	9.4
HCM Lane LOS	-	-	-	A
HCM 95th %tile Q(veh)	-	-	-	0.3

Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	1	4	68	169	25	250	135	258	533
v/c Ratio	0.00	0.01	0.36	0.46	0.04	0.15	0.16	0.33	0.24
Control Delay	26.0	0.0	33.5	9.8	4.0	10.7	2.3	5.3	6.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	26.0	0.0	33.5	9.8	4.0	10.7	2.3	5.3	6.6
Queue Length 50th (ft)	0	0	24	0	2	27	0	28	31
Queue Length 95th (ft)	4	0	66	33	9	48	15	45	68
Internal Link Dist (ft)		394	448			689			1243
Turn Bay Length (ft)					200		90	150	
Base Capacity (vph)	508	848	497	688	613	1678	830	995	2256
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.00	0.00	0.14	0.25	0.04	0.15	0.16	0.26	0.24

Intersection Summary

HCM 6th Signalized Intersection Summary
15: Ward Rd & Tudor Rd

AM Existing plus Site (Phase I & II)



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	0	4	52	1	132	23	200	108	178	367	1
Future Volume (veh/h)	1	0	4	52	1	132	23	200	108	178	367	1
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1	0	4	67	1	169	25	250	135	258	532	1
Peak Hour Factor	0.92	0.92	0.92	0.78	0.92	0.78	0.92	0.80	0.80	0.69	0.69	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	319	0	223	296	4	223	595	1808	806	777	2218	4
Arrive On Green	0.14	0.00	0.14	0.14	0.14	0.14	0.03	0.51	0.51	0.11	0.61	0.61
Sat Flow, veh/h	1416	0	1585	1375	26	1585	1781	3554	1585	1781	3639	7
Grp Volume(v), veh/h	1	0	4	68	0	169	25	250	135	258	260	273
Grp Sat Flow(s),veh/h/ln	1416	0	1585	1401	0	1585	1781	1777	1585	1781	1777	1869
Q Serve(g_s), s	0.0	0.0	0.2	3.0	0.0	7.2	0.5	2.6	3.2	4.5	4.7	4.7
Cycle Q Clear(g_c), s	0.0	0.0	0.2	3.1	0.0	7.2	0.5	2.6	3.2	4.5	4.7	4.7
Prop In Lane	1.00		1.00	0.99		1.00	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	319	0	223	300	0	223	595	1808	806	777	1083	1139
V/C Ratio(X)	0.00	0.00	0.02	0.23	0.00	0.76	0.04	0.14	0.17	0.33	0.24	0.24
Avail Cap(c_a), veh/h	638	0	580	598	0	557	738	1808	806	1149	1083	1139
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.8	0.0	25.8	27.1	0.0	28.8	7.6	9.1	9.2	5.9	6.2	6.2
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.4	0.0	5.2	0.0	0.2	0.4	0.2	0.5	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.1	1.0	0.0	2.9	0.2	0.9	1.1	1.3	1.5	1.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.8	0.0	25.8	27.5	0.0	34.0	7.6	9.2	9.6	6.1	6.7	6.7
LnGrp LOS	C	A	C	C	A	C	A	A	A	A	A	A
Approach Vol, veh/h		5			237			410			791	
Approach Delay, s/veh		25.8			32.2			9.3			6.5	
Approach LOS		C			C			A			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	13.4	41.0		15.3	6.4	48.0		15.3				
Change Period (Y+Rc), s	5.5	5.5		* 5.5	4.5	5.5		5.5				
Max Green Setting (Gmax), s	22.5	26.5		* 26	7.5	42.5		24.5				
Max Q Clear Time (g_c+I1), s	6.5	5.2		2.2	2.5	6.7		9.2				
Green Ext Time (p_c), s	0.6	2.0		0.0	0.0	3.3		0.7				

Intersection Summary			
HCM 6th Ctrl Delay		11.6	
HCM 6th LOS		B	

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	0	3	8	0	11	9	211	1	50	221	6
Future Vol, veh/h	2	0	3	8	0	11	9	211	1	50	221	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	25	-	-	200	-	145	190	-	190
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	63	63	92	79	79	92	95	95	95	80	80	80
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	0	3	10	0	12	9	222	1	63	276	8

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	531	643	138	504	650	111	284	0	0	223	0	0
Stage 1	402	402	-	240	240	-	-	-	-	-	-	-
Stage 2	129	241	-	264	410	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	431	390	885	451	387	921	1275	-	-	1343	-	-
Stage 1	596	599	-	742	706	-	-	-	-	-	-	-
Stage 2	861	705	-	718	594	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	408	369	885	431	366	921	1275	-	-	1343	-	-
Mov Cap-2 Maneuver	408	369	-	431	366	-	-	-	-	-	-	-
Stage 1	592	571	-	737	701	-	-	-	-	-	-	-
Stage 2	844	700	-	682	566	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	11.5	11.1	0.3	1.4
HCM LOS	B	B		

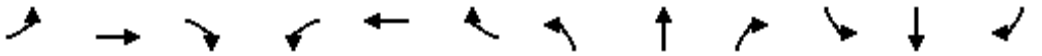
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1275	-	-	561	431	921	1343	-	-
HCM Lane V/C Ratio	0.007	-	-	0.011	0.023	0.013	0.047	-	-
HCM Control Delay (s)	7.8	-	-	11.5	13.6	9	7.8	-	-
HCM Lane LOS	A	-	-	B	B	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0.1	0	0.1	-	-

Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	260	177	38	160	178	135	24
v/c Ratio	0.56	0.37	0.13	0.17	0.07	0.08	0.03
Control Delay	39.5	35.9	2.0	4.0	3.4	10.3	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	39.5	35.9	2.0	4.0	3.4	10.3	0.1
Queue Length 50th (ft)	69	46	0	20	11	15	0
Queue Length 95th (ft)	95	70	1	39	20	29	0
Internal Link Dist (ft)		962			586	567	
Turn Bay Length (ft)	425		310	480			135
Base Capacity (vph)	1219	1256	614	1100	2612	1861	871
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.21	0.14	0.06	0.15	0.07	0.07	0.03

Intersection Summary

HCM 6th Signalized Intersection Summary
38: Blue Pkwy & I-470 WB Ramp

AM Existing plus Site (Phase I & II)



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	213	145	31	133	148	0	0	113	20
Future Volume (veh/h)	0	0	0	213	145	31	133	148	0	0	113	20
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1870	1870	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				260	177	0	160	178	0	0	135	0
Peak Hour Factor				0.82	0.82	0.82	0.83	0.83	0.83	0.84	0.84	0.84
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				412	423		968	2676	0	0	2196	
Arrive On Green				0.12	0.12	0.00	0.07	0.75	0.00	0.00	0.62	0.00
Sat Flow, veh/h				3456	3554	1585	1781	3647	0	0	3647	1585
Grp Volume(v), veh/h				260	177	0	160	178	0	0	135	0
Grp Sat Flow(s),veh/h/ln				1728	1777	1585	1781	1777	0	0	1777	1585
Q Serve(g_s), s				6.1	3.9	0.0	2.4	1.1	0.0	0.0	1.3	0.0
Cycle Q Clear(g_c), s				6.1	3.9	0.0	2.4	1.1	0.0	0.0	1.3	0.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				412	423		968	2676	0	0	2196	
V/C Ratio(X)				0.63	0.42		0.17	0.07	0.00	0.00	0.06	
Avail Cap(c_a), veh/h				1252	1287		1487	2676	0	0	2196	
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				35.4	34.5	0.0	3.9	2.7	0.0	0.0	6.4	0.0
Incr Delay (d2), s/veh				1.6	0.7	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				2.6	1.7	0.0	0.7	0.3	0.0	0.0	0.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				37.0	35.1	0.0	4.0	2.8	0.0	0.0	6.4	0.0
LnGrp LOS				D	D		A	A	A	A	A	
Approach Vol, veh/h					437			338			135	
Approach Delay, s/veh					36.3			3.3			6.4	
Approach LOS					D			A			A	

Timer - Assigned Phs	2		5	6		8						
Phs Duration (G+Y+Rc), s	69.0		11.4	57.6		15.5						
Change Period (Y+Rc), s	* 5.4		* 5.4	* 5.4		5.4						
Max Green Setting (Gmax), s	* 64		* 31	* 28		30.6						
Max Q Clear Time (g_c+I1), s	3.1		4.4	3.3		8.1						
Green Ext Time (p_c), s	1.3		0.4	0.8		2.0						

Intersection Summary		
HCM 6th Ctrl Delay	19.6	
HCM 6th LOS	B	

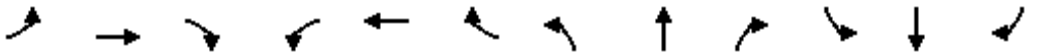
Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	36	301	345	291	108	17	356
v/c Ratio	0.11	0.46	0.60	0.13	0.10	0.02	0.15
Control Delay	23.7	27.3	8.0	7.0	2.6	5.2	5.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	23.7	27.3	8.0	7.0	2.6	5.2	5.2
Queue Length 50th (ft)	13	60	0	21	0	2	25
Queue Length 95th (ft)	34	92	56	59	22	9	47
Internal Link Dist (ft)		816		542			586
Turn Bay Length (ft)	230		230		280	780	
Base Capacity (vph)	1238	2476	1211	2211	1029	734	2323
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.03	0.12	0.28	0.13	0.10	0.02	0.15

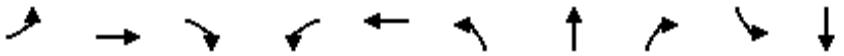
Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	32	265	304	0	0	0	0	250	93	15	310	0
Future Volume (veh/h)	32	265	304	0	0	0	0	250	93	15	310	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	36	301	345				0	291	108	17	356	0
Peak Hour Factor	0.88	0.88	0.88				0.86	0.86	0.86	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	487	971	433				0	1744	778	620	2080	0
Arrive On Green	0.27	0.27	0.27				0.00	0.49	0.49	0.02	0.59	0.00
Sat Flow, veh/h	1781	3554	1585				0	3647	1585	1781	3647	0
Grp Volume(v), veh/h	36	301	345				0	291	108	17	356	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585				0	1777	1585	1781	1777	0
Q Serve(g_s), s	1.2	5.2	15.7				0.0	3.5	2.9	0.3	3.6	0.0
Cycle Q Clear(g_c), s	1.2	5.2	15.7				0.0	3.5	2.9	0.3	3.6	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	487	971	433				0	1744	778	620	2080	0
V/C Ratio(X)	0.07	0.31	0.80				0.00	0.17	0.14	0.03	0.17	0.00
Avail Cap(c_a), veh/h	1111	2217	989				0	1744	778	795	2080	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	21.0	22.4	26.2				0.0	11.0	10.8	8.5	7.4	0.0
Incr Delay (d2), s/veh	0.1	0.2	3.4				0.0	0.2	0.4	0.0	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	2.1	6.1				0.0	1.3	1.0	0.1	1.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.0	22.6	29.6				0.0	11.2	11.2	8.5	7.6	0.0
LnGrp LOS	C	C	C				A	B	B	A	A	A
Approach Vol, veh/h		682						399			373	
Approach Delay, s/veh		26.1						11.2			7.6	
Approach LOS		C						B			A	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	7.3	43.7		26.7		51.0
Change Period (Y+Rc), s	5.5	5.5		5.5		5.5
Max Green Setting (Gmax), s	9.5	30.5		48.5		45.5
Max Q Clear Time (g_c+I1), s	2.3	5.5		17.7		5.6
Green Ext Time (p_c), s	0.0	2.3		3.5		2.6

Intersection Summary			
HCM 6th Ctrl Delay			17.3
HCM 6th LOS			B

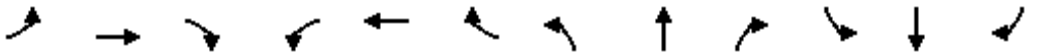


Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	73	346	262	120	308	119	11	32	4	23
v/c Ratio	0.35	0.51	0.35	0.31	0.47	0.17	0.01	0.04	0.01	0.03
Control Delay	34.8	28.7	5.1	32.6	28.6	11.9	11.0	1.0	10.8	7.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	34.8	28.7	5.1	32.6	28.6	11.9	11.0	1.0	10.8	7.3
Queue Length 50th (ft)	30	73	0	25	64	27	2	0	1	2
Queue Length 95th (ft)	71	115	30	46	92	57	11	2	6	14
Internal Link Dist (ft)		383			346		526			358
Turn Bay Length (ft)	200		360	325				210	150	
Base Capacity (vph)	552	1849	1581	921	1692	721	973	859	740	909
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.13	0.19	0.17	0.13	0.18	0.17	0.01	0.04	0.01	0.03

Intersection Summary

HCM 6th Signalized Intersection Summary
46: Blue Pkwy & Ward Rd & West Dealership Access

AM Existing plus Site (Phase I & II)



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	67	311	236	96	242	5	94	10	25	4	9	12
Future Volume (veh/h)	67	311	236	96	242	5	94	10	25	4	9	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	73	346	262	120	302	5	119	11	32	4	10	13
Peak Hour Factor	0.92	0.90	0.90	0.80	0.80	0.92	0.79	0.92	0.79	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	99	610	479	230	655	11	856	1019	864	869	402	523
Arrive On Green	0.06	0.17	0.17	0.07	0.18	0.18	0.55	0.55	0.55	0.55	0.55	0.55
Sat Flow, veh/h	1781	3554	2790	3456	3577	59	1388	1870	1585	1404	738	960
Grp Volume(v), veh/h	73	346	262	120	150	157	119	11	32	4	0	23
Grp Sat Flow(s),veh/h/ln	1781	1777	1395	1728	1777	1860	1388	1870	1585	1404	0	1698
Q Serve(g_s), s	2.7	6.0	5.7	2.2	5.0	5.1	2.9	0.2	0.6	0.1	0.0	0.4
Cycle Q Clear(g_c), s	2.7	6.0	5.7	2.2	5.0	5.1	3.3	0.2	0.6	0.3	0.0	0.4
Prop In Lane	1.00		1.00	1.00		0.03	1.00		1.00	1.00		0.57
Lane Grp Cap(c), veh/h	99	610	479	230	325	340	856	1019	864	869	0	925
V/C Ratio(X)	0.74	0.57	0.55	0.52	0.46	0.46	0.14	0.01	0.04	0.00	0.00	0.02
Avail Cap(c_a), veh/h	572	1910	1500	955	876	916	856	1019	864	869	0	925
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	31.1	25.4	25.3	30.2	24.4	24.4	7.8	7.0	7.1	7.0	0.0	7.0
Incr Delay (d2), s/veh	10.2	0.8	1.0	1.8	1.0	1.0	0.3	0.0	0.1	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	2.5	1.9	1.0	2.1	2.2	0.8	0.1	0.2	0.0	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	41.4	26.3	26.3	32.0	25.4	25.4	8.1	7.0	7.2	7.0	0.0	7.1
LnGrp LOS	D	C	C	C	C	C	A	A	A	A	A	A
Approach Vol, veh/h		681			427			162			27	
Approach Delay, s/veh		27.9			27.3			7.9			7.1	
Approach LOS		C			C			A			A	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		41.5	9.0	16.5		41.5	8.2	17.3				
Change Period (Y+Rc), s		5.0	4.5	5.0		* 5	4.5	5.0				
Max Green Setting (Gmax), s		36.0	18.5	36.0		* 37	21.5	33.0				
Max Q Clear Time (g_c+I1), s		5.3	4.2	8.0		2.4	4.7	7.1				
Green Ext Time (p_c), s		0.5	0.3	3.5		0.1	0.1	1.8				

