



80 Big Bay Point Road

Proposed Industrial Development Traffic Impact Study

04 August 2021

→ The Power of Commitment



Executive summary

GHD was retained to prepare a Traffic Impact Study (TIS) for a proposed industrial subdivision located on the northeast corner of Big Bay Point Road and Bayview Drive on the lands municipally known as 80 Big Bay Point Road in the City of Barrie.

This report establishes the existing and future road network and the subsequent traffic-related impacts of the subject site at the study intersections during the weekday a.m. and p.m. peak hours. These impacts are based on projected future background traffic derived for build-out in 2024 and a period of five and ten year post build-out in 2029 and 2034.

The proposed Draft Plan of Subdivision prepared by Innovative Planning Solutions consists of 31 individual industrial lots with a total of 610,313 sq.ft. of Gross Floor Area (GFA) fronting an internal private ring road.

Access to the development is proposed via a private road with full moves access to Bayview Drive located opposite an existing driveway for the Purolator Shipping Centre. An emergency access from Big Bay Point Road through Lot #1 to the internal ring road is also proposed.

The proposed development is expected to generate a total of 104 new two-way vehicle trips during the a.m. peak hour consisting of 80 inbound and 24 outbound trips. During the p.m. peak hour, it is expected to generate 116 new two-way vehicle trips consisting of 31 inbound and 85 outbound trips.

The distribution of site traffic for each horizon year was based on a review of Transportation Tomorrow Survey (TTS) 2016 data and existing traffic patterns in the area.

The overall impact of the proposed development is minor and will not adversely impact the operation of intersections Big Bay Point Road, Bayview Drive, Fairview Road, and Little Avenue. With the signal optimization applied to the 2024, 2029, and 2034 future conditions, key critical movements can be kept to below their theoretical maximum capacities.

GHD has also found the proposed configuration and location of the site access to be acceptable, with no expected operational or safety concerns for Bayview Drive.

We trust that this satisfies your requirements, but do not hesitate to contact the undersigned if you have any questions.

Sincerely,

GHD



William Maria, P. Eng.
Transportation Planning Lead

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1. Introduction

1.1 Retainer and Objective

GHD is pleased to provide the following Traffic Impact Study in support of a proposed Draft Plan of Subdivision for the proposed industrial subdivision located at 80 Big Bay Point Road in the City of Barrie.

This study was completed to determine the following:

- A summary of baseline traffic conditions for the study area intersections.
- Trip generation estimates for the proposed site plan using Institute of Transportation Engineer's (ITE) Trip Generation data and the distribution of the development traffic to the adjacent road network.
- Updates the existing traffic conditions to derive the future background operating conditions for the study intersections for a future 2024, 2029 and 2034 horizon including general corridor growth and background development traffic.
- Determine existing and future (background and total) traffic conditions during the critical peak hours by conducting intersectional capacity analysis.

The site is generally located in the northeast quadrant of the intersection of Big Bay Point Road and Bayview Drive as shown in **Figure 1**.

1.2 Scope and limitations

The opinions, conclusions and any recommendations in this report are based on conditions encountered and information reviewed at the date of preparation of the report. GHD has no responsibility or obligation to update this report to account for events or changes occurring subsequent to the date that the report was prepared.

1.3 Study Team

The GHD team involved in the preparation of this study are:

- William Maria, P. Eng., Transportation Planning Lead
- James Emerson, EIT, Engineering Assistant



Figure 1 Site Location

1.4 Development Proposal

The proposed Draft Plan of Subdivision prepared by Innovative Planning Solutions dated May 2021 is provided in **Figure 2**. It consists of 31 individual industrial lots with a total of 610,313 sq.ft. of Gross Floor Area (GFA) fronting an internal private ring road.

Access to the development is proposed via a private road with full moves access to Bayview Drive located opposite an existing driveway for the Purolator Shipping Centre.

An emergency access from Big Bay Point Road through Lot #1 to the internal ring road is also proposed.



Figure 2 Proposed Draft Plan of Subdivision

2. Existing Road Network

2.1 Study Area

As confirmed by City staff, the following intersections were included in the capacity analysis:

- Big Bay Point Road and Bayview Drive
- Big Bay Point Road and Fairview Road
- Bayview Drive and Little Avenue
- Fairview Road and Little Avenue

2.2 Existing Road Network

Big Bay Point Road is an east-west arterial road under the jurisdiction of the City of Barrie. The road has recently been reconstructed west of Bayview Drive to provide a five-lane cross section. The posted speed limit is 50 km/h.

Bayview Drive is a north-south major collector road under the jurisdiction of the City of Barrie. From Big Bay Point Road to Little Avenue, it currently has a two-lane rural cross section with paved shoulders. The intersection of Bayview Drive with both Big Bay Point Road and Little Avenue are signalized. The posted speed limit is 50 km/h.

Fairview Road is a north-south arterial road under the jurisdiction of the City of Barrie that extends from Big Bay Point Road to Essa Road. North of Big Bay Point Road it has a two-lane cross section. The posted speed limit is 50 km/h.

Little Avenue is an east-west arterial road under the jurisdiction of the City of Barrie that extends from Fairview Road in the west to Hurst Drive in the east. Within the study area it has a two-lane urban cross section. The posted speed limit is 50 km/h.

The existing lane configurations and traffic controls at the study intersections are shown in **Figure 3**.

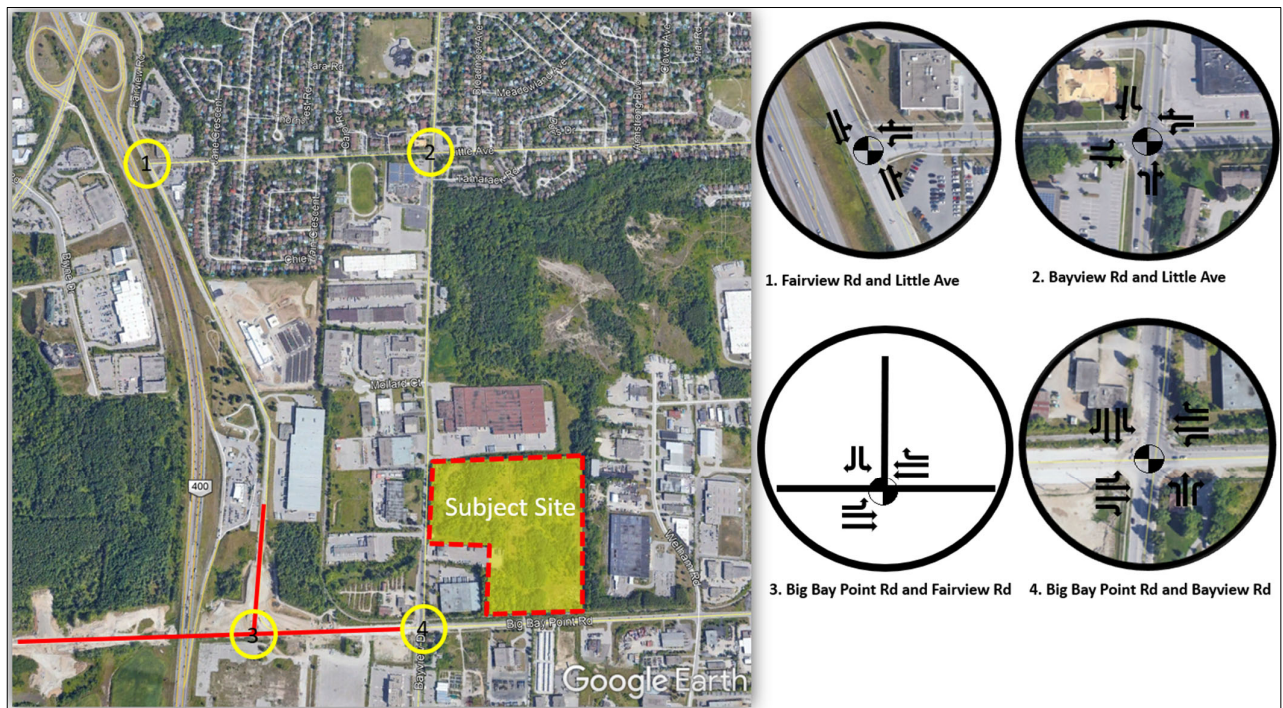


Figure 3 Existing Lane Configurations and Intersection Control

2.3 Pedestrian Facilities

Pedestrian sidewalks are currently provided on several roads within the study area including:

Big Bay Point Road – Sidewalks are provided on both sides of the road within the study area.

Bayview Drive – A sidewalk is provided on the west side of the road that extends from Little Avenue to approximately 400 metres to the south.

Fairview Road – A sidewalk is provided on the east side of the road from Essa Road to approximately 400 metres south of Little Avenue.

Little Avenue – Sidewalks are provided on both sides of the road within the study area.

2.4 Cycling Facilities

Big Bay Point Road was recently reconstructed as part of the Harvie Road extension and crossing over Highway 400. As part of this reconstruction, on-street bike lanes have been constructed on Big Bay Point Road through the study area terminating east of Bayview Drive.

The reconstructed section of Bayview Drive north of Big Bay Point Road also provides on-street bike lanes in both directions which terminate just south of the proposed access to the subject site.

2.5 Transit Service

Barrie Transit operates Route #3A and #3B which travels northbound and southbound along Bayview Road from the Barrie South GO Station to Downtown Barrie as illustrated in **Figure 4** below.

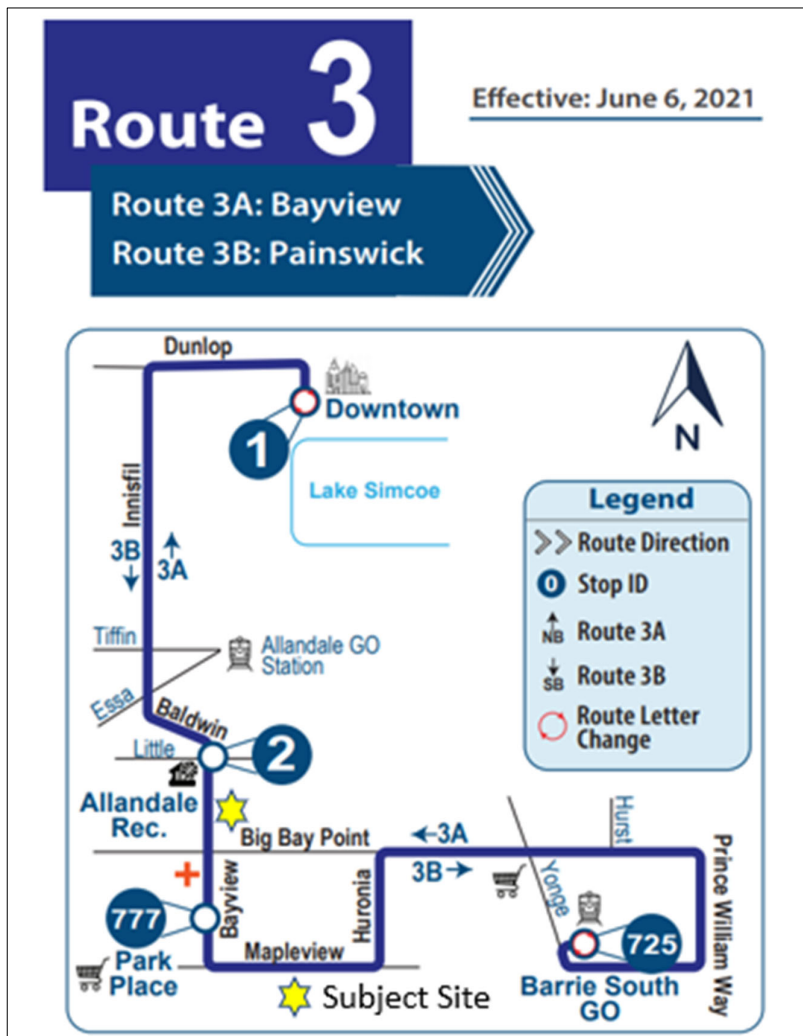


Figure 4 **City of Barrie Transit Map**

Route #3 offer weekday and weekend service every half hour to an hour depending on the time of day.

Existing transit stops adjacent to the site include Transit Stop ID #87 (northbound) located approximately 140 metres south of the proposed site access and Transit Stop ID #86 (southbound) located immediately across the street from the proposed site access.

Figure 5 shows the location of the existing transit stops adjacent to the subject site.

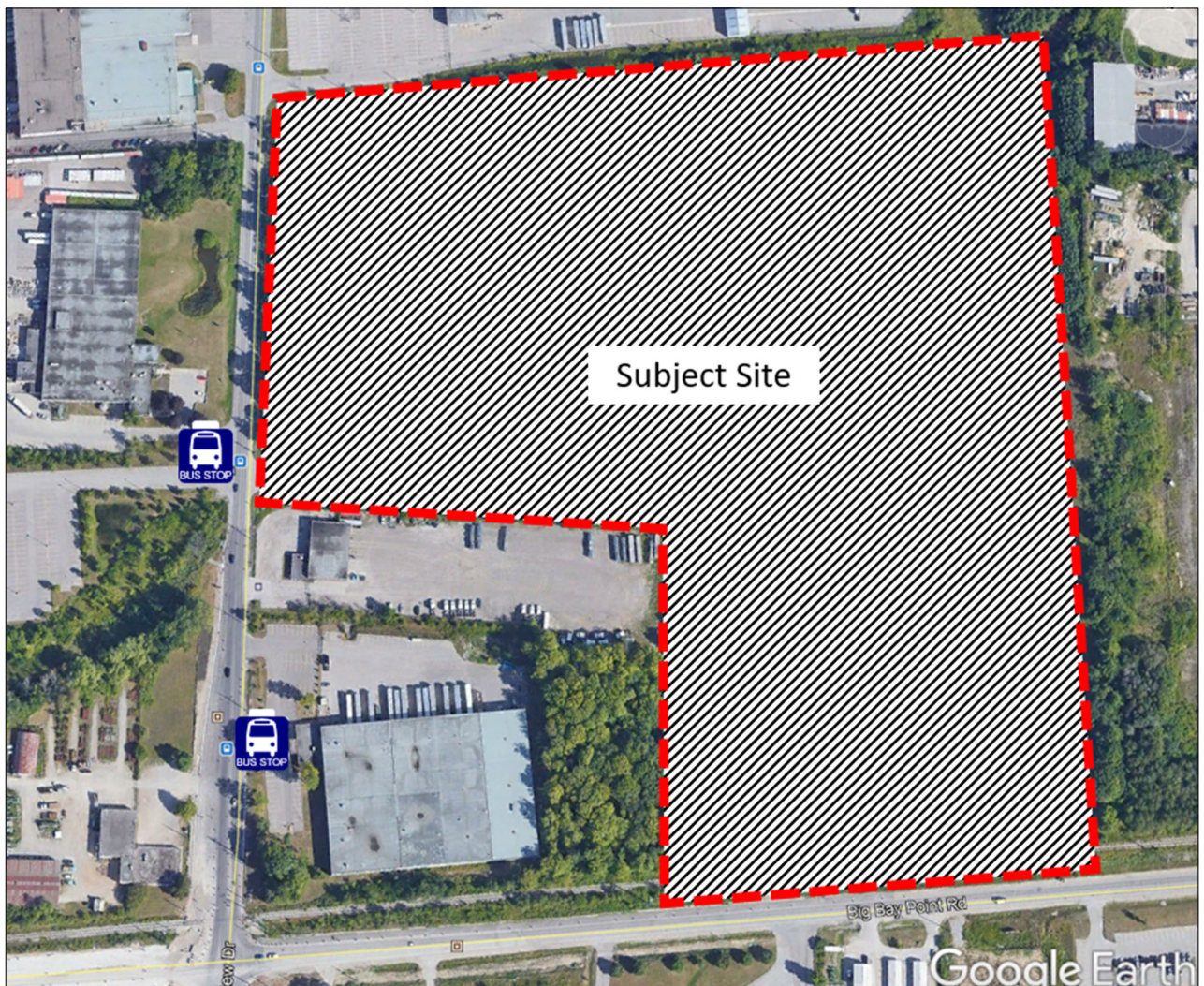


Figure 5 Existing Transit Stop Locations

2.6 Existing Traffic Data

Due to COVID-19 pandemic and travel restrictions imposed by the provincial lockdowns, traffic throughout the City is lower than historical levels. Consequently, conducting updated traffic counts at the study intersections would not provide a realistic estimate of the 2021 base traffic volumes. Instead, GHD used historical traffic data purchased from the city for each of the study intersections and factored the data to the base 2021 year.

The most recent turning movement count data available from the city is summarized in **Table 1** below and is provided in **Appendix C** along with signal timing cards.

Table 1 *Existing Traffic Data Source*

Intersection	Date	Source
Big Bay Point Road and Bayview Drive	2019	City of Barrie
Big Bay Point Road and Fairview Road	Projected from 2031 EMME Model Data	City of Barrie
Fairview Road and Little Avenue	2016	City of Barrie
Bayview Drive and Little Avenue	2014	City of Barrie

City staff provided growth rates extracted from the City's Strategic EMME model for each of the study area roads to estimate the base 2021 traffic volumes for each intersection. These rates are summarized in **Table 2**.

Table 2 *City's Strategic Travel Model Compounded Annual Growth Rates to 2021*

Street Name	Annual Growth Rate
Fairview Road	1.0%
Bayview Drive	3.4%
Big Bay Point Road	3.2%
Little Avenue	1.2%

Figure 6 summarizes the existing traffic volumes for each of the study intersections during the weekday a.m. and p.m. peak hours.

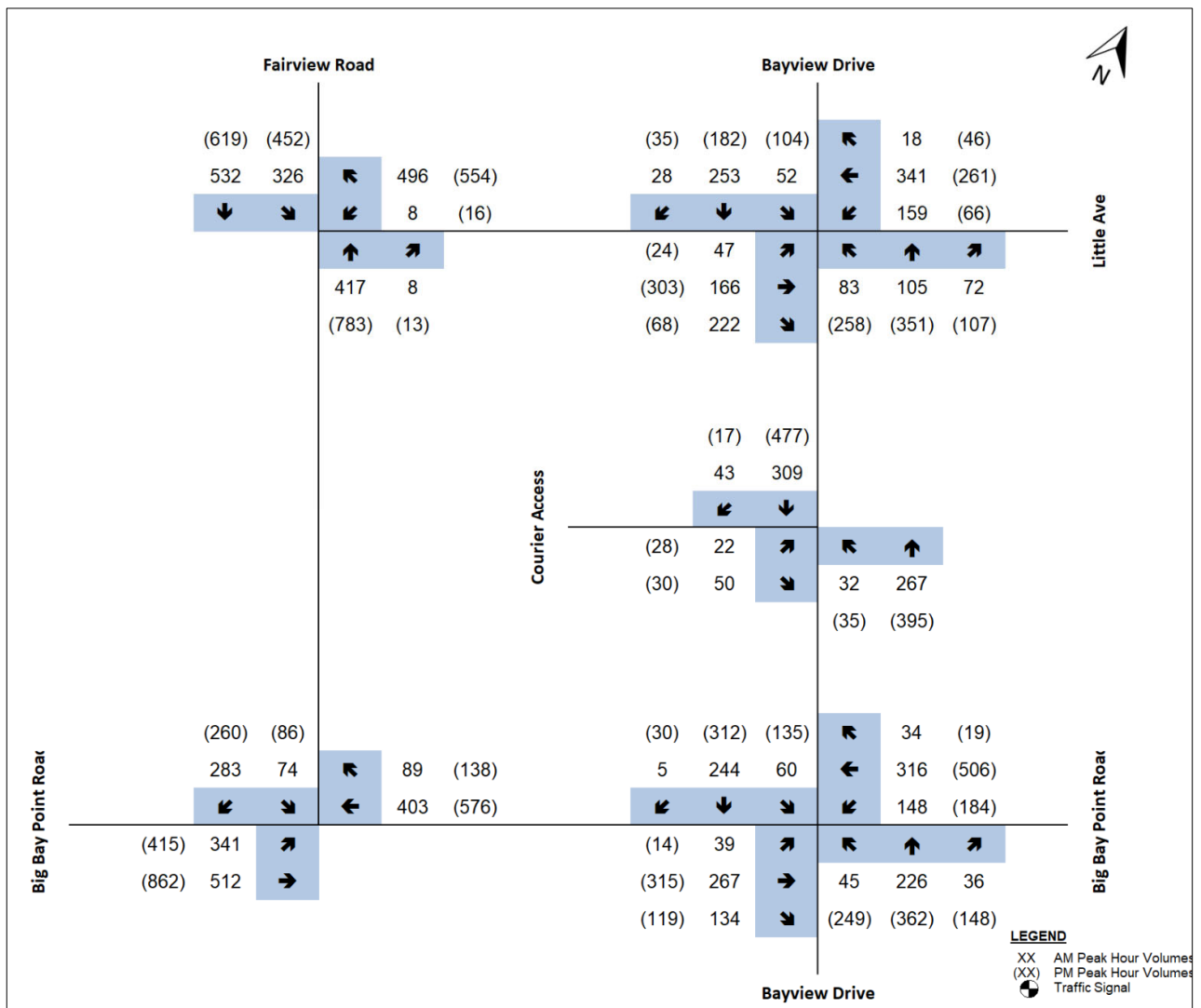


Figure 6 Existing 2021 Volumes

3. Future Background Traffic Conditions

3.1 Study Horizon Year

As per the terms of reference, this study has been prepared with an expected build-out year of 2024 for the subject site and for a period of 5 and 10 years post build-out. As a result, the future traffic scenarios include analysis of the 2024 (build-out), 2029 (five years post build-out) and 2034 (10 years post build-out) planning horizons.

3.2 Planned Infrastructure Improvements

3.2.1 Road Improvements

The City's 2019 Capital Plan identifies the planned improvement of Big Bay Point Road from Fairview Road to Huronia Road by 2022. While the section Big Bay Point Road from Fairview Road to Bayview Drive has been completed, the section east of Bayview Drive remains a two-lane road at the time of this report. The planned improvement includes a five-lane cross section (two lanes per direction with two-way left turn lane) before 2031.

Other planned improvement within the study area contained with City of Barrie Transportation Master Plan Final Report dated June 2019 includes the following by 2031:

- Little Avenue widening to a five-lane cross section (two through lanes and a two-way left turn lane)
- Bayview Drive widening to a three-lane cross section (one lane per direction with two-way left turn lane) before 2031 and a five-lane cross section (two lanes per direction with two-way left turn lane)
- Fairview Road widening to a four-lane cross section

Figure 7 below identifies the planned road improvements within the study area by 2031 from the City's Transportation Master Plan.

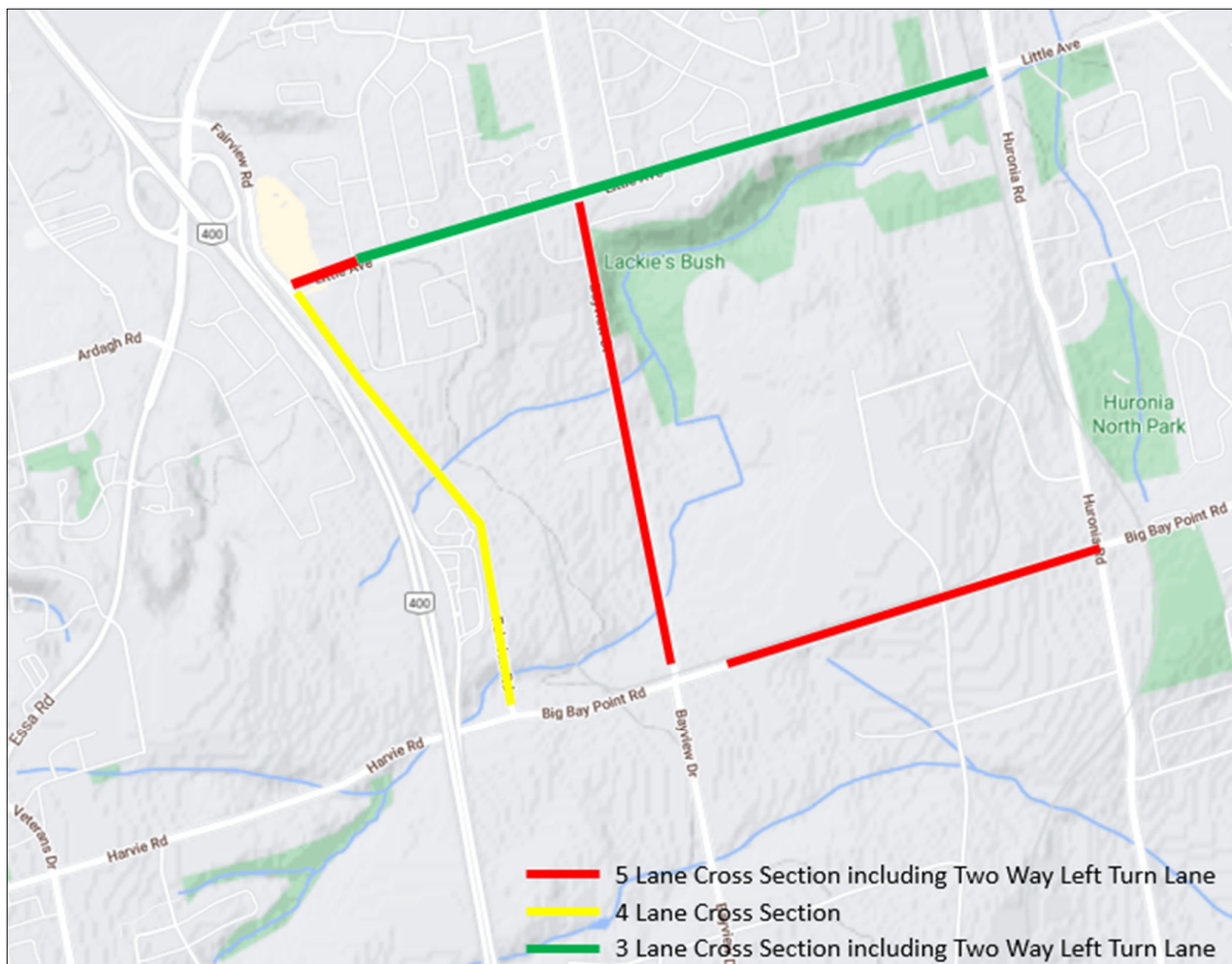


Figure 7 *Planned Road Improvements by 2031*

3.2.2 Pedestrian Facilities

As per the City of Barrie Transportation Master Plan – Active Transportation Strategy report dated June 2019, the city proposed to construct the following pedestrian facilities:

Short Term – 2019 to 2023

Big Bay Point Road – Sidewalk on one side of the road from Bayview Drive to Huronia Road

Bayview Drive – Sidewalks on both sides of the road from Big Bay Point Road to north of Mollard Crescent and sidewalk on one side of the road north of Mollard Crescent to Little Avenue

Medium Term – 2024 to 2031

Fairview Road – Sidewalks on both sides of the road from Big Bay Point Road to Essa Road

3.2.3 Bicycle Facilities

As per the City of Barrie Transportation Master Plan – Active Transportation Strategy report dated June 2019, the city proposed to construct the following bicycle facilities:

Short Term – 2019 to 2023

Big Bay Point Road – Buffered bike lanes from Bayview Drive to Huronia Road

Bayview Drive – Bike lanes from Big Bay Point Road to Little Avenue

Medium Term – 2024 to 2031

Little Avenue – Buffered bike lanes from Fairview Road to Huronia Road

Fairview Road – Bike lanes from Big Bay Point Road to Little Avenue

3.3 Future Background Traffic Growth

City staff provided growth rates to be used in establishing future background traffic volumes at the study intersections. These growth rates have been extracted from the City's EMME model and are summarized in **Table 3** below.

Table 3 City's Strategic Travel Model Compounded Annual Growth Rates (2021 to 2041)

Street Name	Annual Growth Rate	
	Prior to 2031	2031 to 2041
Fairview Road	1.0%	1.4%
Bayview Drive	3.4%	1.5%
Big Bay Point Road	3.2%	3.3%
Little Avenue	1.2%	1.6%

1.5 Future Background Developments

Background site generated traffic from the following planned developments have also been reviewed and if necessary, site trips from these developments included in the future background traffic volumes:

- 110 Fairview Road – Barrie Simcoe Emergency Services Campus
- 249 Bayview Drive – three storey residential development with ground floor commercial.

Excerpts from each respective Traffic Impact Study are provided in **Appendix D**.

Traffic generated by all other future planned developments near the study are assumed to be included in the projected annual growth rates provided by the City's EMME model.

3.4 Future Background Traffic Volumes

The total future background traffic volumes including corridor growth and background site generated traffic for the 2024, 2029 and 2034 planning horizons are summarized in **Figures 8, 9 and 10 respectively** for the weekday a.m. and p.m. peak hours.

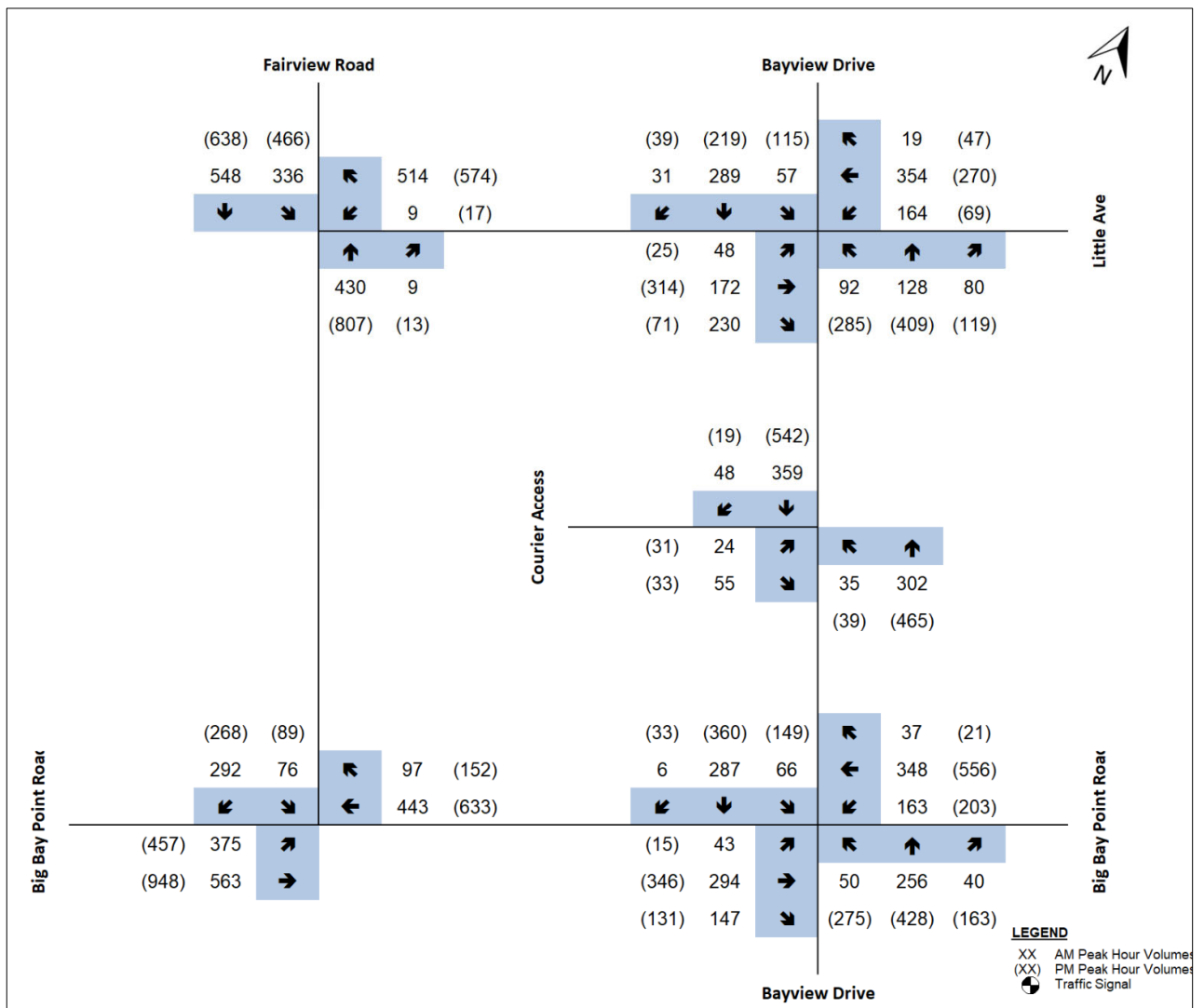


Figure 8 2024 Future Background Volumes

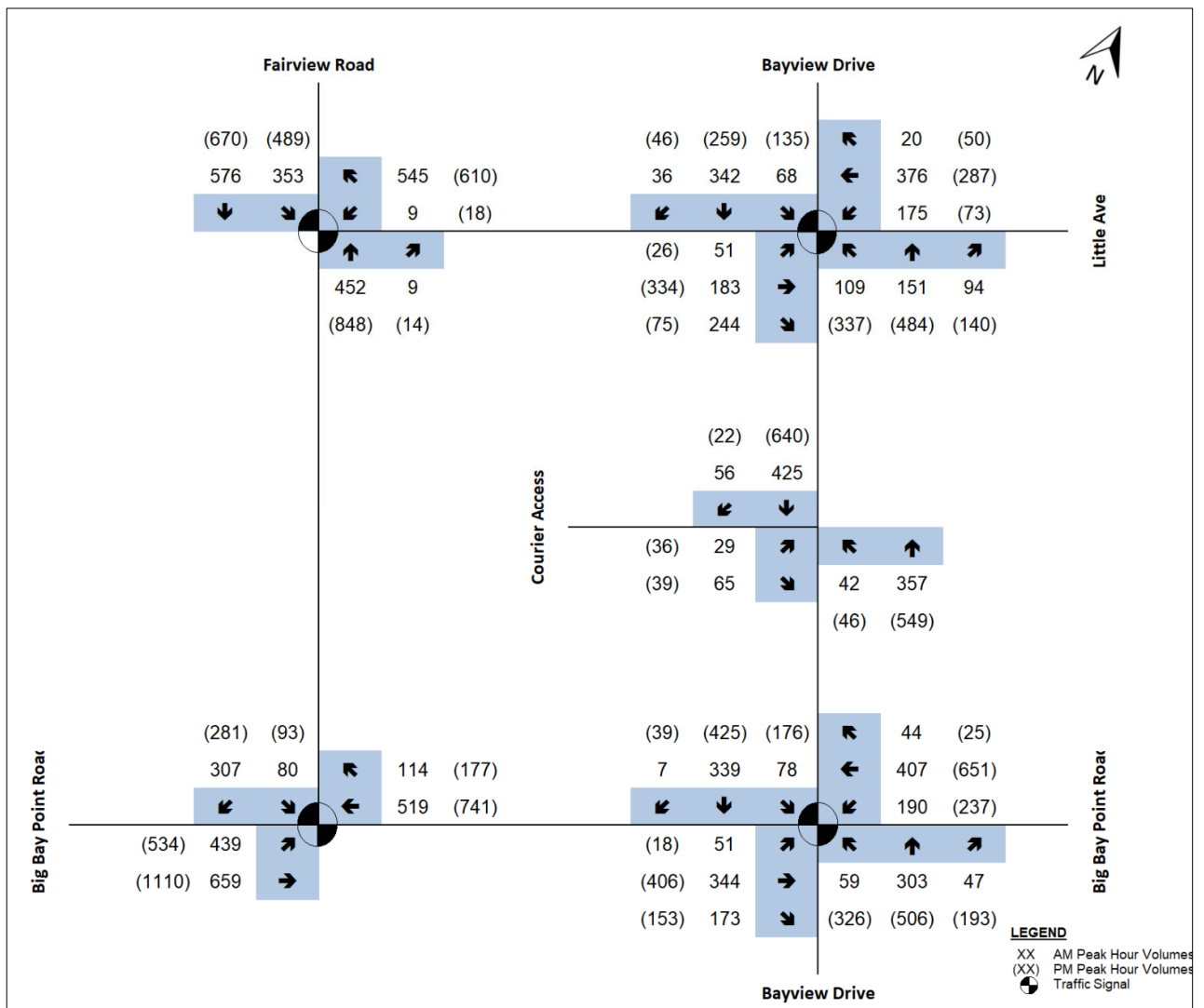


Figure 9 2029 Future Background Volumes

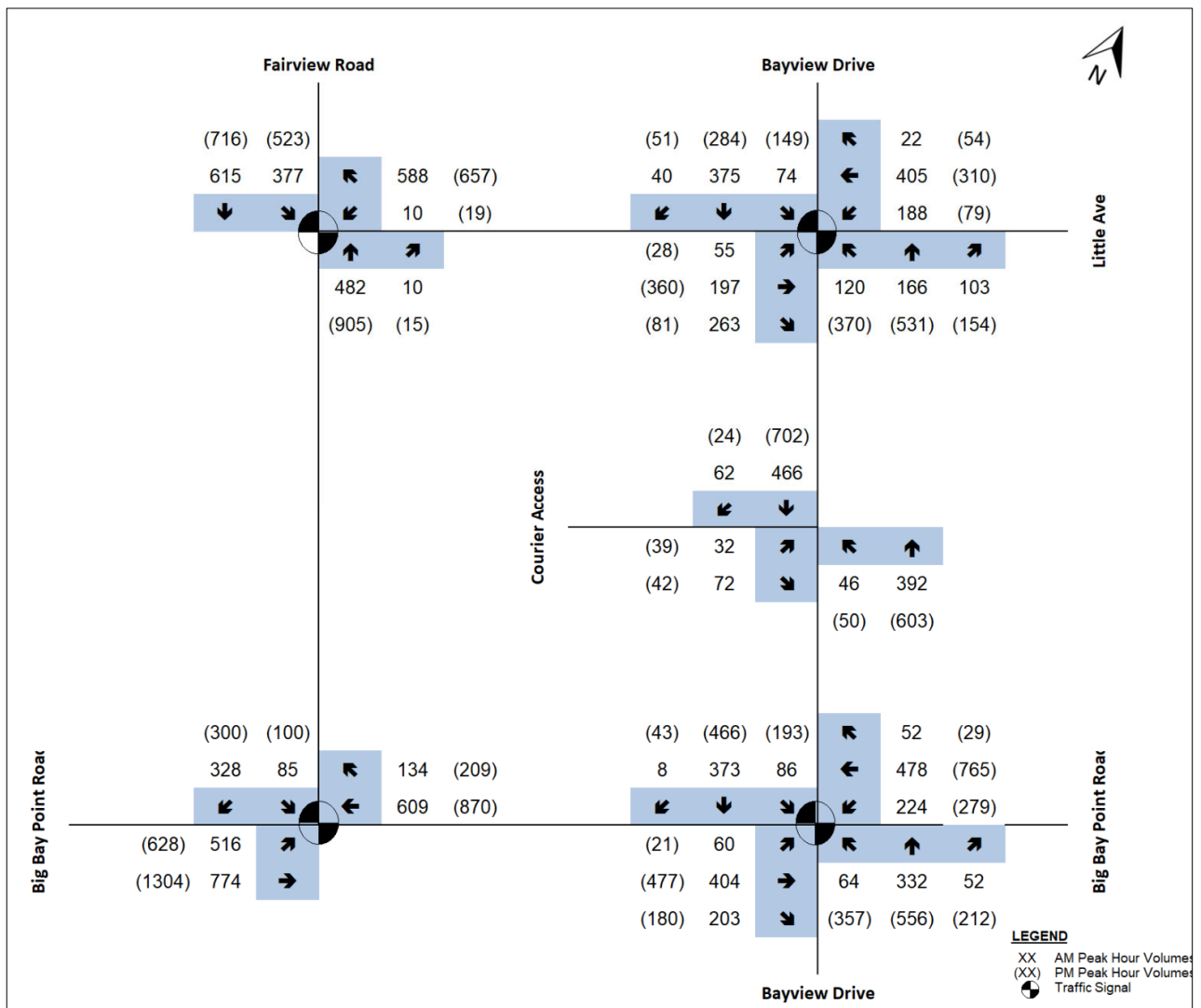


Figure 10 2034 Future Background Volumes

4. Site Generated Traffic

The proposed Draft Plan of Subdivision consists of 31 individual industrial lots with a total of 610,313 sq.ft. of Gross Floor Area (GFA) fronting an internal private ring road.

Access to the development is proposed via a private road with full moves access to Bayview Drive.

4.1 Modal Split

As a conservative measure, no transit reduction was applied to the estimated site trips.

4.2 Site Trip Generation

Site traffic generated by the subject site for the weekday a.m. and p.m. peak hours was estimated by applying the trip rates in the Trip Generation, 10th Edition Manual published by the Institute of Transportation Engineers (ITE). Land Use Code 150 (Warehousing) was used.

GHD adopted the estimated site trips based on either the average rate or the fitted curve equation, depending on which approach resulted in a higher number of trips as per the City's Guidelines.

Table 4 Site Trip Generation

Land Use Code	GFA (per 1,000 sq.ft.)		Peak Hour Trip Generation					
			Weekday AM			Weekday PM		
			In	Out	Total	In	Out	Total
Warehousing (LUC 150)	610.313	Trip Rate	0.131	0.039	0.170	0.051	0.139	0.190
		Trip Ratio	77%	23%	100%	27%	73%	100%
		Gross Trips	80	24	104	31	85	116

The proposed development is expected to generate a total of 104 new two-way vehicle trips during the a.m. peak hour consisting of 80 inbound and 24 outbound trips. During the p.m. peak hour, it is expected to generate 116 new two-way vehicle trips consisting of 31 inbound and 85 outbound trips.

The development generated traffic was sub-divided into two categories consisting of passenger vehicles and heavy vehicles using traffic data collected by GHD at an existing industrial warehouse site on Manchester Court in Bolton. The heavy vehicle splits used in the study is summarized in **Table** below.

Table 5 Heavy Vehicle Percentages

Data Source	AM Peak Hour		PM Peak Hour	
	Inbound	Outbound	Inbound	Outbound
Survey at 4-6 Manchester Court	40%	20%	50%	30%
<i>Resulting Site Traffic Split</i>				
Heavy Vehicle Trips	32	5	16	26
Passenger Vehicle Trips	48	19	16	60
Total Trips	80	24	31	85

4.3 Site Trip Distribution and Assignment

The distribution of site traffic between the subject site through the study area was based on a review of the 2016 TTS data and traffic data at the study intersections.

Upon determining origin and destination points throughout the study area for all inbound and outbound trips, trips were assigned to individual turning movements at the study area intersections based on route choice assignment with consideration for anticipated travel times. **Table 6** below summarizes the site trips distribution within the study area road network for both passenger vehicles and heavy vehicles.

Table 6 Overall Site Trip Distribution

Direction	Distribution Percentage	
	Passenger Vehicles	Heavy Vehicles
To/From the North	55%	20%
To/From the South	20%	60%
To/From the East	15%	10%
To/From the West	10%	10%

The site traffic distribution percentages for the passenger vehicles and heavy vehicles are provided in **11** and Error! Reference source not found., respectively. Additionally, the site generated traffic assignment on the study area road network for the weekday a.m. and p.m. peak hours are provided in **13** and **14** respectively.

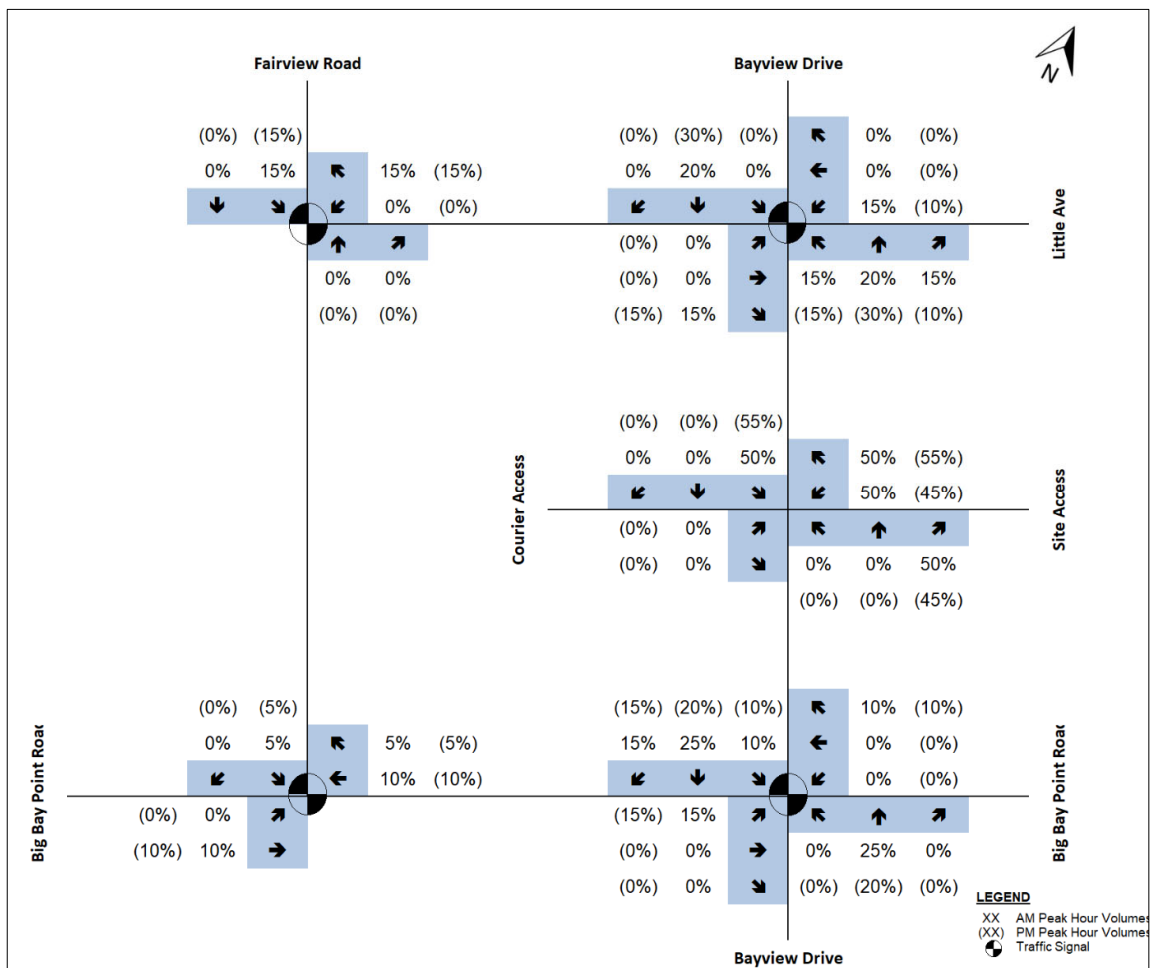


Figure 11 Passenger Vehicle Trip Distribution

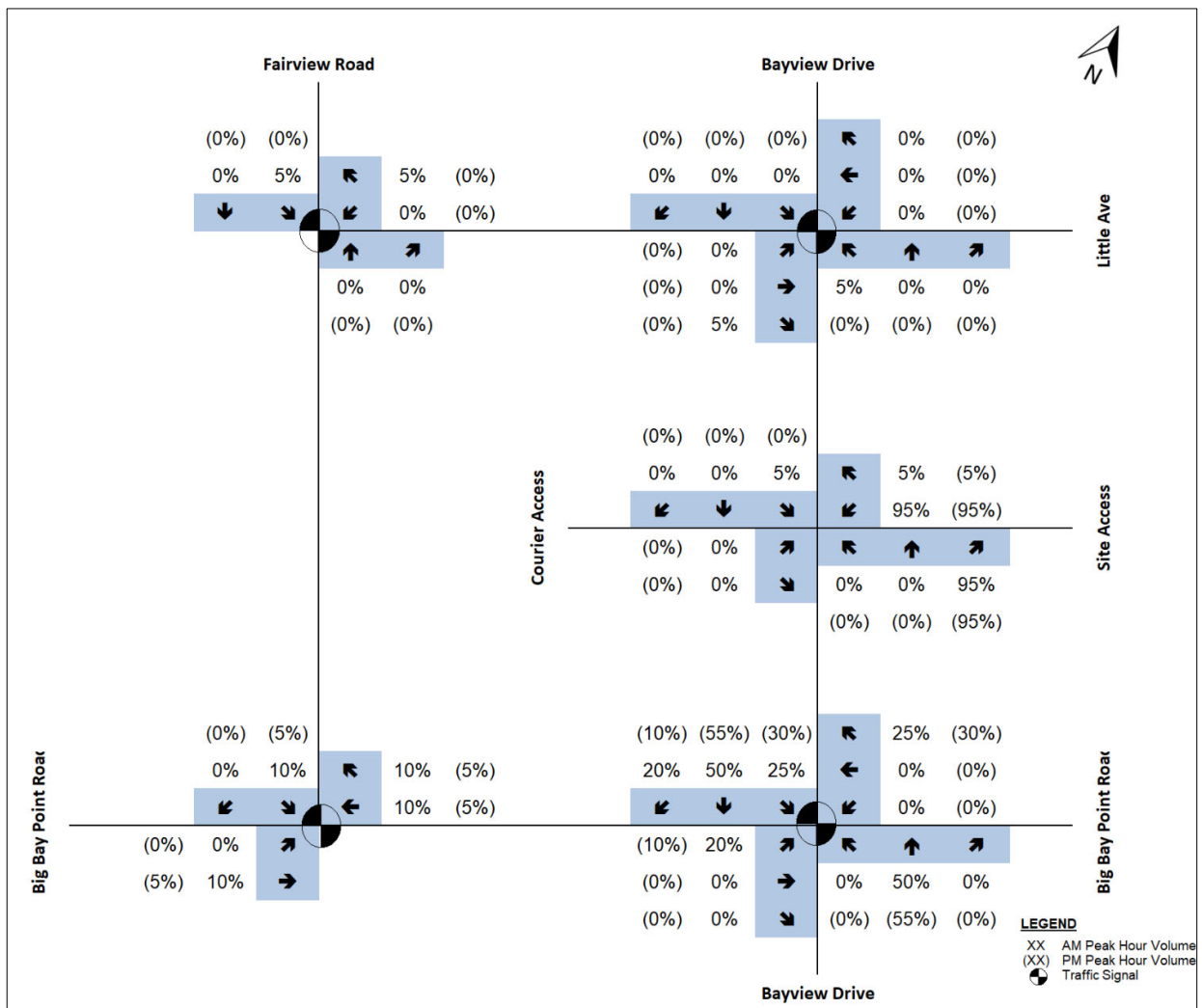


Figure 12 Heavy Vehicle Trip Distribution

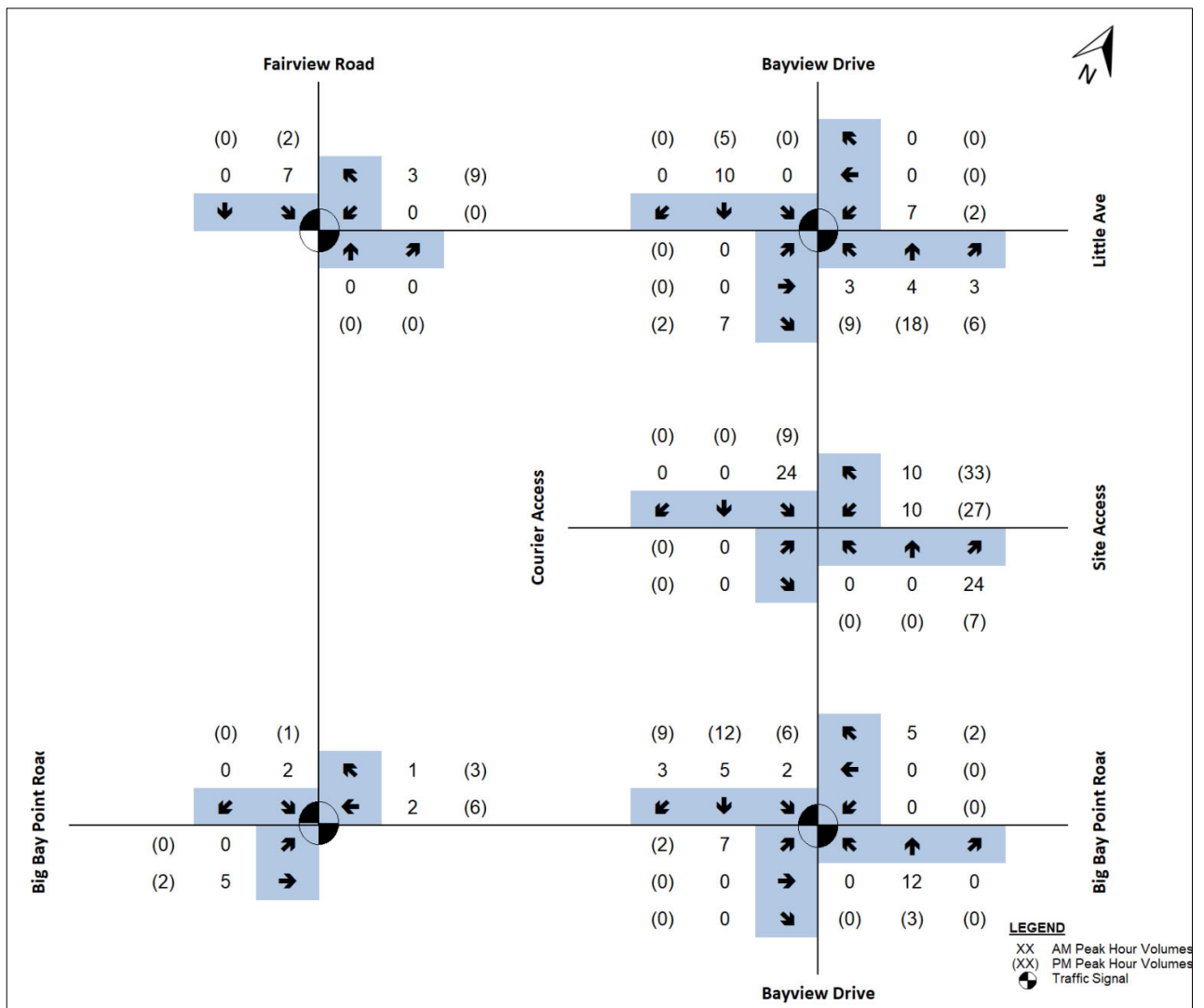


Figure 13 Passenger Vehicle Site Traffic Assignment

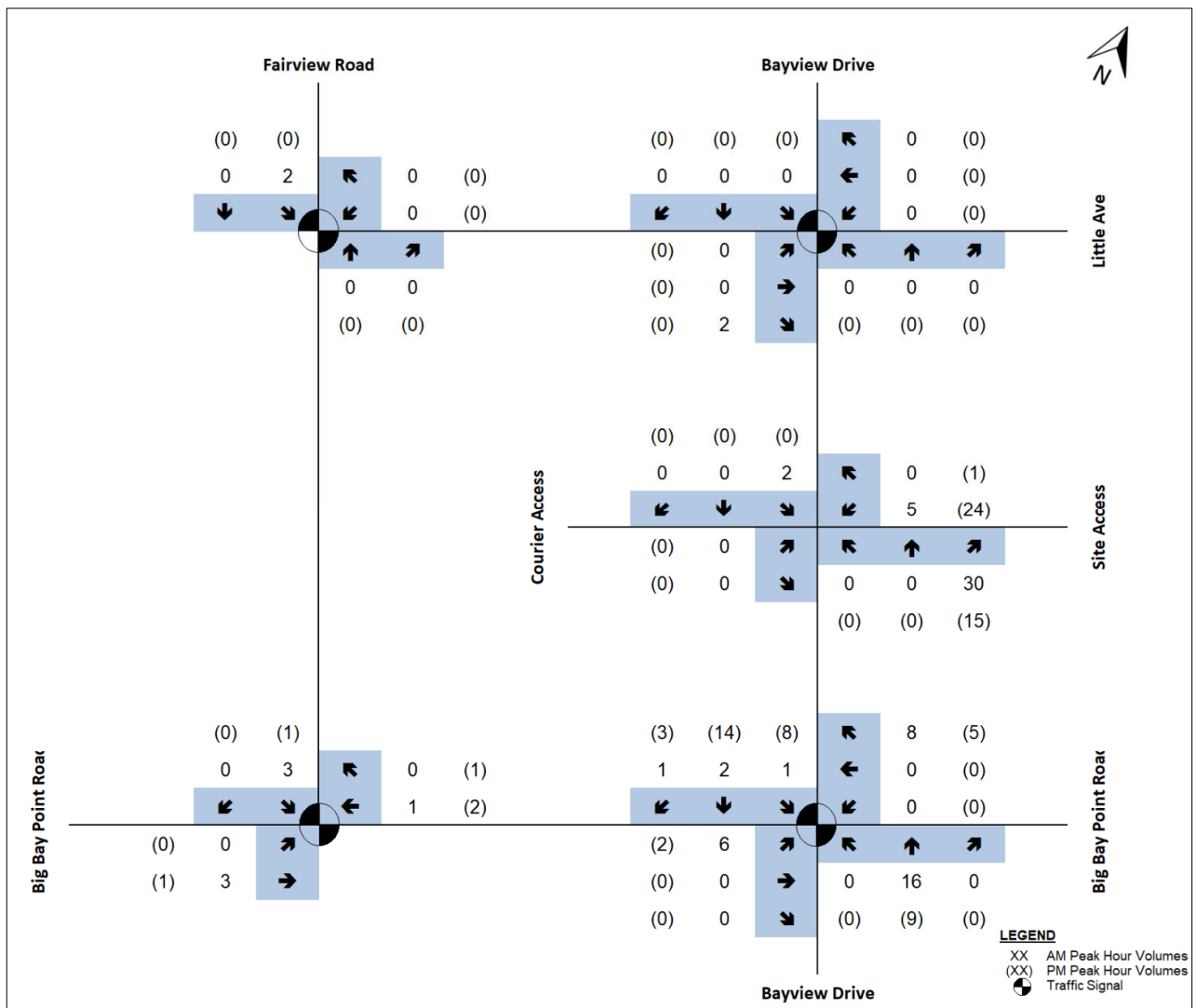


Figure 14 Heavy Vehicle Site Traffic Assignment

5. Future total traffic

5.1 Future Total Traffic

The future total traffic conditions in the weekday a.m. and p.m. peak study hours for each future planning horizon was derived by combining the future background traffic volumes with the corresponding estimates of site trips generation by the proposed residential development.

Figures 15, 16 and 17 summarize the future total traffic volumes for the 2024, 2029 and 2034 planning horizons respectively, for the weekday a.m. and p.m. peak hours.

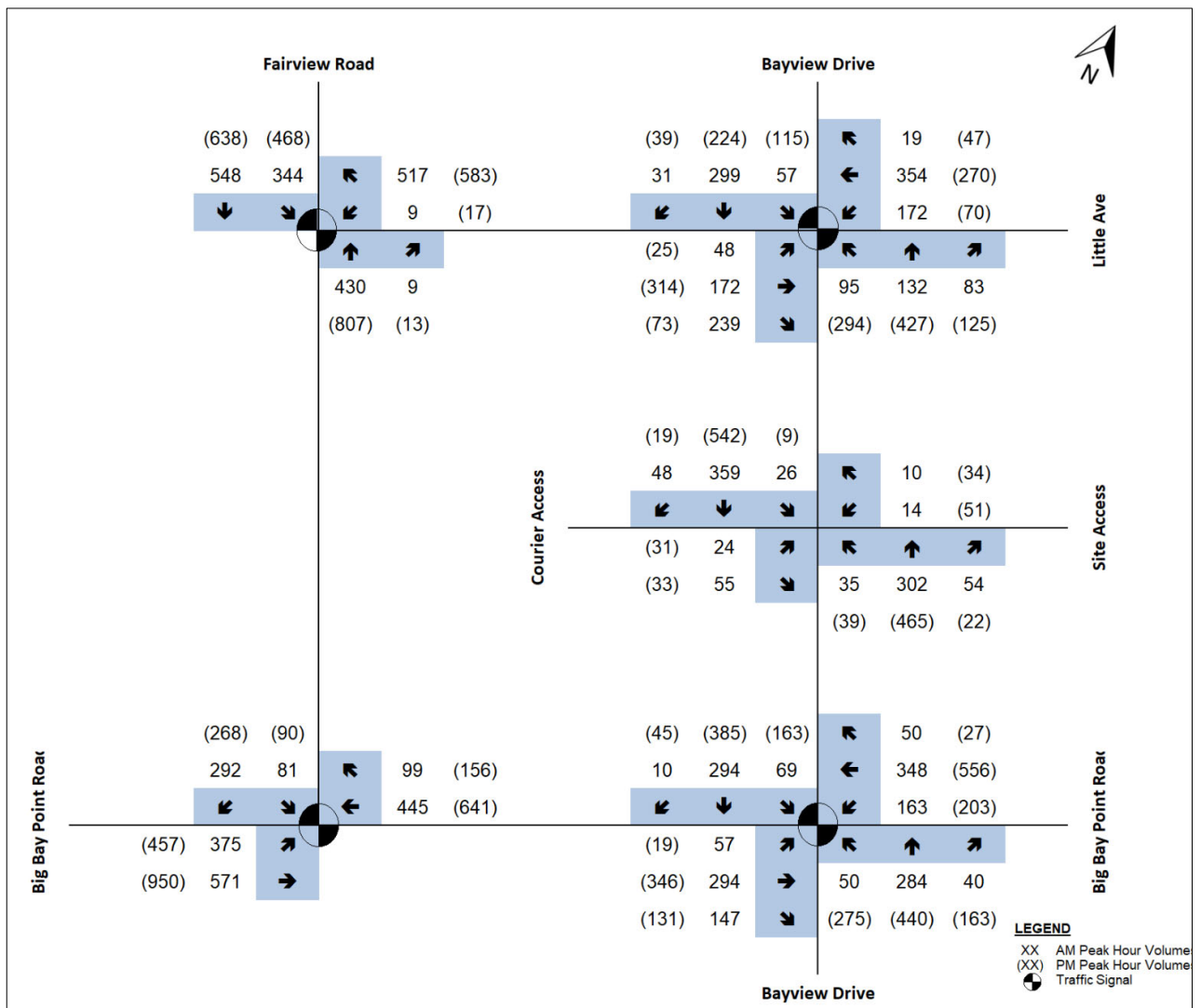


Figure 15 2024 Total Traffic Volumes

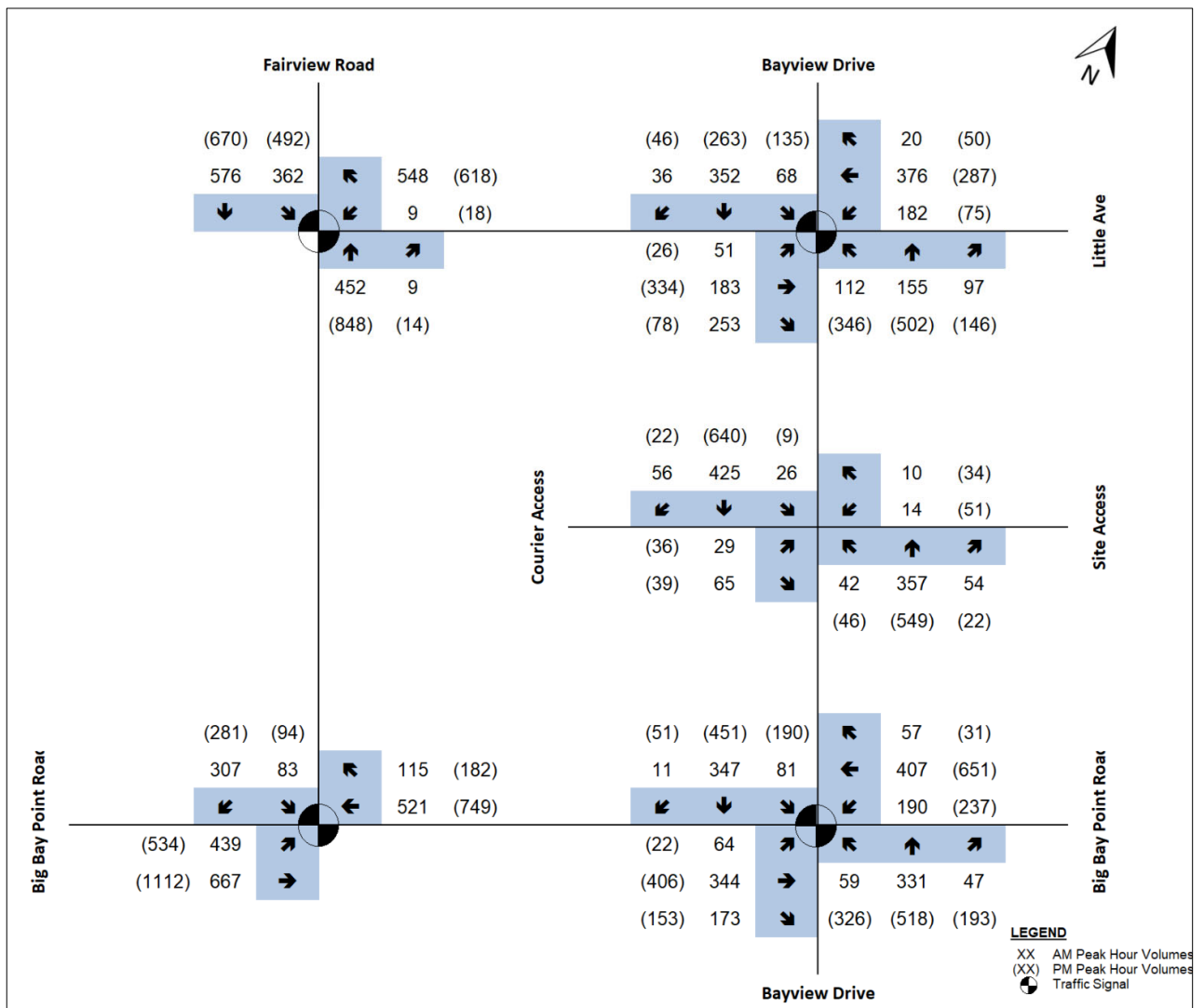


Figure 16 2029 Total Traffic Volumes

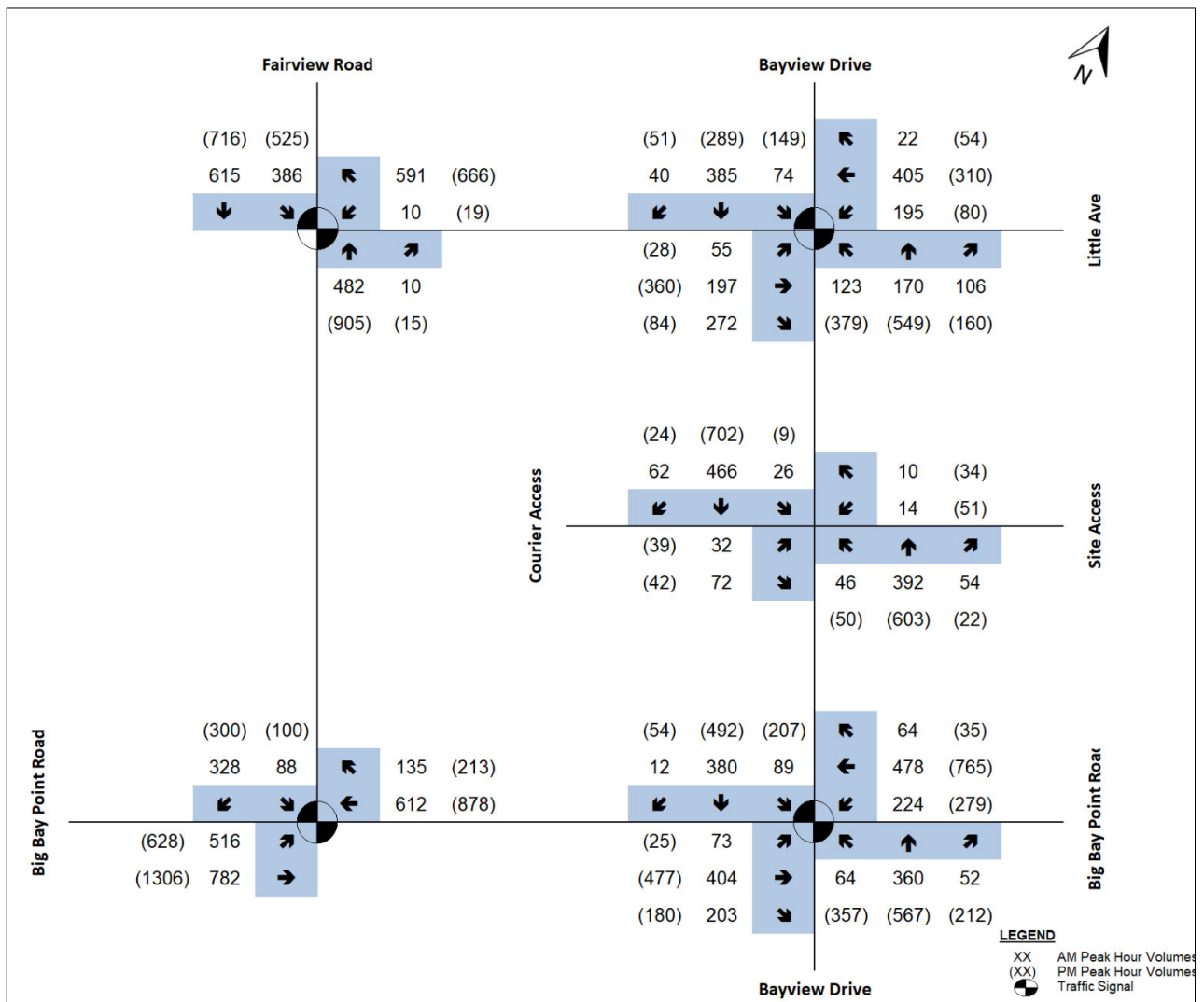


Figure 17 2034 Total Traffic Volumes

6. Intersection Capacity Analysis

The capacity analysis identifies how well the intersections and driveways are operating. The analysis contained within this report utilized the Highway Capacity Manual (HCM) 2000 procedure within the Synchro Version 10 Software package. The reported intersection volume-to-capacity ratios (v/c) are a measure of the saturation volume for each turning movement, while the levels-of-service (LOS) are a measure of the average delay for each turning movement. Queuing characteristics are reported as the predicted 95th percentile queue for each turning movement.

In accordance with the City of Barrie Traffic Impact Study Guidelines, the analysis includes identification of conditions at signalized intersections where:

- Levels of Service (LOS) for overall intersection operations exceeds LOS D.
- Volume/capacity (v/c) ratios for through movements or shared through/turning movements increased to 0.85 or above.
- V/c ratios for exclusive movements increased to 0.85 or above.

- Where the 50th and 95th percentile queues for an individual movement are projected to exceed available turning lane storage.
- Queues for exclusive left and right turn lanes that are inaccessible due to the through lane queue length

The analysis includes identification of conditions at unsignalized intersections where:

- Level of service based on average delay per vehicle for individual movements exceed LOS E.
- 95th percentile queues for an individual movement are projected to exceed the lesser of 5 vehicles or the available queue storage.

The following tables summarize the HCM 2000 capacity results for the study intersections during the weekday a.m. and p.m. hours under existing 2021 and future background condition in 2024 and future total traffic conditions for the 2024, 2029 and 2034 planning horizons.

The detailed Synchro calculation sheets are provided in **Appendix E**.

Existing signal timing plans were obtained from the city for use in the analysis. A copy of the timing plans is also included in **Appendix B**.

Peak hour factors used in the analysis were based on existing data were available. Where existing traffic data was not available, a default peak hour factor of 0.92 was used.

6.1 Big Bay Point Road and Bayview Drive

Capacity analysis at this intersection during the weekday a.m. and p.m. peak hours for the existing, future background, and future total traffic conditions are summarized in the following table.

Table 7 Capacity Analysis for Big Bay Point Road and Bayview Drive

Traffic Condition	AM Peak Hour		PM Peak Hour	
	Movement v/c (LOS) Delay(sec)	95th Percentile Queue	Movement v/c (LOS) Delay(sec)	95th Percentile Queue
Existing 2021	Overall: 0.42 (C) 22 EBL = 0.1 (B) 11 EBT = 0.24 (B) 16 EBR = 0.1 (B) 15 WBL = 0.29 (B) 12 WBT = 0.27 (B) 16 WBR = 0.05 (B) 15 NBL = 0.23 (C) 23 NBT = 0.71 (D) 36 NBR = 0 (D) 42 SBL = 0.4 (C) 26 SBT = 0.4 (C) 30 SBR = 0.01 (C) 27	EBL = 10 m EBT = 30 m EBR = 10 m WBL = 30 m WBT = 35 m WBR = 0 m NBL = 15 m NBT = 60 m NBR = 0 m SBL = 15 m SBT = 35 m SBR = 0 m	Overall: 0.61 (C) 29 EBL = 0.06 (B) 15 EBT = 0.27 (C) 21 EBR = 0.1 (B) 20 WBL = 0.42 (B) 18 WBT = 0.43 (C) 23 WBR = 0.02 (B) 19 NBL = 0.72 (C) 31 NBT = 0.88 (D) 52 NBR = 0.11 (C) 27 SBL = 0.72 (C) 34 SBT = 0.42 (C) 30 SBR = 0.02 (C) 27	EBL = 5 m EBT = 35 m EBR = 10 m WBL = 35 m WBT = 55 m WBR = 0 m NBL = 55 m NBT = 115 m NBR = 15 m SBL = 30 m SBT = 40 m SBR = 0 m
	Overall: 0.48 (C) 24 EBL = 0.13 (B) 14 EBT = 0.28 (B) 19 EBR = 0.11 (B) 18 WBL = 0.35 (B) 15 WBT = 0.31 (B) 20 WBR = 0.05 (B) 17 NBL = 0.26 (C) 25 NBT = 0.79 (D) 44 NBR = 0.03 (C) 28 SBL = 0.37 (C) 23	EBL = 10 m EBT = 35 m EBR = 15 m WBL = 35 m WBT = 40 m WBR = 0 m NBL = 15 m NBT = 75 m NBR = 0 m SBL = 15 m SBT = 35 m	Overall: 0.73 (C) 34 EBL = 0.09 (B) 19 EBT = 0.35 (C) 26 EBR = 0.11 (C) 24 WBL = 0.54 (C) 22 WBT = 0.54 (C) 28 WBR = 0.02 (C) 23 NBL = 0.67 (C) 23 NBT = 0.97 (E) 68 NBR = 0.16 (C) 27 SBL = 0.7 (C) 32	EBL = 5 m EBT = 45 m EBR = 10 m WBL = 45 m WBT = 70 m WBR = 0 m NBL = 55 m NBT = 155 m NBR = 20 m SBL = 30 m SBT = 50 m

Traffic Condition	AM Peak Hour		PM Peak Hour	
	Movement v/c (LOS) Delay(sec)	95th Percentile Queue	Movement v/c (LOS) Delay(sec)	95th Percentile Queue
Future Background 2024 With Lane Improvements	SBT = 0.38 (C) 28 SBR = 0.01 (C) 25	SBR = 0 m	SBT = 0.52 (C) 33 SBR = 0.03 (C) 29	SBR = 0 m
	Overall: 0.39 (C) 22 EBL = 0.12 (B) 11 EBT = 0.27 (B) 16 EBR = 0.11 (B) 15 WBL = 0.33 (B) 12 WBT = 0.29 (B) 17 WBR = 0.05 (B) 15 NBL = 0.3 (C) 27 NBTR = 0.61 (C) 34 SBL = 0.34 (C) 23 SBT = 0.48 (C) 30 SBR = 0.01 (C) 27	EBL = 10 m EBT = 30 m EBR = 15 m WBL = 30 m WBT = 40 m WBR = 0 m NBL = 15 m NBTR = 40 m SBL = 15 m SBT = 40 m SBR = 0 m	Overall: 0.66 (C) 29 EBL = 0.08 (B) 17 EBT = 0.33 (C) 24 EBR = 0.11 (C) 22 WBL = 0.5 (B) 19 WBT = 0.51 (C) 25 WBR = 0.02 (C) 20 NBL = 0.71 (C) 26 NBTR = 0.78 (D) 38 SBL = 0.66 (C) 30 SBT = 0.62 (D) 36 SBR = 0.03 (C) 30	EBL = 5 m EBT = 45 m EBR = 10 m WBL = 45 m WBT = 70 m WBR = 0 m NBL = 55 m NBTR = 75 m SBL = 30 m SBT = 50 m SBR = 0 m
	Overall: 0.41 (C) 22 EBL = 0.17 (B) 12 EBT = 0.27 (B) 17 EBR = 0.11 (B) 16 WBL = 0.33 (B) 13 WBT = 0.3 (B) 17 WBR = 0.08 (B) 16 NBL = 0.3 (C) 26 NBTR = 0.65 (D) 35 SBL = 0.36 (C) 23 SBT = 0.46 (C) 30 SBR = 0.01 (C) 27	EBL = 15 m EBT = 35 m EBR = 15 m WBL = 30 m WBT = 40 m WBR = 0 m NBL = 15 m NBTR = 45 m SBL = 20 m SBT = 40 m SBR = 0 m	Overall: 0.67 (C) 30 EBL = 0.11 (B) 18 EBT = 0.34 (C) 24 EBR = 0.11 (C) 22 WBL = 0.51 (B) 19 WBT = 0.52 (C) 26 WBR = 0.03 (C) 21 NBL = 0.72 (C) 26 NBTR = 0.79 (D) 39 SBL = 0.74 (C) 34 SBT = 0.64 (D) 36 SBR = 0.04 (C) 30	EBL = 10 m EBT = 45 m EBR = 10 m WBL = 45 m WBT = 70 m WBR = 0 m NBL = 55 m NBTR = 80 m SBL = 35 m SBT = 55 m SBR = 0 m
Future Total 2029	Overall: 0.51 (C) 24 EBL = 0.23 (B) 14 EBT = 0.34 (C) 20 EBR = 0.13 (B) 18 WBL = 0.45 (B) 16 WBT = 0.37 (C) 20 WBR = 0.08 (B) 18 NBL = 0.34 (C) 27 NBTR = 0.68 (D) 36 SBL = 0.39 (C) 21 SBT = 0.45 (C) 29 SBR = 0.01 (C) 25	EBL = 15 m EBT = 40 m EBR = 15 m WBL = 40 m WBT = 50 m WBR = 0 m NBL = 15 m NBTR = 50 m SBL = 20 m SBT = 45 m SBR = 0 m	Overall: 0.82 (D) 35 EBL = 0.14 (C) 20 EBT = 0.41 (C) 27 EBR = 0.12 (C) 24 WBL = 0.68 (C) 27 WBT = 0.63 (C) 29 WBR = 0.03 (C) 23 NBL = 0.85 (D) 35 NBTR = 0.88 (D) 45 SBL = 0.87 (D) 48 SBT = 0.71 (D) 39 SBR = 0.04 (C) 30	EBL = 10 m EBT = 50 m EBR = 10 m WBL = 50 m WBT = 85 m WBR = 0 m NBL = 80 m NBTR = 100 m SBL = 45 m SBT = 65 m SBR = 0 m
Future Total 2034	Overall: 0.61 (C) 25 EBL = 0.3 (B) 16 EBT = 0.41 (C) 22 EBR = 0.15 (B) 19 WBL = 0.6 (B) 20 WBT = 0.44 (C) 22 WBR = 0.1 (B) 19 NBL = 0.38 (C) 27 NBTR = 0.7 (D) 37 SBL = 0.43 (C) 21 SBT = 0.47 (C) 28 SBR = 0.02 (C) 25	EBL = 15 m EBT = 50 m EBR = 15 m WBL = 45 m WBT = 60 m WBR = 0 m NBL = 15 m NBTR = 55 m SBL = 20 m SBT = 50 m SBR = 0 m	Overall: 0.96 (D) 39 EBL = 0.19 (C) 20 EBT = 0.45 (C) 26 EBR = 0.15 (C) 23 WBL = 0.89 (D) 47 WBT = 0.7 (C) 30 WBR = 0.04 (C) 22 NBL = 0.94 (D) 53 NBTR = 0.89 (D) 45 SBL = 0.94 (E) 61 SBT = 0.74 (D) 39 SBR = 0.04 (C) 29	EBL = 10 m EBT = 60 m EBR = 10 m WBL = 80 m WBT = 95 m WBR = 0 m NBL = 105 m NBTR = 110 m SBL = 55 m SBT = 70 m SBR = 0 m

Under existing 2021 conditions, this signalized intersection is expected to operate with acceptable levels of delay and with all individual movements operating at a reported v/c below critical levels except for the northbound through movement that operates at a v/c ratio of 0.88.

Traffic signal optimizations were completed and applied to all future conditions. The same optimised timing was used for all future conditions.

Under future background 2024 traffic conditions, the intersection is expected to continue to operate with overall v/c ratios and LOS below critical levels. During both peak hours, all individual movements operate at v/c below 0.85 and LOS E with the exception of the northbound through during the p.m. peak hour which is reported to operate with a v/c ratio of 0.97 LOS E. The northbound through movement would be improved by converting the existing northbound right turn lane to a shared through-right as planned but it is recommended this only be done once updated traffic counts under future conditions confirm the need.

With the planned improvement, the future 2024 background traffic scenario improves significantly and the northbound critical movement is operating below critical levels.

With site traffic added under the 2024 total traffic conditions with signal optimization, the overall intersection v/c ratios increase by 0.02 (0.39 to 0.41) and 0.01 (0.66 to 0.67) in the a.m. and p.m. peaks respectively, with the no critical movements. Overall delays for the intersection remain the same in the a.m. and increase by 1 seconds (29 to 30) in the p.m. peak hour.

With continued corridor growth the overall intersection v/c ratio during the a.m. peak hour increases to 0.51 and 0.61 for the 2029 and 2034 planning horizon respectively. During the a.m. peak hour there remains no critical movements reported. During the p.m. peak hour, the overall intersection v/c ratio increases to 0.82 and 0.96 for the 2029 and 2034 horizon years respectively. The westbound left, northbound left and southbound left turns and northbound through/right movement is expected to operate with critical v/c ratios greater than 0.85 but below their theoretical capacity of 1.0.

The capacity analysis demonstrates that the operational impact of the subject site traffic to this intersection is minimal and is generally not expected to be identifiable from a driver's perspective, with any critical movements reported at this intersection under future traffic conditions a result of the assumed corridor traffic growth.

6.2 Big Bay Point Road and Fairview Road

Capacity analysis at this intersection during the weekday a.m. and p.m. peak hours for the existing, future background, and future total traffic conditions are summarized in the following table.

Table 8 Capacity Analysis for Big Bay Point Road and Fairview Road

Traffic Condition	AM Peak Hour		PM Peak Hour	
	Movement v/c (LOS) Delay(sec)	95th Percentile Queue	Movement v/c (LOS) Delay(sec)	95th Percentile Queue
Existing 2021	Overall: 0.51 (B) 11		Overall: 0.68 (B) 11	
	EBL = 0.51 (A) 5	EBL = 30 m	EBL = 0.7 (A) 8	EBL = 35 m
	EBT = 0.23 (A) 4	EBT = 20 m	EBT = 0.37 (A) 4	EBT = 35 m
	WBT = 0.25 (B) 10	WBT = 30 m	WBT = 0.34 (B) 12	WBT = 40 m
	WBR = 0.06 (A) 9	WBR = 10 m	WBR = 0.09 (B) 10	WBR = 10 m
	SBL = 0.33 (C) 31	SBL = 25 m	SBL = 0.39 (C) 32	SBL = 30 m
Future Background 2024	Overall: 0.54 (B) 11		Overall: 0.73 (B) 12	
	EBL = 0.55 (A) 5	EBL = 30 m	EBL = 0.76 (B) 11	EBL = 50 m
	EBT = 0.25 (A) 4	EBT = 20 m	EBT = 0.4 (A) 5	EBT = 45 m
	WBT = 0.27 (A) 10	WBT = 30 m	WBT = 0.4 (B) 14	WBT = 65 m
	WBR = 0.07 (A) 9	WBR = 10 m	WBR = 0.1 (B) 12	WBR = 15 m
	SBL = 0.34 (C) 30	SBL = 25 m	SBL = 0.41 (C) 34	SBL = 35 m
	SBR = 0.19 (C) 30	SBR = 20 m	SBR = 0.18 (C) 30	SBR = 20 m

Traffic Condition	AM Peak Hour		PM Peak Hour	
	Movement v/c (LOS) Delay(sec)	95th Percentile Queue	Movement v/c (LOS) Delay(sec)	95th Percentile Queue
	SBR = 0.2 (C) 29		SBR = 0.19 (C) 32	
Future Total 2024	<u>Overall: 0.55 (B) 11</u> EBL = 0.55 (A) 5 EBT = 0.25 (A) 4 WBT = 0.27 (A) 10 WBR = 0.07 (A) 9 SBL = 0.35 (C) 30 SBR = 0.2 (C) 29	EBL = 30 m EBT = 20 m WBT = 30 m WBR = 10 m SBL = 25 m SBR = 20 m	<u>Overall: 0.74 (B) 13</u> EBL = 0.76 (B) 11 EBT = 0.4 (A) 5 WBT = 0.4 (B) 14 WBR = 0.11 (B) 12 SBL = 0.41 (C) 34 SBR = 0.19 (C) 33	EBL = 50 m EBT = 45 m WBT = 70 m WBR = 15 m SBL = 35 m SBR = 25 m
Future Total 2029	<u>Overall: 0.69 (B) 12</u> EBL = 0.71 (A) 8 EBT = 0.3 (A) 4 WBT = 0.32 (B) 12 WBR = 0.08 (B) 10 SBL = 0.38 (C) 32 SBR = 0.21 (C) 31	EBL = 40 m EBT = 30 m WBT = 40 m WBR = 10 m SBL = 25 m SBR = 25 m	<u>Overall: 0.82 (B) 17</u> EBL = 0.85 (C) 24 EBT = 0.46 (A) 5 WBT = 0.52 (B) 20 WBR = 0.12 (B) 16 SBL = 0.46 (D) 39 SBR = 0.2 (D) 37	EBL = 105 m EBT = 55 m WBT = 85 m WBR = 15 m SBL = 35 m SBR = 25 m
Future Total 2034	<u>Overall: 0.83 (B) 14</u> EBL = 0.88 (B) 18 EBT = 0.34 (A) 4 WBT = 0.37 (B) 11 WBR = 0.1 (A) 10 SBL = 0.39 (C) 31 SBR = 0.31 (C) 30	EBL = 75 m EBT = 35 m WBT = 45 m WBR = 10 m SBL = 30 m SBR = 30 m	<u>Overall: 0.94 (C) 22</u> EBL = 0.97 (D) 50 EBT = 0.52 (A) 4 WBT = 0.64 (C) 23 WBR = 0.14 (B) 18 SBL = 0.5 (D) 41 SBR = 0.21 (D) 38	EBL = 180 m EBT = 65 m WBT = 100 m WBR = 15 m SBL = 35 m SBR = 25 m

Under existing 2021 conditions, this signalized intersection is operating with acceptable levels of delay and with all individual movements operating below critical levels.

Traffic signal split optimizations were conducted and applied to all future conditions. The same optimised timing was used for all future conditions.

Under future background 2024 traffic conditions, the intersection is expected to continue to operate with all individual movements operating at v/c below 0.85 and with minimal delays and queueing.

