

# 1900 S Chambers Road

## Traffic Impact Study



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## 1900 S CHAMBERS ROAD TRAFFIC IMPACT STUDY

### 1.0 Introduction

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The Fox Tuttle Transportation Group has prepared this traffic impact study for the development of the 1900 S Chambers Road project. The 8± acres of vacant property are located in the City of Aurora east of Chambers Road, between Mexico Avenue and Evans Avenue. It is understood that the development will construct 60 attached single-resident dwelling units of affordable housing (30% adjusted median income) as well as approximately 995 square feet of office space for non-profit mental health providers. Access to the site is planned to be located on Chambers Road at one (1) location. Adjacent land uses are comprised of residential, commercial, and a self-storage business directly north of the project site. **Figure 1** provides a vicinity map for the proposed project.

The purpose of this study is to assist in identifying potential traffic impacts within the study area as a result of this project. The traffic study addresses existing, short-term, and long-term peak hour intersection conditions in the study area with and without the project-generated traffic. The information contained in this study is anticipated to be used by the City of Aurora staff in identifying any intersection or roadway deficiencies and potential improvements for the build-out condition and long-term future scenarios. This study focused on the weekday AM and PM peak hours which represent the periods of highest trip generation for the proposed use and adjacent street traffic. The study is consistent with the requirements of the City of Aurora's Traffic Impact Study Guidelines (June 2015).

### 2.0 Project Description

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The 1900 S Chambers Road project plans to develop vacant land with 60 attached single-resident affordable housing dwelling units for residents meeting a 30% adjusted median income requirement, as well as approximately 995 square feet of office space for non-profit mental health providers. The project proposes to construct one (1) access on Chambers Road. The access is proposed to be right-in, right-out and side-street stop-controlled. For the purpose of this traffic study, it was assumed that the project will be built out and occupied by Year 2027. **Figure 2** shows the site plan and proposed access location.

## 3.0 Study Considerations

### 3.1 Data Collection

Intersection turning movement volumes were collected in February 2024 at two (2) existing intersections during the weekday AM and PM peak hours, including pedestrians and bicyclists. Daily traffic volumes were also collected on Chambers Road north of the proposed access (south of the existing self-storage access) for 24 hours.

From the collected traffic data, no bicyclists were present at either study intersection during the AM or PM peak hours. Pedestrian movement at each intersection varied between zero (0) and five (5) pedestrians crossing the street per approach. Total pedestrian crossing volume ranged from six (6) to twelve (12) per intersection during the peak hour.

Heavy vehicle percentages were collected at the study intersections by intersection approach and peak hour. Heavy vehicle percentages ranged from zero (0) percent to 2.3%. For conservative purposes, the minimum heavy vehicle percentage used in the analysis was 1% for approaches with less than 1% heavy vehicles.

The existing traffic volumes and intersection peak hours are illustrated on **Figure 3**. The existing intersection geometry and traffic control are also shown on this figure. Count data sheets are provided in the **Appendix**.

### 3.2 Evaluation Methodology

The traffic operations analysis addressed the signalized and unsignalized intersection operations using the procedures and methodologies set forth by the Highway Capacity Manual (HCM)<sup>1</sup>. Existing peak hour factors (PHF) by approach and peak hour were applied to the study intersections for the existing scenarios. For long-term future scenarios, the PHF were set to 0.92 unless the existing PHF was greater than these values, with the exception of the westbound approach of Chambers Road and Mexico Avenue in the AM peak hour. At this intersection, the existing AM PHF was maintained for all scenarios given that the AM PHF is likely heavily influenced by the school to the west. Study intersections were evaluated using Synchro software (v12).

<sup>1</sup> Highway Capacity Manual, Highway Research Board Special Report 209, Transportation Research Board, National Research Council, 7<sup>th</sup> Edition (2022).



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The PHF is a ratio which describes how evenly distributed traffic during the peak hour arrives at the intersection. A PHF near 0.25 would indicate that most of the peak hour traffic arrives at the intersection at the same time, while a PHF closer to 1.0 would indicate that the peak hour traffic's arrival at the intersection is evenly distributed over the hour.

### 3.3 Level of Service Capacity Analysis

A Level of Service analysis was conducted to determine the existing and future performance of the study area intersections and accesses to determine the most appropriate intersection traffic controls and auxiliary lanes for future conditions.

To measure and describe the operational status of the study intersections, transportation engineers and planners commonly use a system referred to as "Level of Service" (LOS) that is defined by the *HCM*. LOS characterizes the operational conditions of an intersection's traffic flow, ranging from LOS A (indicating free flow operations) and LOS F (indicating congested and sometimes oversaturated conditions). These grades represent the perspective of drivers and are an indication of the comfort and convenience associated with traveling through the intersections. The intersection LOS is based on delay in seconds per vehicle for the intersection as a whole and for each movement.

Typically, LOS D overall during peak hours is acceptable. Individual movements may be allowed to fall to LOS E or F at signalized intersections. Minor movements at unsignalized intersections, such as left turns onto a major arterial, may be allowed to fall below LOS D, specifically where there are low volumes and/or no viable alternative per the City of Aurora's *Traffic Impact Study Guidelines*. Criteria contained in the *HCM* was applied for these analyses in order to determine peak hour LOS for each scenario. A more detailed discussion of LOS methodology is contained in the **Appendix** for reference.

## 4.0 Existing Conditions

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### 4.1 Roadways

The study area boundaries are based on the amount of traffic to be generated by the project and potential impact to the existing roadway network. The primary public roadways that serve the project site are discussed in the following text and illustrated on **Figure 1**.

**Chambers Road** is a six-lane, north-south, arterial roadway that provides access to residential and commercial neighborhoods near the project site. The roadway extends from 56<sup>th</sup> Avenue (north)

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to Parker Road (south). Chambers Road has a posted speed limit of 40 miles per hour (mph) and serves approximately 28,900 vehicles per day (vpd) near the project site (Year 2024).

**Mexico Avenue** is a four-lane, east-west, arterial roadway that provides access to local residential and commercial neighborhoods. The roadway extends from Abilene Street (just west of I-225) (west) to Uravan Street (east). Mexico Avenue has a posted speed limit of 35 mph east of Chambers Road and 25 mph west of Chambers Road.

**Evans Avenue** is an east-west roadway that provides local access to local residential and commercial neighborhoods. The roadway extends from Elkhart Street (west) to Ivory Street (east). Evans Avenue has a posted speed limit of 25 mph.

#### 4.2 Intersections

The study area includes two (2) existing intersections that are listed below with the current traffic control and were analyzed for existing and future background year traffic operations:

1. Chambers Road at Mexico Avenue [signalized]
2. Chambers Road at Evans Avenue [signalized]

The existing lane configuration at each of the study locations is illustrated on **Figure 3**.

A crash analysis was conducted by City Staff at the study intersections and along Chambers Road within the study area. Per City staff, the intersections and Chambers Road do not have a recent crash history.

#### 4.3 Pedestrian and Bicycle

Currently, there are sidewalks on both sides of the study roadways.

There are no on-street bike facilities within the project study area. Bikes are permitted to travel within general purpose lanes of the study roadways.

#### 4.4 Transit

The City of Aurora is serviced by Regional Transportation District (RTD). Bus stops for both northbound and southbound service are located at the intersections of Chambers Road and Mexico Avenue and at Chambers Road and Evans Avenue. The bus stops are serviced by Route 153 which travels north-south along Chambers Road and connects to the Aurora Metro Center Station.

#### 4.5 Year 2024 Existing Intersection Capacity Analysis

The existing volumes, lane configuration, and traffic control are illustrated on **Figure 3**. The details of LOS for each movement are provided in **Table 1** and the 95<sup>th</sup> percentile queues are provided in **Table 2** (refer to **Appendix**). The intersection Level of Service worksheets are attached in the **Appendix**. **Currently, the study intersections operate overall at LOS C or better in both peak hours.** The following study intersections have movements that operate at LOS E during one or both peak hours:

- **#1 – Chambers Road at Mexico Avenue:** This intersection currently operates overall at LOS B in the AM peak hour and LOS C in the PM peak hour.
  - Eastbound left-turn movement was estimated to operate at LOS E in the AM peak hour. The 95<sup>th</sup> percentile queue was calculated to be up to 88 feet and is contained within the existing storage.
  - Eastbound through movement was estimated to operate at LOS E in both peak hours. The 95<sup>th</sup> percentile queue was calculated to be up to 86 feet in the AM peak hour and 210 feet in the PM peak hour.
  - Eastbound right-turn movement was estimated to operate at LOS E in the AM peak hour. The 95<sup>th</sup> percentile queue was calculated to be up to 8 feet and is contained within the existing storage.
  - Westbound left-turn movement was estimated to operate at LOS E in the PM peak hour. The 95<sup>th</sup> percentile queue was calculated to be up to 183 feet and exceeds the available storage of 180 feet.
  - Southbound left-turn movement was estimated to operate at LOS B in the AM peak hour and LOS C in the PM peak hour. The 95<sup>th</sup> percentile queue was calculated to be up to 464 feet which exceeds the available storage of 130 feet.

**Recommendations:** Monitor signal timing and adjust incrementally as traffic volumes dictate. It is common for side street LOS to fall below LOS D during peak hours. Lengthen turn lane storage to accommodate queues. Consider construction of a second southbound left-turn lane as the existing PM peak hour left-turn volume exceeds the 300 vehicles per hour (vph) rule-of-thumb threshold for consideration of a dual left-turn lane.

- **#2 – Chambers Road at Evans Avenue:** This intersection currently operates overall at LOS A in both peak hours.



- Eastbound left-turn movement was estimated to operate at LOS E in both peak hours. The 95<sup>th</sup> percentile queue was calculated to be up to 74 feet in the AM peak hour and 122 feet in the PM peak hour, and is contained within the existing storage.
- Eastbound through + right-turn movement operates at LOS E in both peak hours. The 95<sup>th</sup> percentile queue was calculated to be up to 45 feet in the AM peak hour and 54 feet in the PM peak hour.
- Westbound left-turn movement was estimated to operate at LOS E in both peak hours. The 95<sup>th</sup> percentile queue was calculated to be up to 106 feet in the AM peak hour and 72 feet in the PM peak hour, and exceeds the available storage of 85 feet.
- Westbound through movement was estimated to operate at LOS E in the AM peak hour. The 95<sup>th</sup> percentile queue was calculated to be up to 32 feet.
- Westbound right-turn movement was estimated to operate at LOS E in the AM peak hour. The 95<sup>th</sup> percentile queue was calculated to be up to 30 feet and is contained within the existing storage.

**Recommendations:** Monitor signal timing and adjust incrementally as traffic volumes dictate. It is common for side street LOS to fall below LOS D during peak hours. Lengthen turn lane storage to accommodate queues.

## 5.0 Future Conditions

### 5.1 Annual Growth Factor and Future Volume Methodology

In order to forecast the future peak hour traffic volumes, background traffic growth assumptions were estimated based the Denver Regional Council of Governments (DRCOG) FOCUS model (Version 2.3.1) as well as developable land within and near the study area.

Based on DRCOG forecasts, the annual growth for Chambers Road and Mexico Avenue ranges between 0.7% annually and 1.7% annually, with an average of 0.96%. An annual growth of **1.0%** was applied to the existing intersection volumes for the future background scenarios.

Using these assumptions, the Year 2027 background traffic is summarized on **Figure 4** and the Year 2050 background traffic is summarized on **Figure 5**.

## 5.2 Year 2027 Anticipated Transportation Network

This study assumes that the short-term (Year 2027) roadway network will be the same as the existing roadway network within the study area.

## 5.3 Year 2027 Background Intersection Capacity Analysis

The study area intersections were evaluated to determine baseline operations for the Year 2027 background scenario and to identify any capacity constraints associated with background traffic (refer to **Section 5.1** for growth assumptions). It was assumed that the signal timing changes listed in **Section 5.2** will be implemented by Year 2027 background. The background volumes, lane configuration, and traffic control are illustrated on **Figure 4**.

The Level of Service criteria discussed previously was applied to the study area intersections to determine the impacts with the short-term background volumes. This analysis assumes signal timing throughout the network would be adjusted to accommodate changes in traffic volumes. The details of LOS for each movement are provided in **Table 1** and the 95<sup>th</sup> percentile queues are provided in **Table 2** (refer to **Appendix**). The intersection Level of Service worksheets are attached in the **Appendix**.