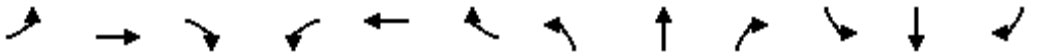
Intersection Summary	
HCM 6th Ctrl Delay	24.8
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	23	9	3	1	15	114	3	7	299	67
v/c Ratio	0.12	0.01	0.02	0.00	0.09	0.04	0.00	0.04	0.11	0.05
Control Delay	26.3	0.0	24.7	0.0	30.7	4.8	0.0	30.7	4.6	1.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	26.3	0.0	24.7	0.0	30.7	4.8	0.0	30.7	4.6	1.0
Queue Length 50th (ft)	9	0	1	0	6	4	0	3	11	0
Queue Length 95th (ft)	28	0	8	0	25	25	0	15	61	11
Internal Link Dist (ft)				394		623			526	
Turn Bay Length (ft)	110				290		210	290		155
Base Capacity (vph)	372	949	331	1071	329	2700	1499	303	2693	1504
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.06	0.01	0.01	0.00	0.05	0.04	0.00	0.02	0.11	0.04

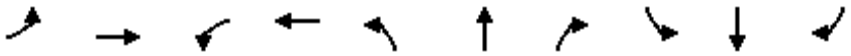
Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	21	0	8	3	0	1	14	105	3	6	275	62
Future Volume (veh/h)	21	0	8	3	0	1	14	105	3	6	275	62
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	23	0	9	3	0	1	15	114	3	7	299	67
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	194	86	73	148	0	31	39	2342	1052	20	2303	1077
Arrive On Green	0.03	0.00	0.05	0.00	0.00	0.02	0.02	0.66	0.66	0.01	0.65	0.65
Sat Flow, veh/h	1781	1870	1585	1781	0	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	23	0	9	3	0	1	15	114	3	7	299	67
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	0	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	0.8	0.0	0.4	0.1	0.0	0.0	0.5	0.7	0.0	0.3	2.1	0.9
Cycle Q Clear(g_c), s	0.8	0.0	0.4	0.1	0.0	0.0	0.5	0.7	0.0	0.3	2.1	0.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	194	86	73	148	0	31	39	2342	1052	20	2303	1077
V/C Ratio(X)	0.12	0.00	0.12	0.02	0.00	0.03	0.38	0.05	0.00	0.36	0.13	0.06
Avail Cap(c_a), veh/h	511	624	529	457	0	479	345	2342	1052	318	2303	1077
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.4	0.0	29.5	30.8	0.0	31.0	31.1	3.9	3.6	31.7	4.4	3.5
Incr Delay (d2), s/veh	0.3	0.0	0.8	0.1	0.0	0.4	6.1	0.0	0.0	10.7	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.1	0.0	0.0	0.0	0.3	0.2	0.0	0.2	0.6	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.7	0.0	30.3	30.8	0.0	31.5	37.2	3.9	3.7	42.4	4.5	3.6
LnGrp LOS	C	A	C	C	A	C	D	A	A	D	A	A
Approach Vol, veh/h		32			4			132			373	
Approach Delay, s/veh		29.9			31.0			7.7			5.0	
Approach LOS		C			C			A			A	

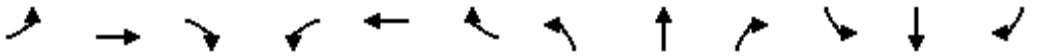
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.2	47.0	4.8	7.5	5.9	46.3	6.5	5.7
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	11.5	42.5	11.5	21.5	12.5	41.5	13.5	19.5
Max Q Clear Time (g_c+I1), s	2.3	2.7	2.1	2.4	2.5	4.1	2.8	2.0
Green Ext Time (p_c), s	0.0	0.7	0.0	0.0	0.0	2.3	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	7.3
HCM 6th LOS	A



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	4	29	7	10	31	128	17	37	314	15
v/c Ratio	0.02	0.04	0.03	0.01	0.09	0.05	0.01	0.11	0.11	0.01
Control Delay	24.0	0.1	24.0	0.0	31.0	6.7	0.0	30.9	6.2	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	24.0	0.1	24.0	0.0	31.0	6.7	0.0	30.9	6.2	0.0
Queue Length 50th (ft)	1	0	2	0	4	0	0	5	0	0
Queue Length 95th (ft)	6	0	10	0	19	29	0	19	55	0
Internal Link Dist (ft)		404		466		564			623	
Turn Bay Length (ft)					240		170	240		300
Base Capacity (vph)	384	946	386	1085	700	2829	1281	700	2832	1282
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.01	0.03	0.02	0.01	0.04	0.05	0.01	0.05	0.11	0.01

Intersection Summary



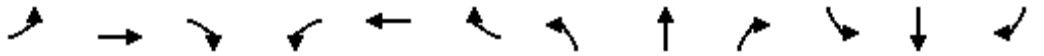
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	0	16	5	0	7	27	113	15	29	245	12
Future Volume (veh/h)	2	0	16	5	0	7	27	113	15	29	245	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	4	0	29	7	0	10	31	128	17	37	314	15
Peak Hour Factor	0.56	0.56	0.56	0.69	0.69	0.69	0.88	0.88	0.88	0.78	0.78	0.78
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	188	0	77	172	0	85	136	2102	943	155	2121	944
Arrive On Green	0.01	0.00	0.05	0.01	0.00	0.05	0.04	0.59	0.59	0.04	0.60	0.60
Sat Flow, veh/h	1781	0	1562	1781	0	1562	3456	3554	1565	3456	3554	1565
Grp Volume(v), veh/h	4	0	29	7	0	10	31	128	17	37	314	15
Grp Sat Flow(s),veh/h/ln	1781	0	1562	1781	0	1562	1728	1777	1565	1728	1777	1565
Q Serve(g_s), s	0.1	0.0	1.2	0.2	0.0	0.4	0.6	1.0	0.3	0.7	2.6	0.3
Cycle Q Clear(g_c), s	0.1	0.0	1.2	0.2	0.0	0.4	0.6	1.0	0.3	0.7	2.6	0.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	188	0	77	172	0	85	136	2102	943	155	2121	944
V/C Ratio(X)	0.02	0.00	0.37	0.04	0.00	0.12	0.23	0.06	0.02	0.24	0.15	0.02
Avail Cap(c_a), veh/h	501	0	497	477	0	497	681	2102	943	681	2121	944
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.4	0.0	30.3	29.2	0.0	29.7	30.7	5.7	5.3	30.4	5.9	5.2
Incr Delay (d2), s/veh	0.0	0.0	3.0	0.1	0.0	0.6	0.8	0.1	0.0	0.8	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.5	0.1	0.0	0.2	0.2	0.3	0.1	0.3	0.8	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.5	0.0	33.3	29.3	0.0	30.3	31.5	5.8	5.3	31.2	6.0	5.3
LnGrp LOS	C	A	C	C	A	C	C	A	A	C	A	A
Approach Vol, veh/h		33			17			176			366	
Approach Delay, s/veh		32.9			29.9			10.3			8.5	
Approach LOS		C			C			B			A	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.0	44.0	5.7	8.3	7.6	44.4	5.4	8.6
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	13.0	39.0	12.0	21.0	13.0	39.0	12.0	21.0
Max Q Clear Time (g_c+I1), s	2.7	3.0	2.2	3.2	2.6	4.6	2.1	2.4
Green Ext Time (p_c), s	0.0	0.9	0.0	0.1	0.0	2.2	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	11.0
HCM 6th LOS	B

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	27	3	123	16	12	139	142	51	25	230	44
v/c Ratio	0.09	0.02	0.45	0.08	0.07	0.34	0.07	0.04	0.15	0.14	0.04
Control Delay	21.6	30.0	12.4	26.3	19.0	31.2	9.6	1.2	32.8	12.7	1.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	21.6	30.0	12.4	26.3	19.0	31.2	9.6	1.2	32.8	12.7	1.0
Queue Length 50th (ft)	9	1	0	6	0	28	11	0	10	30	0
Queue Length 95th (ft)	27	8	42	20	16	54	35	7	33	59	6
Internal Link Dist (ft)		380			478		1188			564	
Turn Bay Length (ft)						170		260	310		325
Base Capacity (vph)	404	820	767	299	643	806	2096	1299	311	1647	1216
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.07	0.00	0.16	0.05	0.02	0.17	0.07	0.04	0.08	0.14	0.04

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	24	3	108	15	1	10	118	121	43	22	205	39
Future Volume (veh/h)	24	3	108	15	1	10	118	121	43	22	205	39
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	27	3	123	16	1	11	139	142	51	25	230	44
Peak Hour Factor	0.88	0.88	0.88	0.93	0.93	0.93	0.85	0.85	0.85	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	299	199	169	288	13	138	299	1851	863	60	1664	799
Arrive On Green	0.04	0.11	0.11	0.02	0.09	0.09	0.09	0.52	0.52	0.03	0.47	0.47
Sat Flow, veh/h	1781	1870	1585	1781	134	1472	3456	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	27	3	123	16	0	12	139	142	51	25	230	44
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	0	1605	1728	1777	1585	1781	1777	1585
Q Serve(g_s), s	0.8	0.1	4.8	0.5	0.0	0.4	2.4	1.3	1.0	0.9	2.3	0.9
Cycle Q Clear(g_c), s	0.8	0.1	4.8	0.5	0.0	0.4	2.4	1.3	1.0	0.9	2.3	0.9
Prop In Lane	1.00		1.00	1.00		0.92	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	299	199	169	288	0	150	299	1851	863	60	1664	799
V/C Ratio(X)	0.09	0.02	0.73	0.06	0.00	0.08	0.46	0.08	0.06	0.42	0.14	0.06
Avail Cap(c_a), veh/h	601	886	751	527	0	684	873	1851	863	337	1664	799
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.4	25.3	27.4	24.9	0.0	26.2	27.5	7.6	6.8	30.0	9.6	8.0
Incr Delay (d2), s/veh	0.1	0.0	5.9	0.1	0.0	0.2	1.1	0.1	0.1	4.5	0.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	2.0	0.2	0.0	0.2	1.0	0.4	0.3	0.4	0.8	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.5	25.4	33.4	25.0	0.0	26.4	28.7	7.7	6.9	34.5	9.8	8.1
LnGrp LOS	C	C	C	C	A	C	C	A	A	C	A	A
Approach Vol, veh/h		153			28			332			299	
Approach Delay, s/veh		31.6			25.6			16.3			11.6	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.1	38.0	6.5	11.7	10.5	34.7	7.3	10.9
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	12.0	33.0	10.0	30.0	16.0	29.0	13.0	27.0
Max Q Clear Time (g_c+I1), s	2.9	3.3	2.5	6.8	4.4	4.3	2.8	2.4
Green Ext Time (p_c), s	0.0	1.1	0.0	0.4	0.3	1.6	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	17.8
HCM 6th LOS	B

Intersection	
Int Delay, s/veh	4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	169	427	1	1	278	7	2	0	3	50	0	103
Future Vol, veh/h	169	427	1	1	278	7	2	0	3	50	0	103
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	210	-	160	215	-	215	-	-	-	200	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	188	474	1	1	309	8	2	0	4	59	0	121

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	317	0	0	475	0	0	1007	1169	237	924	1162	155
Stage 1	-	-	-	-	-	-	850	850	-	311	311	-
Stage 2	-	-	-	-	-	-	157	319	-	613	851	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1240	-	-	1083	-	-	195	192	764	224	194	863
Stage 1	-	-	-	-	-	-	322	375	-	674	657	-
Stage 2	-	-	-	-	-	-	829	652	-	446	375	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1240	-	-	1083	-	-	148	163	764	197	164	863
Mov Cap-2 Maneuver	-	-	-	-	-	-	148	163	-	197	164	-
Stage 1	-	-	-	-	-	-	273	318	-	572	656	-
Stage 2	-	-	-	-	-	-	712	651	-	377	318	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	2.4	0	17.8	16.8
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	287	1240	-	-	1083	-	-	197	863
HCM Lane V/C Ratio	0.02	0.151	-	-	0.001	-	-	0.299	0.14
HCM Control Delay (s)	17.8	8.4	-	-	8.3	-	-	30.9	9.9
HCM Lane LOS	C	A	-	-	A	-	-	D	A
HCM 95th %tile Q(veh)	0.1	0.5	-	-	0	-	-	1.2	0.5

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑			↱
Traffic Vol, veh/h	0	597	380	3	0	13
Future Vol, veh/h	0	597	380	3	0	13
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	73	73	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	663	521	4	0	14

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	263
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	-	0	735
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	735
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	10
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	735
HCM Lane V/C Ratio	-	-	-	0.019
HCM Control Delay (s)	-	-	-	10
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.1

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑	↱		↱
Traffic Vol, veh/h	0	480	279	42	0	7
Future Vol, veh/h	0	480	279	42	0	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	200	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	73	73	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	533	382	58	0	8

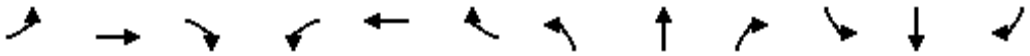
Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	191
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	-	0	818
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	818
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	9.4
HCM LOS			A

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	818
HCM Lane V/C Ratio	-	-	-	0.009
HCM Control Delay (s)	-	-	-	9.4
HCM Lane LOS	-	-	-	A
HCM 95th %tile Q(veh)	-	-	-	0

Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	3	15	124	162	13	231	86	230	334
v/c Ratio	0.01	0.05	0.55	0.40	0.02	0.14	0.11	0.30	0.14
Control Delay	25.7	15.2	37.8	8.3	4.4	12.2	1.1	6.2	6.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	25.7	15.2	37.8	8.3	4.4	12.2	1.1	6.2	6.1
Queue Length 50th (ft)	1	1	49	0	1	27	0	30	22
Queue Length 95th (ft)	8	16	93	30	6	60	9	66	62
Internal Link Dist (ft)		394	448			689			1243
Turn Bay Length (ft)					200		90	150	
Base Capacity (vph)	522	679	553	750	792	1652	811	995	2310
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.01	0.02	0.22	0.22	0.02	0.14	0.11	0.23	0.14