With site traffic added under the 2024 total traffic conditions, the overall intersection v/c ratios increases by 0.01 (0.54 to 0.55 and 0.73 to 0.74) during both the a.m. and p.m. peaks respectively, with overall delays only increase in the p.m. by 1 second (12 to 13). All individual movements are expected to continue to operate with v/c ratios and LOS below critical levels with signal timing optimization.

Under the future 2029 and 2034 total traffic conditions, the intersection continues to operate with generally acceptable v/c ratios and delays. The overall intersection delays do not exceed LOS D in either peak hour. All individual movements also continue to operate with v/c ratios and LOS below critical levels with the exception of the eastbound left turn during the 2029 p.m. peak hour and 2034 a.m. and p.m. peak hours. Despite optimization of the signal timings, the eastbound left turn is operating with a reported v/c ratio of 0.85 during the 2029 p.m. peak hour, 0.88 during the 2034 a.m. peak hour and 0.97 during the 2034 p.m. peak hour. However, these movements are reported to operate below their theoretical maximum capacity and with LOS of D or better.

Based on the projected future traffic volumes at this intersection which were derived from the EMME model data provided by the city, the 95th percentile queue length for the eastbound left turn movement is expected to exceed the existing storage length. Since these volumes are not based on actual traffic data, this intersection should be monitored by the city as traffic volumes increase to ensure these queues can be mitigated.

The analysis confirms that the operational impact of the subject site traffic is minimal and that critical movements reported to occur in the 2029 and 2034 horizon year are a result of the assumed corridor growth.

Traffic signal split optimizations are the only recommendation to be applied at this intersection in response to the subject development and corridor growth.

6.3 Bayview Drive and Little Avenue

Capacity analysis at this intersection during the weekday a.m. and p.m. peak hours for the existing, future background, and future total traffic conditions are summarized in the following table.

Table 9 Capacity Analysis for Bayview Drive and Little Avenue

Traffic Condition	AM Peak Hour		PM Peak Hour	
	Movement v/c (LOS) Delay(sec)	95th Percentile Queue	Movement v/c (LOS) Delay(sec)	95th Percentile Queue
Existing 2021	Overall: 0.69 (C) 31 EBL = 0.15 (B) 18 EBTR = 0.65 (C) 29 WBL = 0.66 (C) 22 WBTR = 0.47 (C) 23 NBL = 0.37 (C) 27 NBTR = 0.45 (C) 35 SBL = 0.17 (C) 29 SBTR = 0.79 (D) 50	EBL = 15 m EBTR = 135 m WBL = 35 m WBTR = 105 m NBL = 25 m NBTR = 55 m SBL = 15 m SBTR = 95 m	Overall: 0.68 (D) 36 EBL = 0.07 (C) 21 EBTR = 0.61 (C) 32 WBL = 0.25 (B) 19 WBTR = 0.41 (C) 25 NBL = 0.62 (C) 28 NBTR = 0.87 (D) 54 SBL = 0.62 (D) 37 SBTR = 0.56 (D) 42	EBL = 10 m EBTR = 135 m WBL = 20 m WBTR = 100 m NBL = 65 m NBTR = 150 m SBL = 25 m SBTR = 75 m
Future Background 2024	Overall: 0.72 (D) 35 EBL = 0.17 (C) 21 EBTR = 0.71 (D) 36 WBL = 0.67 (C) 24 WBTR = 0.47 (C) 23 NBL = 0.49 (C) 31 NBTR = 0.53 (D) 38 SBL = 0.21 (C) 31 SBTR = 0.84 (E) 55	EBL = 15 m EBTR = 155 m WBL = 35 m WBTR = 105 m NBL = 30 m NBTR = 75 m SBL = 20 m SBTR = 120 m	Overall: 0.73 (D) 38 EBL = 0.08 (C) 21 EBTR = 0.62 (C) 32 WBL = 0.29 (C) 21 WBTR = 0.44 (C) 26 NBL = 0.68 (C) 28 NBTR = 0.91 (E) 56 SBL = 0.68 (D) 38 SBTR = 0.59 (D) 40	EBL = 10 m EBTR = 135 m WBL = 20 m WBTR = 100 m NBL = 70 m NBTR = 180 m SBL = 35 m SBTR = 95 m
Future Total 2024	Overall: 0.76 (D) 36 EBL = 0.17 (C) 22 EBTR = 0.74 (D) 38 WBL = 0.72 (C) 27 WBTR = 0.47 (C) 24 NBL = 0.51 (C) 32 NBTR = 0.54 (D) 39 SBL = 0.21 (C) 31 SBTR = 0.85 (E) 57	EBL = 15 m EBTR = 160 m WBL = 40 m WBTR = 105 m NBL = 30 m NBTR = 75 m SBL = 20 m SBTR = 125 m	Overall: 0.74 (D) 38 EBL = 0.08 (C) 22 EBTR = 0.64 (C) 34 WBL = 0.32 (C) 22 WBTR = 0.44 (C) 27 NBL = 0.68 (C) 27 NBTR = 0.91 (E) 56 SBL = 0.7 (D) 40 SBTR = 0.58 (D) 40	EBL = 10 m EBTR = 140 m WBL = 25 m WBTR = 100 m NBL = 70 m NBTR = 190 m SBL = 35 m SBTR = 95 m
Future Total 2029	Overall: 0.85 (D) 40 EBL = 0.19 (C) 23 EBTR = 0.79 (D) 41 WBL = 0.8 (D) 35 WBTR = 0.49 (C) 24 NBL = 0.7 (D) 42 NBT = 0.37 (D) 36 NBR = 0.08 (C) 32 SBL = 0.2 (C) 28 SBTR = 0.91 (E) 63	EBL = 15 m EBTR = 170 m WBL = 40 m WBTR = 110 m NBL = 45 m NBT = 55 m NBR = 10 m SBL = 25 m SBTR = 150 m	Overall: 0.78 (D) 42 EBL = 0.08 (C) 20 EBTR = 0.65 (C) 32 WBL = 0.33 (C) 21 WBTR = 0.46 (C) 25 NBL = 0.92 (E) 59 NBT = 0.86 (D) 50 NBR = 0.13 (C) 29 SBL = 0.78 (D) 47 SBTR = 0.84 (E) 58	EBL = 10 m EBTR = 150 m WBL = 25 m WBTR = 110 m NBL = 120 m NBT = 160 m NBR = 15 m SBL = 40 m SBTR = 115 m
Future Total 2034	Overall: 0.98 (E) 57 EBL = 0.22 (C) 27 EBTR = 0.92 (E) 61 WBL = 0.97 (F) 85 WBTR = 0.54 (C) 28 NBL = 0.83 (E) 63 NBT = 0.41 (D) 39	EBL = 15 m EBTR = 210 m WBL = 60 m WBTR = 125 m NBL = 60 m NBT = 65 m NBR = 10 m	Overall: 0.87 (D) 51 EBL = 0.11 (C) 25 EBTR = 0.77 (D) 42 WBL = 0.46 (C) 27 WBTR = 0.54 (C) 32 NBL = 0.97 (E) 75 NBT = 0.87 (D) 52	EBL = 10 m EBTR = 165 m WBL = 25 m WBTR = 120 m NBL = 145 m NBT = 185 m NBR = 20 m

Traffic Condition	AM Peak Hour		PM Peak Hour	
	Movement v/c (LOS) Delay(sec)	95th Percentile Queue	Movement v/c (LOS) Delay(sec)	95th Percentile Queue
	NBR = 0.09 (D) 35 SBL = 0.22 (C) 30 SBTR = 0.97 (F) 80	SBL = 25 m SBTR = 185 m	NBR = 0.16 (C) 30 SBL = 0.87 (E) 63 SBTR = 0.9 (E) 70	SBL = 40 m SBTR = 135 m

Under existing 2021 conditions, this signalized intersection is operating with acceptable v/c ratios and LOS and with all individual movements operating below critical levels with the exception of the northbound through/right movements during the p.m. peak hour. The northbound through/right is reported to operate with a v/c ratio of 0.87 LOS D. The existing northbound left turn movement reported a 95th percentile queue length of 65 metres which is longer than the existing storage length of 20 metres.

Traffic signal split optimizations were conducted and applied to all future conditions. The same optimised timing plan was used for all future conditions.

Under future 2024 background traffic conditions, the intersection is expected to continue to operate with an overall v/c ratio below 0.85 and with LOS not exceeding D. All individual movements are reported to operate with v/c ratios less than 0.85 with the exception of the northbound through/right movement during the p.m. peak hour which is operating at a v/c ratio of 0.91 LOS D. Despite this, the movement is operating below its theoretical capacity of 1.0.

With the addition of site traffic, the overall intersection v/c ratios increase by 0.04 (0.72 to 0.76) for a.m. peak hour and by 0.01 (0.73 to 0.74) for the p.m. peak hour, the southbound through/right lane in the a.m. peak increased by 0.01 to a critical level of 0.85, also the northbound through/right movement in the p.m. peak increased by 0.01 to 0.91 LOS E. Both of these movements remain below their theoretical capacity of 1.0. The 95th percentile queue length for the northbound left movement continues to exceed the existing storage length although there is no increase from the 2024 background conditions.

Under the future 2029 and 2034 total traffic conditions the intersection is reported to operate with acceptable conditions with overall v/c ratios of 0.85 LOS D and 0.78 LOS D under the 2029 horizon year and 0.98 LOS E and 0.87 LOS D under the 2034 horizon year. All movements are expected to operate within their theoretical capacities with v/c ratios less than 1.0 and delays not exceeding LOS E.

The analysis of future traffic conditions confirms that the operational impact of the subject site traffic is minimal and that critical movements reported to occur in the 2029 and 2034 horizon year are a result of the assumed corridor growth.

Traffic signal split optimizations are the only recommendation to be applied at this intersection in response to the subject development and corridor growth.

6.4 Fairview Road and Little Avenue

Capacity analysis at this intersection during the weekday a.m. and p.m. peak hours for the existing, future background, and future total traffic conditions are summarized in the following table.

Table 10 Capacity Analysis for Fairview Road and Little Avenue

Traffic Condition	AM Peak Hour		PM Peak Hour	
	Movement v/c (LOS) Delay(sec)	95th Percentile Queue	Movement v/c (LOS) Delay(sec)	95th Percentile Queue
Existing 2021	Overall: 0.59 (B) 15 WBL = 0.04 (C) 26 WBR = 0.51 (C) 30 NBTR = 0.31 (B) 14 SBL = 0.58 (A) 7 SBT = 0.49 (A) 7	WBL = 5 m WBR = 30 m NBTR = 50 m SBL = 45 m SBT = 90 m	Overall: 0.86 (C) 25 WBL = 0.05 (C) 28 WBR = 0.77 (D) 44 NBTR = 0.62 (C) 24 SBL = 0.85 (C) 27 SBT = 0.62 (A) 10	WBL = 10 m WBR = 75 m NBTR = 95 m SBL = 120 m SBT = 125 m
Future Background 2024	Overall: 0.63 (B) 17 WBL = 0.04 (C) 29 WBR = 0.61 (D) 36 NBTR = 0.3 (B) 14 SBL = 0.59 (A) 7 SBT = 0.49 (A) 8	WBL = 5 m WBR = 40 m NBTR = 50 m SBL = 50 m SBT = 100 m	Overall: 0.83 (C) 24 WBL = 0.07 (C) 32 WBR = 0.72 (D) 45 NBTR = 0.58 (C) 22 SBL = 0.83 (C) 24 SBT = 0.58 (A) 9	WBL = 10 m WBR = 80 m NBTR = 100 m SBL = 90 m SBT = 105 m
Future Total 2024	Overall: 0.64 (B) 18 WBL = 0.04 (C) 29 WBR = 0.62 (D) 37 NBTR = 0.3 (B) 14 SBL = 0.61 (A) 8 SBT = 0.49 (A) 8	WBL = 5 m WBR = 40 m NBTR = 50 m SBL = 55 m SBT = 100 m	Overall: 0.84 (C) 24 WBL = 0.07 (C) 32 WBR = 0.75 (D) 47 NBTR = 0.58 (C) 22 SBL = 0.82 (C) 23 SBT = 0.58 (A) 9	WBL = 10 m WBR = 85 m NBTR = 100 m SBL = 90 m SBT = 105 m
Future Total 2029	Overall: 0.67 (B) 16 WBL = 0.05 (C) 29 WBR = 0.59 (D) 36 NBTR = 0.32 (B) 14 SBL = 0.65 (A) 8 SBT = 0.27 (A) 6	WBL = 5 m WBR = 50 m NBTR = 55 m SBL = 55 m SBT = 45 m	Overall: 0.91 (C) 30 WBL = 0.06 (C) 30 WBR = 0.83 (D) 52 NBTR = 0.71 (C) 28 SBL = 0.9 (D) 38 SBT = 0.35 (A) 6	WBL = 10 m WBR = 100 m NBTR = 105 m SBL = 130 m SBT = 40 m
Future Total 2034	Overall: 0.81 (C) 24 WBL = 0.04 (C) 27 WBR = 0.85 (D) 51 NBTR = 0.39 (B) 20 SBL = 0.75 (B) 14 SBT = 0.31 (A) 8	WBL = 5 m WBR = 80 m NBTR = 60 m SBL = 60 m SBT = 45 m	Overall: 1.0 (D) 41 WBL = 0.06 (C) 31 WBR = 0.95 (E) 72 NBTR = 0.81 (D) 35 SBL = 0.98 (E) 61 SBT = 0.38 (A) 8	WBL = 10 m WBR = 125 m NBTR = 115 m SBL = 160 m SBT = 45 m

This intersection was modelled in synchro with the existing southbound through/left movement as an exclusive left turn lane. When using the existing lane configurations into Synchro, the software identified this movement as a defacto left turn lane due to the high left turn volume. Under the existing lane configuration of a shared/left and shared/right turn lane, the existing intersection capacity resulted in the intersection operating above its theoretical capacity under existing conditions.

Under existing 2021 conditions, this signalized intersection is operating with acceptable levels of delay and with all individual movements operating at a reported v/c below 1.0. The southbound left movement in the p.m. peak is operating at critical with a v/c ratio of 0.85, but still below its theoretical capacity of 1.0.

Traffic signal split optimizations were conducted and applied to all future conditions. The same optimised timing was used for all future conditions.

Under the future 2024 background traffic conditions, the intersection is expected to continue to operate with acceptable conditions with overall v/c ratios of 0.63 and 0.83 during the a.m. and p.m. peak hours respectively. All individual movements operating within their theoretical capacity with v/c ratios below 1.0 with minimal queueing and delays.

With site traffic added under the 2024 total traffic condition, the overall intersection v/c ratio increases by 0.01 for both a.m. and p.m. peaks, (0.63 to 0.64) and (0.83 to 0.84), respectively. Overall delays increase by only one second for the a.m. peak, with no change to the p.m. peak. T

Under the future 2029 and 2034 total traffic conditions the intersection is reported to operate with acceptable conditions with overall v/c ratios of 0.64 LOS B and 0.91 LOS C under the 2029 horizon year and 0.81 LOS C and 1.0 LOS D under the 2034 horizon year. All individual movements will operate below their theoretical capacities with v/c ratios less than 1.0 with delays not exceeding LOS E.

It should be noted that the westbound approach is reporting elevated v/c ratios above critical levels under the future 2029 and 2034 horizon years which decreases the amount of green time to the north/south movements on Fairview Road. While not included in the analysis since the timing is unclear, the City's TMP does identify a planned widening of Little Avenue east of Fairview Road to a five lane cross section with centre left turn lane. This improvement once implemented would resolve these critical movements.

The analysis of future traffic conditions confirms that the operational impact of the subject site traffic is minimal and that critical movements reported to occur in the 2029 and 2034 horizon year are a result of the assumed corridor growth.

Traffic signal split optimizations are the only recommendation to be applied at this intersection in response to the subject development and corridor growth.

6.5 Bayview Drive and Purolator Shipping Centre/Site Access

Capacity analysis at this intersection during the weekday a.m. and p.m. peak hours for the existing, future background, and future total traffic conditions are summarized in the following table.

Table 11 Capacity Analysis for Bayview Drive and Purolator Shipping Centre/Site Access

Traffic Condition	AM Peak Hour		PM Peak Hour	
	Movement v/c (LOS) Delay(sec)	95th Percentile Queue	Movement v/c (LOS) Delay(sec)	95th Percentile Queue
Existing 2021	EBLR = 0.39 (C) 19 NBTL = 0.03 (A) 1 SBTR = 0.27 (I) 0	EBLR = 15 m NBTL = 5 m SBTR = 0 m	EBLR = 0.29 (C) 22 NBTL = 0.07 (A) 2 SBTR = 0.33 (I) 0	EBLR = 10 m NBTL = 5 m SBTR = 0 m
Future Background 2024	EBTLR = 0.54 (D) 27 WBTLR = 0 (A) 0 NBTLR = 0.04 (A) 1 SBTLR = 0 (I) 0	EBTLR = 25 m WBTLR = 0 m NBTLR = 5 m SBTLR = 0 m	EBTLR = 0.46 (E) 38 WBTLR = 0 (A) 0 NBTLR = 0.08 (A) 2 SBTLR = 0 (I) 0	EBTLR = 20 m WBTLR = 0 m NBTLR = 5 m SBTLR = 0 m
Future Total 2024	EBTLR = 0.6 (D) 33 WBTLR = 0.14 (D) 28 NBTLR = 0.04 (A) 1 SBTLR = 0.02 (A) 1	EBTLR = 30 m WBTLR = 5 m NBTLR = 5 m SBTLR = 5 m	EBTLR = 0.54 (E) 49 WBTLR = 0.69 (F) 78 NBTLR = 0.08 (A) 2 SBTLR = 0.01 (A) 0	EBTLR = 20 m WBTLR = 30 m NBTLR = 5 m SBTLR = 5 m
Future Total 2029	EBTLR = 0.56 (D) 25 WBTLR = 0.1 (C) 20 NBL = 0.05 (A) 9 NBTR = 0.26 (I) 0 SBL = 0.02 (A) 8 SBTR = 0.36 (I) 0	EBTLR = 25 m WBTLR = 5 m NBL = 5 m NBTR = 0 m SBL = 5 m SBTR = 0 m	EBTLR = 0.36 (C) 24 WBTLR = 0.39 (D) 30 NBL = 0.11 (B) 11 NBTR = 0.38 (I) 0 SBL = 0.01 (A) 9 SBTR = 0.44 (I) 0	EBTLR = 15 m WBTLR = 15 m NBL = 5 m NBTR = 0 m SBL = 5 m SBTR = 0 m

Traffic Condition	AM Peak Hour		PM Peak Hour	
	Movement v/c (LOS) Delay(sec)	95th Percentile Queue	Movement v/c (LOS) Delay(sec)	95th Percentile Queue
Future Total 2034	EBTLR = 0.67 (D) 33 WBTLR = 0.12 (C) 25 NBL = 0.06 (A) 9 NBTR = 0.28 (I) 0 SBL = 0.02 (A) 8 SBTR = 0.4 (I) 0	EBTLR = 35 m WBTLR = 5 m NBL = 5 m NBTR = 0 m SBL = 5 m SBTR = 0 m	EBTLR = 0.45 (D) 29 WBTLR = 0.47 (E) 39 NBL = 0.13 (B) 11 NBTR = 0.41 (I) 0 SBL = 0.01 (A) 9 SBTR = 0.49 (I) 0	EBTLR = 20 m WBTLR = 20 m NBL = 5 m NBTR = 0 m SBL = 5 m SBTR = 0 m

Under existing 2021 traffic conditions the intersection is operating as a three-leg intersection with substantial reserve capacity, acceptable levels of delay, and negligible queuing.

Under all future traffic conditions including the introduction of the proposed site driveway as the fourth leg of this intersection and the subject site traffic, the driveways are expected to continue to operate with acceptable v/c ratios, delays and queuing with no significant

With Bayview Drive as a two lane road as per existing conditions, the proposed introduction of the site driveway and site traffic will have negligible impact on the operation of the existing Purolator driveway or the site access. With the planned widening of Bayview Drive to a three lane cross section after 2024 which includes a centre two-way left turn lane, the driveways are expected to continue to operate with no issues under the 2029 and 2034 traffic conditions.

7. Conclusions and Recommendations

The capacity analysis of the future traffic conditions confirms that the proposed development generated traffic can be accommodated by the existing and planned transportation infrastructure during both the weekday a.m. and p.m. peak hours without significantly impacting the operation of the study intersections. The operational impact of the added site traffic is not expected to be noticeable to motorists travelling through the immediate surrounding road network, and it is not expected to contribute to any significant deterioration of overall network's operational performance.

No geometric improvements beyond those already planned have been recommended in response to the proposed development.

We trust that we have addressed the pertinent transportation matters for this proposed development and please do not hesitate to contact us for further clarification of any point.

Sincerely,

GHD

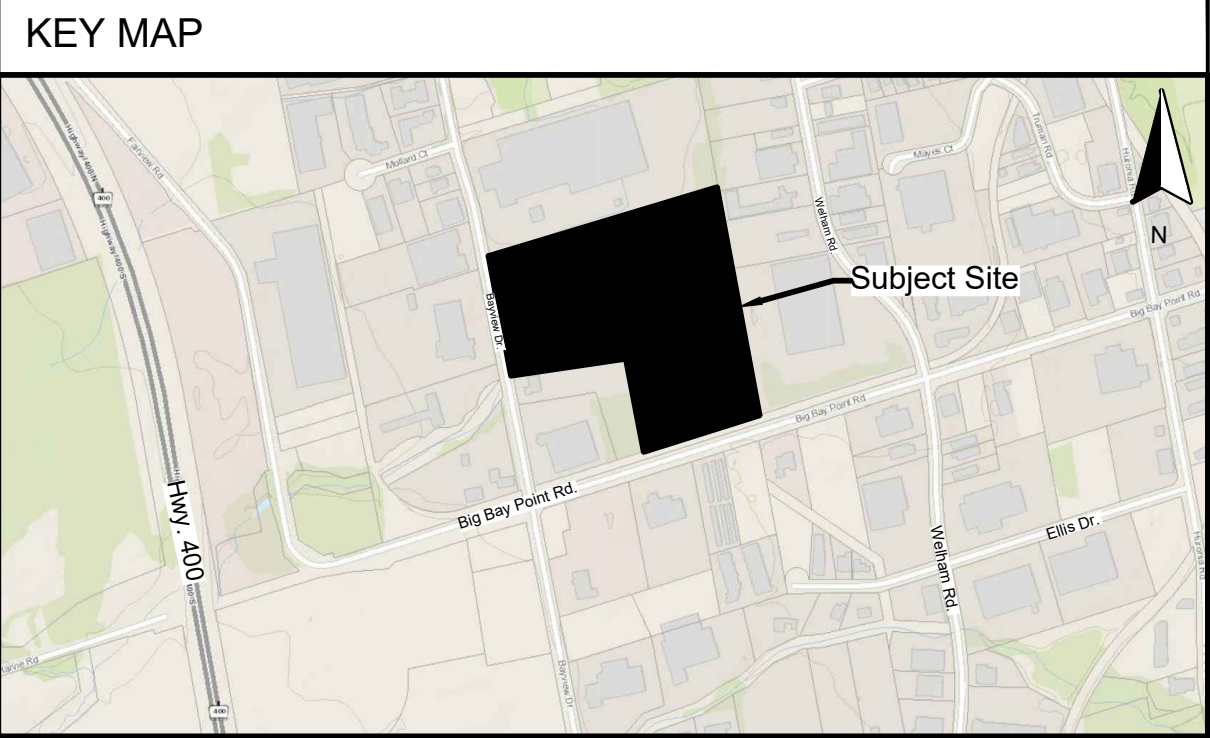


William Maria, P. Eng.
Transportation Planning Lead

Appendices

Appendix A

Site Plan Details



DRAFT PLAN OF SUBDIVISION

Part of West Half of Lot 9, Concession 13,
Geographic Township of Innisfil,
City of Barrie,
County of Simcoe
Scale 1:1,000

LEGEND

SUBJECT LANDS

WOODLOT

PHASE LINE

OWNER'S CERTIFICATE
I HEREBY AUTHORIZE INNOVATIVE PLANNING SOLUTIONS TO PREPARE THIS DRAFT PLAN OF SUBDIVISION AND SUBMIT THIS DRAFT PLAN OF SUBDIVISION FOR APPROVAL.

DATE _____ **OWNER'S NAME:** _____

SURVEYOR'S CERTIFICATE
I CERTIFY THAT THE BOUNDARIES OF THE LAND TO BE SUBDIVIDED AND THEIR RELATIONSHIP TO ADJACENT LANDS ARE ACCURATELY AND CORRECTLY SHOWN.

DATE _____ **SURVEYOR'S NAME:** _____

ADDITIONAL INFORMATION REQUIRED UNDER SECTION 51(17) OF THE PLANNING ACT

a) SHOWN ON PLAN	g) SHOWN ON PLAN
b) SHOWN ON PLAN	h) MUNICIPAL WATER
c) SEE KEY PLAN	i) SAND, SILT GLACIAL TILL
d) RESIDENTIAL	j) SHOWN ON PLAN
e) SHOWN ON PLAN	k) MUNICIPAL WATER & SEWAGE
f) SHOWN ON PLAN	l) NONE

LAND USE STATISTICS

LAND USE	LOT No.	BLOCK No.	AREA (ha)
Industrial Lots	1 - 31	32	9.1
SWM		33	1.7
Environmental Protection			2.5
Streets			2.3
TOTAL:	31	33	15.6

General Industrial (GI) Zone

Provisions	Provided	Required
Lot Area (min.)	700.0m ²	2,219.6m ²
Lot Frontage (min.)	15.0m	36.5m
Front Yard (min.)	7.0m	> 7.0m
Side Yard (min.)	3.0m	> 3.0m
Side Yard Adjoining Street (min.)	7.0m	>7.0m
Rear Yard (min.)	7.0m	>7.0m
Lot Coverage (max.)	60%	< 60%
Building Height (max.)	--	--

IPS INNOVATIVE PLANNING SOLUTIONS
PLANNERS • PROJECT MANAGERS • LAND DEVELOPERS
647 WELHAM ROAD, UNIT 9A, BARRIE, ON, L4N 0B7
tel: 705 • 812 • 3281 fax: 705 • 812 • 3438 e: info@ipsconsultinginc.com www.ipsconsultinginc.com

Date:	May 25, 2021	Drawn By:	M.P.
File:	20-915	Checked:	D.V.

SCHEDULE OF REVISIONS

No.	Date	Description	By
2	Mar. 12, 2021	Remove future road allowance; Update land-use stats;	A.S.
3	Mar. 18, 2021	Revise limits of phasing plans;	A.S.
4	May 5, 2021	Remove open space; Revise Road Widening; Identify service easement;	A.S.

Appendix B

Terms of Reference

James Emerson

From: Justin MacDonald <Justin.MacDonald@barrie.ca>
Sent: Tuesday, July 6, 2021 3:28 PM
To: Dhaval Harpal
Cc: Will Maria; James Emerson
Subject: RE: 80 Big Bay Point Road - Traffic Study Terms

Follow Up Flag: Follow up
Flag Status: Flagged

Categories: Orange category

Good afternoon Dhaval,

I have recalculated the growth rates and did some balancing between the AM and PM Peak hours and have established updated growth rates. I reviewed the option to do a reduced growth rate from 2014 to current and determined that the EMME growth rates shall be applied, this approach is consistent with all reports prepared within the City.

Fairview – 1% per year to a horizon year of 2031; 1.4% per year from 2031 to 2041.
Bayview – 3.4% per year to a horizon year of 2031; 1.5% per year from 2031 to 2041.
Big Bay Point Road – 3.2% per year to a horizon year of 2031; 3.3% per year from 2031 to 2041.
Little Avenue – 1.2% per year to a horizon year of 2031; 1.6% per year from 2031 to 2041.

I inquired about establishing directional splits from the EA and it was determined there are some challenges with this split as the partial interchange is not longer considered.

I am working on how to address this and shall follow up as soon as possible.

Thanks.

Justin MacDonald.

From: Dhaval Harpal <Dhaval.Harpal@ghd.com>
Sent: Wednesday, June 30, 2021 1:39 PM
To: Justin MacDonald <Justin.MacDonald@barrie.ca>
Cc: Will Maria <William.Maria@ghd.com>; James Emerson <James.Emerson@ghd.com>
Subject: RE: 80 Big Bay Point Road - Traffic Study Terms

Hi Justin,

We have some questions and concerns with the methodology to forecast traffic counts at the intersection of Fairview Road at Big Bay Point Road, and the growth rate for the horizon years.

We would like to present our findings and discuss over a Zoom meeting with you. Could you please advise your availability?

Thanks,

DHAVAL HARPAL
Transportation Planner
D +1 905 814 4345

Dhaval Harpal

From: Justin MacDonald <Justin.MacDonald@barrie.ca>
Sent: Monday, May 31, 2021 9:26 AM
To: Dhaval Harpal
Cc: Will Maria
Subject: RE: 80 Big Bay Point Road - Traffic Study Terms
Attachments: 34_Bayview Dr & Little Ave.pdf; Little Ave and Bayview Dr.pdf; Little Avenue at Fairview Road.pdf; Harvie Volumes (2014) Class EA.pdf; 2031 AM EMME Plots.pdf; 2031 PM EMME Plots.pdf; 2041 AM EMME Plot.pdf; 2041 PM EMME Plot.pdf

Follow Up Flag: Follow up
Flag Status: Flagged

Good morning,

I do not have an opening day for the intersection of Big Bay Point and Fairview, but I would assume it will be open within a year as the bridge connection is anticipated to be opened ASAP.

The TMC for Bayview and Little is from 2020 and 2014 for comparison. The TMC for Little and Fairview I am only able to find a count from 2016. These counts are dated, but given the uncertainty of volumes for new counts, please use these as a base line and provided a detailed description on how these volumes were factored.

Please find attached a copy of the 2014 Class EA information regarding the 2031 horizon for the Harvie / BBP crossing. Please use this to establish turning directional split and apply these volumes to the 2031 and 2041 EMME plots attached.

If you have any questions, please let me know.

Thanks.

Justin MacDonald.

From: Dhaval Harpal <Dhaval.Harpal@ghd.com>
Sent: Friday, May 28, 2021 4:02 PM
To: Justin MacDonald <Justin.MacDonald@barrie.ca>
Cc: Will Maria <William.Maria@ghd.com>
Subject: RE: 80 Big Bay Point Road - Traffic Study Terms

Hi Justin,

Following are some of the outstanding details we are hoping to receive from the City:

1. TMCs for the intersection of Little Avenue at Fairview Road, and Little Avenue at Bayview Drive.
2. In your last email it was mentioned to review Harvie Road Class EA for the counts at intersection of Fairview Road and Big Bay Point Road. However, the report does not refer to any traffic data. Please advise if City have any project counts;
3. Also, what is expected opening date for the signalized intersection of Fairview Road and Big Bay Point Road?

Thanks,

DHAVAL HARPAL
Transportation Planner
D +1 905 814 4345

From: Justin MacDonald <Justin.MacDonald@barrie.ca>
Sent: Friday, May 28, 2021 2:04 PM
To: Dhaval Harpal <Dhaval.Harpal@ghd.com>
Cc: Will Maria <William.Maria@ghd.com>
Subject: RE: 80 Big Bay Point Road - Traffic Study Terms

Is there any other information outstanding from my end? I know the applicant is anxious to get this application underway.

From: Dhaval Harpal <Dhaval.Harpal@ghd.com>
Sent: Friday, May 28, 2021 2:02 PM
To: Justin MacDonald <Justin.MacDonald@barrie.ca>
Cc: Will Maria <William.Maria@ghd.com>
Subject: RE: 80 Big Bay Point Road - Traffic Study Terms

Thanks Justin,

Received it.

DHAVAL HARPAL
Transportation Planner
D +1 905 814 4345

From: Justin MacDonald <Justin.MacDonald@barrie.ca>
Sent: Friday, May 28, 2021 1:55 PM
To: Dhaval Harpal <Dhaval.Harpal@ghd.com>
Cc: Will Maria <William.Maria@ghd.com>
Subject: RE: 80 Big Bay Point Road - Traffic Study Terms

Good afternoon Dhaval,

Please find attached a copy of the requested signal timing plan. Please note a plan has not been provided for the intersection of Big Bay Point and Fairview as the signals have not been energized yet. Please use the provided signal timing plans as a basis to create a signal timing plan for Big Bay Point and Fairview Drive.

If you have any questions, please let me know.

Thanks.

Justin MacDonald.

From: Justin MacDonald
Sent: Tuesday, May 18, 2021 11:05 AM
To: Dhaval Harpal <Dhaval.Harpal@ghd.com>
Cc: Will Maria <William.Maria@ghd.com>
Subject: RE: 80 Big Bay Point Road - Traffic Study Terms

Good morning Dhaval,

Please see below comments below:

- **Study Intersections:**
 - Big Bay Point Road and Bayview Drive;
 - Bayview Drive and the proposed site access.
 - **Big Bay Point Road and Fairview Drive.**

- Fairview Drive and Little Avenue.
- Little Avenue and Bayview Drive.

- **Traffic Data:** Available turning movement counts will be purchased, please advise whom to contact. If the counts are more than two years old, updated counts will be collected upon approval.
- **Traffic Signal Timings:** Will be purchased. Please advise whom to contact.
- **Study Peak Hours:** Weekday AM and PM peak hours.
- **Study Horizon Year:** For the purpose of capacity analysis, the development is expected to build out in 2024 and therefore, a five year horizon post build-out in 2029 is proposed. **Please see required horizon years in accordance with the TIS Guidelines, based on the below table a 10 year horizon is required, plus horizons for the proposed phasing.**

Development Size	Horizon
General	Open 5 ye 10 y
Multiphase development ¹	After 5 ye 10 y

- **Analysis Scenarios:** 2021 (existing), 2029 (future background), 2029 (future total).
 - **Include phasing plan and 10 year horizon.**
- **Background Growth Rate:** Based on the review of historical data and through consultation with staff after reviewing traffic data.
 - **To be established based on the 2019 TMP EMME plots – to be provided by the City.**
- **Background Development Traffic:** Future background traffic volumes will include other developments (under construction or planned). GHD reviewed the City's Planning and Development portal and has identified the following proposed nearby developments. Please advise on assumption to be made for any background developments where a traffic study has not been completed.
 - 249 Bayview Drive - traffic operation letter is available;

- 1 Big Bay Point - no development related traffic data is available; and
- 110 Fairview Road - no development related traffic data is available.
- **Trip generation:** Will be completed using rates published by the ITE Trip Generation 10th Edition.
- The directional distribution of traffic approaching and departing the site will be determined based on TTS 2016 data, existing local patterns and first principles. Site traffic will be assigned in accordance with our interpretation of these various patterns.
- The analysis will identify the transportation system requirements and other measures required to ensure the acceptable operation of the study intersections, including auxiliary turning lanes and other transportation infrastructure improvements. The objectives are to ensure that sufficient intersection capacity is available to accommodate the additional site generated traffic on the adjacent road network so that the adjacent lands/activities are not adversely affected.
- TAC, City and County guidelines will be reviewed in order to complete an access management review for the site access that reviews corner clearance, driveway spacing, auxiliary lanes, corner radii, and clear throat distance.
- Using AutoTURN software, GHD will complete a review of waste collection, loading, and emergency vehicle circulation.
- Existing and future TDM opportunities will be reviewed.
- **Construction Management Plan**
- Transportation Design Manual deviation memo.

From: Dhaval Harpal <Dhaval.Harpal@ghd.com>
Sent: Friday, May 14, 2021 2:07 PM
To: Justin MacDonald <Justin.MacDonald@barrie.ca>
Cc: Will Maria <William.Maria@ghd.com>
Subject: RE: 80 Big Bay Point Road - Traffic Study Terms

Good afternoon Justin,

Just would like to follow-up on proposed terms of references email.

Could you please let us know when can we expected City comments?

Thanks,

DHAVAL HARPAL
 Transportation Planner

GHD
 Proudly employee-owned | [ghd.com](https://www.ghd.com)
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 D +1 905 814 4345 E dhaval.harpal@ghd.com

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From: Justin MacDonald <Justin.MacDonald@barrie.ca>
Sent: Thursday, May 6, 2021 8:18 AM
To: Dhaval Harpal <Dhaval.Harpal@ghd.com>
Subject: RE: 80 Big Bay Point Road - Traffic Study Terms

Good morning Dhaval,

Thank you for the email, I shall review the proposed scope and advice early next week should any additional information be required.

Thanks.

Justin MacDonald.

From: Dhaval Harpal <Dhaval.Harpal@ghd.com>
Sent: Tuesday, May 4, 2021 1:57 PM
To: Justin MacDonald <Justin.MacDonald@barrie.ca>
Cc: Will Maria <William.Maria@ghd.com>
Subject: 80 Big Bay Point Road - Traffic Study Terms

Hello Justin,

GHD is pleased to provide the following terms of reference to prepare a Traffic Impact Study (TIS) in support of the industrial subdivision proposed on the lot municipally known as 80 Big Bay Point and 315 Bayview Drive in the City of Barrie. The subject site is generally located on the northeast quadrant of Bayview Drive and Big Bang Point Road in the City of Barrie. Access to the subject development is proposed via new road connections to the Bayview Drive as illustrated in the attached concept plan.

Based on a review of the proposed concept plan and the material provided, GHD have prepared the following terms of reference for your comment and endorsement:

- **Study Intersections:**
 - Big Bang Point Road and Bayview Drive;
 - Bayview Drive and the proposed site access.
- **Traffic Data:** Available turning movement counts will be purchased, please advise whom to contact. If the counts are more than two years old, updated counts will be collected upon approval.
- **Traffic Signal Timings:** Will be purchased. Please advise whom to contact.
- **Study Peak Hours:** Weekday AM and PM peak hours.
- **Study Horizon Year:** For the purpose of capacity analysis, the development is expected to build out in 2024 and therefore, a five year horizon post build-out in 2029 is proposed.

- **Analysis Scenarios:** 2021 (existing), 2029 (future background), 2029 (future total).
- **Background Growth Rate:** Based on the review of historical data and through consultation with staff after reviewing traffic data.
- **Background Development Traffic:** Future background traffic volumes will include other developments (under construction or planned). GHD reviewed the City's Planning and Development portal and has identified the following proposed nearby developments. Please advise on assumption to be made for any background developments where a traffic study has not been completed.
 - 249 Bayview Drive - traffic operation letter is available;
 - 1 Bug Bay Point - no development related traffic data is available; and
 - 110 Fairview Road - no development related traffic data is available.
- **Trip generation:** Will be completed using rates published by the ITE Trip Generation 10th Edition.
- The directional distribution of traffic approaching and departing the site will be determined based on TTS 2016 data, existing local patterns and first principles. Site traffic will be assigned in accordance with our interpretation of these various patterns.
- The analysis will identify the transportation system requirements and other measures required to ensure the acceptable operation of the study intersections, including auxiliary turning lanes and other transportation infrastructure improvements. The objectives are to ensure that sufficient intersection capacity is available to accommodate the additional site generated traffic on the adjacent road network so that the adjacent lands/activities are not adversely affected.
- TAC, City and County guidelines will be reviewed in order to complete an access management review for the site access that reviews corner clearance, driveway spacing, auxiliary lanes, corner radii, and clear throat distance.
- Using AutoTURN software, GHD will complete a review of waste collection, loading, and emergency vehicle circulation.
- Existing and future TDM opportunities will be reviewed.

Your review and comments on the proposed Terms are greatly appreciated.

Thank you,

DHAVAL HARPAL
Transportation Planner

GHD

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6705 Millcreek Drive Unit-1, Mississauga, Ontario L5N 5M4 Canada

D +1 905 814 4345 E dhaval.harpal@ghd.com

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Connect



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Appendix C

Existing Traffic Counts and Signal Timings

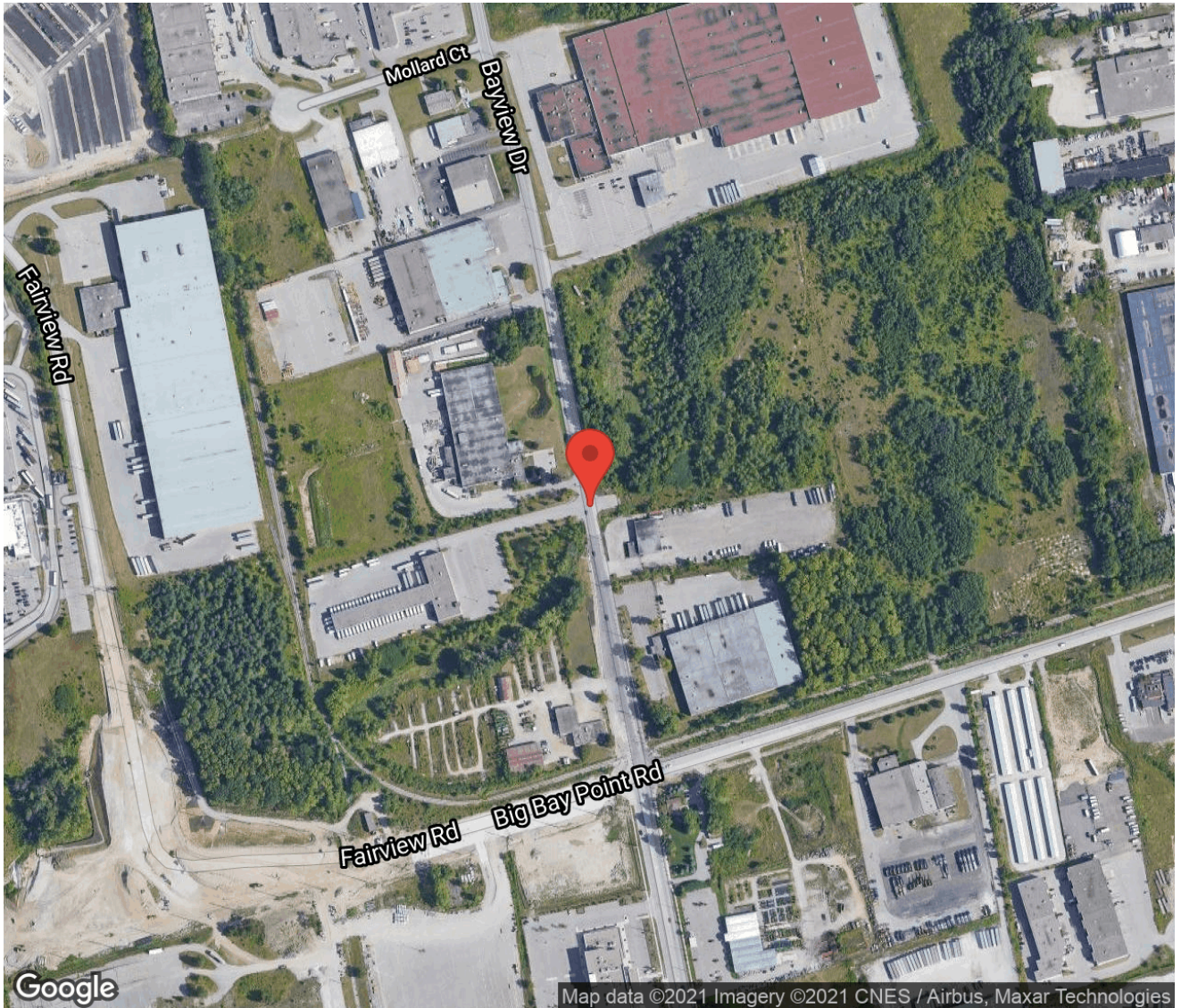
Project #21-093 - GHD

Intersection Count Report

Intersection:	Bayview Dr & 330 Bayview Dr
Municipality:	Barrie
Count Date:	Jun 09, 2021
Site Code:	2109300001
Count Categories:	Cars, Trucks, Bicycles, Pedestrians
Count Period:	07:00-09:00, 16:00-18:00
Weather:	Clear

Traffic Count Map

Intersection:	Bayview Dr & 330 Bayview Dr
Site Code:	2109300001
Municipality:	Barrie
Count Date:	Jun 09, 2021



Traffic Count Summary

Intersection: Bayview Dr & 330 Bayview Dr
 Site Code: 2109300001
 Municipality: Barrie
 Count Date: Jun 09, 2021

Bayview Dr - Traffic Summary

Hour	North Approach Totals						South Approach Totals						Total
	Includes Cars, Trucks, Bicycles						Includes Cars, Trucks, Bicycles						
	Left	Thru	Right	U-Turn	Total	Peds	Left	Thru	Right	U-Turn	Total	Peds	
07:00 - 08:00	0	240	7	1	248	0	16	198	0	0	214	0	462
08:00 - 09:00	0	209	43	1	253	0	32	194	0	0	226	0	479
BREAK													
16:00 - 17:00	0	278	14	0	292	0	38	302	0	0	340	0	632
17:00 - 18:00	0	187	15	0	202	0	29	277	0	1	307	0	509
GRAND TOTAL	0	914	79	2	995	0	115	971	0	1	1087	0	2082

Traffic Count Summary

Intersection: Bayview Dr & 330 Bayview Dr
 Site Code: 2109300001
 Municipality: Barrie
 Count Date: Jun 09, 2021

330 Bayview Dr - Traffic Summary

Hour	East Approach Totals						West Approach Totals							Total
	Includes Cars, Trucks, Bicycles						Includes Cars, Trucks, Bicycles							
	Left	Thru	Right	U-Turn	Total	Peds	Left	Thru	Right	U-Turn	Total	Peds		
07:00 - 08:00	0	0	0	0	0	0	0	0	0	0	0	5	0	
08:00 - 09:00	0	0	0	0	0	0	22	0	50	0	72	0	72	
BREAK														
16:00 - 17:00	0	0	0	0	0	0	28	0	28	0	56	2	56	
17:00 - 18:00	0	0	0	0	0	0	21	0	30	0	51	2	51	
GRAND TOTAL	0	0	0	0	0	0	71	0	108	0	179	9	179	

Traffic Count Data

Intersection: Bayview Dr & 330 Bayview Dr
Site Code: 2109300001
Municipality: Barrie
Count Date: Jun 09, 2021

North Approach - Bayview Dr

Start Time	Cars					Trucks					Bicycles					Total Peds
	←	↑	→	↺	Total	←	↑	→	↺	Total	←	↑	→	↺	Total	
07:00	0	39	1	0	40	0	2	0	0	2	0	1	0	0	1	0
07:15	0	63	2	0	65	0	1	0	0	1	0	1	0	0	1	0
07:30	0	54	1	0	55	0	4	0	0	4	0	2	0	0	2	0
07:45	0	69	3	1	73	0	4	0	0	4	0	0	0	0	0	0
08:00	0	43	17	0	60	0	2	0	0	2	0	0	0	0	0	0
08:15	0	41	13	0	54	0	4	0	0	4	0	0	0	0	0	0
08:30	0	52	6	0	58	0	2	0	0	2	0	0	0	0	0	0
08:45	0	57	7	1	65	0	8	0	0	8	0	0	0	0	0	0
SUBTOTAL	0	418	50	2	470	0	27	0	0	27	0	4	0	0	4	0

Traffic Count Data

Intersection: Bayview Dr & 330 Bayview Dr
Site Code: 2109300001
Municipality: Barrie
Count Date: Jun 09, 2021

North Approach - Bayview Dr

Start Time	Cars					Trucks					Bicycles					Total Peds
	←	↑	→	↻	Total	←	↑	→	↻	Total	←	↑	→	↻	Total	
16:00	0	61	0	0	61	0	3	0	0	3	0	0	0	0	0	0
16:15	0	75	1	0	76	0	5	6	0	11	0	0	0	0	0	0
16:30	0	74	3	0	77	0	6	0	0	6	0	0	0	0	0	0
16:45	0	52	4	0	56	0	2	0	0	2	0	0	0	0	0	0
17:00	0	69	0	0	69	0	3	3	0	6	0	0	0	0	0	0
17:15	0	48	5	0	53	0	4	0	0	4	0	0	0	0	0	0
17:30	0	29	1	0	30	0	2	2	0	4	0	0	0	0	0	0
17:45	0	30	3	0	33	0	2	1	0	3	0	0	0	0	0	0
SUBTOTAL	0	438	17	0	455	0	27	12	0	39	0	0	0	0	0	0
GRAND TOTAL	0	856	67	2	925	0	54	12	0	66	0	4	0	0	4	0

Traffic Count Data

Intersection: Bayview Dr & 330 Bayview Dr
Site Code: 2109300001
Municipality: Barrie
Count Date: Jun 09, 2021

South Approach - Bayview Dr

Start Time	Cars					Trucks					Bicycles					Total Peds
	←	↑	→	↺	Total	←	↑	→	↺	Total	←	↑	→	↺	Total	
07:00	1	40	0	0	41	0	4	0	0	4	0	0	0	0	0	0
07:15	3	38	0	0	41	2	2	0	0	4	0	0	0	0	0	0
07:30	4	45	0	0	49	0	5	0	0	5	0	0	0	0	0	0
07:45	5	63	0	0	68	1	1	0	0	2	0	0	0	0	0	0
08:00	9	46	0	0	55	0	4	0	0	4	0	0	0	0	0	0
08:15	8	42	0	0	50	0	1	0	0	1	0	0	0	0	0	0
08:30	7	41	0	0	48	0	11	0	0	11	0	1	0	0	1	0
08:45	7	46	0	0	53	1	2	0	0	3	0	0	0	0	0	0
SUBTOTAL	44	361	0	0	405	4	30	0	0	34	0	1	0	0	1	0

Traffic Count Data

Intersection: Bayview Dr & 330 Bayview Dr
Site Code: 2109300001
Municipality: Barrie
Count Date: Jun 09, 2021

South Approach - Bayview Dr

Start Time	Cars					Trucks					Bicycles					Total Peds
	←	↑	→	↺	Total	←	↑	→	↺	Total	←	↑	→	↺	Total	
16:00	3	58	0	0	61	4	4	0	0	8	0	0	0	0	0	0
16:15	4	71	0	0	75	3	5	0	0	8	0	0	0	0	0	0
16:30	9	88	0	0	97	6	0	0	0	6	0	0	0	0	0	0
16:45	5	71	0	0	76	4	4	0	0	8	0	1	0	0	1	0
17:00	3	70	0	0	73	1	3	0	0	4	0	0	0	0	0	0
17:15	2	71	0	0	73	7	3	0	0	10	0	1	0	0	1	0
17:30	9	66	0	1	76	4	0	0	0	4	0	1	0	0	1	0
17:45	3	61	0	0	64	0	1	0	0	1	0	0	0	0	0	0
SUBTOTAL	38	556	0	1	595	29	20	0	0	49	0	3	0	0	3	0
GRAND TOTAL	82	917	0	1	1000	33	50	0	0	83	0	4	0	0	4	0

	Cars						Trucks						Bicycles							
Start Time					Total						Total						Total	Total Peds		
07:00	0	0	0	0	0		0	0	0	0	0		0	0	0	0	0	0		
07:15	0	0	0	0	0		0	0	0	0	0		0	0	0	0	0	0		
07:30	0	0	0	0	0		0	0	0	0	0		0	0	0	0	0	0		
07:45	0	0	0	0	0		0	0	0	0	0		0	0	0	0	0	0		
08:00	0	0	0	0	0		0	0	0	0	0		0	0	0	0	0	0		
08:15	0	0	0	0	0		0	0	0	0	0		0	0	0	0	0	0		
08:30	0	0	0	0	0		0	0	0	0	0		0	0	0	0	0	0		
08:45	0	0	0	0	0		0	0	0	0	0		0	0	0	0	0	0		
SUBTOTAL	0	0	0	0	0		0	0	0	0	0		0	0	0	0	0	0		

	Cars						Trucks					Bicycles					
Start Time					Total					Total					Total	Total Peds	
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
SUBTOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
GRAND TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

Traffic Count Data

Intersection: Bayview Dr & 330 Bayview Dr
Site Code: 2109300001
Municipality: Barrie
Count Date: Jun 09, 2021

West Approach - 330 Bayview Dr

Start Time	Cars					Trucks					Bicycles					Total Peds
	←	↑	→	↺	Total	←	↑	→	↺	Total	←	↑	→	↺	Total	
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
07:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
07:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
08:00	1	0	3	0	4	0	0	0	0	0	0	0	0	0	0	0
08:15	1	0	7	0	8	0	0	0	0	0	0	0	0	0	0	0
08:30	2	0	8	0	10	3	0	4	0	7	1	0	0	0	1	0
08:45	6	0	9	0	15	8	0	19	0	27	0	0	0	0	0	0
SUBTOTAL	10	0	27	0	37	11	0	23	0	34	1	0	0	0	1	5

Traffic Count Data

Intersection: Bayview Dr & 330 Bayview Dr
Site Code: 2109300001
Municipality: Barrie
Count Date: Jun 09, 2021

West Approach - 330 Bayview Dr

Start Time	Cars					Trucks					Bicycles					Total Peds
	←	↑	→	↺	Total	←	↑	→	↺	Total	←	↑	→	↺	Total	
16:00	4	0	6	0	10	0	0	1	0	1	0	0	0	0	0	1
16:15	7	0	6	0	13	0	0	1	0	1	0	0	0	0	0	0
16:30	5	0	7	0	12	0	0	0	0	0	0	0	0	0	0	1
16:45	12	0	7	0	19	0	0	0	0	0	0	0	0	0	0	0
17:00	4	0	9	0	13	0	0	0	0	0	0	0	0	0	0	0
17:15	4	0	4	0	8	0	0	1	0	1	0	0	0	0	0	1
17:30	9	0	8	0	17	0	0	0	0	0	0	0	0	0	0	1
17:45	4	0	8	0	12	0	0	0	0	0	0	0	0	0	0	0
SUBTOTAL	49	0	55	0	104	0	0	3	0	3	0	0	0	0	0	4
GRAND TOTAL	59	0	82	0	141	11	0	26	0	37	1	0	0	0	1	9

Peak Hour Diagram

Specified Period

From: 07:00:00
To: 09:00:00

One Hour Peak

From: 08:00:00
To: 09:00:00

Intersection: Bayview Dr & 330 Bayview Dr
Site Code: 2109300001
Count Date: Jun 09, 2021

Weather conditions: Clear

**** Unsignalized Intersection ****

Major Road: Bayview Dr runs N/S

North Approach

	Out	In	Total
	237	186	423
	16	29	45
	0	2	2
Totals	253	217	470

Bayview Dr

	0	0	0	0
	0	16	0	0
	43	193	0	1
Totals	43	209	0	1






East Approach

	Out	In	Total
	0	0	0
	0	0	0
	0	0	0
Totals	0	0	0

330 Bayview Dr

				Totals
0	0	0	0	0
1	11	10	22	22
0	0	0	0	0
0	23	27	50	50






Peds: 0

Peds: 0



Peds: 0

Peds: 0

330 Bayview Dr

Totals			
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0






West Approach

	Out	In	Total
	37	74	111
	34	1	35
	1	0	1
Totals	72	75	147

				
Totals	32	194	0	0
	31	175	0	0
	1	18	0	0
	0	1	0	0

Bayview Dr

South Approach

	Out	In	Total
	206	220	426
	19	39	58
	1	0	1
Totals	226	259	485

 - Cars

 - Trucks

 - Bicycles

Comments

Peak Hour Summary

Intersection: Bayview Dr & 330 Bayview Dr
Site Code: 2109300001
Count Date: Jun 09, 2021
Period: 07:00 - 09:00

Peak Hour Data (08:00 - 09:00)

Start Time	North Approach Bayview Dr						South Approach Bayview Dr						East Approach 330 Bayview Dr						West Approach 330 Bayview Dr						Total Vehicles
	←	↑	→	↻	Peds	Total	←	↑	→	↻	Peds	Total	←	↑	→	↻	Peds	Total	←	↑	→	↻	Peds	Total	
08:00	0	45	17	0	0	62	9	50	0	0	0	59	0	0	0	0	0	0	1	0	3	0	0	4	125
08:15	0	45	13	0	0	58	8	43	0	0	0	51	0	0	0	0	0	0	1	0	7	0	0	8	117
08:30	0	54	6	0	0	60	7	53	0	0	0	60	0	0	0	0	0	0	6	0	12	0	0	18	138
08:45	0	65	7	1	0	73	8	48	0	0	0	56	0	0	0	0	0	0	14	0	28	0	0	42	171
Grand Total	0	209	43	1	0	253	32	194	0	0	0	226	0	0	0	0	0	0	22	0	50	0	0	72	551
Approach %	0	82.6	17	0.4	-	-	14.2	85.8	0	0	-	-	0	0	0	0	-	-	30.6	0	69.4	0	-	-	-
Totals %	0	37.9	7.8	0.2	-	45.9	5.8	35.2	0	0	-	41	0	0	0	0	-	-	4	0	9.1	0	-	13.1	-
PHF	0	0.8	0.63	0.25	-	0.87	0.89	0.92	0	0	-	0.94	0	0	0	0	-	-	0.39	0	0.45	0	-	0.43	0.81
Cars	0	193	43	1	-	237	31	175	0	0	-	206	0	0	0	0	-	-	10	0	27	0	-	37	480
% Cars	0	92.3	100	100	-	93.7	96.9	90.2	0	0	-	91.2	0	0	0	0	-	-	45.5	0	54	0	-	51.4	87.1
Trucks	0	16	0	0	-	16	1	18	0	0	-	19	0	0	0	0	-	-	11	0	23	0	-	34	69
% Trucks	0	7.7	0	0	-	6.3	3.1	9.3	0	0	-	8.4	0	0	0	0	-	-	50	0	46	0	-	47.2	12.5
Bicycles	0	0	0	0	-	0	0	1	0	0	-	1	0	0	0	0	-	-	1	0	0	0	-	1	2
% Bicycles	0	0	0	0	-	0	0	0.5	0	0	-	0.4	0	0	0	0	-	-	4.5	0	0	0	-	1.4	0.4
Peds	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	0
% Peds	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-

Peak Hour Diagram

Specified Period

From: 16:00:00

To: 18:00:00

One Hour Peak

From: 16:15:00

To: 17:15:00

Intersection: Bayview Dr & 330 Bayview Dr

Site Code: 2109300001

Count Date: Jun 09, 2021

Weather conditions: Clear

**** Unsignalized Intersection ****

Major Road: Bayview Dr runs N/S

North Approach

	Out	In	Total
	278	328	606
	25	12	37
	0	1	1
Totals	303	341	644

Bayview Dr

	0	0	0	0
	9	16	0	0
	8	270	0	0
Totals	17	286	0	0

East Approach

	Out	In	Total
	0	0	0
	0	0	0
	0	0	0
Totals	0	0	0

330 Bayview Dr

				Totals
	0	0	0	0
	0	0	28	28
	0	0	0	0
	0	1	29	30

Peds: 0

Peds: 1



Peds: 0

Peds: 0

330 Bayview Dr

Totals			
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0

West Approach

	Out	In	Total
	57	29	86
	1	23	24
	0	0	0
Totals	58	52	110

Totals				
	21	300	0	0
	14	12	0	0
	0	1	0	0

Bayview Dr

South Approach

	Out	In	Total
	321	299	620
	26	17	43
	1	0	1
Totals	348	316	664

 - Cars

 - Trucks

 - Bicycles

Comments

Peak Hour Summary

Intersection: Bayview Dr & 330 Bayview Dr
Site Code: 2109300001
Count Date: Jun 09, 2021
Period: 16:00 - 18:00

Peak Hour Data (16:15 - 17:15)

Start Time	North Approach Bayview Dr						South Approach Bayview Dr						East Approach 330 Bayview Dr						West Approach 330 Bayview Dr						Total Vehicles
	←	↑	→	↻	Peds	Total	←	↑	→	↻	Peds	Total	←	↑	→	↻	Peds	Total	←	↑	→	↻	Peds	Total	
16:15	0	80	7	0	0	87	7	76	0	0	0	83	0	0	0	0	0	0	7	0	7	0	0	14	184
16:30	0	80	3	0	0	83	15	88	0	0	0	103	0	0	0	0	0	0	5	0	7	0	1	12	198
16:45	0	54	4	0	0	58	9	76	0	0	0	85	0	0	0	0	0	0	12	0	7	0	0	19	162
17:00	0	72	3	0	0	75	4	73	0	0	0	77	0	0	0	0	0	0	4	0	9	0	0	13	165
Grand Total	0	286	17	0	0	303	35	313	0	0	0	348	0	0	0	0	0	0	28	0	30	0	1	58	709
Approach %	0	94.4	5.6	0	-	-	10.1	89.9	0	0	-	-	0	0	0	0	-	-	48.3	0	51.7	0	-	-	-
Totals %	0	40.3	2.4	0	-	42.7	4.9	44.1	0	0	-	49.1	0	0	0	0	-	-	3.9	0	4.2	0	-	8.2	-
PHF	0	0.89	0.61	0	-	0.87	0.58	0.89	0	0	-	0.84	0	0	0	0	-	-	0.58	0	0.83	0	-	0.76	0.9
Cars	0	270	8	0	-	278	21	300	0	0	-	321	0	0	0	0	-	-	28	0	29	0	-	57	656
% Cars	0	94.4	47.1	0	-	91.7	60	95.8	0	0	-	92.2	0	0	0	0	-	-	100	0	96.7	0	-	98.3	92.5
Trucks	0	16	9	0	-	25	14	12	0	0	-	26	0	0	0	0	-	-	0	0	1	0	-	1	52
% Trucks	0	5.6	52.9	0	-	8.3	40	3.8	0	0	-	7.5	0	0	0	0	-	-	0	0	3.3	0	-	1.7	7.3
Bicycles	0	0	0	0	-	0	0	1	0	0	-	1	0	0	0	0	-	-	0	0	0	0	-	0	1
% Bicycles	0	0	0	0	-	0	0	0.3	0	0	-	0.3	0	0	0	0	-	-	0	0	0	0	-	0	0.1
Peds	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	1	-	1
% Peds	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	100	-	-

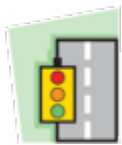


Ontario Traffic Inc.
TRAFFIC MONITORING  SERVICES & PRODUCTS

Project #20-013 - City of Barrie

Intersection Count Report

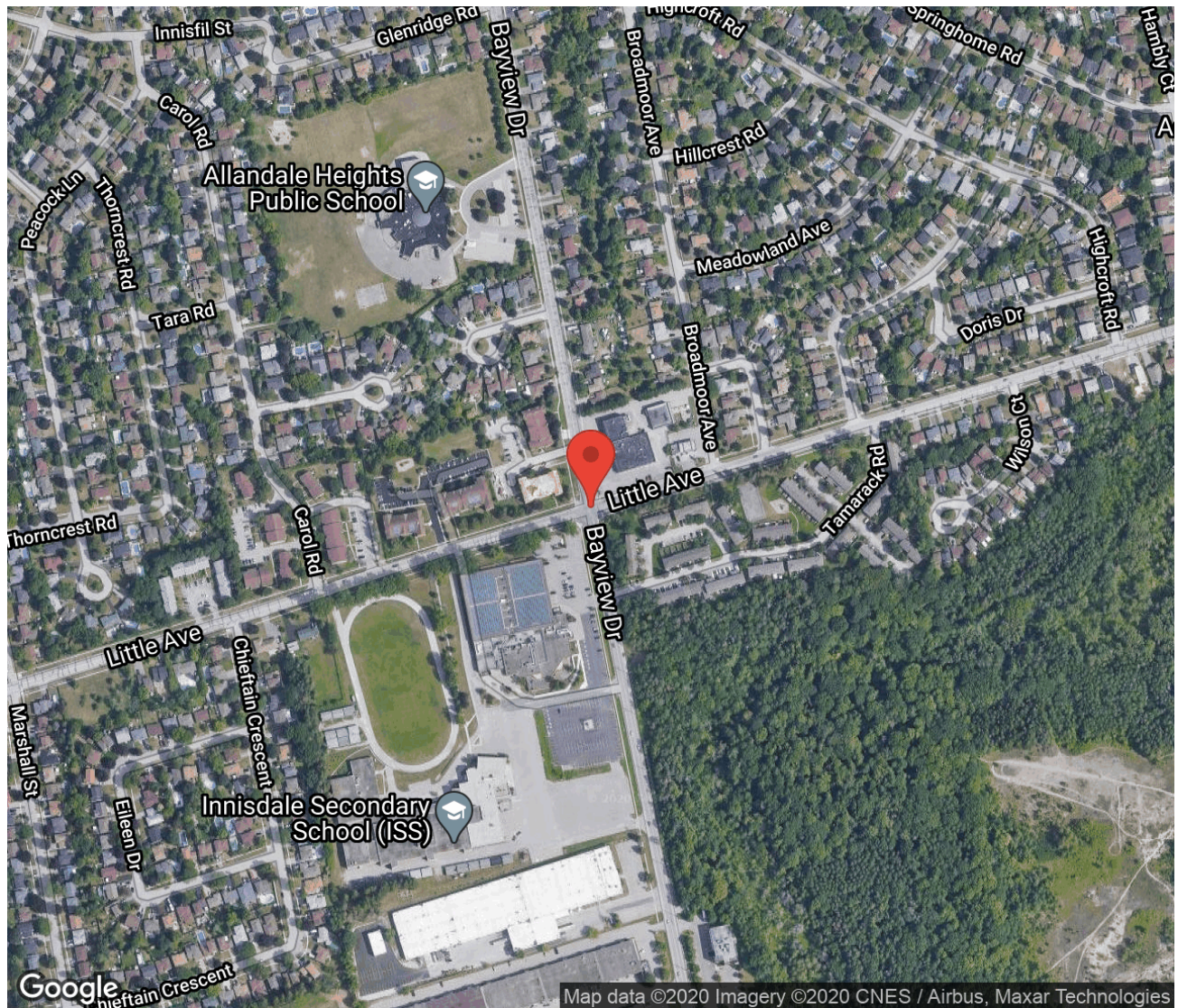
Intersection:	Bayview Dr & Little Ave
Municipality:	Barrie
Count Date:	Oct 15, 2020
Site Code:	2001300034
Count Categories:	Cars, Trucks, Bicycles, Pedestrians
Count Period:	07:00-09:00, 11:00-14:00, 15:00-18:00
Weather:	Clear

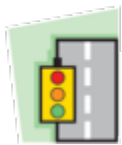


Ontario Traffic Inc.
TRAFFIC MONITORING + SERVICES & PRODUCTS

Traffic Count Map

Intersection: Bayview Dr & Little Ave
Municipality: Barrie
Count Date: Oct 15, 2020





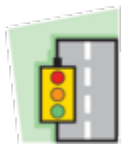
Ontario Traffic Inc.
TRAFFIC MONITORING + SERVICES & PRODUCTS

Traffic Count Summary

Intersection: Bayview Dr & Little Ave
Municipality: Barrie
Count Date: Oct 15, 2020

Bayview Dr - Traffic Summary

Hour	North Approach Totals						South Approach Totals					
	Includes Cars, Trucks, Bicycles						Includes Cars, Trucks, Bicycles					
	Left	Thru	Right	U-Turn	Total	Peds	Left	Thru	Right	U-Turn	Total	Peds
07:00 - 08:00	21	233	32	0	286	30	170	82	37	0	289	37
08:00 - 09:00	35	169	37	0	241	10	190	112	36	0	338	13
BREAK												
11:00 - 12:00	29	206	31	0	266	2	220	200	57	0	477	3
12:00 - 13:00	43	213	39	0	295	85	249	222	87	0	558	155
13:00 - 14:00	42	206	23	0	271	52	258	206	64	0	528	87
BREAK												
15:00 - 16:00	72	196	36	0	304	19	349	296	58	0	703	9
16:00 - 17:00	67	205	45	0	317	18	392	326	35	0	753	3
17:00 - 18:00	62	148	31	0	241	7	307	247	60	0	614	7
GRAND TOTAL	371	1576	274	0	2221	223	2135	1691	434	0	4260	314



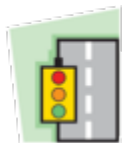
Ontario Traffic Inc.
TRAFFIC MONITORING  SERVICES & PRODUCTS

Traffic Count Summary

Intersection: Bayview Dr & Little Ave
Municipality: Barrie
Count Date: Oct 15, 2020

Little Ave - Traffic Summary

Hour	East Approach Totals						West Approach Totals					
	Includes Cars, Trucks, Bicycles						Includes Cars, Trucks, Bicycles					
	Left	Thru	Right	U-Turn	Total	Peds	Left	Thru	Right	U-Turn	Total	Peds
07:00 - 08:00	110	321	12	0	443	23	20	170	194	0	384	50
08:00 - 09:00	78	354	52	0	484	15	29	268	272	0	569	24
BREAK												
11:00 - 12:00	58	234	38	0	330	4	17	238	205	0	460	0
12:00 - 13:00	131	302	53	0	486	109	30	245	222	0	497	120
13:00 - 14:00	81	299	53	0	433	79	16	307	213	0	536	45
BREAK												
15:00 - 16:00	61	344	73	0	478	28	35	319	258	0	612	13
16:00 - 17:00	63	345	55	0	463	19	29	351	214	0	594	3
17:00 - 18:00	68	336	49	0	453	6	19	371	180	0	570	4
GRAND TOTAL	650	2535	385	0	3570	283	195	2269	1758	0	4222	259



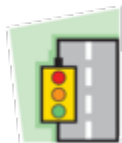
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Traffic Count Data

Intersection: Bayview Dr & Little Ave
Municipality: Barrie
Count Date: Oct 15, 2020

North Approach - Bayview Dr

Start Time	Cars					Trucks					Bicycles					Total Peds
	←	↑	→	↻	Total	←	↑	→	↻	Total	←	↑	→	↻	Total	
07:00	4	32	4	0	40	0	7	0	0	7	0	0	0	0	0	2
07:15	2	24	6	0	32	1	9	1	0	11	0	0	0	0	0	1
07:30	3	57	5	0	65	0	9	0	0	9	0	3	0	0	3	18
07:45	11	76	15	0	102	0	16	1	0	17	0	0	0	0	0	9
08:00	10	32	11	0	53	1	13	0	0	14	0	0	0	0	0	3
08:15	9	28	4	0	41	0	8	1	0	9	0	1	0	0	1	3
08:30	4	28	7	0	39	1	8	0	0	9	0	0	0	0	0	3
08:45	8	40	14	0	62	2	11	0	0	13	0	0	0	0	0	1
SUBTOTAL	51	317	66	0	434	5	81	3	0	89	0	4	0	0	4	40



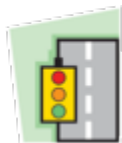
Ontario Traffic Inc.
TRAFFIC MONITORING + SERVICES & PRODUCTS

Traffic Count Data

Intersection: Bayview Dr & Little Ave
Municipality: Barrie
Count Date: Oct 15, 2020

North Approach - Bayview Dr

Start Time	Cars					Trucks					Bicycles					Total Peds
	←	↑	→	↻	Total	←	↑	→	↻	Total	←	↑	→	↻	Total	
11:00	7	46	9	0	62	1	7	1	0	9	0	0	0	0	0	0
11:15	5	35	5	0	45	2	4	1	0	7	0	0	0	0	0	0
11:30	6	47	6	0	59	0	8	1	0	9	0	0	0	0	0	2
11:45	8	45	7	0	60	0	14	1	0	15	0	0	0	0	0	0
12:00	8	36	5	0	49	1	1	0	0	2	0	0	0	0	0	1
12:15	9	47	10	0	66	0	7	0	0	7	0	0	0	0	0	2
12:30	7	54	8	0	69	0	13	2	0	15	0	0	0	0	0	12
12:45	17	47	10	0	74	1	8	4	0	13	0	0	0	0	0	70
13:00	12	37	3	0	52	2	9	1	0	12	0	0	0	0	0	20
13:15	9	51	6	0	66	1	12	0	0	13	0	0	0	0	0	8
13:30	11	46	3	0	60	0	7	2	0	9	0	0	0	0	0	8
13:45	7	34	7	0	48	0	10	1	0	11	0	0	0	0	0	16
SUBTOTAL	106	525	79	0	710	8	100	14	0	122	0	0	0	0	0	139



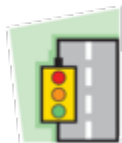
Ontario Traffic Inc.
TRAFFIC MONITORING SERVICES & PRODUCTS

Traffic Count Data

Intersection: Bayview Dr & Little Ave
Municipality: Barrie
Count Date: Oct 15, 2020

North Approach - Bayview Dr

Start Time	Cars					Trucks					Bicycles					Total Peds
	←	↑	→	↻	Total	←	↑	→	↻	Total	←	↑	→	↻	Total	
15:00	13	35	2	0	50	1	11	1	0	13	0	0	0	0	0	2
15:15	14	50	17	0	81	3	6	1	0	10	1	0	0	0	1	6
15:30	22	42	6	0	70	3	11	1	0	15	0	0	0	0	0	6
15:45	13	31	7	0	51	2	10	1	0	13	0	0	0	0	0	5
16:00	13	36	12	0	61	3	12	0	0	15	0	0	0	0	0	3
16:15	14	53	10	0	77	3	5	2	0	10	0	1	0	0	1	2
16:30	13	36	7	0	56	2	8	2	0	12	0	0	0	0	0	5
16:45	18	45	12	0	75	1	9	0	0	10	0	0	0	0	0	8
17:00	18	42	9	0	69	3	4	0	0	7	0	0	0	0	0	1
17:15	11	29	10	0	50	1	3	0	0	4	0	0	0	0	0	4
17:30	13	31	5	0	49	2	3	0	0	5	0	0	0	0	0	0
17:45	12	31	6	0	49	2	5	1	0	8	0	0	0	0	0	2
SUBTOTAL	174	461	103	0	738	26	87	9	0	122	1	1	0	0	2	44
GRAND TOTAL	331	1303	248	0	1882	39	268	26	0	333	1	5	0	0	6	223



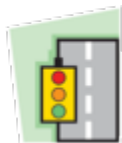
Ontario Traffic Inc.
TRAFFIC MONITORING + SERVICES & PRODUCTS

Traffic Count Data

Intersection: Bayview Dr & Little Ave
Municipality: Barrie
Count Date: Oct 15, 2020

South Approach - Bayview Dr

Start Time	Cars					Trucks					Bicycles					Total Peds
	←	↑	→	↺	Total	←	↑	→	↺	Total	←	↑	→	↺	Total	
07:00	35	13	2	0	50	19	10	3	0	32	0	1	0	0	1	0
07:15	16	13	4	0	33	19	10	1	0	30	0	0	0	0	0	4
07:30	23	7	2	0	32	16	6	1	0	23	0	0	0	0	0	10
07:45	23	12	19	0	54	19	10	5	0	34	0	0	0	0	0	23
08:00	26	22	10	0	58	14	12	2	0	28	0	0	0	0	0	2
08:15	22	10	6	0	38	22	14	0	0	36	0	0	0	0	0	6
08:30	22	14	5	0	41	30	13	3	0	46	0	0	0	0	0	2
08:45	29	16	7	0	52	25	11	3	0	39	0	0	0	0	0	3
SUBTOTAL	196	107	55	0	358	164	86	18	0	268	0	1	0	0	1	50



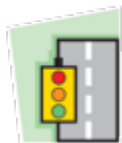
Ontario Traffic Inc.
TRAFFIC MONITORING + SERVICES & PRODUCTS

Traffic Count Data

Intersection: Bayview Dr & Little Ave
Municipality: Barrie
Count Date: Oct 15, 2020

South Approach - Bayview Dr

Start Time	Cars					Trucks					Bicycles					Total Peds
	←	↑	→	↻	Total	←	↑	→	↻	Total	←	↑	→	↻	Total	
11:00	38	30	13	0	81	17	12	2	0	31	0	0	0	0	0	0
11:15	39	32	13	0	84	16	17	3	0	36	0	1	0	0	1	0
11:30	41	42	16	0	99	16	15	5	0	36	0	1	0	0	1	0
11:45	37	41	5	0	83	16	9	0	0	25	0	0	0	0	0	3
12:00	50	39	13	0	102	20	15	2	0	37	0	0	0	0	0	2
12:15	47	48	12	0	107	14	13	1	0	28	0	0	0	0	0	3
12:30	43	39	12	0	94	16	17	2	0	35	0	0	0	0	0	41
12:45	39	36	42	0	117	20	13	3	0	36	0	2	0	0	2	109
13:00	45	40	18	0	103	20	22	3	0	45	0	1	0	0	1	33
13:15	57	31	10	0	98	20	22	2	0	44	0	0	0	0	0	23
13:30	42	31	8	0	81	17	14	3	0	34	0	0	0	0	0	23
13:45	43	32	17	0	92	14	13	3	0	30	0	0	0	0	0	8
SUBTOTAL	521	441	179	0	1141	206	182	29	0	417	0	5	0	0	5	245



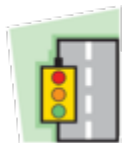
Ontario Traffic Inc.
TRAFFIC MONITORING SERVICES & PRODUCTS

Traffic Count Data

Intersection: Bayview Dr & Little Ave
Municipality: Barrie
Count Date: Oct 15, 2020

South Approach - Bayview Dr

Start Time	Cars					Trucks					Bicycles					Total Peds
	←	↑	→	↻	Total	←	↑	→	↻	Total	←	↑	→	↻	Total	
15:00	62	56	16	0	134	26	10	3	0	39	0	1	1	0	2	3
15:15	57	53	7	0	117	16	15	2	0	33	0	1	0	0	1	5
15:30	76	69	10	0	155	20	13	5	0	38	0	2	0	0	2	1
15:45	66	59	13	0	138	26	17	1	0	44	0	0	0	0	0	0
16:00	72	61	7	0	140	26	21	3	0	50	0	0	0	0	0	0
16:15	63	58	9	0	130	18	23	2	0	43	0	0	0	0	0	2
16:30	92	63	4	0	159	15	18	1	0	34	0	0	0	0	0	1
16:45	81	64	6	0	151	25	17	3	0	45	0	1	0	0	1	0
17:00	74	64	16	0	154	20	13	1	0	34	0	0	0	0	0	1
17:15	58	59	19	0	136	22	16	2	0	40	0	0	0	0	0	1
17:30	62	38	3	0	103	14	9	1	0	24	0	1	2	0	3	3
17:45	44	39	15	0	98	13	7	1	0	21	0	1	0	0	1	2
SUBTOTAL	807	683	125	0	1615	241	179	25	0	445	0	7	3	0	10	19
GRAND TOTAL	1524	1231	359	0	3114	611	447	72	0	1130	0	13	3	0	16	314



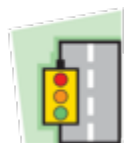
Ontario Traffic Inc.
TRAFFIC MONITORING + SERVICES & PRODUCTS

Traffic Count Data

Intersection: Bayview Dr & Little Ave
Municipality: Barrie
Count Date: Oct 15, 2020

East Approach - Little Ave

Start Time	Cars					Trucks					Bicycles					Total Peds
	←	↑	→	↻	Total	←	↑	→	↻	Total	←	↑	→	↻	Total	
07:00	16	59	2	0	77	2	8	1	0	11	0	0	0	0	0	1
07:15	19	76	0	0	95	2	6	0	0	8	0	0	0	0	0	5
07:30	25	77	6	0	108	12	12	1	0	25	0	0	0	0	0	6
07:45	26	82	2	0	110	8	1	0	0	9	0	0	0	0	0	11
08:00	19	72	9	0	100	12	10	4	0	26	0	0	0	0	0	0
08:15	11	78	15	0	104	3	6	0	0	9	0	0	0	0	0	0
08:30	10	84	8	0	102	4	9	0	0	13	0	0	0	0	0	9
08:45	17	89	8	0	114	2	6	8	0	16	0	0	0	0	0	6
SUBTOTAL	143	617	50	0	810	45	58	14	0	117	0	0	0	0	0	38



Ontario Traffic Inc.
TRAFFIC MONITORING + SERVICES & PRODUCTS

Traffic Count Data

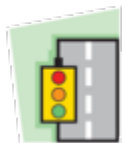
Intersection: Bayview Dr & Little Ave

Municipality: Barrie

Count Date: Oct 15, 2020

East Approach - Little Ave

Start Time	Cars					Trucks					Bicycles					Total Peds
	←	↑	→	↻	Total	←	↑	→	↻	Total	←	↑	→	↻	Total	
11:00	15	50	10	0	75	1	9	1	0	11	0	0	0	0	0	1
11:15	13	45	6	0	64	3	6	0	0	9	1	0	0	0	1	0
11:30	9	58	8	0	75	1	8	0	0	9	0	0	0	0	0	1
11:45	12	53	9	0	74	3	5	4	0	12	0	0	0	0	0	2
12:00	20	75	7	0	102	3	7	1	0	11	0	0	0	0	0	2
12:15	19	71	9	0	99	4	7	0	0	11	0	0	0	0	0	4
12:30	43	61	12	0	116	5	6	2	0	13	0	0	0	0	0	11
12:45	32	64	20	0	116	5	11	2	0	18	0	0	0	0	0	92
13:00	17	61	14	0	92	1	18	1	0	20	0	0	1	0	1	36
13:15	20	56	13	0	89	3	3	2	0	8	0	0	0	0	0	18
13:30	20	71	12	0	103	0	13	1	0	14	0	0	0	0	0	17
13:45	17	70	9	0	96	3	7	0	0	10	0	0	0	0	0	8
SUBTOTAL	237	735	129	0	1101	32	100	14	0	146	1	0	1	0	2	192



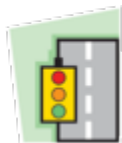
Ontario Traffic Inc.
TRAFFIC MONITORING SERVICES & PRODUCTS

Traffic Count Data

Intersection: Bayview Dr & Little Ave
Municipality: Barrie
Count Date: Oct 15, 2020

East Approach - Little Ave

Start Time	Cars					Trucks					Bicycles					Total Peds
	←	↑	→	↻	Total	←	↑	→	↻	Total	←	↑	→	↻	Total	
15:00	8	69	20	0	97	0	4	2	0	6	0	0	0	0	0	6
15:15	14	89	18	0	121	0	6	2	0	8	0	0	0	0	0	14
15:30	15	69	13	0	97	1	11	2	0	14	0	0	0	0	0	8
15:45	22	84	16	0	122	1	12	0	0	13	0	0	0	0	0	0
16:00	13	80	13	0	106	2	14	1	0	17	0	0	0	0	0	3
16:15	12	82	14	0	108	2	10	0	0	12	0	0	0	0	0	5
16:30	10	68	16	0	94	4	11	0	0	15	0	0	0	0	0	2
16:45	18	69	11	0	98	2	11	0	0	13	0	0	0	0	0	9
17:00	21	89	14	0	124	1	11	0	0	12	0	0	0	0	0	0
17:15	14	76	13	0	103	0	8	0	0	8	0	0	0	0	0	3
17:30	15	75	14	0	104	3	11	1	0	15	0	0	0	0	0	2
17:45	13	60	7	0	80	1	6	0	0	7	0	0	0	0	0	1
SUBTOTAL	175	910	169	0	1254	17	115	8	0	140	0	0	0	0	0	53
GRAND TOTAL	555	2262	348	0	3165	94	273	36	0	403	1	0	1	0	2	283



Ontario Traffic Inc.
TRAFFIC MONITORING + SERVICES & PRODUCTS

Traffic Count Data

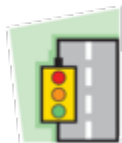
Intersection: Bayview Dr & Little Ave

Municipality: Barrie

Count Date: Oct 15, 2020

West Approach - Little Ave

Start Time	Cars					Trucks					Bicycles					Total Peds
	←	↑	→	↺	Total	←	↑	→	↺	Total	←	↑	→	↺	Total	
07:00	1	25	31	0	57	3	9	14	0	26	0	0	0	0	0	2
07:15	3	28	37	0	68	2	8	11	0	21	0	0	0	0	0	2
07:30	4	33	42	0	79	0	18	12	0	30	0	0	0	0	0	10
07:45	6	38	36	0	80	1	11	11	0	23	0	0	0	0	0	36
08:00	8	54	52	0	114	1	19	44	0	64	0	0	0	0	0	5
08:15	2	56	44	0	102	0	13	16	0	29	0	0	0	0	0	2
08:30	9	53	35	0	97	1	12	15	0	28	0	0	0	0	0	2
08:45	6	52	47	0	105	2	9	19	0	30	0	0	0	0	0	15
SUBTOTAL	39	339	324	0	702	10	99	142	0	251	0	0	0	0	0	74



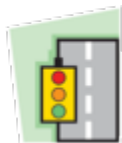
Ontario Traffic Inc.
TRAFFIC MONITORING SERVICES & PRODUCTS

Traffic Count Data

Intersection: Bayview Dr & Little Ave
Municipality: Barrie
Count Date: Oct 15, 2020

West Approach - Little Ave

Start Time	Cars					Trucks					Bicycles					Total Peds
	←	↑	→	↻	Total	←	↑	→	↻	Total	←	↑	→	↻	Total	
11:00	4	43	46	0	93	2	4	13	0	19	0	0	0	0	0	0
11:15	3	39	21	0	63	2	13	15	0	30	0	0	0	0	0	0
11:30	3	51	34	0	88	1	10	17	0	28	0	0	0	0	0	0
11:45	2	62	44	0	108	0	16	15	0	31	0	0	0	0	0	0
12:00	10	53	52	0	115	0	14	16	0	30	0	1	0	0	1	8
12:15	3	38	47	0	88	3	11	12	0	26	0	0	0	0	0	3
12:30	8	49	40	0	97	1	9	19	0	29	0	0	0	0	0	20
12:45	5	59	23	0	87	0	11	13	0	24	0	0	0	0	0	89
13:00	2	86	37	0	125	1	15	8	0	24	0	1	0	0	1	23
13:15	2	53	33	0	88	0	10	23	0	33	0	0	0	0	0	3
13:30	3	53	35	0	91	1	12	11	0	24	0	0	0	0	0	8
13:45	5	58	46	0	109	2	19	20	0	41	0	0	0	0	0	11
SUBTOTAL	50	644	458	0	1152	13	144	182	0	339	0	2	0	0	2	165



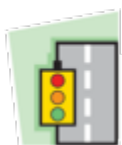
Ontario Traffic Inc.
TRAFFIC MONITORING SERVICES & PRODUCTS

Traffic Count Data

Intersection: Bayview Dr & Little Ave
Municipality: Barrie
Count Date: Oct 15, 2020

West Approach - Little Ave

Start Time	Cars					Trucks					Bicycles					Total Peds
	←	↑	→	↻	Total	←	↑	→	↻	Total	←	↑	→	↻	Total	
15:00	9	71	39	0	119	1	12	23	0	36	0	0	0	0	0	5
15:15	2	70	33	0	105	0	19	17	0	36	0	0	0	0	0	3
15:30	10	65	42	0	117	2	15	22	0	39	0	0	0	0	0	4
15:45	7	58	60	0	125	4	9	22	0	35	0	0	0	0	0	1
16:00	3	77	33	0	113	2	14	18	0	34	0	0	0	0	0	0
16:15	10	68	40	0	118	1	16	14	0	31	0	0	0	0	0	1
16:30	7	66	39	0	112	2	23	20	0	45	0	0	0	0	0	0
16:45	4	75	38	0	117	0	12	12	0	24	0	0	0	0	0	2
17:00	2	73	33	0	108	1	17	11	0	29	0	0	0	0	0	1
17:15	4	89	36	0	129	1	16	12	0	29	0	0	0	0	0	1
17:30	7	81	31	0	119	0	15	8	0	23	0	0	0	0	0	1
17:45	4	65	38	0	107	0	15	11	0	26	0	0	0	0	0	1
SUBTOTAL	69	858	462	0	1389	14	183	190	0	387	0	0	0	0	0	20
GRAND TOTAL	158	1841	1244	0	3243	37	426	514	0	977	0	2	0	0	2	259



Ontario Traffic Inc.