**In summary, all of the study intersections were estimated to operate similarly to the Year 2024 Existing scenario, with no changes to overall or movement LOS and minor changes to queue length.**

## 5.4 Year 2050 Anticipated Transportation Network

This study assumes that, due to high turning volumes exceeding the 300 vph rule-of-thumb threshold for consideration of a dual left-turn lane, a second southbound left-turn lane will be installed at the intersection of Chambers Road and Mexico Avenue prior to the Year 2050 Background scenario and is shown on **Figure 5**. Note that signal timing at this intersection was modified to make the southbound left-turn a protected-only phase when it operates as a dual left-turn.

It is also assumed that auxiliary turn lane storages will be increased to accommodate the calculated 95<sup>th</sup> percentile queues at both study intersections, as shown on **Table 2** and listed below:

- **#1 – Chambers Road at Mexico Avenue**

- Westbound left-turn lane: total lane length of 430 feet (310 feet of storage plus 120 feet of taper).
- Westbound right-turn lane: total lane length of 510 feet (390 feet of storage plus 120 feet of taper).

- Southbound dual left-turn lane: total combined lane length of 409 feet (265 feet of storage plus 144 feet of taper).

- **#2 – Chambers Road at Evans Avenue**

- Eastbound left-turn lane: total lane length of 255 feet (165 feet of storage plus 90 feet of taper).
- Westbound left-turn lane: total lane length of 230 feet (140 feet of storage plus 90 feet of taper).

## 5.5 Year 2050 Background Intersection Capacity Analysis

The study area intersections were evaluated to determine baseline operations for the Year 2050 background scenario and to identify any capacity constraints associated with background traffic in the long-term scenario (refer to **Section 5.1** for growth assumptions). The long-term background volumes, lane configuration, and traffic control are illustrated on **Figure 5**.

The Level of Service criteria discussed previously was applied to the study area intersections to determine the impacts with the long-term background volumes. The analysis assumed the signal timing at all signalized intersections would be adjusted to accommodate the additional lanes and change in traffic volumes. It should be noted that the peak hour factors were adjusted to 0.92 on all roadways (if the existing factor is less than 0.92) since it is assumed that the peak periods will become longer with peak hour traffic spread more evenly over the hour as traffic increases.

The details of LOS for each movement are provided in **Table 1** and the 95<sup>th</sup> percentile queues are provided in **Table 2** (refer to **Appendix**). The intersection Level of Service worksheets are attached in the **Appendix**.

**In summary, majority of the of the study intersections were estimated to operate overall at LOS C or better in both peak periods and the majority of movements were calculated to operate at LOS D or better.** The following intersections or movements were calculated to operate at LOS E in one or both peak hour in Year 2050 background as described below:

- **#1 – Chambers Road at Mexico Avenue** was estimated to operate overall at LOS C in both peak hours.
  - Eastbound through movement was estimated to operate at LOS E in the PM peak hour. The 95<sup>th</sup> percentile queue was calculated to be up to 277 feet.

- Westbound left-turn movement was estimated to operate at LOS E in both peak hours. The 95<sup>th</sup> percentile queue was calculated to be up to 305 feet in the AM peak hour and 223 feet in the PM peak hour and will be contained within the available storage.
- Westbound right-turn movement was estimated to operate at LOS E in the AM peak hour. The 95<sup>th</sup> percentile queue was calculated to be up to 384 feet and will be contained within the available storage.
- Southbound left-turn movement was estimated to operate at LOS E in both peak hours. The 95<sup>th</sup> percentile queue was calculated to be up to 122 feet in the AM peak hour and 245 feet in the PM peak hour and will be contained within the available storage.

**Recommendations:** Monitor signal timing and adjust incrementally as traffic volumes dictate. It is common for side street LOS to fall below LOS D during peak hours.

## 6.0 Future Conditions with the Development

The 1900 S Chambers Road project will be comprised of 60 units of attached affordable housing, and for the purpose of this traffic study it was assumed that the entire project will be built out and occupied by Year 2027.

While the addition of a new access on Chambers Road adds the potential for vehicle conflict points, this potential is reduced by limiting the access to right-in, right-out operations.

### 6.1 Trip Generation

A trip generation estimate was performed to determine the traffic characteristics of the proposed development. The trip rates contained in the Institute of Transportation Engineers (ITE) *Trip Generation Handbook and Manual*<sup>2</sup> were applied to estimate the traffic for the dwelling units. This study applied the trip rates for “Affordable Housing – Income Limits” [ITE #223]. Although the project is for supportive housing, the “income limit” trips rates were used per City input as the “special needs” trip rates are primarily used for “dense multi-use urban” locations. Using “income limit” rates is a conservative approach which results in higher traffic volumes associated with the project. The office space for mental

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<sup>2</sup> *Trip Generation Handbook and Manual, 11<sup>th</sup> Edition*, Institute of Transportation Engineers, 2021.

health providers did not have a strong corollary with any land uses in the *Trip Generation Handbook*. The closest ITE land use would be “Small Office Building” [ITE #712]. However, because the mental health providers utilizing this office space will only provide services to residents of the 1900 S Chambers Road project, it was determined that a typical office building land use would not have similar trip generation characteristics. The project team anticipates that three (3) full-time staff will use the office space, and therefore this study anticipates all three (3) staff will arrive to the project site in the AM peak hour and depart the project site in the PM peak hour. This assumption yields higher AM and PM peak hour trip generation than ITE #712, and is therefore conservatively high.

**The 1900 S Chambers Road project was estimated to generate approximately 301 daily trips with 33 trips in the AM peak hour and 31 trips in the PM peak hour.** Trip generation is described on **Table 3**.

## 6.2 Trip Distribution and Assignment

The estimated trip volumes were distributed onto the study area street network based on existing traffic characteristics, land uses, and traffic patterns in the area. The existing volumes were utilized to determine where vehicles are coming from and going to within the study area, plus the route to get to major highways and anticipated destinations.

The following distributions were assumed for this project and are shown on **Figure 6**:

- North Chambers Road: 44%
- South Chambers Road: 44%
- West Mexico Avenue: 5%
- East Mexico Avenue: 5%
- West Evans Avenue: 1%
- East Evans Avenue: 1%

Using the distribution assumptions, the projected site traffic was assigned to the study area roadway network for the weekday AM and PM peak hour periods. Project-generated trips are shown on **Figure 7**.

## 6.3 Year 2027 Background + Project Intersection Capacity Analysis

This section discusses impacts associated with the addition of the project trips in the short-term scenario. The site-generated volumes were added to the Year 2027 background volumes and are illustrated on **Figure 8**. This figure also illustrates the necessary traffic control and lane configurations for the proposed access.

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The study intersections are anticipated to operate similarly to the background conditions with the addition of project trips since most of the intersection and movement levels of service remain the same letter grade. The proposed access is anticipated to operate at LOS A in both peak hours with all movements operating at LOS C or better. The details of LOS for each movement are provided in **Table 1** and the 95<sup>th</sup> percentile queues are provided in **Table 2** (refer to **Appendix**). The intersection Level of Service worksheets are attached in the **Appendix**.

#### 6.4 Year 2050 Background + Project Intersection Capacity Analysis

This section discusses impacts associated with the addition of the project trips in the long-term scenario. The site-generated volumes were added to the Year 2050 background volumes and are illustrated on **Figure 9**. This figure also illustrates the necessary traffic control and lane configurations for all of the study intersections and proposed access. The recommended improvements in the Year 2050 background scenario were assumed to be implemented.

The study intersections are anticipated to operate similarly to the background conditions with the addition of project trips since most of the intersection and movement levels of service remain the same letter grade. The proposed access is anticipated to operate at LOS A in both peak hours with all movements operating at LOS C or better. The details of LOS for each movement are provided in **Table 1** and the 95<sup>th</sup> percentile queues are provided in **Table 2** (refer to **Appendix**). The intersection Level of Service worksheets are attached in the **Appendix**.

## 7.0 Queuing Analysis

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A queuing analysis was performed to determine if the 95<sup>th</sup> percentile queues would be accommodated by the existing storage length, to determine the storage lengths for future auxiliary lanes, and if any of the queues would impact an upstream intersection/access. **Table 2** provides the existing and proposed storage lengths, as well as the 95<sup>th</sup> percentile queues for each existing and future scenario as calculated by Synchro (assuming each vehicle utilizes 25 feet of space). It should be noted that the 95<sup>th</sup> percentile queue length is a theoretical queue that is 1.65 standard deviations above the average queue length. In theory, the 95<sup>th</sup> percentile queue would be exceeded 5% of the time based on the average queue length, but it is also possible that a queue this long may not occur.

As shown in **Table 2**, majority of the queues are shorter than the provided storage length in all scenarios. The project trips have minimal impact on queues at the existing study intersections.



Recommended turn lanes storage lengths and taper lengths are also listed in **Table 2**, which are based on the volume thresholds set forth in the CDOT State Highway Access Code for the assumed posted speed of each study roadway. For the purposes of this study, the study area roadways were considered classified as NR-B (non-rural arterial roadway).

## 8.0 Conclusions

The 1900 S Chambers Road project plans to develop vacant land with 60 attached affordable housing dwelling units for residents meeting a 30% adjusted median income requirement, as well as approximately 995 square feet of office space for non-profit mental health providers. The project proposes to construct one (1) access on Chambers Road. The access is proposed to be right-in, right-out and side-street stop-controlled. For the purpose of this traffic study, it was assumed that the project will be built out and occupied by Year 2027.

The project is estimated to generate approximately 301 daily trips with up to 33 trips occurring in the AM peak hour and up to 31 trips occurring in the PM peak hour. **It was determined that the proposed roadway system can adequately accommodate the projected traffic volumes.** The recommendations listed on the following pages should be considered.

### Existing/Background Conditions (Non-Project Related):

- **Chambers Road at Mexico Avenue**
  - Lengthen turn lane storage to accommodate queues. Construct second southbound left-turn lane. *[Year 2024 Existing]*
  - Monitor signal timing and adjust incrementally as traffic volumes dictate. *[All scenarios]*
- **Chambers Road at Evans Avenue**
  - Lengthen turn lane storage to accommodate queues. *[Year 2024 Existing]*
  - Monitor signal timing and adjust incrementally as traffic volumes dictate. *[All scenarios]*

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**Project Conditions:**

- **Chambers Road at Mexico Avenue** – Monitor signal timing and adjust incrementally as traffic volumes dictate. *[All scenarios]*
- **Chambers Road at Evans Avenue** –Monitor signal timing and adjust incrementally as traffic volumes dictate. *[All scenarios]*

The proposed lengths of auxiliary lanes are listed in **Table 2**. Note that the traffic study provides technical information and evaluates the need for transportation mitigation as traffic grows, but it does not address infrastructure commitments or obligations of the 1900 S Chambers Road project.