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	2	12	95	1	125	9	208	77	191	276	1
Future Volume (veh/h)	3	2	12	95	1	125	9	208	77	191	276	1
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	3	2	13	123	1	162	13	231	86	230	333	1
Peak Hour Factor	0.92	0.92	0.92	0.77	0.77	0.77	0.70	0.90	0.90	0.83	0.83	0.83
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	156	30	196	281	1	222	750	1874	836	816	2301	7
Arrive On Green	0.14	0.14	0.14	0.14	0.14	0.14	0.02	0.53	0.53	0.11	0.63	0.63
Sat Flow, veh/h	1223	216	1402	1310	11	1585	1781	3554	1585	1781	3634	11
Grp Volume(v), veh/h	3	0	15	124	0	162	13	231	86	230	163	171
Grp Sat Flow(s),veh/h/ln	1223	0	1618	1321	0	1585	1781	1777	1585	1781	1777	1868
Q Serve(g_s), s	0.2	0.0	0.6	6.2	0.0	7.2	0.2	2.4	2.0	4.0	2.7	2.7
Cycle Q Clear(g_c), s	7.0	0.0	0.6	6.8	0.0	7.2	0.2	2.4	2.0	4.0	2.7	2.7
Prop In Lane	1.00		0.87	0.99		1.00	1.00		1.00	1.00		0.01
Lane Grp Cap(c), veh/h	156	0	227	283	0	222	750	1874	836	816	1125	1183
V/C Ratio(X)	0.02	0.00	0.07	0.44	0.00	0.73	0.02	0.12	0.10	0.28	0.14	0.14
Avail Cap(c_a), veh/h	476	0	650	649	0	637	928	1874	836	1242	1125	1183
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.4	0.0	27.4	30.4	0.0	30.3	4.6	8.8	8.7	5.7	5.4	5.4
Incr Delay (d2), s/veh	0.0	0.0	0.1	1.1	0.0	4.6	0.0	0.1	0.2	0.2	0.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.2	2.1	0.0	2.9	0.1	0.9	0.7	1.2	0.9	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.4	0.0	27.5	31.4	0.0	34.8	4.6	8.9	8.9	5.8	5.7	5.7
LnGrp LOS	C	A	C	C	A	C	A	A	A	A	A	A
Approach Vol, veh/h		18			286			330			564	
Approach Delay, s/veh		28.5			33.3			8.7			5.8	
Approach LOS		C			C			A			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	13.4	44.2		15.8	5.7	52.0		15.8				
Change Period (Y+Rc), s	5.5	5.5		5.5	4.5	5.5		5.5				
Max Green Setting (Gmax), s	25.5	28.5		29.5	8.5	46.5		29.5				
Max Q Clear Time (g_c+I1), s	6.0	4.4		9.0	2.2	4.7		9.2				
Green Ext Time (p_c), s	0.6	1.7		0.0	0.0	2.0		1.1				

Intersection Summary			
HCM 6th Ctrl Delay		13.5	
HCM 6th LOS		B	

Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	9	0	9	3	0	38	2	276	1	24	455	1
Future Vol, veh/h	9	0	9	3	0	38	2	276	1	24	455	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	25	-	-	200	-	145	190	-	190
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	57	57	92	47	47	92	92	92	92	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	16	0	10	6	0	41	2	300	1	26	500	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	706	857	250	606	857	150	501	0	0	301	0	0
Stage 1	552	552	-	304	304	-	-	-	-	-	-	-
Stage 2	154	305	-	302	553	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	323	293	750	381	293	870	1059	-	-	1257	-	-
Stage 1	486	513	-	681	662	-	-	-	-	-	-	-
Stage 2	833	661	-	682	513	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	302	286	750	370	286	870	1059	-	-	1257	-	-
Mov Cap-2 Maneuver	302	286	-	370	286	-	-	-	-	-	-	-
Stage 1	485	502	-	680	661	-	-	-	-	-	-	-
Stage 2	792	660	-	659	502	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	14.9	10	0.1	0.4
HCM LOS	B	B		

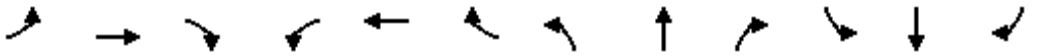
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1059	-	-	391	370	870	1257	-	-
HCM Lane V/C Ratio	0.002	-	-	0.065	0.017	0.047	0.021	-	-
HCM Control Delay (s)	8.4	-	-	14.9	14.9	9.3	7.9	-	-
HCM Lane LOS	A	-	-	B	B	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0.1	0.1	0.1	-	-

Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	257	478	15	272	177	229	39
v/c Ratio	0.38	0.68	0.04	0.34	0.07	0.13	0.05
Control Delay	33.2	39.4	0.2	7.2	5.4	13.4	0.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	33.2	39.4	0.2	7.2	5.4	13.4	0.8
Queue Length 50th (ft)	67	136	0	51	15	34	0
Queue Length 95th (ft)	91	167	0	92	29	63	2
Internal Link Dist (ft)		962			586	567	
Turn Bay Length (ft)	425		310	480			135
Base Capacity (vph)	1186	1222	597	937	2430	1805	846
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.22	0.39	0.03	0.29	0.07	0.13	0.05

Intersection Summary

HCM 6th Signalized Intersection Summary
38: Blue Pkwy & I-470 WB Ramp

PM Existing plus Site (Phase I & II)



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	211	392	12	226	147	0	0	192	33
Future Volume (veh/h)	0	0	0	211	392	12	226	147	0	0	192	33
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1870	1870	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				257	478	0	272	177	0	0	229	0
Peak Hour Factor				0.82	0.82	0.82	0.83	0.83	0.83	0.84	0.84	0.84
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				661	679		832	2459	0	0	1928	
Arrive On Green				0.19	0.19	0.00	0.09	0.69	0.00	0.00	0.54	0.00
Sat Flow, veh/h				3456	3554	1585	1781	3647	0	0	3647	1585
Grp Volume(v), veh/h				257	478	0	272	177	0	0	229	0
Grp Sat Flow(s),veh/h/ln				1728	1777	1585	1781	1777	0	0	1777	1585
Q Serve(g_s), s				5.9	11.4	0.0	5.6	1.5	0.0	0.0	2.9	0.0
Cycle Q Clear(g_c), s				5.9	11.4	0.0	5.6	1.5	0.0	0.0	2.9	0.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				661	679		832	2459	0	0	1928	
V/C Ratio(X)				0.39	0.70		0.33	0.07	0.00	0.00	0.12	
Avail Cap(c_a), veh/h				1203	1237		1233	2459	0	0	1928	
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				32.1	34.3	0.0	6.5	4.5	0.0	0.0	10.2	0.0
Incr Delay (d2), s/veh				0.4	1.3	0.0	0.2	0.1	0.0	0.0	0.1	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				2.5	5.0	0.0	1.9	0.5	0.0	0.0	1.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				32.4	35.6	0.0	6.7	4.6	0.0	0.0	10.3	0.0
LnGrp LOS				C	D		A	A	A	A	B	
Approach Vol, veh/h					735			449			229	
Approach Delay, s/veh					34.5			5.9			10.3	
Approach LOS					C			A			B	

Timer - Assigned Phs	2		5	6		8						
Phs Duration (G+Y+Rc), s	68.0		13.6	54.4		22.8						
Change Period (Y+Rc), s	* 5.2		* 5.2	* 5.2		5.4						
Max Green Setting (Gmax), s	* 63		* 29	* 29		31.6						
Max Q Clear Time (g_c+I1), s	3.5		7.6	4.9		13.4						
Green Ext Time (p_c), s	1.2		0.8	1.4		3.9						

Intersection Summary		
HCM 6th Ctrl Delay		21.5
HCM 6th LOS		C

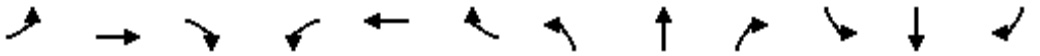
Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	20	323	508	414	264	21	443
v/c Ratio	0.07	0.31	0.79	0.23	0.28	0.04	0.22
Control Delay	24.2	20.0	21.0	13.8	3.6	10.4	10.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	24.2	20.0	21.0	13.8	3.6	10.4	10.0
Queue Length 50th (ft)	8	58	105	43	0	4	47
Queue Length 95th (ft)	19	85	201	121	43	18	103
Internal Link Dist (ft)		816		542			586
Turn Bay Length (ft)	230		230		280	780	
Base Capacity (vph)	1330	2626	1238	1816	940	564	2001
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.02	0.12	0.41	0.23	0.28	0.04	0.22

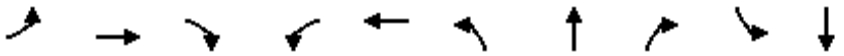
Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	284	447	0	0	0	0	356	227	18	385	0
Future Volume (veh/h)	18	284	447	0	0	0	0	356	227	18	385	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	20	323	508				0	414	264	21	443	0
Peak Hour Factor	0.88	0.88	0.88				0.86	0.86	0.86	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	667	1331	594				0	1524	680	400	1804	0
Arrive On Green	0.37	0.37	0.37				0.00	0.43	0.43	0.02	0.51	0.00
Sat Flow, veh/h	1781	3554	1585				0	3647	1585	1781	3647	0
Grp Volume(v), veh/h	20	323	508				0	414	264	21	443	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585				0	1777	1585	1781	1777	0
Q Serve(g_s), s	0.6	5.0	23.8				0.0	6.1	9.2	0.5	5.7	0.0
Cycle Q Clear(g_c), s	0.6	5.0	23.8				0.0	6.1	9.2	0.5	5.7	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	667	1331	594				0	1524	680	400	1804	0
V/C Ratio(X)	0.03	0.24	0.86				0.00	0.27	0.39	0.05	0.25	0.00
Avail Cap(c_a), veh/h	1202	2398	1070				0	1524	680	502	1804	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	16.0	17.4	23.2				0.0	14.9	15.8	11.6	11.2	0.0
Incr Delay (d2), s/veh	0.0	0.1	3.7				0.0	0.4	1.7	0.1	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	2.0	8.9				0.0	2.4	3.5	0.2	2.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.0	17.5	26.9				0.0	15.4	17.5	11.7	11.5	0.0
LnGrp LOS	B	B	C				A	B	B	B	B	A
Approach Vol, veh/h		851						678			464	
Approach Delay, s/veh		23.1						16.2			11.5	
Approach LOS		C						B			B	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	6.4	39.6		34.8		46.0
Change Period (Y+Rc), s	4.5	5.0		4.5		5.0
Max Green Setting (Gmax), s	6.5	30.0		54.5		41.0
Max Q Clear Time (g_c+I1), s	2.5	11.2		25.8		7.7
Green Ext Time (p_c), s	0.0	3.5		4.4		3.2

Intersection Summary			
HCM 6th Ctrl Delay			18.0
HCM 6th LOS			B

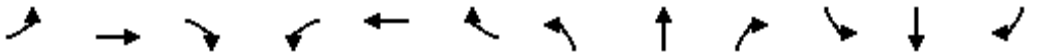


Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	41	547	389	123	414	262	10	105	10	57
v/c Ratio	0.29	0.63	0.40	0.38	0.37	0.39	0.01	0.12	0.01	0.07
Control Delay	47.6	34.7	4.2	44.3	26.8	18.5	14.9	3.8	14.8	6.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	47.6	34.7	4.2	44.3	26.8	18.5	14.9	3.8	14.8	6.7
Queue Length 50th (ft)	23	150	0	35	105	91	3	0	3	4
Queue Length 95th (ft)	61	210	36	55	118	190	14	30	14	28
Internal Link Dist (ft)		383			346		526			358
Turn Bay Length (ft)	200		360	325				210	150	
Base Capacity (vph)	182	1228	1221	446	1343	669	929	842	705	854
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.23	0.45	0.32	0.28	0.31	0.39	0.01	0.12	0.01	0.07

Intersection Summary

HCM 6th Signalized Intersection Summary
46: Blue Pkwy & Ward Rd & West Dealership Access

PM Existing plus Site (Phase I & II)



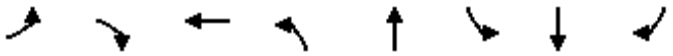
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	38	492	350	90	300	3	238	9	96	9	13	40
Future Volume (veh/h)	38	492	350	90	300	3	238	9	96	9	13	40
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	41	547	389	123	411	3	262	10	105	10	14	43
Peak Hour Factor	0.92	0.90	0.90	0.73	0.73	0.92	0.91	0.91	0.91	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	65	794	624	227	936	7	784	1005	852	766	217	668
Arrive On Green	0.04	0.22	0.22	0.07	0.26	0.26	0.54	0.54	0.54	0.54	0.54	0.54
Sat Flow, veh/h	1781	3554	2790	3456	3616	26	1346	1870	1585	1277	404	1242
Grp Volume(v), veh/h	41	547	389	123	202	212	262	10	105	10	0	57
Grp Sat Flow(s),veh/h/ln	1781	1777	1395	1728	1777	1866	1346	1870	1585	1277	0	1647
Q Serve(g_s), s	2.0	12.2	10.9	3.0	8.2	8.2	10.0	0.2	2.8	0.3	0.0	1.4
Cycle Q Clear(g_c), s	2.0	12.2	10.9	3.0	8.2	8.2	11.5	0.2	2.8	0.5	0.0	1.4
Prop In Lane	1.00		1.00	1.00		0.01	1.00		1.00	1.00		0.75
Lane Grp Cap(c), veh/h	65	794	624	227	460	483	784	1005	852	766	0	885
V/C Ratio(X)	0.64	0.69	0.62	0.54	0.44	0.44	0.33	0.01	0.12	0.01	0.00	0.06
Avail Cap(c_a), veh/h	196	1314	1032	479	719	755	784	1005	852	766	0	885
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	41.1	30.8	30.3	39.2	26.8	26.8	12.3	9.3	9.9	9.4	0.0	9.6
Incr Delay (d2), s/veh	9.9	1.1	1.0	2.0	0.7	0.6	1.1	0.0	0.3	0.0	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	5.2	3.7	1.3	3.5	3.7	3.1	0.1	1.0	0.1	0.0	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	51.1	31.9	31.3	41.2	27.5	27.4	13.5	9.3	10.2	9.5	0.0	9.7
LnGrp LOS	D	C	C	D	C	C	B	A	B	A	A	A
Approach Vol, veh/h		977			537			377			67	
Approach Delay, s/veh		32.5			30.6			12.5			9.7	
Approach LOS		C			C			B			A	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		51.5	10.7	24.3		51.5	7.6	27.4				
Change Period (Y+Rc), s		5.0	5.0	5.0		* 5	4.5	5.0				
Max Green Setting (Gmax), s		46.0	12.0	32.0		* 47	9.5	35.0				
Max Q Clear Time (g_c+I1), s		13.5	5.0	14.2		3.4	4.0	10.2				
Green Ext Time (p_c), s		1.3	0.2	5.1		0.4	0.0	2.5				

Intersection Summary	
HCM 6th Ctrl Delay	27.3
HCM 6th LOS	C

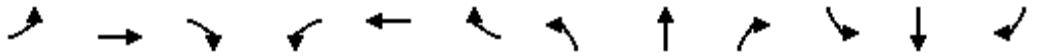
Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Lane Group	EBL	EBR	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	114	82	8	39	281	7	336	171
v/c Ratio	0.38	0.11	0.01	0.20	0.13	0.04	0.16	0.12
Control Delay	27.1	0.3	0.0	32.1	7.2	32.7	9.3	1.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	27.1	0.3	0.0	32.1	7.2	32.7	9.3	1.1
Queue Length 50th (ft)	35	0	0	12	15	2	18	0
Queue Length 95th (ft)	73	0	0	48	71	16	88	20
Internal Link Dist (ft)			394		623		526	
Turn Bay Length (ft)	110			290		290		155
Base Capacity (vph)	517	1057	892	355	2238	272	2083	1445
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.22	0.08	0.01	0.11	0.13	0.03	0.16	0.12