TRAFFIC MONITORING SERVICES & PRODUCTS

Peak Hour Diagram

Specified Period

From: 07:00:00
To: 09:00:00

One Hour Peak

From: 08:00:00
To: 09:00:00

Intersection: Bayview Dr & Little Ave
Site ID: 2001300034
Count Date: Oct 15, 2020

Weather conditions:

**** Unsignalized Intersection ****

Major Road: Bayview Dr runs N/S

North Approach

	Out	In	Total
	195	127	322
	45	66	111
	1	0	1
Totals	241	193	434

Bayview Dr

	0	1	0	0
	1	40	4	0
	36	128	31	0
Totals	37	169	35	0

East Approach

	Out	In	Total
	420	274	694
	64	65	129
	0	0	0
Totals	484	339	823

Little Ave

	Out	In	Total
	0	0	0
	0	4	25
	0	53	215
Totals	0	94	178

Peds: 10



Peds: 24

Peds: 15

Peds: 13

Little Ave

	Out	In	Total
	0	0	0
	52	40	12
	354	323	31
Totals	78	57	21

West Approach

	Out	In	Total
	418	458	876
	151	123	274
	0	0	0
Totals	569	581	1150

	Out	In	Total
	190	112	36
	99	62	28
	91	50	8
Totals	0	0	0

Bayview Dr

South Approach

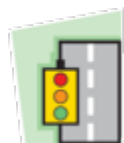
	Out	In	Total
	189	363	552
	149	155	304
	0	1	1
Totals	338	519	857

- Cars

- Trucks

- Bicycles

Comments



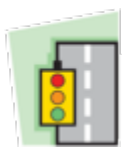
Ontario Traffic Inc.
TRAFFIC MONITORING SERVICES & PRODUCTS

Peak Hour Summary

Intersection: Bayview Dr & Little Ave
Count Date: Oct 15, 2020
Period: 07:00 - 09:00

Peak Hour Data (08:00 - 09:00)

Start Time	North Approach Bayview Dr						South Approach Bayview Dr						East Approach Little Ave						West Approach Little Ave						Total Vehicles
	←	↑	→	↻	Peds	Total	←	↑	→	↻	Peds	Total	←	↑	→	↻	Peds	Total	←	↑	→	↻	Peds	Total	
08:00	11	45	11	0	3	67	40	34	12	0	2	86	31	82	13	0	0	126	9	73	96	0	5	178	457
08:15	9	37	5	0	3	51	44	24	6	0	6	74	14	84	15	0	0	113	2	69	60	0	2	131	369
08:30	5	36	7	0	3	48	52	27	8	0	2	87	14	93	8	0	9	115	10	65	50	0	2	125	375
08:45	10	51	14	0	1	75	54	27	10	0	3	91	19	95	16	0	6	130	8	61	66	0	15	135	431
Grand Total	35	169	37	0	10	241	190	112	36	0	13	338	78	354	52	0	15	484	29	268	272	0	24	569	1632
Approach %	14.5	70.1	15.4	0	-	-	56.2	33.1	10.7	0	-	-	16.1	73.1	10.7	0	-	-	5.1	47.1	47.8	0	-	-	-
Totals %	2.1	10.4	2.3	0	-	14.8	11.6	6.9	2.2	0	-	20.7	4.8	21.7	3.2	0	-	29.7	1.8	16.4	16.7	0	-	34.9	-
PHF	0.8	0.83	0.66	0	-	0.8	0.88	0.82	0.75	0	-	0.93	0.63	0.93	0.81	0	-	0.93	0.73	0.92	0.71	0	-	0.8	0.89
Cars	31	128	36	0	-	195	99	62	28	0	-	189	57	323	40	0	-	420	25	215	178	0	-	418	1222
% Cars	88.6	75.7	97.3	0	-	80.9	52.1	55.4	77.8	0	-	55.9	73.1	91.2	76.9	0	-	86.8	86.2	80.2	65.4	0	-	73.5	74.9
Trucks	4	40	1	0	-	45	91	50	8	0	-	149	21	31	12	0	-	64	4	53	94	0	-	151	409
% Trucks	11.4	23.7	2.7	0	-	18.7	47.9	44.6	22.2	0	-	44.1	26.9	8.8	23.1	0	-	13.2	13.8	19.8	34.6	0	-	26.5	25.1
Bicycles	0	1	0	0	-	1	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	0	0	1
% Bicycles	0	0.6	0	0	-	0.4	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	0	0	0.1
Peds	-	-	-	-	10	-	-	-	-	-	13	-	-	-	-	-	15	-	-	-	-	-	24	-	62
% Peds	-	-	-	-	16.1	-	-	-	-	-	21	-	-	-	-	-	24.2	-	-	-	-	-	38.7	-	-



Ontario Traffic Inc.

TRAFFIC MONITORING SERVICES & PRODUCTS

Peak Hour Diagram

Specified Period

From: 11:00:00
To: 14:00:00

One Hour Peak

From: 12:30:00
To: 13:30:00

Intersection: Bayview Dr & Little Ave
Site ID: 2001300034
Count Date: Oct 15, 2020

Weather conditions:

**** Unsignalized Intersection ****

Major Road: Bayview Dr runs N/S

North Approach

	Out	In	Total
	261	222	483
	53	83	136
	0	4	4
Totals	314	309	623

Bayview Dr

	0	0	0	0
	7	42	4	0
	27	189	45	0
Totals	34	231	49	0

East Approach

	Out	In	Total
	413	374	787
	59	59	118
	1	1	2
Totals	473	434	907

Little Ave

				Totals
	0	0	0	0
	0	2	17	19
	1	45	247	293
	0	63	133	196

Peds: 110

Peds: 135



Peds: 157

Peds: 206

Little Ave

Totals			
	0	0	0
	67	59	7
	280	242	38
	126	112	14

West Approach

	Out	In	Total
	397	453	850
	110	121	231
	1	0	1
Totals	508	574	1082

Totals				
	184	146	82	0
	76	74	10	0
	0	3	0	0

Bayview Dr

South Approach

	Out	In	Total
	412	434	846
	160	119	279
	3	0	3
Totals	575	553	1128

- Cars

- Trucks

- Bicycles

Comments

Peak Hour Summary

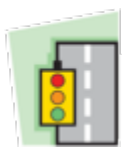
Intersection: Bayview Dr & Little Ave

Count Date: Oct 15, 2020

Period: 11:00 - 14:00

Peak Hour Data (12:30 - 13:30)

Start Time	North Approach Bayview Dr						South Approach Bayview Dr						East Approach Little Ave						West Approach Little Ave						Total Vehicles
	←	↑	→	↻	Peds	Total	←	↑	→	↻	Peds	Total	←	↑	→	↻	Peds	Total	←	↑	→	↻	Peds	Total	
12:30	7	67	10	0	12	84	59	56	14	0	41	129	48	67	14	0	11	129	9	58	59	0	20	126	468
12:45	18	55	14	0	70	87	59	51	45	0	109	155	37	75	22	0	92	134	5	70	36	0	89	111	487
13:00	14	46	4	0	20	64	65	63	21	0	33	149	18	79	16	0	36	113	3	102	45	0	23	150	476
13:15	10	63	6	0	8	79	77	53	12	0	23	142	23	59	15	0	18	97	2	63	56	0	3	121	439
Grand Total	49	231	34	0	110	314	260	223	92	0	206	575	126	280	67	0	157	473	19	293	196	0	135	508	1870
Approach %	15.6	73.6	10.8	0	-	-	45.2	38.8	16	0	-	-	26.6	59.2	14.2	0	-	-	3.7	57.7	38.6	0	-	-	-
Totals %	2.6	12.4	1.8	0	-	16.8	13.9	11.9	4.9	0	-	30.7	6.7	15	3.6	0	-	25.3	1	15.7	10.5	0	-	27.2	-
PHF	0.68	0.86	0.61	0	-	0.9	0.84	0.88	0.51	0	-	0.93	0.66	0.89	0.76	0	-	0.88	0.53	0.72	0.83	0	-	0.85	0.96
Cars	45	189	27	0	-	261	184	146	82	0	-	412	112	242	59	0	-	413	17	247	133	0	-	397	1483
% Cars	91.8	81.8	79.4	0	-	83.1	70.8	65.5	89.1	0	-	71.7	88.9	86.4	88.1	0	-	87.3	89.5	84.3	67.9	0	-	78.1	79.3
Trucks	4	42	7	0	-	53	76	74	10	0	-	160	14	38	7	0	-	59	2	45	63	0	-	110	382
% Trucks	8.2	18.2	20.6	0	-	16.9	29.2	33.2	10.9	0	-	27.8	11.1	13.6	10.4	0	-	12.5	10.5	15.4	32.1	0	-	21.7	20.4
Bicycles	0	0	0	0	-	0	0	3	0	0	-	3	0	0	1	0	-	1	0	1	0	0	-	1	5
% Bicycles	0	0	0	0	-	0	0	1.3	0	0	-	0.5	0	0	1.5	0	-	0.2	0	0.3	0	0	-	0.2	0.3
Peds	-	-	-	-	110	-	-	-	-	-	206	-	-	-	-	-	157	-	-	-	-	-	135	-	608
% Peds	-	-	-	-	18.1	-	-	-	-	-	33.9	-	-	-	-	-	25.8	-	-	-	-	-	22.2	-	-



Ontario Traffic Inc.

TRAFFIC MONITORING SERVICES & PRODUCTS

Peak Hour Diagram

Specified Period

From: 15:00:00
To: 18:00:00

One Hour Peak

From: 15:30:00
To: 16:30:00

Intersection: Bayview Dr & Little Ave
Site ID: 2001300034
Count Date: Oct 15, 2020

Weather conditions:

**** Unsignalized Intersection ****

Major Road: Bayview Dr runs N/S

North Approach

	Out	In	Total
	259	333	592
	53	86	139
	1	2	3
Totals	313	421	734

Bayview Dr

	0	1	0	0
	4	38	11	0
	35	162	62	0
Totals	39	201	73	0

East Approach

	Out	In	Total
	433	369	802
	56	76	132
	0	0	0
Totals	489	445	934

Little Ave

	Out	In	Total
	0	0	0
	0	9	30
	0	54	268
Totals	0	63	298

Peds: 16



Peds: 6

Peds: 16

Peds: 3

Little Ave

	Out	In	Total
	0	0	0
	59	56	115
	362	315	677
Totals	621	371	992

West Approach

	Out	In	Total
	473	627	1100
	139	141	280
	0	0	0
Totals	612	768	1380

	367	323	50	0
	277	247	39	0
	90	74	11	0
	0	2	0	0
Totals	734	646	100	0

Bayview Dr

South Approach

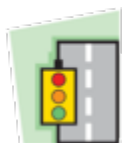
	Out	In	Total
	563	399	962
	175	120	295
	2	1	3
Totals	740	520	1260

- Cars

- Trucks

- Bicycles

Comments



Ontario Traffic Inc.
TRAFFIC MONITORING SERVICES & PRODUCTS

Peak Hour Summary

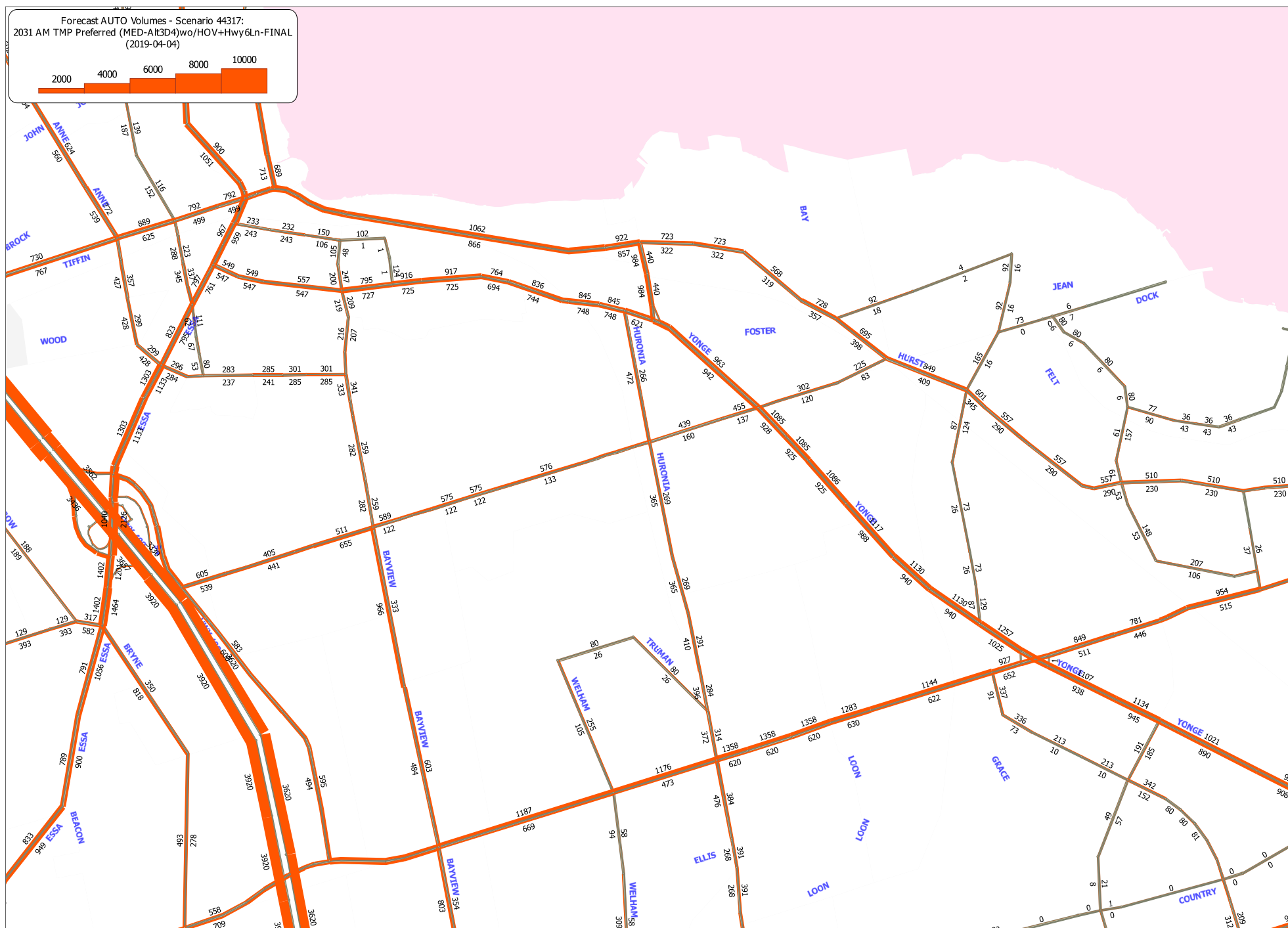
Intersection: Bayview Dr & Little Ave

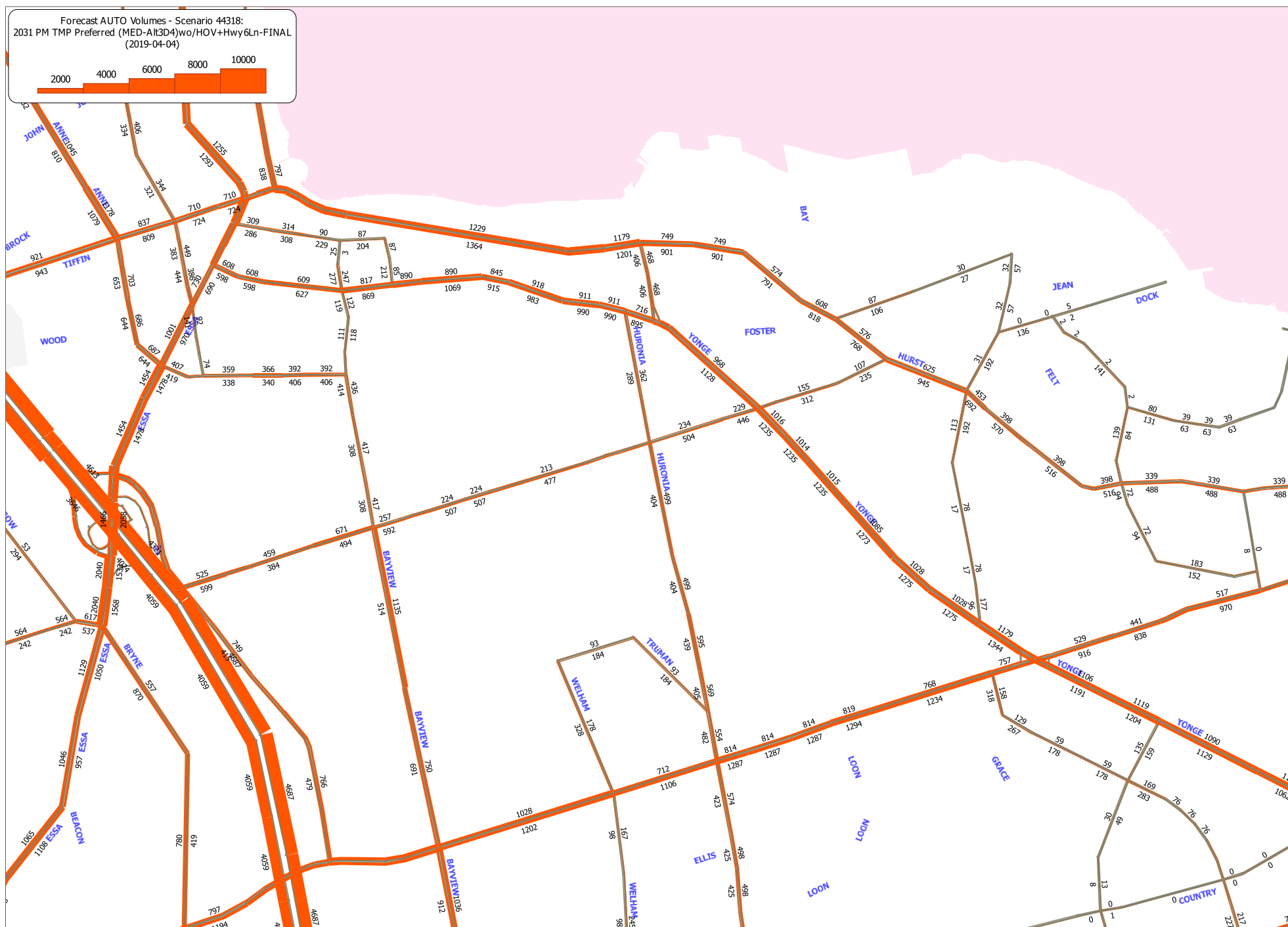
Count Date: Oct 15, 2020

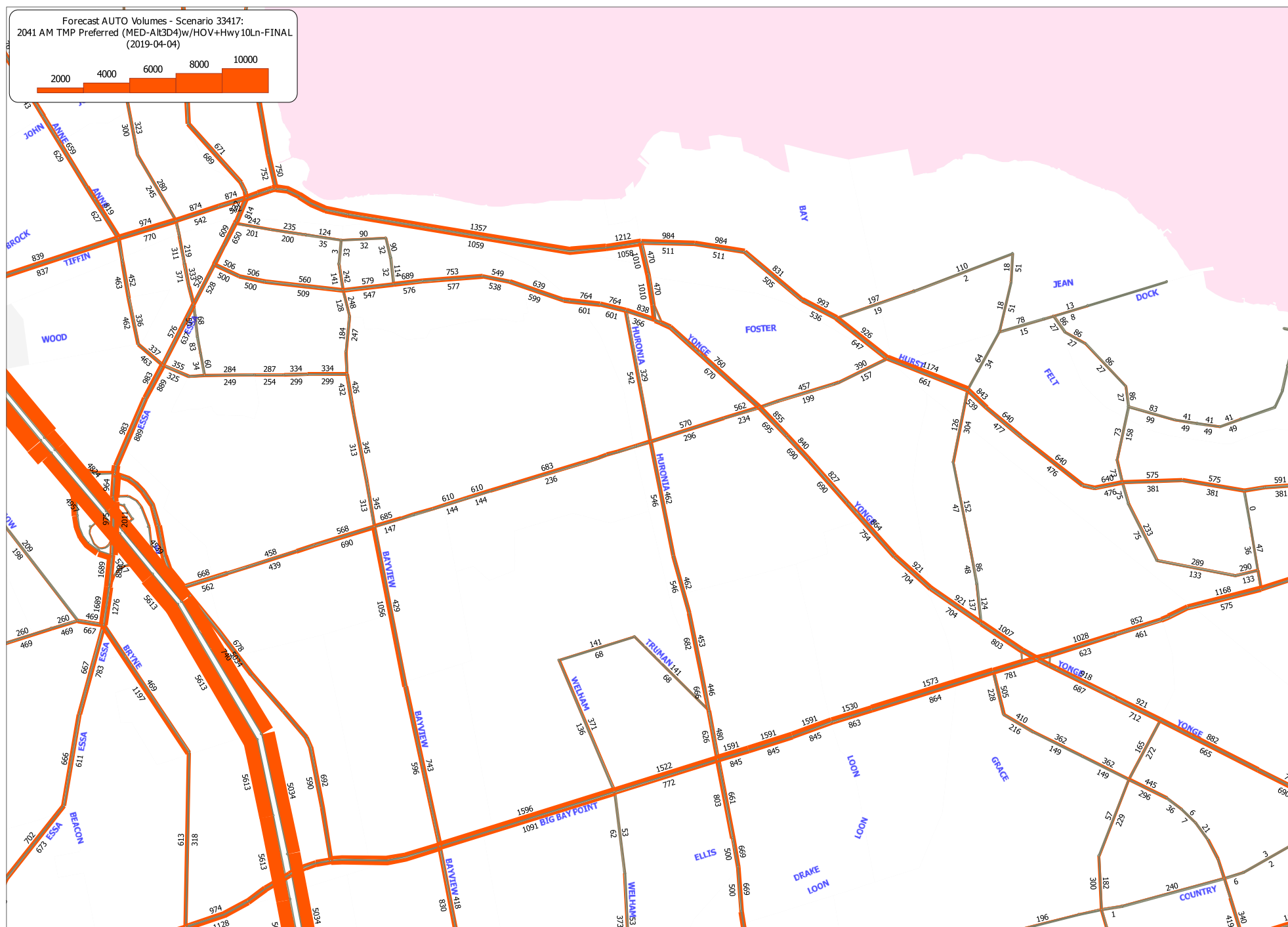
Period: 15:00 - 18:00

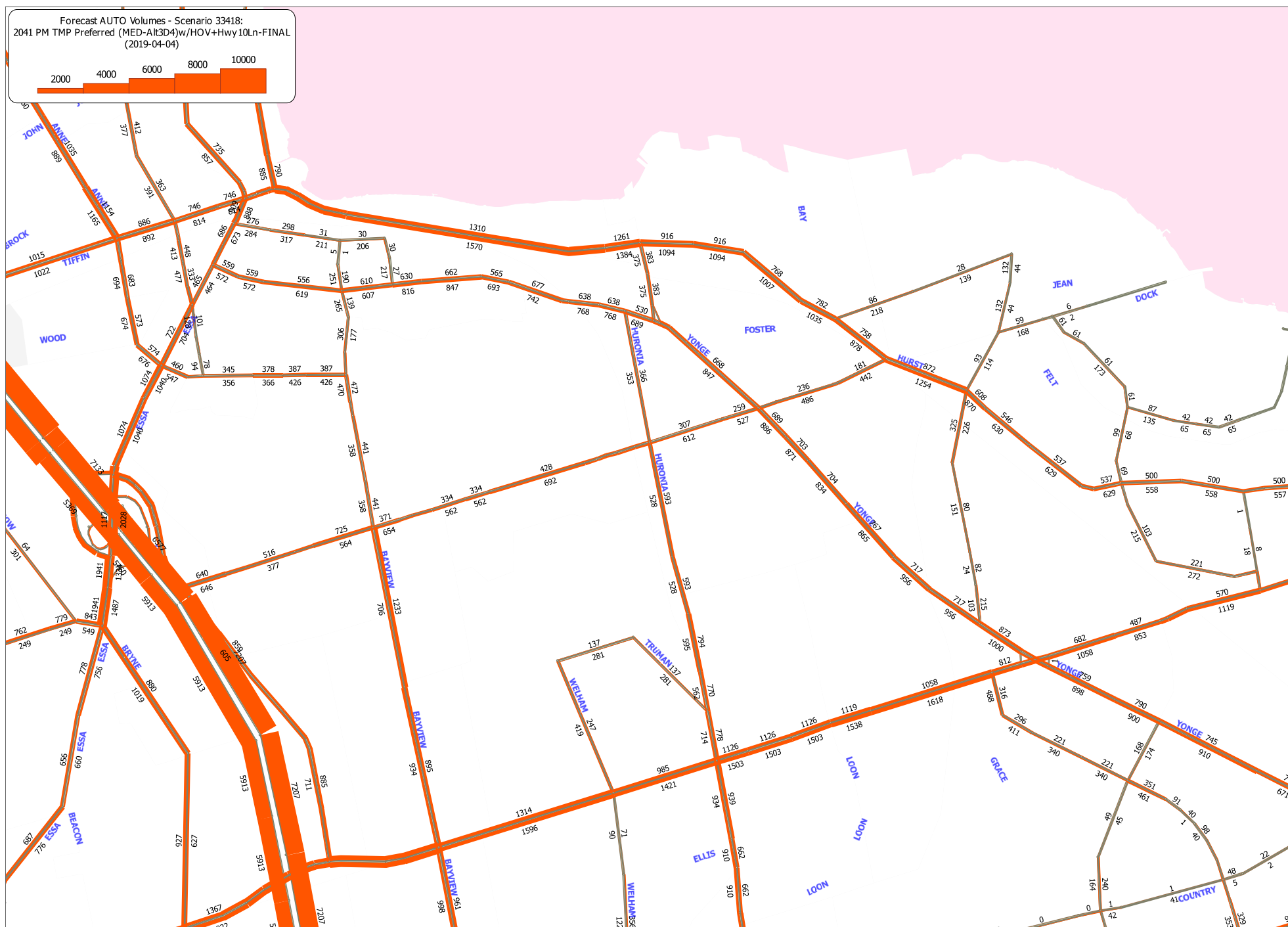
Peak Hour Data (15:30 - 16:30)

Start Time	North Approach Bayview Dr						South Approach Bayview Dr						East Approach Little Ave						West Approach Little Ave						Total Vehicles
	←	↑	→	↺	Peds	Total	←	↑	→	↺	Peds	Total	←	↑	→	↺	Peds	Total	←	↑	→	↺	Peds	Total	
15:30	25	53	7	0	6	85	96	84	15	0	1	195	16	80	15	0	8	111	12	80	64	0	4	156	547
15:45	15	41	8	0	5	64	92	76	14	0	0	182	23	96	16	0	0	135	11	67	82	0	1	160	541
16:00	16	48	12	0	3	76	98	82	10	0	0	190	15	94	14	0	3	123	5	91	51	0	0	147	536
16:15	17	59	12	0	2	88	81	81	11	0	2	173	14	92	14	0	5	120	11	84	54	0	1	149	530
Grand Total	73	201	39	0	16	313	367	323	50	0	3	740	68	362	59	0	16	489	39	322	251	0	6	612	2154
Approach %	23.3	64.2	12.5	0	-	-	49.6	43.6	6.8	0	-	-	13.9	74	12.1	0	-	-	6.4	52.6	41	0	-	-	-
Totals %	3.4	9.3	1.8	0	-	14.5	17	15	2.3	0	-	34.4	3.2	16.8	2.7	0	-	22.7	1.8	14.9	11.7	0	-	-	28.4
PHF	0.73	0.85	0.81	0	-	0.89	0.94	0.96	0.83	0	-	0.95	0.74	0.94	0.92	0	-	0.91	0.81	0.88	0.77	0	-	0.96	0.98
Cars	62	162	35	0	-	259	277	247	39	0	-	563	62	315	56	0	-	433	30	268	175	0	-	473	1728
% Cars	84.9	80.6	89.7	0	-	82.7	75.5	76.5	78	0	-	76.1	91.2	87	94.9	0	-	88.5	76.9	83.2	69.7	0	-	77.3	80.2
Trucks	11	38	4	0	-	53	90	74	11	0	-	175	6	47	3	0	-	56	9	54	76	0	-	139	423
% Trucks	15.1	18.9	10.3	0	-	16.9	24.5	22.9	22	0	-	23.6	8.8	13	5.1	0	-	11.5	23.1	16.8	30.3	0	-	22.7	19.6
Bicycles	0	1	0	0	-	1	0	2	0	0	-	2	0	0	0	0	-	0	0	0	0	0	-	0	3
% Bicycles	0	0.5	0	0	-	0.3	0	0.6	0	0	-	0.3	0	0	0	0	-	0	0	0	0	0	-	0	0.1
Peds	-	-	-	-	16	-	-	-	-	-	3	-	-	-	-	-	16	-	-	-	-	-	6	-	41
% Peds	-	-	-	-	39	-	-	-	-	-	7.3	-	-	-	-	-	39	-	-	-	-	-	14.6	-	-









Trans-Plan Transportation Inc.

Site ID Code:
Intersection Location:
Municipality:
Count Date:
Weather and Temperature:
Surveyor:

Bayview Drive & Big Bay Point Road
Barrie, Ontario
Wednesday March 27, 2019
Sunny, 8 Degrees
TP

AM	NORTH APPROACH										Total	EAST APPROACH										Total	SOUTH APPROACH										Total	WEST APPROACH										Total	Grand Total
	CAR			TRUCKS			CYCLISTS			Peds		CAR			TRUCKS			CYCLISTS			Peds		CAR			TRUCKS			CYCLISTS			Peds													
	L	T	R	L	T	R	L	T	R			L	T	R	L	T	R	L	T	R			L	T	R	L	T	R	L	T	R														
7:00	9	36	0	0	1	1	0	0	0	0	47	31	42	5	1	6	1	0	0	0	2	88	5	35	10	2	7	3	0	0	0	0	62	4	39	22	0	1	3	0	0	0	69	266	
7:15	7	43	0	1	3	0	0	0	0	0	54	39	77	3	3	5	0	0	0	0	2	129	5	29	5	4	1	1	0	0	0	0	45	3	40	23	1	2	0	0	0	1	70	298	
7:30	6	65	2	2	4	2	0	0	0	0	81	33	79	4	2	7	4	0	0	0	0	129	9	47	7	3	8	1	0	0	0	7	82	6	53	35	1	6	3	0	0	0	104	396	
7:45	20	60	2	4	10	3	0	1	0	0	100	36	91	17	2	5	1	0	0	0	1	153	7	68	9	1	3	1	0	0	0	7	96	14	82	31	0	5	1	0	0	0	133	482	
8:00	15	58	1	3	2	1	0	0	0	0	80	32	51	1	0	3	0	0	0	0	2	89	13	41	9	8	3	0	0	0	0	0	74	7	52	25	0	3	2	0	0	0	89	332	
8:15	15	45	0	1	8	2	0	0	0	0	71	38	76	10	0	5	0	0	0	0	2	131	13	55	9	2	7	0	0	0	0	0	86	10	64	35	0	3	4	0	0	0	3	119	407
8:30	11	53	1	4	2	2	0	0	0	0	73	35	86	0	2	13	0	0	0	0	4	140	13	39	14	2	2	1	0	0	0	0	71	3	52	26	2	2	3	0	0	0	1	89	373
8:45	17	52	1	2	7	9	0	0	0	0	88	39	81	1	0	8	0	0	0	0	1	130	13	53	12	5	6	0	0	0	0	0	89	5	66	40	1	5	4	0	0	0	1	122	429
MD																																													
11:00	12	66	4	1	3	0	0	0	0	0	86	48	48	1	1	6	0	0	0	0	4	108	30	48	25	4	4	0	0	0	0	0	111	2	41	34	0	2	5	0	0	0	0	84	389
11:15	19	57	2	0	2	0	0	0	0	0	80	35	70	6	0	5	0	0	0	0	0	116	15	71	20	2	4	2	0	0	0	0	114	3	42	27	0	5	0	0	0	0	0	77	387
11:30	29	74	3	1	4	0	0	0	0	0	111	36	82	4	1	6	0	0	0	0	0	129	27	86	28	3	2	0	0	0	0	0	146	9	35	23	0	2	3	0	0	0	2	74	460
11:45	31	79	3	0	6	1	0	0	0	1	121	49	76	0	0	6	0	0	0	0	2	133	27	58	29	3	5	0	0	0	0	0	122	8	54	30	0	2	5	0	0	0	4	103	479
12:00	20	55	3	6	13	0	0	1	0	5	103	54	73	7	0	6	0	0	0	0	2	142	26	66	28	4	4	0	0	0	0	0	128	5	58	28	3	2	2	0	0	0	10	108	481
12:15	16	73	2	0	12	0	0	0	0	0	103	45	77	4	1	4	0	0	0	0	0	131	27	64	29	3	1	2	0	0	0	0	126	6	50	31	2	6	5	0	0	0	2	102	462
12:30	18	88	6	0	4	1	0	0	0	0	117	56	75	0	1	6	0	0	0	0	0	138	24	72	28	7	7	0	0	0	0	1	139	2	45	27	1	3	6	0	0	0	5	89	483
12:45	12	80	1	2	3	2	0	0	0	0	100	45	68	2	1	6	0	0	0	0	0	122	26	87	29	2	5	1	0	0	0	0	150	3	46	35	3	2	8	0	0	0	2	99	471
13:00	17	69	3	0	3	1	0	0	0	0	93	57	62	9	1	4	0	0	0	0	0	133	36	76	36	1	2	0	0	0	0	1	152	8	37	35	1	4	2	0	0	0	2	89	467
13:15	15	59	2	0	1	2	0	0	0	0	79	33	67	0	1	7	0	0	0	0	1	109	40	65	37	5	2	0	0	0	0	0	149	3	48	32	0	5	4	0	0	0	2	94	431
13:30	29	61	5	1	6	0	0	0	0	0	102	49	75	3	1	4	0	0	0	0	0	132	22	68	22	3	4	0	0	0	0	0	119	3	46	31	1	4	4	0	0	0	2	91	444
13:45	12	54	1	1	4	0	0	0	0	0	72	43	52	5	1	3	0	0	0	0	0	104	22	68	36	4	9	2	0	0	0	0	141	1	50	24	0	10	7	0	0	0	6	98	415
PM																																													
15:00	27	76	2	2	2	0	0	0	0	0	109	30	64	1	3	3	0	0	0	0	0	101	30	72	39	1	9	0	0	0	0	0	151	6	46	31	0	6	5	0	0	0	2	96	457
15:15	22	55	0	1	6	0	0	0	0	0	84	38	68	2	2	2	1	0	0	0	0	113	29	48	26	2	7	0	0	2	0	0	114	1	42	27	3	8	1	0	0	0	2	84	395
15:30	23	69	8	1	6	4	0	0	0	0	111	36	129	7	2	0	1	0	0	0	0	175	42	74	33	4	5	2	0	0	0	0	160	4	46	28	2	8	7	0	0	0	1	96	542
15:45	25	71	5	2	5	0	0	0	0	0	108	38	79	12	0	2	0	0	0	0	1	132	38	70	31	4	5	0	0	0	0	3	151	7	66	30	1	6	4	0	0	0	3	117	508
16:00	43	81	8	2	3	2	0	0	0	1	140	34	140	1	1	5	0	0	0	0	2	183	35	77	26	4	3	1	0	0	0	0	146	4	67	35	2	6	4	0	0	0	1	119	588
16:15	21	67	4	1	2	1	0	0	0	0	96	44	93	5	1	4	0	0	0	0	0	147	41	84	39	3	5	2	0	0	0	1	175	4	78	27	3	4	5	0	0	0	1	122	540
16:30	42	82	6	4	3	1	0	2	0	0	140	44	121	0	1	4	0	0	0	0	0	170	59	75	27	0	6	0	0	1	0	0	168	2	69	35	4	3	2	0	0	0	0	115	593
16:45	28	54	6	1	3	0	0	0	0	0	92	35	104	6	0	2	1	0	0	0	0	148	68	97	35	1	5	0	0	0	0	0	206	5	73	26	0	2	3	0	0	0	0	109	555
17:00	31	88	8	2	4	1	0	0	0	0	134	48	134	3	2	1	0	0	0	0	0	188	55	79	37	0	4	0	0	0	0	0	175	5	84	22	2	1	1	0	0	0	0	115	612
17:15	25	68	8	0	4	1	0	0	0	0	106	46	116	9	0	1	0	0	0	0	2	174	51	88	39	2	3	0	0	0	0	0	183	1	70	29	1	2	1	0	0	0	0	104	567
17:30	25	57	6	0	4	0	0	0	0	0	92	47	54	21	0	1	0	0	0	0	0	123	37	82	39	2	3	0	0	0	0	0	163	1	63	19	0	1	1	0	0	0	0	85	463
17:45	36	66	0	0	1	1	0	0	0	0	104	39	74	19	1	0	0	0	0	0	0	133	31	57	37	0	2	1	0	0	0	0	128	1	74	19	1	4	2	0	0	0	0	101	466



Turning Movement Count Diagram

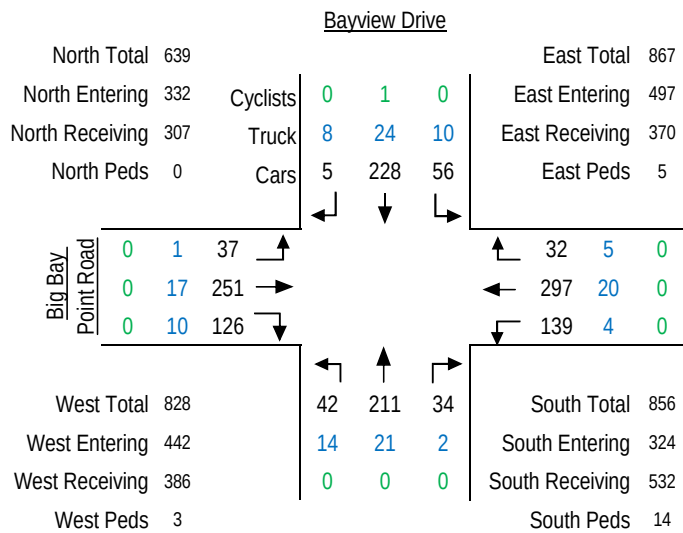
Intersection: Bayview Drive & Big Bay Point Road

Municipality: Barrie, Ontario

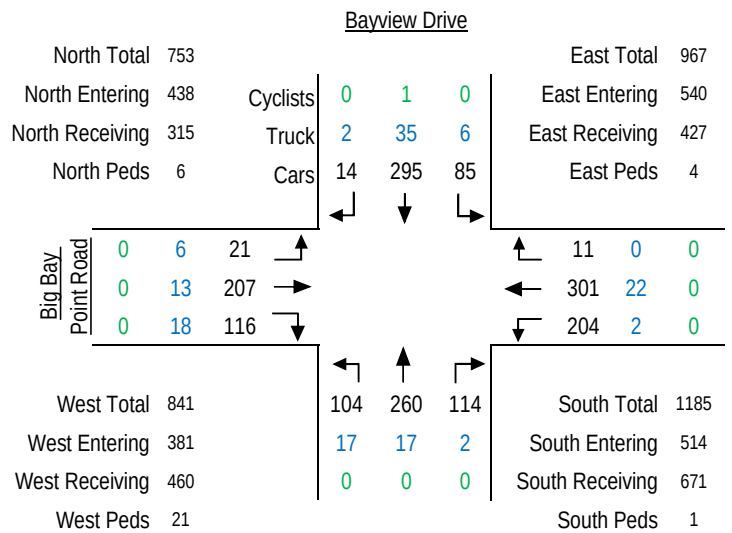
Intersection ID:

Date: Wednesday March 27, 2019

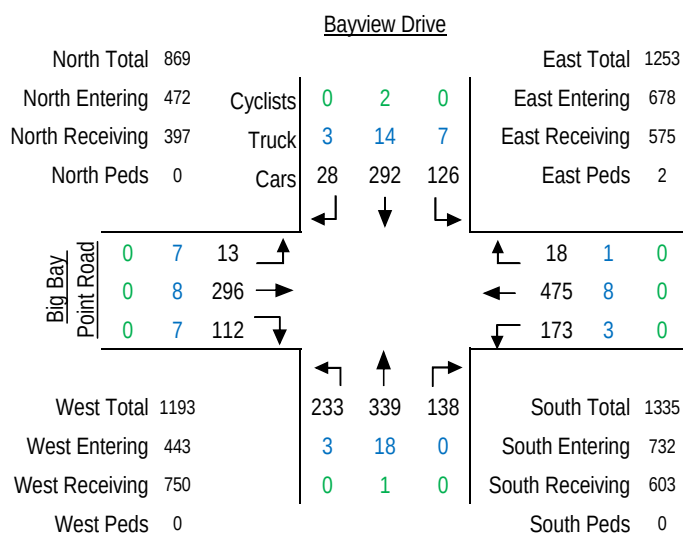
AM Peak Hour: 7:30 to 8:30



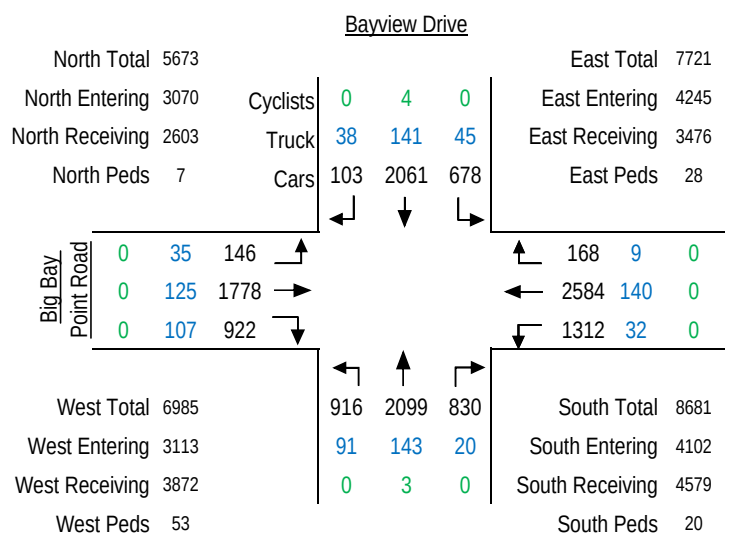
MD Peak Hour: 11:45 to 12:45



PM Peak Hour: 16:30 to 17:30



Total 8-Hour Count



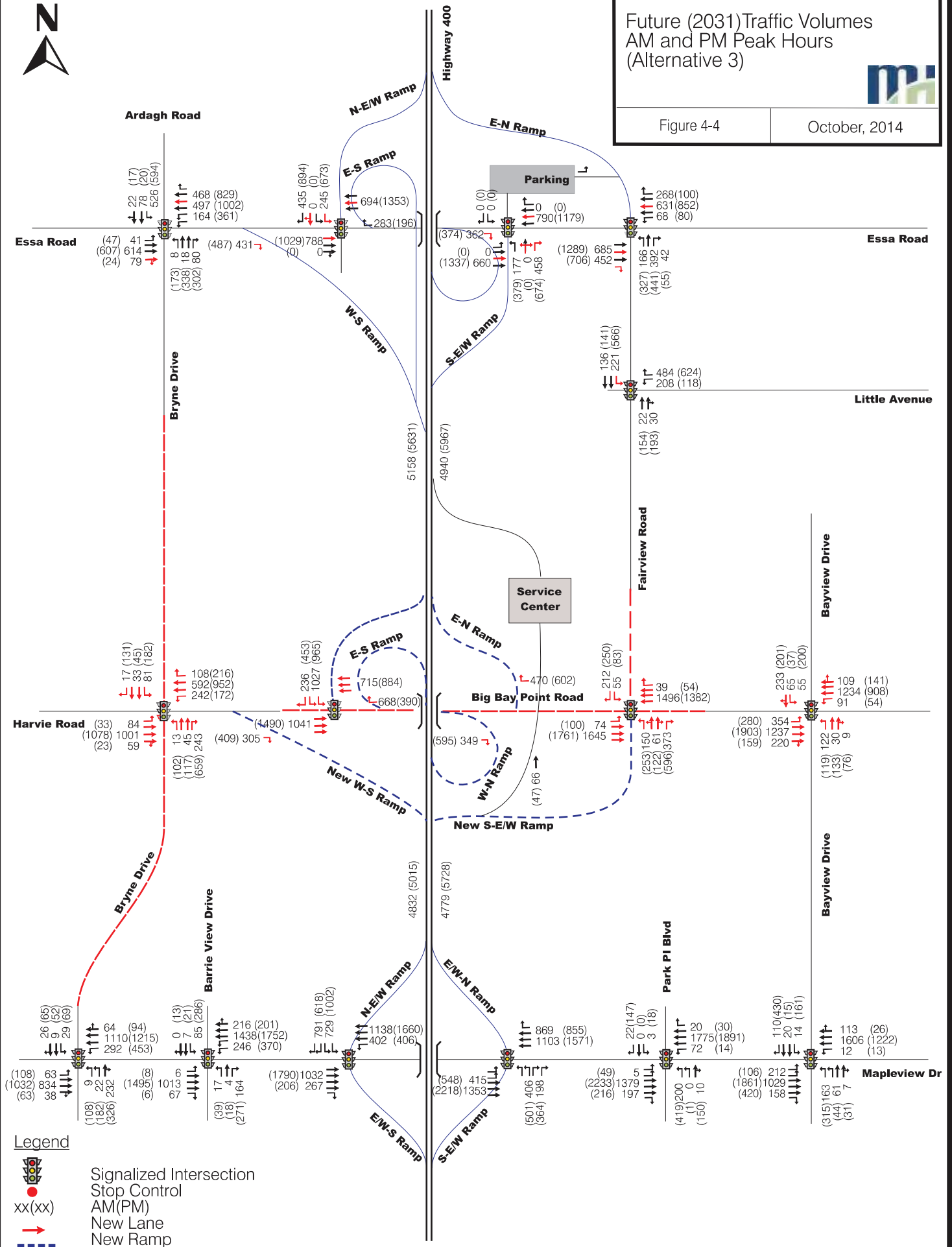


Future (2031) Traffic Volumes
AM and PM Peak Hours
(Alternative 3)



Figure 4-4

October, 2014



Accu-Traffic Inc.

Morning Peak Diagram	Specified Period From: 7:00:00 To: 9:00:00	One Hour Peak From: 7:45:00 To: 8:45:00
Municipality: Barrie Site #: 1402300094 Intersection: Little Ave & Bayview Dr TFR File #: 1 Count date: 21-Oct-14	Weather conditions: Person(s) who counted:	
** Signalized Intersection **	Major Road: Little Ave runs W/E	

North Leg Total: 406 North Entering: 263 North Peds: 13 Peds Cross: ⌂	<table style="margin: auto;"> <tr> <td>Cyclists</td><td>0</td><td>1</td><td>0</td><td>1</td></tr> <tr> <td>Trucks</td><td>1</td><td>4</td><td>0</td><td>5</td></tr> <tr> <td>Cars</td><td>21</td><td>195</td><td>41</td><td>257</td></tr> <tr> <td>Totals</td><td>22</td><td>200</td><td>41</td><td></td></tr> </table>	Cyclists	0	1	0	1	Trucks	1	4	0	5	Cars	21	195	41	257	Totals	22	200	41		 <table style="margin: auto;"> <tr> <td>Cyclists</td><td>6</td></tr> <tr> <td>Trucks</td><td>14</td></tr> <tr> <td>Cars</td><td>123</td></tr> <tr> <td>Totals</td><td>143</td></tr> </table>	Cyclists	6	Trucks	14	Cars	123	Totals	143	East Leg Total: 728 East Entering: 477 East Peds: 52 Peds Cross: ⌂
Cyclists	0	1	0	1																											
Trucks	1	4	0	5																											
Cars	21	195	41	257																											
Totals	22	200	41																												
Cyclists	6																														
Trucks	14																														
Cars	123																														
Totals	143																														

Cyclists	Trucks	Cars	Totals
4	14	384	402

Bayview Dr
 Little Ave

Cars	Trucks	Cyclists	Totals
16	1	0	17
307	4	3	314
144	0	2	146
467	5	5	

Cyclists	Trucks	Cars	Totals
3	4	36	43
5	3	145	153
1	2	201	204
9	9	382	

Bayview Dr
 Little Ave

Cars	Trucks	Cyclists	Totals
239	7	5	251

Peds Cross: ⌂ West Peds: 38 West Entering: 400 West Leg Total: 802	<table style="margin: auto;"> <tr> <td>Cars</td><td>540</td></tr> <tr> <td>Trucks</td><td>6</td></tr> <tr> <td>Cyclists</td><td>4</td></tr> <tr> <td>Totals</td><td>550</td></tr> </table>	Cars	540	Trucks	6	Cyclists	4	Totals	550	 <table style="margin: auto;"> <tr> <td>Cars</td><td>56</td><td>71</td><td>53</td><td>180</td></tr> <tr> <td>Trucks</td><td>9</td><td>9</td><td>4</td><td>22</td></tr> <tr> <td>Cyclists</td><td>1</td><td>3</td><td>0</td><td>4</td></tr> <tr> <td>Totals</td><td>66</td><td>83</td><td>57</td><td></td></tr> </table>	Cars	56	71	53	180	Trucks	9	9	4	22	Cyclists	1	3	0	4	Totals	66	83	57		Peds Cross: ⌂ South Peds: 23 South Entering: 206 South Leg Total: 756
Cars	540																														
Trucks	6																														
Cyclists	4																														
Totals	550																														
Cars	56	71	53	180																											
Trucks	9	9	4	22																											
Cyclists	1	3	0	4																											
Totals	66	83	57																												

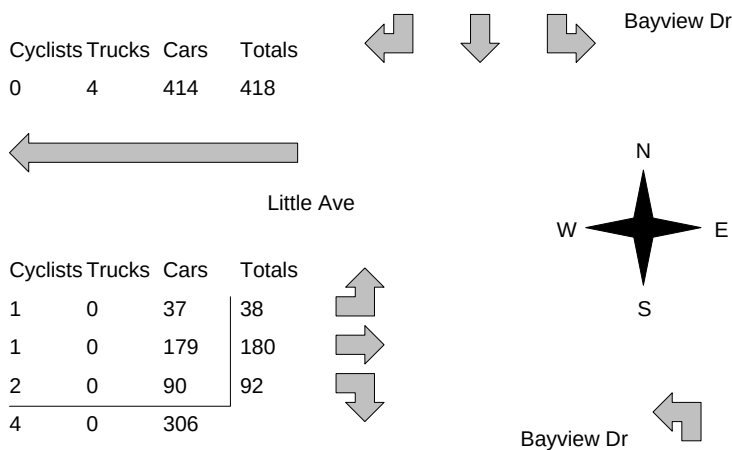
Comments

Accu-Traffic Inc.

Mid-day Peak Diagram	Specified Period From: 11:00:00 To: 14:00:00	One Hour Peak From: 11:15:00 To: 12:15:00
Municipality: Barrie Site #: 1402300094 Intersection: Little Ave & Bayview Dr TFR File #: 1 Count date: 21-Oct-14	Weather conditions: Person(s) who counted:	
** Signalized Intersection **	Major Road: Little Ave runs W/E	

North Leg Total: 415 North Entering: 193 North Peds: 69 Peds Cross: $\bowtie$	<table style="margin: auto;"> <tr> <td>Cyclists</td><td>0</td><td>1</td><td>0</td><td>1</td></tr> <tr> <td>Trucks</td><td>0</td><td>3</td><td>0</td><td>3</td></tr> <tr> <td>Cars</td><td>31</td><td>126</td><td>32</td><td>189</td></tr> <tr> <td>Totals</td><td>31</td><td>130</td><td>32</td><td></td></tr> </table>	Cyclists	0	1	0	1	Trucks	0	3	0	3	Cars	31	126	32	189	Totals	31	130	32		<table style="margin: auto;"> <tr> <td>Cyclists</td><td>4</td></tr> <tr> <td>Trucks</td><td>7</td></tr> <tr> <td>Cars</td><td>211</td></tr> <tr> <td>Totals</td><td>222</td></tr> </table>	Cyclists	4	Trucks	7	Cars	211	Totals	222	East Leg Total: 765 East Entering: 409 East Peds: 58 Peds Cross: $\bowtie$
Cyclists	0	1	0	1																											
Trucks	0	3	0	3																											
Cars	31	126	32	189																											
Totals	31	130	32																												
Cyclists	4																														
Trucks	7																														
Cars	211																														
Totals	222																														

Cyclists	Trucks	Cars	Totals
0	4	414	418



Bayview Dr

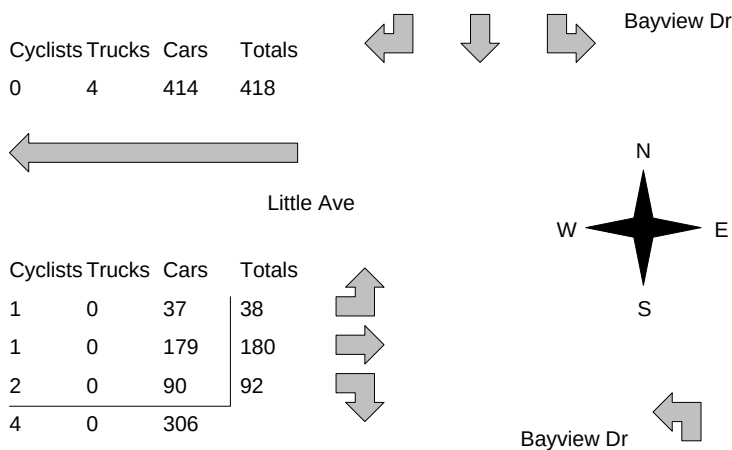
Little Ave

N
W — S — E

Bayview Dr

Cars	Trucks	Cyclists	Totals
22	2	0	24
258	0	0	258
127	0	0	127
407	2	0	

Cyclists	Trucks	Cars	Totals
1	0	37	38
1	0	179	180
2	0	90	92
4	0	306	



Bayview Dr

Little Ave

N
W — S — E

Bayview Dr

Cars	Trucks	Cyclists	Totals
355	0	1	356

Peds Cross: $\bowtie$ West Peds: 59 West Entering: 310 West Leg Total: 728	<table style="margin: auto;"> <tr> <td>Cars</td><td>343</td></tr> <tr> <td>Trucks</td><td>3</td></tr> <tr> <td>Cyclists</td><td>3</td></tr> <tr> <td>Totals</td><td>349</td></tr> </table>	Cars	343	Trucks	3	Cyclists	3	Totals	349	<table style="margin: auto;"> <tr> <td>Cars</td><td>125</td><td>152</td><td>144</td><td>421</td></tr> <tr> <td>Trucks</td><td>4</td><td>5</td><td>0</td><td>9</td></tr> <tr> <td>Cyclists</td><td>0</td><td>3</td><td>0</td><td>3</td></tr> <tr> <td>Totals</td><td>129</td><td>160</td><td>144</td><td></td></tr> </table>	Cars	125	152	144	421	Trucks	4	5	0	9	Cyclists	0	3	0	3	Totals	129	160	144		Peds Cross: $\bowtie$ South Peds: 29 South Entering: 433 South Leg Total: 782
Cars	343																														
Trucks	3																														
Cyclists	3																														
Totals	349																														
Cars	125	152	144	421																											
Trucks	4	5	0	9																											
Cyclists	0	3	0	3																											
Totals	129	160	144																												

Comments

Accu-Traffic Inc.

Afternoon Peak Diagram	Specified Period From: 15:00:00 To: 18:00:00	One Hour Peak From: 16:00:00 To: 17:00:00
Municipality: Barrie Site #: 1402300094 Intersection: Little Ave & Bayview Dr TFR File #: 1 Count date: 21-Oct-14	Weather conditions: Person(s) who counted:	
** Signalized Intersection **	Major Road: Little Ave runs W/E	

North Leg Total: 593 North Entering: 251 North Peds: 17 Peds Cross: $\bowtie$		East Leg Total: 789 East Entering: 343 East Peds: 21 Peds Cross: $\bowtie$
--	--	---

Cyclists 0 3 0 3 Trucks 0 3 0 3 Cars 28 135 82 245 Totals 28 141 82		Cyclists 5 Trucks 1 Cars 336 Totals 342
---	--	--

Cyclists	Trucks	Cars	Totals
2	4	466	472

Bayview Dr
 Little Ave

Cars	Trucks	Cyclists	Totals
42	0	0	42
236	2	2	240
60	0	1	61
338	2	3	

Cyclists	Trucks	Cars	Totals
2	0	20	22
1	4	274	279
3	1	59	63
6	5	353	

Bayview Dr
 Little Ave

Cars	Trucks	Cyclists	Totals
441	4	1	446

Peds Cross: $\bowtie$ West Peds: 13 West Entering: 364 West Leg Total: 836		Cars 254 Trucks 4 Cyclists 7 Totals 265		Cars 202 274 85 561 Trucks 2 1 0 3 Cyclists 0 3 0 3 Totals 204 278 85	Peds Cross: $\bowtie$ South Peds: 17 South Entering: 567 South Leg Total: 832
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Comments

Accu-Traffic Inc.

Total Count Diagram

Municipality: Barrie
Site #: 1402300094
Intersection: Little Ave & Bayview Dr
TFR File #: 1
Count date: 21-Oct-14

Weather conditions:
Person(s) who counted:

**** Signalized Intersection ****

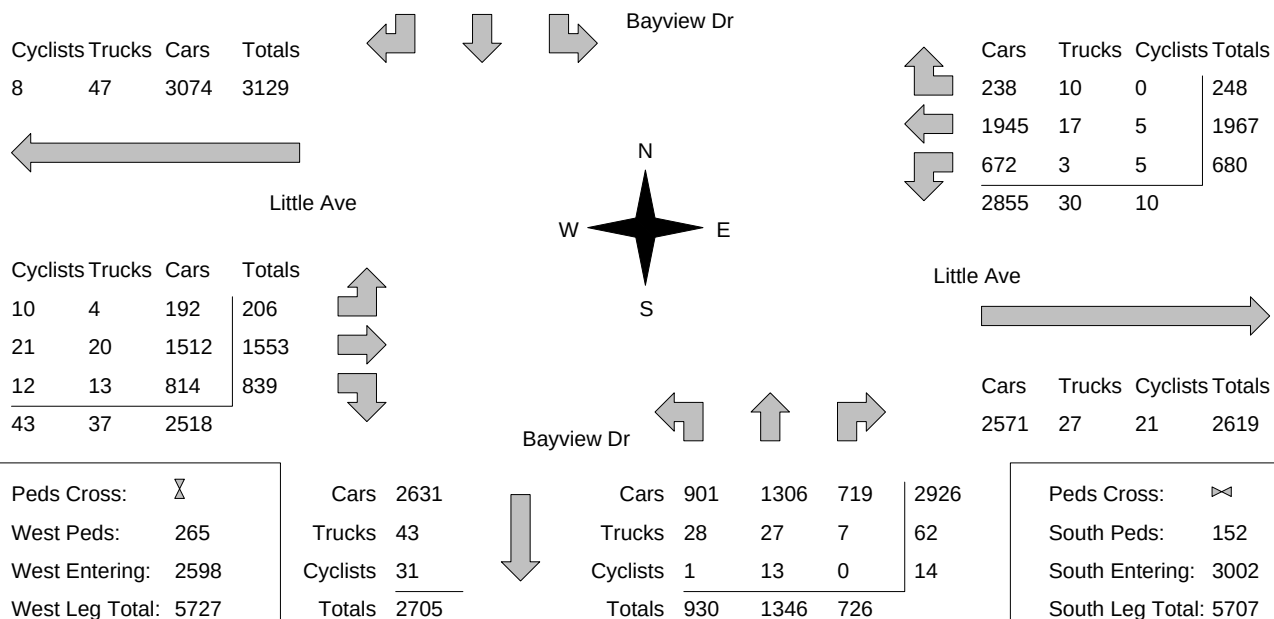
Major Road: Little Ave runs W/E

North Leg Total: 3558
 North Entering: 1758
 North Peds: 256
 Peds Cross: ⚡

	Cyclists	Trucks	Cars	Totals
North	2	2	228	232
East	14	27	1145	1186
South	0	0	340	340
West	16	29	1713	1758

Cyclists 23
 Trucks 41
 Cars 1736
 Totals 1800

East Leg Total: 5514
 East Entering: 2895
 East Peds: 255
 Peds Cross: ⚡



Comments

Accu-Traffic Inc.

Traffic Count Summary

Intersection	Little Ave & Bayview Dr					Count Date	21-Oct-14		Municipality	Barrie				
North Approach Totals						North/South Total Approaches	South Approach Totals							
Hour Ending	Includes Cars, Trucks, & Cyclists				Total Peds		Hour Ending	Includes Cars, Trucks, & Cyclists				Total Peds		
	Left	Thru	Right	Grand Total				Left	Thru	Right	Grand Total			
7:00:00	0	0	0	0	0	0	7:00:00	0	0	0	0	0		
8:00:00	27	206	17	250	21	392	8:00:00	39	60	43	142	13		
9:00:00	46	192	27	265	10	472	9:00:00	66	86	55	207	17		
11:00:00	0	0	0	0	0	0	11:00:00	0	0	0	0	0		
12:00:00	35	121	30	186	73	598	12:00:00	128	150	134	412	37		
13:00:00	18	141	34	193	31	555	13:00:00	98	163	101	362	14		
14:00:00	15	139	28	182	65	521	14:00:00	73	142	124	339	29		
15:00:00	0	0	0	0	0	0	15:00:00	0	0	0	0	0		
16:00:00	63	151	38	252	24	724	16:00:00	166	233	73	472	17		
17:00:00	82	141	28	251	17	818	17:00:00	204	278	85	567	17		
18:00:00	54	95	30	179	15	680	18:00:00	156	234	111	501	8		
Totals:						4760	930 1346 726 3002 152							
East Approach Totals						East/West Total Approaches	West Approach Totals							
Hour Ending	Includes Cars, Trucks, & Cyclists				Total Peds		Hour Ending	Includes Cars, Trucks, & Cyclists				Total Peds		
	Left	Thru	Right	Grand Total				Left	Thru	Right	Grand Total			
7:00:00	0	0	0	0	0	0	7:00:00	0	0	0	0	0		
8:00:00	94	269	19	382	7	681	8:00:00	16	101	182	299	13		
9:00:00	133	330	19	482	51	860	9:00:00	50	152	176	378	34		
11:00:00	0	0	0	0	0	0	11:00:00	0	0	0	0	0		
12:00:00	128	254	21	403	52	709	12:00:00	33	186	87	306	74		
13:00:00	91	213	29	333	32	633	13:00:00	28	174	98	300	23		
14:00:00	86	215	22	323	55	643	14:00:00	14	198	108	320	68		
15:00:00	0	0	0	0	0	0	15:00:00	0	0	0	0	0		
16:00:00	43	204	53	300	20	588	16:00:00	20	204	64	288	31		
17:00:00	61	240	42	343	21	707	17:00:00	22	279	63	364	13		
18:00:00	44	242	43	329	17	672	18:00:00	23	259	61	343	9		
Totals:						5493	206 1553 839 2598 265							
Calculated Values for Traffic Crossing Major Street														
Hours Ending:	8:00	9:00	12:00	13:00			14:00	16:00	17:00	18:00				
Crossing Values:	292	389	439	334			353	513	598	470				

Accu-Traffic Inc.

Count Date: 21-Oct-14 Site #: 1402300094

Interval Time	Passenger Cars - North Approach						Trucks - North Approach						Cyclists - North Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		North Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	2	2	40	40	6	6	0	0	0	0	0	0	0	0	0	0	0	0	4	4
7:30:00	10	8	96	56	7	1	0	0	0	0	0	0	0	0	1	1	0	0	10	6
7:45:00	16	6	157	61	14	7	0	0	0	0	0	0	0	0	1	0	0	0	18	8
8:00:00	27	11	204	47	16	2	0	0	1	1	1	1	0	0	1	0	0	0	21	3
8:15:00	35	8	261	57	22	6	0	0	3	2	1	0	0	0	1	0	0	0	28	7
8:30:00	45	10	312	51	28	6	0	0	3	0	1	0	0	0	2	1	0	0	30	2
8:45:00	57	12	352	40	35	7	0	0	4	1	1	0	0	0	2	0	0	0	31	1
9:00:00	73	16	391	39	43	8	0	0	4	0	1	0	0	0	3	1	0	0	31	0
9:15:00	73	0	391	0	43	0	0	0	4	0	1	0	0	0	3	0	0	0	31	0
11:00:00	73	0	391	0	43	0	0	0	4	0	1	0	0	0	3	0	0	0	31	0
11:15:00	82	9	408	17	49	6	0	0	4	0	1	0	0	0	3	0	0	0	45	14
11:30:00	89	7	438	30	57	8	0	0	4	0	1	0	0	0	4	1	0	0	65	20
11:45:00	95	6	474	36	64	7	0	0	7	3	1	0	0	0	4	0	0	0	91	26
12:00:00	108	13	508	34	73	9	0	0	7	0	1	0	0	0	4	0	0	0	104	13
12:15:00	114	6	534	26	80	7	0	0	7	0	1	0	0	0	4	0	0	0	114	10
12:30:00	116	2	557	23	84	4	0	0	9	2	1	0	0	0	4	0	1	1	120	6
12:45:00	120	4	607	50	94	10	0	0	9	0	1	0	0	0	5	1	1	0	125	5
13:00:00	126	6	645	38	106	12	0	0	10	1	1	0	0	0	5	0	1	0	135	10
13:15:00	130	4	675	30	115	9	0	0	13	3	1	0	0	0	7	2	1	0	151	16
13:30:00	136	6	706	31	127	12	0	0	14	1	1	0	0	0	8	1	1	0	174	23
13:45:00	139	3	740	34	130	3	0	0	14	0	1	0	0	0	8	0	1	0	190	16
14:00:00	141	2	777	37	134	4	0	0	14	0	1	0	0	0	8	0	1	0	200	10
14:15:00	141	0	777	0	134	0	0	0	14	0	1	0	0	0	8	0	1	0	200	0
15:00:00	141	0	777	0	134	0	0	0	14	0	1	0	0	0	8	0	1	0	200	0
15:15:00	155	14	808	31	144	10	0	0	17	3	1	0	0	0	8	0	1	0	205	5
15:30:00	173	18	844	36	160	16	0	0	17	0	2	1	0	0	8	0	1	0	212	7
15:45:00	190	17	884	40	166	6	0	0	19	2	2	0	0	0	8	0	1	0	221	9
16:00:00	204	14	918	34	170	4	0	0	22	3	2	0	0	0	10	2	2	1	224	3
16:15:00	230	26	963	45	173	3	0	0	22	0	2	0	0	0	10	0	2	0	227	3
16:30:00	252	22	992	29	182	9	0	0	23	1	2	0	0	0	12	2	2	0	233	6
16:45:00	270	18	1022	30	191	9	0	0	25	2	2	0	0	0	13	1	2	0	237	4
17:00:00	286	16	1053	31	198	7	0	0	25	0	2	0	0	0	13	0	2	0	241	4
17:15:00	298	12	1079	26	202	4	0	0	25	0	2	0	0	0	14	1	2	0	243	2
17:30:00	312	14	1105	26	206	4	0	0	26	1	2	0	0	0	14	0	2	0	246	3
17:45:00	328	16	1125	20	217	11	0	0	26	0	2	0	0	0	14	0	2	0	248	2
18:00:00	340	12	1145	20	228	11	0	0	27	1	2	0	0	0	14	0	2	0	256	8
18:15:00	340	0	1145	0	228	0	0	0	27	0	2	0	0	0	14	0	2	0	256	0
18:15:15	340	0	1145	0	228	0	0	0	27	0	2	0	0	0	14	0	2	0	256	0

Accu-Traffic Inc.

Count Date: 21-Oct-14 Site #: 1402300094

Interval Time	Passenger Cars - East Approach						Trucks - East Approach						Cyclists - East Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		East Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	6	6	50	50	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30:00	28	22	112	62	10	6	0	0	2	2	0	0	0	0	0	0	0	0	0	0
7:45:00	53	25	198	86	17	7	0	0	5	3	0	0	0	0	0	0	0	0	2	2
8:00:00	94	41	263	65	19	2	0	0	5	0	0	0	0	0	1	1	0	0	7	5
8:15:00	127	33	345	82	21	2	0	0	6	1	0	0	1	1	1	0	0	0	16	9
8:30:00	173	46	437	92	29	8	0	0	7	1	0	0	1	0	1	0	0	0	36	20
8:45:00	197	24	505	68	33	4	0	0	9	2	1	1	2	1	3	2	0	0	54	18
9:00:00	225	28	585	80	37	4	0	0	11	2	1	0	2	0	3	0	0	0	58	4
9:15:00	225	0	585	0	37	0	0	0	11	0	1	0	2	0	3	0	0	0	58	0
11:00:00	225	0	585	0	37	0	0	0	11	0	1	0	2	0	3	0	0	0	58	0
11:15:00	243	18	624	39	44	7	3	3	11	0	1	0	2	0	3	0	0	0	61	3
11:30:00	279	36	693	69	45	1	3	0	11	0	1	0	2	0	3	0	0	0	85	24
11:45:00	320	41	770	77	50	5	3	0	11	0	3	2	2	0	3	0	0	0	100	15
12:00:00	350	30	839	69	56	6	3	0	11	0	3	0	2	0	3	0	0	0	110	10
12:15:00	370	20	882	43	66	10	3	0	11	0	3	0	2	0	3	0	0	0	119	9
12:30:00	389	19	933	51	77	11	3	0	11	0	3	0	2	0	3	0	0	0	128	9
12:45:00	418	29	975	42	81	4	3	0	11	0	3	0	2	0	3	0	0	0	134	6
13:00:00	441	23	1052	77	84	3	3	0	11	0	4	1	2	0	3	0	0	0	142	8
13:15:00	455	14	1108	56	88	4	3	0	11	0	4	0	2	0	3	0	0	0	154	12
13:30:00	478	23	1155	47	94	6	3	0	12	1	4	0	2	0	3	0	0	0	169	15
13:45:00	497	19	1213	58	101	7	3	0	12	0	4	0	3	1	3	0	0	0	184	15
14:00:00	526	29	1266	53	106	5	3	0	12	0	4	0	3	0	3	0	0	0	197	13
14:15:00	526	0	1266	0	106	0	3	0	12	0	4	0	3	0	3	0	0	0	197	0
15:00:00	526	0	1266	0	106	0	3	0	12	0	4	0	3	0	3	0	0	0	197	0
15:15:00	539	13	1315	49	114	8	3	0	12	0	5	1	3	0	3	0	0	0	201	4
15:30:00	556	17	1349	34	127	13	3	0	13	1	5	0	3	0	3	0	0	0	212	11
15:45:00	562	6	1413	64	139	12	3	0	13	0	7	2	4	1	3	0	0	0	215	3
16:00:00	568	6	1467	54	153	14	3	0	15	2	10	3	4	0	3	0	0	0	217	2
16:15:00	583	15	1542	75	163	10	3	0	17	2	10	0	5	1	3	0	0	0	220	3
16:30:00	600	17	1595	53	172	9	3	0	17	0	10	0	5	0	4	1	0	0	225	5
16:45:00	613	13	1648	53	182	10	3	0	17	0	10	0	5	0	4	0	0	0	235	10
17:00:00	628	15	1703	55	195	13	3	0	17	0	10	0	5	0	5	1	0	0	238	3
17:15:00	639	11	1749	46	208	13	3	0	17	0	10	0	5	0	5	0	0	0	242	4
17:30:00	645	6	1818	69	220	12	3	0	17	0	10	0	5	0	5	0	0	0	247	5
17:45:00	658	13	1874	56	230	10	3	0	17	0	10	0	5	0	5	0	0	0	251	4
18:00:00	672	14	1945	71	238	8	3	0	17	0	10	0	5	0	5	0	0	0	255	4
18:15:00	672	0	1945	0	238	0	3	0	17	0	10	0	5	0	5	0	0	0	255	0
18:15:15	672	0	1945	0	238	0	3	0	17	0	10	0	5	0	5	0	0	0	255	0

Accu-Traffic Inc.

Count Date: 21-Oct-14 Site #: 1402300094

Interval Time	Passenger Cars - South Approach						Trucks - South Approach						Cyclists - South Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		South Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	8	8	10	10	6	6	0	0	1	1	0	0	0	0	0	0	0	0	0	0
7:30:00	19	11	21	11	16	10	0	0	1	0	0	0	0	0	0	0	0	0	2	2
7:45:00	27	8	36	15	28	12	0	0	3	2	0	0	0	0	0	0	0	0	5	3
8:00:00	36	9	52	16	39	11	3	3	6	3	4	4	0	0	2	2	0	0	13	8
8:15:00	54	18	64	12	55	16	3	0	8	2	4	0	0	0	3	1	0	0	22	9
8:30:00	71	17	83	19	71	16	5	2	9	1	4	0	0	0	3	0	0	0	25	3
8:45:00	83	12	107	24	81	10	9	4	12	3	4	0	1	1	3	0	0	0	28	3
9:00:00	95	12	131	24	94	13	9	0	12	0	4	0	1	0	3	0	0	0	30	2
9:15:00	95	0	131	0	94	0	9	0	12	0	4	0	1	0	3	0	0	0	30	0
11:00:00	95	0	131	0	94	0	9	0	12	0	4	0	1	0	3	0	0	0	30	0
11:15:00	120	25	158	27	122	28	12	3	12	0	4	0	1	0	3	0	0	0	40	10
11:30:00	138	18	206	48	145	23	14	2	14	2	4	0	1	0	3	0	0	0	52	12
11:45:00	180	42	236	30	196	51	14	0	15	1	4	0	1	0	5	2	0	0	63	11
12:00:00	216	36	274	38	228	32	16	2	17	2	4	0	1	0	5	0	0	0	67	4
12:15:00	245	29	310	36	266	38	16	0	17	0	4	0	1	0	6	1	0	0	69	2
12:30:00	265	20	354	44	289	23	16	0	17	0	4	0	1	0	6	0	0	0	70	1
12:45:00	288	23	385	31	307	18	16	0	17	0	4	0	1	0	6	0	0	0	75	5
13:00:00	314	26	436	51	329	22	16	0	17	0	4	0	1	0	6	0	0	0	81	6
13:15:00	329	15	466	30	358	29	19	3	18	1	4	0	1	0	6	0	0	0	93	12
13:30:00	347	18	497	31	387	29	19	0	21	3	7	3	1	0	7	1	0	0	101	8
13:45:00	362	15	531	34	417	30	20	1	21	0	7	0	1	0	7	0	0	0	106	5
14:00:00	381	19	573	42	450	33	22	2	21	0	7	0	1	0	7	0	0	0	110	4
14:15:00	381	0	573	0	450	0	22	0	21	0	7	0	1	0	7	0	0	0	110	0
15:00:00	381	0	573	0	450	0	22	0	21	0	7	0	1	0	7	0	0	0	110	0
15:15:00	421	40	622	49	463	13	22	0	21	0	7	0	1	0	7	0	0	0	113	3
15:30:00	451	30	660	38	480	17	22	0	24	3	7	0	1	0	9	2	0	0	122	9
15:45:00	502	51	741	81	502	22	22	0	24	0	7	0	1	0	10	1	0	0	124	2
16:00:00	545	43	799	58	523	21	24	2	25	1	7	0	1	0	10	0	0	0	127	3
16:15:00	605	60	857	58	548	25	24	0	26	1	7	0	1	0	10	0	0	0	129	2
16:30:00	647	42	931	74	567	19	24	0	26	0	7	0	1	0	11	1	0	0	134	5
16:45:00	703	56	1013	82	591	24	26	2	26	0	7	0	1	0	13	2	0	0	142	8
17:00:00	747	44	1073	60	608	17	26	0	26	0	7	0	1	0	13	0	0	0	144	2
17:15:00	797	50	1164	91	647	39	26	0	26	0	7	0	1	0	13	0	0	0	145	1
17:30:00	846	49	1229	65	670	23	28	2	27	1	7	0	1	0	13	0	0	0	150	5
17:45:00	880	34	1272	43	697	27	28	0	27	0	7	0	1	0	13	0	0	0	152	2
18:00:00	901	21	1306	34	719	22	28	0	27	0	7	0	1	0	13	0	0	0	152	0
18:15:00	901	0	1306	0	719	0	28	0	27	0	7	0	1	0	13	0	0	0	152	0
18:15:15	901	0	1306	0	719	0	28	0	27	0	7	0	1	0	13	0	0	0	152	0

Accu-Traffic Inc.

Count Date: 21-Oct-14 Site #: 1402300094

Interval Time	Passenger Cars - West Approach						Trucks - West Approach						Cyclists - West Approach						Pedestrians	
	Left		Thru		Right		Left		Thru		Right		Left		Thru		Right		West Cross	
	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr	Cum	Incr
7:00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15:00	2	2	24	24	26	26	0	0	0	0	0	0	0	0	0	0	0	0	2	2
7:30:00	4	2	45	21	70	44	0	0	0	0	0	0	0	0	0	0	0	0	3	1
7:45:00	8	4	68	23	121	51	0	0	0	0	0	0	0	0	1	1	1	1	5	2
8:00:00	11	3	95	27	181	60	4	4	3	3	0	0	1	1	3	2	1	0	13	8
8:15:00	22	11	122	27	232	51	4	0	3	0	2	2	1	0	4	1	1	0	22	9
8:30:00	32	10	173	51	280	48	4	0	3	0	2	0	3	2	4	0	1	0	34	12
8:45:00	44	12	213	40	322	42	4	0	3	0	2	0	3	0	6	2	2	1	43	9
9:00:00	58	14	244	31	353	31	4	0	3	0	3	1	4	1	6	0	2	0	47	4
9:15:00	58	0	244	0	353	0	4	0	3	0	3	0	4	0	6	0	2	0	47	0
11:00:00	58	0	244	0	353	0	4	0	3	0	3	0	4	0	6	0	2	0	47	0
11:15:00	62	4	288	44	370	17	4	0	3	0	3	0	4	0	7	1	2	0	68	21
11:30:00	70	8	343	55	388	18	4	0	3	0	3	0	4	0	7	0	2	0	84	16
11:45:00	79	9	380	37	418	30	4	0	3	0	3	0	5	1	7	0	3	1	108	24
12:00:00	90	11	428	48	439	21	4	0	3	0	3	0	5	0	8	1	3	0	121	13
12:15:00	99	9	467	39	460	21	4	0	3	0	3	0	5	0	8	0	4	1	127	6
12:30:00	104	5	519	52	482	22	4	0	3	0	3	0	5	0	10	2	4	0	129	2
12:45:00	110	6	559	40	498	16	4	0	3	0	4	1	5	0	12	2	4	0	134	5
13:00:00	118	8	598	39	535	37	4	0	3	0	4	0	5	0	12	0	4	0	144	10
13:15:00	120	2	643	45	554	19	4	0	3	0	4	0	5	0	12	0	5	1	164	20
13:30:00	127	7	702	59	578	24	4	0	7	4	4	0	7	2	13	1	5	0	187	23
13:45:00	128	1	757	55	613	35	4	0	10	3	4	0	7	0	13	0	6	1	204	17
14:00:00	130	2	788	31	641	28	4	0	10	0	4	0	7	0	13	0	6	0	212	8
14:15:00	130	0	788	0	641	0	4	0	10	0	4	0	7	0	13	0	6	0	212	0
15:00:00	130	0	788	0	641	0	4	0	10	0	4	0	7	0	13	0	6	0	212	0
15:15:00	134	4	821	33	660	19	4	0	10	0	4	0	7	0	13	0	6	0	217	5
15:30:00	138	4	864	43	676	16	4	0	10	0	4	0	7	0	15	2	6	0	231	14
15:45:00	145	7	919	55	693	17	4	0	11	1	4	0	7	0	18	3	7	1	240	9
16:00:00	149	4	982	63	704	11	4	0	14	3	4	0	8	1	19	1	7	0	243	3
16:15:00	151	2	1044	62	717	13	4	0	14	0	4	0	8	0	20	1	7	0	245	2
16:30:00	160	9	1117	73	732	15	4	0	14	0	4	0	8	0	20	0	7	0	249	4
16:45:00	167	7	1187	70	745	13	4	0	14	0	5	1	8	0	20	0	10	3	254	5
17:00:00	169	2	1256	69	763	18	4	0	18	4	5	0	10	2	20	0	10	0	256	2
17:15:00	174	5	1315	59	779	16	4	0	20	2	9	4	10	0	20	0	12	2	259	3
17:30:00	183	9	1384	69	792	13	4	0	20	0	13	4	10	0	20	0	12	0	261	2
17:45:00	187	4	1448	64	804	12	4	0	20	0	13	0	10	0	20	0	12	0	263	2
18:00:00	192	5	1512	64	814	10	4	0	20	0	13	0	10	0	21	1	12	0	265	2
18:15:00	192	0	1512	0	814	0	4	0	20	0	13	0	10	0	21	0	12	0	265	0
18:15:15	192	0	1512	0	814	0	4	0	20	0	13	0	10	0	21	0	12	0	265	0

Site ID Code:	
Intersection Location:	Little Avenue at Fairview Road
Municipality:	Barrie, Ontario
Count Date:	Wednesday September 14, 2016
Weather and Temperature:	Sunny
Surveyor:	TP

Turning Movement Count Diagram

Intersection: Little Avenue at Fairview Road

Municipality: Barrie, Ontario

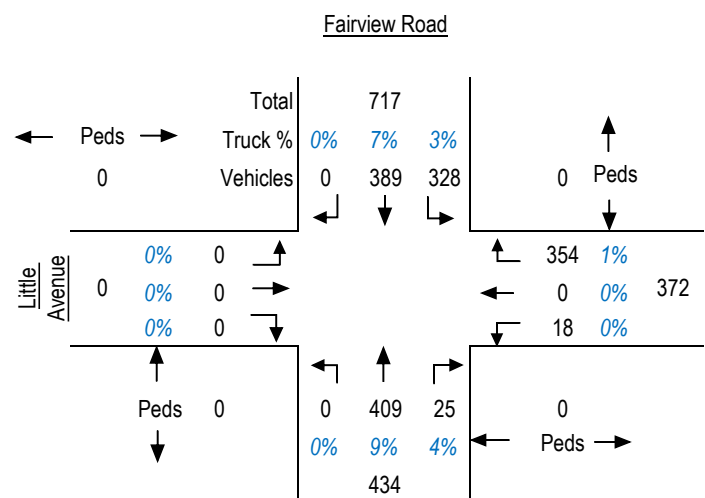
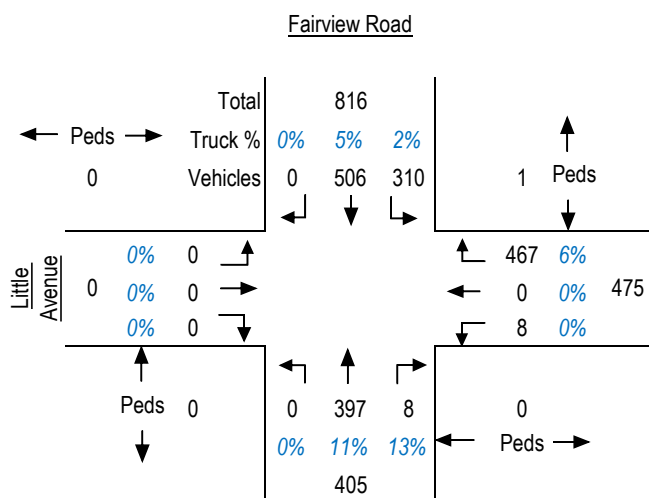
Intersection ID:

Date: Wednesday September 14, 2016



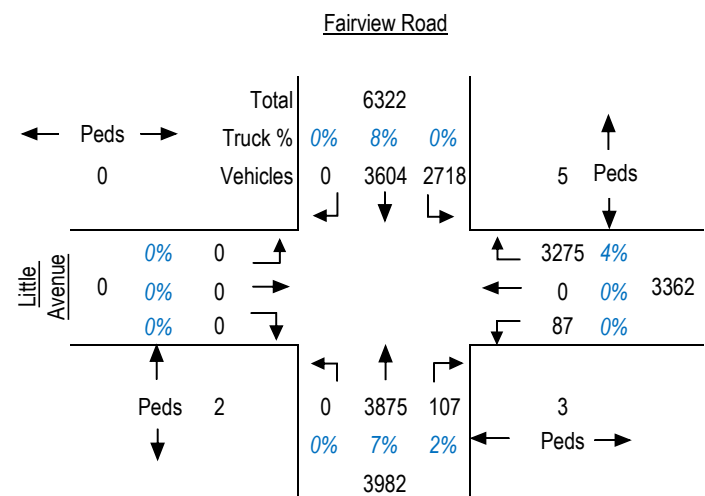
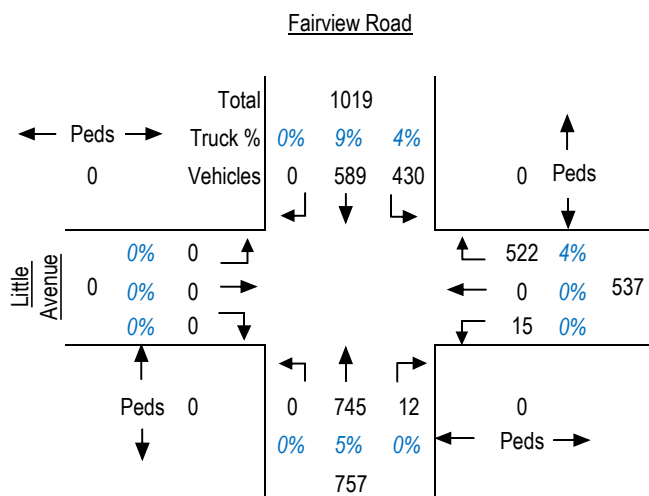
AM Peak Hour: 8:00 to 9:00

MD Peak Hour: 12:15 to 13:15



PM Peak Hour: 16:15 to 17:15

Total 8-Hour Count



May 26, 2021

File: T07-SI

Justin MacDonald
City of Barrie
70 Collier Street
Barrie, ON L4M 4T5

Dear Mr. MacDonald,

RE: **Traffic Signal Timings**

With respect to your inquiry on May 19, 2021, attached are the Signal Timings for the following intersections:

- Bayview and Big Bay Point
- Bayview and Little
- Big Bay Point and Fairview **(to be provided in the future)**
- Fairview and Little

The intersection operates as a semi-actuated signalized intersection; meaning the signals remain green on the major road until a vehicle is detected on the minor road or a pedestrian pushes the pushbutton to activate the pedestrian phase.

Vehicles on the minor road are detected by electromagnetic wires, which are embedded in the pavement on the side street near the stop bar. Vehicle presence only on the side street would result in a possible green time of between the minimum and maximum times, as noted, depending on vehicle demand detected.