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# ***Tables and Figures:***

*Table 1 – Peak Hour Intersection Level of Service Summary*

*Table 2 – Peak Hour Estimated Queues and Proposed Auxiliary Lanes*

*Table 3 – Trip Generation Summary*

*Figure 1 – Vicinity Map*

*Figure 2 – Conceptual Site Plan*

*Figure 3 – Year 2024 Existing Traffic Volumes*

*Figure 4 – Year 2027 Background Traffic Volumes*

*Figure 5 – Year 2050 Background Traffic Volumes*

*Figure 6 – Trip Distribution*

*Figure 7 – Site-Generated Traffic Volumes*

*Figure 8 – Year 2027 Background + Project Traffic Volumes*

*Figure 9 – Year 2050 Background + Project Traffic Volumes*

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Table 1 - Peak Hour Intersection Level of Service Summary

Intersections and Lane Groups	Year 2024 Existing				Year 2027 Background				Year 2027 with Project				Year 2050 Background				Year 2050 with Project			
	AM Peak		PM Peak		AM Peak		PM Peak		AM Peak		PM Peak		AM Peak		PM Peak		AM Peak		PM Peak	
	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
<b>SIGNAL CONTROL</b>																				
<b>1. Chambers Road at Mexico Avenue</b>	<b>19</b>	<b>B</b>	<b>21</b>	<b>C</b>	<b>19</b>	<b>B</b>	<b>22</b>	<b>C</b>	<b>19</b>	<b>B</b>	<b>21</b>	<b>C</b>	<b>25</b>	<b>C</b>	<b>30</b>	<b>C</b>	<b>25</b>	<b>C</b>	<b>31</b>	<b>C</b>
Eastbound Left	64	E	53	D	64	E	53	D	64	E	53	D	57	E	53	D	57	E	53	D
Eastbound Through	60	E	65	E	59	E	66	E	59	E	66	E	53	D	63	E	53	D	66	E
Eastbound Right	64	E	52	D	63	E	51	D	63	E	51	D	55	E	51	D	55	E	51	D
Westbound Left	48	D	66	E	47	D	70	E	53	D	56	E	70	E	63	E	70	E	58	E
Westbound Through	40	D	39	D	39	D	39	D	40	D	37	D	39	D	36	D	39	D	36	D
Westbound Right	52	D	46	D	52	D	46	D	55	D	44	D	70	E	46	D	70	E	45	D
Northbound Left	11	B	14	B	12	B	15	B	11	B	17	B	13	B	23	C	14	B	25	C
Northbound Through	1	A	1	A	1	A	1	A	1	A	2	A	3	A	8	A	3	A	9	A
Northbound Through + Right	2	A	2	A	3	A	2	A	3	A	3	A	5	A	11	B	5	A	13	B
Southbound Left	12	B	22	C	13	B	27	C	12	B	17	B	77	E	74	E	76	E	74	E
Southbound Through	15	B	18	B	16	B	19	B	15	B	20	C	18	B	26	C	18	B	27	C
Southbound Through + Right	16	B	19	B	16	B	20	B	16	B	21	C	18	B	29	C	18	B	30	C
<b>2. Chambers Road at Evans Avenue</b>	<b>9</b>	<b>A</b>	<b>9</b>	<b>A</b>	<b>10</b>	<b>A</b>	<b>9</b>	<b>A</b>	<b>10</b>	<b>A</b>	<b>10</b>	<b>B</b>	<b>10</b>	<b>B</b>	<b>10</b>	<b>B</b>	<b>10</b>	<b>B</b>	<b>10</b>	<b>B</b>
Eastbound Left	59	E	58	E	59	E	58	E	59	E	58	E	57	E	58	E	57	E	58	E
Eastbound Through+Right	59	E	57	E	58	E	57	E	58	E	57	E	57	E	57	E	57	E	57	E
Westbound Left	66	E	65	E	66	E	65	E	66	E	65	E	66	E	65	E	66	E	65	E
Westbound Through	56	E	51	D	56	E	51	D	56	E	51	D	54	D	51	D	54	D	51	D
Westbound Right	59	E	52	D	59	E	52	D	59	E	52	D	57	E	52	D	57	E	52	D
Northbound Left	4	A	5	A	4	A	5	A	4	A	5	A	4	A	7	A	4	A	7	A
Northbound Through	7	A	8	A	7	A	9	A	7	A	9	A	9	A	10	A	9	A	10	A
Northbound Through + Right	7	A	9	A	8	A	6	A	8	A	9	A	10	A	10	B	10	A	10	B
Southbound Left	5	A	5	A	5	A	6	A	5	A	6	A	7	A	7	A	7	A	7	A
Southbound Through	0	A	0	A	0	A	1	A	0	A	2	A	0	A	3	A	0	A	3	A
Southbound Through + Right	1	A	1	A	1	A	2	A	1	A	3	A	1	A	4	A	1	A	4	A
<b>STOP SIGN CONTROL</b>																				
<b>101. Chambers Road at Access</b>									<b>0</b>	<b>A</b>	<b>0</b>	<b>A</b>					<b>0</b>	<b>A</b>	<b>0</b>	<b>A</b>
Westbound Right	Project Access				Project Access				22	C	17	C	Project Access				28	D	22	C
Northbound Through									0	A	0	A					0	A	0	A
Northbound Through + Right									0	A	0	A					0	A	0	A
Southbound Through									0	A	0	A					0	A	0	A

The stop control is the LOS for the intersection.

Table 2 - Peak Hour Estimated Queues and Proposed Auxiliary Lanes

Intersections and Lane Groups	2024 Existing		2027 Background		2027 with Project		2050 Background		2050 with Project		Max. Queue	Existing Storage	Future Auxiliary Lanes		
	95th% Queue		95th% Queue		95th% Queue		95th% Queue		95th% Queue				Storage + Decel. (ft)	Taper (ft) (12 ft lanes)	Total Length (ft)
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM					
1. Chambers Road at Mexico Avenue	Signal		Signal		Signal		Signal		Signal						
Eastbound Left	88'	66'	90'	67'	90'	67'	95'	85'	95'	85'	95'	115'	115'	120'	235'
Eastbound Through	86'	210'	88'	215'	88'	215'	98'	277'	98'	277'	277'	-			
Eastbound Right	8'	0'	10'	0'	11'	0'	15'	0'	15'	0'	15'	115'	115'	120'	235'
Westbound Left	230'	183'	234'	186'	257'	183'	305'	223'	307'	220'	307'	180'	310'	120'	430'
Westbound Through	111'	95'	114'	95'	125'	93'	141'	111'	141'	110'	141'	-			
Westbound Right	218'	103'	228'	112'	250'	60'	384'	105'	378'	110'	384'	180'	390'	120'	510'
Northbound Left	19'	30'	19'	25'	22'	29'	21'	54'	26'	63'	63'	170'	170'	144'	314'
Northbound Through	546'	362'	575'	209'	527'	500'	704'	706'	710'	685'	710'	-			
Northbound Through + Right	546'	362'	575'	209'	527'	500'	704'	706'	710'	685'	710'	-			
Southbound Left	130'	464'	142'	511'	130'	355'	122'	245'	121'	264'	511'	130'	265'	144'	409'
Southbound Through	220'	464'	230'	490'	205'	496'	274'	805'	275'	758'	805'	-			
Southbound Through + Right	220'	464'	230'	490'	205'	496'	274'	805'	275'	758'	805'	-			
2. Chambers Road at Evans Avenue	Signal		Signal		Signal		Signal		Signal						
Eastbound Left	74'	122'	75'	126'	75'	126'	87'	163'	87'	163'	163'	70'	165'	90'	255'
Eastbound Through+Right	45'	54'	46'	57'	46'	54'	50'	95'	50'	95'	95'	-			
Westbound Left	106'	72'	110'	72'	110'	72'	137'	93'	137'	93'	137'	85'	140'	90'	230'
Westbound Through	32'	23'	31'	23'	31'	23'	35'	26'	35'	26'	35'	-			
Westbound Right	30'	6'	31'	7'	31'	7'	47'	18'	47'	18'	47'	85'	85'	90'	175'
Northbound Left	15'	25'	15'	26'	15'	26'	20'	77'	20'	77'	77'	125'	125'	144'	269'
Northbound Through	246'	224'	259'	236'	262'	241'	368'	329'	372'	336'	372'	-			
Northbound Through + Right	246'	224'	259'	236'	262'	241'	368'	329'	372'	336'	372'	-			
Southbound Left	17'	24'	18'	42'	13'	50'	19'	44'	26'	51'	51'	125'	125'	144'	269'
Southbound Through	247'	356'	268'	451'	175'	463'	298'	672'	300'	659'	672'	-			
Southbound Through + Right	247'	356'	268'	451'	175'	463'	298'	672'	300'	659'	672'	-			
101. Chambers Road at Access	Project Intersection		Project Intersection		Stop-Controlled		Project Intersection		Stop-Controlled						
Westbound Right					8'	5'			10'	5'	10'	-			
Northbound Through					0'	0'			0'	0'	0'	-			
Northbound Through + Right					0'	0'			0'	0'	0'	-			
Southbound Through					0'	0'			0'	0'	0'	-			



Table 3 - Trip Generation

Land Use	Size	Unit	Weekday											
			Average Daily				AM Peak Hour				PM Peak Hour			
			Rate	Total	In	Out	Rate	Total	In	Out	Rate	Total	In	Out
ITE 223: Affordable Housing - Income Limits	60	Dwelling Units	4.81	289	145	144	0.50	30	9	21	0.46	28	17	11
Specialty Office	3	Employees	-	12	6	6	-	3	3	0	-	3	0	3
Total				301	151	150		33	12	21		31	17	14

Sources : ITE Trip Generation 11th Edition, 2021 and project team.



Area Map



Location within Aurora

PROJECT SITE



TRANSPORTATION GROUP



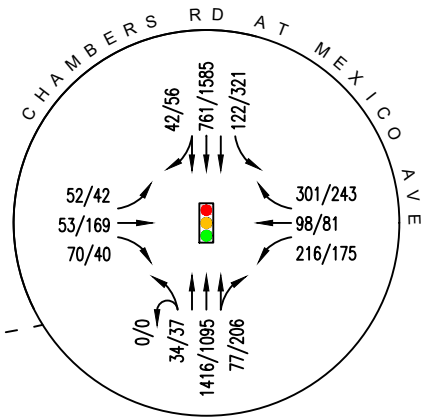
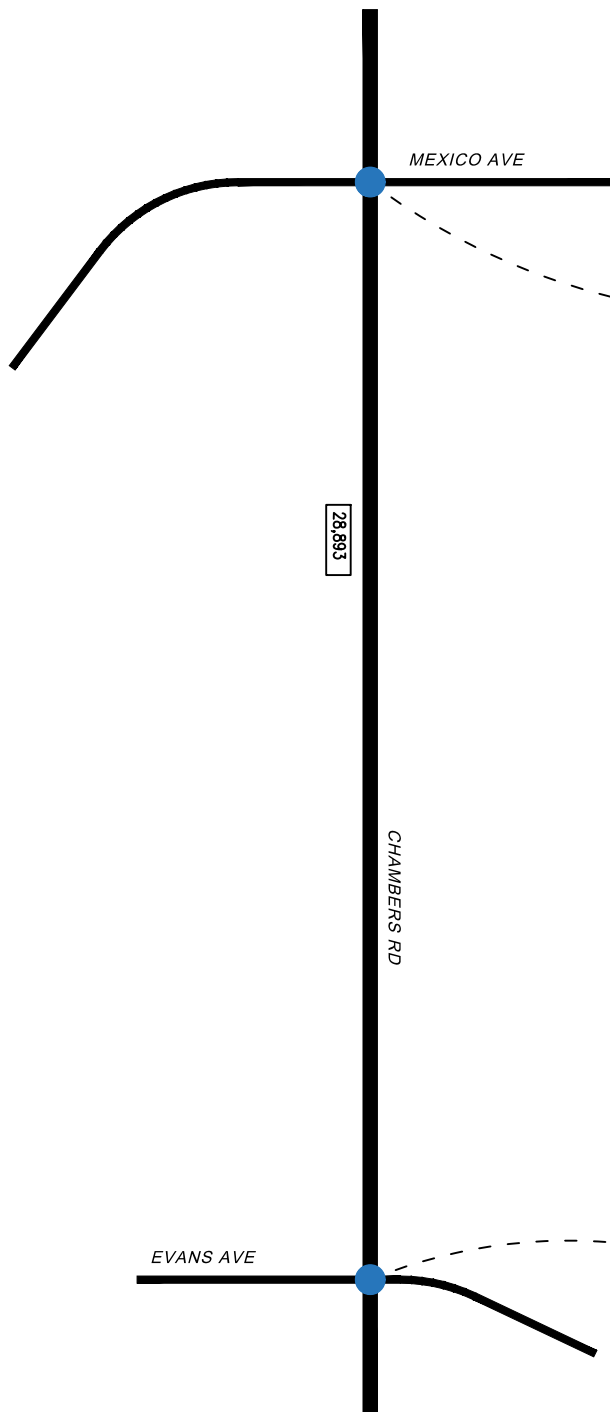
1900 S CHAMBERS RD TRAFFIC IMPACT STUDY  
VICINITY MAP

Project #	24007	Original Scale	NTS	Date	5/3/2024	Drawn by	CAF	Figure #	1
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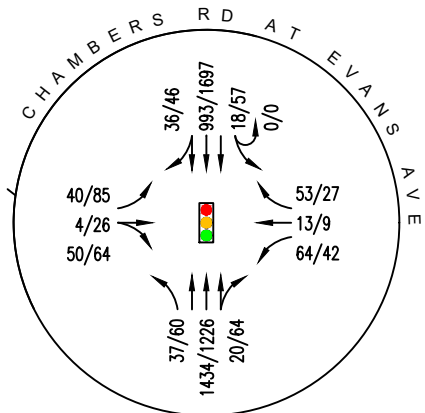