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	89	0	64	0	0	4	35	250	0	6	299	152
Future Volume (veh/h)	89	0	64	0	0	4	35	250	0	6	299	152
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	114	0	82	0	0	8	39	281	0	7	336	171
Peak Hour Factor	0.78	0.78	0.78	0.50	0.50	0.50	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	338	422	358	202	0	114	82	1905	730	19	1781	918
Arrive On Green	0.08	0.00	0.23	0.00	0.00	0.07	0.05	0.54	0.00	0.01	0.50	0.50
Sat Flow, veh/h	1781	1870	1585	1781	0	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	114	0	82	0	0	8	39	281	0	7	336	171
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	0	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	3.9	0.0	2.9	0.0	0.0	0.3	1.5	2.7	5.2	0.3	3.6	3.5
Cycle Q Clear(g_c), s	3.9	0.0	2.9	0.0	0.0	0.3	1.5	2.7	5.2	0.3	3.6	3.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	338	422	358	202	0	114	82	1905	730	19	1781	918
V/C Ratio(X)	0.34	0.00	0.23	0.00	0.00	0.07	0.48	0.15	0.00	0.36	0.19	0.19
Avail Cap(c_a), veh/h	661	861	730	355	0	457	332	1905	730	254	1781	918
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.8	0.0	21.7	0.0	0.0	29.7	31.9	8.0	0.0	33.7	9.4	6.8
Incr Delay (d2), s/veh	0.6	0.0	0.3	0.0	0.0	0.3	4.3	0.2	0.0	10.8	0.2	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	0.0	1.1	0.0	0.0	0.1	0.7	1.0	0.0	0.2	1.3	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.3	0.0	22.0	0.0	0.0	30.0	36.2	8.2	0.0	44.5	9.7	7.3
LnGrp LOS	C	A	C	A	A	C	D	A	A	D	A	A
Approach Vol, veh/h		196			8			320			514	
Approach Delay, s/veh		24.0			30.0			11.6			9.3	
Approach LOS		C			C			B			A	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.9	42.0	0.0	20.7	8.3	39.6	10.6	10.1
Change Period (Y+Rc), s	* 5.2	* 5.2	* 5.2	* 5.2	* 5.2	* 5.2	* 5.2	* 5.2
Max Green Setting (Gmax), s	* 9.8	* 37	* 6	* 32	* 13	* 34	* 18	* 20
Max Q Clear Time (g_c+I1), s	2.3	7.2	0.0	4.9	3.5	5.6	5.9	2.3
Green Ext Time (p_c), s	0.0	1.9	0.0	0.2	0.0	2.9	0.2	0.0

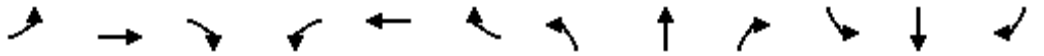
Intersection Summary	
HCM 6th Ctrl Delay	13.0
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	62	113	7	28	55	258	1	8	348	39
v/c Ratio	0.24	0.16	0.03	0.16	0.16	0.10	0.00	0.03	0.15	0.03
Control Delay	24.8	0.5	22.2	19.4	31.5	6.3	0.0	32.7	9.0	0.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	24.8	0.5	22.2	19.4	31.5	6.3	0.0	32.7	9.0	0.8
Queue Length 50th (ft)	22	0	2	2	9	10	0	1	30	0
Queue Length 95th (ft)	40	0	9	17	29	56	0	8	79	6
Internal Link Dist (ft)		404		466		564			623	
Turn Bay Length (ft)					240		170	240		300
Base Capacity (vph)	449	1014	353	608	714	2510	1419	502	2260	1374
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.14	0.11	0.02	0.05	0.08	0.10	0.00	0.02	0.15	0.03

Intersection Summary



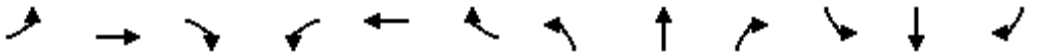
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	43	0	78	5	4	15	48	227	1	7	320	36
Future Volume (veh/h)	43	0	78	5	4	15	48	227	1	7	320	36
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	62	0	113	7	6	22	55	258	1	8	348	39
Peak Hour Factor	0.69	0.69	0.69	0.67	0.67	0.67	0.88	0.88	0.88	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	279	0	181	186	25	92	167	2098	950	36	1963	958
Arrive On Green	0.05	0.00	0.11	0.01	0.07	0.07	0.05	0.59	0.59	0.01	0.55	0.55
Sat Flow, veh/h	1781	0	1585	1781	351	1287	3456	3554	1585	3456	3554	1585
Grp Volume(v), veh/h	62	0	113	7	0	28	55	258	1	8	348	39
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1781	0	1639	1728	1777	1585	1728	1777	1585
Q Serve(g_s), s	2.1	0.0	4.4	0.2	0.0	1.1	1.0	2.1	0.0	0.1	3.2	0.7
Cycle Q Clear(g_c), s	2.1	0.0	4.4	0.2	0.0	1.1	1.0	2.1	0.0	0.1	3.2	0.7
Prop In Lane	1.00		1.00	1.00		0.79	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	279	0	181	186	0	117	167	2098	950	36	1963	958
V/C Ratio(X)	0.22	0.00	0.63	0.04	0.00	0.24	0.33	0.12	0.00	0.22	0.18	0.04
Avail Cap(c_a), veh/h	610	0	693	456	0	591	715	2098	950	503	1963	958
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.7	0.0	27.6	27.7	0.0	28.6	30.0	5.9	5.2	32.0	7.2	5.2
Incr Delay (d2), s/veh	0.4	0.0	3.5	0.1	0.0	1.0	1.1	0.1	0.0	3.1	0.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	1.8	0.1	0.0	0.4	0.4	0.7	0.0	0.1	1.1	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.1	0.0	31.1	27.8	0.0	29.6	31.1	6.0	5.2	35.1	7.4	5.3
LnGrp LOS	C	A	C	C	A	C	C	A	A	D	A	A
Approach Vol, veh/h		175			35			314			395	
Approach Delay, s/veh		29.3			29.3			10.4			7.8	
Approach LOS		C			C			B			A	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.2	43.0	5.1	11.9	7.7	40.5	7.9	9.2
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	9.5	38.5	10.5	28.5	13.5	34.5	15.5	23.5
Max Q Clear Time (g_c+I1), s	2.1	4.1	2.2	6.4	3.0	5.2	4.1	3.1
Green Ext Time (p_c), s	0.0	1.8	0.0	0.6	0.1	2.5	0.1	0.1

Intersection Summary	
HCM 6th Ctrl Delay	13.6
HCM 6th LOS	B

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	59	6	339	46	51	323	218	37	11	303	134
v/c Ratio	0.19	0.03	0.70	0.18	0.24	0.56	0.10	0.03	0.07	0.22	0.13
Control Delay	22.1	29.2	12.2	23.1	17.2	31.8	8.2	1.0	35.1	16.6	2.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	22.1	29.2	12.2	23.1	17.2	31.8	8.2	1.0	35.1	16.6	2.5
Queue Length 50th (ft)	19	2	0	15	4	64	17	0	4	44	0
Queue Length 95th (ft)	47	12	48	38	31	123	55	6	22	92	26
Internal Link Dist (ft)		380			478		1188			564	
Turn Bay Length (ft)						170		260	310		325
Base Capacity (vph)	356	912	948	261	754	1078	2132	1223	168	1390	1032
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.17	0.01	0.36	0.18	0.07	0.30	0.10	0.03	0.07	0.22	0.13

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	48	5	278	37	9	32	291	196	33	10	279	123
Future Volume (veh/h)	48	5	278	37	9	32	291	196	33	10	279	123
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	59	6	339	46	11	40	323	218	37	11	303	134
Peak Hour Factor	0.82	0.82	0.82	0.81	0.81	0.81	0.90	0.90	0.90	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	455	454	385	403	84	305	432	1733	835	24	1337	667
Arrive On Green	0.04	0.24	0.24	0.04	0.24	0.24	0.13	0.49	0.49	0.01	0.38	0.38
Sat Flow, veh/h	1781	1870	1585	1781	354	1285	3456	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	59	6	339	46	0	51	323	218	37	11	303	134
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	0	1639	1728	1777	1585	1781	1777	1585
Q Serve(g_s), s	2.0	0.2	17.1	1.6	0.0	2.0	7.5	2.8	0.9	0.5	4.8	4.4
Cycle Q Clear(g_c), s	2.0	0.2	17.1	1.6	0.0	2.0	7.5	2.8	0.9	0.5	4.8	4.4
Prop In Lane	1.00		1.00	1.00		0.78	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	455	454	385	403	0	389	432	1733	835	24	1337	667
V/C Ratio(X)	0.13	0.01	0.88	0.11	0.00	0.13	0.75	0.13	0.04	0.46	0.23	0.20
Avail Cap(c_a), veh/h	579	754	639	472	0	602	895	1733	835	139	1337	667
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.2	23.9	30.3	22.3	0.0	24.9	35.1	11.6	9.5	40.7	17.7	15.2
Incr Delay (d2), s/veh	0.1	0.0	7.9	0.1	0.0	0.2	2.6	0.1	0.1	13.0	0.4	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.1	7.1	0.7	0.0	0.8	3.2	1.1	0.3	0.3	2.0	1.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.3	23.9	38.2	22.4	0.0	25.1	37.7	11.8	9.6	53.6	18.1	15.9
LnGrp LOS	C	C	D	C	A	C	D	B	A	D	B	B
Approach Vol, veh/h		404			97			578			448	
Approach Delay, s/veh		35.7			23.8			26.1			18.3	
Approach LOS		D			C			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.6	45.0	7.8	24.7	14.9	35.7	8.2	24.2
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	6.5	40.5	6.5	33.5	21.5	25.5	9.5	30.5
Max Q Clear Time (g_c+I1), s	2.5	4.8	3.6	19.1	9.5	6.8	4.0	4.0
Green Ext Time (p_c), s	0.0	1.6	0.0	1.1	0.9	2.3	0.0	0.2

Intersection Summary	
HCM 6th Ctrl Delay	26.2
HCM 6th LOS	C

Intersection	
Int Delay, s/veh	7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	178	324	3	3	385	15	3	0	3	85	0	125
Future Vol, veh/h	178	324	3	3	385	15	3	0	3	85	0	125
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	210	-	160	215	-	215	-	-	-	200	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	80	80	80	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	198	360	3	4	481	19	3	0	3	92	0	136

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	500	0	0	363	0	0	1005	1264	180	1065	1248	241
Stage 1	-	-	-	-	-	-	756	756	-	489	489	-
Stage 2	-	-	-	-	-	-	249	508	-	576	759	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1060	-	-	1192	-	-	196	168	832	177	172	760
Stage 1	-	-	-	-	-	-	366	414	-	529	548	-
Stage 2	-	-	-	-	-	-	733	537	-	470	413	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1060	-	-	1192	-	-	138	136	832	151	139	760
Mov Cap-2 Maneuver	-	-	-	-	-	-	138	136	-	151	139	-
Stage 1	-	-	-	-	-	-	298	337	-	430	546	-
Stage 2	-	-	-	-	-	-	600	535	-	381	336	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	3.2	0.1	20.6	31
HCM LOS			C	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	237	1060	-	-	1192	-	-	151	760
HCM Lane V/C Ratio	0.028	0.187	-	-	0.003	-	-	0.612	0.179
HCM Control Delay (s)	20.6	9.2	-	-	8	-	-	60.6	10.8
HCM Lane LOS	C	A	-	-	A	-	-	F	B
HCM 95th %tile Q(veh)	0.1	0.7	-	-	0	-	-	3.3	0.6

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	505	501	7	0	7
Future Vol, veh/h	0	505	501	7	0	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	80	80	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	561	626	9	0	8

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	318
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	-	0	678
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	678
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	10.4
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	678
HCM Lane V/C Ratio	-	-	-	0.011
HCM Control Delay (s)	-	-	-	10.4
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0

Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑	↱		↱
Traffic Vol, veh/h	0	412	288	45	0	108
Future Vol, veh/h	0	412	288	45	0	108
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	200	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	80	80	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	458	360	56	0	117

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	180
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	-	0	832
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	832
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	10
HCM LOS			B

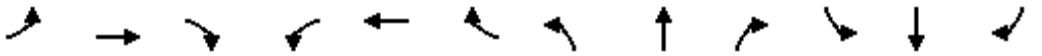
Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	832
HCM Lane V/C Ratio	-	-	-	0.141
HCM Control Delay (s)	-	-	-	10
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.5

Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	1	7	100	251	37	371	200	236	791
v/c Ratio	0.00	0.01	0.49	0.55	0.08	0.21	0.22	0.33	0.36
Control Delay	27.0	0.0	38.7	9.4	5.0	11.6	2.8	5.9	8.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	27.0	0.0	38.7	9.4	5.0	11.6	2.8	5.9	8.6
Queue Length 50th (ft)	0	0	46	0	4	46	0	30	97
Queue Length 95th (ft)	5	0	92	35	14	78	24	51	113
Internal Link Dist (ft)		394	448			689			1243
Turn Bay Length (ft)					200		90	150	
Base Capacity (vph)	407	677	408	654	467	1767	890	971	2215
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.00	0.01	0.25	0.38	0.08	0.21	0.22	0.24	0.36

Intersection Summary

HCM 6th Signalized Intersection Summary
15: Ward Rd & Tudor Rd

AM Future



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	0	6	77	1	196	34	297	160	163	545	1
Future Volume (veh/h)	1	0	6	77	1	196	34	297	160	163	545	1
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1	0	7	99	1	251	37	371	200	236	790	1
Peak Hour Factor	0.92	0.92	0.92	0.78	0.92	0.78	0.92	0.80	0.80	0.69	0.69	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	381	0	299	348	3	299	472	1795	801	644	2120	3
Arrive On Green	0.19	0.00	0.19	0.19	0.19	0.19	0.04	0.51	0.51	0.10	0.58	0.58
Sat Flow, veh/h	1416	0	1585	1371	16	1585	1781	3554	1585	1781	3642	5
Grp Volume(v), veh/h	1	0	7	100	0	251	37	371	200	236	385	406
Grp Sat Flow(s),veh/h/ln	1416	0	1585	1388	0	1585	1781	1777	1585	1781	1777	1870
Q Serve(g_s), s	0.0	0.0	0.3	4.9	0.0	12.2	0.8	4.6	5.7	4.8	9.2	9.2
Cycle Q Clear(g_c), s	0.0	0.0	0.3	5.2	0.0	12.2	0.8	4.6	5.7	4.8	9.2	9.2
Prop In Lane	1.00		1.00	0.99		1.00	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	381	0	299	352	0	299	472	1795	801	644	1034	1088
V/C Ratio(X)	0.00	0.00	0.02	0.28	0.00	0.84	0.08	0.21	0.25	0.37	0.37	0.37
Avail Cap(c_a), veh/h	531	0	466	483	0	446	532	1795	801	1057	1034	1088
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.3	0.0	26.4	28.5	0.0	31.2	8.7	10.9	11.2	7.4	8.9	8.9
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.4	0.0	8.8	0.1	0.3	0.7	0.3	1.0	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.1	1.6	0.0	5.2	0.3	1.7	2.0	1.6	3.3	3.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.3	0.0	26.4	29.0	0.0	40.0	8.8	11.2	11.9	7.7	9.9	9.9
LnGrp LOS	C	A	C	C	A	D	A	B	B	A	A	A
Approach Vol, veh/h		8			351			608			1027	
Approach Delay, s/veh		26.4			36.9			11.3			9.4	
Approach LOS		C			D			B			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	13.5	45.8		20.6	7.3	52.0		20.6				
Change Period (Y+Rc), s	5.5	5.5		* 5.5	4.5	5.5		5.5				
Max Green Setting (Gmax), s	26.5	24.5		* 24	5.5	46.5		22.5				
Max Q Clear Time (g_c+I1), s	6.8	7.7		2.3	2.8	11.2		14.2				
Green Ext Time (p_c), s	0.6	2.9		0.0	0.0	5.4		0.9				