Pedestrians must push the pedestrian push button to be detected. Pedestrian "Walk" and "Flashing Don't Walk" times on the side street, as noted, would be used in the event that the pedestrian push button was activated. Should there be no demand on the actuated phases; the signals would rest in a green indication for the main street.

If you require any further information please feel free to contact me at (705) 739-4220 ext. 4937.

Sincerely,

A handwritten signature in blue ink, appearing to read "Stephen Salis".

Stephen Salis, C.E.T.
Transportation Systems Technologist

Bayview Drive & Big Bay Point Road – FREE PLAN (NO COORDINATION)

		Vehicular Indications				Pedestrian Indications	
Roadway	Direction	Minimum Green	Maximum Green	Amber	All Red	Walk	Flashing Don't Walk
Bayview Drive (main street)	Advanced Northbound Left Turn	7	12	3	1	N/A	N/A
Bayview Drive (main street)	Advanced Southbound Left Turn	7	12	3	1	N/A	N/A
Bayview Drive (main street)	Northbound	12	35	4	2	9	15
Bayview Drive (main street)	Southbound	12	35	4	2	9	15
Big Bay Point Road (side street)	Advanced Eastbound Left Turn	7	12	3	1	N/A	N/A
Big Bay Point Road (side street)	Advanced Westbound Left Turn	7	12	3	1	N/A	N/A
Big Bay Point Road (side street)	Eastbound	35	35	4	2	20	15
Big Bay Point Road (side street)	Westbound	35	35	4	2	20	15

NOTE: All times are recorded in seconds, based on full demand.

Bayview Drive & Big Bay Point Road – AM WEEKDAY PLAN (7:00AM – 9:00AM)

Roadway	Direction	Split Timings (Including Amber + All Red)
Bayview Drive (main street)	Advanced Northbound Left Turn	11
Bayview Drive (main street)	Advanced Southbound Left Turn	11
Bayview Drive (main street)	Northbound	32
Bayview Drive (main street)	Southbound	32
Big Bay Point Road (side street)	Advanced Eastbound Left Turn	11
Big Bay Point Road (side street)	Advanced Westbound Left Turn	11
Big Bay Point Road (side street)	Eastbound	46
Big Bay Point Road (side street)	Westbound	46
Total Cycle Length		100

NOTE: All times are recorded in seconds, based on full demand.

Refer to the FREE PLAN for the Walk and Flashing Don't Walk Timings

Bayview Drive & Big Bay Point Road – NOON WEEKDAY PLAN (9:00AM – 3:30PM)

Roadway	Direction	Split Timings (Including Amber + All Red)
Bayview Drive (main street)	Advanced Northbound Left Turn	11
Bayview Drive (main street)	Advanced Southbound Left Turn	11
Bayview Drive (main street)	Northbound	33
Bayview Drive (main street)	Southbound	33
Big Bay Point Road (side street)	Advanced Eastbound Left Turn	11
Big Bay Point Road (side street)	Advanced Westbound Left Turn	11
Big Bay Point Road (side street)	Eastbound	45
Big Bay Point Road (side street)	Westbound	45
Total Cycle Length		100

NOTE: All times are recorded in seconds, based on full demand.

Refer to the FREE PLAN for the Walk and Flashing Don't Walk Timings

Bayview Drive & Big Bay Point Road – PM WEEKDAY PLAN (3:30PM – 8:00PM)

Roadway	Direction	Split Timings (Including Amber + All Red)
Bayview Drive (main street)	Advanced Northbound Left Turn	13
Bayview Drive (main street)	Advanced Southbound Left Turn	13
Bayview Drive (main street)	Northbound	32
Bayview Drive (main street)	Southbound	32
Big Bay Point Road (side street)	Advanced Eastbound Left Turn	11
Big Bay Point Road (side street)	Advanced Westbound Left Turn	11
Big Bay Point Road (side street)	Eastbound	44
Big Bay Point Road (side street)	Westbound	44
Total Cycle Length		100

NOTE: All times are recorded in seconds, based on full demand.

Refer to the FREE PLAN for the Walk and Flashing Don't Walk Timings

Bayview Drive & Little Avenue – FREE PLAN (NO COORDINATION)

Roadway	Direction	Vehicular Indications				Pedestrian Indications	
		Minimum Green	Maximum Green	Amber	All Red	Walk	Flashing Don't Walk
Little Avenue (main street)	Advanced Eastbound Left Turn	7	10	3	1	N/A	N/A
Little Avenue (main street)	Advanced Westbound Left Turn	7	10	3	1	N/A	N/A
Little Avenue (main street)	Eastbound	44	44	4	2	19	15
Little Avenue (main street)	Westbound	44	44	4	2	19	15
Bayview Drive (side street)	Advanced Northbound Left Turn	10	20	3	1	N/A	N/A
Bayview Drive (side street)	Advanced Southbound Left Turn	7	10	3	1	N/A	N/A
Bayview Drive (side street)	Northbound	10	44	4	2	8	11
Bayview Drive (side street)	Southbound	10	44	4	2	8	11

NOTE: All times are recorded in seconds, based on full demand.

Little Avenue & Fairview Road – FREE PLAN (NO COORDINATION)

Roadway	Direction	Vehicular Indications				Pedestrian Indications	
		Minimum Green	Maximum Green	Amber	All Red	Walk	Flashing Don't Walk
Fairview Road (main street)	Advanced Southbound Left Turn	7	20	3	1	N/A	N/A
Fairview Road (main street)	Northbound/ Southbound	34	34	4	2	22	12
Little Avenue (side street)	Westbound	10	30	4	2	9	12

NOTE: All times are recorded in seconds, based on full demand.

July 07, 2021

File: T07-SI

Justin MacDonald
City of Barrie
70 Collier Street
Barrie, ON L4M 4T5

Dear Mr. MacDonald,

RE: **Traffic Signal Timings**

With respect to your inquiry on July 5, 2021, attached are the Signal Timings for the following intersections:

- Big Bay Point Road & Fairview Road

Signalized Intersections within the City of Barrie function as a semi-actuated; meaning the signals remain green on the major road/ main street until a vehicle is detected on the minor road/ side street or a pedestrian pushes the pushbutton to activate the pedestrian phase.

Vehicles on the minor road/side street are detected by electromagnetic wires, which are embedded in the pavement on the side street near the painted stop bar. Vehicle presence only on the side street would result in a possible green time of between the minimum and maximum times, as noted, depending on vehicle demand detected.

Pedestrians must push the pedestrian push button to be detected. Pedestrian "Walk" and "Flashing Don't Walk" times on the side street, as noted, would be used in the event that the pedestrian push button was activated.

If you require any further information please feel free to contact me at (705) 739-4220 ext. 4937.

Sincerely,

A handwritten signature in blue ink that reads "Stephen Salis".

Stephen Salis, C.E.T.
Transportation Systems Technologist

Big Bay Point Road & Fairview Road– FREE PLAN (NO COORDINATION)

		Vehicular Indications				Pedestrian Indications	
Roadway	Direction	Minimum Green	Maximum Green	Amber	All Red	Walk	Flashing Don't Walk
Fairview Road (side street)	Northbound	N/A	N/A	N/A	N/A	7	25
Fairview Road (side street)	Southbound	10	40	4	2	7	25
Big Bay Point Road (main street)	Advanced Eastbound Left Turn	7	12	3	1	N/A	N/A
Big Bay Point Road (main street)	Eastbound	40	40	4	2	N/A	N/A
Big Bay Point Road (main street)	Westbound	40	40	4	2	7	33

NOTE: All times are recorded in seconds, based on full demand.

Appendix D

Background Developments

Date Plotted: March 3, 2021 Filename: P:\Y1\12\07\Graphics\CAD\Fig13-01-ESTR.dwg

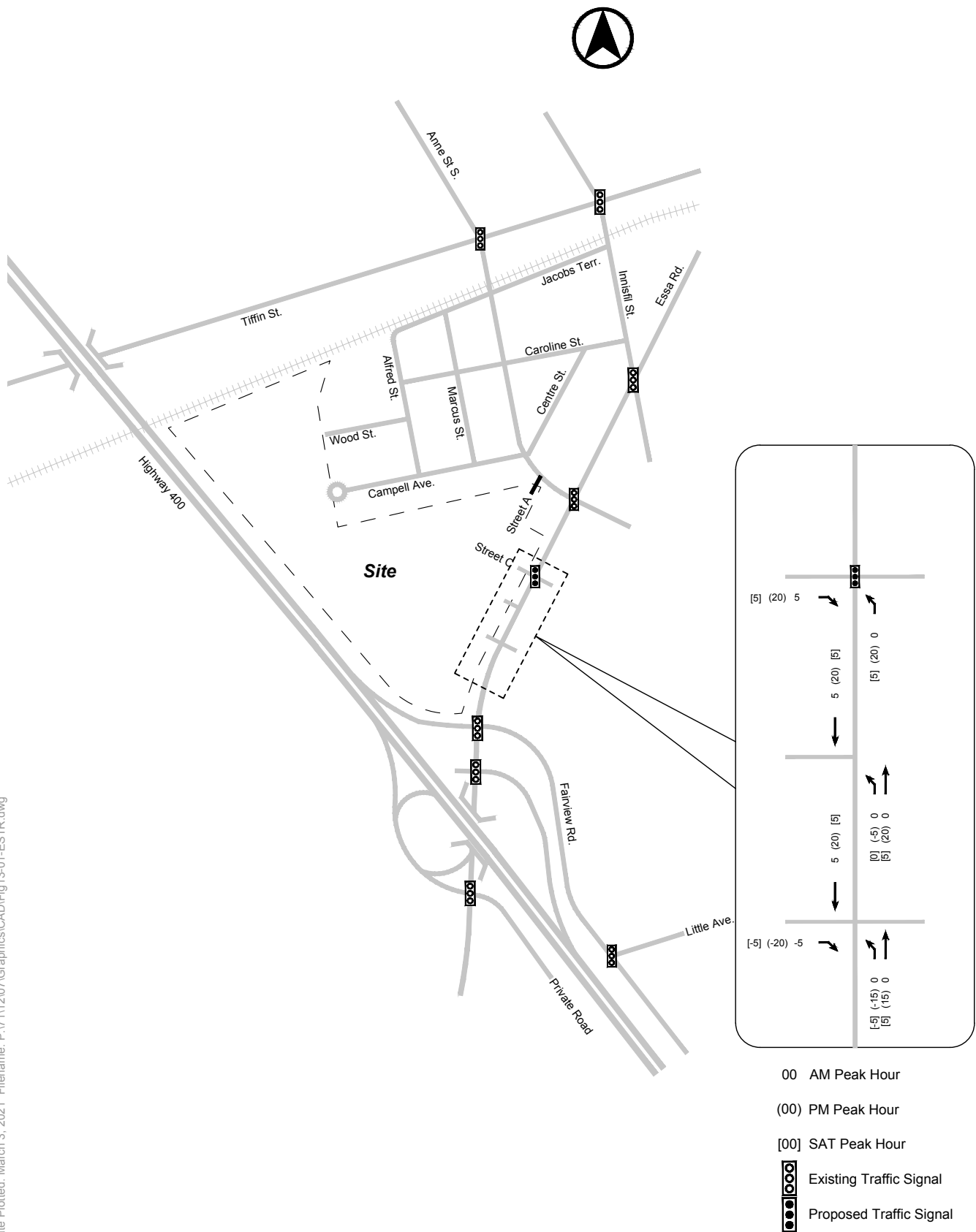


FIGURE 13 EXISTING SITE TRAFFIC VOLUMES REASSIGNMENT

Based on Table 2, the subject development is forecast to generate a total of 15 inbound and 27 outbound trips during the a.m. peak hour and 41 inbound and 32 outbound trips during the p.m. peak hour.

As shown in the site plan (Figure 1), all of the site-generated traffic will be serviced by an unsignalized driveway connecting onto Bayview Drive. The driveway is located near the northerly limit of the subject site and approximately 140 m north of the Mollard Court and Bayview Drive intersection.

The site-generated trips related to the proposed development were assigned on the road network based on the existing traffic patterns on Bayview Drive. During the a.m. peak period it is assumed that 60% of the vehicles will head southbound and 40% will travel northbound. The reverse flow has been assumed for the p.m. peak period. **Figure 4.**

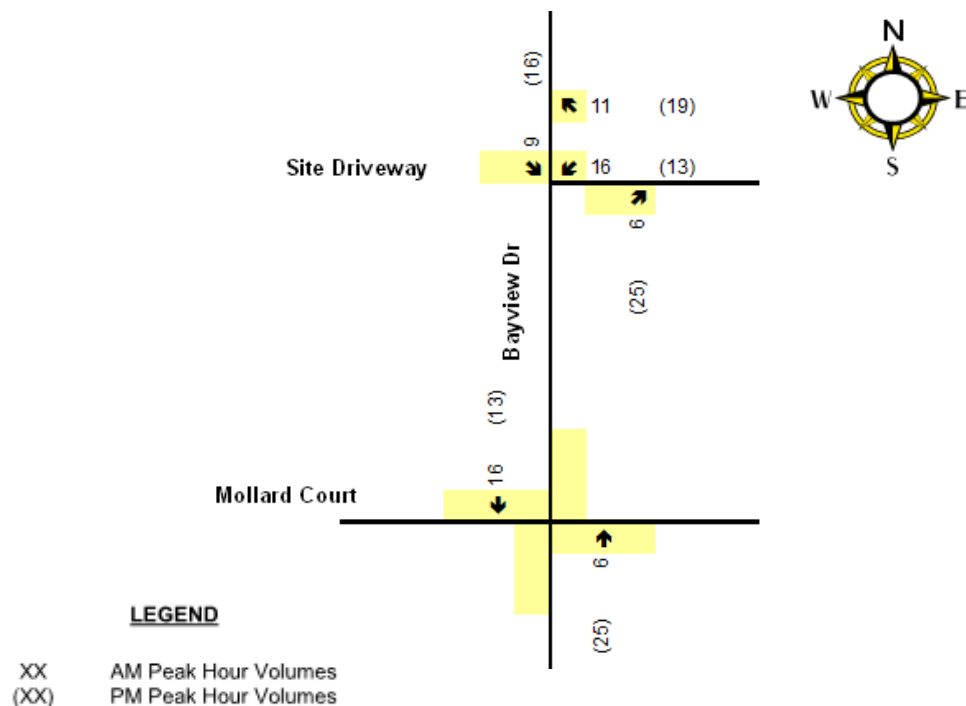


Figure 4: Site-Generated Traffic Volumes

Based on WSP's extensive experience with residential developments of this nature, the magnitude of the site-generated traffic will have minimal impact on the boundary road network. The modest trip generation by the proposed development would be distributed amongst the study road network. To verify this, the site-generated traffic volumes in Figure 4 has been superimposed onto the existing volumes in Figure 3. The resulting volumes are shown in **Figure 5.**

Appendix E

Synchro Reports

Lanes, Volumes, Timings

1: Bayview Drive & Big Bay Point Road

08/05/2021

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	39	267	134	148	316	34	44	225	36	59	243	5
Future Volume (vph)	39	267	134	148	316	34	44	225	36	59	243	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	105.0		55.0	105.0		55.0	105.0		55.0	105.0		55.0
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (m)	65.0			65.0			65.0			65.0		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1772	3444	1526	1772	3444	1432	1460	1762	1541	1587	3349	1008
Flt Permitted	0.523			0.544			0.584			0.337		
Satd. Flow (perm)	975	3444	1526	1015	3444	1432	898	1762	1541	563	3349	1008
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			154			120			185			120
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		485.6			536.9			234.9			173.0	
Travel Time (s)		35.0			38.7			16.9			12.5	
Peak Hour Factor	0.68	0.77	0.87	0.90	0.83	0.51	0.67	0.82	0.90	0.69	0.89	0.65
Heavy Vehicles (%)	3%	6%	7%	3%	6%	14%	25%	9%	6%	15%	9%	62%
Adj. Flow (vph)	57	347	154	164	381	67	66	274	40	86	273	8
Shared Lane Traffic (%)												
Lane Group Flow (vph)	57	347	154	164	381	67	66	274	40	86	273	8
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane		Yes						Yes			Yes	
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	6.1	30.5	6.1	6.1	30.5	6.1	6.1	30.5	6.1	6.1	30.5	6.1
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	6.1	1.8	6.1	6.1	1.8	6.1	6.1	1.8	6.1	6.1	1.8	6.1
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	NA	pm+pt	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	

Lanes, Volumes, Timings

1: Bayview Drive & Big Bay Point Road

08/05/2021

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2		2	6		6	8			4		4
Detector Phase	5	2	2	1	6	6	3	8		7	4	4
Switch Phase												
Minimum Initial (s)	7.0	35.0	35.0	7.0	35.0	35.0	7.0	12.0		7.0	12.0	12.0
Minimum Split (s)	11.0	41.0	41.0	11.0	41.0	41.0	11.0	28.5		11.0	30.0	30.0
Total Split (s)	11.0	46.0	46.0	11.0	46.0	46.0	11.0	32.0		11.0	32.0	32.0
Total Split (%)	11.0%	46.0%	46.0%	11.0%	46.0%	46.0%	11.0%	32.0%		11.0%	32.0%	32.0%
Maximum Green (s)	7.0	40.0	40.0	7.0	40.0	40.0	7.0	27.5		7.0	26.0	26.0
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0		3.0	4.0	4.0
All-Red Time (s)	1.0	2.0	2.0	1.0	2.0	2.0	1.0	0.5		1.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.0	6.0	6.0	4.0	6.0	6.0	4.0	4.5		4.0	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Recall Mode	Max	None	None	None	None	None	None	None		None	None	None
Walk Time (s)		20.0	20.0		20.0	20.0		9.0			9.0	9.0
Flash Dont Walk (s)		15.0	15.0		15.0	15.0		15.0			15.0	15.0
Pedestrian Calls (#/hr)		0	0		0	0		0			0	0
Act Effect Green (s)	44.4	35.3	35.3	44.4	35.3	35.3	24.6	18.7	0.0	24.6	17.2	17.2
Actuated g/C Ratio	0.53	0.42	0.42	0.53	0.42	0.42	0.29	0.22	0.00	0.29	0.20	0.20
v/c Ratio	0.10	0.24	0.21	0.27	0.26	0.10	0.21	0.70	0.22	0.34	0.40	0.03
Control Delay	10.6	17.8	4.2	11.7	18.1	1.0	20.5	40.9	2.7	22.8	31.0	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	10.6	17.8	4.2	11.7	18.1	1.0	20.5	40.9	2.7	22.8	31.0	0.2
LOS	B	B	A	B	B	A	C	D	A	C	C	A
Approach Delay		13.3			14.5			33.3			28.4	
Approach LOS		B			B			C			C	

Intersection Summary

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 84.2

Natural Cycle: 95

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.70

Intersection Signal Delay: 20.5

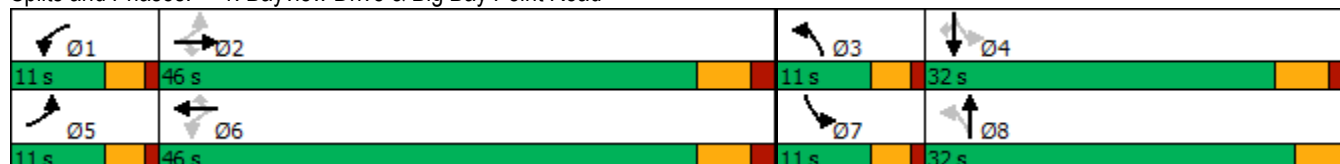
Intersection LOS: C

Intersection Capacity Utilization 70.5%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 1: Bayview Drive & Big Bay Point Road



Queues

1: Bayview Drive & Big Bay Point Road

08/05/2021

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	57	347	154	164	381	67	66	274	40	86	273	8
v/c Ratio	0.10	0.24	0.21	0.27	0.26	0.10	0.21	0.70	0.22	0.34	0.40	0.03
Control Delay	10.6	17.8	4.2	11.7	18.1	1.0	20.5	40.9	2.7	22.8	31.0	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	10.6	17.8	4.2	11.7	18.1	1.0	20.5	40.9	2.7	22.8	31.0	0.2
Queue Length 50th (m)	4.0	19.2	0.0	12.1	21.3	0.0	7.3	42.1	0.0	9.6	20.8	0.0
Queue Length 95th (m)	8.0	27.4	10.6	26.2	32.6	0.0	11.4	59.4	0.0	14.3	31.1	0.0
Internal Link Dist (m)	461.6			512.9			210.9			149.0		
Turn Bay Length (m)	105.0		55.0	105.0		55.0	105.0		55.0	105.0		55.0
Base Capacity (vph)	581	1651	812	598	1651	748	309	580	185	250	1043	396
Starvation Cap Reductn	0	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	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.10	0.21	0.19	0.27	0.23	0.09	0.21	0.47	0.22	0.34	0.26	0.02
Intersection Summary												

HCM Signalized Intersection Capacity Analysis

1: Bayview Drive & Big Bay Point Road

08/05/2021

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	39	267	134	148	316	34	44	225	36	59	243	5
Future Volume (vph)	39	267	134	148	316	34	44	225	36	59	243	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	6.0	6.0	4.0	6.0	6.0	4.0	4.5	4.0	4.0	6.0	6.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1772	3444	1526	1772	3444	1432	1460	1762	1541	1587	3349	1008
Flt Permitted	0.52	1.00	1.00	0.54	1.00	1.00	0.58	1.00	1.00	0.34	1.00	1.00
Satd. Flow (perm)	975	3444	1526	1014	3444	1432	897	1762	1541	562	3349	1008
Peak-hour factor, PHF	0.68	0.77	0.87	0.90	0.83	0.51	0.67	0.82	0.90	0.69	0.89	0.65
Adj. Flow (vph)	57	347	154	164	381	67	66	274	40	86	273	8
RTOR Reduction (vph)	0	0	90	0	0	39	0	0	40	0	0	6
Lane Group Flow (vph)	57	347	64	164	381	28	66	274	0	86	273	2
Heavy Vehicles (%)	3%	6%	7%	3%	6%	14%	25%	9%	6%	15%	9%	62%
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	NA	pm+pt	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2		2	6		6	8			4		4
Actuated Green, G (s)	42.4	35.3	35.3	42.4	35.3	35.3	24.1	18.7	0.0	22.6	17.2	17.2
Effective Green, g (s)	42.4	35.3	35.3	42.4	35.3	35.3	24.1	18.7	0.0	22.6	17.2	17.2
Actuated g/C Ratio	0.50	0.42	0.42	0.50	0.42	0.42	0.28	0.22	0.00	0.27	0.20	0.20
Clearance Time (s)	4.0	6.0	6.0	4.0	6.0	6.0	4.0	4.5		4.0	6.0	6.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	552	1430	633	569	1430	594	290	387	0	214	677	203
v/s Ratio Prot	0.01	0.10		c0.02	0.11		0.01	c0.16		c0.03	0.08	
v/s Ratio Perm	0.04		0.04	c0.12		0.02	0.05			0.08		0.00
v/c Ratio	0.10	0.24	0.10	0.29	0.27	0.05	0.23	0.71	0.00	0.40	0.40	0.01
Uniform Delay, d1	11.0	16.2	15.2	11.8	16.3	14.8	22.8	30.6	42.5	24.6	29.4	27.1
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.1	0.1	0.1	0.3	0.1	0.0	0.4	5.8	0.0	1.2	0.4	0.0
Delay (s)	11.1	16.2	15.2	12.0	16.4	14.9	23.3	36.5	42.5	25.8	29.8	27.1
Level of Service	B	B	B	B	B	B	C	D	D	C	C	C
Approach Delay (s)		15.4			15.1			34.8			28.8	
Approach LOS		B			B			C			C	
Intersection Summary												
HCM 2000 Control Delay			21.7			HCM 2000 Level of Service				C		
HCM 2000 Volume to Capacity ratio			0.42									
Actuated Cycle Length (s)			85.0			Sum of lost time (s)			20.0			
Intersection Capacity Utilization			70.5%			ICU Level of Service			C			
Analysis Period (min)			15									
c Critical Lane Group												

Lanes, Volumes, Timings

2: Bayview Drive & Courier Entrance

08/05/2021



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	22	50	32	267	308	43
Future Volume (vph)	22	50	32	267	308	43
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.910				0.980	
Flt Protected	0.984			0.995		
Satd. Flow (prot)	1168	0	0	1764	1763	0
Flt Permitted	0.984			0.995		
Satd. Flow (perm)	1168	0	0	1764	1763	0
Link Speed (k/h)	50			50	50	
Link Distance (m)	188.0			97.3	1137.3	
Travel Time (s)	13.5			7.0	81.9	
Peak Hour Factor	0.39	0.45	0.89	0.92	0.80	0.63
Heavy Vehicles (%)	50%	46%	3%	9%	8%	0%
Adj. Flow (vph)	56	111	36	290	385	68
Shared Lane Traffic (%)						
Lane Group Flow (vph)	167	0	0	326	453	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.7			3.7	3.7	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14	24			14
Sign Control	Stop			Free	Free	
Intersection Summary						
Area Type: Other						
Control Type: Unsignalized						
Intersection Capacity Utilization 48.9% ICU Level of Service A						
Analysis Period (min) 15						

HCM Unsignalized Intersection Capacity Analysis

2: Bayview Drive & Courier Entrance

08/05/2021

						
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	22	50	32	267	308	43
Future Volume (Veh/h)	22	50	32	267	308	43
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.39	0.45	0.89	0.92	0.80	0.63
Hourly flow rate (vph)	56	111	36	290	385	68
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh						
Upstream signal (m)						
pX, platoon unblocked						
vC, conflicting volume	781	419	453			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	781	419	453			
tC, single (s)	6.9	6.7	4.1			
tC, 2 stage (s)						
tF (s)	4.0	3.7	2.2			
p0 queue free %	81	80	97			
cM capacity (veh/h)	294	550	1102			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	167	326	453			
Volume Left	56	36	0			
Volume Right	111	0	68			
cSH	426	1102	1700			
Volume to Capacity	0.39	0.03	0.27			
Queue Length 95th (m)	13.9	0.8	0.0			
Control Delay (s)	18.8	1.2	0.0			
Lane LOS	C	A				
Approach Delay (s)	18.8	1.2	0.0			
Approach LOS	C					
Intersection Summary						
Average Delay		3.7				
Intersection Capacity Utilization		48.9%		ICU Level of Service		A
Analysis Period (min)		15				

Lanes, Volumes, Timings

3: Bayview Drive & Little Ave

08/05/2021

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	46	166	221	158	341	18	83	104	72	51	252	27
Future Volume (vph)	46	166	221	158	341	18	83	104	72	51	252	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	20.0		0.0	15.0		0.0	15.0		0.0	15.0		0.0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (m)	40.0			30.0			20.0			45.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.905			0.992			0.935			0.982	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1674	1715	0	1825	1882	0	1601	1644	0	1825	1843	0
Flt Permitted	0.439			0.259			0.217			0.585		
Satd. Flow (perm)	774	1715	0	498	1882	0	366	1644	0	1124	1843	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		66			2			32			5	
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		489.6			106.0			1137.3			118.3	
Travel Time (s)		35.3			7.6			81.9			8.5	
Peak Hour Factor	0.73	0.92	0.71	0.63	0.93	0.81	0.88	0.82	0.75	0.80	0.83	0.66
Heavy Vehicles (%)	9%	2%	1%	0%	1%	6%	14%	11%	7%	0%	2%	5%
Adj. Flow (vph)	63	180	311	251	367	22	94	127	96	64	304	41
Shared Lane Traffic (%)												
Lane Group Flow (vph)	63	491	0	251	389	0	94	223	0	64	345	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												Yes
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (m)	6.1	30.5		6.1	30.5		6.1	30.5		6.1	30.5	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Size(m)	6.1	1.8		6.1	1.8		6.1	1.8		6.1	1.8	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	

Lanes, Volumes, Timings

3: Bayview Drive & Little Ave

08/05/2021

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2			6			8			4		
Detector Phase	5	2		1	6		3	8		7	4	
Switch Phase												
Minimum Initial (s)	7.0	44.0		7.0	44.0		10.0	10.0		7.0	10.0	
Minimum Split (s)	11.5	50.0		11.0	50.0		14.0	25.0		14.0	25.0	
Total Split (s)	14.0	50.0		14.0	50.0		24.0	60.0		14.0	50.0	
Total Split (%)	10.1%	36.2%		10.1%	36.2%		17.4%	43.5%		10.1%	36.2%	
Maximum Green (s)	10.0	44.0		10.0	44.0		20.0	54.0		10.0	44.0	
Yellow Time (s)	3.0	4.0		3.0	4.0		3.0	4.0		3.0	4.0	
All-Red Time (s)	1.0	2.0		1.0	2.0		1.0	2.0		1.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	6.0		4.0	6.0		4.0	6.0		4.0	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes			Yes		Yes		
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	None		None	None	
Walk Time (s)		19.0			19.0			8.0			8.0	
Flash Dont Walk (s)		15.0			15.0			11.0			11.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effect Green (s)	54.1	44.2		58.5	48.7		40.9	30.3		35.5	25.4	
Actuated g/C Ratio	0.49	0.40		0.53	0.44		0.37	0.27		0.32	0.23	
v/c Ratio	0.14	0.68		0.65	0.47		0.37	0.47		0.15	0.81	
Control Delay	14.8	30.3		25.1	26.7		26.0	32.6		22.2	54.8	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	14.8	30.3		25.1	26.7		26.0	32.6		22.2	54.8	
LOS	B	C		C	C		C	C		C	D	
Approach Delay		28.5			26.1			30.6			49.7	
Approach LOS		C			C			C			D	

Intersection Summary

Area Type: Other

Cycle Length: 138

Actuated Cycle Length: 110.4

Natural Cycle: 105

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.81

Intersection Signal Delay: 32.5

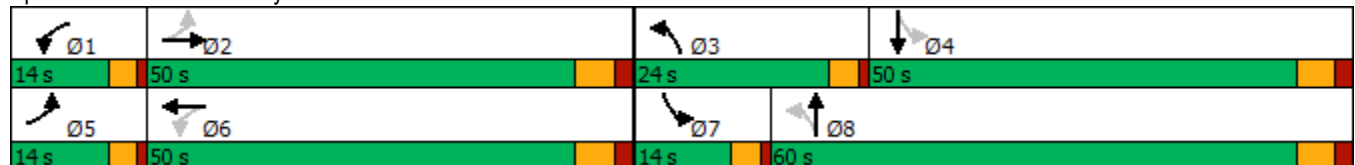
Intersection LOS: C

Intersection Capacity Utilization 85.3%

ICU Level of Service E

Analysis Period (min) 15

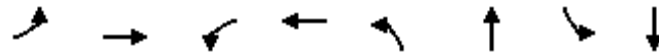
Splits and Phases: 3: Bayview Drive & Little Ave



Queues

3: Bayview Drive & Little Ave

08/05/2021



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	63	491	251	389	94	223	64	345
v/c Ratio	0.14	0.68	0.65	0.47	0.37	0.47	0.15	0.81
Control Delay	14.8	30.3	25.1	26.7	26.0	32.6	22.2	54.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	14.8	30.3	25.1	26.7	26.0	32.6	22.2	54.8
Queue Length 50th (m)	6.0	73.2	26.5	58.3	13.1	35.0	8.7	68.8
Queue Length 95th (m)	12.3	131.1	33.9	105.9	23.1	51.6	15.0	92.8
Internal Link Dist (m)		465.6		82.0		1113.3		94.3
Turn Bay Length (m)	20.0		15.0		15.0		15.0	
Base Capacity (vph)	476	725	384	830	364	823	444	740
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	0.13	0.68	0.65	0.47	0.26	0.27	0.14	0.47
Intersection Summary								

HCM Signalized Intersection Capacity Analysis

3: Bayview Drive & Little Ave

08/05/2021

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	46	166	221	158	341	18	83	104	72	51	252	27
Future Volume (vph)	46	166	221	158	341	18	83	104	72	51	252	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	6.0		4.0	6.0		4.0	6.0		4.0	6.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.90		1.00	0.99		1.00	0.94		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1674	1715		1825	1881		1601	1644		1825	1843	
Flt Permitted	0.44	1.00		0.26	1.00		0.22	1.00		0.58	1.00	
Satd. Flow (perm)	774	1715		497	1881		366	1644		1123	1843	
Peak-hour factor, PHF	0.73	0.92	0.71	0.63	0.93	0.81	0.88	0.82	0.75	0.80	0.83	0.66
Adj. Flow (vph)	63	180	311	251	367	22	94	127	96	64	304	41
RTOR Reduction (vph)	0	39	0	0	1	0	0	23	0	0	4	0
Lane Group Flow (vph)	63	452	0	251	388	0	94	200	0	64	341	0
Heavy Vehicles (%)	9%	2%	1%	0%	1%	6%	14%	11%	7%	0%	2%	5%
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	51.5	45.1		58.7	48.7		40.9	30.3		32.8	26.2	
Effective Green, g (s)	51.5	45.1		58.7	48.7		40.9	30.3		32.8	26.2	
Actuated g/C Ratio	0.46	0.40		0.52	0.43		0.37	0.27		0.29	0.23	
Clearance Time (s)	4.0	6.0		4.0	6.0		4.0	6.0		4.0	6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	407	690		379	817		251	444		370	431	
v/s Ratio Prot	0.01	0.26		c0.06	0.21		c0.04	0.12		0.01	c0.19	
v/s Ratio Perm	0.06			c0.29			0.10			0.04		
v/c Ratio	0.15	0.65		0.66	0.47		0.37	0.45		0.17	0.79	
Uniform Delay, d1	17.3	27.1		17.9	22.5		25.6	33.9		29.0	40.3	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.2	2.2		4.3	0.4		0.9	0.7		0.2	9.6	
Delay (s)	17.5	29.4		22.2	23.0		26.6	34.7		29.3	49.9	
Level of Service	B	C		C	C		C	C		C	D	
Approach Delay (s)		28.0			22.7			32.3			46.7	
Approach LOS		C			C			C			D	
Intersection Summary												
HCM 2000 Control Delay			30.9			HCM 2000 Level of Service				C		
HCM 2000 Volume to Capacity ratio			0.69									
Actuated Cycle Length (s)			112.0			Sum of lost time (s)			20.0			
Intersection Capacity Utilization			85.3%			ICU Level of Service			E			
Analysis Period (min)			15									
c Critical Lane Group												

Lanes, Volumes, Timings
4: Fairview Road & Little Ave

08/05/2021

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	8	495	417	8	325	531
Future Volume (vph)	8	495	417	8	325	531
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	15.0	0.0		0.0	0.0	
Storage Lanes	1	1		0	1	
Taper Length (m)	35.0				2.5	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt		0.850	0.994			
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1825	1541	3266	0	1789	1830
Flt Permitted	0.950				0.431	
Satd. Flow (perm)	1825	1541	3266	0	812	1830
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)		531	4			
Link Speed (k/h)	50		50			50
Link Distance (m)	489.6		1407.2			78.1
Travel Time (s)	35.3		101.3			5.6
Peak Hour Factor	0.58	0.86	0.95	0.44	0.81	0.89
Heavy Vehicles (%)	0%	6%	11%	13%	2%	5%
Adj. Flow (vph)	14	576	439	18	401	597
Shared Lane Traffic (%)						
Lane Group Flow (vph)	14	576	457	0	401	597
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	3.7		3.7			3.7
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	1.6		1.6			1.6
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14		14	24	
Number of Detectors	1	1	2		1	2
Detector Template	Left	Right	Thru		Left	Thru
Leading Detector (m)	6.1	6.1	30.5		6.1	30.5
Trailing Detector (m)	0.0	0.0	0.0		0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0		0.0	0.0
Detector 1 Size(m)	6.1	6.1	1.8		6.1	1.8
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0
Detector 2 Position(m)			28.7			28.7
Detector 2 Size(m)			1.8			1.8
Detector 2 Type			Cl+Ex			Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)			0.0			0.0
Turn Type	Perm	Perm	NA		pm+pt	NA
Protected Phases			4		3	8

Lanes, Volumes, Timings

4: Fairview Road & Little Ave

08/05/2021

	↖	↗	↑	↘	↙	↓
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Permitted Phases	5	5			8	
Detector Phase	5	5	4		3	8
Switch Phase						
Minimum Initial (s)	10.0	10.0	34.0		7.0	34.0
Minimum Split (s)	27.0	27.0	40.0		11.0	40.0
Total Split (s)	36.0	36.0	40.0		24.0	64.0
Total Split (%)	36.0%	36.0%	40.0%		24.0%	64.0%
Maximum Green (s)	30.0	30.0	34.0		20.0	58.0
Yellow Time (s)	4.0	4.0	4.0		3.0	4.0
All-Red Time (s)	2.0	2.0	2.0		1.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0		4.0	6.0
Lead/Lag			Lag		Lead	
Lead-Lag Optimize?			Yes		Yes	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Recall Mode	None	None	Max		None	None
Walk Time (s)	9.0	9.0	22.0			22.0
Flash Dont Walk (s)	12.0	12.0	12.0			12.0
Pedestrian Calls (#/hr)	0	0	0			0
Act Effect Green (s)	13.9	13.9	34.6		53.2	51.2
Actuated g/C Ratio	0.18	0.18	0.45		0.69	0.66
v/c Ratio	0.04	0.81	0.31		0.56	0.49
Control Delay	26.2	14.1	16.2		9.0	9.3
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay	26.2	14.1	16.2		9.0	9.3
LOS	C	B	B		A	A
Approach Delay	14.4		16.2			9.2
Approach LOS	B		B			A

Intersection Summary

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 77.3

Natural Cycle: 80

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.81

Intersection Signal Delay: 12.3

Intersection LOS: B

Intersection Capacity Utilization 69.0%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 4: Fairview Road & Little Ave



Queues

4: Fairview Road & Little Ave

08/05/2021



Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	14	576	457	401	597
v/c Ratio	0.04	0.81	0.31	0.56	0.49
Control Delay	26.2	14.1	16.2	9.0	9.3
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	26.2	14.1	16.2	9.0	9.3
Queue Length 50th (m)	1.6	5.4	18.2	15.3	29.9
Queue Length 95th (m)	4.1	30.1	47.2	45.0	90.4
Internal Link Dist (m)	465.6		1383.2		54.1
Turn Bay Length (m)	15.0				
Base Capacity (vph)	720	929	1464	816	1397
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.02	0.62	0.31	0.49	0.43
Intersection Summary					

HCM Signalized Intersection Capacity Analysis

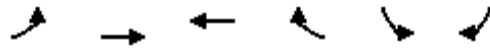
4: Fairview Road & Little Ave

08/05/2021

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	8	495	417	8	325	531
Future Volume (vph)	8	495	417	8	325	531
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	6.0		4.0	6.0
Lane Util. Factor	1.00	1.00	0.95		1.00	1.00
Frt	1.00	0.85	0.99		1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1825	1541	3267		1789	1830
Flt Permitted	0.95	1.00	1.00		0.43	1.00
Satd. Flow (perm)	1825	1541	3267		812	1830
Peak-hour factor, PHF	0.58	0.86	0.95	0.44	0.81	0.89
Adj. Flow (vph)	14	576	439	18	401	597
RTOR Reduction (vph)	0	435	2	0	0	0
Lane Group Flow (vph)	14	141	455	0	401	597
Heavy Vehicles (%)	0%	6%	11%	13%	2%	5%
Turn Type	Perm	Perm	NA		pm+pt	NA
Protected Phases			4		3	8
Permitted Phases	5	5			8	
Actuated Green, G (s)	13.9	13.9	34.7		51.2	51.2
Effective Green, g (s)	13.9	13.9	34.7		51.2	51.2
Actuated g/C Ratio	0.18	0.18	0.45		0.66	0.66
Clearance Time (s)	6.0	6.0	6.0		4.0	6.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	329	277	1470		697	1215
v/s Ratio Prot			0.14		c0.09	0.33
v/s Ratio Perm	0.01	c0.09			c0.29	
v/c Ratio	0.04	0.51	0.31		0.58	0.49
Uniform Delay, d1	26.1	28.5	13.5		5.8	6.5
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.1	1.5	0.5		1.2	0.3
Delay (s)	26.2	30.0	14.1		7.0	6.8
Level of Service	C	C	B		A	A
Approach Delay (s)	29.9		14.1			6.9
Approach LOS	C		B			A
Intersection Summary						
HCM 2000 Control Delay			15.1		HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio			0.59			
Actuated Cycle Length (s)			77.1		Sum of lost time (s)	16.0
Intersection Capacity Utilization			69.0%		ICU Level of Service	C
Analysis Period (min)			15			
c Critical Lane Group						

Lanes, Volumes, Timings
5: Big Bay Point Road & Fairview Road

08/05/2021

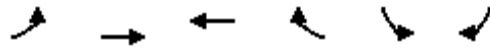


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	341	512	403	88	73	283
Future Volume (vph)	341	512	403	88	73	283
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	120.0			120.0	0.0	0.0
Storage Lanes	1			1	1	1
Taper Length (m)	65.0				0.0	
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1789	3411	3444	1526	1706	1601
Flt Permitted	0.452				0.950	
Satd. Flow (perm)	851	3411	3444	1526	1706	1601
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				96		308
Link Speed (k/h)		50	50		50	
Link Distance (m)		479.3	485.6		1407.2	
Travel Time (s)		34.5	35.0		101.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	7%	6%	7%	7%	2%
Adj. Flow (vph)	371	557	438	96	79	308
Shared Lane Traffic (%)						
Lane Group Flow (vph)	371	557	438	96	79	308
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		3.7	3.7		3.7	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		1.6	1.6		1.6	
Two way Left Turn Lane			Yes			
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24			14	24	14
Number of Detectors	1	2	2	1	1	1
Detector Template	Left	Thru	Thru	Right	Left	Right
Leading Detector (m)	6.1	30.5	30.5	6.1	6.1	6.1
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	6.1	1.8	1.8	6.1	6.1	6.1
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		28.7	28.7			
Detector 2 Size(m)		1.8	1.8			
Detector 2 Type		Cl+Ex	Cl+Ex			
Detector 2 Channel						
Detector 2 Extend (s)		0.0	0.0			
Turn Type	pm+pt	NA	NA	Perm	Perm	Perm
Protected Phases	3	8	4			

Lanes, Volumes, Timings

5: Big Bay Point Road & Fairview Road

08/05/2021



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Permitted Phases	8			4	5	5
Detector Phase	3	8	4	4	5	5
Switch Phase						
Minimum Initial (s)	7.0	40.0	40.0	40.0	10.0	10.0
Minimum Split (s)	11.0	46.0	46.0	46.0	38.0	38.0
Total Split (s)	16.0	62.0	46.0	46.0	46.0	46.0
Total Split (%)	14.8%	57.4%	42.6%	42.6%	42.6%	42.6%
Maximum Green (s)	12.0	56.0	40.0	40.0	40.0	40.0
Yellow Time (s)	3.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None
Walk Time (s)			7.0	7.0	7.0	7.0
Flash Dont Walk (s)			33.0	33.0	25.0	25.0
Pedestrian Calls (#/hr)			0	0	0	0
Act Effect Green (s)	56.5	54.5	40.0	40.0	10.7	10.7
Actuated g/C Ratio	0.73	0.71	0.52	0.52	0.14	0.14
v/c Ratio	0.49	0.23	0.25	0.11	0.34	0.63
Control Delay	6.0	4.3	11.0	2.9	34.7	10.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	6.0	4.3	11.0	2.9	34.7	10.6
LOS	A	A	B	A	C	B
Approach Delay		5.0	9.6		15.5	
Approach LOS		A	A		B	

Intersection Summary

Area Type: Other

Cycle Length: 108

Actuated Cycle Length: 77.2

Natural Cycle: 95

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.63

Intersection Signal Delay: 8.5

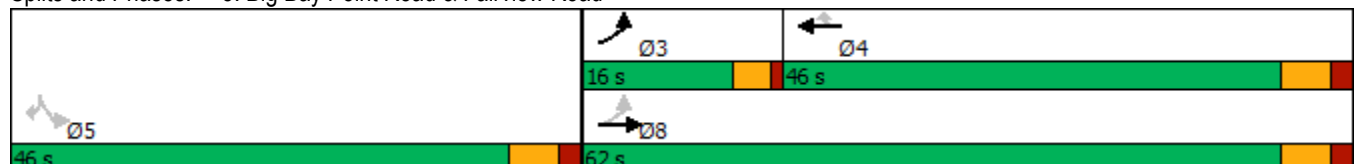
Intersection LOS: A

Intersection Capacity Utilization 73.9%

ICU Level of Service D

Analysis Period (min) 15

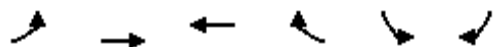
Splits and Phases: 5: Big Bay Point Road & Fairview Road



Queues

5: Big Bay Point Road & Fairview Road

08/05/2021

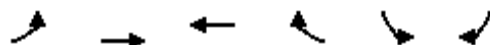


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Group Flow (vph)	371	557	438	96	79	308
v/c Ratio	0.49	0.23	0.25	0.11	0.34	0.63
Control Delay	6.0	4.3	11.0	2.9	34.7	10.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	6.0	4.3	11.0	2.9	34.7	10.6
Queue Length 50th (m)	13.8	11.8	17.1	0.0	10.6	0.0
Queue Length 95th (m)	27.1	20.1	28.5	6.9	22.8	20.4
Internal Link Dist (m)		455.3	461.6		1383.2	
Turn Bay Length (m)	120.0			120.0		
Base Capacity (vph)	768	2476	1786	837	884	978
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	0.48	0.22	0.25	0.11	0.09	0.31
Intersection Summary						

HCM Signalized Intersection Capacity Analysis

5: Big Bay Point Road & Fairview Road

08/05/2021



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	341	512	403	88	73	283
Future Volume (vph)	341	512	403	88	73	283
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	6.0	6.0	6.0	6.0	6.0
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1789	3411	3444	1526	1706	1601
Flt Permitted	0.45	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	852	3411	3444	1526	1706	1601
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	371	557	438	96	79	308
RTOR Reduction (vph)	0	0	0	46	0	265
Lane Group Flow (vph)	371	557	438	50	79	43
Heavy Vehicles (%)	2%	7%	6%	7%	7%	2%
Turn Type	pm+pt	NA	NA	Perm	Perm	Perm
Protected Phases	3	8	4			
Permitted Phases	8			4	5	5
Actuated Green, G (s)	54.5	54.5	40.0	40.0	10.7	10.7
Effective Green, g (s)	54.5	54.5	40.0	40.0	10.7	10.7
Actuated g/C Ratio	0.71	0.71	0.52	0.52	0.14	0.14
Clearance Time (s)	4.0	6.0	6.0	6.0	6.0	6.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	728	2408	1784	790	236	221
v/s Ratio Prot	c0.07	0.16	0.13			
v/s Ratio Perm	c0.29			0.03	c0.05	0.03
v/c Ratio	0.51	0.23	0.25	0.06	0.33	0.19
Uniform Delay, d1	4.4	4.0	10.3	9.3	30.0	29.4
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.6	0.0	0.1	0.0	0.8	0.4
Delay (s)	4.9	4.0	10.3	9.3	30.9	29.9
Level of Service	A	A	B	A	C	C
Approach Delay (s)		4.4	10.2		30.1	
Approach LOS		A	B		C	

Intersection Summary

HCM 2000 Control Delay	11.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	77.2	Sum of lost time (s)	16.0
Intersection Capacity Utilization	73.9%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Lanes, Volumes, Timings

8: Bayview Drive

08/05/2021

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	0	0	0	0
Future Volume (vph)	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	1.00
Frts						
Flt Protected						
Satd. Flow (prot)	0	0	3579	0	0	1883
Flt Permitted						
Satd. Flow (perm)	0	0	3579	0	0	1883
Link Speed (k/h)	50		50			50
Link Distance (m)	61.2		173.0			97.3
Travel Time (s)	4.4		12.5			7.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	0.0		3.7			3.7
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	1.6		1.6			1.6
Two way Left Turn Lane			Yes			
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14		14	24	
Sign Control	Stop		Free			Free
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization 0.0%	ICU Level of Service A					
Analysis Period (min) 15						

HCM Unsignalized Intersection Capacity Analysis

8: Bayview Drive

08/05/2021

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations			↑↑			↑
Traffic Volume (veh/h)	0	0	0	0	0	0
Future Volume (Veh/h)	0	0	0	0	0	0
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	0	0	0
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			TWLTL			None
Median storage (veh)			2			
Upstream signal (m)			173			
pX, platoon unblocked						
vC, conflicting volume	0	0			0	
vC1, stage 1 conf vol	0					
vC2, stage 2 conf vol	0					
vCu, unblocked vol	0	0			0	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)	5.8					
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	1023	1084			1622	
Direction, Lane #	NB 1	NB 2	SB 1			
Volume Total	0	0	0			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	1700	1700			
Volume to Capacity	0.00	0.00	0.00			
Queue Length 95th (m)	0.0	0.0	0.0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS						
Approach Delay (s)	0.0		0.0			
Approach LOS						
Intersection Summary						
Average Delay			0.0			
Intersection Capacity Utilization			0.0%	ICU Level of Service		A
Analysis Period (min)			15			

Lanes, Volumes, Timings
1: Bayview Drive & Big Bay Point Road

EX 2021
PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	13	315	119	184	505	19	249	362	147	134	312	29
Future Volume (vph)	13	315	119	184	505	19	249	362	147	134	312	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	105.0		55.0	105.0		55.0	105.0		55.0	105.0		55.0
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (m)	65.0			65.0			65.0			65.0		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1352	3544	1541	1789	3579	1555	1807	1830	1633	1738	3476	1484
Flt Permitted	0.364			0.525			0.473			0.199		
Satd. Flow (perm)	518	3544	1541	989	3579	1555	900	1830	1633	364	3476	1484
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			149			120			163			120
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		485.6			536.9			234.9			173.0	
Travel Time (s)		35.0			38.7			16.9			12.5	
Peak Hour Factor	0.72	0.89	0.80	0.88	0.89	0.70	0.86	0.88	0.88	0.72	0.84	0.86
Heavy Vehicles (%)	35%	3%	6%	2%	2%	5%	1%	5%	0%	5%	5%	10%
Adj. Flow (vph)	18	354	149	209	567	27	290	411	167	186	371	34
Shared Lane Traffic (%)												
Lane Group Flow (vph)	18	354	149	209	567	27	290	411	167	186	371	34
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane		Yes						Yes			Yes	
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	6.1	30.5	6.1	6.1	30.5	6.1	6.1	30.5	6.1	6.1	30.5	6.1
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	6.1	1.8	6.1	6.1	1.8	6.1	6.1	1.8	6.1	6.1	1.8	6.1
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	

Lanes, Volumes, Timings
1: Bayview Drive & Big Bay Point Road

EX 2021
PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2		2	6		6	8		8	4		4
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	7.0	35.0	35.0	7.0	35.0	35.0	7.0	12.0	12.0	7.0	12.0	12.0
Minimum Split (s)	11.0	41.0	41.0	11.0	41.0	41.0	11.0	30.0	30.0	11.0	30.0	30.0
Total Split (s)	11.0	44.0	44.0	11.0	44.0	44.0	13.0	32.0	32.0	13.0	32.0	32.0
Total Split (%)	11.0%	44.0%	44.0%	11.0%	44.0%	44.0%	13.0%	32.0%	32.0%	13.0%	32.0%	32.0%
Maximum Green (s)	7.0	38.0	38.0	7.0	38.0	38.0	9.0	26.0	26.0	9.0	26.0	26.0
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
All-Red Time (s)	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	6.0	6.0	4.0	6.0	6.0	4.0	6.0	6.0	4.0	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Max	None	None	None	None	None	None	None	None	None	None	None
Walk Time (s)		20.0	20.0		20.0	20.0		9.0	9.0		9.0	9.0
Flash Dont Walk (s)		15.0	15.0		15.0	15.0		15.0	15.0		15.0	15.0
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	0
Act Effect Green (s)	44.0	35.0	35.0	44.0	35.0	35.0	35.3	24.3	24.3	35.3	24.3	24.3
Actuated g/C Ratio	0.46	0.37	0.37	0.46	0.37	0.37	0.37	0.25	0.25	0.37	0.25	0.25
v/c Ratio	0.06	0.27	0.23	0.41	0.43	0.04	0.69	0.88	0.31	0.70	0.42	0.07
Control Delay	13.2	22.3	4.6	17.0	24.3	0.1	30.9	55.7	6.6	34.9	31.1	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	0.0
Total Delay	13.2	22.3	4.6	17.0	24.3	0.1	30.9	55.7	6.6	34.9	31.1	0.3
LOS	B	C	A	B	C	A	C	E	A	C	C	A
Approach Delay		16.9			21.6			38.0			30.6	
Approach LOS		B			C			D			C	

Intersection Summary

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 95.4

Natural Cycle: 95

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.88

Intersection Signal Delay: 27.7

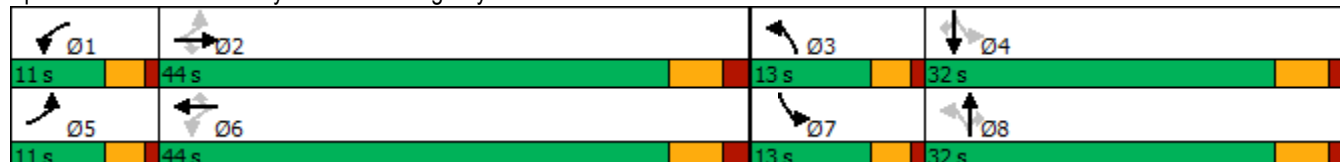
Intersection LOS: C

Intersection Capacity Utilization 82.5%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 1: Bayview Drive & Big Bay Point Road



												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	18	354	149	209	567	27	290	411	167	186	371	34
v/c Ratio	0.06	0.27	0.23	0.41	0.43	0.04	0.69	0.88	0.31	0.70	0.42	0.07
Control Delay	13.2	22.3	4.6	17.0	24.3	0.1	30.9	55.7	6.6	34.9	31.1	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	0.0
Total Delay	13.2	22.3	4.6	17.0	24.3	0.1	30.9	55.7	6.6	34.9	31.1	0.3
Queue Length 50th (m)	1.7	24.4	0.0	21.5	41.9	0.0	36.5	72.8	0.6	22.0	30.0	0.0
Queue Length 95th (m)	4.1	34.7	8.4	34.3	55.7	0.0	53.6	#115.8	14.3	28.4	39.6	0.0
Internal Link Dist (m)	461.6				512.9		210.9				149.0	
Turn Bay Length (m)	105.0			55.0	105.0			55.0	105.0			55.0
Base Capacity (vph)	300	1413	704	515	1427	692	419	499	564	264	948	492
Starvation Cap Reductn	0	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	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.06	0.25	0.21	0.41	0.40	0.04	0.69	0.82	0.30	0.70	0.39	0.07

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

HCM Signalized Intersection Capacity Analysis

1: Bayview Drive & Big Bay Point Road

EX 2021

PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	13	315	119	184	505	19	249	362	147	134	312	29
Future Volume (vph)	13	315	119	184	505	19	249	362	147	134	312	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	6.0	6.0	4.0	6.0	6.0	4.0	6.0	6.0	4.0	6.0	6.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1352	3544	1541	1789	3579	1555	1807	1830	1633	1738	3476	1484
Flt Permitted	0.36	1.00	1.00	0.53	1.00	1.00	0.47	1.00	1.00	0.20	1.00	1.00
Satd. Flow (perm)	518	3544	1541	989	3579	1555	900	1830	1633	365	3476	1484
Peak-hour factor, PHF	0.72	0.89	0.80	0.88	0.89	0.70	0.86	0.88	0.88	0.72	0.84	0.86
Adj. Flow (vph)	18	354	149	209	567	27	290	411	167	186	371	34
RTOR Reduction (vph)	0	0	94	0	0	17	0	0	121	0	0	25
Lane Group Flow (vph)	18	354	55	209	567	10	290	411	46	186	371	9
Heavy Vehicles (%)	35%	3%	6%	2%	2%	5%	1%	5%	0%	5%	5%	10%
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2		2	6		6	8		8	4		4
Actuated Green, G (s)	42.0	35.0	35.0	42.0	35.0	35.0	33.3	24.3	24.3	33.3	24.3	24.3
Effective Green, g (s)	42.0	35.0	35.0	42.0	35.0	35.0	33.3	24.3	24.3	33.3	24.3	24.3
Actuated g/C Ratio	0.44	0.37	0.37	0.44	0.37	0.37	0.35	0.25	0.25	0.35	0.25	0.25
Clearance Time (s)	4.0	6.0	6.0	4.0	6.0	6.0	4.0	6.0	6.0	4.0	6.0	6.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	289	1301	565	494	1314	571	400	466	416	257	886	378
v/s Ratio Prot	0.00	0.10		c0.03	c0.16		c0.07	c0.22		0.07	0.11	
v/s Ratio Perm	0.02		0.04	0.16		0.01	0.18		0.03	0.18		0.01
v/c Ratio	0.06	0.27	0.10	0.42	0.43	0.02	0.72	0.88	0.11	0.72	0.42	0.02
Uniform Delay, d1	15.3	21.2	19.8	16.9	22.7	19.2	24.9	34.1	27.2	24.1	29.6	26.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.1	0.1	0.1	0.6	0.2	0.0	6.4	17.5	0.1	9.7	0.3	0.0
Delay (s)	15.4	21.3	19.9	17.5	22.9	19.2	31.3	51.7	27.3	33.7	29.9	26.6
Level of Service	B	C	B	B	C	B	C	D	C	C	C	C
Approach Delay (s)		20.7			21.4			40.2			30.9	
Approach LOS		C			C			D			C	

Intersection Summary

HCM 2000 Control Delay	29.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	95.3	Sum of lost time (s)	20.0
Intersection Capacity Utilization	82.5%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Lanes, Volumes, Timings

2: Bayview Drive & Courier Entrance

EX 2021
PM Peak Hour



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	28	30	35	395	476	17
Future Volume (vph)	28	30	35	395	476	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.942				0.993	
Flt Protected	0.972			0.994		
Satd. Flow (prot)	1737	0	0	1763	1761	0
Flt Permitted	0.972			0.994		
Satd. Flow (perm)	1737	0	0	1763	1761	0
Link Speed (k/h)	50			50	50	
Link Distance (m)	188.0			97.3	1137.3	
Travel Time (s)	13.5			7.0	81.9	
Peak Hour Factor	0.58	0.83	0.58	0.89	0.89	0.61
Heavy Vehicles (%)	0%	3%	40%	4%	6%	53%
Adj. Flow (vph)	48	36	60	444	535	28
Shared Lane Traffic (%)						
Lane Group Flow (vph)	84	0	0	504	563	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(m)	3.7			3.7	3.7	
Link Offset(m)	0.0			0.0	0.0	
Crosswalk Width(m)	1.6			1.6	1.6	
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14	24			14
Sign Control	Stop			Free	Free	
Intersection Summary						
Area Type: Other						
Control Type: Unsignalized						
Intersection Capacity Utilization 59.8% ICU Level of Service B						
Analysis Period (min) 15						

HCM Unsignalized Intersection Capacity Analysis

2: Bayview Drive & Courier Entrance

EX 2021
PM Peak Hour

						
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	28	30	35	395	476	17
Future Volume (Veh/h)	28	30	35	395	476	17
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.58	0.83	0.58	0.89	0.89	0.61
Hourly flow rate (vph)	48	36	60	444	535	28
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh						
Upstream signal (m)				270		
pX, platoon unblocked						
vC, conflicting volume	1113	549	563			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1113	549	563			
tC, single (s)	6.4	6.2	4.5			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.6			
p0 queue free %	78	93	93			
cM capacity (veh/h)	216	534	844			
Direction, Lane #	EB 1	NB 1	SB 1			
Volume Total	84	504	563			
Volume Left	48	60	0			
Volume Right	36	0	28			
cSH	290	844	1700			
Volume to Capacity	0.29	0.07	0.33			
Queue Length 95th (m)	8.9	1.7	0.0			
Control Delay (s)	22.4	2.0	0.0			
Lane LOS	C	A				
Approach Delay (s)	22.4	2.0	0.0			
Approach LOS	C					
Intersection Summary						
Average Delay		2.5				
Intersection Capacity Utilization		59.8%		ICU Level of Service		B
Analysis Period (min)		15				

Lanes, Volumes, Timings
3: Bayview Drive & Little Ave

EX 2021
PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	23	303	68	66	260	45	257	351	107	103	181	35
Future Volume (vph)	23	303	68	66	260	45	257	351	107	103	181	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	20.0		0.0	15.0		0.0	15.0		0.0	15.0		0.0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (m)	40.0			30.0			20.0			45.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.969			0.977			0.961			0.975	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1825	1839	0	1825	1861	0	1807	1846	0	1825	1842	0
Flt Permitted	0.501			0.291			0.365			0.171		
Satd. Flow (perm)	962	1839	0	559	1861	0	694	1846	0	329	1842	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		10			7			15			8	
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		489.6			106.0			1137.3			118.3	
Travel Time (s)		35.3			7.6			81.9			8.5	
Peak Hour Factor	0.81	0.88	0.77	0.74	0.94	0.92	0.94	0.96	0.83	0.73	0.85	0.81
Heavy Vehicles (%)	0%	1%	2%	0%	1%	0%	1%	0%	0%	0%	2%	0%
Adj. Flow (vph)	28	344	88	89	277	49	273	366	129	141	213	43
Shared Lane Traffic (%)												
Lane Group Flow (vph)	28	432	0	89	326	0	273	495	0	141	256	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												Yes
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (m)	6.1	30.5		6.1	30.5		6.1	30.5		6.1	30.5	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Size(m)	6.1	1.8		6.1	1.8		6.1	1.8		6.1	1.8	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	

Lanes, Volumes, Timings
3: Bayview Drive & Little Ave

EX 2021
PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2			6			8			4		
Detector Phase	5	2		1	6		3	8		7	4	
Switch Phase												
Minimum Initial (s)	7.0	44.0		7.0	44.0		10.0	10.0		7.0	10.0	
Minimum Split (s)	11.0	50.0		11.0	50.0		14.0	25.0		14.0	25.0	
Total Split (s)	14.0	50.0		14.0	50.0		24.0	60.0		14.0	50.0	
Total Split (%)	10.1%	36.2%		10.1%	36.2%		17.4%	43.5%		10.1%	36.2%	
Maximum Green (s)	10.0	44.0		10.0	44.0		20.0	54.0		10.0	44.0	
Yellow Time (s)	3.0	4.0		3.0	4.0		3.0	4.0		3.0	4.0	
All-Red Time (s)	1.0	2.0		1.0	2.0		1.0	2.0		1.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	6.0		4.0	6.0		4.0	6.0		4.0	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	None		None	None	
Walk Time (s)		19.0			19.0			8.0			8.0	
Flash Dont Walk (s)		15.0			15.0			11.0			11.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effect Green (s)	53.7	44.4		57.9	50.6		52.1	36.4		41.1	29.4	
Actuated g/C Ratio	0.45	0.37		0.49	0.42		0.44	0.31		0.34	0.25	
v/c Ratio	0.06	0.63		0.25	0.41		0.59	0.86		0.60	0.56	
Control Delay	19.2	37.0		20.3	28.9		27.5	53.2		32.3	42.9	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	19.2	37.0		20.3	28.9		27.5	53.2		32.3	42.9	
LOS	B	D		C	C		C	D		C	D	
Approach Delay		35.9			27.1			44.1			39.2	
Approach LOS		D			C			D			D	

Intersection Summary

Area Type: Other

Cycle Length: 138

Actuated Cycle Length: 119.2

Natural Cycle: 100

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.86

Intersection Signal Delay: 37.8

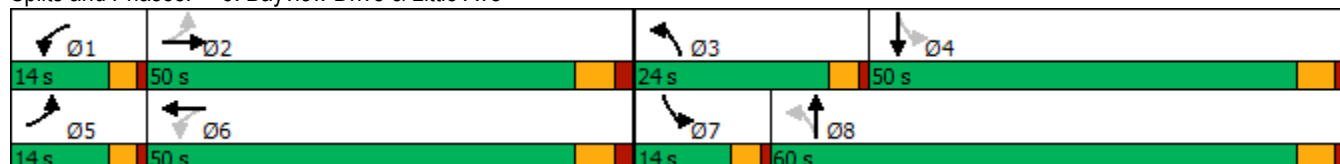
Intersection LOS: D

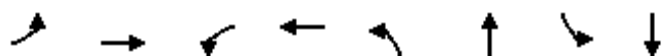
Intersection Capacity Utilization 90.0%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 3: Bayview Drive & Little Ave





Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	28	432	89	326	273	495	141	256
v/c Ratio	0.06	0.63	0.25	0.41	0.59	0.86	0.60	0.56
Control Delay	19.2	37.0	20.3	28.9	27.5	53.2	32.3	42.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	19.2	37.0	20.3	28.9	27.5	53.2	32.3	42.9
Queue Length 50th (m)	3.3	80.9	10.9	55.4	41.2	105.8	19.6	50.9
Queue Length 95th (m)	8.9	133.3	19.7	97.2	61.4	148.3	25.7	73.6
Internal Link Dist (m)		465.6		82.0		1113.3		94.3
Turn Bay Length (m)	20.0		15.0		15.0		15.0	
Base Capacity (vph)	529	691	380	793	491	851	241	690
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	0.05	0.63	0.23	0.41	0.56	0.58	0.59	0.37
Intersection Summary								

HCM Signalized Intersection Capacity Analysis

3: Bayview Drive & Little Ave

EX 2021

PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	23	303	68	66	260	45	257	351	107	103	181	35
Future Volume (vph)	23	303	68	66	260	45	257	351	107	103	181	35
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	6.0		4.0	6.0		4.0	6.0		4.0	6.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.97		1.00	0.98		1.00	0.96		1.00	0.97	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1825	1840		1825	1862		1807	1846		1825	1842	
Flt Permitted	0.50	1.00		0.29	1.00		0.36	1.00		0.17	1.00	
Satd. Flow (perm)	962	1840		560	1862		694	1846		329	1842	
Peak-hour factor, PHF	0.81	0.88	0.77	0.74	0.94	0.92	0.94	0.96	0.83	0.73	0.85	0.81
Adj. Flow (vph)	28	344	88	89	277	49	273	366	129	141	213	43
RTOR Reduction (vph)	0	6	0	0	4	0	0	10	0	0	6	0
Lane Group Flow (vph)	28	426	0	89	322	0	273	485	0	141	250	0
Heavy Vehicles (%)	0%	1%	2%	0%	1%	0%	1%	0%	0%	0%	2%	0%
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	50.3	46.2		58.7	50.6		50.2	36.5		39.2	29.5	
Effective Green, g (s)	50.3	46.2		58.7	50.6		50.2	36.5		39.2	29.5	
Actuated g/C Ratio	0.42	0.38		0.49	0.42		0.42	0.30		0.32	0.24	
Clearance Time (s)	4.0	6.0		4.0	6.0		4.0	6.0		4.0	6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	429	703		360	779		441	557		226	449	
v/s Ratio Prot	0.00	c0.23		c0.02	0.17		c0.09	c0.26		0.05	0.14	
v/s Ratio Perm	0.02			0.10			0.17			0.15		
v/c Ratio	0.07	0.61		0.25	0.41		0.62	0.87		0.62	0.56	
Uniform Delay, d1	21.0	30.0		18.9	24.7		25.3	40.0		31.7	40.0	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.1	1.5		0.4	0.4		2.6	13.6		5.3	1.5	
Delay (s)	21.1	31.5		19.3	25.1		27.9	53.6		37.0	41.5	
Level of Service	C	C		B	C		C	D		D	D	
Approach Delay (s)		30.9			23.8			44.4			39.9	
Approach LOS		C			C			D			D	
Intersection Summary												
HCM 2000 Control Delay			36.3			HCM 2000 Level of Service				D		
HCM 2000 Volume to Capacity ratio			0.68									
Actuated Cycle Length (s)			120.9			Sum of lost time (s)			20.0			
Intersection Capacity Utilization			90.0%			ICU Level of Service			E			
Analysis Period (min)			15									
c Critical Lane Group												

Lanes, Volumes, Timings
4: Fairview Road & Little Ave

EX 2021
PM Peak Hour

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	15	554	783	12	451	619
Future Volume (vph)	15	554	783	12	451	619
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	15.0	0.0		0.0	0.0	
Storage Lanes	1	1		0	1	
Taper Length (m)	35.0				2.5	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt		0.850	0.997			
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1825	1570	3469	0	1761	1764
Flt Permitted	0.950				0.199	
Satd. Flow (perm)	1825	1570	3469	0	369	1764
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)		430	2			
Link Speed (k/h)	50		50			50
Link Distance (m)	489.6		1407.2			78.1
Travel Time (s)	35.3		101.3			5.6
Peak Hour Factor	0.75	0.94	0.95	0.75	0.95	0.86
Heavy Vehicles (%)	0%	4%	5%	0%	2%	5%
Bus Blockages (#/hr)	0	0	0	0	4	9
Adj. Flow (vph)	20	589	824	16	475	720
Shared Lane Traffic (%)						
Lane Group Flow (vph)	20	589	840	0	475	720
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	3.7		3.7			3.7
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	1.6		1.6			1.6
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	1.01	1.03
Turning Speed (k/h)	24	14		14	24	
Number of Detectors	1	1	2		1	2
Detector Template	Left	Right	Thru		Left	Thru
Leading Detector (m)	6.1	6.1	30.5		6.1	30.5
Trailing Detector (m)	0.0	0.0	0.0		0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0		0.0	0.0
Detector 1 Size(m)	6.1	6.1	1.8		6.1	1.8
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0
Detector 2 Position(m)			28.7			28.7
Detector 2 Size(m)			1.8			1.8
Detector 2 Type			Cl+Ex			Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)			0.0			0.0
Turn Type	Perm	Perm	NA		pm+pt	NA

Lanes, Volumes, Timings
4: Fairview Road & Little Ave

EX 2021
PM Peak Hour

												
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT						
Protected Phases			4		3	8						
Permitted Phases	5	5			8							
Detector Phase	5	5	4		3	8						
Switch Phase												
Minimum Initial (s)	10.0	10.0	34.0		7.0	34.0						
Minimum Split (s)	27.0	27.0	40.0		11.0	40.0						
Total Split (s)	36.0	36.0	40.0		24.0	64.0						
Total Split (%)	36.0%	36.0%	40.0%		24.0%	64.0%						
Maximum Green (s)	30.0	30.0	34.0		20.0	58.0						
Yellow Time (s)	4.0	4.0	4.0		3.0	4.0						
All-Red Time (s)	2.0	2.0	2.0		1.0	2.0						
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0						
Total Lost Time (s)	6.0	6.0	6.0		4.0	6.0						
Lead/Lag			Lag		Lead							
Lead-Lag Optimize?			Yes		Yes							
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0						
Recall Mode	None	None	Max		None	None						
Walk Time (s)	9.0	9.0	22.0			22.0						
Flash Dont Walk (s)	12.0	12.0	12.0			12.0						
Pedestrian Calls (#/hr)	0	0	0			0						
Act Effect Green (s)	18.1	18.1	34.3		60.5	58.4						
Actuated g/C Ratio	0.20	0.20	0.39		0.68	0.66						
v/c Ratio	0.05	0.89	0.63		0.84	0.62						
Control Delay	26.6	25.9	25.8		29.6	13.4						
Queue Delay	0.0	0.0	0.0		0.0	0.0						
Total Delay	26.6	25.9	25.8		29.6	13.4						
LOS	C	C	C		C	B						
Approach Delay	25.9		25.8			19.8						
Approach LOS	C		C			B						

Intersection Summary

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 88.6

Natural Cycle: 90

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.89

Intersection Signal Delay: 23.1

Intersection LOS: C

Intersection Capacity Utilization 75.0%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 4: Fairview Road & Little Ave





Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	20	589	840	475	720
v/c Ratio	0.05	0.89	0.63	0.84	0.62
Control Delay	26.6	25.9	25.8	29.6	13.4
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	26.6	25.9	25.8	29.6	13.4
Queue Length 50th (m)	2.7	25.7	58.0	41.5	60.0
Queue Length 95th (m)	6.7	71.2	95.2	#120.4	123.8
Internal Link Dist (m)	465.6		1383.2		54.1
Turn Bay Length (m)	15.0				
Base Capacity (vph)	622	819	1342	568	1163
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.03	0.72	0.63	0.84	0.62

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

HCM Signalized Intersection Capacity Analysis

4: Fairview Road & Little Ave

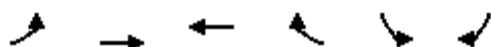
EX 2021

PM Peak Hour

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	15	554	783	12	451	619
Future Volume (vph)	15	554	783	12	451	619
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	6.0		4.0	6.0
Lane Util. Factor	1.00	1.00	0.95		1.00	1.00
Frt	1.00	0.85	1.00		1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1825	1570	3470		1761	1764
Flt Permitted	0.95	1.00	1.00		0.20	1.00
Satd. Flow (perm)	1825	1570	3470		368	1764
Peak-hour factor, PHF	0.75	0.94	0.95	0.75	0.95	0.86
Adj. Flow (vph)	20	589	824	16	475	720
RTOR Reduction (vph)	0	342	1	0	0	0
Lane Group Flow (vph)	20	247	839	0	475	720
Heavy Vehicles (%)	0%	4%	5%	0%	2%	5%
Bus Blockages (#/hr)	0	0	0	0	4	9
Turn Type	Perm	Perm	NA		pm+pt	NA
Protected Phases			4		3	8
Permitted Phases	5	5			8	
Actuated Green, G (s)	18.1	18.1	34.3		58.4	58.4
Effective Green, g (s)	18.1	18.1	34.3		58.4	58.4
Actuated g/C Ratio	0.20	0.20	0.39		0.66	0.66
Clearance Time (s)	6.0	6.0	6.0		4.0	6.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	373	321	1344		559	1164
v/s Ratio Prot			0.24		c0.19	0.41
v/s Ratio Perm	0.01	c0.16			c0.37	
v/c Ratio	0.05	0.77	0.62		0.85	0.62
Uniform Delay, d1	28.3	33.2	21.9		15.7	8.6
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.1	10.6	2.2		11.6	1.0
Delay (s)	28.4	43.8	24.1		27.2	9.6
Level of Service	C	D	C		C	A
Approach Delay (s)	43.3		24.1			16.6
Approach LOS	D		C			B
Intersection Summary						
HCM 2000 Control Delay			25.1		HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio			0.86			
Actuated Cycle Length (s)			88.5		Sum of lost time (s)	16.0
Intersection Capacity Utilization			75.0%		ICU Level of Service	D
Analysis Period (min)			15			
c Critical Lane Group						

Lanes, Volumes, Timings
5: Big Bay Point Road & Fairview Road

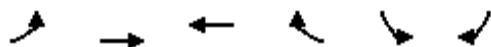
EX 2021
PM Peak Hour



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	415	862	575	137	86	259
Future Volume (vph)	415	862	575	137	86	259
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	120.0			120.0	0.0	0.0
Storage Lanes	1			1	1	1
Taper Length (m)	65.0				2.5	
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1789	3544	3579	1601	1755	1555
Flt Permitted	0.352				0.950	
Satd. Flow (perm)	663	3544	3579	1601	1755	1555
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				149		282
Link Speed (k/h)		50	50		50	
Link Distance (m)		479.3	485.6		1407.2	
Travel Time (s)		34.5	35.0		101.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	3%	2%	2%	4%	5%
Adj. Flow (vph)	451	937	625	149	93	282
Shared Lane Traffic (%)						
Lane Group Flow (vph)	451	937	625	149	93	282
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		3.7	3.7		3.7	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		1.6	1.6		1.6	
Two way Left Turn Lane			Yes			
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24			14	24	14
Number of Detectors	1	2	2	1	1	1
Detector Template	Left	Thru	Thru	Right	Left	Right
Leading Detector (m)	6.1	30.5	30.5	6.1	6.1	6.1
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	6.1	1.8	1.8	6.1	6.1	6.1
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		28.7	28.7			
Detector 2 Size(m)		1.8	1.8			
Detector 2 Type		Cl+Ex	Cl+Ex			
Detector 2 Channel						
Detector 2 Extend (s)		0.0	0.0			
Turn Type	pm+pt	NA	NA	Perm	Perm	Perm
Protected Phases	3	8	4			

Lanes, Volumes, Timings
5: Big Bay Point Road & Fairview Road

EX 2021
PM Peak Hour



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Permitted Phases	8			4	5	5
Detector Phase	3	8	4	4	5	5
Switch Phase						
Minimum Initial (s)	7.0	40.0	40.0	40.0	10.0	10.0
Minimum Split (s)	11.0	46.0	46.0	46.0	38.0	38.0
Total Split (s)	16.0	62.0	46.0	46.0	46.0	46.0
Total Split (%)	14.8%	57.4%	42.6%	42.6%	42.6%	42.6%
Maximum Green (s)	12.0	56.0	40.0	40.0	40.0	40.0
Yellow Time (s)	3.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None
Walk Time (s)			7.0	7.0	7.0	7.0
Flash Dont Walk (s)			33.0	33.0	25.0	25.0
Pedestrian Calls (#/hr)			0	0	0	0
Act Effect Green (s)	58.0	56.0	40.0	40.0	10.7	10.7
Actuated g/C Ratio	0.74	0.71	0.51	0.51	0.14	0.14
v/c Ratio	0.68	0.37	0.34	0.17	0.39	0.62
Control Delay	9.6	5.1	12.4	2.5	36.1	10.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	9.6	5.1	12.4	2.5	36.1	10.8
LOS	A	A	B	A	D	B
Approach Delay		6.6	10.5		17.1	
Approach LOS		A	B		B	

Intersection Summary

Area Type: Other

Cycle Length: 108

Actuated Cycle Length: 78.8

Natural Cycle: 95

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.68

Intersection Signal Delay: 9.3

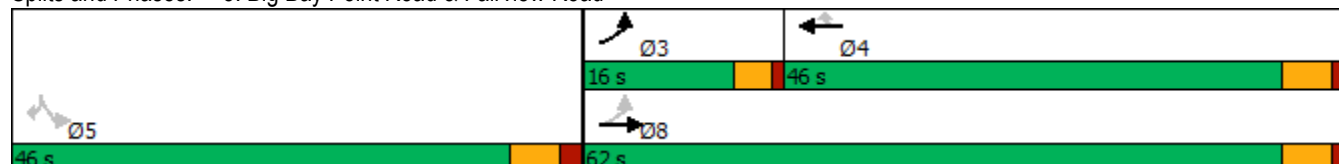
Intersection LOS: A

Intersection Capacity Utilization 78.0%

ICU Level of Service D

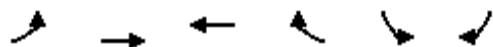
Analysis Period (min) 15

Splits and Phases: 5: Big Bay Point Road & Fairview Road



Queues
5: Big Bay Point Road & Fairview Road

EX 2021
PM Peak Hour



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Group Flow (vph)	451	937	625	149	93	282
v/c Ratio	0.68	0.37	0.34	0.17	0.39	0.62
Control Delay	9.6	5.1	12.4	2.5	36.1	10.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	9.6	5.1	12.4	2.5	36.1	10.8
Queue Length 50th (m)	17.9	22.7	26.8	0.0	12.9	0.0
Queue Length 95th (m)	34.0	35.9	40.8	8.4	26.1	19.7
Internal Link Dist (m)		455.3	461.6		1383.2	
Turn Bay Length (m)	120.0			120.0		
Base Capacity (vph)	660	2520	1818	886	891	928
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	0.68	0.37	0.34	0.17	0.10	0.30
Intersection Summary						

HCM Signalized Intersection Capacity Analysis

5: Big Bay Point Road & Fairview Road

EX 2021
PM Peak Hour



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	415	862	575	137	86	259
Future Volume (vph)	415	862	575	137	86	259
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	6.0	6.0	6.0	6.0	6.0
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1789	3544	3579	1601	1755	1555
Flt Permitted	0.35	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	663	3544	3579	1601	1755	1555
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	451	937	625	149	93	282
RTOR Reduction (vph)	0	0	0	73	0	244
Lane Group Flow (vph)	451	937	625	76	93	38
Heavy Vehicles (%)	2%	3%	2%	2%	4%	5%
Turn Type	pm+pt	NA	NA	Perm	Perm	Perm
Protected Phases	3	8	4			
Permitted Phases	8			4	5	5
Actuated Green, G (s)	56.0	56.0	40.0	40.0	10.7	10.7
Effective Green, g (s)	56.0	56.0	40.0	40.0	10.7	10.7
Actuated g/C Ratio	0.71	0.71	0.51	0.51	0.14	0.14
Clearance Time (s)	4.0	6.0	6.0	6.0	6.0	6.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	643	2521	1819	813	238	211
v/s Ratio Prot	c0.11	0.26	0.17			
v/s Ratio Perm	c0.39			0.05	c0.05	0.02
v/c Ratio	0.70	0.37	0.34	0.09	0.39	0.18
Uniform Delay, d1	5.0	4.5	11.5	10.0	31.0	30.1
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	3.5	0.1	0.1	0.1	1.1	0.4
Delay (s)	8.5	4.5	11.6	10.0	32.1	30.5
Level of Service	A	A	B	B	C	C
Approach Delay (s)		5.8	11.3		30.9	
Approach LOS		A	B		C	
Intersection Summary						
HCM 2000 Control Delay			11.2		HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio			0.68			
Actuated Cycle Length (s)			78.7		Sum of lost time (s)	16.0
Intersection Capacity Utilization			78.0%		ICU Level of Service	D
Analysis Period (min)			15			
c Critical Lane Group						

Lanes, Volumes, Timings
8: Bayview Drive

EX 2021
PM Peak Hour

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations			↑↑			↑
Traffic Volume (vph)	0	0	0	0	0	0
Future Volume (vph)	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	1.00
Fr t						
Flt Protected						
Satd. Flow (prot)	0	0	3579	0	0	1883
Flt Permitted						
Satd. Flow (perm)	0	0	3579	0	0	1883
Link Speed (k/h)	50		50			50
Link Distance (m)	61.2		173.0			97.3
Travel Time (s)	4.4		12.5			7.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	0.0		3.7			3.7
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	1.6		1.6			1.6
Two way Left Turn Lane			Yes			
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14		14	24	
Sign Control	Stop		Free			Free
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization 0.0%	ICU Level of Service A					
Analysis Period (min) 15						

HCM Unsignalized Intersection Capacity Analysis

8: Bayview Drive

EX 2021
PM Peak Hour

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations			↑↑			↑
Traffic Volume (veh/h)	0	0	0	0	0	0
Future Volume (Veh/h)	0	0	0	0	0	0
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	0	0	0
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			TWLTL			None
Median storage (veh)			2			
Upstream signal (m)			173			
pX, platoon unblocked						
vC, conflicting volume	0	0			0	
vC1, stage 1 conf vol	0					
vC2, stage 2 conf vol	0					
vCu, unblocked vol	0	0			0	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)	5.8					
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	1023	1084			1622	
Direction, Lane #	NB 1	NB 2	SB 1			
Volume Total	0	0	0			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	1700	1700			
Volume to Capacity	0.00	0.00	0.00			
Queue Length 95th (m)	0.0	0.0	0.0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS						
Approach Delay (s)	0.0		0.0			
Approach LOS						
Intersection Summary						
Average Delay			0.0			
Intersection Capacity Utilization			0.0%	ICU Level of Service		A
Analysis Period (min)			15			

Lanes, Volumes, Timings

1: Bayview Drive & Big Bay Point Road

08/05/2021

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	43	293	147	162	347	37	49	256	40	66	287	5
Future Volume (vph)	43	293	147	162	347	37	49	256	40	66	287	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	105.0		55.0	105.0		55.0	105.0		55.0	105.0		55.0
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (m)	65.0			65.0			65.0			65.0		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1772	3444	1526	1772	3444	1432	1460	1762	1541	1587	3349	1008
Flt Permitted	0.482			0.511			0.557			0.283		
Satd. Flow (perm)	899	3444	1526	953	3444	1432	856	1762	1541	473	3349	1008
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			169			154			154			113
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		485.6			536.9			234.9			173.0	
Travel Time (s)		35.0			38.7			16.9			12.5	
Peak Hour Factor	0.68	0.77	0.87	0.90	0.83	0.51	0.67	0.82	0.90	0.69	0.89	0.65
Heavy Vehicles (%)	3%	6%	7%	3%	6%	14%	25%	9%	6%	15%	9%	62%
Adj. Flow (vph)	63	381	169	180	418	73	73	312	44	96	322	8
Shared Lane Traffic (%)												
Lane Group Flow (vph)	63	381	169	180	418	73	73	312	44	96	322	8
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane		Yes						Yes			Yes	
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2	0	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	Right
Leading Detector (m)	6.1	30.5	6.1	6.1	30.5	6.1	6.1	30.5	0.0	6.1	30.5	6.1
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	6.1	1.8	6.1	6.1	1.8	6.1	6.1	1.8	0.0	6.1	1.8	6.1
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	

Lanes, Volumes, Timings

1: Bayview Drive & Big Bay Point Road

08/05/2021

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2		2	6		6	8		8	4		4
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	7.0	35.0	35.0	7.0	35.0	35.0	7.0	12.0	12.0	7.0	12.0	12.0
Minimum Split (s)	11.0	41.0	41.0	11.0	41.0	41.0	11.0	30.0	30.0	11.0	30.0	30.0
Total Split (s)	11.0	46.0	46.0	11.0	46.0	46.0	11.0	32.0	32.0	17.5	32.0	32.0
Total Split (%)	10.3%	43.2%	43.2%	10.3%	43.2%	43.2%	10.3%	30.0%	30.0%	16.4%	30.0%	30.0%
Maximum Green (s)	7.0	40.0	40.0	7.0	40.0	40.0	7.0	26.0	26.0	13.5	26.0	26.0
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
All-Red Time (s)	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	6.0	6.0	4.0	6.0	6.0	4.0	6.0	6.0	4.0	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Max	None	None	None	None	None	None	None	None	None	None	None
Walk Time (s)		20.0	20.0		20.0	20.0		9.0	9.0		9.0	9.0
Flash Dont Walk (s)		15.0	15.0		15.0	15.0		15.0	15.0		15.0	15.0
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	0
Act Effect Green (s)	44.8	35.6	35.6	44.8	35.6	35.6	27.8	20.4	20.4	32.9	23.2	23.2
Actuated g/C Ratio	0.49	0.39	0.39	0.49	0.39	0.39	0.31	0.23	0.23	0.36	0.26	0.26
v/c Ratio	0.12	0.28	0.24	0.34	0.31	0.11	0.24	0.79	0.09	0.33	0.38	0.02
Control Delay	13.9	21.6	4.7	15.7	21.9	0.4	19.6	48.7	0.4	20.6	28.7	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	13.9	21.6	4.7	15.7	21.9	0.4	19.6	48.7	0.4	20.6	28.7	0.2
LOS	B	C	A	B	C	A	B	D	A	C	C	A
Approach Delay		16.2			17.9			38.8			26.4	
Approach LOS		B			B			D			C	