**Proposed Access  
Right-In, Right-Out  
Side-Street Stop Controlled**



AM PEAK HOUR: 7:15 AM - 8:15 AM

PM PEAK HOUR: 4:15 PM - 5:15 PM



AM PEAK HOUR: 7:15 AM - 8:15 AM

PM PEAK HOUR: 4:00 PM - 5:00 PM

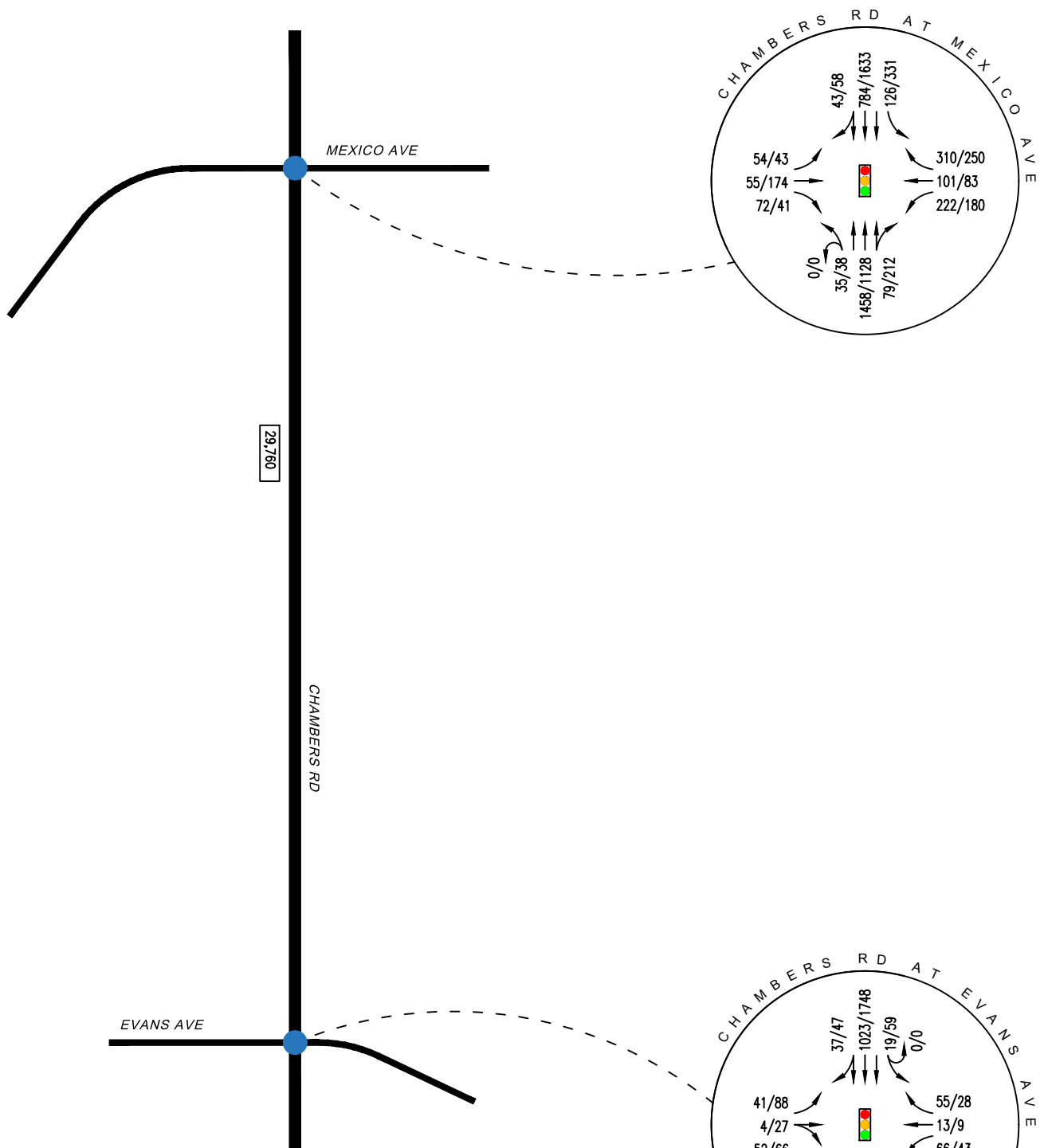
## KEY

XX/XX AM/PM PEAK HOUR TRAFFIC VOLUME

→ EXISTING LANE CONFIGURATION

→ PROPOSED FUTURE LANE

X,XXX WEEKDAY DAILY TRAFFIC VOLUME



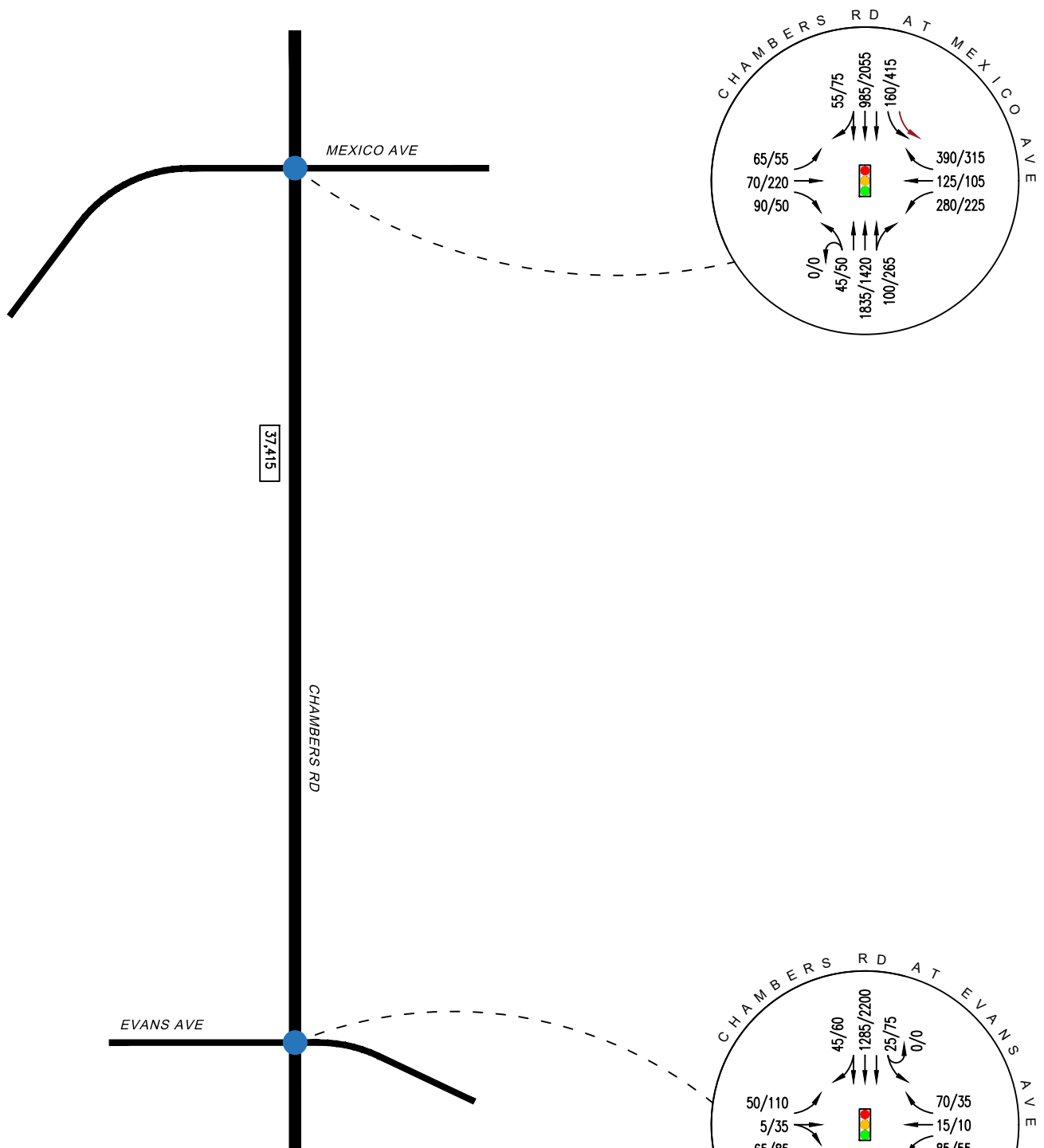
# KEY

- XX/XX AM/PM PEAK HOUR TRAFFIC VOLUME
- EXISTING LANE CONFIGURATION
- PROPOSED FUTURE LANE
- X,XXX WEEKDAY DAILY TRAFFIC VOLUME



## 1900 S CHAMBERS RD TRAFFIC IMPACT STUDY YEAR 2027 BACKGROUND TRAFFIC VOLUMES

Project #	24007	Original Scale	NTS	Date	5/3/2024	Drawn by	CAF	Figure #	4
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# KEY

- XX/XX AM/PM PEAK HOUR TRAFFIC VOLUME
- EXISTING LANE CONFIGURATION
- PROPOSED FUTURE LANE
- X,XXX WEEKDAY DAILY TRAFFIC VOLUME



## 1900 S CHAMBERS RD TRAFFIC IMPACT STUDY YEAR 2050 BACKGROUND TRAFFIC VOLUMES

Project #	24007	Original Scale	NTS	Date	5/3/2024	Drawn by	CAF	Figure #	5
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**44%**

To/From North  
Via Chambers Rd

**5%**

To/From West  
Via Mexico Ave

**5%**

To/From East  
Via Mexico Ave

MEXICO AVE

PROJECT  
SITE

ACCESS

CHAMBERS RD

EVANS AVE

**1%**

To/From West  
Via Evans Ave

**1%**

To/From East  
Via Evans Ave

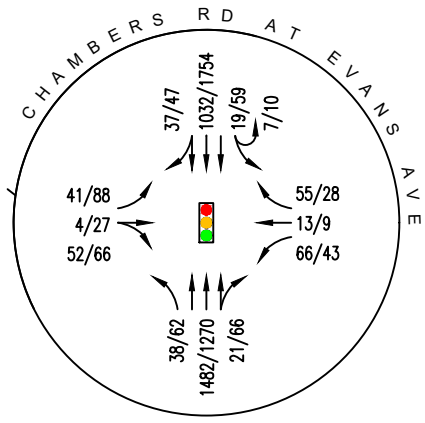
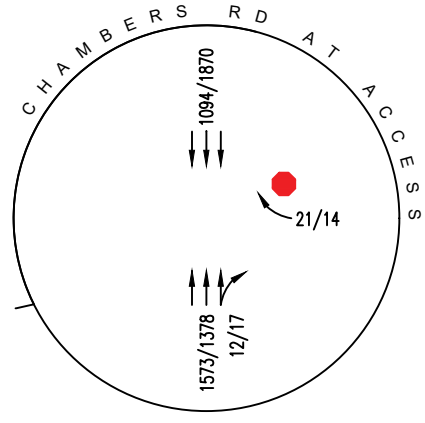
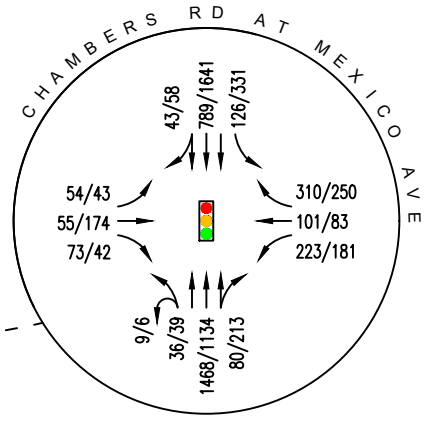
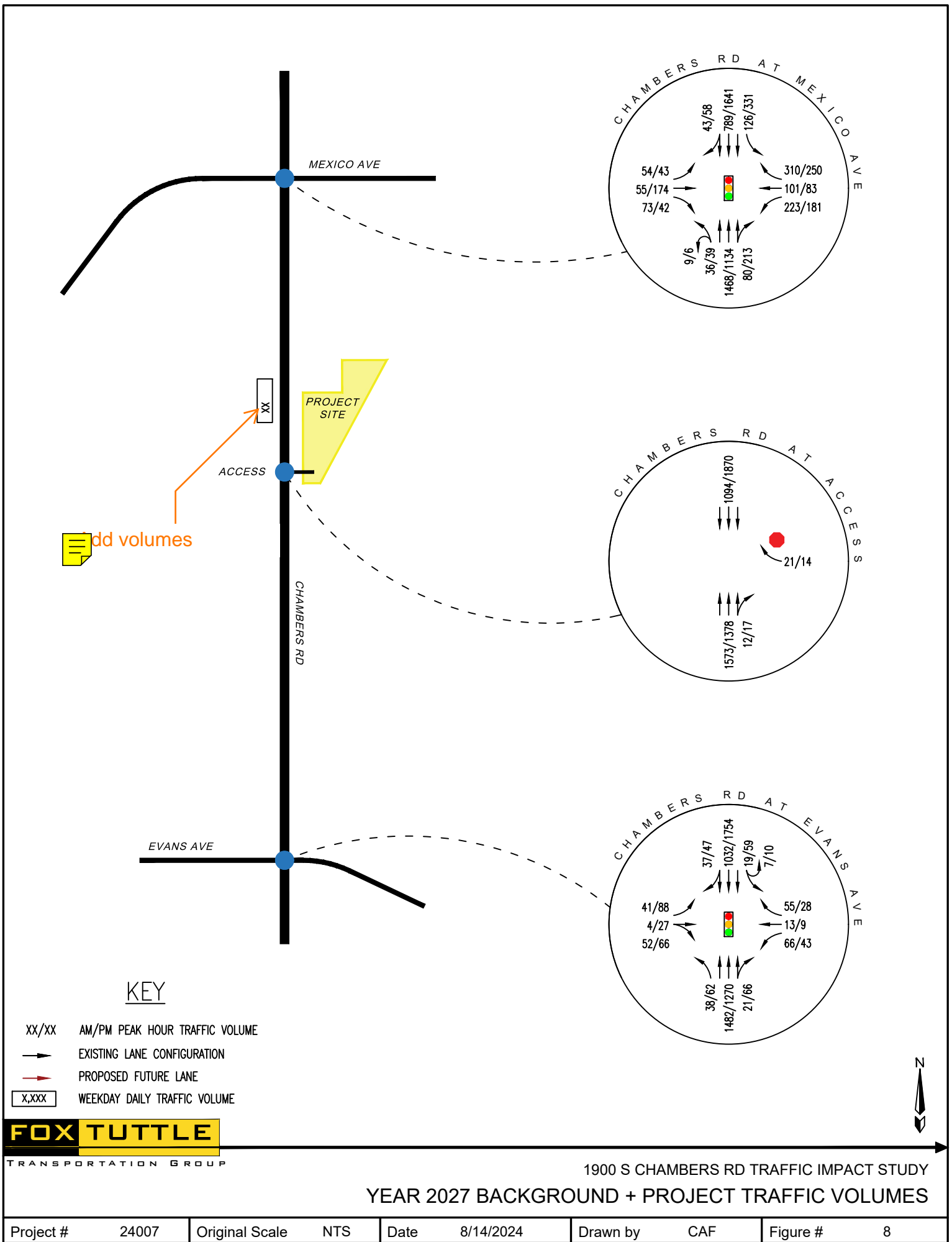
**44%**