Intersection Summary	
HCM 6th Ctrl Delay	14.9
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	3	0	4	12	0	16	13	314	1	74	328	9
Future Vol, veh/h	3	0	4	12	0	16	13	314	1	74	328	9
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	25	-	-	200	-	145	190	-	190
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	63	63	92	79	79	92	95	95	95	80	80	80
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	0	4	15	0	17	14	331	1	93	410	11

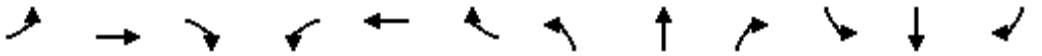
Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	790	956	205	750	966	166	421	0	0	332	0	0
Stage 1	596	596	-	359	359	-	-	-	-	-	-	-
Stage 2	194	360	-	391	607	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	281	257	802	300	253	849	1135	-	-	1224	-	-
Stage 1	457	490	-	632	626	-	-	-	-	-	-	-
Stage 2	789	625	-	605	485	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	257	235	802	278	231	849	1135	-	-	1224	-	-
Mov Cap-2 Maneuver	257	235	-	278	231	-	-	-	-	-	-	-
Stage 1	452	453	-	624	618	-	-	-	-	-	-	-
Stage 2	763	618	-	556	448	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	14.7	13.7	0.3	1.5
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1135	-	-	380	278	849	1224	-	-
HCM Lane V/C Ratio	0.012	-	-	0.024	0.055	0.02	0.076	-	-
HCM Control Delay (s)	8.2	-	-	14.7	18.7	9.3	8.2	-	-
HCM Lane LOS	A	-	-	B	C	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.2	0.1	0.2	-	-

Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	387	262	56	239	265	200	36
v/c Ratio	0.66	0.43	0.17	0.29	0.11	0.11	0.04
Control Delay	40.1	35.1	4.7	5.8	4.6	11.3	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	40.1	35.1	4.7	5.8	4.6	11.3	0.3
Queue Length 50th (ft)	105	69	0	38	21	26	0
Queue Length 95th (ft)	135	96	13	69	35	49	0
Internal Link Dist (ft)		962			586	567	
Turn Bay Length (ft)	425		310	480			135
Base Capacity (vph)	1225	1263	617	974	2503	1899	887
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.32	0.21	0.09	0.25	0.11	0.11	0.04

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	317	215	46	198	220	0	0	168	30
Future Volume (veh/h)	0	0	0	317	215	46	198	220	0	0	168	30
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1870	1870	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				387	262	0	239	265	0	0	200	0
Peak Hour Factor				0.82	0.82	0.82	0.83	0.83	0.83	0.84	0.84	0.84
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				564	580		871	2537	0	0	2031	
Arrive On Green				0.16	0.16	0.00	0.08	0.71	0.00	0.00	0.57	0.00
Sat Flow, veh/h				3456	3554	1585	1781	3647	0	0	3647	1585
Grp Volume(v), veh/h				387	262	0	239	265	0	0	200	0
Grp Sat Flow(s),veh/h/ln				1728	1777	1585	1781	1777	0	0	1777	1585
Q Serve(g_s), s				9.3	5.8	0.0	4.4	2.0	0.0	0.0	2.2	0.0
Cycle Q Clear(g_c), s				9.3	5.8	0.0	4.4	2.0	0.0	0.0	2.2	0.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				564	580		871	2537	0	0	2031	
V/C Ratio(X)				0.69	0.45		0.27	0.10	0.00	0.00	0.10	
Avail Cap(c_a), veh/h				1245	1280		1308	2537	0	0	2031	
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				34.6	33.2	0.0	5.5	3.9	0.0	0.0	8.5	0.0
Incr Delay (d2), s/veh				1.5	0.6	0.0	0.2	0.1	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				3.9	2.5	0.0	1.4	0.6	0.0	0.0	0.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				36.1	33.7	0.0	5.6	4.0	0.0	0.0	8.6	0.0
LnGrp LOS				D	C		A	A	A	A	A	
Approach Vol, veh/h					649			504			200	
Approach Delay, s/veh					35.1			4.8			8.6	
Approach LOS					D			A			A	

Timer - Assigned Phs	2		5	6		8						
Phs Duration (G+Y+Rc), s	68.0		12.5	55.5		19.7						
Change Period (Y+Rc), s	* 5.4		* 5.4	* 5.4		5.4						
Max Green Setting (Gmax), s	* 63		* 29	* 29		31.6						
Max Q Clear Time (g_c+I1), s	4.0		6.4	4.2		11.3						
Green Ext Time (p_c), s	1.9		0.7	1.2		3.0						

Intersection Summary		
HCM 6th Ctrl Delay	19.9	
HCM 6th LOS	B	

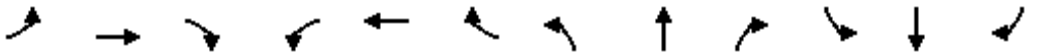
Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	55	448	514	431	160	25	530
v/c Ratio	0.09	0.37	0.77	0.26	0.20	0.05	0.29
Control Delay	16.3	19.5	22.6	18.2	5.1	14.0	13.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	16.3	19.5	22.6	18.2	5.1	14.0	13.7
Queue Length 50th (ft)	18	85	145	57	0	6	73
Queue Length 95th (ft)	39	115	241	151	41	24	150
Internal Link Dist (ft)		816		542			586
Turn Bay Length (ft)	230		230		280	780	
Base Capacity (vph)	1203	2406	1134	1628	814	498	1821
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.05	0.19	0.45	0.26	0.20	0.05	0.29

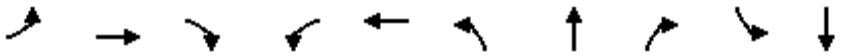
Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	48	394	452	0	0	0	0	371	138	22	461	0
Future Volume (veh/h)	48	394	452	0	0	0	0	371	138	22	461	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	55	448	514				0	431	160	25	530	0
Peak Hour Factor	0.88	0.88	0.88				0.86	0.86	0.86	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	687	1370	611				0	1372	612	431	1717	0
Arrive On Green	0.39	0.39	0.39				0.00	0.39	0.39	0.03	0.48	0.00
Sat Flow, veh/h	1781	3554	1585				0	3647	1585	1781	3647	0
Grp Volume(v), veh/h	55	448	514				0	431	160	25	530	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585				0	1777	1585	1781	1777	0
Q Serve(g_s), s	1.6	7.4	24.7				0.0	7.1	5.8	0.7	7.6	0.0
Cycle Q Clear(g_c), s	1.6	7.4	24.7				0.0	7.1	5.8	0.7	7.6	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	687	1370	611				0	1372	612	431	1717	0
V/C Ratio(X)	0.08	0.33	0.84				0.00	0.31	0.26	0.06	0.31	0.00
Avail Cap(c_a), veh/h	1137	2268	1012				0	1372	612	534	1717	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	16.3	18.1	23.4				0.0	18.0	17.6	13.8	13.2	0.0
Incr Delay (d2), s/veh	0.0	0.1	3.4				0.0	0.6	1.0	0.1	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	3.0	9.3				0.0	2.9	2.2	0.3	3.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.4	18.2	26.8				0.0	18.6	18.6	13.8	13.6	0.0
LnGrp LOS	B	B	C				A	B	B	B	B	A
Approach Vol, veh/h		1017						591			555	
Approach Delay, s/veh		22.5						18.6			13.6	
Approach LOS		C						B			B	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	8.1	37.9		37.8		46.0
Change Period (Y+Rc), s	5.5	5.5		5.5		5.5
Max Green Setting (Gmax), s	7.5	27.5		53.5		40.5
Max Q Clear Time (g_c+I1), s	2.7	9.1		26.7		9.6
Green Ext Time (p_c), s	0.0	3.2		5.6		3.9

Intersection Summary			
HCM 6th Ctrl Delay			19.1
HCM 6th LOS			B

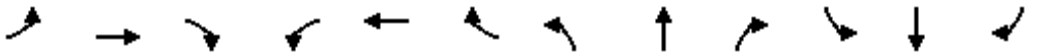


Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	109	513	390	179	458	177	16	47	7	34
v/c Ratio	0.49	0.60	0.40	0.45	0.49	0.28	0.02	0.06	0.01	0.04
Control Delay	43.1	31.1	4.1	39.5	29.2	17.1	15.2	2.6	15.2	9.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	43.1	31.1	4.1	39.5	29.2	17.1	15.2	2.6	15.2	9.3
Queue Length 50th (ft)	54	125	0	45	111	55	4	0	2	4
Queue Length 95th (ft)	112	182	35	74	145	105	18	9	11	23
Internal Link Dist (ft)		383			346		526			358
Turn Bay Length (ft)	200		360	325				210	150	
Base Capacity (vph)	434	1484	1395	678	1312	639	870	776	658	814
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.25	0.35	0.28	0.26	0.35	0.28	0.02	0.06	0.01	0.04

Intersection Summary

HCM 6th Signalized Intersection Summary
46: Blue Pkwy & Ward Rd & West Dealership Access

AM Future



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	462	351	143	360	7	140	15	37	6	13	18
Future Volume (veh/h)	100	462	351	143	360	7	140	15	37	6	13	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	109	513	390	179	450	8	177	16	47	7	14	20
Peak Hour Factor	0.92	0.90	0.90	0.80	0.80	0.92	0.79	0.92	0.79	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	142	799	627	275	802	14	778	952	807	798	354	506
Arrive On Green	0.08	0.22	0.22	0.08	0.22	0.22	0.51	0.51	0.51	0.51	0.51	0.51
Sat Flow, veh/h	1781	3554	2790	3456	3572	63	1375	1870	1585	1397	696	995
Grp Volume(v), veh/h	109	513	390	179	224	234	177	16	47	7	0	34
Grp Sat Flow(s),veh/h/ln	1781	1777	1395	1728	1777	1859	1375	1870	1585	1397	0	1691
Q Serve(g_s), s	4.7	10.2	9.8	3.9	8.7	8.7	5.8	0.3	1.2	0.2	0.0	0.8
Cycle Q Clear(g_c), s	4.7	10.2	9.8	3.9	8.7	8.7	6.5	0.3	1.2	0.5	0.0	0.8
Prop In Lane	1.00		1.00	1.00		0.03	1.00		1.00	1.00		0.59
Lane Grp Cap(c), veh/h	142	799	627	275	399	417	778	952	807	798	0	861
V/C Ratio(X)	0.77	0.64	0.62	0.65	0.56	0.56	0.23	0.02	0.06	0.01	0.00	0.04
Avail Cap(c_a), veh/h	470	1602	1258	735	710	742	778	952	807	798	0	861
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	35.0	27.3	27.1	34.7	26.7	26.7	11.2	9.4	9.6	9.6	0.0	9.6
Incr Delay (d2), s/veh	8.3	0.9	1.0	2.6	1.2	1.2	0.7	0.0	0.1	0.0	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	4.2	3.2	1.7	3.7	3.8	1.8	0.1	0.4	0.1	0.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.3	28.1	28.1	37.3	27.9	27.9	11.9	9.5	9.8	9.6	0.0	9.6
LnGrp LOS	D	C	C	D	C	C	B	A	A	A	A	A
Approach Vol, veh/h		1012			637			240			41	
Approach Delay, s/veh		29.8			30.6			11.3			9.6	
Approach LOS		C			C			B			A	

Timer - Assigned Phs	2	3	4	6	7	8
Phs Duration (G+Y+Rc), s	44.5	10.7	22.5	44.5	10.7	22.4
Change Period (Y+Rc), s	5.0	4.5	5.0	* 5	4.5	5.0
Max Green Setting (Gmax), s	39.0	16.5	35.0	* 40	20.5	31.0
Max Q Clear Time (g_c+I1), s	8.5	5.9	12.2	2.8	6.7	10.7
Green Ext Time (p_c), s	0.8	0.4	5.3	0.2	0.2	2.6

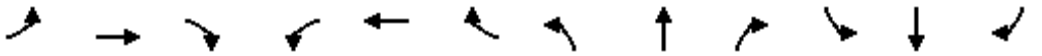
Intersection Summary	
HCM 6th Ctrl Delay	27.3
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	34	13	4	1	23	170	4	10	445	100
v/c Ratio	0.16	0.02	0.02	0.00	0.13	0.06	0.00	0.06	0.17	0.07
Control Delay	27.0	0.1	25.2	0.0	31.1	4.7	0.0	31.1	4.9	0.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	27.0	0.1	25.2	0.0	31.1	4.7	0.0	31.1	4.9	0.9
Queue Length 50th (ft)	12	0	1	0	8	6	0	3	17	0
Queue Length 95th (ft)	37	0	9	0	34	37	0	20	92	14
Internal Link Dist (ft)				394		623			526	
Turn Bay Length (ft)	110				290		210	290		155
Base Capacity (vph)	375	894	278	1005	330	2680	1464	278	2670	1502
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.09	0.01	0.01	0.00	0.07	0.06	0.00	0.04	0.17	0.07