Intersection Summary

Area Type: Other

Cycle Length: 106.5

Actuated Cycle Length: 90.6

Natural Cycle: 95

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.79

Intersection Signal Delay: 23.3

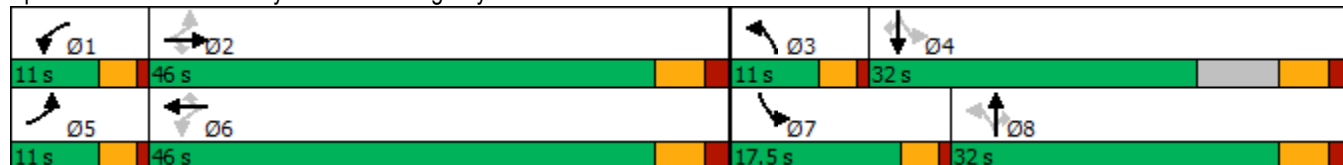
Intersection LOS: C

Intersection Capacity Utilization 74.1%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 1: Bayview Drive & Big Bay Point Road



Queues

1: Bayview Drive & Big Bay Point Road

08/05/2021

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	63	381	169	180	418	73	73	312	44	96	322	8
v/c Ratio	0.12	0.28	0.24	0.34	0.31	0.11	0.24	0.79	0.09	0.33	0.38	0.02
Control Delay	13.9	21.6	4.7	15.7	21.9	0.4	19.6	48.7	0.4	20.6	28.7	0.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	13.9	21.6	4.7	15.7	21.9	0.4	19.6	48.7	0.4	20.6	28.7	0.2
Queue Length 50th (m)	5.4	24.9	0.0	16.7	27.6	0.0	8.1	52.7	0.0	10.8	24.9	0.0
Queue Length 95th (m)	10.2	33.8	12.1	33.4	40.5	0.0	12.0	75.5	0.0	15.2	35.7	0.0
Internal Link Dist (m)	461.6			512.9			210.9			149.0		
Turn Bay Length (m)	105.0		55.0	105.0		55.0	105.0		55.0	105.0		55.0
Base Capacity (vph)	512	1546	778	535	1546	728	309	514	558	344	1222	439
Starvation Cap Reductn	0	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	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.12	0.25	0.22	0.34	0.27	0.10	0.24	0.61	0.08	0.28	0.26	0.02
Intersection Summary												

HCM Signalized Intersection Capacity Analysis

1: Bayview Drive & Big Bay Point Road

08/05/2021

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	43	293	147	162	347	37	49	256	40	66	287	5
Future Volume (vph)	43	293	147	162	347	37	49	256	40	66	287	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	6.0	6.0	4.0	6.0	6.0	4.0	6.0	6.0	4.0	6.0	6.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1772	3444	1526	1772	3444	1432	1460	1762	1541	1587	3349	1008
Flt Permitted	0.48	1.00	1.00	0.51	1.00	1.00	0.56	1.00	1.00	0.28	1.00	1.00
Satd. Flow (perm)	900	3444	1526	954	3444	1432	856	1762	1541	472	3349	1008
Peak-hour factor, PHF	0.68	0.77	0.87	0.90	0.83	0.51	0.67	0.82	0.90	0.69	0.89	0.65
Adj. Flow (vph)	63	381	169	180	418	73	73	312	44	96	322	8
RTOR Reduction (vph)	0	0	103	0	0	45	0	0	34	0	0	6
Lane Group Flow (vph)	63	381	66	180	418	28	73	312	10	96	322	2
Heavy Vehicles (%)	3%	6%	7%	3%	6%	14%	25%	9%	6%	15%	9%	62%
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2		2	6		6	8		8	4		4
Actuated Green, G (s)	42.7	35.6	35.6	42.7	35.6	35.6	25.7	20.4	20.4	31.5	23.3	23.3
Effective Green, g (s)	42.7	35.6	35.6	42.7	35.6	35.6	25.7	20.4	20.4	31.5	23.3	23.3
Actuated g/C Ratio	0.47	0.39	0.39	0.47	0.39	0.39	0.28	0.22	0.22	0.35	0.26	0.26
Clearance Time (s)	4.0	6.0	6.0	4.0	6.0	6.0	4.0	6.0	6.0	4.0	6.0	6.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	488	1342	595	509	1342	558	276	393	344	262	854	257
v/s Ratio Prot	0.01	0.11		c0.03	0.12		0.02	c0.18		c0.03	0.10	
v/s Ratio Perm	0.05		0.04	c0.14		0.02	0.06		0.01	0.09		0.00
v/c Ratio	0.13	0.28	0.11	0.35	0.31	0.05	0.26	0.79	0.03	0.37	0.38	0.01
Uniform Delay, d1	13.4	19.1	17.8	14.4	19.3	17.3	24.8	33.5	27.7	21.7	28.0	25.4
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.1	0.1	0.1	0.4	0.1	0.0	0.5	10.5	0.0	0.9	0.3	0.0
Delay (s)	13.6	19.2	17.8	14.8	19.5	17.4	25.3	44.0	27.7	22.6	28.3	25.4
Level of Service	B	B	B	B	B	B	C	D	C	C	C	C
Approach Delay (s)		18.3			18.0			39.2			27.0	
Approach LOS		B			B			D			C	
Intersection Summary												
HCM 2000 Control Delay			24.1									
HCM 2000 Volume to Capacity ratio			0.48									
Actuated Cycle Length (s)			91.3									
Intersection Capacity Utilization			74.1%									
Analysis Period (min)			15									
c Critical Lane Group												

Lanes, Volumes, Timings

2: Bayview Drive & Courier Entrance/Site Entrance

08/05/2021

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	24	0	55	0	0	0	35	301	0	0	359	47
Future Volume (vph)	24	0	55	0	0	0	35	301	0	0	359	47
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.910		0.981									
Flt Protected	0.983		0.995									
Satd. Flow (prot)	0	1166	0	0	1883	0	0	1764	0	0	1764	0
Flt Permitted	0.983		0.995									
Satd. Flow (perm)	0	1166	0	0	1883	0	0	1764	0	0	1764	0
Link Speed (k/h)	50		50						50			
Link Distance (m)	188.0		108.4						97.3			
Travel Time (s)	13.5		7.8						7.0			
Peak Hour Factor	0.39	0.92	0.45	0.92	0.92	0.92	0.89	0.92	0.92	0.92	0.80	0.63
Heavy Vehicles (%)	50%	2%	46%	2%	2%	2%	3%	9%	2%	2%	8%	0%
Adj. Flow (vph)	62	0	122	0	0	0	39	327	0	0	449	75
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	184	0	0	0	0	0	366	0	0	524	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)	0.0		0.0						3.7			
Link Offset(m)	0.0		0.0						0.0			
Crosswalk Width(m)	1.6		1.6						1.6			
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control	Stop		Stop				Free				Free	
Intersection Summary												
Area Type:	Other											
Control Type:	Unsignalized											
Intersection Capacity Utilization	54.2%				ICU Level of Service A							
Analysis Period (min)	15											

HCM Unsignalized Intersection Capacity Analysis

2: Bayview Drive & Courier Entrance/Site Entrance

08/05/2021

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	24	0	55	0	0	0	35	301	0	0	359	47
Future Volume (Veh/h)	24	0	55	0	0	0	35	301	0	0	359	47
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.39	0.92	0.45	0.92	0.92	0.92	0.89	0.92	0.92	0.92	0.80	0.63
Hourly flow rate (vph)	62	0	122	0	0	0	39	327	0	0	449	75
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type	None								None			
Median storage veh												
Upstream signal (m)	270											
pX, platoon unblocked												
vC, conflicting volume	892	892	486	1014	929	327	524	327				
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	892	892	486	1014	929	327	524	327				
tC, single (s)	7.6	6.5	6.7	7.1	6.5	6.2	4.1	4.1				
tC, 2 stage (s)												
tF (s)	4.0	4.0	3.7	3.5	4.0	3.3	2.2	2.2				
p0 queue free %	71	100	76	100	100	100	96	100				
cM capacity (veh/h)	211	271	501	160	258	714	1038	1233				
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	184	0	366	524								
Volume Left	62	0	39	0								
Volume Right	122	0	0	75								
cSH	343	1700	1038	1233								
Volume to Capacity	0.54	0.00	0.04	0.00								
Queue Length 95th (m)	22.9	0.0	0.9	0.0								
Control Delay (s)	27.0	0.0	1.3	0.0								
Lane LOS	D	A	A									
Approach Delay (s)	27.0	0.0	1.3	0.0								
Approach LOS	D	A										
Intersection Summary												
Average Delay	5.1											
Intersection Capacity Utilization	54.2%			ICU Level of Service					A			
Analysis Period (min)	15											

Lanes, Volumes, Timings

3: Bayview Drive & Little Ave

08/05/2021

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	48	172	229	164	353	19	92	128	79	57	289	30
Future Volume (vph)	48	172	229	164	353	19	92	128	79	57	289	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	20.0		0.0	15.0		0.0	15.0		0.0	15.0		0.0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (m)	40.0			30.0			20.0			45.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.905			0.991			0.940			0.983	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1674	1715	0	1825	1880	0	1601	1651	0	1825	1845	0
Flt Permitted	0.479			0.213			0.177			0.488		
Satd. Flow (perm)	844	1715	0	409	1880	0	298	1651	0	938	1845	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		70			3			25			5	
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		489.6			106.0			1137.3			118.3	
Travel Time (s)		35.3			7.6			81.9			8.5	
Peak Hour Factor	0.73	0.92	0.71	0.63	0.93	0.81	0.88	0.82	0.75	0.80	0.83	0.66
Heavy Vehicles (%)	9%	2%	1%	0%	1%	6%	14%	11%	7%	0%	2%	5%
Adj. Flow (vph)	66	187	323	260	380	23	105	156	105	71	348	45
Shared Lane Traffic (%)												
Lane Group Flow (vph)	66	510	0	260	403	0	105	261	0	71	393	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												Yes
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (m)	6.1	30.5		6.1	30.5		6.1	30.5		6.1	30.5	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Size(m)	6.1	1.8		6.1	1.8		6.1	1.8		6.1	1.8	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	

Lanes, Volumes, Timings

3: Bayview Drive & Little Ave

08/05/2021

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2			6			8			4		
Detector Phase	5	2		1	6		3	8		7	4	
Switch Phase												
Minimum Initial (s)	7.0	44.0		7.0	44.0		10.0	10.0		7.0	10.0	
Minimum Split (s)	11.5	50.0		11.0	50.0		14.5	25.0		14.0	25.0	
Total Split (s)	11.0	55.0		23.0	67.0		14.0	46.0		14.0	46.0	
Total Split (%)	8.0%	39.9%		16.7%	48.6%		10.1%	33.3%		10.1%	33.3%	
Maximum Green (s)	7.0	49.0		19.0	61.0		10.0	40.0		10.0	40.0	
Yellow Time (s)	3.0	4.0		3.0	4.0		3.0	4.0		3.0	4.0	
All-Red Time (s)	1.0	2.0		1.0	2.0		1.0	2.0		1.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	6.0		4.0	6.0		4.0	6.0		4.0	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	None		None	None	
Walk Time (s)		19.0			19.0			8.0			8.0	
Flash Dont Walk (s)		15.0			15.0			11.0			11.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effect Green (s)	54.6	45.5		66.1	55.5		43.8	34.0		40.5	29.9	
Actuated g/C Ratio	0.45	0.38		0.55	0.46		0.36	0.28		0.34	0.25	
v/c Ratio	0.15	0.74		0.66	0.46		0.48	0.54		0.19	0.85	
Control Delay	15.9	36.8		23.7	26.0		32.6	39.0		25.6	60.5	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	15.9	36.8		23.7	26.0		32.6	39.0		25.6	60.5	
LOS	B	D		C	C		C	D		C	E	
Approach Delay		34.4			25.1			37.2			55.1	
Approach LOS		C			C			D			E	

Intersection Summary

Area Type: Other

Cycle Length: 138

Actuated Cycle Length: 120.2

Natural Cycle: 105

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.85

Intersection Signal Delay: 36.6

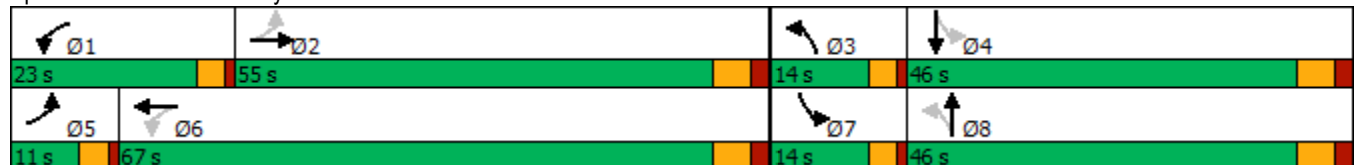
Intersection LOS: D

Intersection Capacity Utilization 87.8%

ICU Level of Service E

Analysis Period (min) 15

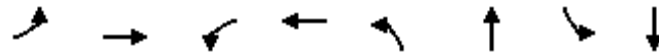
Splits and Phases: 3: Bayview Drive & Little Ave



Queues

3: Bayview Drive & Little Ave

08/05/2021



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	66	510	260	403	105	261	71	393
v/c Ratio	0.15	0.74	0.66	0.46	0.48	0.54	0.19	0.85
Control Delay	15.9	36.8	23.7	26.0	32.6	39.0	25.6	60.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	15.9	36.8	23.7	26.0	32.6	39.0	25.6	60.5
Queue Length 50th (m)	7.0	90.0	30.9	65.7	15.9	47.8	10.4	86.2
Queue Length 95th (m)	12.7	153.8	35.4	105.7	30.1	72.4	19.5	119.4
Internal Link Dist (m)		465.6		82.0		1113.3		94.3
Turn Bay Length (m)	20.0		15.0		15.0		15.0	
Base Capacity (vph)	432	747	450	965	218	571	402	623
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	0.15	0.68	0.58	0.42	0.48	0.46	0.18	0.63
Intersection Summary								

HCM Signalized Intersection Capacity Analysis

3: Bayview Drive & Little Ave

08/05/2021

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	48	172	229	164	353	19	92	128	79	57	289	30
Future Volume (vph)	48	172	229	164	353	19	92	128	79	57	289	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	6.0		4.0	6.0		4.0	6.0		4.0	6.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.91		1.00	0.99		1.00	0.94		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1674	1715		1825	1880		1601	1650		1825	1845	
Flt Permitted	0.48	1.00		0.21	1.00		0.18	1.00		0.49	1.00	
Satd. Flow (perm)	845	1715		410	1880		299	1650		937	1845	
Peak-hour factor, PHF	0.73	0.92	0.71	0.63	0.93	0.81	0.88	0.82	0.75	0.80	0.83	0.66
Adj. Flow (vph)	66	187	323	260	380	23	105	156	105	71	348	45
RTOR Reduction (vph)	0	43	0	0	2	0	0	18	0	0	4	0
Lane Group Flow (vph)	66	467	0	260	401	0	105	243	0	71	389	0
Heavy Vehicles (%)	9%	2%	1%	0%	1%	6%	14%	11%	7%	0%	2%	5%
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	51.8	46.4		64.9	55.5		44.1	34.0		37.7	30.8	
Effective Green, g (s)	51.8	46.4		64.9	55.5		44.1	34.0		37.7	30.8	
Actuated g/C Ratio	0.43	0.38		0.53	0.46		0.36	0.28		0.31	0.25	
Clearance Time (s)	4.0	6.0		4.0	6.0		4.0	6.0		4.0	6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	396	653		386	856		216	460		340	466	
v/s Ratio Prot	0.01	c0.27		c0.08	0.21		c0.04	0.15		0.01	c0.21	
v/s Ratio Perm	0.06			0.28			0.14			0.05		
v/c Ratio	0.17	0.71		0.67	0.47		0.49	0.53		0.21	0.84	
Uniform Delay, d1	21.0	32.1		19.9	22.9		28.9	37.1		30.4	43.1	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.2	3.7		4.6	0.4		1.7	1.1		0.3	12.2	
Delay (s)	21.2	35.8		24.5	23.4		30.6	38.2		30.7	55.3	
Level of Service	C	D		C	C		C	D		C	E	
Approach Delay (s)		34.1			23.8			36.0			51.6	
Approach LOS		C			C			D			D	
Intersection Summary												
HCM 2000 Control Delay			35.1			HCM 2000 Level of Service				D		
HCM 2000 Volume to Capacity ratio			0.72									
Actuated Cycle Length (s)			121.8			Sum of lost time (s)			20.0			
Intersection Capacity Utilization			87.8%			ICU Level of Service			E			
Analysis Period (min)			15									
c Critical Lane Group												

Lanes, Volumes, Timings
4: Fairview Road & Little Ave

08/05/2021

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	8	513	429	8	335	547
Future Volume (vph)	8	513	429	8	335	547
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	15.0	0.0		0.0	0.0	
Storage Lanes	1	1		0	1	
Taper Length (m)	35.0				0.0	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt		0.850	0.994			
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1825	1541	3266	0	1789	1830
Flt Permitted	0.950				0.425	
Satd. Flow (perm)	1825	1541	3266	0	800	1830
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)		522	4			
Link Speed (k/h)	50		50			50
Link Distance (m)	489.6		1407.2			78.1
Travel Time (s)	35.3		101.3			5.6
Peak Hour Factor	0.58	0.86	0.94	0.43	0.81	0.89
Heavy Vehicles (%)	0%	6%	11%	13%	2%	5%
Adj. Flow (vph)	14	597	456	19	414	615
Shared Lane Traffic (%)						
Lane Group Flow (vph)	14	597	475	0	414	615
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	3.7		3.7			3.7
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	1.6		1.6			1.6
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14		14	24	
Number of Detectors	1	1	2		1	2
Detector Template	Left	Right	Thru		Left	Thru
Leading Detector (m)	6.1	6.1	30.5		6.1	30.5
Trailing Detector (m)	0.0	0.0	0.0		0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0		0.0	0.0
Detector 1 Size(m)	6.1	6.1	1.8		6.1	1.8
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0
Detector 2 Position(m)			28.7			28.7
Detector 2 Size(m)			1.8			1.8
Detector 2 Type			Cl+Ex			Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)			0.0			0.0
Turn Type	Perm	Perm	NA		pm+pt	NA
Protected Phases			4		3	8

Lanes, Volumes, Timings

4: Fairview Road & Little Ave

08/05/2021

	↖	↗	↑	↘	↙	↓
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Permitted Phases	5	5			8	
Detector Phase	5	5	4		3	8
Switch Phase						
Minimum Initial (s)	10.0	10.0	34.0		7.0	34.0
Minimum Split (s)	27.0	27.0	40.0		13.0	40.0
Total Split (s)	36.0	36.0	40.0		24.0	64.0
Total Split (%)	36.0%	36.0%	40.0%		24.0%	64.0%
Maximum Green (s)	30.0	30.0	34.0		20.0	58.0
Yellow Time (s)	4.0	4.0	4.0		3.0	4.0
All-Red Time (s)	2.0	2.0	2.0		1.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0		4.0	6.0
Lead/Lag			Lag		Lead	
Lead-Lag Optimize?			Yes		Yes	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Recall Mode	None	None	Max		None	Max
Walk Time (s)	9.0	9.0	22.0			22.0
Flash Dont Walk (s)	12.0	12.0	12.0			12.0
Pedestrian Calls (#/hr)	0	0	0			0
Act Effect Green (s)	15.4	15.4	41.3		60.5	58.4
Actuated g/C Ratio	0.18	0.18	0.48		0.70	0.68
v/c Ratio	0.04	0.85	0.30		0.58	0.49
Control Delay	27.2	17.6	16.5		9.7	9.7
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay	27.2	17.6	16.5		9.7	9.7
LOS	C	B	B		A	A
Approach Delay	17.9		16.5			9.7
Approach LOS	B		B			A

Intersection Summary

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 85.9

Natural Cycle: 80

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.85

Intersection Signal Delay: 13.6

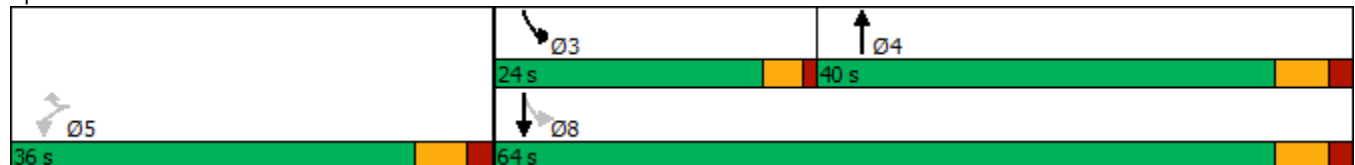
Intersection LOS: B

Intersection Capacity Utilization 70.1%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 4: Fairview Road & Little Ave



Queues

4: Fairview Road & Little Ave

08/05/2021



Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	14	597	475	414	615
v/c Ratio	0.04	0.85	0.30	0.58	0.49
Control Delay	27.2	17.6	16.5	9.7	9.7
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	27.2	17.6	16.5	9.7	9.7
Queue Length 50th (m)	1.9	10.7	20.2	17.3	33.7
Queue Length 95th (m)	4.1	38.2	50.7	49.6	99.9
Internal Link Dist (m)	465.6		1383.2		54.1
Turn Bay Length (m)	15.0				
Base Capacity (vph)	642	880	1573	795	1245
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.02	0.68	0.30	0.52	0.49
Intersection Summary					

HCM Signalized Intersection Capacity Analysis

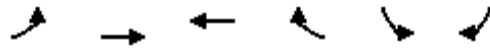
4: Fairview Road & Little Ave

08/05/2021

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations			 			
Traffic Volume (vph)	8	513	429	8	335	547
Future Volume (vph)	8	513	429	8	335	547
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	6.0		4.0	6.0
Lane Util. Factor	1.00	1.00	0.95		1.00	1.00
Frt	1.00	0.85	0.99		1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1825	1541	3266		1789	1830
Flt Permitted	0.95	1.00	1.00		0.43	1.00
Satd. Flow (perm)	1825	1541	3266		801	1830
Peak-hour factor, PHF	0.58	0.86	0.94	0.43	0.81	0.89
Adj. Flow (vph)	14	597	456	19	414	615
RTOR Reduction (vph)	0	428	2	0	0	0
Lane Group Flow (vph)	14	169	473	0	414	615
Heavy Vehicles (%)	0%	6%	11%	13%	2%	5%
Turn Type	Perm	Perm	NA		pm+pt	NA
Protected Phases			4		3	8
Permitted Phases	5	5			8	
Actuated Green, G (s)	15.4	15.4	41.3		58.4	58.4
Effective Green, g (s)	15.4	15.4	41.3		58.4	58.4
Actuated g/C Ratio	0.18	0.18	0.48		0.68	0.68
Clearance Time (s)	6.0	6.0	6.0		4.0	6.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	327	276	1572		696	1245
v/s Ratio Prot			0.14		0.09	0.34
v/s Ratio Perm	0.01	0.11			0.31	
v/c Ratio	0.04	0.61	0.30		0.59	0.49
Uniform Delay, d1	29.1	32.4	13.5		6.0	6.6
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.1	4.0	0.5		1.4	1.4
Delay (s)	29.2	36.4	14.0		7.4	8.0
Level of Service	C	D	B		A	A
Approach Delay (s)	36.2		14.0			7.7
Approach LOS	D		B			A
Intersection Summary						
HCM 2000 Control Delay			17.4		HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio			0.63			
Actuated Cycle Length (s)			85.8		Sum of lost time (s)	16.0
Intersection Capacity Utilization			70.1%		ICU Level of Service	C
Analysis Period (min)			15			
c Critical Lane Group						

Lanes, Volumes, Timings
5: Big Bay Point Road & Fairview Road

08/05/2021

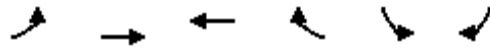


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	375	562	443	97	75	291
Future Volume (vph)	375	562	443	97	75	291
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	120.0			120.0	0.0	0.0
Storage Lanes	1			1	1	1
Taper Length (m)	65.0				0.0	
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1789	3411	3444	1526	1706	1601
Flt Permitted	0.434				0.950	
Satd. Flow (perm)	817	3411	3444	1526	1706	1601
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				105		316
Link Speed (k/h)		50	50		50	
Link Distance (m)		479.3	485.6		1407.2	
Travel Time (s)		34.5	35.0		101.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	7%	6%	7%	7%	2%
Adj. Flow (vph)	408	611	482	105	82	316
Shared Lane Traffic (%)						
Lane Group Flow (vph)	408	611	482	105	82	316
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		3.7	3.7		3.7	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		1.6	1.6		1.6	
Two way Left Turn Lane			Yes			
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24			14	24	14
Number of Detectors	1	2	2	1	1	1
Detector Template	Left	Thru	Thru	Right	Left	Right
Leading Detector (m)	6.1	30.5	30.5	6.1	6.1	6.1
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	6.1	1.8	1.8	6.1	6.1	6.1
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		28.7	28.7			
Detector 2 Size(m)		1.8	1.8			
Detector 2 Type		Cl+Ex	Cl+Ex			
Detector 2 Channel						
Detector 2 Extend (s)		0.0	0.0			
Turn Type	pm+pt	NA	NA	Perm	Perm	Perm
Protected Phases	3	8	4			

Lanes, Volumes, Timings

5: Big Bay Point Road & Fairview Road

08/05/2021



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Permitted Phases	8			4	5	5
Detector Phase	3	8	4	4	5	5
Switch Phase						
Minimum Initial (s)	7.0	40.0	40.0	40.0	10.0	10.0
Minimum Split (s)	11.0	46.0	46.0	46.0	37.0	37.0
Total Split (s)	16.0	62.0	46.0	46.0	46.0	46.0
Total Split (%)	14.8%	57.4%	42.6%	42.6%	42.6%	42.6%
Maximum Green (s)	12.0	56.0	40.0	40.0	42.0	42.0
Yellow Time (s)	3.0	4.0	4.0	4.0	3.0	3.0
All-Red Time (s)	1.0	2.0	2.0	2.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	6.0	6.0	6.0	4.0	4.0
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None
Walk Time (s)			7.0	7.0	7.0	7.0
Flash Dont Walk (s)			33.0	33.0	25.0	25.0
Pedestrian Calls (#/hr)			0	0	0	0
Act Effect Green (s)	57.2	55.2	40.0	40.0	10.7	10.7
Actuated g/C Ratio	0.75	0.73	0.53	0.53	0.14	0.14
v/c Ratio	0.54	0.25	0.27	0.12	0.34	0.64
Control Delay	5.9	3.8	10.6	2.7	34.0	10.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	5.9	3.8	10.6	2.7	34.0	10.4
LOS	A	A	B	A	C	B
Approach Delay		4.6	9.2		15.3	
Approach LOS		A	A		B	

Intersection Summary

Area Type: Other

Cycle Length: 108

Actuated Cycle Length: 75.9

Natural Cycle: 95

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.64

Intersection Signal Delay: 8.1

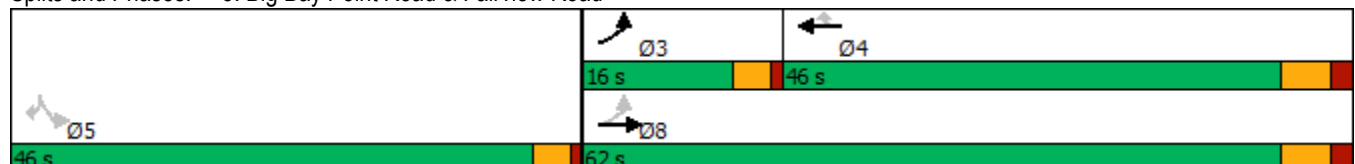
Intersection LOS: A

Intersection Capacity Utilization 74.1%

ICU Level of Service D

Analysis Period (min) 15

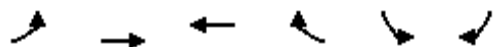
Splits and Phases: 5: Big Bay Point Road & Fairview Road



Queues

5: Big Bay Point Road & Fairview Road

08/05/2021

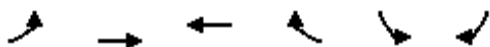


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Group Flow (vph)	408	611	482	105	82	316
v/c Ratio	0.54	0.25	0.27	0.12	0.34	0.64
Control Delay	5.9	3.8	10.6	2.7	34.0	10.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	5.9	3.8	10.6	2.7	34.0	10.4
Queue Length 50th (m)	13.4	11.5	18.6	0.0	10.9	0.0
Queue Length 95th (m)	27.0	20.0	29.7	6.9	23.0	20.4
Internal Link Dist (m)		455.3	461.6		1383.2	
Turn Bay Length (m)	120.0			120.0		
Base Capacity (vph)	769	2517	1815	853	944	1027
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	0.53	0.24	0.27	0.12	0.09	0.31
Intersection Summary						

HCM Signalized Intersection Capacity Analysis

5: Big Bay Point Road & Fairview Road

08/05/2021



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	375	562	443	97	75	291
Future Volume (vph)	375	562	443	97	75	291
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	6.0	6.0	6.0	4.0	4.0
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1789	3411	3444	1526	1706	1601
Flt Permitted	0.43	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	817	3411	3444	1526	1706	1601
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	408	611	482	105	82	316
RTOR Reduction (vph)	0	0	0	50	0	272
Lane Group Flow (vph)	408	611	482	55	82	44
Heavy Vehicles (%)	2%	7%	6%	7%	7%	2%
Turn Type	pm+pt	NA	NA	Perm	Perm	Perm
Protected Phases	3	8	4			
Permitted Phases	8			4	5	5
Actuated Green, G (s)	55.3	55.3	40.1	40.1	10.7	10.7
Effective Green, g (s)	55.3	55.3	40.1	40.1	10.7	10.7
Actuated g/C Ratio	0.73	0.73	0.53	0.53	0.14	0.14
Clearance Time (s)	4.0	6.0	6.0	6.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	737	2481	1817	805	240	225
v/s Ratio Prot	c0.08	0.18	0.14			
v/s Ratio Perm	c0.32			0.04	c0.05	0.03
v/c Ratio	0.55	0.25	0.27	0.07	0.34	0.20
Uniform Delay, d1	3.8	3.4	9.9	8.8	29.5	28.9
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.9	0.1	0.1	0.0	0.9	0.4
Delay (s)	4.7	3.5	9.9	8.8	30.3	29.3
Level of Service	A	A	A	A	C	C
Approach Delay (s)		4.0	9.7		29.5	
Approach LOS		A	A		C	
Intersection Summary						
HCM 2000 Control Delay			10.7		HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio			0.54			
Actuated Cycle Length (s)			76.0		Sum of lost time (s)	14.0
Intersection Capacity Utilization			74.1%		ICU Level of Service	D
Analysis Period (min)			15			
c Critical Lane Group						

Lanes, Volumes, Timings

8: Bayview Drive

08/05/2021

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations			↑↑			↑
Traffic Volume (vph)	0	0	0	0	0	0
Future Volume (vph)	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	1.00
Frnt						
Flt Protected						
Satd. Flow (prot)	0	0	3579	0	0	1883
Flt Permitted						
Satd. Flow (perm)	0	0	3579	0	0	1883
Link Speed (k/h)	50		50			50
Link Distance (m)	61.2		173.0			97.3
Travel Time (s)	4.4		12.5			7.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	0.0		3.7			3.7
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	1.6		1.6			1.6
Two way Left Turn Lane			Yes			
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14		14	24	
Sign Control	Stop		Free			Free
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization 0.0%	ICU Level of Service A					
Analysis Period (min) 15						

HCM Unsignalized Intersection Capacity Analysis

8: Bayview Drive

08/05/2021

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations			↑↑			↑
Traffic Volume (veh/h)	0	0	0	0	0	0
Future Volume (Veh/h)	0	0	0	0	0	0
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	0	0	0
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			TWLTL			None
Median storage (veh)			2			
Upstream signal (m)			173			
pX, platoon unblocked						
vC, conflicting volume	0	0			0	
vC1, stage 1 conf vol	0					
vC2, stage 2 conf vol	0					
vCu, unblocked vol	0	0			0	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)	5.8					
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	1023	1084			1622	
Direction, Lane #	NB 1	NB 2	SB 1			
Volume Total	0	0	0			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	1700	1700			
Volume to Capacity	0.00	0.00	0.00			
Queue Length 95th (m)	0.0	0.0	0.0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS						
Approach Delay (s)	0.0		0.0			
Approach LOS						
Intersection Summary						
Average Delay			0.0			
Intersection Capacity Utilization			0.0%	ICU Level of Service		A
Analysis Period (min)			15			

Lanes, Volumes, Timings

1: Bayview Drive & Big Bay Point Road

08/05/2021

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	43	293	147	162	347	37	49	256	40	66	287	5
Future Volume (vph)	43	293	147	162	347	37	49	256	40	66	287	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	105.0		55.0	105.0		55.0	105.0		55.0	105.0		55.0
Storage Lanes	1		1	1		1	1		0	1		1
Taper Length (m)	65.0			65.0			65.0			65.0		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.95	1.00	0.95	1.00
Frt			0.850			0.850		0.981				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1772	3444	1526	1772	3444	1432	1460	3296	0	1587	3349	1008
Flt Permitted	0.494			0.523			0.557			0.392		
Satd. Flow (perm)	921	3444	1526	975	3444	1432	856	3296	0	655	3349	1008
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			169			154		14				113
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		485.6			536.9			234.9			173.0	
Travel Time (s)		35.0			38.7			16.9			12.5	
Peak Hour Factor	0.68	0.77	0.87	0.90	0.83	0.51	0.67	0.82	0.90	0.69	0.89	0.65
Heavy Vehicles (%)	3%	6%	7%	3%	6%	14%	25%	9%	6%	15%	9%	62%
Adj. Flow (vph)	63	381	169	180	418	73	73	312	44	96	322	8
Shared Lane Traffic (%)												
Lane Group Flow (vph)	63	381	169	180	418	73	73	356	0	96	322	8
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane		Yes						Yes			Yes	
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	Right
Leading Detector (m)	6.1	30.5	6.1	6.1	30.5	6.1	6.1	30.5		6.1	30.5	6.1
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Size(m)	6.1	1.8	6.1	6.1	1.8	6.1	6.1	1.8		6.1	1.8	6.1
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	

Lanes, Volumes, Timings

1: Bayview Drive & Big Bay Point Road

08/05/2021

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2		2	6		6	8			4		4
Detector Phase	5	2	2	1	6	6	3	8		7	4	4
Switch Phase												
Minimum Initial (s)	7.0	35.0	35.0	7.0	35.0	35.0	7.0	12.0		7.0	12.0	12.0
Minimum Split (s)	11.0	41.0	41.0	11.0	41.0	41.0	11.0	30.0		11.0	30.0	30.0
Total Split (s)	11.0	46.0	46.0	11.0	46.0	46.0	11.0	32.0		17.5	32.0	32.0
Total Split (%)	10.3%	43.2%	43.2%	10.3%	43.2%	43.2%	10.3%	30.0%		16.4%	30.0%	30.0%
Maximum Green (s)	7.0	40.0	40.0	7.0	40.0	40.0	7.0	26.0		13.5	26.0	26.0
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0		3.0	4.0	4.0
All-Red Time (s)	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0		1.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.0	6.0	6.0	4.0	6.0	6.0	4.0	6.0		4.0	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Recall Mode	Max	None	None	None	None	None	None	None		None	None	None
Walk Time (s)		20.0	20.0		20.0	20.0		9.0			9.0	9.0
Flash Dont Walk (s)		15.0	15.0		15.0	15.0		15.0			15.0	15.0
Pedestrian Calls (#/hr)		0	0		0	0		0			0	0
Act Effect Green (s)	44.5	35.4	35.4	44.5	35.4	35.4	22.1	14.7		26.6	17.1	17.1
Actuated g/C Ratio	0.53	0.42	0.42	0.53	0.42	0.42	0.26	0.17		0.32	0.20	0.20
v/c Ratio	0.11	0.26	0.23	0.31	0.29	0.11	0.27	0.61		0.31	0.47	0.03
Control Delay	10.8	18.1	4.2	12.2	18.3	0.3	21.7	36.4		21.7	32.1	0.2
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	10.8	18.1	4.2	12.2	18.3	0.3	21.7	36.4		21.7	32.1	0.2
LOS	B	B	A	B	B	A	C	D		C	C	A
Approach Delay		13.5			14.7			33.9			29.1	
Approach LOS		B			B			C			C	

Intersection Summary

Area Type: Other

Cycle Length: 106.5

Actuated Cycle Length: 84.2

Natural Cycle: 95

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.61

Intersection Signal Delay: 21.1

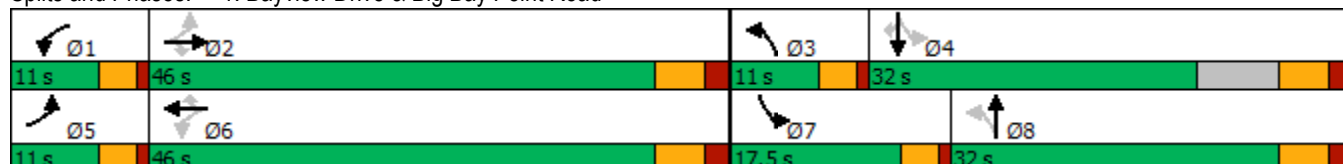
Intersection LOS: C

Intersection Capacity Utilization 70.6%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 1: Bayview Drive & Big Bay Point Road



Queues

1: Bayview Drive & Big Bay Point Road

08/05/2021



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	63	381	169	180	418	73	73	356	96	322	8
v/c Ratio	0.11	0.26	0.23	0.31	0.29	0.11	0.27	0.61	0.31	0.47	0.03
Control Delay	10.8	18.1	4.2	12.2	18.3	0.3	21.7	36.4	21.7	32.1	0.2
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	10.8	18.1	4.2	12.2	18.3	0.3	21.7	36.4	21.7	32.1	0.2
Queue Length 50th (m)	4.3	21.1	0.0	13.3	23.4	0.0	8.1	27.7	10.8	24.9	0.0
Queue Length 95th (m)	8.9	30.5	11.2	29.2	36.5	0.0	12.2	38.5	15.6	36.3	0.0
Internal Link Dist (m)	461.6			512.9			210.9			149.0	
Turn Bay Length (m)	105.0			55.0	105.0			55.0	105.0		
Base Capacity (vph)	557	1653	820	581	1653	767	275	1038	365	1305	462
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	0.11	0.23	0.21	0.31	0.25	0.10	0.27	0.34	0.26	0.25	0.02
Intersection Summary											

HCM Signalized Intersection Capacity Analysis

1: Bayview Drive & Big Bay Point Road

08/05/2021

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 			 			 	
Traffic Volume (vph)	43	293	147	162	347	37	49	256	40	66	287	5
Future Volume (vph)	43	293	147	162	347	37	49	256	40	66	287	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	6.0	6.0	4.0	6.0	6.0	4.0	6.0		4.0	6.0	6.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95		1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1772	3444	1526	1772	3444	1432	1460	3298		1587	3349	1008
Flt Permitted	0.49	1.00	1.00	0.52	1.00	1.00	0.56	1.00		0.39	1.00	1.00
Satd. Flow (perm)	922	3444	1526	975	3444	1432	856	3298		655	3349	1008
Peak-hour factor, PHF	0.68	0.77	0.87	0.90	0.83	0.51	0.67	0.82	0.90	0.69	0.89	0.65
Adj. Flow (vph)	63	381	169	180	418	73	73	312	44	96	322	8
RTOR Reduction (vph)	0	0	99	0	0	43	0	12	0	0	0	6
Lane Group Flow (vph)	63	381	70	180	418	30	73	344	0	96	322	2
Heavy Vehicles (%)	3%	6%	7%	3%	6%	14%	25%	9%	6%	15%	9%	62%
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2		2	6		6	8			4		4
Actuated Green, G (s)	42.5	35.4	35.4	42.5	35.4	35.4	20.1	14.7		25.1	17.2	17.2
Effective Green, g (s)	42.5	35.4	35.4	42.5	35.4	35.4	20.1	14.7		25.1	17.2	17.2
Actuated g/C Ratio	0.50	0.42	0.42	0.50	0.42	0.42	0.24	0.17		0.29	0.20	0.20
Clearance Time (s)	4.0	6.0	6.0	4.0	6.0	6.0	4.0	6.0		4.0	6.0	6.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	531	1432	634	553	1432	595	240	569		279	676	203
v/s Ratio Prot	0.01	0.11		c0.03	0.12		0.02	c0.10		c0.03	0.10	
v/s Ratio Perm	0.05		0.05	c0.14		0.02	0.05			0.07		0.00
v/c Ratio	0.12	0.27	0.11	0.33	0.29	0.05	0.30	0.61		0.34	0.48	0.01
Uniform Delay, d1	11.1	16.3	15.2	11.9	16.5	14.8	26.1	32.5		22.7	30.0	27.1
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	0.1	0.1	0.1	0.3	0.1	0.0	0.7	1.8		0.7	0.5	0.0
Delay (s)	11.2	16.4	15.3	12.2	16.6	14.9	26.8	34.3		23.4	30.5	27.1
Level of Service	B	B	B	B	B	B	C	C		C	C	C
Approach Delay (s)		15.6			15.3			33.1			28.8	
Approach LOS		B			B			C			C	
Intersection Summary												
HCM 2000 Control Delay			21.6	HCM 2000 Level of Service					C			
HCM 2000 Volume to Capacity ratio			0.39									
Actuated Cycle Length (s)			85.1	Sum of lost time (s)					20.0			
Intersection Capacity Utilization			70.6%	ICU Level of Service					C			
Analysis Period (min)			15									
c Critical Lane Group												

Lanes, Volumes, Timings

2: Bayview Drive & Courier Entrance/Site Entrance

08/05/2021

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	24	0	55	0	0	0	35	301	0	0	359	47
Future Volume (vph)	24	0	55	0	0	0	35	301	0	0	359	47
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.910									0.981	
Flt Protected		0.983						0.995				
Satd. Flow (prot)	0	1166	0	0	1883	0	0	1764	0	0	1764	0
Flt Permitted		0.983						0.995				
Satd. Flow (perm)	0	1166	0	0	1883	0	0	1764	0	0	1764	0
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		188.0			108.4			97.3			1137.3	
Travel Time (s)		13.5			7.8			7.0			81.9	
Peak Hour Factor	0.39	0.92	0.45	0.92	0.92	0.92	0.89	0.92	0.92	0.92	0.80	0.63
Heavy Vehicles (%)	50%	2%	46%	2%	2%	2%	3%	9%	2%	2%	8%	0%
Adj. Flow (vph)	62	0	122	0	0	0	39	327	0	0	449	75
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	184	0	0	0	0	0	366	0	0	524	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		0.0			0.0			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Stop			Stop			Free			Free	
Intersection Summary												
Area Type:	Other											
Control Type:	Unsignalized											
Intersection Capacity Utilization	54.2%											
Analysis Period (min)	15											
	ICU Level of Service A											

HCM Unsignalized Intersection Capacity Analysis

2: Bayview Drive & Courier Entrance/Site Entrance

08/05/2021

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	24	0	55	0	0	0	35	301	0	0	359	47
Future Volume (Veh/h)	24	0	55	0	0	0	35	301	0	0	359	47
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.39	0.92	0.45	0.92	0.92	0.92	0.89	0.92	0.92	0.92	0.80	0.63
Hourly flow rate (vph)	62	0	122	0	0	0	39	327	0	0	449	75
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type							None			None		
Median storage (veh)												
Upstream signal (m)	270											
pX, platoon unblocked												
vC, conflicting volume	892	892	486	1014	929	327	524				327	
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	892	892	486	1014	929	327	524				327	
tC, single (s)	7.6	6.5	6.7	7.1	6.5	6.2	4.1				4.1	
tC, 2 stage (s)												
tF (s)	4.0	4.0	3.7	3.5	4.0	3.3	2.2				2.2	
p0 queue free %	71	100	76	100	100	100	96				100	
cM capacity (veh/h)	211	271	501	160	258	714	1038				1233	
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	184	0	366	524								
Volume Left	62	0	39	0								
Volume Right	122	0	0	75								
cSH	343	1700	1038	1233								
Volume to Capacity	0.54	0.00	0.04	0.00								
Queue Length 95th (m)	22.9	0.0	0.9	0.0								
Control Delay (s)	27.0	0.0	1.3	0.0								
Lane LOS	D	A	A									
Approach Delay (s)	27.0	0.0	1.3	0.0								
Approach LOS	D	A										
Intersection Summary												
Average Delay				5.1								
Intersection Capacity Utilization				54.2%	ICU Level of Service				A			
Analysis Period (min)				15								

Lanes, Volumes, Timings

3: Bayview Drive & Little Ave

08/05/2021

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	48	172	229	164	353	19	92	128	79	57	289	30
Future Volume (vph)	48	172	229	164	353	19	92	128	79	57	289	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	20.0		0.0	15.0		0.0	15.0		0.0	15.0		0.0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (m)	40.0			30.0			20.0			45.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.905			0.991			0.940			0.983	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1674	1715	0	1825	1880	0	1601	1651	0	1825	1845	0
Flt Permitted	0.479			0.213			0.177			0.488		
Satd. Flow (perm)	844	1715	0	409	1880	0	298	1651	0	938	1845	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		70			3			25			5	
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		489.6			106.0			1137.3			118.3	
Travel Time (s)		35.3			7.6			81.9			8.5	
Peak Hour Factor	0.73	0.92	0.71	0.63	0.93	0.81	0.88	0.82	0.75	0.80	0.83	0.66
Heavy Vehicles (%)	9%	2%	1%	0%	1%	6%	14%	11%	7%	0%	2%	5%
Adj. Flow (vph)	66	187	323	260	380	23	105	156	105	71	348	45
Shared Lane Traffic (%)												
Lane Group Flow (vph)	66	510	0	260	403	0	105	261	0	71	393	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												Yes
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (m)	6.1	30.5		6.1	30.5		6.1	30.5		6.1	30.5	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Size(m)	6.1	1.8		6.1	1.8		6.1	1.8		6.1	1.8	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	

Lanes, Volumes, Timings

3: Bayview Drive & Little Ave

08/05/2021

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2			6			8			4		
Detector Phase	5	2		1	6		3	8		7	4	
Switch Phase												
Minimum Initial (s)	7.0	44.0		7.0	44.0		10.0	10.0		7.0	10.0	
Minimum Split (s)	11.5	50.0		11.0	50.0		14.5	25.0		14.0	25.0	
Total Split (s)	11.0	55.0		23.0	67.0		14.0	46.0		14.0	46.0	
Total Split (%)	8.0%	39.9%		16.7%	48.6%		10.1%	33.3%		10.1%	33.3%	
Maximum Green (s)	7.0	49.0		19.0	61.0		10.0	40.0		10.0	40.0	
Yellow Time (s)	3.0	4.0		3.0	4.0		3.0	4.0		3.0	4.0	
All-Red Time (s)	1.0	2.0		1.0	2.0		1.0	2.0		1.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	6.0		4.0	6.0		4.0	6.0		4.0	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	None		None	None	
Walk Time (s)		19.0			19.0			8.0			8.0	
Flash Dont Walk (s)		15.0			15.0			11.0			11.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effect Green (s)	54.6	45.5		66.1	55.5		43.8	34.0		40.5	29.9	
Actuated g/C Ratio	0.45	0.38		0.55	0.46		0.36	0.28		0.34	0.25	
v/c Ratio	0.15	0.74		0.66	0.46		0.48	0.54		0.19	0.85	
Control Delay	15.9	36.8		23.7	26.0		32.6	39.0		25.6	60.5	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	15.9	36.8		23.7	26.0		32.6	39.0		25.6	60.5	
LOS	B	D		C	C		C	D		C	E	
Approach Delay		34.4			25.1			37.2			55.1	
Approach LOS		C			C			D			E	

Intersection Summary

Area Type: Other

Cycle Length: 138

Actuated Cycle Length: 120.2

Natural Cycle: 105

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.85

Intersection Signal Delay: 36.6

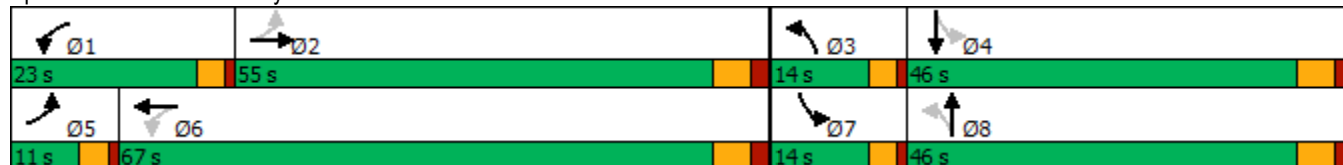
Intersection LOS: D

Intersection Capacity Utilization 87.8%

ICU Level of Service E

Analysis Period (min) 15

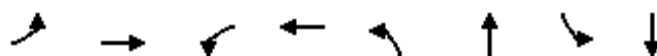
Splits and Phases: 3: Bayview Drive & Little Ave



Queues

3: Bayview Drive & Little Ave

08/05/2021



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	66	510	260	403	105	261	71	393
v/c Ratio	0.15	0.74	0.66	0.46	0.48	0.54	0.19	0.85
Control Delay	15.9	36.8	23.7	26.0	32.6	39.0	25.6	60.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	15.9	36.8	23.7	26.0	32.6	39.0	25.6	60.5
Queue Length 50th (m)	7.0	90.0	30.9	65.7	15.9	47.8	10.4	86.2
Queue Length 95th (m)	12.7	153.8	35.4	105.7	30.1	72.4	19.5	119.4
Internal Link Dist (m)		465.6		82.0		1113.3		94.3
Turn Bay Length (m)	20.0		15.0		15.0		15.0	
Base Capacity (vph)	432	747	450	965	218	571	402	623
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	0.15	0.68	0.58	0.42	0.48	0.46	0.18	0.63
Intersection Summary								

HCM Signalized Intersection Capacity Analysis

3: Bayview Drive & Little Ave

08/05/2021

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	48	172	229	164	353	19	92	128	79	57	289	30
Future Volume (vph)	48	172	229	164	353	19	92	128	79	57	289	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	6.0		4.0	6.0		4.0	6.0		4.0	6.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.91		1.00	0.99		1.00	0.94		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1674	1715		1825	1880		1601	1650		1825	1845	
Flt Permitted	0.48	1.00		0.21	1.00		0.18	1.00		0.49	1.00	
Satd. Flow (perm)	845	1715		410	1880		299	1650		937	1845	
Peak-hour factor, PHF	0.73	0.92	0.71	0.63	0.93	0.81	0.88	0.82	0.75	0.80	0.83	0.66
Adj. Flow (vph)	66	187	323	260	380	23	105	156	105	71	348	45
RTOR Reduction (vph)	0	43	0	0	2	0	0	18	0	0	4	0
Lane Group Flow (vph)	66	467	0	260	401	0	105	243	0	71	389	0
Heavy Vehicles (%)	9%	2%	1%	0%	1%	6%	14%	11%	7%	0%	2%	5%
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	51.8	46.4		64.9	55.5		44.1	34.0		37.7	30.8	
Effective Green, g (s)	51.8	46.4		64.9	55.5		44.1	34.0		37.7	30.8	
Actuated g/C Ratio	0.43	0.38		0.53	0.46		0.36	0.28		0.31	0.25	
Clearance Time (s)	4.0	6.0		4.0	6.0		4.0	6.0		4.0	6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	396	653		386	856		216	460		340	466	
v/s Ratio Prot	0.01	c0.27		c0.08	0.21		c0.04	0.15		0.01	c0.21	
v/s Ratio Perm	0.06			0.28			0.14			0.05		
v/c Ratio	0.17	0.71		0.67	0.47		0.49	0.53		0.21	0.84	
Uniform Delay, d1	21.0	32.1		19.9	22.9		28.9	37.1		30.4	43.1	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.2	3.7		4.6	0.4		1.7	1.1		0.3	12.2	
Delay (s)	21.2	35.8		24.5	23.4		30.6	38.2		30.7	55.3	
Level of Service	C	D		C	C		C	D		C	E	
Approach Delay (s)		34.1			23.8			36.0			51.6	
Approach LOS		C			C			D			D	
Intersection Summary												
HCM 2000 Control Delay			35.1			HCM 2000 Level of Service				D		
HCM 2000 Volume to Capacity ratio			0.72									
Actuated Cycle Length (s)			121.8			Sum of lost time (s)			20.0			
Intersection Capacity Utilization			87.8%			ICU Level of Service			E			
Analysis Period (min)			15									
c Critical Lane Group												

Lanes, Volumes, Timings
4: Fairview Road & Little Ave

08/05/2021

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	8	513	429	8	335	547
Future Volume (vph)	8	513	429	8	335	547
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	15.0	0.0		0.0	0.0	
Storage Lanes	1	1		0	1	
Taper Length (m)	35.0				0.0	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt		0.850	0.994			
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1825	1541	3266	0	1789	1830
Flt Permitted	0.950				0.425	
Satd. Flow (perm)	1825	1541	3266	0	800	1830
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)		522	4			
Link Speed (k/h)	50		50			50
Link Distance (m)	489.6		1407.2			78.1
Travel Time (s)	35.3		101.3			5.6
Peak Hour Factor	0.58	0.86	0.94	0.43	0.81	0.89
Heavy Vehicles (%)	0%	6%	11%	13%	2%	5%
Adj. Flow (vph)	14	597	456	19	414	615
Shared Lane Traffic (%)						
Lane Group Flow (vph)	14	597	475	0	414	615
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	3.7		3.7			3.7
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	1.6		1.6			1.6
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14		14	24	
Number of Detectors	1	1	2		1	2
Detector Template	Left	Right	Thru		Left	Thru
Leading Detector (m)	6.1	6.1	30.5		6.1	30.5
Trailing Detector (m)	0.0	0.0	0.0		0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0		0.0	0.0
Detector 1 Size(m)	6.1	6.1	1.8		6.1	1.8
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0
Detector 2 Position(m)			28.7			28.7
Detector 2 Size(m)			1.8			1.8
Detector 2 Type			Cl+Ex			Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)			0.0			0.0
Turn Type	Perm	Perm	NA		pm+pt	NA
Protected Phases			4		3	8

Lanes, Volumes, Timings

4: Fairview Road & Little Ave

08/05/2021

	↖	↗	↑	↘	↙	↓
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Permitted Phases	5	5			8	
Detector Phase	5	5	4		3	8
Switch Phase						
Minimum Initial (s)	10.0	10.0	34.0		7.0	34.0
Minimum Split (s)	27.0	27.0	40.0		13.0	40.0
Total Split (s)	36.0	36.0	40.0		24.0	64.0
Total Split (%)	36.0%	36.0%	40.0%		24.0%	64.0%
Maximum Green (s)	30.0	30.0	34.0		20.0	58.0
Yellow Time (s)	4.0	4.0	4.0		3.0	4.0
All-Red Time (s)	2.0	2.0	2.0		1.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0		4.0	6.0
Lead/Lag			Lag		Lead	
Lead-Lag Optimize?			Yes		Yes	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Recall Mode	None	None	Max		None	Max
Walk Time (s)	9.0	9.0	22.0			22.0
Flash Dont Walk (s)	12.0	12.0	12.0			12.0
Pedestrian Calls (#/hr)	0	0	0			0
Act Effect Green (s)	15.4	15.4	41.3		60.5	58.4
Actuated g/C Ratio	0.18	0.18	0.48		0.70	0.68
v/c Ratio	0.04	0.85	0.30		0.58	0.49
Control Delay	27.2	17.6	16.5		9.7	9.7
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay	27.2	17.6	16.5		9.7	9.7
LOS	C	B	B		A	A
Approach Delay	17.9		16.5			9.7
Approach LOS	B		B			A

Intersection Summary

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 85.9

Natural Cycle: 80

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.85

Intersection Signal Delay: 13.6

Intersection LOS: B

Intersection Capacity Utilization 70.1%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 4: Fairview Road & Little Ave



Queues

4: Fairview Road & Little Ave

08/05/2021



Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	14	597	475	414	615
v/c Ratio	0.04	0.85	0.30	0.58	0.49
Control Delay	27.2	17.6	16.5	9.7	9.7
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	27.2	17.6	16.5	9.7	9.7
Queue Length 50th (m)	1.9	10.7	20.2	17.3	33.7
Queue Length 95th (m)	4.1	38.2	50.7	49.6	99.9
Internal Link Dist (m)	465.6		1383.2		54.1
Turn Bay Length (m)	15.0				
Base Capacity (vph)	642	880	1573	795	1245
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.02	0.68	0.30	0.52	0.49
Intersection Summary					

HCM Signalized Intersection Capacity Analysis

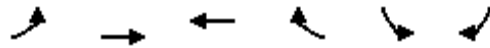
4: Fairview Road & Little Ave

08/05/2021

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	8	513	429	8	335	547
Future Volume (vph)	8	513	429	8	335	547
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	6.0		4.0	6.0
Lane Util. Factor	1.00	1.00	0.95		1.00	1.00
Frt	1.00	0.85	0.99		1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1825	1541	3266		1789	1830
Flt Permitted	0.95	1.00	1.00		0.43	1.00
Satd. Flow (perm)	1825	1541	3266		801	1830
Peak-hour factor, PHF	0.58	0.86	0.94	0.43	0.81	0.89
Adj. Flow (vph)	14	597	456	19	414	615
RTOR Reduction (vph)	0	428	2	0	0	0
Lane Group Flow (vph)	14	169	473	0	414	615
Heavy Vehicles (%)	0%	6%	11%	13%	2%	5%
Turn Type	Perm	Perm	NA		pm+pt	NA
Protected Phases			4		3	8
Permitted Phases	5	5			8	
Actuated Green, G (s)	15.4	15.4	41.3		58.4	58.4
Effective Green, g (s)	15.4	15.4	41.3		58.4	58.4
Actuated g/C Ratio	0.18	0.18	0.48		0.68	0.68
Clearance Time (s)	6.0	6.0	6.0		4.0	6.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	327	276	1572		696	1245
v/s Ratio Prot			0.14		0.09	0.34
v/s Ratio Perm	0.01	0.11			0.31	
v/c Ratio	0.04	0.61	0.30		0.59	0.49
Uniform Delay, d1	29.1	32.4	13.5		6.0	6.6
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.1	4.0	0.5		1.4	1.4
Delay (s)	29.2	36.4	14.0		7.4	8.0
Level of Service	C	D	B		A	A
Approach Delay (s)	36.2		14.0			7.7
Approach LOS	D		B			A
Intersection Summary						
HCM 2000 Control Delay			17.4		HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio			0.63			
Actuated Cycle Length (s)			85.8		Sum of lost time (s)	16.0
Intersection Capacity Utilization			70.1%		ICU Level of Service	C
Analysis Period (min)			15			
c Critical Lane Group						

Lanes, Volumes, Timings
5: Big Bay Point Road & Fairview Road

08/05/2021

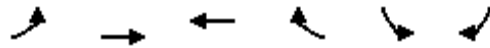


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	375	562	443	97	75	291
Future Volume (vph)	375	562	443	97	75	291
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	120.0			120.0	0.0	0.0
Storage Lanes	1			1	1	1
Taper Length (m)	65.0				0.0	
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1789	3411	3444	1526	1706	1601
Flt Permitted	0.434				0.950	
Satd. Flow (perm)	817	3411	3444	1526	1706	1601
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				105		316
Link Speed (k/h)		50	50		50	
Link Distance (m)		479.3	485.6		1407.2	
Travel Time (s)		34.5	35.0		101.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	7%	6%	7%	7%	2%
Adj. Flow (vph)	408	611	482	105	82	316
Shared Lane Traffic (%)						
Lane Group Flow (vph)	408	611	482	105	82	316
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		3.7	3.7		3.7	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		1.6	1.6		1.6	
Two way Left Turn Lane			Yes			
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24			14	24	14
Number of Detectors	1	2	2	1	1	1
Detector Template	Left	Thru	Thru	Right	Left	Right
Leading Detector (m)	6.1	30.5	30.5	6.1	6.1	6.1
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	6.1	1.8	1.8	6.1	6.1	6.1
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		28.7	28.7			
Detector 2 Size(m)		1.8	1.8			
Detector 2 Type		Cl+Ex	Cl+Ex			
Detector 2 Channel						
Detector 2 Extend (s)		0.0	0.0			
Turn Type	pm+pt	NA	NA	Perm	Perm	Perm
Protected Phases	3	8	4			

Lanes, Volumes, Timings

5: Big Bay Point Road & Fairview Road

08/05/2021



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Permitted Phases	8			4	5	5
Detector Phase	3	8	4	4	5	5
Switch Phase						
Minimum Initial (s)	7.0	40.0	40.0	40.0	10.0	10.0
Minimum Split (s)	11.0	46.0	46.0	46.0	37.0	37.0
Total Split (s)	16.0	62.0	46.0	46.0	46.0	46.0
Total Split (%)	14.8%	57.4%	42.6%	42.6%	42.6%	42.6%
Maximum Green (s)	12.0	56.0	40.0	40.0	42.0	42.0
Yellow Time (s)	3.0	4.0	4.0	4.0	3.0	3.0
All-Red Time (s)	1.0	2.0	2.0	2.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	6.0	6.0	6.0	4.0	4.0
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None
Walk Time (s)			7.0	7.0	7.0	7.0
Flash Dont Walk (s)			33.0	33.0	25.0	25.0
Pedestrian Calls (#/hr)			0	0	0	0
Act Effect Green (s)	57.2	55.2	40.0	40.0	10.7	10.7
Actuated g/C Ratio	0.75	0.73	0.53	0.53	0.14	0.14
v/c Ratio	0.54	0.25	0.27	0.12	0.34	0.64
Control Delay	5.9	3.8	10.6	2.7	34.0	10.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	5.9	3.8	10.6	2.7	34.0	10.4
LOS	A	A	B	A	C	B
Approach Delay		4.6	9.2		15.3	
Approach LOS		A	A		B	

Intersection Summary

Area Type: Other

Cycle Length: 108

Actuated Cycle Length: 75.9

Natural Cycle: 95

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.64

Intersection Signal Delay: 8.1

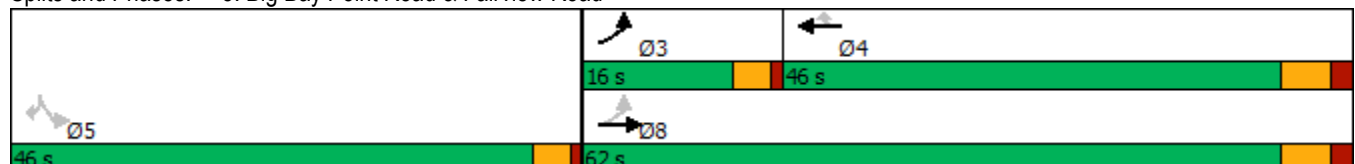
Intersection LOS: A

Intersection Capacity Utilization 74.1%

ICU Level of Service D

Analysis Period (min) 15

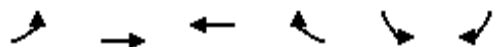
Splits and Phases: 5: Big Bay Point Road & Fairview Road



Queues

5: Big Bay Point Road & Fairview Road

08/05/2021



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Group Flow (vph)	408	611	482	105	82	316
v/c Ratio	0.54	0.25	0.27	0.12	0.34	0.64
Control Delay	5.9	3.8	10.6	2.7	34.0	10.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	5.9	3.8	10.6	2.7	34.0	10.4
Queue Length 50th (m)	13.4	11.5	18.6	0.0	10.9	0.0
Queue Length 95th (m)	27.0	20.0	29.7	6.9	23.0	20.4
Internal Link Dist (m)		455.3	461.6		1383.2	
Turn Bay Length (m)	120.0			120.0		
Base Capacity (vph)	769	2517	1815	853	944	1027
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	0.53	0.24	0.27	0.12	0.09	0.31
Intersection Summary						

HCM Signalized Intersection Capacity Analysis

5: Big Bay Point Road & Fairview Road

08/05/2021



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	375	562	443	97	75	291
Future Volume (vph)	375	562	443	97	75	291
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	6.0	6.0	6.0	4.0	4.0
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1789	3411	3444	1526	1706	1601
Flt Permitted	0.43	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	817	3411	3444	1526	1706	1601
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	408	611	482	105	82	316
RTOR Reduction (vph)	0	0	0	50	0	272
Lane Group Flow (vph)	408	611	482	55	82	44
Heavy Vehicles (%)	2%	7%	6%	7%	7%	2%
Turn Type	pm+pt	NA	NA	Perm	Perm	Perm
Protected Phases	3	8	4			
Permitted Phases	8			4	5	5
Actuated Green, G (s)	55.3	55.3	40.1	40.1	10.7	10.7
Effective Green, g (s)	55.3	55.3	40.1	40.1	10.7	10.7
Actuated g/C Ratio	0.73	0.73	0.53	0.53	0.14	0.14
Clearance Time (s)	4.0	6.0	6.0	6.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	737	2481	1817	805	240	225
v/s Ratio Prot	c0.08	0.18	0.14			
v/s Ratio Perm	c0.32			0.04	c0.05	0.03
v/c Ratio	0.55	0.25	0.27	0.07	0.34	0.20
Uniform Delay, d1	3.8	3.4	9.9	8.8	29.5	28.9
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.9	0.1	0.1	0.0	0.9	0.4
Delay (s)	4.7	3.5	9.9	8.8	30.3	29.3
Level of Service	A	A	A	A	C	C
Approach Delay (s)		4.0	9.7		29.5	
Approach LOS		A	A		C	
Intersection Summary						
HCM 2000 Control Delay			10.7		HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio			0.54			
Actuated Cycle Length (s)			76.0		Sum of lost time (s)	14.0
Intersection Capacity Utilization			74.1%		ICU Level of Service	D
Analysis Period (min)			15			
c Critical Lane Group						

Lanes, Volumes, Timings

8: Bayview Drive

08/05/2021

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations			↑↑			↑
Traffic Volume (vph)	0	0	0	0	0	0
Future Volume (vph)	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	1.00
Fr t						
Flt Protected						
Satd. Flow (prot)	0	0	3579	0	0	1883
Flt Permitted						
Satd. Flow (perm)	0	0	3579	0	0	1883
Link Speed (k/h)	50		50			50
Link Distance (m)	61.2		173.0			97.3
Travel Time (s)	4.4		12.5			7.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	0.0		3.7			3.7
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	1.6		1.6			1.6
Two way Left Turn Lane			Yes			
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14		14	24	
Sign Control	Stop		Free			Free
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization 0.0%	ICU Level of Service A					
Analysis Period (min) 15						

HCM Unsignalized Intersection Capacity Analysis

8: Bayview Drive

08/05/2021

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations			↑↑			↑
Traffic Volume (veh/h)	0	0	0	0	0	0
Future Volume (Veh/h)	0	0	0	0	0	0
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	0	0	0
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			TWLTL			None
Median storage veh			2			
Upstream signal (m)			173			
pX, platoon unblocked						
vC, conflicting volume	0	0			0	
vC1, stage 1 conf vol	0					
vC2, stage 2 conf vol	0					
vCu, unblocked vol	0	0			0	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)	5.8					
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	1023	1084			1622	
Direction, Lane #	NB 1	NB 2	SB 1			
Volume Total	0	0	0			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	1700	1700			
Volume to Capacity	0.00	0.00	0.00			
Queue Length 95th (m)	0.0	0.0	0.0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS						
Approach Delay (s)	0.0		0.0			
Approach LOS						
Intersection Summary						
Average Delay			0.0			
Intersection Capacity Utilization			0.0%	ICU Level of Service		A
Analysis Period (min)			15			

Lanes, Volumes, Timings

1: Bayview Drive & Big Bay Point Road

08/05/2021

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	346	131	202	556	21	275	428	163	148	359	33
Future Volume (vph)	15	346	131	202	556	21	275	428	163	148	359	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	105.0		55.0	105.0		55.0	105.0		55.0	105.0		55.0
Storage Lanes	1		1	1		1	1		0	1		1
Taper Length (m)	65.0			65.0			65.0			65.0		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.95	1.00	0.95	1.00
Frt			0.850			0.850		0.959				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1352	3544	1541	1789	3579	1555	1807	3378	0	1738	3476	1484
Flt Permitted	0.324			0.473			0.311			0.237		
Satd. Flow (perm)	461	3544	1541	891	3579	1555	592	3378	0	434	3476	1484
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			164			164		54				164
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		485.6			536.9			234.9			173.0	
Travel Time (s)		35.0			38.7			16.9			12.5	
Peak Hour Factor	0.72	0.89	0.80	0.88	0.89	0.70	0.86	0.88	0.88	0.72	0.84	0.86
Heavy Vehicles (%)	35%	3%	6%	2%	2%	5%	1%	5%	0%	5%	5%	10%
Adj. Flow (vph)	21	389	164	230	625	30	320	486	185	206	427	38
Shared Lane Traffic (%)												
Lane Group Flow (vph)	21	389	164	230	625	30	320	671	0	206	427	38
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane		Yes						Yes			Yes	
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	Right
Leading Detector (m)	6.1	30.5	6.1	6.1	30.5	6.1	6.1	30.5		6.1	30.5	6.1
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Size(m)	6.1	1.8	6.1	6.1	1.8	6.1	6.1	1.8		6.1	1.8	6.1
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	

Lanes, Volumes, Timings

1: Bayview Drive & Big Bay Point Road

08/05/2021

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2		2	6		6	8			4		4
Detector Phase	5	2	2	1	6	6	3	8		7	4	4
Switch Phase												
Minimum Initial (s)	7.0	35.0	35.0	7.0	35.0	35.0	7.0	12.0		7.0	12.0	12.0
Minimum Split (s)	11.0	41.0	41.0	11.0	41.0	41.0	11.0	30.0		11.0	30.0	30.0
Total Split (s)	11.0	37.0	37.0	12.0	38.0	38.0	23.0	33.0		18.0	28.0	28.0
Total Split (%)	11.0%	37.0%	37.0%	12.0%	38.0%	38.0%	23.0%	33.0%		18.0%	28.0%	28.0%
Maximum Green (s)	7.0	31.0	31.0	8.0	32.0	32.0	19.0	27.0		14.0	22.0	22.0
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0		3.0	4.0	4.0
All-Red Time (s)	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0		1.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.0	6.0	6.0	4.0	6.0	6.0	4.0	6.0		4.0	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Recall Mode	Max	None	None	None	None	None	None	None		None	None	None
Walk Time (s)		20.0	20.0		20.0	20.0		9.0			9.0	9.0
Flash Dont Walk (s)		15.0	15.0		15.0	15.0		15.0			15.0	15.0
Pedestrian Calls (#/hr)		0	0		0	0		0			0	0
Act Effect Green (s)	40.2	31.2	31.2	42.2	32.2	32.2	40.3	22.6		32.8	18.7	18.7
Actuated g/C Ratio	0.43	0.33	0.33	0.45	0.34	0.34	0.43	0.24		0.35	0.20	0.20
v/c Ratio	0.08	0.33	0.26	0.48	0.51	0.05	0.69	0.79		0.65	0.62	0.09
Control Delay	15.9	25.7	5.4	20.4	27.4	0.1	26.6	38.0		27.5	38.8	0.4
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	15.9	25.7	5.4	20.4	27.4	0.1	26.6	38.0		27.5	38.8	0.4
LOS	B	C	A	C	C	A	C	D		C	D	A
Approach Delay		19.5			24.7			34.3			33.2	
Approach LOS		B			C			C			C	

Intersection Summary

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 94

Natural Cycle: 95

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.79

Intersection Signal Delay: 28.6

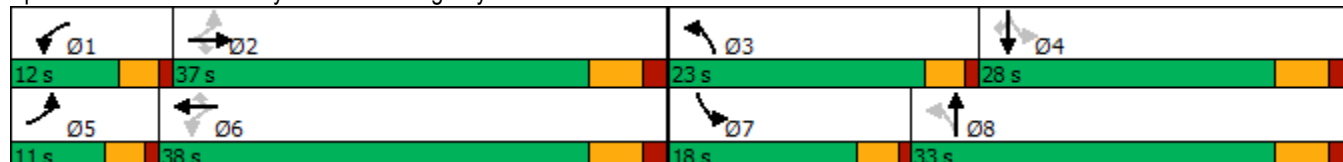
Intersection LOS: C

Intersection Capacity Utilization 82.3%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 1: Bayview Drive & Big Bay Point Road



Queues

1: Bayview Drive & Big Bay Point Road

08/05/2021



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	21	389	164	230	625	30	320	671	206	427	38
v/c Ratio	0.08	0.33	0.26	0.48	0.51	0.05	0.69	0.79	0.65	0.62	0.09
Control Delay	15.9	25.7	5.4	20.4	27.4	0.1	26.6	38.0	27.5	38.8	0.4
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	15.9	25.7	5.4	20.4	27.4	0.1	26.6	38.0	27.5	38.8	0.4
Queue Length 50th (m)	2.1	28.8	0.0	25.3	49.1	0.0	38.6	56.1	23.2	37.8	0.0
Queue Length 95th (m)	5.2	42.6	9.5	42.5	68.3	0.0	55.5	74.3	29.1	50.0	0.0
Internal Link Dist (m)	461.6				512.9		210.9		149.0		
Turn Bay Length (m)	105.0		55.0	105.0		55.0	105.0		105.0		55.0
Base Capacity (vph)	263	1174	620	476	1224	639	503	1013	355	817	474
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	0.08	0.33	0.26	0.48	0.51	0.05	0.64	0.66	0.58	0.52	0.08
Intersection Summary											

HCM Signalized Intersection Capacity Analysis

1: Bayview Drive & Big Bay Point Road

08/05/2021

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 			 			 	
Traffic Volume (vph)	15	346	131	202	556	21	275	428	163	148	359	33
Future Volume (vph)	15	346	131	202	556	21	275	428	163	148	359	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	6.0	6.0	4.0	6.0	6.0	4.0	6.0		4.0	6.0	6.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95		1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.96		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1352	3544	1541	1789	3579	1555	1807	3377		1738	3476	1484
Flt Permitted	0.32	1.00	1.00	0.47	1.00	1.00	0.31	1.00		0.24	1.00	1.00
Satd. Flow (perm)	462	3544	1541	890	3579	1555	592	3377		434	3476	1484
Peak-hour factor, PHF	0.72	0.89	0.80	0.88	0.89	0.70	0.86	0.88	0.88	0.72	0.84	0.86
Adj. Flow (vph)	21	389	164	230	625	30	320	486	185	206	427	38
RTOR Reduction (vph)	0	0	110	0	0	20	0	41	0	0	0	30
Lane Group Flow (vph)	21	389	54	230	625	10	320	630	0	206	427	8
Heavy Vehicles (%)	35%	3%	6%	2%	2%	5%	1%	5%	0%	5%	5%	10%
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2		2	6		6	8			4		4
Actuated Green, G (s)	38.2	31.2	31.2	40.2	32.2	32.2	38.6	22.6		30.8	18.7	18.7
Effective Green, g (s)	38.2	31.2	31.2	40.2	32.2	32.2	38.6	22.6		30.8	18.7	18.7
Actuated g/C Ratio	0.41	0.33	0.33	0.43	0.34	0.34	0.41	0.24		0.33	0.20	0.20
Clearance Time (s)	4.0	6.0	6.0	4.0	6.0	6.0	4.0	6.0		4.0	6.0	6.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	254	1177	512	457	1227	533	450	812		310	692	295
v/s Ratio Prot	0.01	0.11		c0.04	c0.17		c0.12	c0.19		0.09	0.12	
v/s Ratio Perm	0.03		0.04	0.17		0.01	0.17			0.13		0.01
v/c Ratio	0.08	0.33	0.11	0.50	0.51	0.02	0.71	0.78		0.66	0.62	0.03
Uniform Delay, d1	17.0	23.5	21.7	17.7	24.6	20.4	20.4	33.3		24.5	34.3	30.3
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	0.1	0.2	0.1	0.9	0.3	0.0	5.2	4.7		5.3	1.6	0.0
Delay (s)	17.2	23.7	21.8	18.6	24.9	20.4	25.6	38.0		29.8	36.0	30.3
Level of Service	B	C	C	B	C	C	C	D		C	D	C
Approach Delay (s)		22.9			23.1			34.0			33.7	
Approach LOS		C			C			C			C	
Intersection Summary												
HCM 2000 Control Delay			28.8			HCM 2000 Level of Service				C		
HCM 2000 Volume to Capacity ratio			0.66									
Actuated Cycle Length (s)			93.9			Sum of lost time (s)			20.0			
Intersection Capacity Utilization			82.3%			ICU Level of Service			E			
Analysis Period (min)			15									
c Critical Lane Group												

Lanes, Volumes, Timings

2: Bayview Drive & Courier Entrance/Site Entrance

08/05/2021

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	0	32	0	0	0	38	464	0	0	541	18
Future Volume (vph)	30	0	32	0	0	0	38	464	0	0	541	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	0.942		0.994									
Flt Protected	0.972		0.994									
Satd. Flow (prot)	0	1737	0	0	1883	0	0	1767	0	0	1765	0
Flt Permitted	0.972		0.994									
Satd. Flow (perm)	0	1737	0	0	1883	0	0	1767	0	0	1765	0
Link Speed (k/h)	50		50									
Link Distance (m)	188.0		286.2									
Travel Time (s)	13.5		20.6									
Peak Hour Factor	0.58	0.92	0.83	0.92	0.92	0.92	0.58	0.89	0.92	0.92	0.89	0.61
Heavy Vehicles (%)	0%	0%	3%	2%	2%	2%	40%	4%	0%	2%	6%	53%
Adj. Flow (vph)	52	0	39	0	0	0	66	521	0	0	608	30
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	91	0	0	0	0	0	587	0	0	638	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)	0.0		0.0									
Link Offset(m)	0.0		0.0									
Crosswalk Width(m)	1.6		1.6									
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control	Stop		Free									
Intersection Summary												
Area Type: Other												
Control Type: Unsignalized												
Intersection Capacity Utilization 66.1%												
ICU Level of Service C												
Analysis Period (min) 15												

HCM Unsignalized Intersection Capacity Analysis

2: Bayview Drive & Courier Entrance/Site Entrance

08/05/2021

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	0	32	0	0	0	38	464	0	0	541	18
Future Volume (Veh/h)	30	0	32	0	0	0	38	464	0	0	541	18
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.58	0.92	0.83	0.92	0.92	0.92	0.58	0.89	0.92	0.92	0.89	0.61
Hourly flow rate (vph)	52	0	39	0	0	0	66	521	0	0	608	30
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type	None								None			
Median storage veh												
Upstream signal (m)	270											
pX, platoon unblocked												
vC, conflicting volume	1276	1276	623	1315	1291	521	638	521				
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1276	1276	623	1315	1291	521	638	521				
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.5	4.1				
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.6	2.2				
p0 queue free %	62	100	92	100	100	100	92	100				
cM capacity (veh/h)	136	154	484	116	150	555	788	1045				
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	91	0	587	638								
Volume Left	52	0	66	0								
Volume Right	39	0	0	30								
cSH	196	1700	788	1045								
Volume to Capacity	0.46	0.00	0.08	0.00								
Queue Length 95th (m)	16.9	0.0	2.1	0.0								
Control Delay (s)	38.3	0.0	2.2	0.0								
Lane LOS	E	A	A									
Approach Delay (s)	38.3	0.0	2.2	0.0								
Approach LOS	E	A										
Intersection Summary												
Average Delay	3.6											
Intersection Capacity Utilization	66.1%			ICU Level of Service					C			
Analysis Period (min)	15											

Lanes, Volumes, Timings

3: Bayview Drive & Little Ave

08/05/2021

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	24	314	70	68	270	47	284	409	118	114	218	39
Future Volume (vph)	24	314	70	68	270	47	284	409	118	114	218	39
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	20.0		0.0	15.0		0.0	15.0		0.0	15.0		0.0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (m)	40.0			30.0			20.0			45.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.970			0.977			0.962			0.976	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1825	1841	0	1825	1861	0	1807	1848	0	1825	1844	0
Flt Permitted	0.446			0.263			0.299			0.120		
Satd. Flow (perm)	857	1841	0	505	1861	0	569	1848	0	231	1844	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		10			7			14			7	
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		489.6			106.0			1137.3			118.3	
Travel Time (s)		35.3			7.6			81.9			8.5	
Peak Hour Factor	0.81	0.88	0.77	0.74	0.94	0.92	0.94	0.96	0.83	0.73	0.85	0.81
Heavy Vehicles (%)	0%	1%	2%	0%	1%	0%	1%	0%	0%	0%	2%	0%
Adj. Flow (vph)	30	357	91	92	287	51	302	426	142	156	256	48
Shared Lane Traffic (%)												
Lane Group Flow (vph)	30	448	0	92	338	0	302	568	0	156	304	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												Yes
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (m)	6.1	30.5		6.1	30.5		6.1	30.5		6.1	30.5	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Size(m)	6.1	1.8		6.1	1.8		6.1	1.8		6.1	1.8	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	

Lanes, Volumes, Timings

3: Bayview Drive & Little Ave

08/05/2021

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2			6			8			4		
Detector Phase	5	2		1	6		3	8		7	4	
Switch Phase												
Minimum Initial (s)	7.0	44.0		7.0	44.0		10.0	10.0		7.0	10.0	
Minimum Split (s)	11.0	48.0		11.0	48.0		14.0	23.0		14.0	23.0	
Total Split (s)	11.0	53.0		11.0	53.0		32.0	58.0		16.0	42.0	
Total Split (%)	8.0%	38.4%		8.0%	38.4%		23.2%	42.0%		11.6%	30.4%	
Maximum Green (s)	7.0	49.0		7.0	49.0		28.0	54.0		12.0	38.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	None		None	None	
Walk Time (s)		19.0			19.0			8.0			8.0	
Flash Dont Walk (s)		15.0			15.0			11.0			11.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effect Green (s)	52.3	45.3		54.1	50.2		55.7	40.6		44.5	33.4	
Actuated g/C Ratio	0.44	0.38		0.45	0.42		0.46	0.34		0.37	0.28	
v/c Ratio	0.07	0.64		0.30	0.43		0.67	0.90		0.67	0.59	
Control Delay	21.1	37.0		23.3	30.1		28.1	54.7		40.0	42.1	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	21.1	37.0		23.3	30.1		28.1	54.7		40.0	42.1	
LOS	C	D		C	C		C	D		D	D	
Approach Delay		36.0			28.6			45.5			41.4	
Approach LOS		D			C			D			D	

Intersection Summary

Area Type: Other

Cycle Length: 138

Actuated Cycle Length: 120.2

Natural Cycle: 100

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.90

Intersection Signal Delay: 39.4

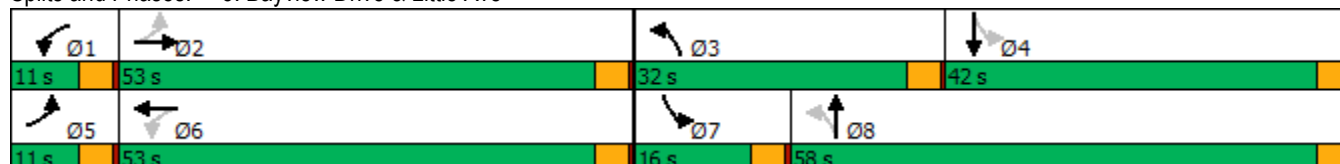
Intersection LOS: D

Intersection Capacity Utilization 90.8%

ICU Level of Service E

Analysis Period (min) 15

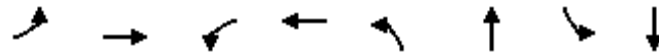
Splits and Phases: 3: Bayview Drive & Little Ave



Queues

3: Bayview Drive & Little Ave

08/05/2021



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	30	448	92	338	302	568	156	304
v/c Ratio	0.07	0.64	0.30	0.43	0.67	0.90	0.67	0.59
Control Delay	21.1	37.0	23.3	30.1	28.1	54.7	40.0	42.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	21.1	37.0	23.3	30.1	28.1	54.7	40.0	42.1
Queue Length 50th (m)	3.8	85.9	12.2	60.1	43.7	123.0	20.5	59.3
Queue Length 95th (m)	9.8	135.1	20.9	100.4	67.5	177.3	31.5	91.4
Internal Link Dist (m)		465.6		82.0		1113.3		94.3
Turn Bay Length (m)	20.0		15.0		15.0		15.0	
Base Capacity (vph)	430	764	305	811	555	846	248	604
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	0.07	0.59	0.30	0.42	0.54	0.67	0.63	0.50
Intersection Summary								

HCM Signalized Intersection Capacity Analysis

3: Bayview Drive & Little Ave

08/05/2021

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	24	314	70	68	270	47	284	409	118	114	218	39
Future Volume (vph)	24	314	70	68	270	47	284	409	118	114	218	39
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.97		1.00	0.98		1.00	0.96		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1825	1840		1825	1862		1807	1849		1825	1845	
Flt Permitted	0.45	1.00		0.26	1.00		0.30	1.00		0.12	1.00	
Satd. Flow (perm)	858	1840		505	1862		568	1849		230	1845	
Peak-hour factor, PHF	0.81	0.88	0.77	0.74	0.94	0.92	0.94	0.96	0.83	0.73	0.85	0.81
Adj. Flow (vph)	30	357	91	92	287	51	302	426	142	156	256	48
RTOR Reduction (vph)	0	6	0	0	4	0	0	9	0	0	5	0
Lane Group Flow (vph)	30	442	0	92	334	0	302	559	0	156	299	0
Heavy Vehicles (%)	0%	1%	2%	0%	1%	0%	1%	0%	0%	0%	2%	0%
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	50.9	47.0		57.3	50.2		55.7	40.6		44.5	33.4	
Effective Green, g (s)	50.9	47.0		57.3	50.2		55.7	40.6		44.5	33.4	
Actuated g/C Ratio	0.42	0.39		0.47	0.41		0.46	0.33		0.37	0.27	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	389	710		314	767		445	616		229	505	
v/s Ratio Prot	0.00	c0.24		c0.02	0.18		c0.10	c0.30		0.06	0.16	
v/s Ratio Perm	0.03			0.12			0.21			0.19		
v/c Ratio	0.08	0.62		0.29	0.44		0.68	0.91		0.68	0.59	
Uniform Delay, d1	21.3	30.2		20.6	25.6		23.4	38.8		30.1	38.3	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.1	1.7		0.5	0.4		4.1	17.0		8.1	1.9	
Delay (s)	21.4	31.9		21.1	26.0		27.5	55.8		38.2	40.2	
Level of Service	C	C		C	C		C	E		D	D	
Approach Delay (s)		31.3			25.0			46.0			39.5	
Approach LOS		C			C			D			D	
Intersection Summary												
HCM 2000 Control Delay			37.5			HCM 2000 Level of Service				D		
HCM 2000 Volume to Capacity ratio			0.73									
Actuated Cycle Length (s)			121.8			Sum of lost time (s)			16.0			
Intersection Capacity Utilization			90.8%			ICU Level of Service			E			
Analysis Period (min)			15									
c Critical Lane Group												