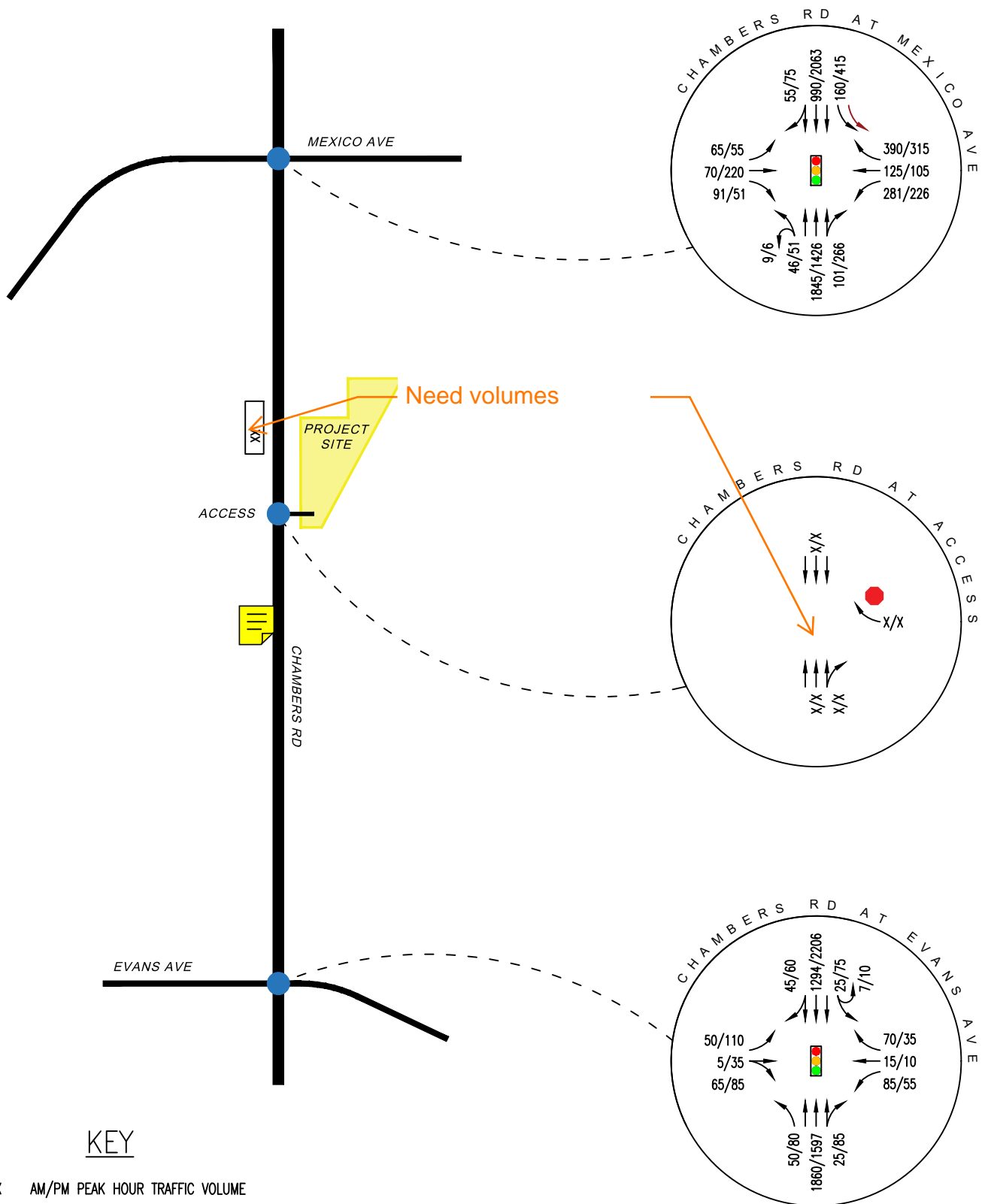
To/From South  
Via Chambers Rd











# KEY

- XX/XX AM/PM PEAK HOUR TRAFFIC VOLUME
- EXISTING LANE CONFIGURATION
- PROPOSED FUTURE LANE
- X,XXX WEEKDAY DAILY TRAFFIC VOLUME



## 1900 S CHAMBERS RD TRAFFIC IMPACT STUDY YEAR 2050 BACKGROUND + PROJECT TRAFFIC VOLUMES

Project #	24007	Original Scale	NTS	Date	8/14/2024	Drawn by	CAF	Figure #	9
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# ***Appendix:***

*Level of Service Definitions*

*Existing Traffic Data*

*Intersection Capacity Worksheets*



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## ***Level of Service Definitions***

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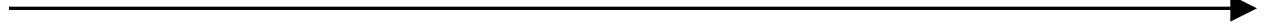
## LEVEL OF SERVICE DEFINITIONS

In rating roadway and intersection operating conditions with existing or future traffic volumes, “Levels of Service” (LOS) A through F are used, with LOS A indicating very good operation and LOS F indicating poor operation. Levels of service at signalized and unsignalized intersections are closely associated with vehicle delays experienced in seconds per vehicle. More complete level of service definitions and delay data for signal and stop sign controlled intersections are contained in the following table for reference.

Level of Service Rating	Delay in seconds per vehicle (a)		Definition
	Signalized	Unsignalized	
A	0.0 to 10.0	0.0 to 10.0	Low vehicular traffic volumes; primarily free flow operations. Density is low and vehicles can freely maneuver within the traffic stream. Drivers are able to maintain their desired speeds with little or no delay.
B	10.1 to 20.0	10.1 to 15.0	Stable vehicular traffic volume flow with potential for some restriction of operating speeds due to traffic conditions. Vehicle maneuvering is only slightly restricted. The stopped delays are not bothersome and drivers are not subject to appreciable tension.
C	20.1 to 35.0	15.1 to 25.0	Stable traffic operations, however the ability for vehicles to maneuver is more restricted by the increase in traffic volumes. Relatively satisfactory operating speeds prevail, but adverse signal coordination or longer vehicle queues cause delays along the corridor.
D	35.1 to 55.0	25.1 to 35.0	Approaching unstable vehicular traffic flow where small increases in volume could cause substantial delays. Most drivers are restricted in ability to maneuver and selection of travel speeds due to congestion. Driver comfort and convenience are low, but tolerable.
E	55.1 to 80.0	35.1 to 50.0	Traffic operations characterized by significant approach delays and average travel speeds of one-half to one-third the free flow speed. Vehicular flow is unstable and there is potential for stoppages of brief duration. High signal density, extensive vehicle queuing, or corridor signal progression/timing are the typical causes of vehicle delays at signalized corridors.
F	> 80.0	> 50.0	Forced vehicular traffic flow and operations with high approach delays at critical intersections. Vehicle speeds are reduced substantially, and stoppages may occur for short or long periods of time because of downstream congestion.

(a) Delay ranges based on Highway Capacity Manual (6<sup>th</sup> Edition, 2016) criteria.





## ***Existing Traffic Data***



## Vehicle Classification Report Summary

**Location:** Chambers Rd S/O Cube Smart Self Storage

**Count Direction:** Northbound / Southbound

**Date Range:** 2/14/2024 to 2/14/2024

**Site Code:** 01

Direction	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
Northbound	19	12,150	1,787	68	148	49	0	98	18	23	3	0	82	14,445
	0.1%	84.1%	12.4%	0.5%	1.0%	0.3%	0.0%	0.7%	0.1%	0.2%	0.0%	0.0%	0.6%	
Southbound	12	11,413	2,412	61	297	32	0	130	21	17	3	0	50	14,448
	0.1%	79.0%	16.7%	0.4%	2.1%	0.2%	0.0%	0.9%	0.1%	0.1%	0.0%	0.0%	0.3%	
Total	31	23,563	4,199	129	445	81	0	228	39	40	6	0	132	28,893
	0.1%	81.6%	14.5%	0.4%	1.5%	0.3%	0.0%	0.8%	0.1%	0.1%	0.0%	0.0%	0.5%	

FHWA Vehicle Classification	
Class 1 - Motorcycles	Class 8 - Four or Fewer Axle Single-Trailer Trucks
Class 2 - Passenger Cars	Class 9 - Five-Axle Single-Trailer Trucks
Class 3 - Other Two-Axle, Four-Tire Single Unit Vehicles	Class 10 - Six or More Axle Single-Trailer Trucks
Class 4 - Buses	Class 11 - Five or fewer Axle Multi-Trailer Trucks
Class 5 - Two-Axle, Six-Tire, Single-Unit Trucks	Class 12 - Six-Axle Multi-Trailer Trucks
Class 6 - Three-Axle Single-Unit Trucks	Class 13 - Seven or More Axle Multi-Trailer Trucks
Class 7 - Four or More Axle Single-Unit Trucks	

Location: Chambers Rd S/O Cube Smart Self Storage  
Date Range: 2/14/2024 to 2/14/2024  
Site Code: 01