Intersection Summary



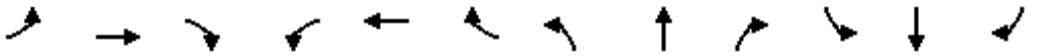
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	31	0	12	4	0	1	21	156	4	9	409	92
Future Volume (veh/h)	31	0	12	4	0	1	21	156	4	9	409	92
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	34	0	13	4	0	1	23	170	4	10	445	100
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	217	114	97	155	0	40	56	2306	1039	27	2249	1070
Arrive On Green	0.04	0.00	0.06	0.01	0.00	0.03	0.03	0.65	0.65	0.02	0.63	0.63
Sat Flow, veh/h	1781	1870	1585	1781	0	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	34	0	13	4	0	1	23	170	4	10	445	100
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	0	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	1.2	0.0	0.5	0.1	0.0	0.0	0.8	1.2	0.1	0.4	3.5	1.5
Cycle Q Clear(g_c), s	1.2	0.0	0.5	0.1	0.0	0.0	0.8	1.2	0.1	0.4	3.5	1.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	217	114	97	155	0	40	56	2306	1039	27	2249	1070
V/C Ratio(X)	0.16	0.00	0.13	0.03	0.00	0.02	0.41	0.07	0.00	0.37	0.20	0.09
Avail Cap(c_a), veh/h	501	656	556	396	0	461	332	2306	1039	279	2249	1070
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.7	0.0	29.8	31.5	0.0	31.9	31.9	4.3	4.0	32.7	5.2	3.8
Incr Delay (d2), s/veh	0.3	0.0	0.6	0.1	0.0	0.2	4.9	0.1	0.0	8.2	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	0.2	0.1	0.0	0.0	0.4	0.3	0.0	0.2	1.1	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.0	0.0	30.4	31.6	0.0	32.1	36.7	4.4	4.0	40.9	5.4	4.0
LnGrp LOS	C	A	C	C	A	C	D	A	A	D	A	A
Approach Vol, veh/h		47			5			197			555	
Approach Delay, s/veh		30.2			31.7			8.2			5.7	
Approach LOS		C			C			A			A	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.5	48.0	4.9	8.6	6.6	46.9	7.3	6.2
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	10.5	43.5	9.5	23.5	12.5	41.5	13.5	19.5
Max Q Clear Time (g_c+I1), s	2.4	3.2	2.1	2.5	2.8	5.5	3.2	2.0
Green Ext Time (p_c), s	0.0	1.2	0.0	0.0	0.0	3.6	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	7.9
HCM 6th LOS	A

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	5	43	10	14	45	191	25	55	467	23
v/c Ratio	0.02	0.07	0.04	0.02	0.14	0.08	0.02	0.17	0.19	0.02
Control Delay	25.7	0.2	29.0	0.0	35.0	8.4	0.0	35.0	8.4	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	25.7	0.2	29.0	0.0	35.0	8.4	0.0	35.0	8.4	0.1
Queue Length 50th (ft)	2	0	4	0	11	24	0	13	64	0
Queue Length 95th (ft)	7	0	12	0	26	41	0	26	81	0
Internal Link Dist (ft)		404		466		564			623	
Turn Bay Length (ft)					240		170	240		300
Base Capacity (vph)	318	837	301	998	522	2504	1192	569	2512	1222
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.02	0.05	0.03	0.01	0.09	0.08	0.02	0.10	0.19	0.02

Intersection Summary



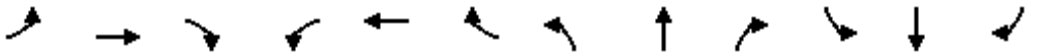
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	0	24	7	0	10	40	168	22	43	364	18
Future Volume (veh/h)	3	0	24	7	0	10	40	168	22	43	364	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	5	0	43	10	0	14	45	191	25	55	467	23
Peak Hour Factor	0.56	0.56	0.56	0.69	0.69	0.69	0.88	0.88	0.88	0.78	0.78	0.78
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	198	0	93	174	0	104	172	2085	943	194	2107	941
Arrive On Green	0.01	0.00	0.06	0.02	0.00	0.07	0.05	0.59	0.59	0.06	0.59	0.59
Sat Flow, veh/h	1781	0	1562	1781	0	1562	3456	3554	1565	3456	3554	1565
Grp Volume(v), veh/h	5	0	43	10	0	14	45	191	25	55	467	23
Grp Sat Flow(s),veh/h/ln	1781	0	1562	1781	0	1562	1728	1777	1565	1728	1777	1565
Q Serve(g_s), s	0.2	0.0	1.9	0.4	0.0	0.6	0.9	1.7	0.5	1.1	4.4	0.4
Cycle Q Clear(g_c), s	0.2	0.0	1.9	0.4	0.0	0.6	0.9	1.7	0.5	1.1	4.4	0.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	198	0	93	174	0	104	172	2085	943	194	2107	941
V/C Ratio(X)	0.03	0.00	0.46	0.06	0.00	0.13	0.26	0.09	0.03	0.28	0.22	0.02
Avail Cap(c_a), veh/h	435	0	485	398	0	485	537	2085	943	586	2107	941
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.9	0.0	32.2	30.5	0.0	31.1	32.4	6.4	5.7	32.1	6.8	5.7
Incr Delay (d2), s/veh	0.1	0.0	3.5	0.1	0.0	0.6	0.8	0.1	0.1	0.8	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.8	0.2	0.0	0.2	0.4	0.6	0.1	0.5	1.4	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.9	0.0	35.7	30.6	0.0	31.7	33.2	6.5	5.8	32.9	7.0	5.8
LnGrp LOS	C	A	D	C	A	C	C	A	A	C	A	A
Approach Vol, veh/h		48			24			261			545	
Approach Delay, s/veh		35.2			31.3			11.0			9.6	
Approach LOS		D			C			B			A	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.0	46.6	6.1	9.2	8.5	47.0	5.6	9.7
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	12.0	41.0	10.0	22.0	11.0	42.0	10.0	22.0
Max Q Clear Time (g_c+I1), s	3.1	3.7	2.4	3.9	2.9	6.4	2.2	2.6
Green Ext Time (p_c), s	0.1	1.4	0.0	0.1	0.0	3.5	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	12.0
HCM 6th LOS	B

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	41	5	182	24	17	206	212	75	37	343	65
v/c Ratio	0.12	0.03	0.57	0.12	0.10	0.45	0.11	0.06	0.21	0.22	0.06
Control Delay	23.8	32.8	13.3	29.4	18.6	34.6	11.3	2.1	36.7	14.7	0.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	23.8	32.8	13.3	29.4	18.6	34.6	11.3	2.1	36.7	14.7	0.3
Queue Length 50th (ft)	16	2	0	11	0	47	27	0	17	50	0
Queue Length 95th (ft)	39	12	53	27	19	79	53	15	47	93	2
Internal Link Dist (ft)		380			478		1188			564	
Turn Bay Length (ft)						170		260	310		325
Base Capacity (vph)	391	768	759	241	603	802	1927	1165	243	1561	1170
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.10	0.01	0.24	0.10	0.03	0.26	0.11	0.06	0.15	0.22	0.06

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	36	4	160	22	1	15	175	180	64	33	305	58
Future Volume (veh/h)	36	4	160	22	1	15	175	180	64	33	305	58
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	41	5	182	24	1	16	206	212	75	37	343	65
Peak Hour Factor	0.88	0.88	0.88	0.93	0.93	0.93	0.85	0.85	0.85	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	350	271	230	339	12	196	312	1799	853	77	1633	802
Arrive On Green	0.05	0.14	0.14	0.03	0.13	0.13	0.09	0.51	0.51	0.04	0.46	0.46
Sat Flow, veh/h	1781	1870	1585	1781	94	1505	3456	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	41	5	182	24	0	17	206	212	75	37	343	65
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	0	1599	1728	1777	1585	1781	1777	1585
Q Serve(g_s), s	1.4	0.2	8.1	0.8	0.0	0.7	4.2	2.3	1.7	1.5	4.2	1.5
Cycle Q Clear(g_c), s	1.4	0.2	8.1	0.8	0.0	0.7	4.2	2.3	1.7	1.5	4.2	1.5
Prop In Lane	1.00		1.00	1.00		0.94	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	350	271	230	339	0	208	312	1799	853	77	1633	802
V/C Ratio(X)	0.12	0.02	0.79	0.07	0.00	0.08	0.66	0.12	0.09	0.48	0.21	0.08
Avail Cap(c_a), veh/h	535	768	651	477	0	591	804	1799	853	244	1633	802
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.4	26.8	30.2	26.0	0.0	27.9	32.2	9.5	8.2	34.1	11.8	9.3
Incr Delay (d2), s/veh	0.1	0.0	6.1	0.1	0.0	0.2	2.4	0.1	0.2	4.5	0.3	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.1	3.4	0.4	0.0	0.3	1.8	0.8	0.6	0.7	1.6	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.5	26.8	36.2	26.1	0.0	28.1	34.5	9.6	8.4	38.7	12.1	9.5
LnGrp LOS	C	C	D	C	A	C	C	A	A	D	B	A
Approach Vol, veh/h		228			41			493			445	
Approach Delay, s/veh		34.1			26.9			19.8			13.9	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.2	42.0	7.3	15.6	11.6	38.6	8.4	14.5
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	10.0	37.0	8.0	30.0	17.0	30.0	11.0	27.0
Max Q Clear Time (g_c+I1), s	3.5	4.3	2.8	10.1	6.2	6.2	3.4	2.7
Green Ext Time (p_c), s	0.0	1.7	0.0	0.6	0.5	2.5	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	20.6
HCM 6th LOS	C

Intersection	
Int Delay, s/veh	12.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	251	634	1	1	413	10	3	0	4	74	0	153
Future Vol, veh/h	251	634	1	1	413	10	3	0	4	74	0	153
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	210	-	160	215	-	215	-	-	-	200	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	279	704	1	1	459	11	4	0	5	87	0	180

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	470	0	0	705	0	0	1494	1734	352	1371	1724	230
Stage 1	-	-	-	-	-	-	1262	1262	-	461	461	-
Stage 2	-	-	-	-	-	-	232	472	-	910	1263	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1088	-	-	889	-	-	85	87	644	105	88	772
Stage 1	-	-	-	-	-	-	180	239	-	550	564	-
Stage 2	-	-	-	-	-	-	750	557	-	296	239	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1088	-	-	889	-	-	52	65	644	~ 84	65	772
Mov Cap-2 Maneuver	-	-	-	-	-	-	52	65	-	~ 84	65	-
Stage 1	-	-	-	-	-	-	134	178	-	409	563	-
Stage 2	-	-	-	-	-	-	574	556	-	218	178	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	2.7	0	40.4	71.9
HCM LOS			E	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	110	1088	-	-	889	-	-	84	772
HCM Lane V/C Ratio	0.075	0.256	-	-	0.001	-	-	1.036	0.233
HCM Control Delay (s)	40.4	9.4	-	-	9.1	-	-	197.7	11.1
HCM Lane LOS	E	A	-	-	A	-	-	F	B
HCM 95th %tile Q(veh)	0.2	1	-	-	0	-	-	5.9	0.9

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	887	565	4	0	19
Future Vol, veh/h	0	887	565	4	0	19
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	73	73	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	986	774	5	0	21

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	390
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	-	0	609
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	609
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	11.1
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	609
HCM Lane V/C Ratio	-	-	-	0.034
HCM Control Delay (s)	-	-	-	11.1
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0.1

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑	↱		↱
Traffic Vol, veh/h	0	713	415	62	0	10
Future Vol, veh/h	0	713	415	62	0	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	200	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	73	73	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	792	568	85	0	11

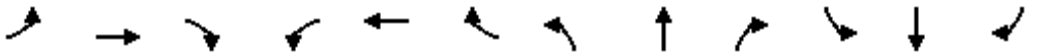
Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	-	0	-	0	-	284
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	-	0	713
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	-	-	-	-	-	713
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	10.1
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	713
HCM Lane V/C Ratio	-	-	-	0.015
HCM Control Delay (s)	-	-	-	10.1
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q(veh)	-	-	-	0

Lane Group	EBL	EBT	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	4	23	184	242	19	343	127	342	495
v/c Ratio	0.02	0.07	0.67	0.47	0.03	0.23	0.17	0.48	0.23
Control Delay	25.8	13.1	42.2	7.0	6.2	17.2	4.0	9.6	9.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	25.8	13.1	42.2	7.0	6.2	17.2	4.0	9.6	9.5
Queue Length 50th (ft)	1	1	78	0	3	52	0	60	42
Queue Length 95th (ft)	10	20	134	30	10	114	34	128	111
Internal Link Dist (ft)		394	448			689			1243
Turn Bay Length (ft)					200		90	150	
Base Capacity (vph)	408	643	515	764	638	1496	747	927	2145
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.01	0.04	0.36	0.32	0.03	0.23	0.17	0.37	0.23

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	3	18	141	1	186	13	309	114	284	410	1
Future Volume (veh/h)	4	3	18	141	1	186	13	309	114	284	410	1
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	4	3	20	183	1	242	19	343	127	342	494	1
Peak Hour Factor	0.92	0.92	0.92	0.77	0.77	0.77	0.70	0.90	0.90	0.83	0.83	0.83
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	152	40	269	338	1	304	606	1674	747	706	2159	4
Arrive On Green	0.19	0.19	0.19	0.19	0.19	0.19	0.02	0.47	0.47	0.13	0.59	0.59
Sat Flow, veh/h	1137	211	1406	1299	7	1585	1781	3554	1585	1781	3639	7
Grp Volume(v), veh/h	4	0	23	184	0	242	19	343	127	342	241	254
Grp Sat Flow(s),veh/h/ln	1137	0	1617	1306	0	1585	1781	1777	1585	1781	1777	1869
Q Serve(g_s), s	0.3	0.0	0.9	10.0	0.0	11.7	0.3	4.5	3.7	7.6	5.1	5.1
Cycle Q Clear(g_c), s	11.2	0.0	0.9	10.9	0.0	11.7	0.3	4.5	3.7	7.6	5.1	5.1
Prop In Lane	1.00		0.87	0.99		1.00	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	152	0	310	340	0	304	606	1674	747	706	1054	1109
V/C Ratio(X)	0.03	0.00	0.07	0.54	0.00	0.80	0.03	0.20	0.17	0.48	0.23	0.23
Avail Cap(c_a), veh/h	368	0	616	603	0	604	712	1674	747	1085	1054	1109
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.9	0.0	26.5	31.0	0.0	30.9	6.2	12.4	12.2	8.0	7.7	7.7
Incr Delay (d2), s/veh	0.1	0.0	0.1	1.3	0.0	4.8	0.0	0.3	0.5	0.5	0.5	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.4	3.3	0.0	4.6	0.1	1.8	1.3	2.5	1.8	1.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.0	0.0	26.6	32.4	0.0	35.7	6.2	12.7	12.7	8.6	8.2	8.1
LnGrp LOS	D	A	C	C	A	D	A	B	B	A	A	A
Approach Vol, veh/h		27			426			489			837	
Approach Delay, s/veh		28.0			34.2			12.4			8.3	
Approach LOS		C			C			B			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	16.0	43.2		20.8	6.2	53.0		20.8				
Change Period (Y+Rc), s	5.5	5.5		5.5	4.5	5.5		5.5				
Max Green Setting (Gmax), s	27.5	25.5		30.5	6.5	47.5		30.5				
Max Q Clear Time (g_c+I1), s	9.6	6.5		13.2	2.3	7.1		13.7				
Green Ext Time (p_c), s	0.9	2.5		0.1	0.0	3.1		1.7				

Intersection Summary												
HCM 6th Ctrl Delay			16.0									
HCM 6th LOS			B									

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	13	0	13	4	0	56	3	410	1	36	676	1
Future Vol, veh/h	13	0	13	4	0	56	3	410	1	36	676	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	25	-	-	200	-	145	190	-	190
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	57	57	92	47	47	92	92	92	92	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	23	0	14	9	0	61	3	446	1	40	743	1