Lanes, Volumes, Timings
4: Fairview Road & Little Ave

08/05/2021

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	16	574	806	12	465	637
Future Volume (vph)	16	574	806	12	465	637
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	15.0	0.0		0.0	0.0	
Storage Lanes	1	1		0	1	
Taper Length (m)	35.0				0.0	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt		0.850	0.997			
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1825	1570	3469	0	1789	1830
Flt Permitted	0.950				0.210	
Satd. Flow (perm)	1825	1570	3469	0	396	1830
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)		504	2			
Link Speed (k/h)	50		50			50
Link Distance (m)	489.6		1407.2			78.1
Travel Time (s)	35.3		101.3			5.6
Peak Hour Factor	0.75	0.94	0.95	0.75	0.95	0.86
Heavy Vehicles (%)	0%	4%	5%	0%	2%	5%
Adj. Flow (vph)	21	611	848	16	489	741
Shared Lane Traffic (%)						
Lane Group Flow (vph)	21	611	864	0	489	741
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	3.7		3.7			3.7
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	1.6		1.6			1.6
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14		14	24	
Number of Detectors	1	1	2		1	2
Detector Template	Left	Right	Thru		Left	Thru
Leading Detector (m)	6.1	6.1	30.5		6.1	30.5
Trailing Detector (m)	0.0	0.0	0.0		0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0		0.0	0.0
Detector 1 Size(m)	6.1	6.1	1.8		6.1	1.8
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0
Detector 2 Position(m)			28.7			28.7
Detector 2 Size(m)			1.8			1.8
Detector 2 Type			Cl+Ex			Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)			0.0			0.0
Turn Type	Perm	Perm	NA		pm+pt	NA
Protected Phases			4		3	8

Lanes, Volumes, Timings

4: Fairview Road & Little Ave

08/05/2021

	↖	↗	↑	↘	↙	↓
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Permitted Phases	5	5			8	
Detector Phase	5	5	4		3	8
Switch Phase						
Minimum Initial (s)	10.0	10.0	34.0		7.0	34.0
Minimum Split (s)	27.0	27.0	40.0		11.0	40.0
Total Split (s)	29.0	29.0	40.0		31.0	71.0
Total Split (%)	29.0%	29.0%	40.0%		31.0%	71.0%
Maximum Green (s)	23.0	23.0	34.0		27.0	65.0
Yellow Time (s)	4.0	4.0	4.0		3.0	4.0
All-Red Time (s)	2.0	2.0	2.0		1.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0		4.0	6.0
Lead/Lag			Lag		Lead	
Lead-Lag Optimize?			Yes		Yes	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Recall Mode	None	None	Max		None	Max
Walk Time (s)	9.0	9.0	22.0			22.0
Flash Dont Walk (s)	12.0	12.0	12.0			12.0
Pedestrian Calls (#/hr)	0	0	0			0
Act Effect Green (s)	16.0	16.0	40.1		67.2	65.2
Actuated g/C Ratio	0.17	0.17	0.43		0.72	0.70
v/c Ratio	0.07	0.89	0.58		0.81	0.58
Control Delay	31.4	23.8	24.6		24.2	10.4
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay	31.4	23.8	24.6		24.2	10.4
LOS	C	C	C		C	B
Approach Delay	24.1		24.6			15.9
Approach LOS	C		C			B

Intersection Summary

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 93.3

Natural Cycle: 90

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.89

Intersection Signal Delay: 20.6

Intersection LOS: C

Intersection Capacity Utilization 75.8%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 4: Fairview Road & Little Ave



Queues

4: Fairview Road & Little Ave

08/05/2021



Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	21	611	864	489	741
v/c Ratio	0.07	0.89	0.58	0.81	0.58
Control Delay	31.4	23.8	24.6	24.2	10.4
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	31.4	23.8	24.6	24.2	10.4
Queue Length 50th (m)	3.2	17.2	62.4	39.8	57.2
Queue Length 95th (m)	7.7	#78.6	98.7	87.7	101.4
Internal Link Dist (m)	465.6		1383.2		54.1
Turn Bay Length (m)	15.0				
Base Capacity (vph)	451	767	1491	689	1279
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.05	0.80	0.58	0.71	0.58

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

HCM Signalized Intersection Capacity Analysis

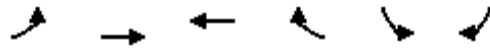
4: Fairview Road & Little Ave

08/05/2021

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations			 			
Traffic Volume (vph)	16	574	806	12	465	637
Future Volume (vph)	16	574	806	12	465	637
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	6.0		4.0	6.0
Lane Util. Factor	1.00	1.00	0.95		1.00	1.00
Frt	1.00	0.85	1.00		1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1825	1570	3470		1789	1830
Flt Permitted	0.95	1.00	1.00		0.21	1.00
Satd. Flow (perm)	1825	1570	3470		395	1830
Peak-hour factor, PHF	0.75	0.94	0.95	0.75	0.95	0.86
Adj. Flow (vph)	21	611	848	16	489	741
RTOR Reduction (vph)	0	418	1	0	0	0
Lane Group Flow (vph)	21	193	863	0	489	741
Heavy Vehicles (%)	0%	4%	5%	0%	2%	5%
Turn Type	Perm	Perm	NA		pm+pt	NA
Protected Phases			4		3	8
Permitted Phases	5	5			8	
Actuated Green, G (s)	16.0	16.0	40.2		65.3	65.3
Effective Green, g (s)	16.0	16.0	40.2		65.3	65.3
Actuated g/C Ratio	0.17	0.17	0.43		0.70	0.70
Clearance Time (s)	6.0	6.0	6.0		4.0	6.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	312	269	1495		591	1280
v/s Ratio Prot			0.25		0.19	0.41
v/s Ratio Perm	0.01	0.12			0.39	
v/c Ratio	0.07	0.72	0.58		0.83	0.58
Uniform Delay, d1	32.4	36.5	20.1		14.5	7.1
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.1	8.9	1.6		9.3	1.9
Delay (s)	32.5	45.4	21.7		23.8	9.0
Level of Service	C	D	C		C	A
Approach Delay (s)	45.0		21.7			14.9
Approach LOS	D		C			B
Intersection Summary						
HCM 2000 Control Delay			24.0		HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio			0.83			
Actuated Cycle Length (s)			93.3		Sum of lost time (s)	16.0
Intersection Capacity Utilization			75.8%		ICU Level of Service	D
Analysis Period (min)			15			
c Critical Lane Group						

Lanes, Volumes, Timings
5: Big Bay Point Road & Fairview Road

08/05/2021

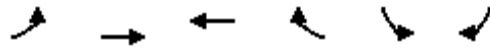


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	456	947	632	151	88	267
Future Volume (vph)	456	947	632	151	88	267
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	120.0			120.0	0.0	0.0
Storage Lanes	1			1	1	1
Taper Length (m)	65.0				0.0	
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1789	3544	3579	1601	1755	1555
Flt Permitted	0.313				0.950	
Satd. Flow (perm)	590	3544	3579	1601	1755	1555
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				164		290
Link Speed (k/h)		50	50		50	
Link Distance (m)		479.3	485.6		1407.2	
Travel Time (s)		34.5	35.0		101.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	3%	2%	2%	4%	5%
Adj. Flow (vph)	496	1029	687	164	96	290
Shared Lane Traffic (%)						
Lane Group Flow (vph)	496	1029	687	164	96	290
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		3.7	3.7		3.7	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		1.6	1.6		1.6	
Two way Left Turn Lane			Yes			
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24			14	24	14
Number of Detectors	1	2	2	1	1	1
Detector Template	Left	Thru	Thru	Right	Left	Right
Leading Detector (m)	6.1	30.5	30.5	6.1	6.1	6.1
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	6.1	1.8	1.8	6.1	6.1	6.1
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		28.7	28.7			
Detector 2 Size(m)		1.8	1.8			
Detector 2 Type		Cl+Ex	Cl+Ex			
Detector 2 Channel						
Detector 2 Extend (s)		0.0	0.0			
Turn Type	pm+pt	NA	NA	Perm	Perm	Perm
Protected Phases	3	8	4			

Lanes, Volumes, Timings

5: Big Bay Point Road & Fairview Road

08/05/2021



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Permitted Phases	8			4	5	5
Detector Phase	3	8	4	4	5	5
Switch Phase						
Minimum Initial (s)	7.0	40.0	40.0	40.0	10.0	10.0
Minimum Split (s)	11.0	46.0	46.0	46.0	38.0	38.0
Total Split (s)	34.0	80.0	46.0	46.0	28.0	28.0
Total Split (%)	31.5%	74.1%	42.6%	42.6%	25.9%	25.9%
Maximum Green (s)	30.0	74.0	40.0	40.0	22.0	22.0
Yellow Time (s)	3.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None
Walk Time (s)			7.0	7.0	7.0	7.0
Flash Dont Walk (s)			33.0	33.0	25.0	25.0
Pedestrian Calls (#/hr)			0	0	0	0
Act Effect Green (s)	62.4	60.3	40.4	40.4	11.2	11.2
Actuated g/C Ratio	0.75	0.72	0.48	0.48	0.13	0.13
v/c Ratio	0.74	0.40	0.40	0.19	0.41	0.63
Control Delay	12.2	5.2	16.1	3.5	40.5	11.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	12.2	5.2	16.1	3.5	40.5	11.5
LOS	B	A	B	A	D	B
Approach Delay		7.5	13.7		18.7	
Approach LOS		A	B		B	

Intersection Summary

Area Type: Other

Cycle Length: 108

Actuated Cycle Length: 83.7

Natural Cycle: 95

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.74

Intersection Signal Delay: 11.0

Intersection LOS: B

Intersection Capacity Utilization 80.3%

ICU Level of Service D

Analysis Period (min) 15

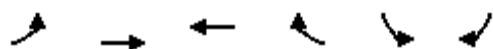
Splits and Phases: 5: Big Bay Point Road & Fairview Road



Queues

5: Big Bay Point Road & Fairview Road

08/05/2021

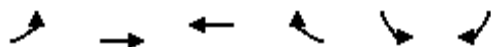


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Group Flow (vph)	496	1029	687	164	96	290
v/c Ratio	0.74	0.40	0.40	0.19	0.41	0.63
Control Delay	12.2	5.2	16.1	3.5	40.5	11.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	12.2	5.2	16.1	3.5	40.5	11.5
Queue Length 50th (m)	20.4	25.8	31.8	0.0	13.7	0.0
Queue Length 95th (m)	49.1	43.3	65.8	11.7	31.8	22.6
Internal Link Dist (m)		455.3	461.6		1383.2	
Turn Bay Length (m)	120.0			120.0		
Base Capacity (vph)	873	3162	1726	857	465	625
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	0.57	0.33	0.40	0.19	0.21	0.46
Intersection Summary						

HCM Signalized Intersection Capacity Analysis

5: Big Bay Point Road & Fairview Road

08/05/2021



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	456	947	632	151	88	267
Future Volume (vph)	456	947	632	151	88	267
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	6.0	6.0	6.0	6.0	6.0
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1789	3544	3579	1601	1755	1555
Flt Permitted	0.31	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	589	3544	3579	1601	1755	1555
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	496	1029	687	164	96	290
RTOR Reduction (vph)	0	0	0	85	0	251
Lane Group Flow (vph)	496	1029	687	79	96	39
Heavy Vehicles (%)	2%	3%	2%	2%	4%	5%
Turn Type	pm+pt	NA	NA	Perm	Perm	Perm
Protected Phases	3	8	4			
Permitted Phases	8			4	5	5
Actuated Green, G (s)	60.3	60.3	40.4	40.4	11.2	11.2
Effective Green, g (s)	60.3	60.3	40.4	40.4	11.2	11.2
Actuated g/C Ratio	0.72	0.72	0.48	0.48	0.13	0.13
Clearance Time (s)	4.0	6.0	6.0	6.0	6.0	6.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	653	2559	1731	774	235	208
v/s Ratio Prot	c0.14	0.29	0.19			
v/s Ratio Perm	c0.40			0.05	c0.05	0.03
v/c Ratio	0.76	0.40	0.40	0.10	0.41	0.19
Uniform Delay, d1	5.9	4.5	13.8	11.7	33.1	32.1
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	5.1	0.1	0.2	0.1	1.2	0.4
Delay (s)	11.0	4.6	13.9	11.8	34.3	32.5
Level of Service	B	A	B	B	C	C
Approach Delay (s)		6.7	13.5		33.0	
Approach LOS		A	B		C	
Intersection Summary						
HCM 2000 Control Delay			12.5		HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio			0.73			
Actuated Cycle Length (s)			83.5		Sum of lost time (s)	16.0
Intersection Capacity Utilization			80.3%		ICU Level of Service	D
Analysis Period (min)			15			
c Critical Lane Group						

Lanes, Volumes, Timings

8: Bayview Drive

08/05/2021

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations			↑↑			↑
Traffic Volume (vph)	0	0	0	0	0	0
Future Volume (vph)	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	1.00
Frnt						
Flt Protected						
Satd. Flow (prot)	0	0	3579	0	0	1883
Flt Permitted						
Satd. Flow (perm)	0	0	3579	0	0	1883
Link Speed (k/h)	50		50			50
Link Distance (m)	61.2		173.0			97.3
Travel Time (s)	4.4		12.5			7.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	0.0		3.7			3.7
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	1.6		1.6			1.6
Two way Left Turn Lane			Yes			
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14		14	24	
Sign Control	Stop		Free			Free
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization 0.0%	ICU Level of Service A					
Analysis Period (min) 15						

HCM Unsignalized Intersection Capacity Analysis

8: Bayview Drive

08/05/2021

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations			↑↑			↑
Traffic Volume (veh/h)	0	0	0	0	0	0
Future Volume (Veh/h)	0	0	0	0	0	0
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	0	0	0
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			TWLTL			None
Median storage (veh)			2			
Upstream signal (m)			173			
pX, platoon unblocked						
vC, conflicting volume	0	0			0	
vC1, stage 1 conf vol	0					
vC2, stage 2 conf vol	0					
vCu, unblocked vol	0	0			0	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)	5.8					
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	1023	1084			1622	
Direction, Lane #	NB 1	NB 2	SB 1			
Volume Total	0	0	0			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	1700	1700			
Volume to Capacity	0.00	0.00	0.00			
Queue Length 95th (m)	0.0	0.0	0.0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS						
Approach Delay (s)	0.0		0.0			
Approach LOS						
Intersection Summary						
Average Delay			0.0			
Intersection Capacity Utilization			0.0%	ICU Level of Service		A
Analysis Period (min)			15			

Lanes, Volumes, Timings

1: Bayview Drive & Big Bay Point Road

08/05/2021

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	346	131	202	556	21	275	428	163	148	359	33
Future Volume (vph)	15	346	131	202	556	21	275	428	163	148	359	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	105.0		55.0	105.0		55.0	105.0		55.0	105.0		55.0
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (m)	65.0			65.0			65.0			65.0		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1352	3544	1541	1789	3579	1555	1807	1830	1633	1738	3476	1484
Flt Permitted	0.310			0.462			0.348			0.171		
Satd. Flow (perm)	441	3544	1541	870	3579	1555	662	1830	1633	313	3476	1484
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			164			164			155			164
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		485.6			536.9			234.9			173.0	
Travel Time (s)		35.0			38.7			16.9			12.5	
Peak Hour Factor	0.72	0.89	0.80	0.88	0.89	0.70	0.86	0.88	0.88	0.72	0.84	0.86
Heavy Vehicles (%)	35%	3%	6%	2%	2%	5%	1%	5%	0%	5%	5%	10%
Adj. Flow (vph)	21	389	164	230	625	30	320	486	185	206	427	38
Shared Lane Traffic (%)												
Lane Group Flow (vph)	21	389	164	230	625	30	320	486	185	206	427	38
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane		Yes						Yes			Yes	
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (m)	6.1	30.5	6.1	6.1	30.5	6.1	6.1	30.5	6.1	6.1	30.5	6.1
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	6.1	1.8	6.1	6.1	1.8	6.1	6.1	1.8	6.1	6.1	1.8	6.1
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	

Lanes, Volumes, Timings

1: Bayview Drive & Big Bay Point Road

08/05/2021

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2		2	6		6	8		8	4		4
Detector Phase	5	2	2	1	6	6	3	8	8	7	4	4
Switch Phase												
Minimum Initial (s)	7.0	35.0	35.0	7.0	35.0	35.0	7.0	12.0	12.0	7.0	12.0	12.0
Minimum Split (s)	11.0	41.0	41.0	11.0	41.0	41.0	11.0	30.0	30.0	11.0	30.0	30.0
Total Split (s)	11.0	37.0	37.0	12.0	38.0	38.0	23.0	33.0	33.0	18.0	28.0	28.0
Total Split (%)	11.0%	37.0%	37.0%	12.0%	38.0%	38.0%	23.0%	33.0%	33.0%	18.0%	28.0%	28.0%
Maximum Green (s)	7.0	31.0	31.0	8.0	32.0	32.0	19.0	27.0	27.0	14.0	22.0	22.0
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
All-Red Time (s)	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	6.0	6.0	4.0	6.0	6.0	4.0	6.0	6.0	4.0	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	Max	None	None	None	None	None	None	None	None	None	None	None
Walk Time (s)		20.0	20.0		20.0	20.0		9.0	9.0		9.0	9.0
Flash Dont Walk (s)		15.0	15.0		15.0	15.0		15.0	15.0		15.0	15.0
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	0
Act Effect Green (s)	40.0	31.0	31.0	42.0	32.0	32.0	44.7	27.0	27.0	37.8	23.4	23.4
Actuated g/C Ratio	0.41	0.31	0.31	0.43	0.32	0.32	0.45	0.27	0.27	0.38	0.24	0.24
v/c Ratio	0.09	0.35	0.27	0.52	0.54	0.05	0.66	0.97	0.33	0.69	0.52	0.08
Control Delay	16.3	27.3	5.4	22.4	29.5	0.1	24.4	70.2	9.0	32.4	35.9	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	0.0
Total Delay	16.3	27.3	5.4	22.4	29.5	0.1	24.4	70.2	9.0	32.4	35.9	0.3
LOS	B	C	A	C	C	A	C	E	A	C	D	A
Approach Delay		20.7			26.7			44.0			32.8	
Approach LOS		C			C			D			C	

Intersection Summary

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 98.5

Natural Cycle: 95

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.97

Intersection Signal Delay: 32.4

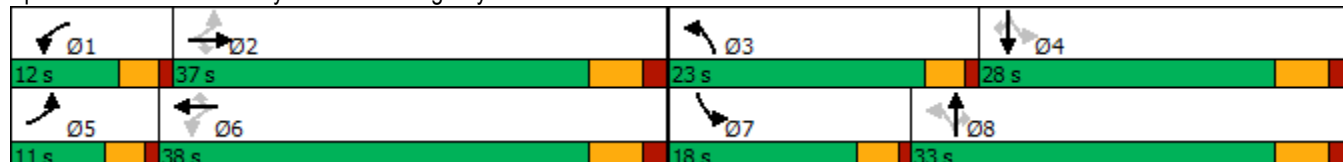
Intersection LOS: C

Intersection Capacity Utilization 87.8%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 1: Bayview Drive & Big Bay Point Road



Queues

1: Bayview Drive & Big Bay Point Road

08/05/2021

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	21	389	164	230	625	30	320	486	185	206	427	38
v/c Ratio	0.09	0.35	0.27	0.52	0.54	0.05	0.66	0.97	0.33	0.69	0.52	0.08
Control Delay	16.3	27.3	5.4	22.4	29.5	0.1	24.4	70.2	9.0	32.4	35.9	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	0.0
Total Delay	16.3	27.3	5.4	22.4	29.5	0.1	24.4	70.2	9.0	32.4	35.9	0.3
Queue Length 50th (m)	2.2	30.3	0.0	27.0	51.6	0.0	38.6	92.7	4.3	23.2	37.8	0.0
Queue Length 95th (m)	5.2	42.6	9.5	42.5	68.3	0.0	55.5	#151.3	19.3	30.8	50.0	0.0
Internal Link Dist (m)	461.6			512.9			210.9			149.0		
Turn Bay Length (m)	105.0		55.0	105.0		55.0	105.0		55.0	105.0		55.0
Base Capacity (vph)	244	1115	597	445	1163	616	526	502	560	327	824	477
Starvation Cap Reductn	0	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	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.09	0.35	0.27	0.52	0.54	0.05	0.61	0.97	0.33	0.63	0.52	0.08

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

HCM Signalized Intersection Capacity Analysis

1: Bayview Drive & Big Bay Point Road

08/05/2021

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	15	346	131	202	556	21	275	428	163	148	359	33
Future Volume (vph)	15	346	131	202	556	21	275	428	163	148	359	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	6.0	6.0	4.0	6.0	6.0	4.0	6.0	6.0	4.0	6.0	6.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1352	3544	1541	1789	3579	1555	1807	1830	1633	1738	3476	1484
Flt Permitted	0.31	1.00	1.00	0.46	1.00	1.00	0.35	1.00	1.00	0.17	1.00	1.00
Satd. Flow (perm)	440	3544	1541	870	3579	1555	662	1830	1633	313	3476	1484
Peak-hour factor, PHF	0.72	0.89	0.80	0.88	0.89	0.70	0.86	0.88	0.88	0.72	0.84	0.86
Adj. Flow (vph)	21	389	164	230	625	30	320	486	185	206	427	38
RTOR Reduction (vph)	0	0	112	0	0	20	0	0	113	0	0	29
Lane Group Flow (vph)	21	389	52	230	625	10	320	486	72	206	427	9
Heavy Vehicles (%)	35%	3%	6%	2%	2%	5%	1%	5%	0%	5%	5%	10%
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2		2	6		6	8		8	4		4
Actuated Green, G (s)	38.0	31.0	31.0	40.0	32.0	32.0	43.1	27.0	27.0	35.9	23.4	23.4
Effective Green, g (s)	38.0	31.0	31.0	40.0	32.0	32.0	43.1	27.0	27.0	35.9	23.4	23.4
Actuated g/C Ratio	0.39	0.31	0.31	0.41	0.32	0.32	0.44	0.27	0.27	0.36	0.24	0.24
Clearance Time (s)	4.0	6.0	6.0	4.0	6.0	6.0	4.0	6.0	6.0	4.0	6.0	6.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	234	1115	484	427	1162	505	476	501	447	294	825	352
v/s Ratio Prot	0.01	0.11		c0.04	c0.17		c0.11	c0.27		0.09	0.12	
v/s Ratio Perm	0.03		0.03	0.17		0.01	0.18		0.04	0.17		0.01
v/c Ratio	0.09	0.35	0.11	0.54	0.54	0.02	0.67	0.97	0.16	0.70	0.52	0.03
Uniform Delay, d1	19.2	26.0	23.9	20.2	27.2	22.6	19.5	35.4	27.2	24.3	32.6	28.8
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	0.2	0.1	1.3	0.5	0.0	3.7	32.5	0.2	7.3	0.6	0.0
Delay (s)	19.4	26.2	24.0	21.6	27.7	22.6	23.2	67.8	27.3	31.7	33.2	28.8
Level of Service	B	C	C	C	C	C	C	E	C	C	C	C
Approach Delay (s)		25.3			25.9			45.9			32.5	
Approach LOS		C			C			D			C	
Intersection Summary												
HCM 2000 Control Delay			33.5									
HCM 2000 Volume to Capacity ratio			0.73									
Actuated Cycle Length (s)			98.5									
Intersection Capacity Utilization			87.8%									
Analysis Period (min)			15									
c Critical Lane Group												

Lanes, Volumes, Timings

2: Bayview Drive & Courier Entrance/Site Entrance

08/05/2021

																						
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR										
Lane Configurations																						
Traffic Volume (vph)	30	0	32	0	0	0	38	464	0	0	541	18										
Future Volume (vph)	30	0	32	0	0	0	38	464	0	0	541	18										
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900										
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00										
Frt	0.942		0.994																			
Flt Protected	0.972		0.994																			
Satd. Flow (prot)	0	1737	0	0	1883	0	0	1767	0	0	1765	0										
Flt Permitted	0.972		0.994																			
Satd. Flow (perm)	0	1737	0	0	1883	0	0	1767	0	0	1765	0										
Link Speed (k/h)	50		50																			
Link Distance (m)	188.0		286.2																			
Travel Time (s)	13.5		20.6																			
Peak Hour Factor	0.58	0.92	0.83	0.92	0.92	0.92	0.58	0.89	0.92	0.92	0.89	0.61										
Heavy Vehicles (%)	0%	0%	3%	2%	2%	2%	40%	4%	0%	2%	6%	53%										
Adj. Flow (vph)	52	0	39	0	0	0	66	521	0	0	608	30										
Shared Lane Traffic (%)																						
Lane Group Flow (vph)	0	91	0	0	0	0	0	587	0	0	638	0										
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No										
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right										
Median Width(m)	0.0		0.0																			
Link Offset(m)	0.0		0.0																			
Crosswalk Width(m)	1.6		1.6																			
Two way Left Turn Lane																						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99										
Turning Speed (k/h)	24		14	24		14	24		14	24		14										
Sign Control	Stop		Stop																			
Free			Free																			
Free			Free																			
Intersection Summary																						
Area Type:	Other																					
Control Type:	Unsignalized																					
Intersection Capacity Utilization	66.1%																					
ICU Level of Service	C																					
Analysis Period (min)	15																					

HCM Unsignalized Intersection Capacity Analysis

2: Bayview Drive & Courier Entrance/Site Entrance

08/05/2021

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	0	32	0	0	0	38	464	0	0	541	18
Future Volume (Veh/h)	30	0	32	0	0	0	38	464	0	0	541	18
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.58	0.92	0.83	0.92	0.92	0.92	0.58	0.89	0.92	0.92	0.89	0.61
Hourly flow rate (vph)	52	0	39	0	0	0	66	521	0	0	608	30
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type	None								None			
Median storage veh												
Upstream signal (m)	270											
pX, platoon unblocked												
vC, conflicting volume	1276	1276	623	1315	1291	521	638	521				
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1276	1276	623	1315	1291	521	638	521				
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.5	4.1				
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.6	2.2				
p0 queue free %	62	100	92	100	100	100	92	100				
cM capacity (veh/h)	136	154	484	116	150	555	788	1045				
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	91	0	587	638								
Volume Left	52	0	66	0								
Volume Right	39	0	0	30								
cSH	196	1700	788	1045								
Volume to Capacity	0.46	0.00	0.08	0.00								
Queue Length 95th (m)	16.9	0.0	2.1	0.0								
Control Delay (s)	38.3	0.0	2.2	0.0								
Lane LOS	E	A	A									
Approach Delay (s)	38.3	0.0	2.2	0.0								
Approach LOS	E	A										
Intersection Summary												
Average Delay	3.6											
Intersection Capacity Utilization	66.1%			ICU Level of Service					C			
Analysis Period (min)	15											

Lanes, Volumes, Timings

3: Bayview Drive & Little Ave

08/05/2021

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	24	314	70	68	270	47	284	409	118	114	218	39
Future Volume (vph)	24	314	70	68	270	47	284	409	118	114	218	39
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	20.0		0.0	15.0		0.0	15.0		0.0	15.0		0.0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (m)	40.0			30.0			20.0			45.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.970			0.977			0.962			0.976	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1825	1841	0	1825	1861	0	1807	1848	0	1825	1844	0
Flt Permitted	0.446			0.263			0.299			0.120		
Satd. Flow (perm)	857	1841	0	505	1861	0	569	1848	0	231	1844	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		10			7			14			7	
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		489.6			106.0			1137.3			118.3	
Travel Time (s)		35.3			7.6			81.9			8.5	
Peak Hour Factor	0.81	0.88	0.77	0.74	0.94	0.92	0.94	0.96	0.83	0.73	0.85	0.81
Heavy Vehicles (%)	0%	1%	2%	0%	1%	0%	1%	0%	0%	0%	2%	0%
Adj. Flow (vph)	30	357	91	92	287	51	302	426	142	156	256	48
Shared Lane Traffic (%)												
Lane Group Flow (vph)	30	448	0	92	338	0	302	568	0	156	304	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												Yes
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (m)	6.1	30.5		6.1	30.5		6.1	30.5		6.1	30.5	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Size(m)	6.1	1.8		6.1	1.8		6.1	1.8		6.1	1.8	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	

Lanes, Volumes, Timings

3: Bayview Drive & Little Ave

08/05/2021

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2			6			8			4		
Detector Phase	5	2		1	6		3	8		7	4	
Switch Phase												
Minimum Initial (s)	7.0	44.0		7.0	44.0		10.0	10.0		7.0	10.0	
Minimum Split (s)	11.0	48.0		11.0	48.0		14.0	23.0		14.0	23.0	
Total Split (s)	11.0	53.0		11.0	53.0		32.0	58.0		16.0	42.0	
Total Split (%)	8.0%	38.4%		8.0%	38.4%		23.2%	42.0%		11.6%	30.4%	
Maximum Green (s)	7.0	49.0		7.0	49.0		28.0	54.0		12.0	38.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	None		None	None	
Walk Time (s)		19.0			19.0			8.0			8.0	
Flash Dont Walk (s)		15.0			15.0			11.0			11.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effect Green (s)	52.3	45.3		54.1	50.2		55.7	40.6		44.5	33.4	
Actuated g/C Ratio	0.44	0.38		0.45	0.42		0.46	0.34		0.37	0.28	
v/c Ratio	0.07	0.64		0.30	0.43		0.67	0.90		0.67	0.59	
Control Delay	21.1	37.0		23.3	30.1		28.1	54.7		40.0	42.1	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	21.1	37.0		23.3	30.1		28.1	54.7		40.0	42.1	
LOS	C	D		C	C		C	D		D	D	
Approach Delay		36.0			28.6			45.5			41.4	
Approach LOS		D			C			D			D	

Intersection Summary

Area Type: Other

Cycle Length: 138

Actuated Cycle Length: 120.2

Natural Cycle: 100

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.90

Intersection Signal Delay: 39.4

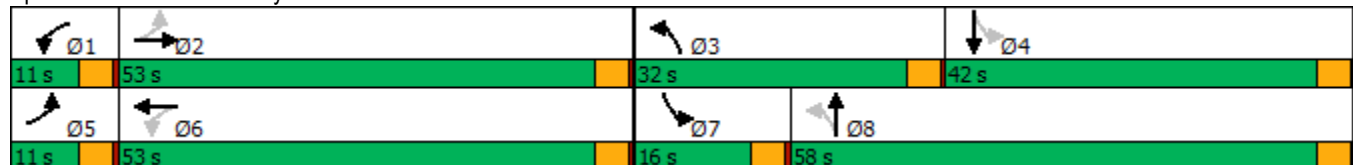
Intersection LOS: D

Intersection Capacity Utilization 90.8%

ICU Level of Service E

Analysis Period (min) 15

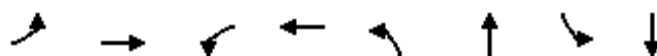
Splits and Phases: 3: Bayview Drive & Little Ave



Queues

3: Bayview Drive & Little Ave

08/05/2021



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	30	448	92	338	302	568	156	304
v/c Ratio	0.07	0.64	0.30	0.43	0.67	0.90	0.67	0.59
Control Delay	21.1	37.0	23.3	30.1	28.1	54.7	40.0	42.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	21.1	37.0	23.3	30.1	28.1	54.7	40.0	42.1
Queue Length 50th (m)	3.8	85.9	12.2	60.1	43.7	123.0	20.5	59.3
Queue Length 95th (m)	9.8	135.1	20.9	100.4	67.5	177.3	31.5	91.4
Internal Link Dist (m)		465.6		82.0		1113.3		94.3
Turn Bay Length (m)	20.0		15.0		15.0		15.0	
Base Capacity (vph)	430	764	305	811	555	846	248	604
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	0.07	0.59	0.30	0.42	0.54	0.67	0.63	0.50
Intersection Summary								

HCM Signalized Intersection Capacity Analysis

3: Bayview Drive & Little Ave

08/05/2021

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	24	314	70	68	270	47	284	409	118	114	218	39
Future Volume (vph)	24	314	70	68	270	47	284	409	118	114	218	39
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.97		1.00	0.98		1.00	0.96		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1825	1840		1825	1862		1807	1849		1825	1845	
Flt Permitted	0.45	1.00		0.26	1.00		0.30	1.00		0.12	1.00	
Satd. Flow (perm)	858	1840		505	1862		568	1849		230	1845	
Peak-hour factor, PHF	0.81	0.88	0.77	0.74	0.94	0.92	0.94	0.96	0.83	0.73	0.85	0.81
Adj. Flow (vph)	30	357	91	92	287	51	302	426	142	156	256	48
RTOR Reduction (vph)	0	6	0	0	4	0	0	9	0	0	5	0
Lane Group Flow (vph)	30	442	0	92	334	0	302	559	0	156	299	0
Heavy Vehicles (%)	0%	1%	2%	0%	1%	0%	1%	0%	0%	0%	2%	0%
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	50.9	47.0		57.3	50.2		55.7	40.6		44.5	33.4	
Effective Green, g (s)	50.9	47.0		57.3	50.2		55.7	40.6		44.5	33.4	
Actuated g/C Ratio	0.42	0.39		0.47	0.41		0.46	0.33		0.37	0.27	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	389	710		314	767		445	616		229	505	
v/s Ratio Prot	0.00	c0.24		c0.02	0.18		c0.10	c0.30		0.06	0.16	
v/s Ratio Perm	0.03			0.12			0.21			0.19		
v/c Ratio	0.08	0.62		0.29	0.44		0.68	0.91		0.68	0.59	
Uniform Delay, d1	21.3	30.2		20.6	25.6		23.4	38.8		30.1	38.3	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.1	1.7		0.5	0.4		4.1	17.0		8.1	1.9	
Delay (s)	21.4	31.9		21.1	26.0		27.5	55.8		38.2	40.2	
Level of Service	C	C		C	C		C	E		D	D	
Approach Delay (s)		31.3			25.0			46.0			39.5	
Approach LOS		C			C			D			D	
Intersection Summary												
HCM 2000 Control Delay			37.5			HCM 2000 Level of Service				D		
HCM 2000 Volume to Capacity ratio			0.73									
Actuated Cycle Length (s)			121.8			Sum of lost time (s)			16.0			
Intersection Capacity Utilization			90.8%			ICU Level of Service			E			
Analysis Period (min)			15									
c Critical Lane Group												

Lanes, Volumes, Timings
4: Fairview Road & Little Ave

08/05/2021

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	16	574	806	12	465	637
Future Volume (vph)	16	574	806	12	465	637
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	15.0	0.0		0.0	0.0	
Storage Lanes	1	1		0	1	
Taper Length (m)	35.0				0.0	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt		0.850	0.997			
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1825	1570	3469	0	1789	1830
Flt Permitted	0.950				0.210	
Satd. Flow (perm)	1825	1570	3469	0	396	1830
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)		504	2			
Link Speed (k/h)	50		50			50
Link Distance (m)	489.6		1407.2			78.1
Travel Time (s)	35.3		101.3			5.6
Peak Hour Factor	0.75	0.94	0.95	0.75	0.95	0.86
Heavy Vehicles (%)	0%	4%	5%	0%	2%	5%
Adj. Flow (vph)	21	611	848	16	489	741
Shared Lane Traffic (%)						
Lane Group Flow (vph)	21	611	864	0	489	741
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	3.7		3.7			3.7
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	1.6		1.6			1.6
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14		14	24	
Number of Detectors	1	1	2		1	2
Detector Template	Left	Right	Thru		Left	Thru
Leading Detector (m)	6.1	6.1	30.5		6.1	30.5
Trailing Detector (m)	0.0	0.0	0.0		0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0		0.0	0.0
Detector 1 Size(m)	6.1	6.1	1.8		6.1	1.8
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0
Detector 2 Position(m)			28.7			28.7
Detector 2 Size(m)			1.8			1.8
Detector 2 Type			Cl+Ex			Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)			0.0			0.0
Turn Type	Perm	Perm	NA		pm+pt	NA
Protected Phases			4		3	8

Lanes, Volumes, Timings
4: Fairview Road & Little Ave

08/05/2021

	↖	↗	↑	↘	↙	↓
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Permitted Phases	5	5			8	
Detector Phase	5	5	4		3	8
Switch Phase						
Minimum Initial (s)	10.0	10.0	34.0		7.0	34.0
Minimum Split (s)	27.0	27.0	40.0		11.0	40.0
Total Split (s)	29.0	29.0	40.0		31.0	71.0
Total Split (%)	29.0%	29.0%	40.0%		31.0%	71.0%
Maximum Green (s)	23.0	23.0	34.0		27.0	65.0
Yellow Time (s)	4.0	4.0	4.0		3.0	4.0
All-Red Time (s)	2.0	2.0	2.0		1.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0		4.0	6.0
Lead/Lag			Lag		Lead	
Lead-Lag Optimize?			Yes		Yes	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Recall Mode	None	None	Max		None	Max
Walk Time (s)	9.0	9.0	22.0			22.0
Flash Dont Walk (s)	12.0	12.0	12.0			12.0
Pedestrian Calls (#/hr)	0	0	0			0
Act Effect Green (s)	16.0	16.0	40.1		67.2	65.2
Actuated g/C Ratio	0.17	0.17	0.43		0.72	0.70
v/c Ratio	0.07	0.89	0.58		0.81	0.58
Control Delay	31.4	23.8	24.6		24.2	10.4
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay	31.4	23.8	24.6		24.2	10.4
LOS	C	C	C		C	B
Approach Delay	24.1		24.6			15.9
Approach LOS	C		C			B

Intersection Summary

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 93.3

Natural Cycle: 90

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.89

Intersection Signal Delay: 20.6

Intersection LOS: C

Intersection Capacity Utilization 75.8%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 4: Fairview Road & Little Ave



Queues

4: Fairview Road & Little Ave

08/05/2021



Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	21	611	864	489	741
v/c Ratio	0.07	0.89	0.58	0.81	0.58
Control Delay	31.4	23.8	24.6	24.2	10.4
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	31.4	23.8	24.6	24.2	10.4
Queue Length 50th (m)	3.2	17.2	62.4	39.8	57.2
Queue Length 95th (m)	7.7	#78.6	98.7	87.7	101.4
Internal Link Dist (m)	465.6		1383.2		54.1
Turn Bay Length (m)	15.0				
Base Capacity (vph)	451	767	1491	689	1279
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.05	0.80	0.58	0.71	0.58

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

HCM Signalized Intersection Capacity Analysis

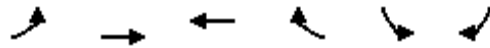
4: Fairview Road & Little Ave

08/05/2021

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations			 			
Traffic Volume (vph)	16	574	806	12	465	637
Future Volume (vph)	16	574	806	12	465	637
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	6.0		4.0	6.0
Lane Util. Factor	1.00	1.00	0.95		1.00	1.00
Frt	1.00	0.85	1.00		1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1825	1570	3470		1789	1830
Flt Permitted	0.95	1.00	1.00		0.21	1.00
Satd. Flow (perm)	1825	1570	3470		395	1830
Peak-hour factor, PHF	0.75	0.94	0.95	0.75	0.95	0.86
Adj. Flow (vph)	21	611	848	16	489	741
RTOR Reduction (vph)	0	418	1	0	0	0
Lane Group Flow (vph)	21	193	863	0	489	741
Heavy Vehicles (%)	0%	4%	5%	0%	2%	5%
Turn Type	Perm	Perm	NA		pm+pt	NA
Protected Phases			4		3	8
Permitted Phases	5	5			8	
Actuated Green, G (s)	16.0	16.0	40.2		65.3	65.3
Effective Green, g (s)	16.0	16.0	40.2		65.3	65.3
Actuated g/C Ratio	0.17	0.17	0.43		0.70	0.70
Clearance Time (s)	6.0	6.0	6.0		4.0	6.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	312	269	1495		591	1280
v/s Ratio Prot			0.25		c0.19	0.41
v/s Ratio Perm	0.01	c0.12			c0.39	
v/c Ratio	0.07	0.72	0.58		0.83	0.58
Uniform Delay, d1	32.4	36.5	20.1		14.5	7.1
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.1	8.9	1.6		9.3	1.9
Delay (s)	32.5	45.4	21.7		23.8	9.0
Level of Service	C	D	C		C	A
Approach Delay (s)	45.0		21.7			14.9
Approach LOS	D		C			B
Intersection Summary						
HCM 2000 Control Delay			24.0		HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio			0.83			
Actuated Cycle Length (s)			93.3		Sum of lost time (s)	16.0
Intersection Capacity Utilization			75.8%		ICU Level of Service	D
Analysis Period (min)			15			
c Critical Lane Group						

Lanes, Volumes, Timings
5: Big Bay Point Road & Fairview Road

08/05/2021

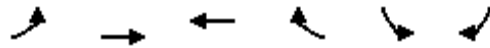


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	456	947	632	151	88	267
Future Volume (vph)	456	947	632	151	88	267
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	120.0			120.0	0.0	0.0
Storage Lanes	1			1	1	1
Taper Length (m)	65.0				0.0	
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1789	3544	3579	1601	1755	1555
Flt Permitted	0.313				0.950	
Satd. Flow (perm)	590	3544	3579	1601	1755	1555
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				164		290
Link Speed (k/h)		50	50		50	
Link Distance (m)		479.3	485.6		1407.2	
Travel Time (s)		34.5	35.0		101.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	3%	2%	2%	4%	5%
Adj. Flow (vph)	496	1029	687	164	96	290
Shared Lane Traffic (%)						
Lane Group Flow (vph)	496	1029	687	164	96	290
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		3.7	3.7		3.7	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		1.6	1.6		1.6	
Two way Left Turn Lane			Yes			
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24			14	24	14
Number of Detectors	1	2	2	1	1	1
Detector Template	Left	Thru	Thru	Right	Left	Right
Leading Detector (m)	6.1	30.5	30.5	6.1	6.1	6.1
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	6.1	1.8	1.8	6.1	6.1	6.1
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		28.7	28.7			
Detector 2 Size(m)		1.8	1.8			
Detector 2 Type		Cl+Ex	Cl+Ex			
Detector 2 Channel						
Detector 2 Extend (s)		0.0	0.0			
Turn Type	pm+pt	NA	NA	Perm	Perm	Perm
Protected Phases	3	8	4			

Lanes, Volumes, Timings

5: Big Bay Point Road & Fairview Road

08/05/2021



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Permitted Phases	8			4	5	5
Detector Phase	3	8	4	4	5	5
Switch Phase						
Minimum Initial (s)	7.0	40.0	40.0	40.0	10.0	10.0
Minimum Split (s)	11.0	46.0	46.0	46.0	38.0	38.0
Total Split (s)	34.0	80.0	46.0	46.0	28.0	28.0
Total Split (%)	31.5%	74.1%	42.6%	42.6%	25.9%	25.9%
Maximum Green (s)	30.0	74.0	40.0	40.0	22.0	22.0
Yellow Time (s)	3.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None
Walk Time (s)			7.0	7.0	7.0	7.0
Flash Dont Walk (s)			33.0	33.0	25.0	25.0
Pedestrian Calls (#/hr)			0	0	0	0
Act Effect Green (s)	62.4	60.3	40.4	40.4	11.2	11.2
Actuated g/C Ratio	0.75	0.72	0.48	0.48	0.13	0.13
v/c Ratio	0.74	0.40	0.40	0.19	0.41	0.63
Control Delay	12.2	5.2	16.1	3.5	40.5	11.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	12.2	5.2	16.1	3.5	40.5	11.5
LOS	B	A	B	A	D	B
Approach Delay		7.5	13.7		18.7	
Approach LOS		A	B		B	

Intersection Summary

Area Type: Other

Cycle Length: 108

Actuated Cycle Length: 83.7

Natural Cycle: 95

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.74

Intersection Signal Delay: 11.0

Intersection LOS: B

Intersection Capacity Utilization 80.3%

ICU Level of Service D

Analysis Period (min) 15

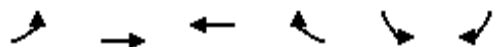
Splits and Phases: 5: Big Bay Point Road & Fairview Road



Queues

5: Big Bay Point Road & Fairview Road

08/05/2021

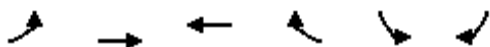


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Group Flow (vph)	496	1029	687	164	96	290
v/c Ratio	0.74	0.40	0.40	0.19	0.41	0.63
Control Delay	12.2	5.2	16.1	3.5	40.5	11.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	12.2	5.2	16.1	3.5	40.5	11.5
Queue Length 50th (m)	20.4	25.8	31.8	0.0	13.7	0.0
Queue Length 95th (m)	49.1	43.3	65.8	11.7	31.8	22.6
Internal Link Dist (m)		455.3	461.6		1383.2	
Turn Bay Length (m)	120.0			120.0		
Base Capacity (vph)	873	3162	1726	857	465	625
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	0.57	0.33	0.40	0.19	0.21	0.46
Intersection Summary						

HCM Signalized Intersection Capacity Analysis

5: Big Bay Point Road & Fairview Road

08/05/2021



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	456	947	632	151	88	267
Future Volume (vph)	456	947	632	151	88	267
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	6.0	6.0	6.0	6.0	6.0
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1789	3544	3579	1601	1755	1555
Flt Permitted	0.31	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	589	3544	3579	1601	1755	1555
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	496	1029	687	164	96	290
RTOR Reduction (vph)	0	0	0	85	0	251
Lane Group Flow (vph)	496	1029	687	79	96	39
Heavy Vehicles (%)	2%	3%	2%	2%	4%	5%
Turn Type	pm+pt	NA	NA	Perm	Perm	Perm
Protected Phases	3	8	4			
Permitted Phases	8			4	5	5
Actuated Green, G (s)	60.3	60.3	40.4	40.4	11.2	11.2
Effective Green, g (s)	60.3	60.3	40.4	40.4	11.2	11.2
Actuated g/C Ratio	0.72	0.72	0.48	0.48	0.13	0.13
Clearance Time (s)	4.0	6.0	6.0	6.0	6.0	6.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	653	2559	1731	774	235	208
v/s Ratio Prot	c0.14	0.29	0.19			
v/s Ratio Perm	c0.40			0.05	c0.05	0.03
v/c Ratio	0.76	0.40	0.40	0.10	0.41	0.19
Uniform Delay, d1	5.9	4.5	13.8	11.7	33.1	32.1
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	5.1	0.1	0.2	0.1	1.2	0.4
Delay (s)	11.0	4.6	13.9	11.8	34.3	32.5
Level of Service	B	A	B	B	C	C
Approach Delay (s)		6.7	13.5		33.0	
Approach LOS		A	B		C	
Intersection Summary						
HCM 2000 Control Delay			12.5		HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio			0.73			
Actuated Cycle Length (s)			83.5		Sum of lost time (s)	16.0
Intersection Capacity Utilization			80.3%		ICU Level of Service	D
Analysis Period (min)			15			
c Critical Lane Group						

Lanes, Volumes, Timings

8: Bayview Drive

08/05/2021

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations			↑↑			↑
Traffic Volume (vph)	0	0	0	0	0	0
Future Volume (vph)	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	1.00
Frnt						
Flt Protected						
Satd. Flow (prot)	0	0	3579	0	0	1883
Flt Permitted						
Satd. Flow (perm)	0	0	3579	0	0	1883
Link Speed (k/h)	50		50			50
Link Distance (m)	61.2		173.0			97.3
Travel Time (s)	4.4		12.5			7.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	0.0		3.7			3.7
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	1.6		1.6			1.6
Two way Left Turn Lane			Yes			
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14		14	24	
Sign Control	Stop		Free			Free
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization 0.0%	ICU Level of Service A					
Analysis Period (min) 15						

HCM Unsignalized Intersection Capacity Analysis

8: Bayview Drive

08/05/2021

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations			↑↑			↑
Traffic Volume (veh/h)	0	0	0	0	0	0
Future Volume (Veh/h)	0	0	0	0	0	0
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	0	0	0
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			TWLTL			None
Median storage (veh)			2			
Upstream signal (m)			173			
pX, platoon unblocked						
vC, conflicting volume	0	0			0	
vC1, stage 1 conf vol	0					
vC2, stage 2 conf vol	0					
vCu, unblocked vol	0	0			0	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)	5.8					
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	1023	1084			1622	
Direction, Lane #	NB 1	NB 2	SB 1			
Volume Total	0	0	0			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	1700	1700			
Volume to Capacity	0.00	0.00	0.00			
Queue Length 95th (m)	0.0	0.0	0.0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS						
Approach Delay (s)	0.0		0.0			
Approach LOS						
Intersection Summary						
Average Delay			0.0			
Intersection Capacity Utilization			0.0%	ICU Level of Service		A
Analysis Period (min)			15			

Lanes, Volumes, Timings

1: Bayview Drive & Big Bay Point Road

08/05/2021

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	56	293	147	162	347	50	49	284	40	69	294	9
Future Volume (vph)	56	293	147	162	347	50	49	284	40	69	294	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	105.0		55.0	105.0		55.0	105.0		55.0	105.0		55.0
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (m)	65.0			65.0			65.0			65.0		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.95	1.00	0.95	1.00
Frt			0.850			0.850		0.983				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1615	3444	1526	1772	3444	1296	1460	3173	0	1573	3318	1111
Flt Permitted	0.491			0.520			0.553			0.359		
Satd. Flow (perm)	835	3444	1526	970	3444	1296	850	3173	0	595	3318	1111
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			169			154		12				113
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		485.6			536.9			234.9			173.0	
Travel Time (s)		35.0			38.7			16.9			12.5	
Peak Hour Factor	0.68	0.77	0.87	0.90	0.83	0.51	0.67	0.82	0.90	0.69	0.89	0.65
Heavy Vehicles (%)	13%	6%	7%	3%	6%	26%	25%	14%	6%	16%	10%	47%
Adj. Flow (vph)	82	381	169	180	418	98	73	346	44	100	330	14
Shared Lane Traffic (%)												
Lane Group Flow (vph)	82	381	169	180	418	98	73	390	0	100	330	14
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane		Yes						Yes			Yes	
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	Right
Leading Detector (m)	6.1	30.5	6.1	6.1	30.5	6.1	6.1	30.5		6.1	30.5	6.1
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Size(m)	6.1	1.8	6.1	6.1	1.8	6.1	6.1	1.8		6.1	1.8	6.1
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	

Lanes, Volumes, Timings

1: Bayview Drive & Big Bay Point Road

08/05/2021

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2		2	6		6	8			4		4
Detector Phase	5	2	2	1	6	6	3	8		7	4	4
Switch Phase												
Minimum Initial (s)	7.0	35.0	35.0	7.0	35.0	35.0	7.0	12.0		7.0	12.0	12.0
Minimum Split (s)	11.0	41.0	41.0	11.0	41.0	41.0	11.0	30.0		11.0	30.0	30.0
Total Split (s)	11.0	46.0	46.0	11.0	46.0	46.0	11.0	32.0		17.5	32.0	32.0
Total Split (%)	10.3%	43.2%	43.2%	10.3%	43.2%	43.2%	10.3%	30.0%		16.4%	30.0%	30.0%
Maximum Green (s)	7.0	40.0	40.0	7.0	40.0	40.0	7.0	26.0		13.5	26.0	26.0
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0		3.0	4.0	4.0
All-Red Time (s)	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0		1.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.0	6.0	6.0	4.0	6.0	6.0	4.0	6.0		4.0	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Recall Mode	Max	None	None	None	None	None	None	None		None	None	None
Walk Time (s)		20.0	20.0		20.0	20.0		9.0			9.0	9.0
Flash Dont Walk (s)		15.0	15.0		15.0	15.0		15.0			15.0	15.0
Pedestrian Calls (#/hr)		0	0		0	0		0			0	0
Act Effect Green (s)	44.5	35.4	35.4	44.5	35.4	35.4	23.3	15.9		28.3	18.6	18.6
Actuated g/C Ratio	0.52	0.41	0.41	0.52	0.41	0.41	0.27	0.19		0.33	0.22	0.22
v/c Ratio	0.16	0.27	0.23	0.32	0.29	0.16	0.26	0.65		0.33	0.46	0.04
Control Delay	12.1	19.0	4.3	13.1	19.2	1.4	21.1	37.6		21.6	31.3	0.2
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	12.1	19.0	4.3	13.1	19.2	1.4	21.1	37.6		21.6	31.3	0.2
LOS	B	B	A	B	B	A	C	D		C	C	A
Approach Delay		14.2			15.1			35.0			28.2	
Approach LOS		B			B			C			C	

Intersection Summary

Area Type: Other

Cycle Length: 106.5

Actuated Cycle Length: 85.8

Natural Cycle: 95

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.65

Intersection Signal Delay: 21.6

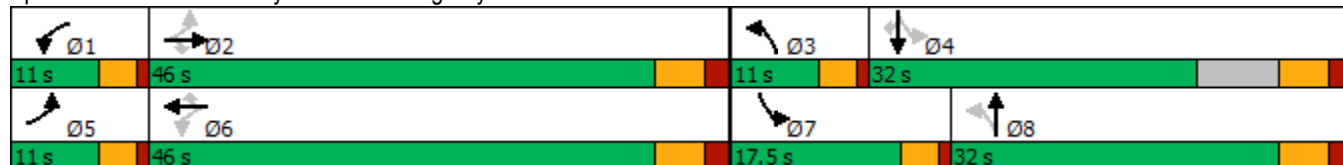
Intersection LOS: C

Intersection Capacity Utilization 70.6%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 1: Bayview Drive & Big Bay Point Road



Queues

1: Bayview Drive & Big Bay Point Road

08/05/2021



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	82	381	169	180	418	98	73	390	100	330	14
v/c Ratio	0.16	0.27	0.23	0.32	0.29	0.16	0.26	0.65	0.33	0.46	0.04
Control Delay	12.1	19.0	4.3	13.1	19.2	1.4	21.1	37.6	21.6	31.3	0.2
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	12.1	19.0	4.3	13.1	19.2	1.4	21.1	37.6	21.6	31.3	0.2
Queue Length 50th (m)	6.0	21.9	0.0	14.0	24.3	0.0	8.1	31.3	11.3	25.6	0.0
Queue Length 95th (m)	11.6	31.8	11.5	30.8	38.1	0.0	12.1	42.7	16.0	37.0	0.0
Internal Link Dist (m)	461.6				512.9		210.9		149.0		
Turn Bay Length (m)	105.0		55.0	105.0		55.0	105.0		105.0		55.0
Base Capacity (vph)	497	1625	809	569	1625	693	281	981	357	1272	495
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	0.16	0.23	0.21	0.32	0.26	0.14	0.26	0.40	0.28	0.26	0.03
Intersection Summary											

HCM Signalized Intersection Capacity Analysis

1: Bayview Drive & Big Bay Point Road

08/05/2021

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	56	293	147	162	347	50	49	284	40	69	294	9
Future Volume (vph)	56	293	147	162	347	50	49	284	40	69	294	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	6.0	6.0	4.0	6.0	6.0	4.0	6.0		4.0	6.0	6.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95		1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1615	3444	1526	1772	3444	1296	1460	3173		1573	3318	1111
Flt Permitted	0.49	1.00	1.00	0.52	1.00	1.00	0.55	1.00		0.36	1.00	1.00
Satd. Flow (perm)	836	3444	1526	970	3444	1296	849	3173		595	3318	1111
Peak-hour factor, PHF	0.68	0.77	0.87	0.90	0.83	0.51	0.67	0.82	0.90	0.69	0.89	0.65
Adj. Flow (vph)	82	381	169	180	418	98	73	346	44	100	330	14
RTOR Reduction (vph)	0	0	100	0	0	58	0	10	0	0	0	11
Lane Group Flow (vph)	82	381	69	180	418	40	73	380	0	100	330	3
Heavy Vehicles (%)	13%	6%	7%	3%	6%	26%	25%	14%	6%	16%	10%	47%
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2		2	6		6	8			4		4
Actuated Green, G (s)	42.5	35.4	35.4	42.5	35.4	35.4	21.3	15.9		26.7	18.6	18.6
Effective Green, g (s)	42.5	35.4	35.4	42.5	35.4	35.4	21.3	15.9		26.7	18.6	18.6
Actuated g/C Ratio	0.49	0.41	0.41	0.49	0.41	0.41	0.25	0.18		0.31	0.22	0.22
Clearance Time (s)	4.0	6.0	6.0	4.0	6.0	6.0	4.0	6.0		4.0	6.0	6.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	474	1409	624	542	1409	530	247	583		275	713	238
v/s Ratio Prot	0.01	0.11		c0.03	0.12		0.02	c0.12		c0.03	0.10	
v/s Ratio Perm	0.07		0.05	c0.14		0.03	0.05			0.08		0.00
v/c Ratio	0.17	0.27	0.11	0.33	0.30	0.08	0.30	0.65		0.36	0.46	0.01
Uniform Delay, d1	11.8	17.0	15.8	12.5	17.2	15.6	25.9	32.7		22.3	29.6	26.7
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	0.2	0.1	0.1	0.4	0.1	0.1	0.7	2.6		0.8	0.5	0.0
Delay (s)	12.0	17.1	15.9	12.8	17.3	15.6	26.5	35.4		23.1	30.1	26.7
Level of Service	B	B	B	B	B	B	C	D		C	C	C
Approach Delay (s)		16.1			15.9			34.0			28.4	
Approach LOS		B			B			C			C	
Intersection Summary												
HCM 2000 Control Delay			22.2									
HCM 2000 Volume to Capacity ratio			0.41									
Actuated Cycle Length (s)			86.5									
Intersection Capacity Utilization			70.6%									
Analysis Period (min)			15									
c Critical Lane Group												

Lanes, Volumes, Timings

2: Bayview Drive & Courier Entrance/Site Entrance

08/05/2021

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	24	0	55	14	0	9	35	301	54	25	359	47
Future Volume (vph)	24	0	55	14	0	9	35	301	54	25	359	47
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.910			0.946			0.981			0.982	
Flt Protected		0.983			0.971			0.995			0.998	
Satd. Flow (prot)	0	1166	0	0	1471	0	0	1634	0	0	1763	0
Flt Permitted		0.983			0.971			0.995			0.998	
Satd. Flow (perm)	0	1166	0	0	1471	0	0	1634	0	0	1763	0
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		188.0			108.4			97.3			1137.3	
Travel Time (s)		13.5			7.8			7.0			81.9	
Peak Hour Factor	0.39	0.92	0.45	0.92	0.92	0.92	0.89	0.92	0.92	0.92	0.80	0.63
Heavy Vehicles (%)	50%	0%	46%	32%	0%	2%	1%	9%	56%	6%	8%	0%
Adj. Flow (vph)	62	0	122	15	0	10	39	327	59	27	449	75
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	184	0	0	25	0	0	425	0	0	551	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		0.0			0.0			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Stop			Stop			Free			Free	
Intersection Summary												
Area Type:	Other											
Control Type:	Unsignalized											
Intersection Capacity Utilization	42.1%											
Analysis Period (min)	15											
ICU Level of Service A												

HCM Unsignalized Intersection Capacity Analysis

2: Bayview Drive & Courier Entrance/Site Entrance

08/05/2021

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	24	0	55	14	0	9	35	301	54	25	359	47
Future Volume (Veh/h)	24	0	55	14	0	9	35	301	54	25	359	47
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.39	0.92	0.45	0.92	0.92	0.92	0.89	0.92	0.92	0.92	0.80	0.63
Hourly flow rate (vph)	62	0	122	15	0	10	39	327	59	27	449	75
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type	None								None			
Median storage veh												
Upstream signal (m)	270											
pX, platoon unblocked												
vC, conflicting volume	985	1004	486	1097	1012	356	524	386				
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	985	1004	486	1097	1012	356	524	386				
tC, single (s)	7.6	6.5	6.7	7.4	6.5	6.2	4.1	4.2				
tC, 2 stage (s)												
tF (s)	4.0	4.0	3.7	3.8	4.0	3.3	2.2	2.3				
p0 queue free %	65	100	76	88	100	99	96	98				
cM capacity (veh/h)	175	229	501	121	227	688	1048	1151				
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	184	25	425	551								
Volume Left	62	15	39	27								
Volume Right	122	10	59	75								
cSH	308	180	1048	1151								
Volume to Capacity	0.60	0.14	0.04	0.02								
Queue Length 95th (m)	27.4	3.6	0.9	0.5								
Control Delay (s)	32.6	28.2	1.2	0.7								
Lane LOS	D	D	A	A								
Approach Delay (s)	32.6	28.2	1.2	0.7								
Approach LOS	D	D										
Intersection Summary												
Average Delay	6.4											
Intersection Capacity Utilization	42.1%			ICU Level of Service					A			
Analysis Period (min)	15											

Lanes, Volumes, Timings

3: Bayview Drive & Little Ave

08/05/2021

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	48	172	238	171	353	19	95	131	82	57	298	30
Future Volume (vph)	48	172	238	171	353	19	95	131	82	57	298	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	20.0		0.0	15.0		0.0	15.0		0.0	15.0		0.0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (m)	40.0			30.0			20.0			45.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.904			0.991			0.939			0.983	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1674	1703	0	1825	1880	0	1615	1649	0	1825	1845	0
Flt Permitted	0.483			0.200			0.166			0.473		
Satd. Flow (perm)	851	1703	0	384	1880	0	282	1649	0	909	1845	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		72			3			25			5	
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		489.6			106.0			1137.3			118.3	
Travel Time (s)		35.3			7.6			81.9			8.5	
Peak Hour Factor	0.73	0.92	0.71	0.63	0.93	0.81	0.88	0.82	0.75	0.80	0.83	0.66
Heavy Vehicles (%)	9%	2%	2%	0%	1%	6%	13%	11%	7%	0%	2%	5%
Adj. Flow (vph)	66	187	335	271	380	23	108	160	109	71	359	45
Shared Lane Traffic (%)												
Lane Group Flow (vph)	66	522	0	271	403	0	108	269	0	71	404	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												Yes
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (m)	6.1	30.5		6.1	30.5		6.1	30.5		6.1	30.5	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Size(m)	6.1	1.8		6.1	1.8		6.1	1.8		6.1	1.8	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	

Lanes, Volumes, Timings

3: Bayview Drive & Little Ave

08/05/2021

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2			6			8			4		
Detector Phase	5	2		1	6		3	8		7	4	
Switch Phase												
Minimum Initial (s)	7.0	44.0		7.0	44.0		10.0	10.0		7.0	10.0	
Minimum Split (s)	11.0	50.0		11.0	50.0		14.0	25.0		14.0	25.0	
Total Split (s)	11.0	55.0		23.0	67.0		14.0	46.0		14.0	46.0	
Total Split (%)	8.0%	39.9%		16.7%	48.6%		10.1%	33.3%		10.1%	33.3%	
Maximum Green (s)	7.0	49.0		19.0	61.0		10.0	40.0		10.0	40.0	
Yellow Time (s)	3.0	4.0		3.0	4.0		3.0	4.0		3.0	4.0	
All-Red Time (s)	1.0	2.0		1.0	2.0		1.0	2.0		1.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	6.0		4.0	6.0		4.0	6.0		4.0	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	None		None	None	
Walk Time (s)		19.0			19.0			8.0			8.0	
Flash Dont Walk (s)		15.0			15.0			11.0			11.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effect Green (s)	55.2	46.1		67.1	56.6		44.7	34.9		41.4	30.8	
Actuated g/C Ratio	0.45	0.38		0.55	0.46		0.37	0.29		0.34	0.25	
v/c Ratio	0.15	0.76		0.70	0.46		0.51	0.55		0.19	0.86	
Control Delay	16.1	38.5		25.8	26.2		34.0	39.9		26.0	62.3	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	16.1	38.5		25.8	26.2		34.0	39.9		26.0	62.3	
LOS	B	D		C	C		C	D		C	E	
Approach Delay		36.0			26.0			38.2			56.9	
Approach LOS		D			C			D			E	

Intersection Summary

Area Type: Other

Cycle Length: 138

Actuated Cycle Length: 122.2

Natural Cycle: 100

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.86

Intersection Signal Delay: 37.9

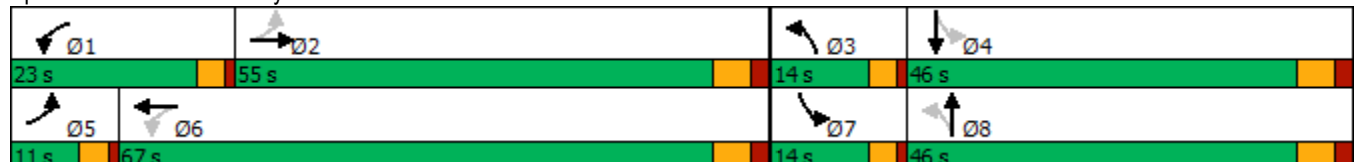
Intersection LOS: D

Intersection Capacity Utilization 88.6%

ICU Level of Service E

Analysis Period (min) 15

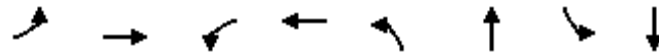
Splits and Phases: 3: Bayview Drive & Little Ave



Queues

3: Bayview Drive & Little Ave

08/05/2021



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	66	522	271	403	108	269	71	404
v/c Ratio	0.15	0.76	0.70	0.46	0.51	0.55	0.19	0.86
Control Delay	16.1	38.5	25.8	26.2	34.0	39.9	26.0	62.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	16.1	38.5	25.8	26.2	34.0	39.9	26.0	62.3
Queue Length 50th (m)	7.2	95.6	33.1	66.8	16.5	50.2	10.5	90.0
Queue Length 95th (m)	12.7	159.3	36.8	105.7	30.9	74.9	19.5	123.2
Internal Link Dist (m)		465.6		82.0		1113.3		94.3
Turn Bay Length (m)	20.0		15.0		15.0		15.0	
Base Capacity (vph)	432	733	437	949	213	562	395	613
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	0.15	0.71	0.62	0.42	0.51	0.48	0.18	0.66
Intersection Summary								

HCM Signalized Intersection Capacity Analysis

3: Bayview Drive & Little Ave

08/05/2021

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	48	172	238	171	353	19	95	131	82	57	298	30
Future Volume (vph)	48	172	238	171	353	19	95	131	82	57	298	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	6.0		4.0	6.0		4.0	6.0		4.0	6.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.90		1.00	0.99		1.00	0.94		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1674	1702		1825	1880		1615	1650		1825	1846	
Flt Permitted	0.48	1.00		0.20	1.00		0.17	1.00		0.47	1.00	
Satd. Flow (perm)	851	1702		383	1880		282	1650		909	1846	
Peak-hour factor, PHF	0.73	0.92	0.71	0.63	0.93	0.81	0.88	0.82	0.75	0.80	0.83	0.66
Adj. Flow (vph)	66	187	335	271	380	23	108	160	109	71	359	45
RTOR Reduction (vph)	0	45	0	0	2	0	0	18	0	0	4	0
Lane Group Flow (vph)	66	477	0	271	401	0	108	251	0	71	400	0
Heavy Vehicles (%)	9%	2%	2%	0%	1%	6%	13%	11%	7%	0%	2%	5%
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	52.4	47.0		66.0	56.6		45.0	34.9		38.6	31.7	
Effective Green, g (s)	52.4	47.0		66.0	56.6		45.0	34.9		38.6	31.7	
Actuated g/C Ratio	0.42	0.38		0.53	0.46		0.36	0.28		0.31	0.26	
Clearance Time (s)	4.0	6.0		4.0	6.0		4.0	6.0		4.0	6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	396	646		378	859		211	465		334	472	
v/s Ratio Prot	0.01	0.28		c0.09	0.21		c0.04	0.15		0.01	c0.22	
v/s Ratio Perm	0.06			c0.29			0.14			0.05		
v/c Ratio	0.17	0.74		0.72	0.47		0.51	0.54		0.21	0.85	
Uniform Delay, d1	21.5	33.1		20.8	23.2		29.5	37.6		30.7	43.8	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.2	4.4		6.4	0.4		2.1	1.2		0.3	13.3	
Delay (s)	21.7	37.5		27.2	23.6		31.6	38.9		31.0	57.0	
Level of Service	C	D		C	C		C	D		C	E	
Approach Delay (s)		35.8			25.0			36.8			53.1	
Approach LOS		D			C			D			D	
Intersection Summary												
HCM 2000 Control Delay			36.4			HCM 2000 Level of Service				D		
HCM 2000 Volume to Capacity ratio			0.76									
Actuated Cycle Length (s)			123.8			Sum of lost time (s)			20.0			
Intersection Capacity Utilization			88.6%			ICU Level of Service			E			
Analysis Period (min)			15									
c Critical Lane Group												

Lanes, Volumes, Timings
4: Fairview Road & Little Ave

08/05/2021

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	8	516	429	8	344	547
Future Volume (vph)	8	516	429	8	344	547
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	15.0	0.0		0.0	0.0	
Storage Lanes	1	1		0	1	
Taper Length (m)	35.0				0.0	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt		0.850	0.994			
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1825	1541	3266	0	1789	1830
Flt Permitted	0.950				0.425	
Satd. Flow (perm)	1825	1541	3266	0	800	1830
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)		522	4			
Link Speed (k/h)	50		50			50
Link Distance (m)	489.6		1407.2			78.1
Travel Time (s)	35.3		101.3			5.6
Peak Hour Factor	0.58	0.86	0.94	0.43	0.81	0.89
Heavy Vehicles (%)	0%	6%	11%	13%	2%	5%
Adj. Flow (vph)	14	600	456	19	425	615
Shared Lane Traffic (%)						
Lane Group Flow (vph)	14	600	475	0	425	615
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	3.7		3.7			3.7
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	1.6		1.6			1.6
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14		14	24	
Number of Detectors	1	1	2		1	2
Detector Template	Left	Right	Thru		Left	Thru
Leading Detector (m)	6.1	6.1	30.5		6.1	30.5
Trailing Detector (m)	0.0	0.0	0.0		0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0		0.0	0.0
Detector 1 Size(m)	6.1	6.1	1.8		6.1	1.8
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0
Detector 2 Position(m)			28.7			28.7
Detector 2 Size(m)			1.8			1.8
Detector 2 Type			Cl+Ex			Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)			0.0			0.0
Turn Type	Perm	Perm	NA		pm+pt	NA
Protected Phases			4		3	8

Lanes, Volumes, Timings

4: Fairview Road & Little Ave

08/05/2021

	↖	↗	↑	↘	↙	↓
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Permitted Phases	5	5			8	
Detector Phase	5	5	4		3	8
Switch Phase						
Minimum Initial (s)	10.0	10.0	34.0		7.0	34.0
Minimum Split (s)	27.0	27.0	40.0		13.0	40.0
Total Split (s)	36.0	36.0	40.0		24.0	64.0
Total Split (%)	36.0%	36.0%	40.0%		24.0%	64.0%
Maximum Green (s)	30.0	30.0	34.0		20.0	58.0
Yellow Time (s)	4.0	4.0	4.0		3.0	4.0
All-Red Time (s)	2.0	2.0	2.0		1.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0		4.0	6.0
Lead/Lag			Lag		Lead	
Lead-Lag Optimize?			Yes		Yes	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Recall Mode	None	None	Max		None	Max
Walk Time (s)	9.0	9.0	22.0			22.0
Flash Dont Walk (s)	12.0	12.0	12.0			12.0
Pedestrian Calls (#/hr)	0	0	0			0
Act Effect Green (s)	15.5	15.5	41.1		60.4	58.4
Actuated g/C Ratio	0.18	0.18	0.48		0.70	0.68
v/c Ratio	0.04	0.85	0.30		0.59	0.49
Control Delay	27.2	17.9	16.7		10.0	9.8
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay	27.2	17.9	16.7		10.0	9.8
LOS	C	B	B		B	A
Approach Delay	18.1		16.7			9.9
Approach LOS	B		B			A

Intersection Summary

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 86

Natural Cycle: 80

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.85

Intersection Signal Delay: 13.8

Intersection LOS: B

Intersection Capacity Utilization 70.3%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 4: Fairview Road & Little Ave



Queues

4: Fairview Road & Little Ave

08/05/2021



Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	14	600	475	425	615
v/c Ratio	0.04	0.85	0.30	0.59	0.49
Control Delay	27.2	17.9	16.7	10.0	9.8
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	27.2	17.9	16.7	10.0	9.8
Queue Length 50th (m)	1.9	11.1	20.5	18.3	34.2
Queue Length 95th (m)	4.1	39.1	50.7	51.2	99.9
Internal Link Dist (m)	465.6		1383.2		54.1
Turn Bay Length (m)	15.0				
Base Capacity (vph)	641	880	1562	793	1243
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.02	0.68	0.30	0.54	0.49
Intersection Summary					

HCM Signalized Intersection Capacity Analysis

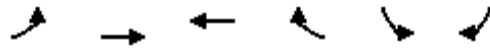
4: Fairview Road & Little Ave

08/05/2021

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	8	516	429	8	344	547
Future Volume (vph)	8	516	429	8	344	547
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	6.0		4.0	6.0
Lane Util. Factor	1.00	1.00	0.95		1.00	1.00
Frt	1.00	0.85	0.99		1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1825	1541	3266		1789	1830
Flt Permitted	0.95	1.00	1.00		0.42	1.00
Satd. Flow (perm)	1825	1541	3266		800	1830
Peak-hour factor, PHF	0.58	0.86	0.94	0.43	0.81	0.89
Adj. Flow (vph)	14	600	456	19	425	615
RTOR Reduction (vph)	0	428	2	0	0	0
Lane Group Flow (vph)	14	172	473	0	425	615
Heavy Vehicles (%)	0%	6%	11%	13%	2%	5%
Turn Type	Perm	Perm	NA		pm+pt	NA
Protected Phases			4		3	8
Permitted Phases	5	5			8	
Actuated Green, G (s)	15.5	15.5	41.1		58.4	58.4
Effective Green, g (s)	15.5	15.5	41.1		58.4	58.4
Actuated g/C Ratio	0.18	0.18	0.48		0.68	0.68
Clearance Time (s)	6.0	6.0	6.0		4.0	6.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	329	278	1562		697	1244
v/s Ratio Prot			0.14		0.09	0.34
v/s Ratio Perm	0.01	0.11			0.32	
v/c Ratio	0.04	0.62	0.30		0.61	0.49
Uniform Delay, d1	29.1	32.5	13.7		6.1	6.6
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.1	4.1	0.5		1.5	1.4
Delay (s)	29.1	36.6	14.2		7.6	8.0
Level of Service	C	D	B		A	A
Approach Delay (s)	36.4		14.2			7.9
Approach LOS	D		B			A
Intersection Summary						
HCM 2000 Control Delay			17.5		HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio			0.64			
Actuated Cycle Length (s)			85.9		Sum of lost time (s)	16.0
Intersection Capacity Utilization			70.3%		ICU Level of Service	C
Analysis Period (min)			15			
c Critical Lane Group						

Lanes, Volumes, Timings
5: Big Bay Point Road & Fairview Road

08/05/2021

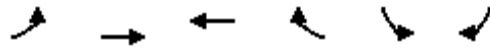


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	375	570	445	98	78	291
Future Volume (vph)	375	570	445	98	78	291
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	120.0			120.0	0.0	0.0
Storage Lanes	1			1	1	1
Taper Length (m)	65.0				0.0	
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1789	3411	3444	1526	1706	1601
Flt Permitted	0.433				0.950	
Satd. Flow (perm)	816	3411	3444	1526	1706	1601
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				107		316
Link Speed (k/h)		50	50		50	
Link Distance (m)		479.3	485.6		1407.2	
Travel Time (s)		34.5	35.0		101.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	7%	6%	7%	7%	2%
Adj. Flow (vph)	408	620	484	107	85	316
Shared Lane Traffic (%)						
Lane Group Flow (vph)	408	620	484	107	85	316
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		3.7	3.7		3.7	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		1.6	1.6		1.6	
Two way Left Turn Lane			Yes			
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24			14	24	14
Number of Detectors	1	2	2	1	1	1
Detector Template	Left	Thru	Thru	Right	Left	Right
Leading Detector (m)	6.1	30.5	30.5	6.1	6.1	6.1
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	6.1	1.8	1.8	6.1	6.1	6.1
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		28.7	28.7			
Detector 2 Size(m)		1.8	1.8			
Detector 2 Type		Cl+Ex	Cl+Ex			
Detector 2 Channel						
Detector 2 Extend (s)		0.0	0.0			
Turn Type	pm+pt	NA	NA	Perm	Perm	Perm
Protected Phases	3	8	4			

Lanes, Volumes, Timings

5: Big Bay Point Road & Fairview Road

08/05/2021



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Permitted Phases	8			4	5	5
Detector Phase	3	8	4	4	5	5
Switch Phase						
Minimum Initial (s)	7.0	40.0	40.0	40.0	10.0	10.0
Minimum Split (s)	11.0	46.0	46.0	46.0	37.0	37.0
Total Split (s)	16.0	62.0	46.0	46.0	46.0	46.0
Total Split (%)	14.8%	57.4%	42.6%	42.6%	42.6%	42.6%
Maximum Green (s)	12.0	56.0	40.0	40.0	42.0	42.0
Yellow Time (s)	3.0	4.0	4.0	4.0	3.0	3.0
All-Red Time (s)	1.0	2.0	2.0	2.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	6.0	6.0	6.0	4.0	4.0
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None
Walk Time (s)			7.0	7.0	7.0	7.0
Flash Dont Walk (s)			33.0	33.0	25.0	25.0
Pedestrian Calls (#/hr)			0	0	0	0
Act Effect Green (s)	57.3	55.3	40.0	40.0	10.7	10.7
Actuated g/C Ratio	0.75	0.73	0.53	0.53	0.14	0.14
v/c Ratio	0.54	0.25	0.27	0.13	0.35	0.64
Control Delay	5.9	3.8	10.7	2.7	34.3	10.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	5.9	3.8	10.7	2.7	34.3	10.4
LOS	A	A	B	A	C	B
Approach Delay		4.7	9.2		15.5	
Approach LOS		A	A		B	

Intersection Summary

Area Type: Other

Cycle Length: 108

Actuated Cycle Length: 76

Natural Cycle: 95

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.64

Intersection Signal Delay: 8.1

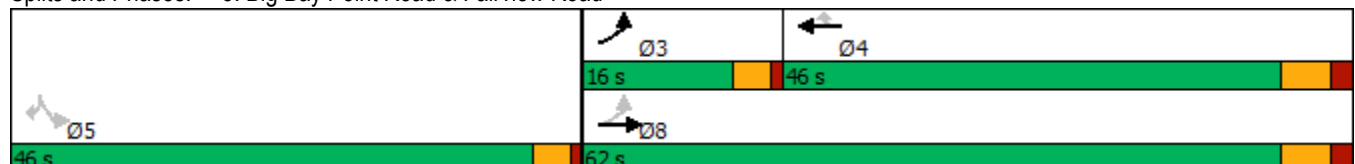
Intersection LOS: A

Intersection Capacity Utilization 74.1%

ICU Level of Service D

Analysis Period (min) 15

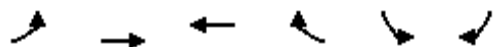
Splits and Phases: 5: Big Bay Point Road & Fairview Road



Queues

5: Big Bay Point Road & Fairview Road

08/05/2021

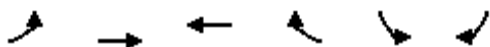


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Group Flow (vph)	408	620	484	107	85	316
v/c Ratio	0.54	0.25	0.27	0.13	0.35	0.64
Control Delay	5.9	3.8	10.7	2.7	34.3	10.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	5.9	3.8	10.7	2.7	34.3	10.4
Queue Length 50th (m)	13.4	11.8	18.6	0.0	11.3	0.0
Queue Length 95th (m)	27.0	20.3	29.9	7.0	23.6	20.4
Internal Link Dist (m)		455.3	461.6		1383.2	
Turn Bay Length (m)	120.0			120.0		
Base Capacity (vph)	769	2515	1814	854	943	1026
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	0.53	0.25	0.27	0.13	0.09	0.31
Intersection Summary						

HCM Signalized Intersection Capacity Analysis

5: Big Bay Point Road & Fairview Road

08/05/2021



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	375	570	445	98	78	291
Future Volume (vph)	375	570	445	98	78	291
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	6.0	6.0	6.0	4.0	4.0
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1789	3411	3444	1526	1706	1601
Flt Permitted	0.43	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	815	3411	3444	1526	1706	1601
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	408	620	484	107	85	316
RTOR Reduction (vph)	0	0	0	51	0	272
Lane Group Flow (vph)	408	620	484	56	85	44
Heavy Vehicles (%)	2%	7%	6%	7%	7%	2%
Turn Type	pm+pt	NA	NA	Perm	Perm	Perm
Protected Phases	3	8	4			
Permitted Phases	8			4	5	5
Actuated Green, G (s)	55.3	55.3	40.1	40.1	10.7	10.7
Effective Green, g (s)	55.3	55.3	40.1	40.1	10.7	10.7
Actuated g/C Ratio	0.73	0.73	0.53	0.53	0.14	0.14
Clearance Time (s)	4.0	6.0	6.0	6.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	736	2481	1817	805	240	225
v/s Ratio Prot	c0.08	0.18	0.14			
v/s Ratio Perm	c0.32			0.04	c0.05	0.03
v/c Ratio	0.55	0.25	0.27	0.07	0.35	0.20
Uniform Delay, d1	3.8	3.4	9.9	8.8	29.5	28.9
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.9	0.1	0.1	0.0	0.9	0.4
Delay (s)	4.8	3.5	9.9	8.8	30.4	29.3
Level of Service	A	A	A	A	C	C
Approach Delay (s)		4.0	9.7		29.5	
Approach LOS		A	A		C	
Intersection Summary						
HCM 2000 Control Delay			10.7		HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio			0.55			
Actuated Cycle Length (s)			76.0		Sum of lost time (s)	14.0
Intersection Capacity Utilization			74.1%		ICU Level of Service	D
Analysis Period (min)			15			
c Critical Lane Group						

Lanes, Volumes, Timings

8: Bayview Drive

08/05/2021

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations			↑↑			↑
Traffic Volume (vph)	0	0	0	0	0	0
Future Volume (vph)	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	1.00
Frnt						
Flt Protected						
Satd. Flow (prot)	0	0	3579	0	0	1883
Flt Permitted						
Satd. Flow (perm)	0	0	3579	0	0	1883
Link Speed (k/h)	50		50			50
Link Distance (m)	61.2		173.0			97.3
Travel Time (s)	4.4		12.5			7.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	0.0		3.7			3.7
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	1.6		1.6			1.6
Two way Left Turn Lane			Yes			
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14		14	24	
Sign Control	Stop		Free			Free
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization 0.0%	ICU Level of Service A					
Analysis Period (min) 15						

HCM Unsignalized Intersection Capacity Analysis

8: Bayview Drive

08/05/2021

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations			↑↑			↑
Traffic Volume (veh/h)	0	0	0	0	0	0
Future Volume (Veh/h)	0	0	0	0	0	0
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	0	0	0
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			TWLTL			None
Median storage veh			2			
Upstream signal (m)			173			
pX, platoon unblocked						
vC, conflicting volume	0	0			0	
vC1, stage 1 conf vol	0					
vC2, stage 2 conf vol	0					
vCu, unblocked vol	0	0			0	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)	5.8					
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	1023	1084			1622	
Direction, Lane #	NB 1	NB 2	SB 1			
Volume Total	0	0	0			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	1700	1700			
Volume to Capacity	0.00	0.00	0.00			
Queue Length 95th (m)	0.0	0.0	0.0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS						
Approach Delay (s)	0.0		0.0			
Approach LOS						
Intersection Summary						
Average Delay			0.0			
Intersection Capacity Utilization			0.0%	ICU Level of Service		A
Analysis Period (min)			15			

Lanes, Volumes, Timings

1: Bayview Drive & Big Bay Point Road

08/05/2021

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	19	346	131	202	556	27	275	439	163	162	385	44
Future Volume (vph)	19	346	131	202	556	27	275	439	163	162	385	44
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	105.0		55.0	105.0		55.0	105.0		55.0	105.0		55.0
Storage Lanes	1		1	1		1	1		0	1		1
Taper Length (m)	65.0			65.0			65.0			65.0		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.95	1.00	0.95	1.00
Frt			0.850			0.850		0.959				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1342	3544	1541	1789	3579	1350	1807	3330	0	1659	3380	1445
Flt Permitted	0.320			0.469			0.302			0.223		
Satd. Flow (perm)	452	3544	1541	883	3579	1350	574	3330	0	389	3380	1445
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			164			164		52				164
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		485.6			536.9			234.9			173.0	
Travel Time (s)		35.0			38.7			16.9			12.5	
Peak Hour Factor	0.72	0.89	0.80	0.88	0.89	0.70	0.86	0.88	0.88	0.72	0.84	0.86
Heavy Vehicles (%)	36%	3%	6%	2%	2%	21%	1%	7%	0%	10%	8%	13%
Adj. Flow (vph)	26	389	164	230	625	39	320	499	185	225	458	51
Shared Lane Traffic (%)												
Lane Group Flow (vph)	26	389	164	230	625	39	320	684	0	225	458	51
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane		Yes						Yes			Yes	
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	Right
Leading Detector (m)	6.1	30.5	6.1	6.1	30.5	6.1	6.1	30.5		6.1	30.5	6.1
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Size(m)	6.1	1.8	6.1	6.1	1.8	6.1	6.1	1.8		6.1	1.8	6.1
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	

Lanes, Volumes, Timings

1: Bayview Drive & Big Bay Point Road

08/05/2021

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2		2	6		6	8			4		4
Detector Phase	5	2	2	1	6	6	3	8		7	4	4
Switch Phase												
Minimum Initial (s)	7.0	35.0	35.0	7.0	35.0	35.0	7.0	12.0		7.0	12.0	12.0
Minimum Split (s)	11.0	41.0	41.0	11.0	41.0	41.0	11.0	30.0		11.0	30.0	30.0
Total Split (s)	11.0	37.0	37.0	12.0	38.0	38.0	23.0	33.0		18.0	28.0	28.0
Total Split (%)	11.0%	37.0%	37.0%	12.0%	38.0%	38.0%	23.0%	33.0%		18.0%	28.0%	28.0%
Maximum Green (s)	7.0	31.0	31.0	8.0	32.0	32.0	19.0	27.0		14.0	22.0	22.0
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0		3.0	4.0	4.0
All-Red Time (s)	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0		1.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.0	6.0	6.0	4.0	6.0	6.0	4.0	6.0		4.0	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Recall Mode	Max	None	None	None	None	None	None	None		None	None	None
Walk Time (s)		20.0	20.0		20.0	20.0		9.0			9.0	9.0
Flash Dont Walk (s)		15.0	15.0		15.0	15.0		15.0			15.0	15.0
Pedestrian Calls (#/hr)		0	0		0	0		0			0	0
Act Effect Green (s)	40.1	31.1	31.1	42.2	32.1	32.1	41.1	23.4		34.7	20.0	20.0
Actuated g/C Ratio	0.42	0.33	0.33	0.44	0.34	0.34	0.43	0.25		0.36	0.21	0.21
v/c Ratio	0.10	0.34	0.27	0.49	0.52	0.07	0.70	0.80		0.73	0.65	0.12
Control Delay	16.3	26.2	5.4	21.1	28.1	0.2	26.8	38.9		33.4	39.3	0.5
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	16.3	26.2	5.4	21.1	28.1	0.2	26.8	38.9		33.4	39.3	0.5
LOS	B	C	A	C	C	A	C	D		C	D	A
Approach Delay		19.9			25.1			35.0			34.8	
Approach LOS		B			C			D			C	