Wednesday, February 14, 2024  
Northbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	58	9	1	0	0	0	0	0	0	0	0	0	68
1:00 AM	0	42	3	0	1	0	0	0	0	0	0	0	0	46
2:00 AM	0	48	3	1	0	1	0	0	1	0	0	0	0	54
3:00 AM	0	42	0	0	0	0	0	0	0	0	0	0	0	42
4:00 AM	0	83	12	0	1	0	0	0	0	0	0	0	0	96
5:00 AM	1	182	22	3	5	1	0	0	1	0	0	0	0	215
6:00 AM	2	499	105	3	8	3	0	7	4	2	0	0	4	637
7:00 AM	0	1,000	140	3	10	5	0	13	1	2	1	0	15	1,190
8:00 AM	0	820	138	6	13	6	0	5	0	3	1	0	5	997
9:00 AM	1	555	95	6	8	4	0	3	1	0	0	0	4	677
10:00 AM	0	589	98	3	13	1	0	7	0	0	0	0	2	713
11:00 AM	1	603	85	4	13	3	0	5	1	2	0	0	3	720
12:00 PM	0	717	100	7	10	2	0	9	0	2	0	0	3	850
1:00 PM	2	723	105	3	7	1	0	4	1	2	0	0	3	851
2:00 PM	1	783	135	5	5	7	0	7	4	2	0	0	6	955
3:00 PM	2	862	120	3	13	2	0	13	0	2	0	0	8	1,025
4:00 PM	3	942	145	3	9	6	0	8	2	3	1	0	12	1,134
5:00 PM	0	920	127	2	9	2	0	9	1	2	0	0	9	1,081
6:00 PM	2	759	122	6	10	1	0	5	1	1	0	0	6	913
7:00 PM	2	668	99	3	5	2	0	1	0	0	0	0	1	781
8:00 PM	0	476	49	2	3	0	0	1	0	0	0	0	1	532
9:00 PM	1	370	32	1	5	0	0	1	0	0	0	0	0	410
10:00 PM	0	263	26	2	0	1	0	0	0	0	0	0	0	292
11:00 PM	1	146	17	1	0	1	0	0	0	0	0	0	0	166
Total	19	12,150	1,787	68	148	49	0	98	18	23	3	0	82	14,445
	0.1%	84.1%	12.4%	0.5%	1.0%	0.3%	0.0%	0.7%	0.1%	0.2%	0.0%	0.0%	0.6%	

Location: Chambers Rd S/O Cube Smart Self Storage  
Date Range: 2/14/2024 to 2/14/2024  
Site Code: 01



Wednesday, February 14, 2024  
Southbound

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	62	10	1	1	0	0	0	0	0	0	0	0	74
1:00 AM	0	30	3	1	1	0	0	0	0	0	0	0	0	35
2:00 AM	0	32	9	0	1	0	0	0	2	0	0	0	0	44
3:00 AM	0	30	6	0	0	0	0	0	0	0	0	0	0	36
4:00 AM	0	61	18	2	6	0	0	1	0	0	0	0	0	88
5:00 AM	0	160	45	2	9	1	0	0	1	0	0	0	0	218
6:00 AM	2	342	120	3	17	1	0	6	2	0	0	0	4	497
7:00 AM	0	627	162	5	16	4	0	8	1	0	1	0	3	827
8:00 AM	1	630	139	5	21	1	0	9	2	1	0	0	5	814
9:00 AM	0	507	136	4	27	7	0	3	0	1	1	0	1	687
10:00 AM	1	563	124	4	13	2	0	4	0	1	0	0	0	712
11:00 AM	0	610	128	5	14	0	0	5	1	0	0	0	1	764
12:00 PM	2	707	136	3	16	0	0	8	0	0	0	0	1	873
1:00 PM	0	754	144	2	17	2	0	12	2	1	0	0	2	936
2:00 PM	3	792	169	3	22	1	0	9	1	1	0	0	2	1,003
3:00 PM	0	1,012	206	3	23	5	0	17	3	3	0	0	8	1,280
4:00 PM	0	1,125	219	4	30	2	0	14	4	3	1	0	8	1,410
5:00 PM	2	968	171	2	20	1	0	14	2	6	0	0	13	1,199
6:00 PM	0	760	153	2	17	2	0	9	0	0	0	0	1	944
7:00 PM	0	607	115	3	11	0	0	6	0	0	0	0	1	743
8:00 PM	0	420	73	1	6	2	0	2	0	0	0	0	0	504
9:00 PM	0	302	60	2	6	0	0	2	0	0	0	0	0	372
10:00 PM	0	187	40	3	2	1	0	1	0	0	0	0	0	234
11:00 PM	1	125	26	1	1	0	0	0	0	0	0	0	0	154
Total	12	11,413	2,412	61	297	32	0	130	21	17	3	0	50	14,448
	0.1%	79.0%	16.7%	0.4%	2.1%	0.2%	0.0%	0.9%	0.1%	0.1%	0.0%	0.0%	0.3%	

Location: Chambers Rd S/O Cube Smart Self Storage  
Date Range: 2/14/2024 to 2/14/2024  
Site Code: 01



**Total Study Average  
Northbound**

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	58	9	1	0	0	0	0	0	0	0	0	0	68
1:00 AM	0	42	3	0	1	0	0	0	0	0	0	0	0	46
2:00 AM	0	48	3	1	0	1	0	0	1	0	0	0	0	54
3:00 AM	0	42	0	0	0	0	0	0	0	0	0	0	0	42
4:00 AM	0	83	12	0	1	0	0	0	0	0	0	0	0	96
5:00 AM	1	182	22	3	5	1	0	0	1	0	0	0	0	215
6:00 AM	2	499	105	3	8	3	0	7	4	2	0	0	4	637
7:00 AM	0	1,000	140	3	10	5	0	13	1	2	1	0	15	1,190
8:00 AM	0	820	138	6	13	6	0	5	0	3	1	0	5	997
9:00 AM	1	555	95	6	8	4	0	3	1	0	0	0	4	677
10:00 AM	0	589	98	3	13	1	0	7	0	0	0	0	2	713
11:00 AM	1	603	85	4	13	3	0	5	1	2	0	0	3	720
12:00 PM	0	717	100	7	10	2	0	9	0	2	0	0	3	850
1:00 PM	2	723	105	3	7	1	0	4	1	2	0	0	3	851
2:00 PM	1	783	135	5	5	7	0	7	4	2	0	0	6	955
3:00 PM	2	862	120	3	13	2	0	13	0	2	0	0	8	1,025
4:00 PM	3	942	145	3	9	6	0	8	2	3	1	0	12	1,134
5:00 PM	0	920	127	2	9	2	0	9	1	2	0	0	9	1,081
6:00 PM	2	759	122	6	10	1	0	5	1	1	0	0	6	913
7:00 PM	2	668	99	3	5	2	0	1	0	0	0	0	1	781
8:00 PM	0	476	49	2	3	0	0	1	0	0	0	0	1	532
9:00 PM	1	370	32	1	5	0	0	1	0	0	0	0	0	410
10:00 PM	0	263	26	2	0	1	0	0	0	0	0	0	0	292
11:00 PM	1	146	17	1	0	1	0	0	0	0	0	0	0	166
Total	19	12,150	1,787	68	148	49	0	98	18	23	3	0	82	14,445
	0.1%	84.1%	12.4%	0.5%	1.0%	0.3%	0.0%	0.7%	0.1%	0.2%	0.0%	0.0%	0.6%	

Note: Average only considered on days with 24-hours of data.

Location: Chambers Rd S/O Cube Smart Self Storage  
Date Range: 2/14/2024 to 2/14/2024  
Site Code: 01



**Total Study Average  
Southbound**

Time	FHWA Vehicle Classification													Total Volume
	1	2	3	4	5	6	7	8	9	10	11	12	13	
12:00 AM	0	62	10	1	1	0	0	0	0	0	0	0	0	74
1:00 AM	0	30	3	1	1	0	0	0	0	0	0	0	0	35
2:00 AM	0	32	9	0	1	0	0	0	2	0	0	0	0	44
3:00 AM	0	30	6	0	0	0	0	0	0	0	0	0	0	36
4:00 AM	0	61	18	2	6	0	0	1	0	0	0	0	0	88
5:00 AM	0	160	45	2	9	1	0	0	1	0	0	0	0	218
6:00 AM	2	342	120	3	17	1	0	6	2	0	0	0	4	497
7:00 AM	0	627	162	5	16	4	0	8	1	0	1	0	3	827
8:00 AM	1	630	139	5	21	1	0	9	2	1	0	0	5	814
9:00 AM	0	507	136	4	27	7	0	3	0	1	1	0	1	687
10:00 AM	1	563	124	4	13	2	0	4	0	1	0	0	0	712
11:00 AM	0	610	128	5	14	0	0	5	1	0	0	0	1	764
12:00 PM	2	707	136	3	16	0	0	8	0	0	0	0	1	873
1:00 PM	0	754	144	2	17	2	0	12	2	1	0	0	2	936
2:00 PM	3	792	169	3	22	1	0	9	1	1	0	0	2	1,003
3:00 PM	0	1,012	206	3	23	5	0	17	3	3	0	0	8	1,280
4:00 PM	0	1,125	219	4	30	2	0	14	4	3	1	0	8	1,410
5:00 PM	2	968	171	2	20	1	0	14	2	6	0	0	13	1,199
6:00 PM	0	760	153	2	17	2	0	9	0	0	0	0	1	944
7:00 PM	0	607	115	3	11	0	0	6	0	0	0	0	1	743
8:00 PM	0	420	73	1	6	2	0	2	0	0	0	0	0	504
9:00 PM	0	302	60	2	6	0	0	2	0	0	0	0	0	372
10:00 PM	0	187	40	3	2	1	0	1	0	0	0	0	0	234
11:00 PM	1	125	26	1	1	0	0	0	0	0	0	0	0	154
Total	12	11,413	2,412	61	297	32	0	130	21	17	3	0	50	14,448
	0.1%	79.0%	16.7%	0.4%	2.1%	0.2%	0.0%	0.9%	0.1%	0.1%	0.0%	0.0%	0.3%	

Note: Average only considered on days with 24-hours of data.

## Vehicle Speed Report Summary



**Location:** Chambers Rd S/O Cube Smart Self Storage

**Direction:** Northbound / Southbound

**Date Range:** 2/14/2024 to 2/14/2024

**Site Code:** 01

Direction	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
Northbound	3	5	6	37	197	766	2,610	5,072	3,851	1,342	414	101	26	9	4	2	0	14,445
	0.0%	0.0%	0.0%	0.3%	1.4%	5.3%	18.1%	35.1%	26.7%	9.3%	2.9%	0.7%	0.2%	0.1%	0.0%	0.0%	0.0%	
Southbound	0	7	1	3	16	230	1,646	5,139	4,744	1,885	532	171	45	11	10	6	2	14,448
	0.0%	0.0%	0.0%	0.0%	0.1%	1.6%	11.4%	35.6%	32.8%	13.0%	3.7%	1.2%	0.3%	0.1%	0.1%	0.0%	0.0%	
Total	3	12	7	40	213	996	4,256	10,211	8,595	3,227	946	272	71	20	14	8	2	28,893
	0.0%	0.0%	0.0%	0.1%	0.7%	3.4%	14.7%	35.3%	29.7%	11.2%	3.3%	0.9%	0.2%	0.1%	0.0%	0.0%	0.0%	

Total Study Percentile Speed Summary				Total Study Speed Statistics			
Northbound				Northbound			
50th Percentile (Median)		43.6	mph	Mean (Average) Speed		43.7	mph
85th Percentile		49.5	mph	10 mph Pace		38.6 - 48.6	mph
95th Percentile		53.8	mph	Percent in Pace		63.2	%
Southbound				Southbound			
50th Percentile (Median)		45.2	mph	Mean (Average) Speed		45.6	mph
85th Percentile		50.9	mph	10 mph Pace		39.8 - 49.8	mph
95th Percentile		55.4	mph	Percent in Pace		68.2	%

Location: Chambers Rd S/O Cube Smart Self Storage  
Date Range: 2/14/2024 to 2/14/2024  
Site Code: 01