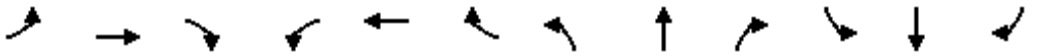
Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1052	1276	372	904	1276	223	744	0	0	447	0	0
Stage 1	823	823	-	452	452	-	-	-	-	-	-	-
Stage 2	229	453	-	452	824	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	181	165	625	232	165	780	859	-	-	1110	-	-
Stage 1	334	386	-	557	569	-	-	-	-	-	-	-
Stage 2	753	568	-	557	385	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	162	159	625	220	159	780	859	-	-	1110	-	-
Mov Cap-2 Maneuver	162	159	-	220	159	-	-	-	-	-	-	-
Stage 1	333	372	-	555	567	-	-	-	-	-	-	-
Stage 2	692	566	-	525	371	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	24	11.5	0.1	0.4
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	859	-	-	226	220	780	1110	-	-
HCM Lane V/C Ratio	0.004	-	-	0.163	0.039	0.078	0.036	-	-
HCM Control Delay (s)	9.2	-	-	24	22	10	8.4	-	-
HCM Lane LOS	A	-	-	C	C	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.6	0.1	0.3	0.1	-	-

Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	383	710	22	405	263	339	58
v/c Ratio	0.41	0.74	0.05	0.58	0.12	0.25	0.09
Control Delay	30.1	37.3	0.2	13.8	8.5	23.1	4.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	30.1	37.3	0.2	13.8	8.5	23.1	4.1
Queue Length 50th (ft)	99	208	0	111	31	71	0
Queue Length 95th (ft)	125	240	0	188	55	127	16
Internal Link Dist (ft)		962			586	567	
Turn Bay Length (ft)	425		310	480			135
Base Capacity (vph)	1232	1269	617	835	2194	1382	666
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.31	0.56	0.04	0.49	0.12	0.25	0.09

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	314	582	18	336	218	0	0	285	49
Future Volume (veh/h)	0	0	0	314	582	18	336	218	0	0	285	49
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1870	1870	1870	1870	1870	0	0	1870	1870
Adj Flow Rate, veh/h				383	710	0	405	263	0	0	339	0
Peak Hour Factor				0.82	0.82	0.82	0.83	0.83	0.83	0.84	0.84	0.84
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				912	937		720	2222	0	0	1483	
Arrive On Green				0.26	0.26	0.00	0.15	0.63	0.00	0.00	0.42	0.00
Sat Flow, veh/h				3456	3554	1585	1781	3647	0	0	3647	1585
Grp Volume(v), veh/h				383	710	0	405	263	0	0	339	0
Grp Sat Flow(s),veh/h/ln				1728	1777	1585	1781	1777	0	0	1777	1585
Q Serve(g_s), s				8.8	17.6	0.0	11.5	2.9	0.0	0.0	5.9	0.0
Cycle Q Clear(g_c), s				8.8	17.6	0.0	11.5	2.9	0.0	0.0	5.9	0.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				912	937		720	2222	0	0	1483	
V/C Ratio(X)				0.42	0.76		0.56	0.12	0.00	0.00	0.23	
Avail Cap(c_a), veh/h				1250	1286		1038	2222	0	0	1483	
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				29.1	32.4	0.0	10.8	7.2	0.0	0.0	17.9	0.0
Incr Delay (d2), s/veh				0.3	1.8	0.0	0.7	0.1	0.0	0.0	0.4	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				3.6	7.6	0.0	4.3	1.0	0.0	0.0	2.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				29.5	34.1	0.0	11.5	7.4	0.0	0.0	18.3	0.0
LnGrp LOS				C	C		B	A	A	A	B	
Approach Vol, veh/h					1093			668			339	
Approach Delay, s/veh					32.5			9.9			18.3	
Approach LOS					C			A			B	

Timer - Assigned Phs	2		5	6		8						
Phs Duration (G+Y+Rc), s	65.0		19.9	45.1		30.6						
Change Period (Y+Rc), s	* 5.2		* 5.2	* 5.2		5.4						
Max Green Setting (Gmax), s	* 60		* 32	* 23		34.6						
Max Q Clear Time (g_c+I1), s	4.9		13.5	7.9		19.6						
Green Ext Time (p_c), s	1.9		1.2	1.9		5.6						

Intersection Summary		
HCM 6th Ctrl Delay	23.0	
HCM 6th LOS	C	

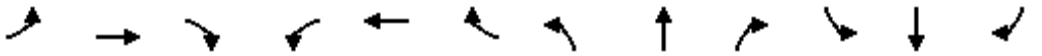
Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Unsignalized Delay for [EBR, WBR, SBR] is excluded from calculations of the approach delay and intersection delay.

Lane Group	EBL	EBT	EBR	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	31	480	755	615	392	31	657
v/c Ratio	0.05	0.26	0.89	0.54	0.51	0.12	0.49
Control Delay	12.1	12.7	31.6	32.1	6.0	23.5	25.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	12.1	12.7	31.6	32.1	6.0	23.5	25.9
Queue Length 50th (ft)	8	79	346	180	0	12	166
Queue Length 95th (ft)	21	105	508	248	60	34	236
Internal Link Dist (ft)		816		542			586
Turn Bay Length (ft)	230		230		280	780	
Base Capacity (vph)	1154	2281	1048	1136	774	250	1335
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.03	0.21	0.72	0.54	0.51	0.12	0.49

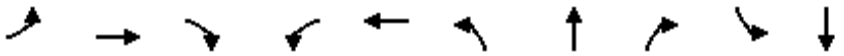
Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	27	422	664	0	0	0	0	529	337	27	572	0
Future Volume (veh/h)	27	422	664	0	0	0	0	529	337	27	572	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870				0	1870	1870	1870	1870	0
Adj Flow Rate, veh/h	31	480	755				0	615	392	31	657	0
Peak Hour Factor	0.88	0.88	0.88				0.86	0.86	0.86	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	933	1862	830				0	1054	470	213	1331	0
Arrive On Green	0.52	0.52	0.52				0.00	0.30	0.30	0.03	0.37	0.00
Sat Flow, veh/h	1781	3554	1585				0	3647	1585	1781	3647	0
Grp Volume(v), veh/h	31	480	755				0	615	392	31	657	0
Grp Sat Flow(s),veh/h/ln	1781	1777	1585				0	1777	1585	1781	1777	0
Q Serve(g_s), s	0.8	6.9	40.5				0.0	13.8	21.6	1.1	13.3	0.0
Cycle Q Clear(g_c), s	0.8	6.9	40.5				0.0	13.8	21.6	1.1	13.3	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	933	1862	830				0	1054	470	213	1331	0
V/C Ratio(X)	0.03	0.26	0.91				0.00	0.58	0.83	0.15	0.49	0.00
Avail Cap(c_a), veh/h	1153	2300	1026				0	1054	470	258	1331	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	10.8	12.2	20.2				0.0	28.0	30.7	21.6	22.4	0.0
Incr Delay (d2), s/veh	0.0	0.1	10.2				0.0	2.4	15.8	0.3	1.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	2.6	16.0				0.0	6.1	10.1	0.5	5.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	10.8	12.3	30.4				0.0	30.3	46.5	22.0	23.7	0.0
LnGrp LOS	B	B	C				A	C	D	C	C	A
Approach Vol, veh/h		1266						1007			688	
Approach Delay, s/veh		23.1						36.6			23.7	
Approach LOS		C						D			C	

Timer - Assigned Phs	1	2		4		6
Phs Duration (G+Y+Rc), s	7.3	32.7		53.5		40.0
Change Period (Y+Rc), s	4.5	5.0		4.5		5.0
Max Green Setting (Gmax), s	5.1	25.4		60.5		35.0
Max Q Clear Time (g_c+I1), s	3.1	23.6		42.5		15.3
Green Ext Time (p_c), s	0.0	1.0		6.5		4.5

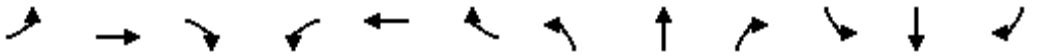
Intersection Summary	
HCM 6th Ctrl Delay	27.8
HCM 6th LOS	C



Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	61	812	578	184	615	389	14	157	14	85
v/c Ratio	0.37	0.74	0.46	0.48	0.48	0.72	0.02	0.21	0.02	0.12
Control Delay	46.5	33.1	3.4	43.3	25.3	33.0	17.9	4.0	17.8	7.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	46.5	33.1	3.4	43.3	25.3	33.0	17.9	4.0	17.8	7.5
Queue Length 50th (ft)	35	220	0	54	150	194	5	0	5	7
Queue Length 95th (ft)	74	302	39	70	163	#353	18	38	18	37
Internal Link Dist (ft)		383			346		526			358
Turn Bay Length (ft)	200		360	325				210	150	
Base Capacity (vph)	317	1194	1323	597	1272	541	770	746	583	729
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.19	0.68	0.44	0.31	0.48	0.72	0.02	0.21	0.02	0.12

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	56	731	520	134	446	4	354	13	143	13	19	59
Future Volume (veh/h)	56	731	520	134	446	4	354	13	143	13	19	59
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	61	812	578	184	611	4	389	14	157	14	21	64
Peak Hour Factor	0.92	0.90	0.90	0.73	0.73	0.92	0.91	0.91	0.91	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	79	1067	838	271	1231	8	631	836	708	621	182	554
Arrive On Green	0.04	0.30	0.30	0.08	0.34	0.34	0.45	0.45	0.45	0.45	0.45	0.45
Sat Flow, veh/h	1781	3554	2790	3456	3619	24	1313	1870	1585	1214	407	1240
Grp Volume(v), veh/h	61	812	578	184	300	315	389	14	157	14	0	85
Grp Sat Flow(s),veh/h/ln	1781	1777	1395	1728	1777	1866	1313	1870	1585	1214	0	1647
Q Serve(g_s), s	2.9	17.8	15.7	4.5	11.5	11.5	21.2	0.4	5.2	0.6	0.0	2.6
Cycle Q Clear(g_c), s	2.9	17.8	15.7	4.5	11.5	11.5	23.7	0.4	5.2	0.9	0.0	2.6
Prop In Lane	1.00		1.00	1.00		0.01	1.00		1.00	1.00		0.75
Lane Grp Cap(c), veh/h	79	1067	838	271	604	635	631	836	708	621	0	736
V/C Ratio(X)	0.77	0.76	0.69	0.68	0.50	0.50	0.62	0.02	0.22	0.02	0.00	0.12
Avail Cap(c_a), veh/h	341	1279	1004	642	639	672	631	836	708	621	0	736
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	40.7	27.3	26.6	38.6	22.6	22.6	20.8	13.3	14.6	13.5	0.0	13.9
Incr Delay (d2), s/veh	14.3	2.2	1.6	3.0	0.6	0.6	4.5	0.0	0.7	0.1	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	7.6	5.2	2.0	4.8	5.0	6.9	0.2	1.9	0.2	0.0	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	55.0	29.6	28.2	41.6	23.2	23.2	25.3	13.3	15.3	13.6	0.0	14.2
LnGrp LOS	E	C	C	D	C	C	C	B	B	B	A	B
Approach Vol, veh/h		1451			799			560			99	
Approach Delay, s/veh		30.1			27.4			22.2			14.1	
Approach LOS		C			C			C			B	

Timer - Assigned Phs	2	3	4	6	7	8
Phs Duration (G+Y+Rc), s	43.5	11.8	30.9	43.5	8.3	34.3
Change Period (Y+Rc), s	5.0	5.0	5.0	* 5	4.5	5.0
Max Green Setting (Gmax), s	38.0	16.0	31.0	* 39	16.5	31.0
Max Q Clear Time (g_c+I1), s	25.7	6.5	19.8	4.6	4.9	13.5
Green Ext Time (p_c), s	1.6	0.4	6.0	0.5	0.1	3.5

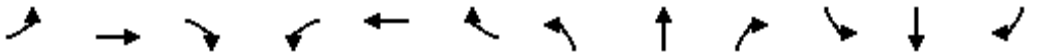
Intersection Summary	
HCM 6th Ctrl Delay	27.3
HCM 6th LOS	C

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBR	WBT	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	169	122	12	58	417	11	535	60
v/c Ratio	0.52	0.19	0.02	0.30	0.19	0.07	0.27	0.05
Control Delay	31.4	0.7	0.0	36.3	8.0	36.2	12.1	1.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	31.4	0.7	0.0	36.3	8.0	36.2	12.1	1.1
Queue Length 50th (ft)	68	0	0	24	28	4	67	0
Queue Length 95th (ft)	107	0	0	68	111	22	155	9
Internal Link Dist (ft)			394		623		526	
Turn Bay Length (ft)	110			290		290		155
Base Capacity (vph)	472	910	747	318	2241	194	1948	1360
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.36	0.13	0.02	0.18	0.19	0.06	0.27	0.04

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	132	0	95	0	0	6	52	371	0	10	476	53
Future Volume (veh/h)	132	0	95	0	0	6	52	371	0	10	476	53
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	169	0	122	0	0	12	58	417	0	11	535	60
Peak Hour Factor	0.78	0.78	0.78	0.50	0.50	0.50	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	385	473	401	192	0	118	99	1866	723	29	1726	944
Arrive On Green	0.11	0.00	0.25	0.00	0.00	0.07	0.06	0.53	0.00	0.02	0.49	0.49
Sat Flow, veh/h	1781	1870	1585	1781	0	1585	1781	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	169	0	122	0	0	12	58	417	0	11	535	60
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	0	1585	1781	1777	1585	1781	1777	1585
Q Serve(g_s), s	6.3	0.0	4.7	0.0	0.0	0.5	2.4	4.8	5.2	0.5	6.9	1.2
Cycle Q Clear(g_c), s	6.3	0.0	4.7	0.0	0.0	0.5	2.4	4.8	5.2	0.5	6.9	1.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	385	473	401	192	0	118	99	1866	723	29	1726	944
V/C Ratio(X)	0.44	0.00	0.30	0.00	0.00	0.10	0.58	0.22	0.00	0.38	0.31	0.06
Avail Cap(c_a), veh/h	608	755	640	330	0	393	301	1866	723	183	1726	944
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.1	0.0	22.9	0.0	0.0	32.7	34.9	9.7	0.0	36.9	11.8	6.5
Incr Delay (d2), s/veh	0.8	0.0	0.4	0.0	0.0	0.4	5.3	0.3	0.0	7.9	0.5	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	0.0	1.7	0.0	0.0	0.2	1.2	1.8	0.0	0.3	2.6	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.9	0.0	23.3	0.0	0.0	33.1	40.3	10.0	0.0	44.8	12.3	6.6
LnGrp LOS	C	A	C	A	A	C	D	A	A	D	B	A
Approach Vol, veh/h		291			12			475			606	
Approach Delay, s/veh		25.4			33.1			13.7			12.3	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.4	45.0	0.0	24.4	9.4	42.0	13.5	10.8
Change Period (Y+Rc), s	* 5.2	* 5.2	* 5.2	* 5.2	* 5.2	* 5.2	* 5.2	* 5.2
Max Green Setting (Gmax), s	* 7.8	* 40	* 6	* 31	* 13	* 35	* 18	* 19
Max Q Clear Time (g_c+I1), s	2.5	7.2	0.0	6.7	4.4	8.9	8.3	2.5
Green Ext Time (p_c), s	0.0	3.0	0.0	0.3	0.1	4.0	0.3	0.0