Intersection Summary

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 95.3

Natural Cycle: 95

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.80

Intersection Signal Delay: 29.5

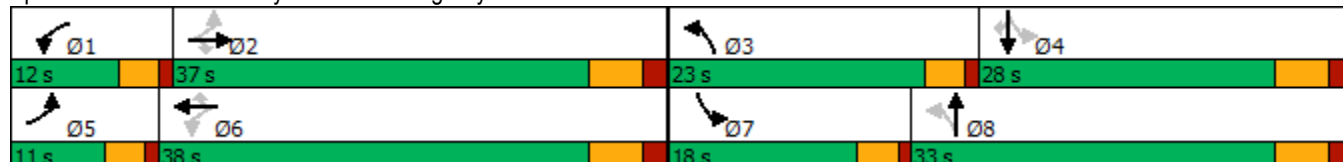
Intersection LOS: C

Intersection Capacity Utilization 83.3%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 1: Bayview Drive & Big Bay Point Road



Queues

1: Bayview Drive & Big Bay Point Road

08/05/2021



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	26	389	164	230	625	39	320	684	225	458	51
v/c Ratio	0.10	0.34	0.27	0.49	0.52	0.07	0.70	0.80	0.73	0.65	0.12
Control Delay	16.3	26.2	5.4	21.1	28.1	0.2	26.8	38.9	33.4	39.3	0.5
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	16.3	26.2	5.4	21.1	28.1	0.2	26.8	38.9	33.4	39.3	0.5
Queue Length 50th (m)	2.7	29.8	0.0	26.4	50.7	0.0	38.6	58.8	25.9	41.1	0.0
Queue Length 95th (m)	6.0	42.6	9.5	42.5	68.3	0.0	55.5	76.5	31.9	53.9	0.0
Internal Link Dist (m)	461.6				512.9		210.9		149.0		
Turn Bay Length (m)	105.0		55.0	105.0		55.0	105.0		105.0		55.0
Base Capacity (vph)	256	1156	613	466	1206	563	500	984	334	786	461
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	0.34	0.27	0.49	0.52	0.07	0.64	0.70	0.67	0.58	0.11
Intersection Summary											

HCM Signalized Intersection Capacity Analysis

1: Bayview Drive & Big Bay Point Road

08/05/2021

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	19	346	131	202	556	27	275	439	163	162	385	44
Future Volume (vph)	19	346	131	202	556	27	275	439	163	162	385	44
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	6.0	6.0	4.0	6.0	6.0	4.0	6.0		4.0	6.0	6.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95		1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.96		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1342	3544	1541	1789	3579	1350	1807	3332		1659	3380	1445
Flt Permitted	0.32	1.00	1.00	0.47	1.00	1.00	0.30	1.00		0.22	1.00	1.00
Satd. Flow (perm)	452	3544	1541	884	3579	1350	575	3332		390	3380	1445
Peak-hour factor, PHF	0.72	0.89	0.80	0.88	0.89	0.70	0.86	0.88	0.88	0.72	0.84	0.86
Adj. Flow (vph)	26	389	164	230	625	39	320	499	185	225	458	51
RTOR Reduction (vph)	0	0	110	0	0	26	0	39	0	0	0	40
Lane Group Flow (vph)	26	389	54	230	625	13	320	645	0	225	458	11
Heavy Vehicles (%)	36%	3%	6%	2%	2%	21%	1%	7%	0%	10%	8%	13%
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2		2	6		6	8			4		4
Actuated Green, G (s)	38.1	31.1	31.1	40.1	32.1	32.1	39.4	23.4		32.8	20.1	20.1
Effective Green, g (s)	38.1	31.1	31.1	40.1	32.1	32.1	39.4	23.4		32.8	20.1	20.1
Actuated g/C Ratio	0.40	0.33	0.33	0.42	0.34	0.34	0.41	0.25		0.34	0.21	0.21
Clearance Time (s)	4.0	6.0	6.0	4.0	6.0	6.0	4.0	6.0		4.0	6.0	6.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	246	1157	503	448	1206	455	445	819		303	713	305
v/s Ratio Prot	0.01	0.11		c0.04	c0.17		c0.12	c0.19		0.10	0.14	
v/s Ratio Perm	0.03		0.03	0.17		0.01	0.18			0.16		0.01
v/c Ratio	0.11	0.34	0.11	0.51	0.52	0.03	0.72	0.79		0.74	0.64	0.04
Uniform Delay, d1	17.7	24.2	22.4	18.4	25.3	21.1	20.5	33.6		24.2	34.3	29.8
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	0.2	0.2	0.1	1.0	0.4	0.0	5.5	5.0		9.4	2.0	0.0
Delay (s)	17.9	24.4	22.5	19.4	25.7	21.1	26.0	38.6		33.7	36.3	29.9
Level of Service	B	C	C	B	C	C	C	D		C	D	C
Approach Delay (s)		23.6			23.9			34.6			35.0	
Approach LOS		C			C			C			D	
Intersection Summary												
HCM 2000 Control Delay			29.7			HCM 2000 Level of Service				C		
HCM 2000 Volume to Capacity ratio			0.67									
Actuated Cycle Length (s)			95.2			Sum of lost time (s)			20.0			
Intersection Capacity Utilization			83.3%			ICU Level of Service			E			
Analysis Period (min)			15									
c Critical Lane Group												

Lanes, Volumes, Timings

2: Bayview Drive & Courier Entrance/Site Entrance

08/05/2021

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	0	32	51	0	34	38	464	21	8	541	18
Future Volume (vph)	30	0	32	51	0	34	38	464	21	8	541	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.942			0.946			0.995			0.994	
Flt Protected		0.972			0.971			0.995			0.999	
Satd. Flow (prot)	0	1737	0	0	1354	0	0	1724	0	0	1765	0
Flt Permitted		0.972			0.971			0.995			0.999	
Satd. Flow (perm)	0	1737	0	0	1354	0	0	1724	0	0	1765	0
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		188.0			286.2			97.3			1137.3	
Travel Time (s)		13.5			20.6			7.0			81.9	
Peak Hour Factor	0.58	0.92	0.83	0.92	0.92	0.92	0.58	0.89	0.92	0.92	0.89	0.61
Heavy Vehicles (%)	0%	0%	3%	48%	0%	4%	40%	4%	68%	0%	6%	53%
Adj. Flow (vph)	52	0	39	55	0	37	66	521	23	9	608	30
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	91	0	0	92	0	0	610	0	0	647	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		0.0			0.0			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Stop			Stop			Free			Free	
Intersection Summary												
Area Type:	Other											
Control Type:	Unsignalized											
Intersection Capacity Utilization	61.7%				ICU Level of Service B							
Analysis Period (min)	15											

HCM Unsignalized Intersection Capacity Analysis

2: Bayview Drive & Courier Entrance/Site Entrance

08/05/2021

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	0	32	51	0	34	38	464	21	8	541	18
Future Volume (Veh/h)	30	0	32	51	0	34	38	464	21	8	541	18
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.58	0.92	0.83	0.92	0.92	0.92	0.58	0.89	0.92	0.92	0.89	0.61
Hourly flow rate (vph)	52	0	39	55	0	37	66	521	23	9	608	30
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								None			None	
Median storage veh												
Upstream signal (m)								270				
pX, platoon unblocked												
vC, conflicting volume	1342	1317	623	1344	1320	532	638			544		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1342	1317	623	1344	1320	532	638			544		
tC, single (s)	7.1	6.5	6.2	7.6	6.5	6.2	4.5			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.9	4.0	3.3	2.6			2.2		
p0 queue free %	54	100	92	38	100	93	92			99		
cM capacity (veh/h)	113	144	484	88	144	543	788			1035		
Direction, Lane #	EB 1	WB 1	NB 1	SB 1								
Volume Total	91	92	610	647								
Volume Left	52	55	66	9								
Volume Right	39	37	23	30								
cSH	168	133	788	1035								
Volume to Capacity	0.54	0.69	0.08	0.01								
Queue Length 95th (m)	20.9	29.3	2.1	0.2								
Control Delay (s)	49.1	78.0	2.2	0.2								
Lane LOS	E	F	A	A								
Approach Delay (s)	49.1	78.0	2.2	0.2								
Approach LOS	E	F										
Intersection Summary												
Average Delay			9.1									
Intersection Capacity Utilization			61.7%		ICU Level of Service				B			
Analysis Period (min)			15									

Lanes, Volumes, Timings

3: Bayview Drive & Little Ave

08/05/2021

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	24	314	73	70	270	47	293	427	124	114	223	39
Future Volume (vph)	24	314	73	70	270	47	293	427	124	114	223	39
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	20.0		0.0	15.0		0.0	15.0		0.0	15.0		0.0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (m)	40.0			30.0			20.0			45.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.968			0.977			0.962			0.977	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1825	1837	0	1825	1861	0	1807	1848	0	1825	1846	0
Flt Permitted	0.440			0.251			0.302			0.113		
Satd. Flow (perm)	845	1837	0	482	1861	0	574	1848	0	217	1846	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		11			7			14			7	
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		489.6			106.0			1137.3			118.3	
Travel Time (s)		35.3			7.6			81.9			8.5	
Peak Hour Factor	0.81	0.88	0.77	0.74	0.94	0.92	0.94	0.96	0.83	0.73	0.85	0.81
Heavy Vehicles (%)	0%	1%	2%	0%	1%	0%	1%	0%	0%	0%	2%	0%
Adj. Flow (vph)	30	357	95	95	287	51	312	445	149	156	262	48
Shared Lane Traffic (%)												
Lane Group Flow (vph)	30	452	0	95	338	0	312	594	0	156	310	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane												Yes
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (m)	6.1	30.5		6.1	30.5		6.1	30.5		6.1	30.5	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Size(m)	6.1	1.8		6.1	1.8		6.1	1.8		6.1	1.8	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	

Lanes, Volumes, Timings

3: Bayview Drive & Little Ave

08/05/2021

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2			6			8			4		
Detector Phase	5	2		1	6		3	8		7	4	
Switch Phase												
Minimum Initial (s)	7.0	44.0		7.0	44.0		10.0	10.0		7.0	10.0	
Minimum Split (s)	11.0	48.0		11.0	48.0		14.0	23.0		14.0	23.0	
Total Split (s)	11.0	53.0		11.0	53.0		32.0	58.0		16.0	42.0	
Total Split (%)	8.0%	38.4%		8.0%	38.4%		23.2%	42.0%		11.6%	30.4%	
Maximum Green (s)	7.0	49.0		7.0	49.0		28.0	54.0		12.0	38.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5		3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5		0.5	0.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None		None	None		None	None		None	None	
Walk Time (s)		19.0			19.0			8.0			8.0	
Flash Dont Walk (s)		15.0			15.0			11.0			11.0	
Pedestrian Calls (#/hr)		0			0			0			0	
Act Effect Green (s)	52.3	45.3		54.1	50.2		58.2	43.1		46.4	35.3	
Actuated g/C Ratio	0.43	0.37		0.44	0.41		0.47	0.35		0.38	0.29	
v/c Ratio	0.07	0.66		0.33	0.44		0.68	0.90		0.69	0.58	
Control Delay	21.9	38.9		24.7	31.3		28.0	55.1		42.2	41.8	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	21.9	38.9		24.7	31.3		28.0	55.1		42.2	41.8	
LOS	C	D		C	C		C	E		D	D	
Approach Delay		37.8			29.8			45.8			41.9	
Approach LOS		D			C			D			D	

Intersection Summary

Area Type: Other

Cycle Length: 138

Actuated Cycle Length: 122.7

Natural Cycle: 110

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.90

Intersection Signal Delay: 40.3

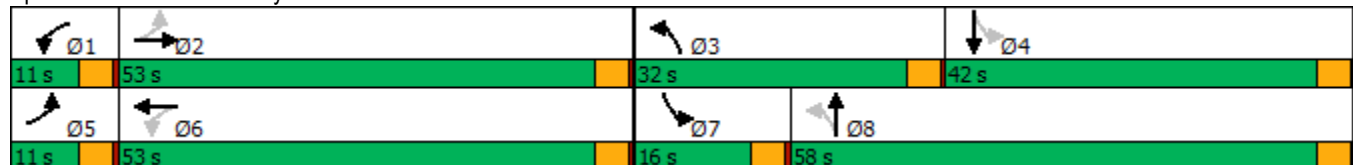
Intersection LOS: D

Intersection Capacity Utilization 92.2%

ICU Level of Service F

Analysis Period (min) 15

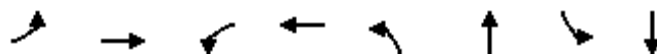
Splits and Phases: 3: Bayview Drive & Little Ave



Queues

3: Bayview Drive & Little Ave

08/05/2021



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	30	452	95	338	312	594	156	310
v/c Ratio	0.07	0.66	0.33	0.44	0.68	0.90	0.69	0.58
Control Delay	21.9	38.9	24.7	31.3	28.0	55.1	42.2	41.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	21.9	38.9	24.7	31.3	28.0	55.1	42.2	41.8
Queue Length 50th (m)	4.0	90.7	13.2	62.7	45.4	131.5	20.5	61.1
Queue Length 95th (m)	9.8	136.4	21.5	100.1	70.3	189.8	33.4	94.5
Internal Link Dist (m)		465.6		82.0		1113.3		94.3
Turn Bay Length (m)	20.0		15.0		15.0		15.0	
Base Capacity (vph)	416	746	289	794	556	828	242	600
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	0.07	0.61	0.33	0.43	0.56	0.72	0.64	0.52
Intersection Summary								

HCM Signalized Intersection Capacity Analysis

3: Bayview Drive & Little Ave

08/05/2021

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	24	314	73	70	270	47	293	427	124	114	223	39
Future Volume (vph)	24	314	73	70	270	47	293	427	124	114	223	39
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	0.97		1.00	0.98		1.00	0.96		1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1825	1838		1825	1862		1807	1849		1825	1845	
Flt Permitted	0.44	1.00		0.25	1.00		0.30	1.00		0.11	1.00	
Satd. Flow (perm)	844	1838		482	1862		575	1849		218	1845	
Peak-hour factor, PHF	0.81	0.88	0.77	0.74	0.94	0.92	0.94	0.96	0.83	0.73	0.85	0.81
Adj. Flow (vph)	30	357	95	95	287	51	312	445	149	156	262	48
RTOR Reduction (vph)	0	7	0	0	4	0	0	9	0	0	5	0
Lane Group Flow (vph)	30	445	0	95	334	0	312	585	0	156	305	0
Heavy Vehicles (%)	0%	1%	2%	0%	1%	0%	1%	0%	0%	0%	2%	0%
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2			6			8			4		
Actuated Green, G (s)	50.9	47.0		57.3	50.2		58.2	43.1		46.4	35.3	
Effective Green, g (s)	50.9	47.0		57.3	50.2		58.2	43.1		46.4	35.3	
Actuated g/C Ratio	0.41	0.38		0.46	0.40		0.47	0.35		0.37	0.28	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	376	694		298	751		456	641		224	523	
v/s Ratio Prot	0.00	c0.24		c0.02	0.18		c0.10	c0.32		0.06	0.17	
v/s Ratio Perm	0.03			0.13			0.22			0.20		
v/c Ratio	0.08	0.64		0.32	0.44		0.68	0.91		0.70	0.58	
Uniform Delay, d1	22.4	31.7		21.9	26.9		23.2	38.8		30.4	38.2	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	0.1	2.0		0.6	0.4		4.2	17.4		9.1	1.7	
Delay (s)	22.5	33.8		22.5	27.3		27.4	56.2		39.5	39.8	
Level of Service	C	C		C	C		C	E		D	D	
Approach Delay (s)		33.1			26.3			46.3			39.7	
Approach LOS		C			C			D			D	
Intersection Summary												
HCM 2000 Control Delay			38.4			HCM 2000 Level of Service				D		
HCM 2000 Volume to Capacity ratio			0.74									
Actuated Cycle Length (s)			124.3			Sum of lost time (s)			16.0			
Intersection Capacity Utilization			92.2%			ICU Level of Service			F			
Analysis Period (min)			15									
c Critical Lane Group												

Lanes, Volumes, Timings
4: Fairview Road & Little Ave

08/05/2021

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	16	583	806	12	467	637
Future Volume (vph)	16	583	806	12	467	637
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	15.0	0.0		0.0	0.0	
Storage Lanes	1	1		0	1	
Taper Length (m)	35.0				0.0	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	1.00
Frt		0.850	0.997			
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1825	1570	3469	0	1825	1830
Flt Permitted	0.950				0.210	
Satd. Flow (perm)	1825	1570	3469	0	403	1830
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)		504	2			
Link Speed (k/h)	50		50			50
Link Distance (m)	489.6		1407.2			78.1
Travel Time (s)	35.3		101.3			5.6
Peak Hour Factor	0.75	0.94	0.95	0.75	0.95	0.86
Heavy Vehicles (%)	0%	4%	5%	0%	0%	5%
Adj. Flow (vph)	21	620	848	16	492	741
Shared Lane Traffic (%)						
Lane Group Flow (vph)	21	620	864	0	492	741
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	3.7		3.7			3.7
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	1.6		1.6			1.6
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14		14	24	
Number of Detectors	1	1	2		1	2
Detector Template	Left	Right	Thru		Left	Thru
Leading Detector (m)	6.1	6.1	30.5		6.1	30.5
Trailing Detector (m)	0.0	0.0	0.0		0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0		0.0	0.0
Detector 1 Size(m)	6.1	6.1	1.8		6.1	1.8
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0
Detector 2 Position(m)			28.7			28.7
Detector 2 Size(m)			1.8			1.8
Detector 2 Type			Cl+Ex			Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)			0.0			0.0
Turn Type	Perm	Perm	NA		pm+pt	NA
Protected Phases			4		3	8

Lanes, Volumes, Timings
4: Fairview Road & Little Ave

08/05/2021

	↖	↗	↑	↘	↙	↓
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Permitted Phases	5	5			8	
Detector Phase	5	5	4		3	8
Switch Phase						
Minimum Initial (s)	10.0	10.0	34.0		7.0	34.0
Minimum Split (s)	27.0	27.0	40.0		11.0	40.0
Total Split (s)	29.0	29.0	40.0		31.0	71.0
Total Split (%)	29.0%	29.0%	40.0%		31.0%	71.0%
Maximum Green (s)	23.0	23.0	34.0		27.0	65.0
Yellow Time (s)	4.0	4.0	4.0		3.0	4.0
All-Red Time (s)	2.0	2.0	2.0		1.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0		4.0	6.0
Lead/Lag			Lag		Lead	
Lead-Lag Optimize?			Yes		Yes	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Recall Mode	None	None	Max		None	Max
Walk Time (s)	9.0	9.0	22.0			22.0
Flash Dont Walk (s)	12.0	12.0	12.0			12.0
Pedestrian Calls (#/hr)	0	0	0			0
Act Effct Green (s)	16.3	16.3	40.3		67.3	65.3
Actuated g/C Ratio	0.17	0.17	0.43		0.72	0.70
v/c Ratio	0.07	0.90	0.58		0.81	0.58
Control Delay	31.3	25.3	24.7		23.6	10.5
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay	31.3	25.3	24.7		23.6	10.5
LOS	C	C	C		C	B
Approach Delay	25.5		24.7			15.7
Approach LOS	C		C			B

Intersection Summary

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 93.6

Natural Cycle: 90

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.90

Intersection Signal Delay: 20.8

Intersection LOS: C

Intersection Capacity Utilization 75.9%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 4: Fairview Road & Little Ave



Queues

4: Fairview Road & Little Ave

08/05/2021



Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	21	620	864	492	741
v/c Ratio	0.07	0.90	0.58	0.81	0.58
Control Delay	31.3	25.3	24.7	23.6	10.5
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	31.3	25.3	24.7	23.6	10.5
Queue Length 50th (m)	3.2	18.8	63.7	40.9	60.0
Queue Length 95th (m)	7.7	#82.3	98.7	87.1	101.4
Internal Link Dist (m)	465.6		1383.2		54.1
Turn Bay Length (m)	15.0				
Base Capacity (vph)	450	767	1495	701	1276
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.05	0.81	0.58	0.70	0.58

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

HCM Signalized Intersection Capacity Analysis

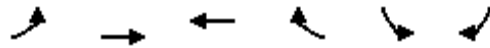
4: Fairview Road & Little Ave

08/05/2021

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	16	583	806	12	467	637
Future Volume (vph)	16	583	806	12	467	637
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	6.0		4.0	6.0
Lane Util. Factor	1.00	1.00	0.95		1.00	1.00
Frt	1.00	0.85	1.00		1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1825	1570	3470		1825	1830
Flt Permitted	0.95	1.00	1.00		0.21	1.00
Satd. Flow (perm)	1825	1570	3470		403	1830
Peak-hour factor, PHF	0.75	0.94	0.95	0.75	0.95	0.86
Adj. Flow (vph)	21	620	848	16	492	741
RTOR Reduction (vph)	0	416	1	0	0	0
Lane Group Flow (vph)	21	204	863	0	492	741
Heavy Vehicles (%)	0%	4%	5%	0%	0%	5%
Turn Type	Perm	Perm	NA		pm+pt	NA
Protected Phases			4		3	8
Permitted Phases	5	5			8	
Actuated Green, G (s)	16.3	16.3	40.4		65.3	65.3
Effective Green, g (s)	16.3	16.3	40.4		65.3	65.3
Actuated g/C Ratio	0.17	0.17	0.43		0.70	0.70
Clearance Time (s)	6.0	6.0	6.0		4.0	6.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	317	273	1497		598	1276
v/s Ratio Prot			0.25		0.18	0.41
v/s Ratio Perm	0.01	0.13			0.39	
v/c Ratio	0.07	0.75	0.58		0.82	0.58
Uniform Delay, d1	32.3	36.7	20.1		14.3	7.2
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.1	10.6	1.6		8.9	1.9
Delay (s)	32.4	47.3	21.7		23.2	9.1
Level of Service	C	D	C		C	A
Approach Delay (s)	46.8		21.7			14.8
Approach LOS	D		C			B
Intersection Summary						
HCM 2000 Control Delay			24.5		HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio			0.84			
Actuated Cycle Length (s)			93.6		Sum of lost time (s)	16.0
Intersection Capacity Utilization			75.9%		ICU Level of Service	D
Analysis Period (min)			15			
c Critical Lane Group						

Lanes, Volumes, Timings
5: Big Bay Point Road & Fairview Road

08/05/2021

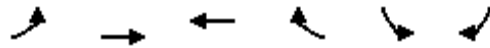


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	456	950	640	155	89	267
Future Volume (vph)	456	950	640	155	89	267
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	120.0			120.0	0.0	0.0
Storage Lanes	1			1	1	1
Taper Length (m)	65.0				0.0	
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1789	3544	3579	1601	1738	1555
Flt Permitted	0.308				0.950	
Satd. Flow (perm)	580	3544	3579	1601	1738	1555
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				168		290
Link Speed (k/h)		50	50		50	
Link Distance (m)		479.3	485.6		1407.2	
Travel Time (s)		34.5	35.0		101.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	3%	2%	2%	5%	5%
Adj. Flow (vph)	496	1033	696	168	97	290
Shared Lane Traffic (%)						
Lane Group Flow (vph)	496	1033	696	168	97	290
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		3.7	3.7		3.7	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		1.6	1.6		1.6	
Two way Left Turn Lane			Yes			
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24			14	24	14
Number of Detectors	1	2	2	1	1	1
Detector Template	Left	Thru	Thru	Right	Left	Right
Leading Detector (m)	6.1	30.5	30.5	6.1	6.1	6.1
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	6.1	1.8	1.8	6.1	6.1	6.1
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		28.7	28.7			
Detector 2 Size(m)		1.8	1.8			
Detector 2 Type		Cl+Ex	Cl+Ex			
Detector 2 Channel						
Detector 2 Extend (s)		0.0	0.0			
Turn Type	pm+pt	NA	NA	Perm	Perm	Perm
Protected Phases	3	8	4			

Lanes, Volumes, Timings

5: Big Bay Point Road & Fairview Road

08/05/2021



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Permitted Phases	8			4	5	5
Detector Phase	3	8	4	4	5	5
Switch Phase						
Minimum Initial (s)	7.0	40.0	40.0	40.0	10.0	10.0
Minimum Split (s)	11.0	46.0	46.0	46.0	38.0	38.0
Total Split (s)	34.0	80.0	46.0	46.0	28.0	28.0
Total Split (%)	31.5%	74.1%	42.6%	42.6%	25.9%	25.9%
Maximum Green (s)	30.0	74.0	40.0	40.0	22.0	22.0
Yellow Time (s)	3.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None
Walk Time (s)			7.0	7.0	7.0	7.0
Flash Dont Walk (s)			33.0	33.0	25.0	25.0
Pedestrian Calls (#/hr)			0	0	0	0
Act Effect Green (s)	62.5	60.5	40.4	40.4	11.3	11.3
Actuated g/C Ratio	0.74	0.72	0.48	0.48	0.13	0.13
v/c Ratio	0.75	0.40	0.40	0.20	0.42	0.63
Control Delay	12.6	5.2	16.3	3.5	40.9	11.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	12.6	5.2	16.3	3.5	40.9	11.5
LOS	B	A	B	A	D	B
Approach Delay		7.6	13.8		18.8	
Approach LOS		A	B		B	

Intersection Summary

Area Type: Other

Cycle Length: 108

Actuated Cycle Length: 83.9

Natural Cycle: 95

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.75

Intersection Signal Delay: 11.1

Intersection LOS: B

Intersection Capacity Utilization 80.3%

ICU Level of Service D

Analysis Period (min) 15

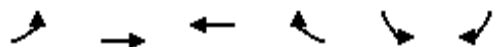
Splits and Phases: 5: Big Bay Point Road & Fairview Road



Queues

5: Big Bay Point Road & Fairview Road

08/05/2021

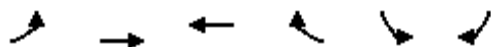


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Group Flow (vph)	496	1033	696	168	97	290
v/c Ratio	0.75	0.40	0.40	0.20	0.42	0.63
Control Delay	12.6	5.2	16.3	3.5	40.9	11.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	12.6	5.2	16.3	3.5	40.9	11.5
Queue Length 50th (m)	20.4	26.0	32.5	0.0	13.9	0.0
Queue Length 95th (m)	50.6	43.7	67.3	11.8	32.3	22.7
Internal Link Dist (m)		455.3	461.6		1383.2	
Turn Bay Length (m)	120.0			120.0		
Base Capacity (vph)	868	3155	1722	857	460	624
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	0.57	0.33	0.40	0.20	0.21	0.46
Intersection Summary						

HCM Signalized Intersection Capacity Analysis

5: Big Bay Point Road & Fairview Road

08/05/2021



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	456	950	640	155	89	267
Future Volume (vph)	456	950	640	155	89	267
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	6.0	6.0	6.0	6.0	6.0
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1789	3544	3579	1601	1738	1555
Flt Permitted	0.31	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	580	3544	3579	1601	1738	1555
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	496	1033	696	168	97	290
RTOR Reduction (vph)	0	0	0	87	0	251
Lane Group Flow (vph)	496	1033	696	81	97	39
Heavy Vehicles (%)	2%	3%	2%	2%	5%	5%
Turn Type	pm+pt	NA	NA	Perm	Perm	Perm
Protected Phases	3	8	4			
Permitted Phases	8			4	5	5
Actuated Green, G (s)	60.5	60.5	40.4	40.4	11.3	11.3
Effective Green, g (s)	60.5	60.5	40.4	40.4	11.3	11.3
Actuated g/C Ratio	0.72	0.72	0.48	0.48	0.13	0.13
Clearance Time (s)	4.0	6.0	6.0	6.0	6.0	6.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	651	2558	1725	771	234	209
v/s Ratio Prot	c0.15	0.29	0.19			
v/s Ratio Perm	c0.40			0.05	c0.06	0.03
v/c Ratio	0.76	0.40	0.40	0.11	0.41	0.19
Uniform Delay, d1	6.0	4.6	14.0	11.8	33.2	32.2
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	5.3	0.1	0.2	0.1	1.2	0.4
Delay (s)	11.3	4.7	14.1	11.9	34.4	32.6
Level of Service	B	A	B	B	C	C
Approach Delay (s)		6.8	13.7		33.1	
Approach LOS		A	B		C	
Intersection Summary						
HCM 2000 Control Delay			12.6		HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio			0.74			
Actuated Cycle Length (s)			83.8		Sum of lost time (s)	16.0
Intersection Capacity Utilization			80.3%		ICU Level of Service	D
Analysis Period (min)			15			
c Critical Lane Group						

Lanes, Volumes, Timings

8: Bayview Drive

08/05/2021

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations			↑↑			↑
Traffic Volume (vph)	0	0	0	0	0	0
Future Volume (vph)	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	1.00
Fr t						
Flt Protected						
Satd. Flow (prot)	0	0	3579	0	0	1883
Flt Permitted						
Satd. Flow (perm)	0	0	3579	0	0	1883
Link Speed (k/h)	50		50			50
Link Distance (m)	61.2		173.0			97.3
Travel Time (s)	4.4		12.5			7.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	0.0		3.7			3.7
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	1.6		1.6			1.6
Two way Left Turn Lane			Yes			
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14		14	24	
Sign Control	Stop		Free			Free
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization 0.0%	ICU Level of Service A					
Analysis Period (min) 15						

HCM Unsignalized Intersection Capacity Analysis

8: Bayview Drive

08/05/2021

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations			↑↑			↑
Traffic Volume (veh/h)	0	0	0	0	0	0
Future Volume (Veh/h)	0	0	0	0	0	0
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	0	0	0
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			TWLTL			None
Median storage (veh)			2			
Upstream signal (m)			173			
pX, platoon unblocked						
vC, conflicting volume	0	0			0	
vC1, stage 1 conf vol	0					
vC2, stage 2 conf vol	0					
vCu, unblocked vol	0	0			0	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)	5.8					
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	1023	1084			1622	
Direction, Lane #	NB 1	NB 2	SB 1			
Volume Total	0	0	0			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	1700	1700			
Volume to Capacity	0.00	0.00	0.00			
Queue Length 95th (m)	0.0	0.0	0.0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS						
Approach Delay (s)	0.0		0.0			
Approach LOS						
Intersection Summary						
Average Delay			0.0			
Intersection Capacity Utilization			0.0%	ICU Level of Service		A
Analysis Period (min)			15			

Lanes, Volumes, Timings

1: Bayview Drive & Big Bay Point Road

08/05/2021

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	64	343	172	190	406	56	58	330	47	81	346	10
Future Volume (vph)	64	343	172	190	406	56	58	330	47	81	346	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	105.0		55.0	105.0		55.0	105.0		55.0	105.0		55.0
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (m)	65.0			65.0			65.0			65.0		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.95	1.00	0.95	1.00
Frt			0.850			0.850		0.983				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1615	3444	1526	1772	3444	1296	1460	3173	0	1573	3318	1111
Flt Permitted	0.428			0.460			0.522			0.295		
Satd. Flow (perm)	728	3444	1526	858	3444	1296	802	3173	0	489	3318	1111
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			198			154		12				113
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		485.6			536.9			234.9			173.0	
Travel Time (s)		35.0			38.7			16.9			12.5	
Peak Hour Factor	0.68	0.77	0.87	0.90	0.83	0.51	0.67	0.82	0.90	0.69	0.89	0.65
Heavy Vehicles (%)	13%	6%	7%	3%	6%	26%	25%	14%	6%	16%	10%	47%
Adj. Flow (vph)	94	445	198	211	489	110	87	402	52	117	389	15
Shared Lane Traffic (%)												
Lane Group Flow (vph)	94	445	198	211	489	110	87	454	0	117	389	15
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane		Yes						Yes			Yes	
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	Right
Leading Detector (m)	6.1	30.5	6.1	6.1	30.5	6.1	6.1	30.5		6.1	30.5	6.1
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Size(m)	6.1	1.8	6.1	6.1	1.8	6.1	6.1	1.8		6.1	1.8	6.1
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	

Lanes, Volumes, Timings

1: Bayview Drive & Big Bay Point Road

08/05/2021

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2		2	6		6	8			4		4
Detector Phase	5	2	2	1	6	6	3	8		7	4	4
Switch Phase												
Minimum Initial (s)	7.0	35.0	35.0	7.0	35.0	35.0	7.0	12.0		7.0	12.0	12.0
Minimum Split (s)	11.0	41.0	41.0	11.0	41.0	41.0	11.0	30.0		11.0	30.0	30.0
Total Split (s)	11.0	46.0	46.0	11.0	46.0	46.0	11.0	32.0		17.5	32.0	32.0
Total Split (%)	10.3%	43.2%	43.2%	10.3%	43.2%	43.2%	10.3%	30.0%		16.4%	30.0%	30.0%
Maximum Green (s)	7.0	40.0	40.0	7.0	40.0	40.0	7.0	26.0		13.5	26.0	26.0
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0		3.0	4.0	4.0
All-Red Time (s)	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0		1.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.0	6.0	6.0	4.0	6.0	6.0	4.0	6.0		4.0	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Recall Mode	Max	None	None	None	None	None	None	None		None	None	None
Walk Time (s)		20.0	20.0		20.0	20.0		9.0			9.0	9.0
Flash Dont Walk (s)		15.0	15.0		15.0	15.0		15.0			15.0	15.0
Pedestrian Calls (#/hr)		0	0		0	0		0			0	0
Act Effect Green (s)	44.2	35.2	35.2	44.2	35.2	35.2	27.1	18.0		33.9	23.8	23.8
Actuated g/C Ratio	0.49	0.39	0.39	0.49	0.39	0.39	0.30	0.20		0.37	0.26	0.26
v/c Ratio	0.22	0.33	0.28	0.43	0.37	0.18	0.30	0.71		0.38	0.45	0.04
Control Delay	13.8	21.5	4.4	16.5	21.9	2.2	21.2	39.7		22.0	30.1	0.2
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	13.8	21.5	4.4	16.5	21.9	2.2	21.2	39.7		22.0	30.1	0.2
LOS	B	C	A	B	C	A	C	D		C	C	A
Approach Delay		15.9			17.8			36.7			27.4	
Approach LOS		B			B			D			C	

Intersection Summary

Area Type: Other

Cycle Length: 106.5

Actuated Cycle Length: 90.7

Natural Cycle: 95

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.71

Intersection Signal Delay: 23.1

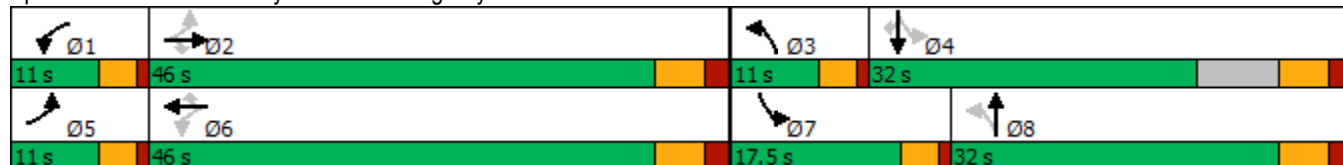
Intersection LOS: C

Intersection Capacity Utilization 72.8%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 1: Bayview Drive & Big Bay Point Road



Queues

1: Bayview Drive & Big Bay Point Road

08/05/2021



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	94	445	198	211	489	110	87	454	117	389	15
v/c Ratio	0.22	0.33	0.28	0.43	0.37	0.18	0.30	0.71	0.38	0.45	0.04
Control Delay	13.8	21.5	4.4	16.5	21.9	2.2	21.2	39.7	22.0	30.1	0.2
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	13.8	21.5	4.4	16.5	21.9	2.2	21.2	39.7	22.0	30.1	0.2
Queue Length 50th (m)	7.6	27.8	0.0	18.2	31.1	0.0	9.8	38.0	13.4	30.8	0.0
Queue Length 95th (m)	13.7	38.8	12.7	38.1	46.6	0.0	13.8	49.5	18.2	43.0	0.0
Internal Link Dist (m)	461.6			512.9			210.9			149.0	
Turn Bay Length (m)	105.0		55.0	105.0		55.0	105.0		105.0		55.0
Base Capacity (vph)	423	1526	786	489	1526	660	290	923	347	1195	472
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	0.29	0.25	0.43	0.32	0.17	0.30	0.49	0.34	0.33	0.03

Intersection Summary

HCM Signalized Intersection Capacity Analysis

1: Bayview Drive & Big Bay Point Road

08/05/2021

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 			 			 	
Traffic Volume (vph)	64	343	172	190	406	56	58	330	47	81	346	10
Future Volume (vph)	64	343	172	190	406	56	58	330	47	81	346	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	6.0	6.0	4.0	6.0	6.0	4.0	6.0		4.0	6.0	6.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95		1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1615	3444	1526	1772	3444	1296	1460	3172		1573	3318	1111
Flt Permitted	0.43	1.00	1.00	0.46	1.00	1.00	0.52	1.00		0.30	1.00	1.00
Satd. Flow (perm)	728	3444	1526	859	3444	1296	802	3172		489	3318	1111
Peak-hour factor, PHF	0.68	0.77	0.87	0.90	0.83	0.51	0.67	0.82	0.90	0.69	0.89	0.65
Adj. Flow (vph)	94	445	198	211	489	110	87	402	52	117	389	15
RTOR Reduction (vph)	0	0	122	0	0	68	0	10	0	0	0	11
Lane Group Flow (vph)	94	445	76	211	489	42	87	444	0	117	389	4
Heavy Vehicles (%)	13%	6%	7%	3%	6%	26%	25%	14%	6%	16%	10%	47%
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2		2	6		6	8			4		4
Actuated Green, G (s)	42.2	35.2	35.2	42.2	35.2	35.2	24.4	18.9		33.3	23.8	23.8
Effective Green, g (s)	42.2	35.2	35.2	42.2	35.2	35.2	24.4	18.9		33.3	23.8	23.8
Actuated g/C Ratio	0.46	0.38	0.38	0.46	0.38	0.38	0.27	0.21		0.36	0.26	0.26
Clearance Time (s)	4.0	6.0	6.0	4.0	6.0	6.0	4.0	6.0		4.0	6.0	6.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	403	1324	587	466	1324	498	253	655		301	863	288
v/s Ratio Prot	0.02	0.13		c0.03	0.14		0.02	c0.14		c0.04	0.12	
v/s Ratio Perm	0.09		0.05	c0.17		0.03	0.07			0.10		0.00
v/c Ratio	0.23	0.34	0.13	0.45	0.37	0.08	0.34	0.68		0.39	0.45	0.01
Uniform Delay, d1	14.2	19.9	18.2	15.1	20.2	17.9	26.2	33.5		20.5	28.4	25.1
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	0.3	0.2	0.1	0.7	0.2	0.1	0.8	2.8		0.8	0.4	0.0
Delay (s)	14.5	20.0	18.3	15.8	20.4	18.0	27.0	36.3		21.4	28.7	25.2
Level of Service	B	C	B	B	C	B	C	D		C	C	C
Approach Delay (s)		18.9			18.9			34.8			27.0	
Approach LOS		B			B			C			C	
Intersection Summary												
HCM 2000 Control Delay			23.8									
HCM 2000 Volume to Capacity ratio			0.51									
Actuated Cycle Length (s)			91.5							20.0		
Intersection Capacity Utilization			72.8%									
Analysis Period (min)			15									
c Critical Lane Group												

Lanes, Volumes, Timings

2: Bayview Drive & Courier Entrance/Site Entrance

08/05/2021

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	28	0	65	14	0	9	41	356	54	25	424	56
Future Volume (vph)	28	0	65	14	0	9	41	356	54	25	424	56
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		0.0	0.0		0.0	30.0		0.0	30.0		0.0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (m)	0.0			0.0			2.5			2.5		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.910			0.946			0.980			0.978	
Flt Protected		0.984			0.971		0.950			0.950		
Satd. Flow (prot)	0	1168	0	0	1471	0	1772	1634	0	1722	1758	0
Flt Permitted		0.984			0.971		0.950			0.950		
Satd. Flow (perm)	0	1168	0	0	1471	0	1772	1634	0	1722	1758	0
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		188.0			108.4			97.3			1137.3	
Travel Time (s)		13.5			7.8			7.0			81.9	
Peak Hour Factor	0.39	0.92	0.45	0.92	0.92	0.92	0.89	0.92	0.92	0.92	0.80	0.63
Heavy Vehicles (%)	50%	0%	46%	32%	0%	2%	3%	9%	56%	6%	8%	0%
Adj. Flow (vph)	72	0	144	15	0	10	46	387	59	27	530	89
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	216	0	0	25	0	46	446	0	27	619	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		0.0			0.0			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane								Yes			Yes	
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Stop			Stop			Free			Free	
Intersection Summary												
Area Type:	Other											
Control Type:	Unsignalized											
Intersection Capacity Utilization	44.8%											
Analysis Period (min)	15											
ICU Level of Service A												

HCM Unsignalized Intersection Capacity Analysis

2: Bayview Drive & Courier Entrance/Site Entrance

08/05/2021

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	28	0	65	14	0	9	41	356	54	25	424	56
Future Volume (Veh/h)	28	0	65	14	0	9	41	356	54	25	424	56
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.39	0.92	0.45	0.92	0.92	0.92	0.89	0.92	0.92	0.92	0.80	0.63
Hourly flow rate (vph)	72	0	144	15	0	10	46	387	59	27	530	89
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								TWLTL			TWLTL	
Median storage veh								2			2	
Upstream signal (m)								270				
pX, platoon unblocked												
vC, conflicting volume	1118	1166	574	1236	1182	416	619			446		
vC1, stage 1 conf vol	628	628		508	508							
vC2, stage 2 conf vol	489	538		728	673							
vCu, unblocked vol	1118	1166	574	1236	1182	416	619			446		
tC, single (s)	7.6	6.5	6.7	7.4	6.5	6.2	4.1			4.2		
tC, 2 stage (s)	6.6	5.5		6.4	5.5							
tF (s)	4.0	4.0	3.7	3.8	4.0	3.3	2.2			2.3		
p0 queue free %	77	100	68	92	100	98	95			98		
cM capacity (veh/h)	308	365	444	187	345	636	956			1093		
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2						
Volume Total	216	25	46	446	27	619						
Volume Left	72	15	46	0	27	0						
Volume Right	144	10	0	59	0	89						
cSH	387	261	956	1700	1093	1700						
Volume to Capacity	0.56	0.10	0.05	0.26	0.02	0.36						
Queue Length 95th (m)	24.9	2.4	1.2	0.0	0.6	0.0						
Control Delay (s)	25.4	20.3	9.0	0.0	8.4	0.0						
Lane LOS	D	C	A		A							
Approach Delay (s)	25.4	20.3	0.8		0.4							
Approach LOS	D	C										
Intersection Summary												
Average Delay			4.8									
Intersection Capacity Utilization			44.8%		ICU Level of Service				A			
Analysis Period (min)			15									

Lanes, Volumes, Timings

3: Bayview Drive & Little Ave

08/05/2021

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	51	182	252	181	375	20	112	155	97	67	351	36
Future Volume (vph)	51	182	252	181	375	20	112	155	97	67	351	36
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	20.0		0.0	15.0		0.0	15.0		0.0	15.0		0.0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (m)	40.0			30.0			20.0			45.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.904			0.991				0.850		0.983	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1674	1703	0	1825	1880	0	1615	1731	1526	1825	1845	0
Flt Permitted	0.451			0.150			0.107			0.547		
Satd. Flow (perm)	795	1703	0	288	1880	0	182	1731	1526	1051	1845	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		74			3				129		5	
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		489.6			106.0			1137.3			118.3	
Travel Time (s)		35.3			7.6			81.9			8.5	
Peak Hour Factor	0.73	0.92	0.71	0.63	0.93	0.81	0.88	0.82	0.75	0.80	0.83	0.66
Heavy Vehicles (%)	9%	2%	2%	0%	1%	6%	13%	11%	7%	0%	2%	5%
Adj. Flow (vph)	70	198	355	287	403	25	127	189	129	84	423	55
Shared Lane Traffic (%)												
Lane Group Flow (vph)	70	553	0	287	428	0	127	189	129	84	478	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane								Yes			Yes	
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (m)	6.1	30.5		6.1	30.5		6.1	30.5	6.1	6.1	30.5	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Size(m)	6.1	1.8		6.1	1.8		6.1	1.8	6.1	6.1	1.8	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	

Lanes, Volumes, Timings

3: Bayview Drive & Little Ave

08/05/2021

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2			6			8		8	4		
Detector Phase	5	2		1	6		3	8	8	7	4	
Switch Phase												
Minimum Initial (s)	7.0	44.0		7.0	44.0		10.0	10.0	10.0	7.0	10.0	
Minimum Split (s)	11.0	48.0		11.0	48.0		14.0	23.0	23.0	14.0	23.0	
Total Split (s)	11.0	55.0		23.0	67.0		14.0	46.0	46.0	14.0	46.0	
Total Split (%)	8.0%	39.9%		16.7%	48.6%		10.1%	33.3%	33.3%	10.1%	33.3%	
Maximum Green (s)	7.0	51.0		19.0	63.0		10.0	42.0	42.0	10.0	42.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5	0.5	0.5	0.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	None		None	None		None	None	None	None	None	
Walk Time (s)		19.0			19.0			8.0	8.0		8.0	
Flash Dont Walk (s)		15.0			15.0			11.0	11.0		11.0	
Pedestrian Calls (#/hr)		0			0			0	0		0	
Act Effect Green (s)	54.2	47.1		67.8	59.3		47.5	37.4	37.4	44.9	36.1	
Actuated g/C Ratio	0.43	0.37		0.54	0.47		0.38	0.30	0.30	0.36	0.29	
v/c Ratio	0.18	0.81		0.80	0.48		0.69	0.37	0.24	0.20	0.90	
Control Delay	17.3	42.5		38.6	26.6		47.3	38.2	6.8	26.0	64.3	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	17.3	42.5		38.6	26.6		47.3	38.2	6.8	26.0	64.3	
LOS	B	D		D	C		D	D	A	C	E	
Approach Delay		39.7			31.4			31.7			58.6	
Approach LOS		D			C			C			E	

Intersection Summary

Area Type: Other

Cycle Length: 138

Actuated Cycle Length: 126.1

Natural Cycle: 100

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.90

Intersection Signal Delay: 40.2

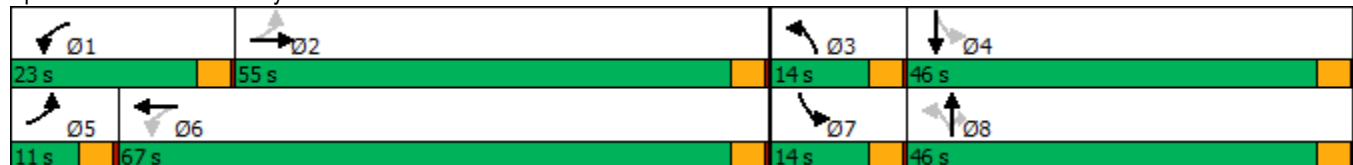
Intersection LOS: D

Intersection Capacity Utilization 89.0%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 3: Bayview Drive & Little Ave



Queues

3: Bayview Drive & Little Ave

08/05/2021



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	70	553	287	428	127	189	129	84	478
v/c Ratio	0.18	0.81	0.80	0.48	0.69	0.37	0.24	0.20	0.90
Control Delay	17.3	42.5	38.6	26.6	47.3	38.2	6.8	26.0	64.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	17.3	42.5	38.6	26.6	47.3	38.2	6.8	26.0	64.3
Queue Length 50th (m)	8.6	116.8	40.1	77.6	20.3	37.1	0.0	12.9	112.6
Queue Length 95th (m)	13.3	169.2	38.9	110.4	#45.6	55.6	7.6	22.3	147.1
Internal Link Dist (m)		465.6		82.0		1113.3			94.3
Turn Bay Length (m)	20.0		15.0		15.0			15.0	
Base Capacity (vph)	390	739	388	949	183	582	599	447	624
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	0.18	0.75	0.74	0.45	0.69	0.32	0.22	0.19	0.77

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

HCM Signalized Intersection Capacity Analysis

3: Bayview Drive & Little Ave

08/05/2021

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	51	182	252	181	375	20	112	155	97	67	351	36
Future Volume (vph)	51	182	252	181	375	20	112	155	97	67	351	36
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.90		1.00	0.99		1.00	1.00	0.85	1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1674	1702		1825	1880		1615	1731	1526	1825	1845	
Flt Permitted	0.45	1.00		0.15	1.00		0.11	1.00	1.00	0.55	1.00	
Satd. Flow (perm)	795	1702		287	1880		182	1731	1526	1050	1845	
Peak-hour factor, PHF	0.73	0.92	0.71	0.63	0.93	0.81	0.88	0.82	0.75	0.80	0.83	0.66
Adj. Flow (vph)	70	198	355	287	403	25	127	189	129	84	423	55
RTOR Reduction (vph)	0	46	0	0	2	0	0	0	91	0	4	0
Lane Group Flow (vph)	70	507	0	287	426	0	127	189	38	84	474	0
Heavy Vehicles (%)	9%	2%	2%	0%	1%	6%	13%	11%	7%	0%	2%	5%
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2			6			8		8	4		
Actuated Green, G (s)	53.4	48.0		68.7	59.3		47.5	37.4	37.4	44.9	36.1	
Effective Green, g (s)	53.4	48.0		68.7	59.3		47.5	37.4	37.4	44.9	36.1	
Actuated g/C Ratio	0.42	0.38		0.54	0.47		0.37	0.29	0.29	0.35	0.28	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	371	643		357	878		182	510	449	425	524	
v/s Ratio Prot	0.01	0.30		c0.11	0.23		c0.06	0.11		0.01	c0.26	
v/s Ratio Perm	0.07			c0.33			0.21		0.02	0.06		
v/c Ratio	0.19	0.79		0.80	0.49		0.70	0.37	0.08	0.20	0.91	
Uniform Delay, d1	22.4	35.0		23.0	23.3		31.1	35.4	32.4	27.9	43.8	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.2	6.4		12.3	0.4		11.1	0.5	0.1	0.2	19.1	
Delay (s)	22.6	41.3		35.3	23.7		42.2	35.9	32.5	28.1	62.8	
Level of Service	C	D		D	C		D	D	C	C	E	
Approach Delay (s)		39.2			28.4			36.7			57.6	
Approach LOS		D			C			D			E	
Intersection Summary												
HCM 2000 Control Delay		39.8			HCM 2000 Level of Service			D				
HCM 2000 Volume to Capacity ratio		0.85										
Actuated Cycle Length (s)		126.9			Sum of lost time (s)			16.0				
Intersection Capacity Utilization		89.0%			ICU Level of Service			E				
Analysis Period (min)		15										
c Critical Lane Group												

Lanes, Volumes, Timings
4: Fairview Road & Little Ave

08/05/2021

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	9	548	451	9	361	575
Future Volume (vph)	9	548	451	9	361	575
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	15.0	0.0		0.0	50.0	
Storage Lanes	1	1		0	1	
Taper Length (m)	35.0				2.5	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	0.95
Frt		0.850	0.994			
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1825	1541	3266	0	1789	3476
Flt Permitted	0.950				0.409	
Satd. Flow (perm)	1825	1541	3266	0	770	3476
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)		512	5			
Link Speed (k/h)	50		50			50
Link Distance (m)	489.6		1407.2			78.1
Travel Time (s)	35.3		101.3			5.6
Peak Hour Factor	0.58	0.94	0.94	0.43	0.81	0.89
Heavy Vehicles (%)	0%	6%	11%	13%	2%	5%
Adj. Flow (vph)	16	583	480	21	446	646
Shared Lane Traffic (%)						
Lane Group Flow (vph)	16	583	501	0	446	646
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	3.7		3.7			3.7
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	1.6		1.6			1.6
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14		14	24	
Number of Detectors	1	1	2		1	2
Detector Template	Left	Right	Thru		Left	Thru
Leading Detector (m)	6.1	6.1	30.5		6.1	30.5
Trailing Detector (m)	0.0	0.0	0.0		0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0		0.0	0.0
Detector 1 Size(m)	6.1	6.1	1.8		6.1	1.8
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0
Detector 2 Position(m)			28.7			28.7
Detector 2 Size(m)			1.8			1.8
Detector 2 Type			Cl+Ex			Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)			0.0			0.0
Turn Type	Perm	Perm	NA		pm+pt	NA
Protected Phases			4		3	8

Lanes, Volumes, Timings

4: Fairview Road & Little Ave

08/05/2021

	↖	↗	↑	↘	↙	↓
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Permitted Phases	5	5			8	
Detector Phase	5	5	4		3	8
Switch Phase						
Minimum Initial (s)	10.0	10.0	34.0		7.0	34.0
Minimum Split (s)	27.0	27.0	40.0		13.0	40.0
Total Split (s)	36.0	36.0	40.0		24.0	64.0
Total Split (%)	36.0%	36.0%	40.0%		24.0%	64.0%
Maximum Green (s)	30.0	30.0	34.0		20.0	58.0
Yellow Time (s)	4.0	4.0	4.0		3.0	4.0
All-Red Time (s)	2.0	2.0	2.0		1.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0		4.0	6.0
Lead/Lag			Lag		Lead	
Lead-Lag Optimize?			Yes		Yes	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Recall Mode	None	None	Max		None	Max
Walk Time (s)	9.0	9.0	22.0			22.0
Flash Dont Walk (s)	12.0	12.0	12.0			12.0
Pedestrian Calls (#/hr)	0	0	0			0
Act Effect Green (s)	15.1	15.1	40.9		60.5	58.5
Actuated g/C Ratio	0.18	0.18	0.48		0.71	0.68
v/c Ratio	0.05	0.84	0.32		0.63	0.27
Control Delay	27.4	17.2	16.8		10.7	6.7
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay	27.4	17.2	16.8		10.7	6.7
LOS	C	B	B		B	A
Approach Delay	17.5		16.8			8.3
Approach LOS	B		B			A

Intersection Summary

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 85.7

Natural Cycle: 80

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.84

Intersection Signal Delay: 12.8

Intersection LOS: B

Intersection Capacity Utilization 72.3%

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 4: Fairview Road & Little Ave



Queues

4: Fairview Road & Little Ave

08/05/2021



Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	16	583	501	446	646
v/c Ratio	0.05	0.84	0.32	0.63	0.27
Control Delay	27.4	17.2	16.8	10.7	6.7
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	27.4	17.2	16.8	10.7	6.7
Queue Length 50th (m)	2.2	10.1	21.5	18.6	14.8
Queue Length 95th (m)	4.4	46.7	53.6	54.1	41.4
Internal Link Dist (m)	465.6		1383.2		54.1
Turn Bay Length (m)	15.0			50.0	
Base Capacity (vph)	643	874	1559	783	2371
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.02	0.67	0.32	0.57	0.27
Intersection Summary					

HCM Signalized Intersection Capacity Analysis

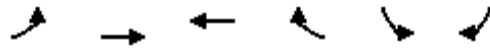
4: Fairview Road & Little Ave

08/05/2021

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	9	548	451	9	361	575
Future Volume (vph)	9	548	451	9	361	575
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	6.0		4.0	6.0
Lane Util. Factor	1.00	1.00	0.95		1.00	0.95
Frt	1.00	0.85	0.99		1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1825	1541	3265		1789	3476
Flt Permitted	0.95	1.00	1.00		0.41	1.00
Satd. Flow (perm)	1825	1541	3265		770	3476
Peak-hour factor, PHF	0.58	0.94	0.94	0.43	0.81	0.89
Adj. Flow (vph)	16	583	480	21	446	646
RTOR Reduction (vph)	0	422	3	0	0	0
Lane Group Flow (vph)	16	161	498	0	446	646
Heavy Vehicles (%)	0%	6%	11%	13%	2%	5%
Turn Type	Perm	Perm	NA		pm+pt	NA
Protected Phases			4		3	8
Permitted Phases	5	5			8	
Actuated Green, G (s)	15.1	15.1	40.8		58.4	58.4
Effective Green, g (s)	15.1	15.1	40.8		58.4	58.4
Actuated g/C Ratio	0.18	0.18	0.48		0.68	0.68
Clearance Time (s)	6.0	6.0	6.0		4.0	6.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	322	272	1558		688	2374
v/s Ratio Prot			0.15		c0.10	0.19
v/s Ratio Perm	0.01	c0.10			c0.34	
v/c Ratio	0.05	0.59	0.32		0.65	0.27
Uniform Delay, d1	29.2	32.4	13.8		6.1	5.3
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.1	3.5	0.5		2.1	0.3
Delay (s)	29.3	35.8	14.3		8.2	5.6
Level of Service	C	D	B		A	A
Approach Delay (s)	35.7		14.3			6.6
Approach LOS	D		B			A
Intersection Summary						
HCM 2000 Control Delay			16.3		HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio			0.67			
Actuated Cycle Length (s)			85.5		Sum of lost time (s)	16.0
Intersection Capacity Utilization			72.3%		ICU Level of Service	C
Analysis Period (min)			15			
c Critical Lane Group						

Lanes, Volumes, Timings
5: Big Bay Point Road & Fairview Road

08/05/2021

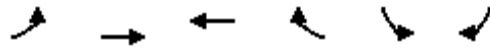


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	439	666	521	115	82	306
Future Volume (vph)	439	666	521	115	82	306
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	120.0			120.0	0.0	0.0
Storage Lanes	1			1	1	1
Taper Length (m)	65.0				0.0	
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1789	3444	3444	1526	1706	1601
Flt Permitted	0.382				0.950	
Satd. Flow (perm)	719	3444	3444	1526	1706	1601
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				125		333
Link Speed (k/h)		50	50		50	
Link Distance (m)		479.3	485.6		1407.2	
Travel Time (s)		34.5	35.0		101.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	6%	6%	7%	7%	2%
Adj. Flow (vph)	477	724	566	125	89	333
Shared Lane Traffic (%)						
Lane Group Flow (vph)	477	724	566	125	89	333
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		3.7	3.7		3.7	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		1.6	1.6		1.6	
Two way Left Turn Lane			Yes			
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24			14	24	14
Number of Detectors	1	2	2	1	1	1
Detector Template	Left	Thru	Thru	Right	Left	Right
Leading Detector (m)	6.1	30.5	30.5	6.1	6.1	6.1
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	6.1	1.8	1.8	6.1	6.1	6.1
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		28.7	28.7			
Detector 2 Size(m)		1.8	1.8			
Detector 2 Type		Cl+Ex	Cl+Ex			
Detector 2 Channel						
Detector 2 Extend (s)		0.0	0.0			
Turn Type	pm+pt	NA	NA	Perm	Perm	Perm
Protected Phases	3	8	4			

Lanes, Volumes, Timings

5: Big Bay Point Road & Fairview Road

08/05/2021



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Permitted Phases	8			4	5	5
Detector Phase	3	8	4	4	5	5
Switch Phase						
Minimum Initial (s)	7.0	40.0	40.0	40.0	10.0	10.0
Minimum Split (s)	11.0	46.0	46.0	46.0	38.0	38.0
Total Split (s)	16.0	62.0	46.0	46.0	46.0	46.0
Total Split (%)	14.8%	57.4%	42.6%	42.6%	42.6%	42.6%
Maximum Green (s)	12.0	56.0	40.0	40.0	40.0	40.0
Yellow Time (s)	3.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None
Walk Time (s)			7.0	7.0	7.0	7.0
Flash Dont Walk (s)			33.0	33.0	25.0	25.0
Pedestrian Calls (#/hr)			0	0	0	0
Act Effect Green (s)	58.0	56.0	40.0	40.0	10.9	10.9
Actuated g/C Ratio	0.74	0.71	0.51	0.51	0.14	0.14
v/c Ratio	0.69	0.30	0.32	0.15	0.38	0.66
Control Delay	9.9	4.7	12.3	2.8	35.9	10.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	9.9	4.7	12.3	2.8	35.9	10.7
LOS	A	A	B	A	D	B
Approach Delay		6.8	10.6		16.0	
Approach LOS		A	B		B	

Intersection Summary

Area Type: Other

Cycle Length: 108

Actuated Cycle Length: 78.9

Natural Cycle: 95

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.69

Intersection Signal Delay: 9.6

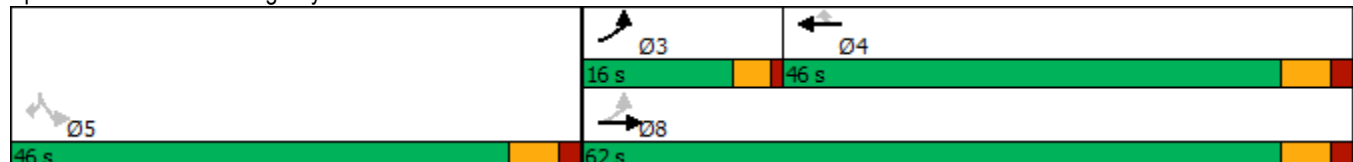
Intersection LOS: A

Intersection Capacity Utilization 79.3%

ICU Level of Service D

Analysis Period (min) 15

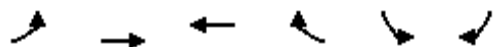
Splits and Phases: 5: Big Bay Point Road & Fairview Road



Queues

5: Big Bay Point Road & Fairview Road

08/05/2021

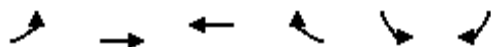


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Group Flow (vph)	477	724	566	125	89	333
v/c Ratio	0.69	0.30	0.32	0.15	0.38	0.66
Control Delay	9.9	4.7	12.3	2.8	35.9	10.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	9.9	4.7	12.3	2.8	35.9	10.7
Queue Length 50th (m)	19.3	16.3	24.0	0.0	12.3	0.0
Queue Length 95th (m)	38.1	27.6	37.8	7.9	25.2	21.3
Internal Link Dist (m)		455.3	461.6		1383.2	
Turn Bay Length (m)	120.0			120.0		
Base Capacity (vph)	691	2444	1746	835	864	976
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	0.69	0.30	0.32	0.15	0.10	0.34
Intersection Summary						

HCM Signalized Intersection Capacity Analysis

5: Big Bay Point Road & Fairview Road

08/05/2021



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	439	666	521	115	82	306
Future Volume (vph)	439	666	521	115	82	306
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	6.0	6.0	6.0	6.0	6.0
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1789	3444	3444	1526	1706	1601
Flt Permitted	0.38	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	720	3444	3444	1526	1706	1601
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	477	724	566	125	89	333
RTOR Reduction (vph)	0	0	0	62	0	287
Lane Group Flow (vph)	477	724	566	63	89	46
Heavy Vehicles (%)	2%	6%	6%	7%	7%	2%
Turn Type	pm+pt	NA	NA	Perm	Perm	Perm
Protected Phases	3	8	4			
Permitted Phases	8			4	5	5
Actuated Green, G (s)	56.0	56.0	40.0	40.0	10.9	10.9
Effective Green, g (s)	56.0	56.0	40.0	40.0	10.9	10.9
Actuated g/C Ratio	0.71	0.71	0.51	0.51	0.14	0.14
Clearance Time (s)	4.0	6.0	6.0	6.0	6.0	6.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	673	2444	1746	773	235	221
v/s Ratio Prot	c0.11	0.21	0.16			
v/s Ratio Perm	c0.39			0.04	c0.05	0.03
v/c Ratio	0.71	0.30	0.32	0.08	0.38	0.21
Uniform Delay, d1	5.0	4.2	11.5	10.0	30.9	30.2
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	3.4	0.1	0.1	0.0	1.0	0.5
Delay (s)	8.4	4.3	11.6	10.1	31.9	30.6
Level of Service	A	A	B	B	C	C
Approach Delay (s)		5.9	11.3		30.9	
Approach LOS		A	B		C	
Intersection Summary						
HCM 2000 Control Delay			12.1		HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio			0.69			
Actuated Cycle Length (s)			78.9		Sum of lost time (s)	16.0
Intersection Capacity Utilization			79.3%		ICU Level of Service	D
Analysis Period (min)			15			
c Critical Lane Group						

Lanes, Volumes, Timings

8: Bayview Drive

08/05/2021

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations			↑↑			↑
Traffic Volume (vph)	0	0	0	0	0	0
Future Volume (vph)	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	1.00
Frnt						
Flt Protected						
Satd. Flow (prot)	0	0	3579	0	0	1883
Flt Permitted						
Satd. Flow (perm)	0	0	3579	0	0	1883
Link Speed (k/h)	50		50			50
Link Distance (m)	61.2		173.0			97.3
Travel Time (s)	4.4		12.5			7.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	0.0		3.7			3.7
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	1.6		1.6			1.6
Two way Left Turn Lane			Yes			Yes
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14		14	24	
Sign Control	Stop		Free			Free
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization 0.0%	ICU Level of Service A					
Analysis Period (min) 15						

HCM Unsignalized Intersection Capacity Analysis

8: Bayview Drive

08/05/2021

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations			↑↑			↑
Traffic Volume (veh/h)	0	0	0	0	0	0
Future Volume (Veh/h)	0	0	0	0	0	0
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	0	0	0
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			TWLT		TWLT	
Median storage (veh)			2		2	
Upstream signal (m)			173			
pX, platoon unblocked						
vC, conflicting volume	0	0			0	
vC1, stage 1 conf vol	0					
vC2, stage 2 conf vol	0					
vCu, unblocked vol	0	0			0	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)	5.8					
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	1023	1084			1622	
Direction, Lane #	NB 1	NB 2	SB 1			
Volume Total	0	0	0			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	1700	1700			
Volume to Capacity	0.00	0.00	0.00			
Queue Length 95th (m)	0.0	0.0	0.0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS						
Approach Delay (s)	0.0		0.0			
Approach LOS						
Intersection Summary						
Average Delay			0.0			
Intersection Capacity Utilization			0.0%	ICU Level of Service		A
Analysis Period (min)			15			

Lanes, Volumes, Timings

1: Bayview Drive & Big Bay Point Road

08/05/2021

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	21	405	153	237	650	30	325	517	192	189	450	50
Future Volume (vph)	21	405	153	237	650	30	325	517	192	189	450	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	105.0		55.0	105.0		55.0	105.0		55.0	105.0		55.0
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (m)	65.0			65.0			65.0			65.0		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.95	1.00	0.95	1.00
Frt			0.850			0.850		0.959				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1342	3544	1541	1789	3579	1350	1807	3330	0	1659	3380	1445
Flt Permitted	0.241			0.407			0.238			0.183		
Satd. Flow (perm)	340	3544	1541	767	3579	1350	453	3330	0	320	3380	1445
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			191			164			52			164
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		485.6			536.9			234.9			173.0	
Travel Time (s)		35.0			38.7			16.9			12.5	
Peak Hour Factor	0.72	0.89	0.80	0.88	0.89	0.70	0.86	0.88	0.88	0.72	0.84	0.86
Heavy Vehicles (%)	36%	3%	6%	2%	2%	21%	1%	7%	0%	10%	8%	13%
Adj. Flow (vph)	29	455	191	269	730	43	378	588	218	263	536	58
Shared Lane Traffic (%)												
Lane Group Flow (vph)	29	455	191	269	730	43	378	806	0	263	536	58
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane		Yes						Yes			Yes	
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	Right
Leading Detector (m)	6.1	30.5	6.1	6.1	30.5	6.1	6.1	30.5		6.1	30.5	6.1
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Size(m)	6.1	1.8	6.1	6.1	1.8	6.1	6.1	1.8		6.1	1.8	6.1
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	

Lanes, Volumes, Timings

1: Bayview Drive & Big Bay Point Road

08/05/2021

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2		2	6		6	8			4		4
Detector Phase	5	2	2	1	6	6	3	8		7	4	4
Switch Phase												
Minimum Initial (s)	7.0	35.0	35.0	7.0	35.0	35.0	7.0	12.0		7.0	12.0	12.0
Minimum Split (s)	11.0	41.0	41.0	11.0	41.0	41.0	11.0	30.0		11.0	30.0	30.0
Total Split (s)	11.0	37.0	37.0	12.0	38.0	38.0	23.0	33.0		18.0	28.0	28.0
Total Split (%)	11.0%	37.0%	37.0%	12.0%	38.0%	38.0%	23.0%	33.0%		18.0%	28.0%	28.0%
Maximum Green (s)	7.0	31.0	31.0	8.0	32.0	32.0	19.0	27.0		14.0	22.0	22.0
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0		3.0	4.0	4.0
All-Red Time (s)	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0		1.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.0	6.0	6.0	4.0	6.0	6.0	4.0	6.0		4.0	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Recall Mode	Max	None	None	None	None	None	None	None		None	None	None
Walk Time (s)		20.0	20.0		20.0	20.0		9.0			9.0	9.0
Flash Dont Walk (s)		15.0	15.0		15.0	15.0		15.0			15.0	15.0
Pedestrian Calls (#/hr)		0	0		0	0		0			0	0
Act Effect Green (s)	40.0	31.0	31.0	42.0	32.0	32.0	45.0	25.9		37.6	21.9	21.9
Actuated g/C Ratio	0.41	0.31	0.31	0.43	0.32	0.32	0.46	0.26		0.38	0.22	0.22
v/c Ratio	0.14	0.41	0.31	0.66	0.63	0.08	0.84	0.88		0.85	0.72	0.13
Control Delay	17.2	28.3	5.3	27.9	31.5	0.3	36.6	45.4		49.0	41.9	0.6
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	17.2	28.3	5.3	27.9	31.5	0.3	36.6	45.4		49.0	41.9	0.6
LOS	B	C	A	C	C	A	D	D		D	D	A
Approach Delay		21.3			29.3			42.6			41.3	
Approach LOS		C			C			D			D	

Intersection Summary

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 98.7

Natural Cycle: 95

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.88

Intersection Signal Delay: 34.8

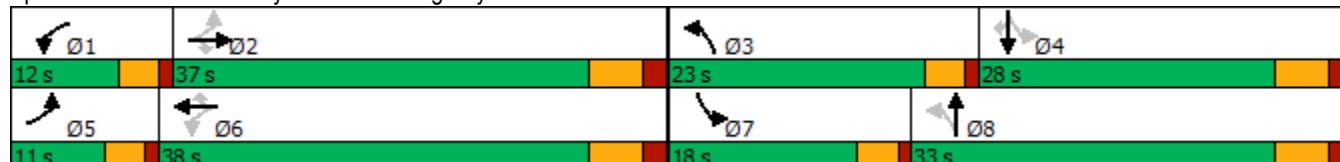
Intersection LOS: C

Intersection Capacity Utilization 89.9%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 1: Bayview Drive & Big Bay Point Road



Queues

1: Bayview Drive & Big Bay Point Road

08/05/2021



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	29	455	191	269	730	43	378	806	263	536	58
v/c Ratio	0.14	0.41	0.31	0.66	0.63	0.08	0.84	0.88	0.85	0.72	0.13
Control Delay	17.2	28.3	5.3	27.9	31.5	0.3	36.6	45.4	49.0	41.9	0.6
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	17.2	28.3	5.3	27.9	31.5	0.3	36.6	45.4	49.0	41.9	0.6
Queue Length 50th (m)	3.1	36.5	0.0	32.8	63.2	0.0	47.4	73.6	33.3	51.0	0.0
Queue Length 95th (m)	6.4	49.8	9.9	49.7	81.2	0.0	#76.8	#96.9	42.6	63.5	0.0
Internal Link Dist (m)	461.6				512.9				210.9		149.0
Turn Bay Length (m)	105.0			55.0	105.0			55.0	105.0		
Base Capacity (vph)	209	1114	615	409	1161	548	470	950	313	762	453
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	0.14	0.41	0.31	0.66	0.63	0.08	0.80	0.85	0.84	0.70	0.13

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

HCM Signalized Intersection Capacity Analysis

1: Bayview Drive & Big Bay Point Road

08/05/2021

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		 			 			 			 	
Traffic Volume (vph)	21	405	153	237	650	30	325	517	192	189	450	50
Future Volume (vph)	21	405	153	237	650	30	325	517	192	189	450	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	6.0	6.0	4.0	6.0	6.0	4.0	6.0		4.0	6.0	6.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95		1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.96		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1342	3544	1541	1789	3579	1350	1807	3332		1659	3380	1445
Flt Permitted	0.24	1.00	1.00	0.41	1.00	1.00	0.24	1.00		0.18	1.00	1.00
Satd. Flow (perm)	340	3544	1541	767	3579	1350	453	3332		319	3380	1445
Peak-hour factor, PHF	0.72	0.89	0.80	0.88	0.89	0.70	0.86	0.88	0.88	0.72	0.84	0.86
Adj. Flow (vph)	29	455	191	269	730	43	378	588	218	262	536	58
RTOR Reduction (vph)	0	0	131	0	0	29	0	38	0	0	0	45
Lane Group Flow (vph)	29	455	60	269	730	14	378	768	0	263	536	13
Heavy Vehicles (%)	36%	3%	6%	2%	2%	21%	1%	7%	0%	10%	8%	13%
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2		2	6		6	8			4		4
Actuated Green, G (s)	38.0	31.0	31.0	40.0	32.0	32.0	43.6	25.9		35.6	21.9	21.9
Effective Green, g (s)	38.0	31.0	31.0	40.0	32.0	32.0	43.6	25.9		35.6	21.9	21.9
Actuated g/C Ratio	0.39	0.31	0.31	0.41	0.32	0.32	0.44	0.26		0.36	0.22	0.22
Clearance Time (s)	4.0	6.0	6.0	4.0	6.0	6.0	4.0	6.0		4.0	6.0	6.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	202	1114	484	394	1161	438	443	875		301	750	320
v/s Ratio Prot	0.01	0.13		c0.06	0.20		c0.15	c0.23		0.12	0.16	
v/s Ratio Perm	0.05		0.04	c0.22		0.01	0.22			0.19		0.01
v/c Ratio	0.14	0.41	0.12	0.68	0.63	0.03	0.85	0.88		0.87	0.71	0.04
Uniform Delay, d1	19.7	26.6	24.1	21.9	28.3	22.7	20.8	34.8		25.1	35.5	30.1
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	0.3	0.2	0.1	4.8	1.1	0.0	14.7	9.9		23.3	3.2	0.1
Delay (s)	20.0	26.8	24.2	26.8	29.3	22.8	35.4	44.7		48.4	38.7	30.2
Level of Service	C	C	C	C	C	C	D	D		D	D	C
Approach Delay (s)		25.8			28.4			41.8			41.1	
Approach LOS		C			C			D			D	
Intersection Summary												
HCM 2000 Control Delay			35.0				HCM 2000 Level of Service			D		
HCM 2000 Volume to Capacity ratio			0.82									
Actuated Cycle Length (s)			98.6				Sum of lost time (s)			20.0		
Intersection Capacity Utilization			89.9%				ICU Level of Service			E		
Analysis Period (min)			15									
c Critical Lane Group												

Lanes, Volumes, Timings
2: Bayview Drive & Courier Entrance/Site Entrance

08/05/2021

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	36	0	38	51	0	34	45	549	21	8	640	22
Future Volume (vph)	36	0	38	51	0	34	45	549	21	8	640	22
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		0.0	0.0		0.0	30.0		0.0	30.0		0.0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (m)	0.0			0.0			0.0			0.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.942			0.946			0.995			0.993	
Flt Protected		0.972			0.971		0.950			0.950		
Satd. Flow (prot)	0	1737	0	0	1354	0	1304	1798	0	1825	1762	0
Flt Permitted		0.972			0.971		0.950			0.950		
Satd. Flow (perm)	0	1737	0	0	1354	0	1304	1798	0	1825	1762	0
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		188.0			286.2			97.3			1137.3	
Travel Time (s)		13.5			20.6			7.0			81.9	
Peak Hour Factor	0.58	0.92	0.83	0.92	0.92	0.92	0.58	0.89	0.92	0.92	0.89	0.61
Heavy Vehicles (%)	0%	0%	3%	48%	0%	4%	40%	4%	68%	0%	6%	53%
Adj. Flow (vph)	62	0	46	55	0	37	78	617	23	9	719	36
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	108	0	0	92	0	78	640	0	9	755	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		0.0			0.0			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane								Yes			Yes	
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Stop			Stop			Free			Free	
Intersection Summary												
Area Type:	Other											
Control Type:	Unsignalized											
Intersection Capacity Utilization	50.8%						ICU Level of Service A					
Analysis Period (min)	15											

HCM Unsignalized Intersection Capacity Analysis

2: Bayview Drive & Courier Entrance/Site Entrance

08/05/2021

													
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations													
Traffic Volume (veh/h)	36	0	38	51	0	34	45	549	21	8	640	22	
Future Volume (Veh/h)	36	0	38	51	0	34	45	549	21	8	640	22	
Sign Control		Stop			Stop			Free			Free		
Grade		0%			0%			0%			0%		
Peak Hour Factor	0.58	0.92	0.83	0.92	0.92	0.92	0.58	0.89	0.92	0.92	0.89	0.61	
Hourly flow rate (vph)	62	0	46	55	0	37	78	617	23	9	719	36	
Pedestrians													
Lane Width (m)													
Walking Speed (m/s)													
Percent Blockage													
Right turn flare (veh)													
Median type								TWLTL					TWLTL
Median storage veh								2					2
Upstream signal (m)								270					
pX, platoon unblocked													
vC, conflicting volume	1565	1551	737	1568	1558	628	755						640
vC1, stage 1 conf vol	755	755		784	784								
vC2, stage 2 conf vol	810	796		783	773								
vCu, unblocked vol	1565	1551	737	1568	1558	628	755						640
tC, single (s)	7.1	6.5	6.2	7.6	6.5	6.2	4.5						4.1
tC, 2 stage (s)	6.1	5.5		6.6	5.5								
tF (s)	3.5	4.0	3.3	3.9	4.0	3.3	2.6						2.2
p0 queue free %	75	100	89	68	100	92	89						99
cM capacity (veh/h)	245	278	417	173	257	479	707						954
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2							
Volume Total	108	92	78	640	9	755							
Volume Left	62	55	78	0	9	0							
Volume Right	46	37	0	23	0	36							
cSH	297	233	707	1700	954	1700							
Volume to Capacity	0.36	0.39	0.11	0.38	0.01	0.44							
Queue Length 95th (m)	12.2	13.5	2.8	0.0	0.2	0.0							
Control Delay (s)	23.9	30.1	10.7	0.0	8.8	0.0							
Lane LOS	C	D	B		A								
Approach Delay (s)	23.9	30.1	1.2		0.1								
Approach LOS	C	D											
Intersection Summary													
Average Delay			3.7										
Intersection Capacity Utilization			50.8%	ICU Level of Service				A					
Analysis Period (min)			15										

Lanes, Volumes, Timings

3: Bayview Drive & Little Ave

08/05/2021

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	26	333	77	74	287	50	345	501	146	135	263	46
Future Volume (vph)	26	333	77	74	287	50	345	501	146	135	263	46
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	20.0		0.0	15.0		0.0	15.0		0.0	15.0		0.0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (m)	40.0			30.0			20.0			45.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.969			0.977				0.850		0.977	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1825	1839	0	1825	1846	0	1807	1921	1633	1825	1846	0
Flt Permitted	0.430			0.243			0.143			0.147		
Satd. Flow (perm)	826	1839	0	467	1846	0	272	1921	1633	282	1846	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		11			7				159		7	
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		489.6			106.0			1137.3			118.3	
Travel Time (s)		35.3			7.6			81.9			8.5	
Peak Hour Factor	0.81	0.88	0.77	0.74	0.94	0.92	0.94	0.96	0.83	0.73	0.85	0.81
Heavy Vehicles (%)	0%	1%	2%	0%	1%	0%	1%	0%	0%	0%	2%	0%
Bus Blockages (#/hr)	0	0	0	0	2	0	0	0	0	0	0	0
Adj. Flow (vph)	32	378	100	100	305	54	367	522	176	185	309	57
Shared Lane Traffic (%)												
Lane Group Flow (vph)	32	478	0	100	359	0	367	522	176	185	366	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane								Yes			Yes	
Headway Factor	0.99	0.99	0.99	0.99	1.00	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (m)	6.1	30.5		6.1	30.5		6.1	30.5	6.1	6.1	30.5	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Size(m)	6.1	1.8		6.1	1.8		6.1	1.8	6.1	6.1	1.8	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	

Lanes, Volumes, Timings

3: Bayview Drive & Little Ave

08/05/2021

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2			6			8		8	4		
Detector Phase	5	2		1	6		3	8	8	7	4	
Switch Phase												
Minimum Initial (s)	7.0	44.0		7.0	44.0		10.0	10.0	10.0	7.0	10.0	
Minimum Split (s)	11.0	48.0		11.0	48.0		14.0	20.0	20.0	14.0	20.0	
Total Split (s)	11.0	53.0		11.0	53.0		32.0	58.0	58.0	16.0	42.0	
Total Split (%)	8.0%	38.4%		8.0%	38.4%		23.2%	42.0%	42.0%	11.6%	30.4%	
Maximum Green (s)	7.0	49.0		7.0	49.0		28.0	54.0	54.0	12.0	38.0	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	0.5	0.5		0.5	0.5		0.5	0.5	0.5	0.5	0.5	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	None		None	None		None	None	None	None	None	
Walk Time (s)					5.0			5.0	5.0		5.0	
Flash Dont Walk (s)					11.0			11.0	11.0		11.0	
Pedestrian Calls (#/hr)					0			0	0		0	
Act Effct Green (s)	52.5	45.4		54.3	50.3		53.4	38.0	38.0	39.1	27.8	
Actuated g/C Ratio	0.44	0.38		0.46	0.43		0.45	0.32	0.32	0.33	0.24	
v/c Ratio	0.07	0.67		0.34	0.45		0.91	0.84	0.28	0.77	0.83	
Control Delay	20.4	37.0		23.1	29.6		57.6	50.2	6.6	47.8	59.2	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	20.4	37.0		23.1	29.6		57.6	50.2	6.6	47.8	59.2	
LOS	C	D		C	C		E	D	A	D	E	
Approach Delay		36.0			28.2			45.5			55.4	
Approach LOS		D			C			D			E	

Intersection Summary

Area Type: Other

Cycle Length: 138

Actuated Cycle Length: 118

Natural Cycle: 95

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.91

Intersection Signal Delay: 42.7

Intersection LOS: D

Intersection Capacity Utilization 91.6%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 3: Bayview Drive & Little Ave

			
Ø1	Ø2	Ø3	Ø4
11 s	53 s	32 s	42 s
			
Ø5	Ø6	Ø7	Ø8
11 s	53 s	16 s	58 s

Queues

3: Bayview Drive & Little Ave

08/05/2021



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	32	478	100	359	367	522	176	185	366
v/c Ratio	0.07	0.67	0.34	0.45	0.91	0.84	0.28	0.77	0.83
Control Delay	20.4	37.0	23.1	29.6	57.6	50.2	6.6	47.8	59.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	20.4	37.0	23.1	29.6	57.6	50.2	6.6	47.8	59.2
Queue Length 50th (m)	3.9	89.0	12.5	61.7	63.5	110.5	2.7	24.8	77.9
Queue Length 95th (m)	10.3	146.7	22.3	107.5	#117.8	159.2	13.7	36.6	115.5
Internal Link Dist (m)		465.6		82.0		1113.3			94.3
Turn Bay Length (m)	20.0		15.0		15.0			15.0	
Base Capacity (vph)	427	779	296	821	491	889	841	254	606
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	0.07	0.61	0.34	0.44	0.75	0.59	0.21	0.73	0.60

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

HCM Signalized Intersection Capacity Analysis

3: Bayview Drive & Little Ave

08/05/2021

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	26	333	77	74	287	50	345	501	146	135	263	46
Future Volume (vph)	26	333	77	74	287	50	345	501	146	135	263	46
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.97		1.00	0.98		1.00	1.00	0.85	1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1825	1839		1825	1847		1807	1921	1633	1825	1845	
Flt Permitted	0.43	1.00		0.24	1.00		0.14	1.00	1.00	0.15	1.00	
Satd. Flow (perm)	826	1839		466	1847		273	1921	1633	283	1845	
Peak-hour factor, PHF	0.81	0.88	0.77	0.74	0.94	0.92	0.94	0.96	0.83	0.73	0.85	0.81
Adj. Flow (vph)	32	378	100	100	305	54	367	522	176	185	309	57
RTOR Reduction (vph)	0	7	0	0	4	0	0	0	108	0	5	0
Lane Group Flow (vph)	32	471	0	100	355	0	367	522	68	185	361	0
Heavy Vehicles (%)	0%	1%	2%	0%	1%	0%	1%	0%	0%	0%	2%	0%
Bus Blockages (#/hr)	0	0	0	0	2	0	0	0	0	0	0	0
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2			6			8		8	4		
Actuated Green, G (s)	51.0	47.1		57.4	50.3		53.3	38.0	38.0	39.1	27.8	
Effective Green, g (s)	51.0	47.1		57.4	50.3		53.3	38.0	38.0	39.1	27.8	
Actuated g/C Ratio	0.43	0.39		0.48	0.42		0.45	0.32	0.32	0.33	0.23	
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	385	724		304	777		397	610	519	238	429	
v/s Ratio Prot	0.00	c0.26		c0.02	0.19		c0.17	0.27		0.07	0.20	
v/s Ratio Perm	0.03			0.14			c0.25		0.04	0.18		
v/c Ratio	0.08	0.65		0.33	0.46		0.92	0.86	0.13	0.78	0.84	
Uniform Delay, d1	20.4	29.5		20.1	24.8		32.2	38.2	29.0	32.0	43.7	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.1	2.1		0.6	0.4		27.0	11.3	0.1	14.7	13.8	
Delay (s)	20.5	31.6		20.7	25.2		59.1	49.5	29.1	46.7	57.5	
Level of Service	C	C		C	C		E	D	C	D	E	
Approach Delay (s)		30.9			24.3			49.5			53.9	
Approach LOS		C			C			D			D	
Intersection Summary												
HCM 2000 Control Delay			42.3			HCM 2000 Level of Service			D			
HCM 2000 Volume to Capacity ratio			0.78									
Actuated Cycle Length (s)			119.5			Sum of lost time (s)			16.0			
Intersection Capacity Utilization			91.6%			ICU Level of Service			F			
Analysis Period (min)			15									
c Critical Lane Group												

Lanes, Volumes, Timings
4: Fairview Road & Little Ave

08/05/2021

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	17	618	847	13	491	670
Future Volume (vph)	17	618	847	13	491	670
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	15.0	0.0		0.0	50.0	
Storage Lanes	1	1		0	1	
Taper Length (m)	35.0				2.5	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	0.95
Frt		0.850	0.997			
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1825	1570	3469	0	1755	3349
Flt Permitted	0.950				0.157	
Satd. Flow (perm)	1825	1570	3469	0	290	3349
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)		500	2			
Link Speed (k/h)	50		50			50
Link Distance (m)	489.6		1407.2			78.1
Travel Time (s)	35.3		101.3			5.6
Peak Hour Factor	0.75	0.94	0.95	0.75	0.95	0.86
Heavy Vehicles (%)	0%	4%	5%	0%	4%	9%
Adj. Flow (vph)	23	657	892	17	517	779
Shared Lane Traffic (%)						
Lane Group Flow (vph)	23	657	909	0	517	779
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	3.7		3.7			3.7
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	1.6		1.6			1.6
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14		14	24	
Number of Detectors	1	1	2		1	2
Detector Template	Left	Right	Thru		Left	Thru
Leading Detector (m)	6.1	6.1	30.5		6.1	30.5
Trailing Detector (m)	0.0	0.0	0.0		0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0		0.0	0.0
Detector 1 Size(m)	6.1	6.1	1.8		6.1	1.8
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0
Detector 2 Position(m)			28.7			28.7
Detector 2 Size(m)			1.8			1.8
Detector 2 Type			Cl+Ex			Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)			0.0			0.0
Turn Type	Perm	Perm	NA		pm+pt	NA
Protected Phases			4		3	8