Wednesday, February 14, 2024  
Northbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	1	0	1	1	12	26	20	5	1	1	0	0	0	0	0	68
1:00 AM	0	0	0	0	1	3	5	14	16	4	2	1	0	0	0	0	0	46
2:00 AM	0	0	0	0	1	3	5	23	9	8	3	0	1	0	1	0	0	54
3:00 AM	0	0	0	0	0	6	7	9	16	1	2	1	0	0	0	0	0	42
4:00 AM	0	0	0	0	1	3	15	38	23	8	8	0	0	0	0	0	0	96
5:00 AM	0	0	0	0	0	5	38	84	58	24	3	1	1	1	0	0	0	215
6:00 AM	0	0	0	0	1	10	57	204	228	91	38	5	3	0	0	0	0	637
7:00 AM	0	4	1	3	14	27	165	467	337	122	41	7	1	1	0	0	0	1,190
8:00 AM	0	0	0	0	1	18	109	358	327	132	38	14	0	0	0	0	0	997
9:00 AM	0	0	0	0	3	18	103	236	209	81	23	1	0	2	1	0	0	677
10:00 AM	0	0	0	0	3	11	93	272	224	77	22	9	1	1	0	0	0	713
11:00 AM	0	0	0	0	1	15	103	316	188	71	18	6	1	0	1	0	0	720
12:00 PM	0	0	0	0	3	21	146	330	244	79	20	3	2	1	0	1	0	850
1:00 PM	0	0	0	1	7	24	171	339	218	68	18	3	2	0	0	0	0	851
2:00 PM	0	0	0	0	2	46	193	332	265	83	26	5	3	0	0	0	0	955
3:00 PM	0	0	0	6	20	97	239	322	246	71	19	5	0	0	0	0	0	1,025
4:00 PM	1	1	4	9	49	144	265	338	224	67	20	12	0	0	0	0	0	1,134
5:00 PM	2	0	0	12	44	159	280	305	206	54	15	3	1	0	0	0	0	1,081
6:00 PM	0	0	0	6	31	73	215	339	179	56	10	2	2	0	0	0	0	913
7:00 PM	0	0	0	0	8	35	150	292	202	65	20	5	2	1	0	1	0	781
8:00 PM	0	0	0	0	1	15	96	158	155	69	32	4	0	2	0	0	0	532
9:00 PM	0	0	0	0	3	12	61	141	114	51	18	6	4	0	0	0	0	410
10:00 PM	0	0	0	0	2	10	55	78	95	36	10	3	2	0	1	0	0	292
11:00 PM	0	0	0	0	0	10	27	51	48	19	7	4	0	0	0	0	0	166
Total	3	5	6	37	197	766	2,610	5,072	3,851	1,342	414	101	26	9	4	2	0	14,445
	0.0%	0.0%	0.0%	0.3%	1.4%	5.3%	18.1%	35.1%	26.7%	9.3%	2.9%	0.7%	0.2%	0.1%	0.0%	0.0%	0.0%	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	43.6	mph	Mean (Average) Speed	43.7	mph
85th Percentile	49.5	mph	10 mph Pace	38.6 - 48.6	mph
95th Percentile	53.8	mph	Percent in Pace	63.2	%



Location: Chambers Rd S/O Cube Smart Self Storage  
Date Range: 2/14/2024 to 2/14/2024  
Site Code: 01



Wednesday, February 14, 2024  
Southbound

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	0	0	2	8	21	23	14	4	2	0	0	0	0	0	74
1:00 AM	0	0	0	0	0	0	2	11	13	4	3	1	1	0	0	0	0	35
2:00 AM	0	0	0	0	1	0	5	13	12	6	2	5	0	0	0	0	0	44
3:00 AM	0	0	0	1	1	0	5	13	7	3	2	1	2	1	0	0	0	36
4:00 AM	0	0	0	1	0	0	8	18	31	16	11	3	0	0	0	0	0	88
5:00 AM	0	0	0	0	0	3	21	71	63	37	18	5	0	0	0	0	0	218
6:00 AM	0	1	0	0	0	7	29	127	162	105	42	16	6	1	1	0	0	497
7:00 AM	0	2	0	1	0	5	58	261	271	157	56	13	3	0	0	0	0	827
8:00 AM	0	1	0	0	1	2	70	248	291	140	38	19	3	1	0	0	0	814
9:00 AM	0	0	0	0	0	10	60	225	257	92	30	10	2	1	0	0	0	687
10:00 AM	0	0	0	0	2	11	50	211	270	131	23	8	3	1	0	2	0	712
11:00 AM	0	0	0	0	3	9	74	257	273	112	30	2	2	0	2	0	0	764
12:00 PM	0	0	0	0	0	9	96	299	293	130	25	14	5	0	2	0	0	873
1:00 PM	0	3	0	0	1	11	85	343	317	126	34	11	2	1	1	0	1	936
2:00 PM	0	0	0	0	0	8	81	360	346	148	37	17	3	0	1	1	1	1,003
3:00 PM	0	0	0	0	1	21	178	506	405	135	28	6	0	0	0	0	0	1,280
4:00 PM	0	0	0	0	1	20	190	557	479	120	34	4	5	0	0	0	0	1,410
5:00 PM	0	0	1	0	1	25	185	536	334	91	20	4	2	0	0	0	0	1,199
6:00 PM	0	0	0	0	1	19	172	397	249	79	18	9	0	0	0	0	0	944
7:00 PM	0	0	0	0	1	38	103	264	222	82	23	7	1	1	1	0	0	743
8:00 PM	0	0	0	0	1	10	56	176	167	66	18	5	1	2	1	1	0	504
9:00 PM	0	0	0	0	0	11	49	116	122	47	20	3	1	1	1	1	0	372
10:00 PM	0	0	0	0	1	4	44	73	71	22	11	5	1	1	0	1	0	234
11:00 PM	0	0	0	0	0	5	17	36	66	22	5	1	2	0	0	0	0	154
Total	0	7	1	3	16	230	1,646	5,139	4,744	1,885	532	171	45	11	10	6	2	14,448
	0.0%	0.0%	0.0%	0.0%	0.1%	1.6%	11.4%	35.6%	32.8%	13.0%	3.7%	1.2%	0.3%	0.1%	0.1%	0.0%	0.0%	

Daily Percentile Speed Summary			Speed Statistics		
50th Percentile (Median)	45.2	mph	Mean (Average) Speed	45.6	mph
85th Percentile	50.9	mph	10 mph Pace	39.8 - 49.8	mph
95th Percentile	55.4	mph	Percent in Pace	68.24	%

Location: Chambers Rd S/O Cube Smart Self Storage  
Date Range: 2/14/2024 to 2/14/2024  
Site Code: 01



**Total Study Average  
Northbound**

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	1	0	1	1	12	26	20	5	1	1	0	0	0	0	0	68
1:00 AM	0	0	0	0	1	3	5	14	16	4	2	1	0	0	0	0	0	46
2:00 AM	0	0	0	0	1	3	5	23	9	8	3	0	1	0	1	0	0	54
3:00 AM	0	0	0	0	0	6	7	9	16	1	2	1	0	0	0	0	0	42
4:00 AM	0	0	0	0	1	3	15	38	23	8	8	0	0	0	0	0	0	96
5:00 AM	0	0	0	0	0	5	38	84	58	24	3	1	1	1	0	0	0	215
6:00 AM	0	0	0	0	1	10	57	204	228	91	38	5	3	0	0	0	0	637
7:00 AM	0	4	1	3	14	27	165	467	337	122	41	7	1	1	0	0	0	1,190
8:00 AM	0	0	0	0	1	18	109	358	327	132	38	14	0	0	0	0	0	997
9:00 AM	0	0	0	0	3	18	103	236	209	81	23	1	0	2	1	0	0	677
10:00 AM	0	0	0	0	3	11	93	272	224	77	22	9	1	1	0	0	0	713
11:00 AM	0	0	0	0	1	15	103	316	188	71	18	6	1	0	1	0	0	720
12:00 PM	0	0	0	0	3	21	146	330	244	79	20	3	2	1	0	1	0	850
1:00 PM	0	0	0	1	7	24	171	339	218	68	18	3	2	0	0	0	0	851
2:00 PM	0	0	0	0	2	46	193	332	265	83	26	5	3	0	0	0	0	955
3:00 PM	0	0	0	6	20	97	239	322	246	71	19	5	0	0	0	0	0	1,025
4:00 PM	1	1	4	9	49	144	265	338	224	67	20	12	0	0	0	0	0	1,134
5:00 PM	2	0	0	12	44	159	280	305	206	54	15	3	1	0	0	0	0	1,081
6:00 PM	0	0	0	6	31	73	215	339	179	56	10	2	2	0	0	0	0	913
7:00 PM	0	0	0	0	8	35	150	292	202	65	20	5	2	1	0	1	0	781
8:00 PM	0	0	0	0	1	15	96	158	155	69	32	4	0	2	0	0	0	532
9:00 PM	0	0	0	0	3	12	61	141	114	51	18	6	4	0	0	0	0	410
10:00 PM	0	0	0	0	2	10	55	78	95	36	10	3	2	0	1	0	0	292
11:00 PM	0	0	0	0	0	10	27	51	48	19	7	4	0	0	0	0	0	166
Total	3	5	6	37	197	766	2,610	5,072	3,851	1,342	414	101	26	9	4	2	0	14,445
	0.0%	0.0%	0.0%	0.3%	1.4%	5.3%	18.1%	35.1%	26.7%	9.3%	2.9%	0.7%	0.2%	0.1%	0.0%	0.0%	0.0%	

Note: Average only considered on days with 24-hours of data.

Total Study Percentile Speed Summary			Total Study Speed Statistics		
50th Percentile (Median)	43.6	mph	Mean (Average) Speed	43.7	mph
85th Percentile	49.5	mph	10 mph Pace	38.6 - 48.6	mph
95th Percentile	53.8	mph	Percent in Pace	63.2	%

Location: Chambers Rd S/O Cube Smart Self Storage  
Date Range: 2/14/2024 to 2/14/2024  
Site Code: 01



**Total Study Average  
Southbound**

Time	Speed Range (mph)																	Total Volume
	0 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 +	
12:00 AM	0	0	0	0	0	2	8	21	23	14	4	2	0	0	0	0	0	74
1:00 AM	0	0	0	0	0	0	2	11	13	4	3	1	1	0	0	0	0	35
2:00 AM	0	0	0	0	1	0	5	13	12	6	2	5	0	0	0	0	0	44
3:00 AM	0	0	0	1	1	0	5	13	7	3	2	1	2	1	0	0	0	36
4:00 AM	0	0	0	1	0	0	8	18	31	16	11	3	0	0	0	0	0	88
5:00 AM	0	0	0	0	0	3	21	71	63	37	18	5	0	0	0	0	0	218
6:00 AM	0	1	0	0	0	7	29	127	162	105	42	16	6	1	1	0	0	497
7:00 AM	0	2	0	1	0	5	58	261	271	157	56	13	3	0	0	0	0	827
8:00 AM	0	1	0	0	1	2	70	248	291	140	38	19	3	1	0	0	0	814
9:00 AM	0	0	0	0	0	10	60	225	257	92	30	10	2	1	0	0	0	687
10:00 AM	0	0	0	0	2	11	50	211	270	131	23	8	3	1	0	2	0	712
11:00 AM	0	0	0	0	3	9	74	257	273	112	30	2	2	0	2	0	0	764
12:00 PM	0	0	0	0	0	9	96	299	293	130	25	14	5	0	2	0	0	873
1:00 PM	0	3	0	0	1	11	85	343	317	126	34	11	2	1	1	0	1	936
2:00 PM	0	0	0	0	0	8	81	360	346	148	37	17	3	0	1	1	1	1,003
3:00 PM	0	0	0	0	1	21	178	506	405	135	28	6	0	0	0	0	0	1,280
4:00 PM	0	0	0	0	1	20	190	557	479	120	34	4	5	0	0	0	0	1,410
5:00 PM	0	0	1	0	1	25	185	536	334	91	20	4	2	0	0	0	0	1,199
6:00 PM	0	0	0	0	1	19	172	397	249	79	18	9	0	0	0	0	0	944
7:00 PM	0	0	0	0	1	38	103	264	222	82	23	7	1	1	1	0	0	743
8:00 PM	0	0	0	0	1	10	56	176	167	66	18	5	1	2	1	1	0	504
9:00 PM	0	0	0	0	0	11	49	116	122	47	20	3	1	1	1	1	0	372
10:00 PM	0	0	0	0	1	4	44	73	71	22	11	5	1	1	0	1	0	234
11:00 PM	0	0	0	0	0	5	17	36	66	22	5	1	2	0	0	0	0	154
Total	0	7	1	3	16	230	1,646	5,139	4,744	1,885	532	171	45	11	10	6	2	14,448
	0.0%	0.0%	0.0%	0.0%	0.1%	1.6%	11.4%	35.6%	32.8%	13.0%	3.7%	1.2%	0.3%	0.1%	0.1%	0.0%	0.0%	