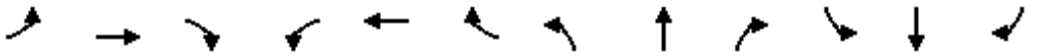
Intersection Summary	
HCM 6th Ctrl Delay	15.7
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	93	168	10	42	81	383	1	11	517	58
v/c Ratio	0.34	0.26	0.05	0.25	0.25	0.16	0.00	0.04	0.26	0.05
Control Delay	28.5	1.0	24.3	21.2	37.4	7.4	0.0	38.2	11.7	1.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	28.5	1.0	24.3	21.2	37.4	7.4	0.0	38.2	11.7	1.6
Queue Length 50th (ft)	38	0	4	4	20	36	0	2	76	0
Queue Length 95th (ft)	58	0	12	21	43	87	0	11	130	11
Internal Link Dist (ft)		404		466		564			623	
Turn Bay Length (ft)					240		170	240		300
Base Capacity (vph)	343	827	254	500	508	2340	1322	331	1997	1242
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.27	0.20	0.04	0.08	0.16	0.16	0.00	0.03	0.26	0.05

Intersection Summary



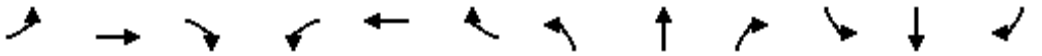
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	64	0	116	7	6	22	71	337	1	10	476	53
Future Volume (veh/h)	64	0	116	7	6	22	71	337	1	10	476	53
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	93	0	168	10	9	33	81	383	1	11	517	58
Peak Hour Factor	0.69	0.69	0.69	0.67	0.67	0.67	0.88	0.88	0.88	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	298	0	222	165	31	115	188	2110	961	47	1965	977
Arrive On Green	0.06	0.00	0.14	0.01	0.09	0.09	0.05	0.59	0.59	0.01	0.55	0.55
Sat Flow, veh/h	1781	0	1585	1781	351	1287	3456	3554	1585	3456	3554	1585
Grp Volume(v), veh/h	93	0	168	10	0	42	81	383	1	11	517	58
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1781	0	1639	1728	1777	1585	1728	1777	1585
Q Serve(g_s), s	3.4	0.0	7.6	0.4	0.0	1.8	1.7	3.7	0.0	0.2	5.7	1.1
Cycle Q Clear(g_c), s	3.4	0.0	7.6	0.4	0.0	1.8	1.7	3.7	0.0	0.2	5.7	1.1
Prop In Lane	1.00		1.00	1.00		0.79	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	298	0	222	165	0	146	188	2110	961	47	1965	977
V/C Ratio(X)	0.31	0.00	0.76	0.06	0.00	0.29	0.43	0.18	0.00	0.23	0.26	0.06
Avail Cap(c_a), veh/h	482	0	560	344	0	492	530	2110	961	346	1965	977
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.3	0.0	31.0	30.5	0.0	31.9	34.3	6.9	5.8	36.6	8.8	5.7
Incr Delay (d2), s/veh	0.6	0.0	5.2	0.2	0.0	1.1	1.6	0.2	0.0	2.5	0.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	0.0	3.1	0.2	0.0	0.7	0.7	1.3	0.0	0.1	2.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.9	0.0	36.2	30.7	0.0	33.0	35.9	7.1	5.8	39.1	9.1	5.8
LnGrp LOS	C	A	D	C	A	C	D	A	A	D	A	A
Approach Vol, veh/h		261			52			465			586	
Approach Delay, s/veh		33.3			32.5			12.1			9.3	
Approach LOS		C			C			B			A	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.5	49.0	5.4	15.0	8.6	45.9	9.2	11.2
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	7.5	44.5	8.5	26.5	11.5	40.5	12.5	22.5
Max Q Clear Time (g_c+I1), s	2.2	5.7	2.4	9.6	3.7	7.7	5.4	3.8
Green Ext Time (p_c), s	0.0	2.8	0.0	0.9	0.1	4.0	0.1	0.1

Intersection Summary	
HCM 6th Ctrl Delay	15.7
HCM 6th LOS	B

Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	87	9	504	68	75	480	323	54	16	451	199
v/c Ratio	0.34	0.05	0.73	0.19	0.37	0.62	0.15	0.04	0.11	0.34	0.21
Control Delay	34.7	37.4	16.8	26.0	20.5	32.0	8.3	1.2	40.5	21.8	2.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	34.7	37.4	16.8	26.0	20.5	32.0	8.3	1.2	40.5	21.8	2.7
Queue Length 50th (ft)	41	4	93	27	8	112	30	0	8	86	0
Queue Length 95th (ft)	69	18	132	56	41	175	81	11	29	157	35
Internal Link Dist (ft)		380			478		1188			564	
Turn Bay Length (ft)						170		260	310		325
Base Capacity (vph)	401	515	866	418	456	1259	2222	1484	284	1308	1067
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.22	0.02	0.58	0.16	0.16	0.38	0.15	0.04	0.06	0.34	0.19

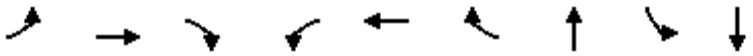
Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	71	7	413	55	13	48	432	291	49	15	415	183
Future Volume (veh/h)	71	7	413	55	13	48	432	291	49	15	415	183
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	87	9	504	68	16	59	480	323	54	16	451	199
Peak Hour Factor	0.82	0.82	0.82	0.81	0.81	0.81	0.90	0.90	0.90	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	433	448	654	367	81	299	598	1762	858	33	1213	626
Arrive On Green	0.05	0.24	0.24	0.05	0.23	0.23	0.17	0.50	0.50	0.02	0.34	0.34
Sat Flow, veh/h	1781	1870	1585	1781	350	1289	3456	3554	1585	1781	3554	1585
Grp Volume(v), veh/h	87	9	504	68	0	75	480	323	54	16	451	199
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	0	1638	1728	1777	1585	1781	1777	1585
Q Serve(g_s), s	3.3	0.3	21.5	2.6	0.0	3.3	12.0	4.5	1.5	0.8	8.6	7.8
Cycle Q Clear(g_c), s	3.3	0.3	21.5	2.6	0.0	3.3	12.0	4.5	1.5	0.8	8.6	7.8
Prop In Lane	1.00		1.00	1.00		0.79	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	433	448	654	367	0	380	598	1762	858	33	1213	626
V/C Ratio(X)	0.20	0.02	0.77	0.19	0.00	0.20	0.80	0.18	0.06	0.49	0.37	0.32
Avail Cap(c_a), veh/h	646	448	654	554	0	380	1098	1762	858	248	1213	626
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.2	26.1	22.7	24.4	0.0	27.8	35.6	12.5	9.8	43.6	22.3	18.8
Incr Delay (d2), s/veh	0.2	0.0	5.6	0.2	0.0	0.3	2.6	0.2	0.1	10.9	0.9	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	0.1	9.7	1.1	0.0	1.3	5.2	1.8	0.5	0.4	3.6	3.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.4	26.1	28.3	24.6	0.0	28.0	38.2	12.8	9.9	54.6	23.2	20.1
LnGrp LOS	C	C	C	C	A	C	D	B	A	D	C	C
Approach Vol, veh/h		600			143			857			666	
Approach Delay, s/veh		27.7			26.4			26.8			23.0	
Approach LOS		C			C			C			C	

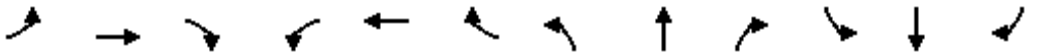
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.1	49.0	8.6	26.0	20.0	35.1	9.3	25.3
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	12.5	44.5	13.5	21.5	28.5	28.5	15.5	19.5
Max Q Clear Time (g_c+I1), s	2.8	6.5	4.6	23.5	14.0	10.6	5.3	5.3
Green Ext Time (p_c), s	0.0	2.5	0.1	0.0	1.5	3.5	0.1	0.3

Intersection Summary	
HCM 6th Ctrl Delay	25.9
HCM 6th LOS	C



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	264	704	1	1	459	11	9	82	169
v/c Ratio	0.57	0.35	0.00	0.01	0.51	0.02	0.03	0.34	0.22
Control Delay	23.3	7.3	0.0	28.0	20.2	0.1	0.1	26.3	0.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	23.3	7.3	0.0	28.0	20.2	0.1	0.1	26.3	0.6
Queue Length 50th (ft)	69	45	0	0	62	0	0	22	0
Queue Length 95th (ft)	161	131	0	5	128	0	0	65	0
Internal Link Dist (ft)		432			492		663		453
Turn Bay Length (ft)	210		160	215		215		200	
Base Capacity (vph)	1230	3411	1529	225	2029	960	743	666	1078
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.21	0.21	0.00	0.00	0.23	0.01	0.01	0.12	0.16

Intersection Summary



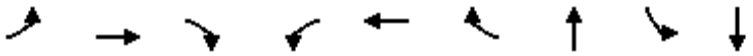
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	238	634	1	1	413	10	3	0	4	70	0	144
Future Volume (veh/h)	238	634	1	1	413	10	3	0	4	70	0	144
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	264	704	1	1	459	11	4	0	5	82	0	169
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	351	1543	688	4	847	378	175	41	111	454	0	278
Arrive On Green	0.20	0.43	0.43	0.00	0.24	0.24	0.18	0.00	0.18	0.18	0.00	0.18
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	273	231	630	1411	0	1585
Grp Volume(v), veh/h	264	704	1	1	459	11	9	0	0	82	0	169
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1134	0	0	1411	0	1585
Q Serve(g_s), s	5.7	5.7	0.0	0.0	4.6	0.2	0.0	0.0	0.0	0.0	0.0	4.0
Cycle Q Clear(g_c), s	5.7	5.7	0.0	0.0	4.6	0.2	4.0	0.0	0.0	1.7	0.0	4.0
Prop In Lane	1.00		1.00	1.00		1.00	0.44		0.56	1.00		1.00
Lane Grp Cap(c), veh/h	351	1543	688	4	847	378	326	0	0	454	0	278
V/C Ratio(X)	0.75	0.46	0.00	0.23	0.54	0.03	0.03	0.00	0.00	0.18	0.00	0.61
Avail Cap(c_a), veh/h	1547	5068	2261	283	2547	1136	911	0	0	1046	0	942
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	15.5	8.2	6.5	20.4	13.6	11.9	14.0	0.0	0.0	14.6	0.0	15.6
Incr Delay (d2), s/veh	3.2	0.2	0.0	24.8	0.5	0.0	0.0	0.0	0.0	0.2	0.0	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	1.6	0.0	0.0	1.6	0.1	0.1	0.0	0.0	0.6	0.0	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.7	8.4	6.5	45.2	14.2	12.0	14.0	0.0	0.0	14.8	0.0	17.7
LnGrp LOS	B	A	A	D	B	B	B	A	A	B	A	B
Approach Vol, veh/h		969			471			9			251	
Approach Delay, s/veh		11.2			14.2			14.0			16.7	
Approach LOS		B			B			B			B	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		12.9	4.6	23.5		12.9	12.6	15.4				
Change Period (Y+Rc), s		* 5.7	4.5	* 5.7		* 5.7	4.5	* 5.7				
Max Green Setting (Gmax), s		* 24	6.5	* 58		* 24	35.5	* 29				
Max Q Clear Time (g_c+I1), s		6.0	2.0	7.7		6.0	7.7	6.6				
Green Ext Time (p_c), s		0.0	0.0	5.8		1.1	0.8	3.1				

Intersection Summary	
HCM 6th Ctrl Delay	12.8
HCM 6th LOS	B

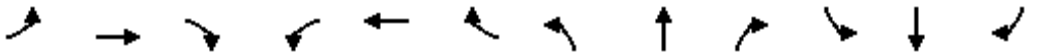
Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	264	704	1	1	459	11	9	82	169
v/c Ratio	0.57	0.35	0.00	0.01	0.51	0.02	0.03	0.34	0.22
Control Delay	23.3	7.3	0.0	28.0	20.2	0.1	0.1	26.3	0.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	23.3	7.3	0.0	28.0	20.2	0.1	0.1	26.3	0.6
Queue Length 50th (ft)	69	45	0	0	62	0	0	22	0
Queue Length 95th (ft)	161	131	0	5	128	0	0	65	0
Internal Link Dist (ft)		432			492		663		453
Turn Bay Length (ft)	210		160	215		215		200	
Base Capacity (vph)	1230	3411	1529	225	2029	960	743	666	1078
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.21	0.21	0.00	0.00	0.23	0.01	0.01	0.12	0.16

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	238	634	1	1	413	10	3	0	4	70	0	144
Future Volume (veh/h)	238	634	1	1	413	10	3	0	4	70	0	144
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	264	704	1	1	459	11	4	0	5	82	0	169
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	351	1543	688	4	847	378	175	41	111	454	0	278
Arrive On Green	0.20	0.43	0.43	0.00	0.24	0.24	0.18	0.00	0.18	0.18	0.00	0.18
Sat Flow, veh/h	1781	3554	1585	1781	3554	1585	273	231	630	1411	0	1585
Grp Volume(v), veh/h	264	704	1	1	459	11	9	0	0	82	0	169
Grp Sat Flow(s),veh/h/ln	1781	1777	1585	1781	1777	1585	1134	0	0	1411	0	1585
Q Serve(g_s), s	5.7	5.7	0.0	0.0	4.6	0.2	0.0	0.0	0.0	0.0	0.0	4.0
Cycle Q Clear(g_c), s	5.7	5.7	0.0	0.0	4.6	0.2	4.0	0.0	0.0	1.7	0.0	4.0
Prop In Lane	1.00		1.00	1.00		1.00	0.44		0.56	1.00		1.00
Lane Grp Cap(c), veh/h	351	1543	688	4	847	378	326	0	0	454	0	278
V/C Ratio(X)	0.75	0.46	0.00	0.23	0.54	0.03	0.03	0.00	0.00	0.18	0.00	0.61
Avail Cap(c_a), veh/h	1547	5068	2261	283	2547	1136	911	0	0	1046	0	942
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	15.5	8.2	6.5	20.4	13.6	11.9	14.0	0.0	0.0	14.6	0.0	15.6
Incr Delay (d2), s/veh	3.2	0.2	0.0	24.8	0.5	0.0	0.0	0.0	0.0	0.2	0.0	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	1.6	0.0	0.0	1.6	0.1	0.1	0.0	0.0	0.6	0.0	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.7	8.4	6.5	45.2	14.2	12.0	14.0	0.0	0.0	14.8	0.0	17.7
LnGrp LOS	B	A	A	D	B	B	B	A	A	B	A	B
Approach Vol, veh/h		969			471			9			251	
Approach Delay, s/veh		11.2			14.2			14.0			16.7	
Approach LOS		B			B			B			B	

Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		12.9	4.6	23.5		12.9	12.6	15.4				
Change Period (Y+Rc), s		* 5.7	4.5	* 5.7		* 5.7	4.5	* 5.7				
Max Green Setting (Gmax), s		* 24	6.5	* 58		* 24	35.5	* 29				
Max Q Clear Time (g_c+I1), s		6.0	2.0	7.7		6.0	7.7	6.6				
Green Ext Time (p_c), s		0.0	0.0	5.8		1.1	0.8	3.1				

Intersection Summary	
HCM 6th Ctrl Delay	12.8
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.