Lanes, Volumes, Timings

4: Fairview Road & Little Ave

08/05/2021

	↖	↗	↑	↘	↙	↓
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Permitted Phases	5	5			8	
Detector Phase	5	5	4		3	8
Switch Phase						
Minimum Initial (s)	10.0	10.0	34.0		4.0	34.0
Minimum Split (s)	27.0	27.0	40.0		8.0	40.0
Total Split (s)	29.0	29.0	40.0		31.0	71.0
Total Split (%)	29.0%	29.0%	40.0%		31.0%	71.0%
Maximum Green (s)	23.0	23.0	34.0		27.0	65.0
Yellow Time (s)	4.0	4.0	4.0		3.0	4.0
All-Red Time (s)	2.0	2.0	2.0		1.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0		4.0	6.0
Lead/Lag			Lag		Lead	
Lead-Lag Optimize?			Yes		Yes	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Recall Mode	None	None	Max		None	None
Walk Time (s)	9.0	9.0	22.0			22.0
Flash Dont Walk (s)	12.0	12.0	12.0			12.0
Pedestrian Calls (#/hr)	0	0	0			0
Act Effect Green (s)	18.3	18.3	34.4		64.5	62.5
Actuated g/C Ratio	0.20	0.20	0.37		0.69	0.67
v/c Ratio	0.06	0.92	0.71		0.89	0.35
Control Delay	30.8	29.8	30.2		38.6	7.5
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay	30.8	29.8	30.2		38.6	7.5
LOS	C	C	C		D	A
Approach Delay	29.8		30.2			19.9
Approach LOS	C		C			B

Intersection Summary

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 92.9

Natural Cycle: 90

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.92

Intersection Signal Delay: 25.5

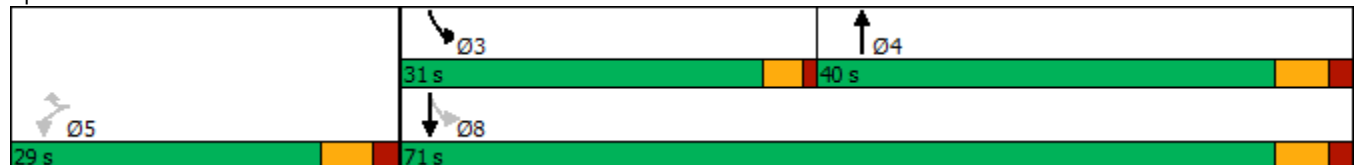
Intersection LOS: C

Intersection Capacity Utilization 77.2%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 4: Fairview Road & Little Ave



Queues

4: Fairview Road & Little Ave

08/05/2021



Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	23	657	909	517	779
v/c Ratio	0.06	0.92	0.71	0.89	0.35
Control Delay	30.8	29.8	30.2	38.6	7.5
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	30.8	29.8	30.2	38.6	7.5
Queue Length 50th (m)	3.5	29.6	81.7	68.7	32.5
Queue Length 95th (m)	8.2	#100.2	105.2	#127.1	40.0
Internal Link Dist (m)	465.6		1383.2		54.1
Turn Bay Length (m)	15.0			50.0	
Base Capacity (vph)	456	768	1284	631	2368
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.05	0.86	0.71	0.82	0.33

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

HCM Signalized Intersection Capacity Analysis

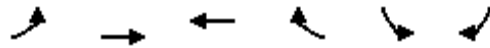
4: Fairview Road & Little Ave

08/05/2021

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	17	618	847	13	491	670
Future Volume (vph)	17	618	847	13	491	670
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	6.0		4.0	6.0
Lane Util. Factor	1.00	1.00	0.95		1.00	0.95
Frt	1.00	0.85	1.00		1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1825	1570	3470		1755	3349
Flt Permitted	0.95	1.00	1.00		0.16	1.00
Satd. Flow (perm)	1825	1570	3470		291	3349
Peak-hour factor, PHF	0.75	0.94	0.95	0.75	0.95	0.86
Adj. Flow (vph)	23	657	892	17	517	779
RTOR Reduction (vph)	0	401	1	0	0	0
Lane Group Flow (vph)	23	256	908	0	517	779
Heavy Vehicles (%)	0%	4%	5%	0%	4%	9%
Turn Type	Perm	Perm	NA		pm+pt	NA
Protected Phases			4		3	8
Permitted Phases	5	5			8	
Actuated Green, G (s)	18.3	18.3	34.4		62.5	62.5
Effective Green, g (s)	18.3	18.3	34.4		62.5	62.5
Actuated g/C Ratio	0.20	0.20	0.37		0.67	0.67
Clearance Time (s)	6.0	6.0	6.0		4.0	6.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	359	309	1286		576	2255
v/s Ratio Prot			0.26		c0.23	0.23
v/s Ratio Perm	0.01	c0.16			c0.37	
v/c Ratio	0.06	0.83	0.71		0.90	0.35
Uniform Delay, d1	30.3	35.7	24.9		21.1	6.4
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.1	16.4	3.3		16.6	0.1
Delay (s)	30.4	52.1	28.2		37.7	6.5
Level of Service	C	D	C		D	A
Approach Delay (s)	51.4		28.2			19.0
Approach LOS	D		C			B
Intersection Summary						
HCM 2000 Control Delay			29.5		HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio			0.91			
Actuated Cycle Length (s)			92.8		Sum of lost time (s)	16.0
Intersection Capacity Utilization			77.2%		ICU Level of Service	D
Analysis Period (min)			15			
c Critical Lane Group						

Lanes, Volumes, Timings
5: Big Bay Point Road & Fairview Road

08/05/2021

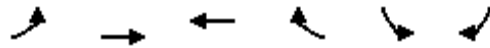


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	534	1111	748	181	94	281
Future Volume (vph)	534	1111	748	181	94	281
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	120.0			120.0	0.0	0.0
Storage Lanes	1			1	1	1
Taper Length (m)	65.0				0.0	
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1789	3544	3579	1601	1738	1555
Flt Permitted	0.233				0.950	
Satd. Flow (perm)	439	3544	3579	1601	1738	1555
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				197		305
Link Speed (k/h)		50	50		50	
Link Distance (m)		479.3	485.6		1407.2	
Travel Time (s)		34.5	35.0		101.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	3%	2%	2%	5%	5%
Adj. Flow (vph)	580	1208	813	197	102	305
Shared Lane Traffic (%)						
Lane Group Flow (vph)	580	1208	813	197	102	305
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		3.7	3.7		3.7	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		1.6	1.6		1.6	
Two way Left Turn Lane			Yes			
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24			14	24	14
Number of Detectors	1	2	2	1	1	1
Detector Template	Left	Thru	Thru	Right	Left	Right
Leading Detector (m)	6.1	30.5	30.5	6.1	6.1	6.1
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	6.1	1.8	1.8	6.1	6.1	6.1
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		28.7	28.7			
Detector 2 Size(m)		1.8	1.8			
Detector 2 Type		Cl+Ex	Cl+Ex			
Detector 2 Channel						
Detector 2 Extend (s)		0.0	0.0			
Turn Type	pm+pt	NA	NA	Perm	Perm	Perm
Protected Phases	3	8	4			

Lanes, Volumes, Timings

5: Big Bay Point Road & Fairview Road

08/05/2021



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Permitted Phases	8			4	5	5
Detector Phase	3	8	4	4	5	5
Switch Phase						
Minimum Initial (s)	7.0	40.0	40.0	40.0	10.0	10.0
Minimum Split (s)	11.0	46.0	46.0	46.0	38.0	38.0
Total Split (s)	34.0	80.0	46.0	46.0	28.0	28.0
Total Split (%)	31.5%	74.1%	42.6%	42.6%	25.9%	25.9%
Maximum Green (s)	30.0	74.0	40.0	40.0	22.0	22.0
Yellow Time (s)	3.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	1.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None
Walk Time (s)			7.0	7.0	7.0	7.0
Flash Dont Walk (s)			33.0	33.0	25.0	25.0
Pedestrian Calls (#/hr)			0	0	0	0
Act Effect Green (s)	70.8	68.8	40.3	40.3	11.8	11.8
Actuated g/C Ratio	0.76	0.74	0.43	0.43	0.13	0.13
v/c Ratio	0.84	0.46	0.52	0.24	0.46	0.66
Control Delay	23.7	5.4	21.9	3.8	46.1	12.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	23.7	5.4	21.9	3.8	46.1	12.2
LOS	C	A	C	A	D	B
Approach Delay		11.4	18.4		20.7	
Approach LOS		B	B		C	

Intersection Summary

Area Type: Other

Cycle Length: 108

Actuated Cycle Length: 92.7

Natural Cycle: 115

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.84

Intersection Signal Delay: 14.8

Intersection LOS: B

Intersection Capacity Utilization 84.6%

ICU Level of Service E

Analysis Period (min) 15

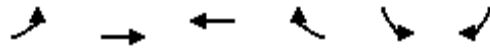
Splits and Phases: 5: Big Bay Point Road & Fairview Road



Queues

5: Big Bay Point Road & Fairview Road

08/05/2021



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Group Flow (vph)	580	1208	813	197	102	305
v/c Ratio	0.84	0.46	0.52	0.24	0.46	0.66
Control Delay	23.7	5.4	21.9	3.8	46.1	12.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	23.7	5.4	21.9	3.8	46.1	12.2
Queue Length 50th (m)	47.3	34.4	56.4	0.0	17.7	0.0
Queue Length 95th (m)	#102.7	55.1	83.8	13.1	34.1	23.4
Internal Link Dist (m)		455.3	461.6		1383.2	
Turn Bay Length (m)	120.0			120.0		
Base Capacity (vph)	775	2847	1554	806	415	603
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	0.75	0.42	0.52	0.24	0.25	0.51

Intersection Summary

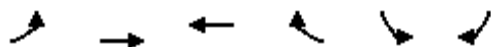
95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

HCM Signalized Intersection Capacity Analysis

5: Big Bay Point Road & Fairview Road

08/05/2021



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	534	1111	748	181	94	281
Future Volume (vph)	534	1111	748	181	94	281
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	6.0	6.0	6.0	6.0	6.0
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1789	3544	3579	1601	1738	1555
Flt Permitted	0.23	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	439	3544	3579	1601	1738	1555
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	580	1208	813	197	102	305
RTOR Reduction (vph)	0	0	0	111	0	266
Lane Group Flow (vph)	580	1208	813	86	102	39
Heavy Vehicles (%)	2%	3%	2%	2%	5%	5%
Turn Type	pm+pt	NA	NA	Perm	Perm	Perm
Protected Phases	3	8	4			
Permitted Phases	8			4	5	5
Actuated Green, G (s)	68.9	68.9	40.3	40.3	11.8	11.8
Effective Green, g (s)	68.9	68.9	40.3	40.3	11.8	11.8
Actuated g/C Ratio	0.74	0.74	0.43	0.43	0.13	0.13
Clearance Time (s)	4.0	6.0	6.0	6.0	6.0	6.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	684	2634	1555	696	221	197
v/s Ratio Prot	c0.22	0.34	0.23			
v/s Ratio Perm	c0.40			0.05	c0.06	0.02
v/c Ratio	0.85	0.46	0.52	0.12	0.46	0.20
Uniform Delay, d1	14.1	4.6	19.2	15.6	37.5	36.2
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	9.6	0.1	0.3	0.1	1.5	0.5
Delay (s)	23.6	4.8	19.5	15.7	39.0	36.7
Level of Service	C	A	B	B	D	D
Approach Delay (s)		10.9	18.8		37.3	
Approach LOS		B	B		D	
Intersection Summary						
HCM 2000 Control Delay			16.7		HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio			0.82			
Actuated Cycle Length (s)			92.7		Sum of lost time (s)	16.0
Intersection Capacity Utilization			84.6%		ICU Level of Service	E
Analysis Period (min)			15			
c Critical Lane Group						

Lanes, Volumes, Timings

8: Bayview Drive

08/05/2021

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations			↑↑			↑
Traffic Volume (vph)	0	0	0	0	0	0
Future Volume (vph)	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	1.00
Frnt						
Flt Protected						
Satd. Flow (prot)	0	0	3579	0	0	1883
Flt Permitted						
Satd. Flow (perm)	0	0	3579	0	0	1883
Link Speed (k/h)	50		50			50
Link Distance (m)	61.2		173.0			97.3
Travel Time (s)	4.4		12.5			7.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	0.0		3.7			3.7
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	1.6		1.6			1.6
Two way Left Turn Lane			Yes			Yes
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14		14	24	
Sign Control	Stop		Free			Free
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization 0.0%	ICU Level of Service A					
Analysis Period (min) 15						

HCM Unsignalized Intersection Capacity Analysis

8: Bayview Drive

08/05/2021

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations			↑↑			↑
Traffic Volume (veh/h)	0	0	0	0	0	0
Future Volume (Veh/h)	0	0	0	0	0	0
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	0	0	0
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			TWLT		TWLT	
Median storage veh			2		2	
Upstream signal (m)			173			
pX, platoon unblocked						
vC, conflicting volume	0	0			0	
vC1, stage 1 conf vol	0					
vC2, stage 2 conf vol	0					
vCu, unblocked vol	0	0			0	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)	5.8					
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	1023	1084			1622	
Direction, Lane #	NB 1	NB 2	SB 1			
Volume Total	0	0	0			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	1700	1700			
Volume to Capacity	0.00	0.00	0.00			
Queue Length 95th (m)	0.0	0.0	0.0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS						
Approach Delay (s)	0.0		0.0			
Approach LOS						
Intersection Summary						
Average Delay			0.0			
Intersection Capacity Utilization			0.0%	ICU Level of Service		A
Analysis Period (min)			15			

Lanes, Volumes, Timings
1: Bayview Drive & Big Bay Point Road

FT 2034
AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	73	404	202	223	478	64	64	360	52	88	379	11
Future Volume (vph)	73	404	202	223	478	64	64	360	52	88	379	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	105.0		55.0	105.0		55.0	105.0		55.0	105.0		55.0
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (m)	65.0			65.0			65.0			65.0		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.95	1.00	0.95	1.00
Frt			0.850			0.850		0.982				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1615	3444	1526	1772	3444	1296	1460	3170	0	1573	3318	1111
Flt Permitted	0.363			0.398			0.504			0.270		
Satd. Flow (perm)	617	3444	1526	742	3444	1296	775	3170	0	447	3318	1111
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			232			154		13				113
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		485.6			536.9			234.9			173.0	
Travel Time (s)		35.0			38.7			16.9			12.5	
Peak Hour Factor	0.68	0.77	0.87	0.90	0.83	0.51	0.67	0.82	0.90	0.69	0.89	0.65
Heavy Vehicles (%)	13%	6%	7%	3%	6%	26%	25%	14%	6%	16%	10%	47%
Adj. Flow (vph)	107	525	232	248	576	125	96	439	58	128	426	17
Shared Lane Traffic (%)												
Lane Group Flow (vph)	107	525	232	248	576	125	96	497	0	128	426	17
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane		Yes						Yes			Yes	
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	Right
Leading Detector (m)	6.1	30.5	6.1	6.1	30.5	6.1	6.1	30.5		6.1	30.5	6.1
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Size(m)	6.1	1.8	6.1	6.1	1.8	6.1	6.1	1.8		6.1	1.8	6.1
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	

Lanes, Volumes, Timings
1: Bayview Drive & Big Bay Point Road

FT 2034
AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2		2	6		6	8			4		4
Detector Phase	5	2	2	1	6	6	3	8		7	4	4
Switch Phase												
Minimum Initial (s)	7.0	35.0	35.0	7.0	35.0	35.0	7.0	12.0		7.0	12.0	12.0
Minimum Split (s)	11.0	41.0	41.0	11.0	41.0	41.0	11.0	30.0		17.5	30.0	30.0
Total Split (s)	11.0	46.0	46.0	11.0	46.0	46.0	11.0	32.0		17.5	32.0	32.0
Total Split (%)	10.3%	43.2%	43.2%	10.3%	43.2%	43.2%	10.3%	30.0%		16.4%	30.0%	30.0%
Maximum Green (s)	7.0	40.0	40.0	7.0	40.0	40.0	7.0	26.0		13.5	26.0	26.0
Yellow Time (s)	3.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0		3.0	4.0	4.0
All-Red Time (s)	1.0	2.0	2.0	1.0	2.0	2.0	1.0	2.0		1.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.0	6.0	6.0	4.0	6.0	6.0	4.0	6.0		4.0	6.0	6.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Recall Mode	Max	None	None	None	None	None	None	None		None	None	None
Walk Time (s)		20.0	20.0		20.0	20.0		9.0			9.0	9.0
Flash Dont Walk (s)		15.0	15.0		15.0	15.0		15.0			15.0	15.0
Pedestrian Calls (#/hr)		0	0		0	0		0			0	0
Act Effect Green (s)	44.2	35.2	35.2	44.2	35.2	35.2	28.6	19.5		36.0	25.8	25.8
Actuated g/C Ratio	0.48	0.38	0.38	0.48	0.38	0.38	0.31	0.21		0.39	0.28	0.28
v/c Ratio	0.29	0.40	0.32	0.57	0.44	0.21	0.33	0.73		0.42	0.46	0.04
Control Delay	15.4	23.3	4.5	21.4	23.8	3.1	21.5	40.2		22.4	29.9	0.2
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	15.4	23.3	4.5	21.4	23.8	3.1	21.5	40.2		22.4	29.9	0.2
LOS	B	C	A	C	C	A	C	D		C	C	A
Approach Delay		17.3			20.5			37.2			27.3	
Approach LOS		B			C			D			C	

Intersection Summary

Area Type: Other

Cycle Length: 106.5

Actuated Cycle Length: 92.7

Natural Cycle: 100

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.73

Intersection Signal Delay: 24.2

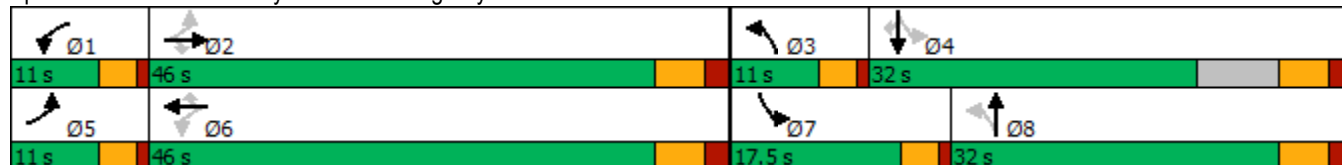
Intersection LOS: C

Intersection Capacity Utilization 75.6%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 1: Bayview Drive & Big Bay Point Road





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	107	525	232	248	576	125	96	497	128	426	17
v/c Ratio	0.29	0.40	0.32	0.57	0.44	0.21	0.33	0.73	0.42	0.46	0.04
Control Delay	15.4	23.3	4.5	21.4	23.8	3.1	21.5	40.2	22.4	29.9	0.2
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	15.4	23.3	4.5	21.4	23.8	3.1	21.5	40.2	22.4	29.9	0.2
Queue Length 50th (m)	9.5	35.8	0.0	23.9	40.1	0.0	10.9	42.7	14.7	34.2	0.0
Queue Length 95th (m)	15.5	46.5	13.5	45.7	56.2	0.0	14.9	54.2	19.5	47.0	0.0
Internal Link Dist (m)	461.6				512.9				210.9		149.0
Turn Bay Length (m)	105.0			55.0	105.0			55.0	105.0		
Base Capacity (vph)	370	1494	793	432	1494	649	290	903	340	1169	464
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	0.29	0.35	0.29	0.57	0.39	0.19	0.33	0.55	0.38	0.36	0.04
Intersection Summary											

HCM Signalized Intersection Capacity Analysis

1: Bayview Drive & Big Bay Point Road

FT 2034

AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	73	404	202	223	478	64	64	360	52	88	379	11
Future Volume (vph)	73	404	202	223	478	64	64	360	52	88	379	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	6.0	6.0	4.0	6.0	6.0	4.0	6.0		4.0	6.0	6.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95		1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1615	3444	1526	1772	3444	1296	1460	3172		1573	3318	1111
Flt Permitted	0.36	1.00	1.00	0.40	1.00	1.00	0.50	1.00		0.27	1.00	1.00
Satd. Flow (perm)	618	3444	1526	742	3444	1296	774	3172		448	3318	1111
Peak-hour factor, PHF	0.68	0.77	0.87	0.90	0.83	0.51	0.67	0.82	0.90	0.69	0.89	0.65
Adj. Flow (vph)	107	525	232	248	576	125	96	439	58	128	426	17
RTOR Reduction (vph)	0	0	145	0	0	78	0	10	0	0	0	12
Lane Group Flow (vph)	107	525	87	248	576	47	96	487	0	128	426	5
Heavy Vehicles (%)	13%	6%	7%	3%	6%	26%	25%	14%	6%	16%	10%	47%
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2		2	6		6	8			4		4
Actuated Green, G (s)	42.2	35.2	35.2	42.2	35.2	35.2	26.0	20.5		35.3	25.8	25.8
Effective Green, g (s)	42.2	35.2	35.2	42.2	35.2	35.2	26.0	20.5		35.3	25.8	25.8
Actuated g/C Ratio	0.45	0.38	0.38	0.45	0.38	0.38	0.28	0.22		0.38	0.28	0.28
Clearance Time (s)	4.0	6.0	6.0	4.0	6.0	6.0	4.0	6.0		4.0	6.0	6.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	353	1296	574	412	1296	487	255	695		299	915	306
v/s Ratio Prot	0.02	0.15		c0.05	0.17		0.02	c0.15		c0.05	0.13	
v/s Ratio Perm	0.11		0.06	c0.23		0.04	0.08			0.11		0.00
v/c Ratio	0.30	0.41	0.15	0.60	0.44	0.10	0.38	0.70		0.43	0.47	0.02
Uniform Delay, d1	15.3	21.4	19.3	17.2	21.8	18.9	26.1	33.7		20.4	28.1	24.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	0.5	0.2	0.1	2.5	0.2	0.1	0.9	3.2		1.0	0.4	0.0
Delay (s)	15.8	21.7	19.4	19.7	22.1	18.9	27.0	36.9		21.4	28.5	24.6
Level of Service	B	C	B	B	C	B	C	D		C	C	C
Approach Delay (s)		20.3			21.0			35.3			26.8	
Approach LOS		C			C			D			C	
Intersection Summary												
HCM 2000 Control Delay			24.8									
HCM 2000 Volume to Capacity ratio			0.61									
Actuated Cycle Length (s)			93.5									
Intersection Capacity Utilization			75.6%									
Analysis Period (min)			15									
c Critical Lane Group												

Lanes, Volumes, Timings
2: Bayview Drive & Courier Entrance/Site Entrance

FT 2034
AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	31	0	71	14	0	9	45	391	54	25	466	61
Future Volume (vph)	31	0	71	14	0	9	45	391	54	25	466	61
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		0.0	0.0		0.0	30.0		0.0	30.0		0.0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (m)	0.0			0.0			2.5			2.5		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.910			0.946			0.982			0.979	
Flt Protected		0.984			0.971		0.950			0.950		
Satd. Flow (prot)	0	1168	0	0	1471	0	1772	1644	0	1825	1746	0
Flt Permitted		0.984			0.971		0.950			0.950		
Satd. Flow (perm)	0	1168	0	0	1471	0	1772	1644	0	1825	1746	0
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		188.0			108.4			97.3			1137.3	
Travel Time (s)		13.5			7.8			7.0			81.9	
Peak Hour Factor	0.39	0.92	0.45	0.92	0.92	0.92	0.89	0.92	0.92	0.92	0.80	0.63
Heavy Vehicles (%)	50%	0%	46%	32%	0%	2%	3%	9%	56%	0%	8%	6%
Adj. Flow (vph)	79	0	158	15	0	10	51	425	59	27	583	97
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	237	0	0	25	0	51	484	0	27	680	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		0.0			0.0			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane								Yes			Yes	
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Stop			Stop			Free			Free	
Intersection Summary												
Area Type:	Other											
Control Type:	Unsignalized											
Intersection Capacity Utilization	47.8%											
Analysis Period (min)	15											
ICU Level of Service A												

HCM Unsignalized Intersection Capacity Analysis

2: Bayview Drive & Courier Entrance/Site Entrance

FT 2034
AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	31	0	71	14	0	9	45	391	54	25	466	61
Future Volume (Veh/h)	31	0	71	14	0	9	45	391	54	25	466	61
Sign Control	Stop				Stop				Free			
Grade	0%				0%				0%			
Peak Hour Factor	0.39	0.92	0.45	0.92	0.92	0.92	0.89	0.92	0.92	0.92	0.80	0.63
Hourly flow rate (vph)	79	0	158	15	0	10	51	425	59	27	583	97
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type							TWLTL			TWLTL		
Median storage veh							2			2		
Upstream signal (m)							270					
pX, platoon unblocked												
vC, conflicting volume	1222	1272	632	1352	1290	454	680				484	
vC1, stage 1 conf vol	686	686		556	556							
vC2, stage 2 conf vol	537	586		795	734							
vCu, unblocked vol	1222	1272	632	1352	1290	454	680				484	
tC, single (s)	7.6	6.5	6.7	7.4	6.5	6.2	4.1				4.1	
tC, 2 stage (s)	6.6	5.5		6.4	5.5							
tF (s)	4.0	4.0	3.7	3.8	4.0	3.3	2.2				2.2	
p0 queue free %	72	100	61	90	100	98	94				98	
cM capacity (veh/h)	281	339	410	145	316	606	908				1089	
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2						
Volume Total	237	25	51	484	27	680						
Volume Left	79	15	51	0	27	0						
Volume Right	158	10	0	59	0	97						
cSH	356	209	908	1700	1089	1700						
Volume to Capacity	0.67	0.12	0.06	0.28	0.02	0.40						
Queue Length 95th (m)	34.8	3.0	1.4	0.0	0.6	0.0						
Control Delay (s)	33.1	24.6	9.2	0.0	8.4	0.0						
Lane LOS	D	C	A		A							
Approach Delay (s)	33.1	24.6	0.9		0.3							
Approach LOS	D	C										
Intersection Summary												
Average Delay	6.1											
Intersection Capacity Utilization	47.8%			ICU Level of Service			A					
Analysis Period (min)	15											

Lanes, Volumes, Timings
3: Bayview Drive & Little Ave

FT 2034
AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	55	197	271	195	404	21	122	170	106	74	384	39
Future Volume (vph)	55	197	271	195	404	21	122	170	106	74	384	39
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	20.0		0.0	15.0		0.0	15.0		0.0	15.0		0.0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (m)	40.0			30.0			20.0			45.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.904			0.992				0.850		0.983	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1674	1703	0	1825	1882	0	1615	1731	1526	1825	1845	0
Flt Permitted	0.434			0.088			0.099			0.539		
Satd. Flow (perm)	765	1703	0	169	1882	0	168	1731	1526	1035	1845	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		72			3				141		5	
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		489.6			106.0			1137.3			118.3	
Travel Time (s)		35.3			7.6			81.9			8.5	
Peak Hour Factor	0.73	0.92	0.71	0.63	0.93	0.81	0.88	0.82	0.75	0.80	0.83	0.66
Heavy Vehicles (%)	9%	2%	2%	0%	1%	6%	13%	11%	7%	0%	2%	5%
Adj. Flow (vph)	75	214	382	310	434	26	139	207	141	93	463	59
Shared Lane Traffic (%)												
Lane Group Flow (vph)	75	596	0	310	460	0	139	207	141	93	522	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane								Yes			Yes	
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (m)	6.1	30.5		6.1	30.5		6.1	30.5	6.1	6.1	30.5	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Size(m)	6.1	1.8		6.1	1.8		6.1	1.8	6.1	6.1	1.8	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	

Lanes, Volumes, Timings
3: Bayview Drive & Little Ave

FT 2034
AM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2			6			8		8	4		
Detector Phase	5	2		1	6		3	8	8	7	4	
Switch Phase												
Minimum Initial (s)	7.0	44.0		7.0	44.0		10.0	10.0	10.0	7.0	10.0	
Minimum Split (s)	11.0	50.0		11.0	50.0		14.0	25.0	25.0	14.0	25.0	
Total Split (s)	11.0	55.0		23.0	67.0		14.0	46.0	46.0	14.0	46.0	
Total Split (%)	8.0%	39.9%		16.7%	48.6%		10.1%	33.3%	33.3%	10.1%	33.3%	
Maximum Green (s)	7.0	49.0		19.0	61.0		10.0	40.0	40.0	10.0	40.0	
Yellow Time (s)	3.0	4.0		3.0	4.0		3.0	4.0	4.0	3.0	4.0	
All-Red Time (s)	1.0	2.0		1.0	2.0		1.0	2.0	2.0	1.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	6.0		4.0	6.0		4.0	6.0	6.0	4.0	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	None		None	None		None	None	None	None	None	
Walk Time (s)		19.0			19.0			8.0	8.0		8.0	
Flash Dont Walk (s)		15.0			15.0			11.0	11.0		11.0	
Pedestrian Calls (#/hr)		0			0			0	0		0	
Act Effect Green (s)	56.5	47.5		72.5	61.8		52.4	40.4	40.4	50.5	39.5	
Actuated g/C Ratio	0.42	0.35		0.53	0.45		0.39	0.30	0.30	0.37	0.29	
v/c Ratio	0.21	0.93		0.97	0.54		0.81	0.40	0.26	0.21	0.97	
Control Delay	18.1	59.5		79.0	30.2		63.9	41.6	6.8	26.9	79.4	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	18.1	59.5		79.0	30.2		63.9	41.6	6.8	26.9	79.4	
LOS	B	E		E	C		E	D	A	C	E	
Approach Delay		54.9			49.8			37.9			71.5	
Approach LOS		D			D			D			E	

Intersection Summary

Area Type: Other

Cycle Length: 138

Actuated Cycle Length: 136

Natural Cycle: 110

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.97

Intersection Signal Delay: 54.1

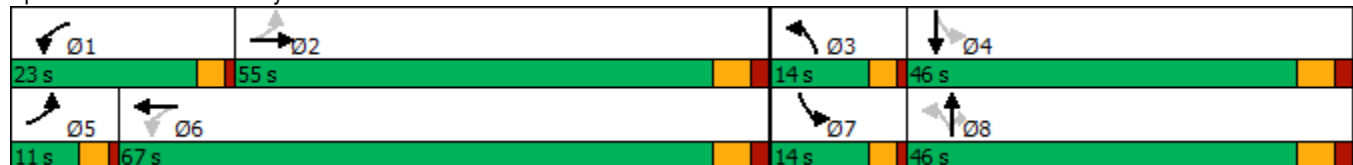
Intersection LOS: D

Intersection Capacity Utilization 95.0%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 3: Bayview Drive & Little Ave





Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	75	596	310	460	139	207	141	93	522
v/c Ratio	0.21	0.93	0.97	0.54	0.81	0.40	0.26	0.21	0.97
Control Delay	18.1	59.5	79.0	30.2	63.9	41.6	6.8	26.9	79.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	18.1	59.5	79.0	30.2	63.9	41.6	6.8	26.9	79.4
Queue Length 50th (m)	9.6	139.9	65.5	90.7	24.4	45.6	0.0	15.7	139.9
Queue Length 95th (m)	14.2	#210.9	58.6	123.7	#56.2	61.9	8.0	24.1	#182.7
Internal Link Dist (m)		465.6		82.0		1113.3			94.3
Turn Bay Length (m)	20.0		15.0		15.0			15.0	
Base Capacity (vph)	364	660	321	863	171	513	552	449	546
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	0.90	0.97	0.53	0.81	0.40	0.26	0.21	0.96

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

HCM Signalized Intersection Capacity Analysis

3: Bayview Drive & Little Ave

FT 2034

AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	55	197	271	195	404	21	122	170	106	74	384	39
Future Volume (vph)	55	197	271	195	404	21	122	170	106	74	384	39
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	6.0		4.0	6.0		4.0	6.0	6.0	4.0	6.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.90		1.00	0.99		1.00	1.00	0.85	1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1674	1702		1825	1881		1615	1731	1526	1825	1845	
Flt Permitted	0.43	1.00		0.09	1.00		0.10	1.00	1.00	0.54	1.00	
Satd. Flow (perm)	765	1702		169	1881		168	1731	1526	1035	1845	
Peak-hour factor, PHF	0.73	0.92	0.71	0.63	0.93	0.81	0.88	0.82	0.75	0.80	0.83	0.66
Adj. Flow (vph)	75	214	382	310	434	26	139	207	141	92	463	59
RTOR Reduction (vph)	0	47	0	0	2	0	0	0	99	0	4	0
Lane Group Flow (vph)	75	549	0	310	458	0	139	207	42	93	518	0
Heavy Vehicles (%)	9%	2%	2%	0%	1%	6%	13%	11%	7%	0%	2%	5%
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2			6			8		8	4		
Actuated Green, G (s)	53.8	48.3		71.3	61.8		50.4	40.4	40.4	48.6	39.5	
Effective Green, g (s)	53.8	48.3		71.3	61.8		50.4	40.4	40.4	48.6	39.5	
Actuated g/C Ratio	0.39	0.35		0.52	0.45		0.37	0.30	0.30	0.36	0.29	
Clearance Time (s)	4.0	6.0		4.0	6.0		4.0	6.0	6.0	4.0	6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	337	600		318	849		167	511	450	420	532	
v/s Ratio Prot	0.01	0.32		c0.14	0.24		c0.06	0.12		0.01	c0.28	
v/s Ratio Perm	0.08			c0.37			0.24		0.03	0.06		
v/c Ratio	0.22	0.92		0.97	0.54		0.83	0.41	0.09	0.22	0.97	
Uniform Delay, d1	26.5	42.3		41.9	27.2		34.8	38.6	34.9	30.1	48.2	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.3	18.7		43.3	0.7		28.3	0.5	0.1	0.3	32.3	
Delay (s)	26.9	61.0		85.2	27.9		63.1	39.1	35.0	30.4	80.4	
Level of Service	C	E		F	C		E	D	D	C	F	
Approach Delay (s)		57.2			50.9			44.8			72.9	
Approach LOS		E			D			D			E	
Intersection Summary												
HCM 2000 Control Delay			56.7			HCM 2000 Level of Service				E		
HCM 2000 Volume to Capacity ratio			0.98									
Actuated Cycle Length (s)			136.8			Sum of lost time (s)			20.0			
Intersection Capacity Utilization			95.0%			ICU Level of Service			F			
Analysis Period (min)			15									
c Critical Lane Group												

Lanes, Volumes, Timings
4: Fairview Road & Little Ave

FT 2034
AM Peak Hour

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	10	590	482	9	385	614
Future Volume (vph)	10	590	482	9	385	614
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	15.0	0.0		0.0	50.0	
Storage Lanes	1	1		0	1	
Taper Length (m)	35.0				2.5	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	0.95
Frt		0.850	0.994			
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1825	1541	3266	0	1789	3476
Flt Permitted	0.950				0.369	
Satd. Flow (perm)	1825	1541	3266	0	695	3476
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)		498	4			
Link Speed (k/h)	50		50			50
Link Distance (m)	489.6		1407.2			78.1
Travel Time (s)	35.3		101.3			5.6
Peak Hour Factor	0.58	0.86	0.94	0.43	0.81	0.89
Heavy Vehicles (%)	0%	6%	11%	13%	2%	5%
Adj. Flow (vph)	17	686	513	21	475	690
Shared Lane Traffic (%)						
Lane Group Flow (vph)	17	686	534	0	475	690
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	3.7		3.7			3.7
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	1.6		1.6			1.6
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14		14	24	
Number of Detectors	1	1	2		1	2
Detector Template	Left	Right	Thru		Left	Thru
Leading Detector (m)	6.1	6.1	30.5		6.1	30.5
Trailing Detector (m)	0.0	0.0	0.0		0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0		0.0	0.0
Detector 1 Size(m)	6.1	6.1	1.8		6.1	1.8
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0
Detector 2 Position(m)			28.7			28.7
Detector 2 Size(m)			1.8			1.8
Detector 2 Type			Cl+Ex			Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)			0.0			0.0
Turn Type	Perm	Perm	NA		pm+pt	NA
Protected Phases			4		3	8

Lanes, Volumes, Timings
4: Fairview Road & Little Ave

FT 2034
AM Peak Hour

												
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT						
Permitted Phases	5	5			8							
Detector Phase	5	5	4		3	8						
Switch Phase												
Minimum Initial (s)	10.0	10.0	34.0		7.0	34.0						
Minimum Split (s)	27.0	27.0	40.0		11.0	40.0						
Total Split (s)	36.0	36.0	40.0		24.0	64.0						
Total Split (%)	36.0%	36.0%	40.0%		24.0%	64.0%						
Maximum Green (s)	30.0	30.0	34.0		20.0	58.0						
Yellow Time (s)	4.0	4.0	4.0		3.0	4.0						
All-Red Time (s)	2.0	2.0	2.0		1.0	2.0						
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0						
Total Lost Time (s)	6.0	6.0	6.0		4.0	6.0						
Lead/Lag			Lag		Lead							
Lead-Lag Optimize?			Yes		Yes							
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0						
Recall Mode	None	None	Max		None	Max						
Walk Time (s)	9.0	9.0	22.0			22.0						
Flash Dont Walk (s)	12.0	12.0	12.0			12.0						
Pedestrian Calls (#/hr)	0	0	0			0						
Act Effect Green (s)	21.3	21.3	38.2		60.4	58.4						
Actuated g/C Ratio	0.23	0.23	0.42		0.66	0.64						
v/c Ratio	0.04	0.93	0.39		0.73	0.31						
Control Delay	25.6	29.5	22.2		16.4	9.1						
Queue Delay	0.0	0.0	0.0		0.0	0.0						
Total Delay	25.6	29.5	22.2		16.4	9.1						
LOS	C	C	C		B	A						
Approach Delay	29.4		22.2			12.1						
Approach LOS	C		C			B						

Intersection Summary

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 91.8

Natural Cycle: 90

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.93

Intersection Signal Delay: 19.4

Intersection LOS: B

Intersection Capacity Utilization 74.9%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 4: Fairview Road & Little Ave





Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	17	686	534	475	690
v/c Ratio	0.04	0.93	0.39	0.73	0.31
Control Delay	25.6	29.5	22.2	16.4	9.1
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	25.6	29.5	22.2	16.4	9.1
Queue Length 50th (m)	2.3	34.4	36.5	37.8	28.3
Queue Length 95th (m)	4.7	#77.8	57.5	58.4	44.6
Internal Link Dist (m)	465.6		1383.2		54.1
Turn Bay Length (m)	15.0			50.0	
Base Capacity (vph)	600	841	1361	697	2212
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.03	0.82	0.39	0.68	0.31

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

HCM Signalized Intersection Capacity Analysis

4: Fairview Road & Little Ave

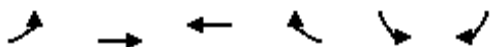
FT 2034

AM Peak Hour

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	10	590	482	9	385	614
Future Volume (vph)	10	590	482	9	385	614
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	6.0		4.0	6.0
Lane Util. Factor	1.00	1.00	0.95		1.00	0.95
Frt	1.00	0.85	0.99		1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1825	1541	3267		1789	3476
Flt Permitted	0.95	1.00	1.00		0.37	1.00
Satd. Flow (perm)	1825	1541	3267		694	3476
Peak-hour factor, PHF	0.58	0.86	0.94	0.43	0.81	0.89
Adj. Flow (vph)	17	686	513	21	475	690
RTOR Reduction (vph)	0	382	2	0	0	0
Lane Group Flow (vph)	17	304	532	0	475	690
Heavy Vehicles (%)	0%	6%	11%	13%	2%	5%
Turn Type	Perm	Perm	NA		pm+pt	NA
Protected Phases			4		3	8
Permitted Phases	5	5			8	
Actuated Green, G (s)	21.3	21.3	38.3		58.5	58.5
Effective Green, g (s)	21.3	21.3	38.3		58.5	58.5
Actuated g/C Ratio	0.23	0.23	0.42		0.64	0.64
Clearance Time (s)	6.0	6.0	6.0		4.0	6.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	423	357	1363		635	2215
v/s Ratio Prot			0.16		0.13	0.20
v/s Ratio Perm	0.01	0.20			0.34	
v/c Ratio	0.04	0.85	0.39		0.75	0.31
Uniform Delay, d1	27.3	33.7	18.6		9.0	7.5
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.0	17.3	0.8		4.8	0.4
Delay (s)	27.4	51.0	19.5		13.8	7.9
Level of Service	C	D	B		B	A
Approach Delay (s)	50.5		19.5			10.3
Approach LOS	D		B			B
Intersection Summary						
HCM 2000 Control Delay			24.1		HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio			0.81			
Actuated Cycle Length (s)			91.8		Sum of lost time (s)	16.0
Intersection Capacity Utilization			74.9%		ICU Level of Service	D
Analysis Period (min)			15			
c Critical Lane Group						

Lanes, Volumes, Timings
5: Big Bay Point Road & Fairview Road

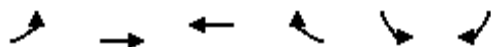
FT 2034
AM Peak Hour



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	515	782	611	135	88	327
Future Volume (vph)	515	782	611	135	88	327
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	120.0			120.0	0.0	0.0
Storage Lanes	1			1	1	1
Taper Length (m)	65.0				0.0	
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1789	3411	3444	1526	1706	1601
Flt Permitted	0.336				0.950	
Satd. Flow (perm)	633	3411	3444	1526	1706	1601
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				147		330
Link Speed (k/h)		50	50		50	
Link Distance (m)		479.3	485.6		1407.2	
Travel Time (s)		34.5	35.0		101.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	7%	6%	7%	7%	2%
Adj. Flow (vph)	560	850	664	147	96	355
Shared Lane Traffic (%)						
Lane Group Flow (vph)	560	850	664	147	96	355
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		3.7	3.7		3.7	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		1.6	1.6		1.6	
Two way Left Turn Lane			Yes			
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24			14	24	14
Number of Detectors	1	2	2	1	1	1
Detector Template	Left	Thru	Thru	Right	Left	Right
Leading Detector (m)	6.1	30.5	30.5	6.1	6.1	6.1
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	6.1	1.8	1.8	6.1	6.1	6.1
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		28.7	28.7			
Detector 2 Size(m)		1.8	1.8			
Detector 2 Type		Cl+Ex	Cl+Ex			
Detector 2 Channel						
Detector 2 Extend (s)		0.0	0.0			
Turn Type	pm+pt	NA	NA	Perm	Perm	Perm
Protected Phases	3	8	4			

Lanes, Volumes, Timings
5: Big Bay Point Road & Fairview Road

FT 2034
AM Peak Hour



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Permitted Phases	8			4	5	5
Detector Phase	3	8	4	4	5	5
Switch Phase						
Minimum Initial (s)	7.0	40.0	40.0	40.0	10.0	10.0
Minimum Split (s)	11.0	46.0	46.0	46.0	36.0	36.0
Total Split (s)	16.0	62.0	46.0	46.0	46.0	46.0
Total Split (%)	14.8%	57.4%	42.6%	42.6%	42.6%	42.6%
Maximum Green (s)	12.0	56.0	40.0	40.0	42.0	42.0
Yellow Time (s)	3.0	4.0	4.0	4.0	3.5	3.5
All-Red Time (s)	1.0	2.0	2.0	2.0	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	6.0	6.0	6.0	4.0	4.0
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None
Walk Time (s)			7.0	7.0	7.0	7.0
Flash Dont Walk (s)			33.0	33.0	25.0	25.0
Pedestrian Calls (#/hr)			0	0	0	0
Act Effect Green (s)	58.0	56.0	40.0	40.0	11.2	11.2
Actuated g/C Ratio	0.75	0.72	0.52	0.52	0.14	0.14
v/c Ratio	0.86	0.34	0.37	0.17	0.39	0.69
Control Delay	20.2	4.5	12.1	2.6	34.6	12.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	20.2	4.5	12.1	2.6	34.6	12.7
LOS	C	A	B	A	C	B
Approach Delay		10.8	10.4		17.3	
Approach LOS		B	B		B	

Intersection Summary

Area Type: Other

Cycle Length: 108

Actuated Cycle Length: 77.3

Natural Cycle: 95

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.86

Intersection Signal Delay: 11.8

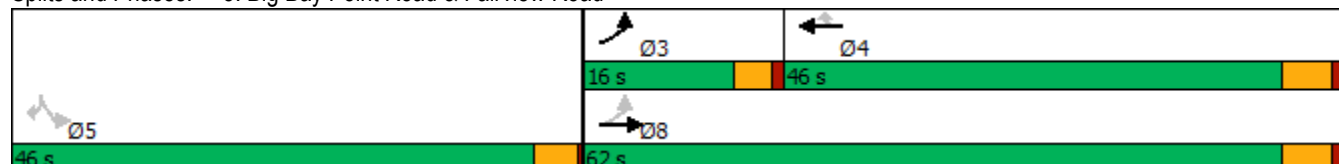
Intersection LOS: B

Intersection Capacity Utilization 81.9%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 5: Big Bay Point Road & Fairview Road



Queues
5: Big Bay Point Road & Fairview Road

FT 2034
AM Peak Hour



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Group Flow (vph)	560	850	664	147	96	355
v/c Ratio	0.86	0.34	0.37	0.17	0.39	0.69
Control Delay	20.2	4.5	12.1	2.6	34.6	12.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	20.2	4.5	12.1	2.6	34.6	12.7
Queue Length 50th (m)	20.8	17.6	27.4	0.0	12.9	3.2
Queue Length 95th (m)	#72.5	33.2	44.7	8.4	26.0	26.4
Internal Link Dist (m)		455.3	461.6		1383.2	
Turn Bay Length (m)	120.0			120.0		
Base Capacity (vph)	654	2472	1783	860	927	1021
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	0.86	0.34	0.37	0.17	0.10	0.35

Intersection Summary

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

HCM Signalized Intersection Capacity Analysis

5: Big Bay Point Road & Fairview Road

FT 2034
AM Peak Hour



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	515	782	611	135	88	327
Future Volume (vph)	515	782	611	135	88	327
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	6.0	6.0	6.0	4.0	4.0
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1789	3411	3444	1526	1706	1601
Flt Permitted	0.34	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	633	3411	3444	1526	1706	1601
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	560	850	664	147	96	355
RTOR Reduction (vph)	0	0	0	71	0	282
Lane Group Flow (vph)	560	850	664	76	96	73
Heavy Vehicles (%)	2%	7%	6%	7%	7%	2%
Turn Type	pm+pt	NA	NA	Perm	Perm	Perm
Protected Phases	3	8	4			
Permitted Phases	8			4	5	5
Actuated Green, G (s)	56.0	56.0	40.0	40.0	11.2	11.2
Effective Green, g (s)	56.0	56.0	40.0	40.0	11.2	11.2
Actuated g/C Ratio	0.73	0.73	0.52	0.52	0.15	0.15
Clearance Time (s)	4.0	6.0	6.0	6.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	638	2474	1784	790	247	232
v/s Ratio Prot	c0.14	0.25	0.19			
v/s Ratio Perm	c0.50			0.05	c0.06	0.05
v/c Ratio	0.88	0.34	0.37	0.10	0.39	0.31
Uniform Delay, d1	5.5	3.9	11.1	9.4	29.9	29.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	13.0	0.1	0.1	0.1	1.0	0.8
Delay (s)	18.4	4.0	11.2	9.5	30.9	30.3
Level of Service	B	A	B	A	C	C
Approach Delay (s)		9.7	10.9		30.5	
Approach LOS		A	B		C	
Intersection Summary						
HCM 2000 Control Delay			13.6		HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio			0.83			
Actuated Cycle Length (s)			77.2		Sum of lost time (s)	14.0
Intersection Capacity Utilization			81.9%		ICU Level of Service	D
Analysis Period (min)			15			
c Critical Lane Group						

Lanes, Volumes, Timings
8: Bayview Drive

FT 2034
AM Peak Hour

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	0	0	0	0
Future Volume (vph)	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	1.00
Fr _t						
Flt Protected						
Satd. Flow (prot)	0	0	3579	0	0	1883
Flt Permitted						
Satd. Flow (perm)	0	0	3579	0	0	1883
Link Speed (k/h)	50		50			50
Link Distance (m)	61.2		173.0			97.3
Travel Time (s)	4.4		12.5			7.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	0.0		3.7			3.7
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	1.6		1.6			1.6
Two way Left Turn Lane			Yes			Yes
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14		14	24	
Sign Control	Stop		Free			Free
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization 0.0%	ICU Level of Service A					
Analysis Period (min) 15						

HCM Unsignalized Intersection Capacity Analysis

8: Bayview Drive

FT 2034
AM Peak Hour

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations			↑↑			↑
Traffic Volume (veh/h)	0	0	0	0	0	0
Future Volume (Veh/h)	0	0	0	0	0	0
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	0	0	0
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			TWLT		TWLT	
Median storage (veh)			2		2	
Upstream signal (m)			173			
pX, platoon unblocked						
vC, conflicting volume	0	0			0	
vC1, stage 1 conf vol	0					
vC2, stage 2 conf vol	0					
vCu, unblocked vol	0	0			0	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)	5.8					
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	1023	1084			1622	
Direction, Lane #	NB 1	NB 2	SB 1			
Volume Total	0	0	0			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	1700	1700			
Volume to Capacity	0.00	0.00	0.00			
Queue Length 95th (m)	0.0	0.0	0.0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS						
Approach Delay (s)	0.0		0.0			
Approach LOS						
Intersection Summary						
Average Delay			0.0			
Intersection Capacity Utilization			0.0%	ICU Level of Service		A
Analysis Period (min)			15			

Lanes, Volumes, Timings
1: Bayview Drive & Big Bay Point Road

FT 2034
PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	24	476	180	278	764	35	357	567	211	206	492	54
Future Volume (vph)	24	476	180	278	764	35	357	567	211	206	492	54
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	105.0		55.0	105.0		55.0	105.0		55.0	105.0		55.0
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (m)	65.0			65.0			65.0			65.0		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.95	1.00	0.95	1.00
Frt			0.850			0.850		0.959				0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1342	3544	1541	1789	3579	1350	1807	3331	0	1659	3380	1445
Flt Permitted	0.162			0.329			0.183			0.172		
Satd. Flow (perm)	229	3544	1541	620	3579	1350	348	3331	0	300	3380	1445
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			225			142		54				142
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		485.6			536.9			234.9			173.0	
Travel Time (s)		35.0			38.7			16.9			12.5	
Peak Hour Factor	0.72	0.89	0.80	0.88	0.89	0.70	0.86	0.88	0.88	0.72	0.84	0.86
Heavy Vehicles (%)	36%	3%	6%	2%	2%	21%	1%	7%	0%	10%	8%	13%
Adj. Flow (vph)	33	535	225	316	858	50	415	644	240	286	586	63
Shared Lane Traffic (%)												
Lane Group Flow (vph)	33	535	225	316	858	50	415	884	0	286	586	63
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane		Yes						Yes			Yes	
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2	1	1	2	1	1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	Right
Leading Detector (m)	6.1	30.5	6.1	6.1	30.5	6.1	6.1	30.5		6.1	30.5	6.1
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Size(m)	6.1	1.8	6.1	6.1	1.8	6.1	6.1	1.8		6.1	1.8	6.1
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	

Lanes, Volumes, Timings
1: Bayview Drive & Big Bay Point Road

FT 2034
PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases	2		2	6		6	8			4		4
Detector Phase	5	2	2	1	6	6	3	8		7	4	4
Switch Phase												
Minimum Initial (s)	7.0	35.0	35.0	7.0	35.0	35.0	7.0	12.0		7.0	12.0	12.0
Minimum Split (s)	11.0	39.0	39.0	11.0	39.0	39.0	11.0	28.0		11.0	28.0	28.0
Total Split (s)	11.0	37.0	37.0	12.0	38.0	38.0	23.0	33.0		18.0	28.0	28.0
Total Split (%)	11.0%	37.0%	37.0%	12.0%	38.0%	38.0%	23.0%	33.0%		18.0%	28.0%	28.0%
Maximum Green (s)	7.0	33.0	33.0	8.0	34.0	34.0	19.0	29.0		14.0	24.0	24.0
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5		0.5	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Recall Mode	Max	None	None	None	None	None	None	None		None	None	None
Walk Time (s)		20.0	20.0		20.0	20.0		9.0			9.0	9.0
Flash Dont Walk (s)		15.0	15.0		15.0	15.0		15.0			15.0	15.0
Pedestrian Calls (#/hr)		0	0		0	0		0			0	0
Act Effect Green (s)	40.0	33.0	33.0	42.0	34.0	34.0	46.2	28.2		37.2	23.2	23.2
Actuated g/C Ratio	0.40	0.33	0.33	0.42	0.34	0.34	0.47	0.28		0.38	0.23	0.23
v/c Ratio	0.19	0.45	0.34	0.89	0.70	0.09	0.94	0.90		0.94	0.74	0.14
Control Delay	18.5	27.7	4.9	50.1	32.0	0.3	55.2	45.1		65.5	41.6	0.7
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	18.5	27.7	4.9	50.1	32.0	0.3	55.2	45.1		65.5	41.6	0.7
LOS	B	C	A	D	C	A	E	D		E	D	A
Approach Delay		20.8			35.4			48.4			46.2	
Approach LOS		C			D			D			D	

Intersection Summary

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 99.2

Natural Cycle: 90

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.94

Intersection Signal Delay: 39.0

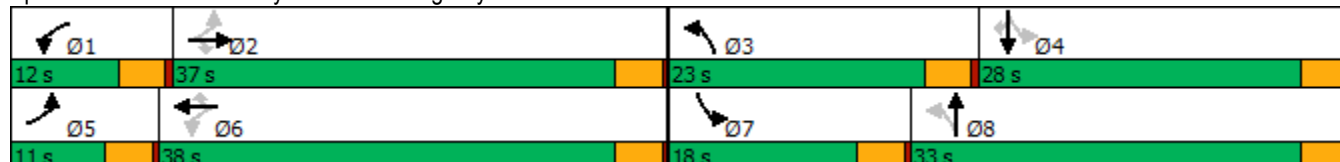
Intersection LOS: D

Intersection Capacity Utilization 91.7%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 1: Bayview Drive & Big Bay Point Road





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	33	535	225	316	858	50	415	884	286	586	63
v/c Ratio	0.19	0.45	0.34	0.89	0.70	0.09	0.94	0.90	0.94	0.74	0.14
Control Delay	18.5	27.7	4.9	50.1	32.0	0.3	55.2	45.1	65.5	41.6	0.7
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	18.5	27.7	4.9	50.1	32.0	0.3	55.2	45.1	65.5	41.6	0.7
Queue Length 50th (m)	3.5	42.7	0.0	39.7	75.2	0.0	58.6	81.0	39.4	55.2	0.0
Queue Length 95th (m)	7.1	56.9	9.9	#78.3	95.2	0.0	#105.7	#109.8	#55.5	67.8	0.0
Internal Link Dist (m)	461.6				512.9				210.9		149.0
Turn Bay Length (m)	105.0			55.0	105.0			55.0	105.0		
Base Capacity (vph)	170	1179	663	356	1226	555	441	1012	304	818	457
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	0.19	0.45	0.34	0.89	0.70	0.09	0.94	0.87	0.94	0.72	0.14

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

HCM Signalized Intersection Capacity Analysis

1: Bayview Drive & Big Bay Point Road

FT 2034

PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	24	476	180	278	764	35	357	567	211	206	492	54
Future Volume (vph)	24	476	180	278	764	35	357	567	211	206	492	54
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95		1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.96		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1342	3544	1541	1789	3579	1350	1807	3332		1659	3380	1445
Flt Permitted	0.16	1.00	1.00	0.33	1.00	1.00	0.18	1.00		0.17	1.00	1.00
Satd. Flow (perm)	228	3544	1541	620	3579	1350	348	3332		300	3380	1445
Peak-hour factor, PHF	0.72	0.89	0.80	0.88	0.89	0.70	0.86	0.88	0.88	0.72	0.84	0.86
Adj. Flow (vph)	33	535	225	316	858	50	415	644	240	286	586	63
RTOR Reduction (vph)	0	0	150	0	0	33	0	39	0	0	0	48
Lane Group Flow (vph)	33	535	75	316	858	17	415	845	0	286	586	15
Heavy Vehicles (%)	36%	3%	6%	2%	2%	21%	1%	7%	0%	10%	8%	13%
Turn Type	pm+pt	NA	Perm	pm+pt	NA	Perm	pm+pt	NA		pm+pt	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2		2	6		6	8			4		4
Actuated Green, G (s)	40.0	33.0	33.0	42.0	34.0	34.0	46.2	28.2		37.3	23.3	23.3
Effective Green, g (s)	40.0	33.0	33.0	42.0	34.0	34.0	46.2	28.2		37.3	23.3	23.3
Actuated g/C Ratio	0.40	0.33	0.33	0.42	0.34	0.34	0.47	0.28		0.38	0.23	0.23
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	170	1178	512	356	1226	462	440	947		304	793	339
v/s Ratio Prot	0.01	0.15		c0.07	0.24		c0.18	0.25		0.13	0.17	
v/s Ratio Perm	0.06		0.05	c0.30		0.01	c0.26			0.22		0.01
v/c Ratio	0.19	0.45	0.15	0.89	0.70	0.04	0.94	0.89		0.94	0.74	0.04
Uniform Delay, d1	19.6	26.0	23.2	24.4	28.2	21.7	23.9	34.0		25.2	35.1	29.3
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	0.6	0.3	0.1	22.4	1.8	0.0	28.8	10.7		36.1	3.6	0.1
Delay (s)	20.2	26.3	23.4	46.8	30.0	21.7	52.7	44.7		61.3	38.8	29.4
Level of Service	C	C	C	D	C	C	D	D		E	D	C
Approach Delay (s)		25.2			34.0			47.3			45.0	
Approach LOS		C			C			D			D	
Intersection Summary												
HCM 2000 Control Delay			38.8									D
HCM 2000 Volume to Capacity ratio			0.96									
Actuated Cycle Length (s)			99.2							16.0		
Intersection Capacity Utilization			91.7%									F
ICU Level of Service												
Analysis Period (min)			15									
c Critical Lane Group												

Lanes, Volumes, Timings
2: Bayview Drive & Courier Entrance/Site Entrance

FT 2034
PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	39	0	42	51	0	34	50	602	21	8	702	24
Future Volume (vph)	39	0	42	51	0	34	50	602	21	8	702	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	0.0		0.0	0.0		0.0	30.0		0.0	30.0		0.0
Storage Lanes	0		0	0		0	1		0	1		0
Taper Length (m)	0.0			0.0			0.0			0.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.942			0.946			0.995			0.993	
Flt Protected		0.972			0.971		0.950			0.950		
Satd. Flow (prot)	0	1736	0	0	1354	0	1304	1802	0	1825	1763	0
Flt Permitted		0.972			0.971		0.950			0.950		
Satd. Flow (perm)	0	1736	0	0	1354	0	1304	1802	0	1825	1763	0
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		188.0			286.2			97.3			1137.3	
Travel Time (s)		13.5			20.6			7.0			81.9	
Peak Hour Factor	0.58	0.92	0.83	0.92	0.92	0.92	0.58	0.89	0.92	0.92	0.89	0.61
Heavy Vehicles (%)	0%	0%	3%	48%	0%	4%	40%	4%	68%	0%	6%	53%
Adj. Flow (vph)	67	0	51	55	0	37	86	676	23	9	789	39
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	118	0	0	92	0	86	699	0	9	828	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		0.0			0.0			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane								Yes			Yes	
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Sign Control		Stop			Stop			Free			Free	
Intersection Summary												
Area Type:	Other											
Control Type:	Unsignalized											
Intersection Capacity Utilization	55.0%						ICU Level of Service A					
Analysis Period (min)	15											

HCM Unsignalized Intersection Capacity Analysis

2: Bayview Drive & Courier Entrance/Site Entrance

FT 2034
PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	39	0	42	51	0	34	50	602	21	8	702	24
Future Volume (Veh/h)	39	0	42	51	0	34	50	602	21	8	702	24
Sign Control	Stop			Stop			Free			Free		
Grade	0%			0%			0%			0%		
Peak Hour Factor	0.58	0.92	0.83	0.92	0.92	0.92	0.58	0.89	0.92	0.92	0.89	0.61
Hourly flow rate (vph)	67	0	51	55	0	37	86	676	23	9	789	39
Pedestrians												
Lane Width (m)												
Walking Speed (m/s)												
Percent Blockage												
Right turn flare (veh)												
Median type							TWLTL			TWLTL		
Median storage veh							2			2		
Upstream signal (m)							270					
pX, platoon unblocked												
vC, conflicting volume	1712	1698	808	1718	1706	688	828				699	
vC1, stage 1 conf vol	826	826		860	860							
vC2, stage 2 conf vol	885	871		858	846							
vCu, unblocked vol	1712	1698	808	1718	1706	688	828				699	
tC, single (s)	7.1	6.5	6.2	7.6	6.5	6.2	4.5				4.1	
tC, 2 stage (s)	6.1	5.5		6.6	5.5							
tF (s)	3.5	4.0	3.3	3.9	4.0	3.3	2.6				2.2	
p0 queue free %	69	100	87	61	100	92	87				99	
cM capacity (veh/h)	215	250	379	141	226	443	661				907	
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2						
Volume Total	118	92	86	699	9	828						
Volume Left	67	55	86	0	9	0						
Volume Right	51	37	0	23	0	39						
cSH	265	194	661	1700	907	1700						
Volume to Capacity	0.45	0.47	0.13	0.41	0.01	0.49						
Queue Length 95th (m)	16.4	17.4	3.4	0.0	0.2	0.0						
Control Delay (s)	29.1	39.3	11.3	0.0	9.0	0.0						
Lane LOS	D	E	B	A								
Approach Delay (s)	29.1	39.3	1.2	0.1								
Approach LOS	D	E										
Intersection Summary												
Average Delay	4.4											
Intersection Capacity Utilization	55.0%			ICU Level of Service			A					
Analysis Period (min)	15											

Lanes, Volumes, Timings
3: Bayview Drive & Little Ave

FT 2034
PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	28	359	83	80	309	54	378	548	159	148	288	50
Future Volume (vph)	28	359	83	80	309	54	378	548	159	148	288	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	20.0		0.0	15.0		0.0	15.0		0.0	15.0		0.0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (m)	40.0			30.0			20.0			45.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.969			0.977				0.850		0.977	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1825	1839	0	1825	1846	0	1807	1921	1633	1825	1846	0
Flt Permitted	0.386			0.187			0.129			0.155		
Satd. Flow (perm)	742	1839	0	359	1846	0	245	1921	1633	298	1846	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		10			7				155		6	
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		489.6			106.0			1137.3			118.3	
Travel Time (s)		35.3			7.6			81.9			8.5	
Peak Hour Factor	0.81	0.88	0.77	0.74	0.94	0.92	0.94	0.96	0.83	0.73	0.85	0.81
Heavy Vehicles (%)	0%	1%	2%	0%	1%	0%	1%	0%	0%	0%	2%	0%
Bus Blockages (#/hr)	0	0	0	0	2	0	0	0	0	0	0	0
Adj. Flow (vph)	35	408	108	108	329	59	402	571	192	203	339	62
Shared Lane Traffic (%)												
Lane Group Flow (vph)	35	516	0	108	388	0	402	571	192	203	401	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(m)		3.7			3.7			3.7			3.7	
Link Offset(m)		0.0			0.0			0.0			0.0	
Crosswalk Width(m)		1.6			1.6			1.6			1.6	
Two way Left Turn Lane								Yes			Yes	
Headway Factor	0.99	0.99	0.99	0.99	1.00	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24		14	24		14	24		14	24		14
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (m)	6.1	30.5		6.1	30.5		6.1	30.5	6.1	6.1	30.5	
Trailing Detector (m)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Position(m)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Size(m)	6.1	1.8		6.1	1.8		6.1	1.8	6.1	6.1	1.8	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(m)		28.7			28.7			28.7			28.7	
Detector 2 Size(m)		1.8			1.8			1.8			1.8	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	

Lanes, Volumes, Timings
3: Bayview Drive & Little Ave

FT 2034
PM Peak Hour

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2			6			8		8	4		
Detector Phase	5	2		1	6		3	8	8	7	4	
Switch Phase												
Minimum Initial (s)	7.0	44.0		7.0	44.0		10.0	10.0	10.0	7.0	10.0	
Minimum Split (s)	11.0	50.0		11.0	50.0		14.0	25.0	25.0	11.0	25.0	
Total Split (s)	11.0	53.0		11.0	53.0		32.0	58.0	58.0	16.0	42.0	
Total Split (%)	8.0%	38.4%		8.0%	38.4%		23.2%	42.0%	42.0%	11.6%	30.4%	
Maximum Green (s)	7.0	47.0		7.0	47.0		28.0	52.0	52.0	12.0	36.0	
Yellow Time (s)	3.0	4.0		3.0	4.0		3.0	4.0	4.0	3.0	4.0	
All-Red Time (s)	1.0	2.0		1.0	2.0		1.0	2.0	2.0	1.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	4.0	6.0		4.0	6.0		4.0	6.0	6.0	4.0	6.0	
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	None		None	None		None	None	None	None	None	
Walk Time (s)		19.0			19.0			8.0	8.0		8.0	
Flash Dont Walk (s)		15.0			15.0			11.0	11.0		11.0	
Pedestrian Calls (#/hr)		0			0			0	0		0	
Act Effect Green (s)	54.5	45.4		56.2	50.2		62.3	44.6	44.6	44.8	31.1	
Actuated g/C Ratio	0.42	0.35		0.44	0.39		0.48	0.35	0.35	0.35	0.24	
v/c Ratio	0.09	0.79		0.46	0.54		0.95	0.86	0.29	0.84	0.89	
Control Delay	22.8	48.1		29.2	36.1		67.6	53.0	8.3	57.3	69.5	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	22.8	48.1		29.2	36.1		67.6	53.0	8.3	57.3	69.5	
LOS	C	D		C	D		E	D	A	E	E	
Approach Delay		46.5			34.6			50.7			65.4	
Approach LOS		D			C			D			E	

Intersection Summary

Area Type: Other

Cycle Length: 138

Actuated Cycle Length: 128.8

Natural Cycle: 110

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.95

Intersection Signal Delay: 50.2

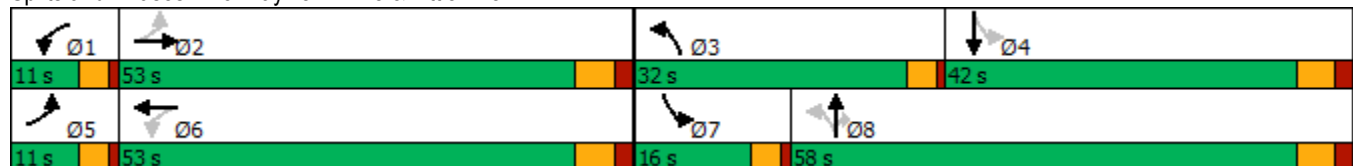
Intersection LOS: D

Intersection Capacity Utilization 98.3%

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 3: Bayview Drive & Little Ave





Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	35	516	108	388	402	571	192	203	401
v/c Ratio	0.09	0.79	0.46	0.54	0.95	0.86	0.29	0.84	0.89
Control Delay	22.8	48.1	29.2	36.1	67.6	53.0	8.3	57.3	69.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	22.8	48.1	29.2	36.1	67.6	53.0	8.3	57.3	69.5
Queue Length 50th (m)	5.3	123.6	17.0	84.7	81.6	132.2	6.2	29.8	99.0
Queue Length 95th (m)	10.9	165.8	23.8	120.6	#144.4	183.9	18.2	40.7	131.2
Internal Link Dist (m)		465.6		82.0		1113.3			94.3
Turn Bay Length (m)	20.0		15.0		15.0			15.0	
Base Capacity (vph)	373	681	237	732	460	780	755	247	523
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	0.09	0.76	0.46	0.53	0.87	0.73	0.25	0.82	0.77

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

HCM Signalized Intersection Capacity Analysis

3: Bayview Drive & Little Ave

FT 2034

PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	28	359	83	80	309	54	378	548	159	148	288	50
Future Volume (vph)	28	359	83	80	309	54	378	548	159	148	288	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	6.0		4.0	6.0		4.0	6.0	6.0	4.0	6.0	
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.97		1.00	0.98		1.00	1.00	0.85	1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1825	1839		1825	1847		1807	1921	1633	1825	1845	
Flt Permitted	0.39	1.00		0.19	1.00		0.13	1.00	1.00	0.15	1.00	
Satd. Flow (perm)	741	1839		359	1847		245	1921	1633	297	1845	
Peak-hour factor, PHF	0.81	0.88	0.77	0.74	0.94	0.92	0.94	0.96	0.83	0.73	0.85	0.81
Adj. Flow (vph)	35	408	108	108	329	59	402	571	192	203	339	62
RTOR Reduction (vph)	0	6	0	0	4	0	0	0	102	0	5	0
Lane Group Flow (vph)	35	510	0	108	384	0	402	571	90	203	396	0
Heavy Vehicles (%)	0%	1%	2%	0%	1%	0%	1%	0%	0%	0%	2%	0%
Bus Blockages (#/hr)	0	0	0	0	2	0	0	0	0	0	0	0
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases	2			6			8		8	4		
Actuated Green, G (s)	51.3	47.3		57.3	50.3		60.2	44.6	44.6	42.7	31.1	
Effective Green, g (s)	51.3	47.3		57.3	50.3		60.2	44.6	44.6	42.7	31.1	
Actuated g/C Ratio	0.39	0.36		0.44	0.39		0.46	0.34	0.34	0.33	0.24	
Clearance Time (s)	4.0	6.0		4.0	6.0		4.0	6.0	6.0	4.0	6.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	324	666		236	711		413	656	558	233	439	
v/s Ratio Prot	0.00	c0.28		c0.02	0.21		c0.19	0.30		0.08	0.21	
v/s Ratio Perm	0.04			0.18			c0.26		0.06	0.21		
v/c Ratio	0.11	0.77		0.46	0.54		0.97	0.87	0.16	0.87	0.90	
Uniform Delay, d1	25.2	36.7		25.8	31.1		38.0	40.2	29.9	35.3	48.2	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.1	5.2		1.4	0.8		37.1	12.1	0.1	27.9	21.5	
Delay (s)	25.3	41.9		27.3	31.9		75.1	52.3	30.1	63.3	69.7	
Level of Service	C	D		C	C		E	D	C	E	E	
Approach Delay (s)		40.9			30.9			56.5			67.6	
Approach LOS		D			C			E			E	
Intersection Summary												
HCM 2000 Control Delay	51.3			HCM 2000 Level of Service			D					
HCM 2000 Volume to Capacity ratio	0.87											
Actuated Cycle Length (s)	130.5			Sum of lost time (s)			20.0					
Intersection Capacity Utilization	98.3%			ICU Level of Service			F					
Analysis Period (min)	15											
c Critical Lane Group												

Lanes, Volumes, Timings
4: Fairview Road & Little Ave

FT 2034
PM Peak Hour

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	18	666	905	14	524	715
Future Volume (vph)	18	666	905	14	524	715
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	15.0	0.0		0.0	50.0	
Storage Lanes	1	1		0	1	
Taper Length (m)	35.0				2.5	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	0.95
Frt		0.850	0.997			
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1825	1570	3469	0	1755	3349
Flt Permitted	0.950				0.113	
Satd. Flow (perm)	1825	1570	3469	0	209	3349
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)		496	2			
Link Speed (k/h)	50		50			50
Link Distance (m)	489.6		1407.2			78.1
Travel Time (s)	35.3		101.3			5.6
Peak Hour Factor	0.75	0.94	0.95	0.75	0.95	0.86
Heavy Vehicles (%)	0%	4%	5%	0%	4%	9%
Adj. Flow (vph)	24	709	953	19	552	831
Shared Lane Traffic (%)						
Lane Group Flow (vph)	24	709	972	0	552	831
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	3.7		3.7			3.7
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	1.6		1.6			1.6
Two way Left Turn Lane						
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14		14	24	
Number of Detectors	1	1	2		1	2
Detector Template	Left	Right	Thru		Left	Thru
Leading Detector (m)	6.1	6.1	30.5		6.1	30.5
Trailing Detector (m)	0.0	0.0	0.0		0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0		0.0	0.0
Detector 1 Size(m)	6.1	6.1	1.8		6.1	1.8
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0		0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0		0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0		0.0	0.0
Detector 2 Position(m)			28.7			28.7
Detector 2 Size(m)			1.8			1.8
Detector 2 Type			Cl+Ex			Cl+Ex
Detector 2 Channel						
Detector 2 Extend (s)			0.0			0.0
Turn Type	Perm	Perm	NA		pm+pt	NA
Protected Phases			4		3	8

Lanes, Volumes, Timings
4: Fairview Road & Little Ave

FT 2034
PM Peak Hour

	↖	↗	↑	↘	↙	↓
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Permitted Phases	5	5			8	
Detector Phase	5	5	4		3	8
Switch Phase						
Minimum Initial (s)	10.0	10.0	34.0		7.0	34.0
Minimum Split (s)	27.0	27.0	40.0		11.0	40.0
Total Split (s)	29.0	29.0	40.0		31.0	71.0
Total Split (%)	29.0%	29.0%	40.0%		31.0%	71.0%
Maximum Green (s)	23.0	23.0	34.0		27.0	65.0
Yellow Time (s)	4.0	4.0	4.0		3.0	4.0
All-Red Time (s)	2.0	2.0	2.0		1.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0		0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0		4.0	6.0
Lead/Lag			Lag		Lead	
Lead-Lag Optimize?			Yes		Yes	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Recall Mode	None	None	Max		None	Max
Walk Time (s)	9.0	9.0	22.0			22.0
Flash Dont Walk (s)	12.0	12.0	12.0			12.0
Pedestrian Calls (#/hr)	0	0	0			0
Act Effect Green (s)	21.3	21.3	34.1		67.1	65.1
Actuated g/C Ratio	0.22	0.22	0.35		0.68	0.66
v/c Ratio	0.06	0.97	0.81		0.97	0.38
Control Delay	30.7	40.1	36.0		59.0	8.4
Queue Delay	0.0	0.0	0.0		0.0	0.0
Total Delay	30.7	40.1	36.0		59.0	8.4
LOS	C	D	D		E	A
Approach Delay	39.8		36.0			28.6
Approach LOS	D		D			C

Intersection Summary

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 98.4

Natural Cycle: 90

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.97

Intersection Signal Delay: 33.6

Intersection LOS: C

Intersection Capacity Utilization 79.6%

ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 4: Fairview Road & Little Ave





Lane Group	WBL	WBR	NBT	SBL	SBT
Lane Group Flow (vph)	24	709	972	552	831
v/c Ratio	0.06	0.97	0.81	0.97	0.38
Control Delay	30.7	40.1	36.0	59.0	8.4
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	30.7	40.1	36.0	59.0	8.4
Queue Length 50th (m)	3.7	46.8	89.8	88.2	35.5
Queue Length 95th (m)	8.3	#124.7	114.8	#156.9	43.3
Internal Link Dist (m)	465.6		1383.2		54.1
Turn Bay Length (m)	15.0			50.0	
Base Capacity (vph)	427	747	1201	567	2215
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.06	0.95	0.81	0.97	0.38

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

HCM Signalized Intersection Capacity Analysis

4: Fairview Road & Little Ave

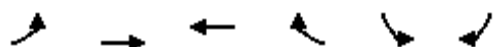
FT 2034

PM Peak Hour

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations			 			
Traffic Volume (vph)	18	666	905	14	524	715
Future Volume (vph)	18	666	905	14	524	715
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	6.0		4.0	6.0
Lane Util. Factor	1.00	1.00	0.95		1.00	0.95
Frt	1.00	0.85	1.00		1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1825	1570	3469		1755	3349
Flt Permitted	0.95	1.00	1.00		0.11	1.00
Satd. Flow (perm)	1825	1570	3469		208	3349
Peak-hour factor, PHF	0.75	0.94	0.95	0.75	0.95	0.86
Adj. Flow (vph)	24	709	953	19	552	831
RTOR Reduction (vph)	0	389	1	0	0	0
Lane Group Flow (vph)	24	320	971	0	552	831
Heavy Vehicles (%)	0%	4%	5%	0%	4%	9%
Turn Type	Perm	Perm	NA		pm+pt	NA
Protected Phases			4		3	8
Permitted Phases	5	5			8	
Actuated Green, G (s)	21.3	21.3	34.1		65.1	65.1
Effective Green, g (s)	21.3	21.3	34.1		65.1	65.1
Actuated g/C Ratio	0.22	0.22	0.35		0.66	0.66
Clearance Time (s)	6.0	6.0	6.0		4.0	6.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	395	339	1202		562	2215
v/s Ratio Prot			0.28		c0.27	0.25
v/s Ratio Perm	0.01	c0.20			c0.38	
v/c Ratio	0.06	0.95	0.81		0.98	0.38
Uniform Delay, d1	30.6	38.0	29.2		27.6	7.5
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.1	34.5	5.9		33.2	0.5
Delay (s)	30.7	72.4	35.1		60.8	8.0
Level of Service	C	E	D		E	A
Approach Delay (s)	71.1		35.1			29.1
Approach LOS	E		D			C
Intersection Summary						
HCM 2000 Control Delay			40.9		HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio			1.00			
Actuated Cycle Length (s)			98.4		Sum of lost time (s)	16.0
Intersection Capacity Utilization			79.6%		ICU Level of Service	D
Analysis Period (min)			15			
c Critical Lane Group						

Lanes, Volumes, Timings
5: Big Bay Point Road & Fairview Road

FT 2034
PM Peak Hour

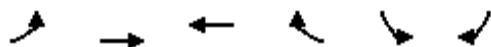


Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	628	1306	878	212	100	300
Future Volume (vph)	628	1306	878	212	100	300
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (m)	120.0			120.0	0.0	0.0
Storage Lanes	1			1	1	1
Taper Length (m)	65.0				0.0	
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00
Frt				0.850		0.850
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1789	3544	3579	1601	1738	1555
Flt Permitted	0.166				0.950	
Satd. Flow (perm)	313	3544	3579	1601	1738	1555
Right Turn on Red				Yes		Yes
Satd. Flow (RTOR)				230		326
Link Speed (k/h)		50	50		50	
Link Distance (m)		479.3	485.6		1407.2	
Travel Time (s)		34.5	35.0		101.3	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	3%	2%	2%	5%	5%
Adj. Flow (vph)	683	1420	954	230	109	326
Shared Lane Traffic (%)						
Lane Group Flow (vph)	683	1420	954	230	109	326
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(m)		3.7	3.7		3.7	
Link Offset(m)		0.0	0.0		0.0	
Crosswalk Width(m)		1.6	1.6		1.6	
Two way Left Turn Lane			Yes			
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24			14	24	14
Number of Detectors	1	2	2	1	1	1
Detector Template	Left	Thru	Thru	Right	Left	Right
Leading Detector (m)	6.1	30.5	30.5	6.1	6.1	6.1
Trailing Detector (m)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Position(m)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Size(m)	6.1	1.8	1.8	6.1	6.1	6.1
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel						
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(m)		28.7	28.7			
Detector 2 Size(m)		1.8	1.8			
Detector 2 Type		Cl+Ex	Cl+Ex			
Detector 2 Channel						
Detector 2 Extend (s)		0.0	0.0			
Turn Type	pm+pt	NA	NA	Perm	Perm	Perm
Protected Phases	3	8	4			

Lanes, Volumes, Timings

5: Big Bay Point Road & Fairview Road

FT 2034
PM Peak Hour



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Permitted Phases	8			4	5	5
Detector Phase	3	8	4	4	5	5
Switch Phase						
Minimum Initial (s)	7.0	40.0	40.0	40.0	10.0	10.0
Minimum Split (s)	11.0	46.0	46.0	46.0	36.0	36.0
Total Split (s)	34.0	80.0	46.0	46.0	28.0	28.0
Total Split (%)	31.5%	74.1%	42.6%	42.6%	25.9%	25.9%
Maximum Green (s)	30.0	74.0	40.0	40.0	24.0	24.0
Yellow Time (s)	3.0	4.0	4.0	4.0	3.5	3.5
All-Red Time (s)	1.0	2.0	2.0	2.0	0.5	0.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.0	6.0	6.0	6.0	4.0	4.0
Lead/Lag	Lead		Lag	Lag		
Lead-Lag Optimize?	Yes		Yes	Yes		
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None
Walk Time (s)			7.0	7.0	7.0	7.0
Flash Dont Walk (s)			33.0	33.0	25.0	25.0
Pedestrian Calls (#/hr)			0	0	0	0
Act Effect Green (s)	76.1	74.1	40.0	40.0	12.0	12.0
Actuated g/C Ratio	0.79	0.77	0.42	0.42	0.12	0.12
v/c Ratio	0.96	0.52	0.64	0.29	0.50	0.68
Control Delay	47.5	5.2	25.0	3.6	47.5	12.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	47.5	5.2	25.0	3.6	47.5	12.4
LOS	D	A	C	A	D	B
Approach Delay		19.0	20.9		21.2	
Approach LOS		B	C		C	

Intersection Summary

Area Type: Other

Cycle Length: 108

Actuated Cycle Length: 96.1

Natural Cycle: 125

Control Type: Semi Act-Uncoord

Maximum v/c Ratio: 0.96

Intersection Signal Delay: 19.8

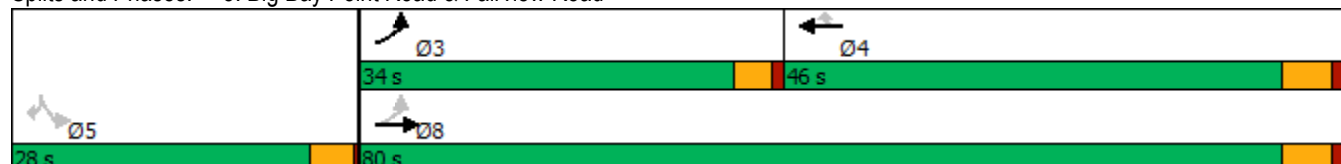
Intersection LOS: B

Intersection Capacity Utilization 88.1%

ICU Level of Service E

Analysis Period (min) 15

Splits and Phases: 5: Big Bay Point Road & Fairview Road



Queues
5: Big Bay Point Road & Fairview Road

FT 2034
PM Peak Hour



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Group Flow (vph)	683	1420	954	230	109	326
v/c Ratio	0.96	0.52	0.64	0.29	0.50	0.68
Control Delay	47.5	5.2	25.0	3.6	47.5	12.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	47.5	5.2	25.0	3.6	47.5	12.4
Queue Length 50th (m)	88.9	40.1	71.2	0.0	19.2	0.0
Queue Length 95th (m)	#176.5	65.8	99.5	13.7	35.3	24.0
Internal Link Dist (m)		455.3	461.6		1383.2	
Turn Bay Length (m)	120.0			120.0		
Base Capacity (vph)	709	2731	1490	801	434	632
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	0.96	0.52	0.64	0.29	0.25	0.52

Intersection Summary

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

HCM Signalized Intersection Capacity Analysis

5: Big Bay Point Road & Fairview Road

FT 2034
PM Peak Hour



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	628	1306	878	212	100	300
Future Volume (vph)	628	1306	878	212	100	300
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	6.0	6.0	6.0	4.0	4.0
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1789	3544	3579	1601	1738	1555
Flt Permitted	0.17	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	313	3544	3579	1601	1738	1555
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	683	1420	954	230	109	326
RTOR Reduction (vph)	0	0	0	134	0	285
Lane Group Flow (vph)	683	1420	954	96	109	41
Heavy Vehicles (%)	2%	3%	2%	2%	5%	5%
Turn Type	pm+pt	NA	NA	Perm	Perm	Perm
Protected Phases	3	8	4			
Permitted Phases	8			4	5	5
Actuated Green, G (s)	74.0	74.0	40.0	40.0	12.0	12.0
Effective Green, g (s)	74.0	74.0	40.0	40.0	12.0	12.0
Actuated g/C Ratio	0.77	0.77	0.42	0.42	0.12	0.12
Clearance Time (s)	4.0	6.0	6.0	6.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	702	2731	1491	667	217	194
v/s Ratio Prot	c0.30	0.40	0.27			
v/s Ratio Perm	c0.45			0.06	c0.06	0.03
v/c Ratio	0.97	0.52	0.64	0.14	0.50	0.21
Uniform Delay, d1	22.3	4.2	22.3	17.4	39.2	37.7
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	27.2	0.2	0.9	0.1	1.8	0.5
Delay (s)	49.5	4.4	23.2	17.5	41.0	38.3
Level of Service	D	A	C	B	D	D
Approach Delay (s)		19.0	22.1		39.0	
Approach LOS		B	C		D	
Intersection Summary						
HCM 2000 Control Delay			22.3		HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio			0.94			
Actuated Cycle Length (s)			96.0		Sum of lost time (s)	14.0
Intersection Capacity Utilization			88.1%		ICU Level of Service	E
Analysis Period (min)			15			
c Critical Lane Group						

Lanes, Volumes, Timings
8: Bayview Drive

FT 2034
PM Peak Hour

						
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations			↑↑			↑
Traffic Volume (vph)	0	0	0	0	0	0
Future Volume (vph)	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Util. Factor	1.00	1.00	0.95	1.00	1.00	1.00
Fr t						
Flt Protected						
Satd. Flow (prot)	0	0	3579	0	0	1883
Flt Permitted						
Satd. Flow (perm)	0	0	3579	0	0	1883
Link Speed (k/h)	50		50			50
Link Distance (m)	61.2		173.0			97.3
Travel Time (s)	4.4		12.5			7.0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	0	0
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	0	0	0	0	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(m)	0.0		3.7			3.7
Link Offset(m)	0.0		0.0			0.0
Crosswalk Width(m)	1.6		1.6			1.6
Two way Left Turn Lane			Yes			Yes
Headway Factor	0.99	0.99	0.99	0.99	0.99	0.99
Turning Speed (k/h)	24	14		14	24	
Sign Control	Stop		Free			Free
Intersection Summary						
Area Type:	Other					
Control Type:	Unsignalized					
Intersection Capacity Utilization 0.0%	ICU Level of Service A					
Analysis Period (min) 15						

HCM Unsignalized Intersection Capacity Analysis

8: Bayview Drive

FT 2034
PM Peak Hour

						
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations			↑↑			↑
Traffic Volume (veh/h)	0	0	0	0	0	0
Future Volume (Veh/h)	0	0	0	0	0	0
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	0	0	0
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			TWLT		TWLT	
Median storage veh			2		2	
Upstream signal (m)			173			
pX, platoon unblocked						
vC, conflicting volume	0	0			0	
vC1, stage 1 conf vol	0					
vC2, stage 2 conf vol	0					
vCu, unblocked vol	0	0			0	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)	5.8					
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	1023	1084			1622	
Direction, Lane #	NB 1	NB 2	SB 1			
Volume Total	0	0	0			
Volume Left	0	0	0			
Volume Right	0	0	0			
cSH	1700	1700	1700			
Volume to Capacity	0.00	0.00	0.00			
Queue Length 95th (m)	0.0	0.0	0.0			
Control Delay (s)	0.0	0.0	0.0			
Lane LOS						
Approach Delay (s)	0.0		0.0			
Approach LOS						
Intersection Summary						
Average Delay			0.0			
Intersection Capacity Utilization			0.0%	ICU Level of Service		A
Analysis Period (min)			15			



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