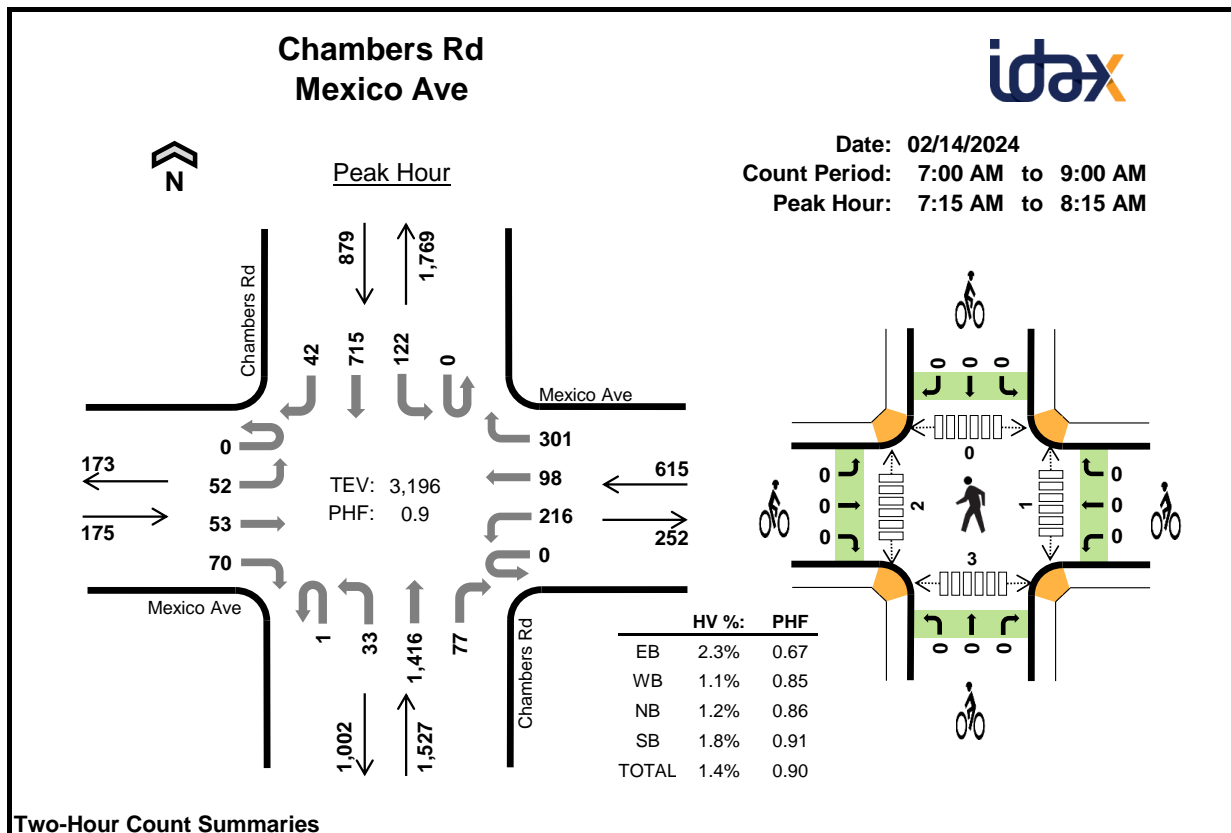
Note: Average only considered on days with 24-hours of data.

Total Study Percentile Speed Summary			Total Study Speed Statistics		
50th Percentile (Median)	45.2	mph	Mean (Average) Speed	45.6	mph
85th Percentile	50.9	mph	10 mph Pace	39.8 - 49.8	mph
95th Percentile	55.4	mph	Percent in Pace	68.2	%

Location: Chambers Rd S/O Cube Smart Self Storage  
Date Range: 2/14/2024 - 2/20/2024  
Site Code: 01

Time	Wednesday 2/14/2024			Thursday 2/15/2024			Friday 2/16/2024			Saturday 2/17/2024			Sunday 2/18/2024			Monday 2/19/2024			Tuesday 2/20/2024			Mid-Week Average		
	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total	NB	SB	Total
12:00 AM	68	74	142	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	68	74	142
1:00 AM	46	35	81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	46	35	81
2:00 AM	54	44	98	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	54	44	98
3:00 AM	42	36	78	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	42	36	78
4:00 AM	96	88	184	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	96	88	184
5:00 AM	215	218	433	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	215	218	433
6:00 AM	637	497	1,134	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	637	497	1,134
7:00 AM	1,190	827	2,017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,190	827	2,017
8:00 AM	997	814	1,811	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	997	814	1,811
9:00 AM	677	687	1,364	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	677	687	1,364
10:00 AM	713	712	1,425	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	713	712	1,425
11:00 AM	720	764	1,484	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	720	764	1,484
12:00 PM	850	873	1,723	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	850	873	1,723
1:00 PM	851	936	1,787	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	851	936	1,787
2:00 PM	955	1,003	1,958	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	955	1,003	1,958
3:00 PM	1,025	1,280	2,305	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,025	1,280	2,305
4:00 PM	1,134	1,410	2,544	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,134	1,410	2,544
5:00 PM	1,081	1,199	2,280	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,081	1,199	2,280
6:00 PM	913	944	1,857	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	913	944	1,857
7:00 PM	781	743	1,524	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	781	743	1,524
8:00 PM	532	504	1,036	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	532	504	1,036
9:00 PM	410	372	782	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	410	372	782
10:00 PM	292	234	526	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	292	234	526
11:00 PM	166	154	320	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	166	154	320
Total	14,445	14,448	28,893	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	14,445	14,448	28,893
Percent	50%	50%		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	50%	50%	
AM Peak	07:00	07:00	07:00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	07:00	07:00	07:00
Vol.	1,190	827	2,017	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,190	827	2,017
PM Peak	16:00	16:00	16:00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16:00	16:00	16:00
Vol.	1,134	1,410	2,544	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1,134	1,410	2,544

1. Mid-week average includes data between Tuesday and Thursday.

**Two-Hour Count Summaries**

Interval Start		Mexico Ave				Mexico Ave				Chambers Rd				Chambers Rd				15-min Total	Rolling One Hour
		Eastbound				Westbound				Northbound				Southbound					
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM		0	10	8	11	0	46	29	62	0	13	260	10	0	6	108	10	573	0
7:15 AM		0	12	10	14	0	63	31	87	0	10	293	16	0	19	157	9	721	0
7:30 AM		0	21	17	27	0	53	25	79	1	7	396	15	0	23	198	15	877	0
7:45 AM		0	13	17	17	0	59	22	77	0	9	414	22	0	45	186	11	892	3,063
8:00 AM		0	6	9	12	0	41	20	58	0	7	313	24	0	35	174	7	706	3,196
8:15 AM		0	6	10	11	0	55	15	73	2	9	260	15	0	40	175	4	675	3,150
8:30 AM		0	3	11	19	0	44	19	49	0	5	269	32	0	38	145	3	637	2,910
8:45 AM		0	6	9	11	0	59	14	59	1	7	199	13	0	41	157	1	577	2,595
Count Total		0	77	91	122	0	420	175	544	4	67	2,404	147	0	247	1,300	60	5,658	0
Peak Hour	All	0	52	53	70	0	216	98	301	1	33	1,416	77	0	122	715	42	3,196	0
	HV	0	2	1	1	0	2	0	5	0	2	13	3	0	4	11	1	45	0
	HV%	-	4%	2%	1%	-	1%	0%	2%	0%	6%	1%	4%	-	3%	2%	2%	1%	0

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	1	2	0	2	5	0	0	0	0	0	1	0	3	9	13
7:15 AM	2	5	2	2	11	0	0	0	0	0	1	1	0	0	2
7:30 AM	0	1	4	3	8	0	0	0	0	0	0	1	0	1	2
7:45 AM	1	0	7	8	16	0	0	0	0	0	0	0	0	2	2
8:00 AM	1	1	5	3	10	0	0	0	0	0	0	0	0	0	0
8:15 AM	1	2	6	4	13	0	0	0	0	0	0	0	2	0	2
8:30 AM	0	2	8	3	13	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	3	7	11	21	0	0	0	0	0	0	1	1	1	3
Count Total	6	16	39	36	97	0	0	0	0	0	2	3	6	13	24
Peak Hour	4	7	18	16	45	0	0	0	0	0	1	2	0	3	6

Two-Hour Count Summaries - Heavy Vehicles																		
Interval Start	Mexico Ave				Mexico Ave				Chambers Rd				Chambers Rd				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	1	0	0	0	0	1	1	0	0	0	0	0	0	1	1	5	0
7:15 AM	0	1	1	0	0	1	0	4	0	1	0	1	0	0	2	0	11	0
7:30 AM	0	0	0	0	0	1	0	0	0	0	3	1	0	1	1	1	8	0
7:45 AM	0	0	0	1	0	0	0	0	0	1	6	0	0	3	5	0	16	40
8:00 AM	0	1	0	0	0	0	0	1	0	0	4	1	0	0	3	0	10	45
8:15 AM	0	0	1	0	0	0	1	1	0	0	6	0	0	1	3	0	13	47
8:30 AM	0	0	0	0	0	1	0	1	0	0	6	2	0	1	2	0	13	52
8:45 AM	0	0	0	0	0	2	0	1	0	0	6	1	0	5	6	0	21	57
Count Total	0	3	2	1	0	5	2	9	0	2	31	6	0	11	23	2	97	0
Peak Hour	0	2	1	1	0	2	0	5	0	2	13	3	0	4	11	1	45	0

Two-Hour Count Summaries - Bikes																	
Interval Start	Mexico Ave			Mexico Ave			Chambers Rd			Chambers Rd			15-min Total	Rolling One Hour			
	Eastbound			Westbound			Northbound			Southbound							
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT					
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Peak Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0			

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

# Chambers Rd Mexico Ave

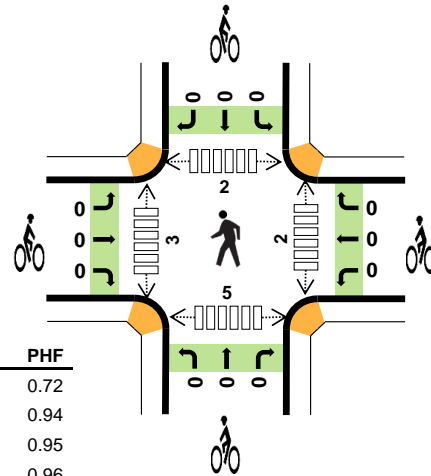
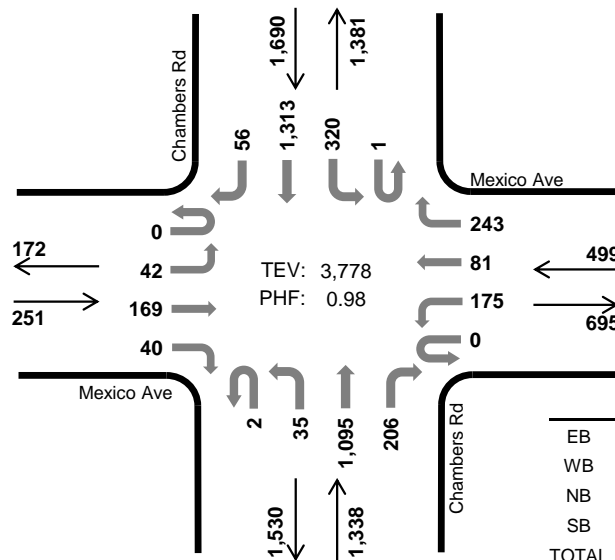


Peak Hour

Date: 02/14/2024

Count Period: 3:00 PM to 6:00 PM

Peak Hour: 4:15 PM to 5:15 PM



	HV %:	PHF
EB	1.2%	0.72
WB	0.6%	0.94
NB	1.5%	0.95
SB	0.5%	0.96
TOTAL	0.9%	0.98

## Three-Hour Count Summaries

Interval Start		Mexico Ave				Mexico Ave				Chambers Rd				Chambers Rd				15-min Total	Rolling One Hour
		Eastbound				Westbound				Northbound				Southbound					
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:15 PM		0	13	29	11	0	45	16	58	1	10	266	56	0	85	337	12	939	0
4:30 PM		0	11	41	7	0	49	24	60	0	7	288	47	0	81	316	10	941	0
4:45 PM		0	6	38	8	0	42	20	60	1	10	291	51	0	71	350	19	967	0
5:00 PM		0	12	61	14	0	39	21	65	0	8	250	52	1	83	310	15	931	3,778
Peak Hour	All	0	42	169	40	0	175	81	243	2	35	1,095	206	1	320	1,313	56	3,778	0
	HV	0	2	1	0	0	0	1	2	0	0	18	2	0	3	5	1	35	0
	HV%	-	5%	1%	0%	-	0%	1%	1%	0%	0%	2%	1%	0%	1%	0%	2%	1%	0

Note: For all three-hour count summary, see next page.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:15 PM	2	0	7	3	12	0	0	0	0	0	1	0	2	2	5
4:30 PM	1	1	4	4	10	0	0	0	0	0	0	2	0	1	3
4:45 PM	0	1	7	2	10	0	0	0	0	0	0	1	0	1	2
5:00 PM	0	1	2	0	3	0	0	0	0	0	1	0	0	1	2
Peak Hour	3	3	20	9	35	0	0	0	0	0	2	3	2	5	12

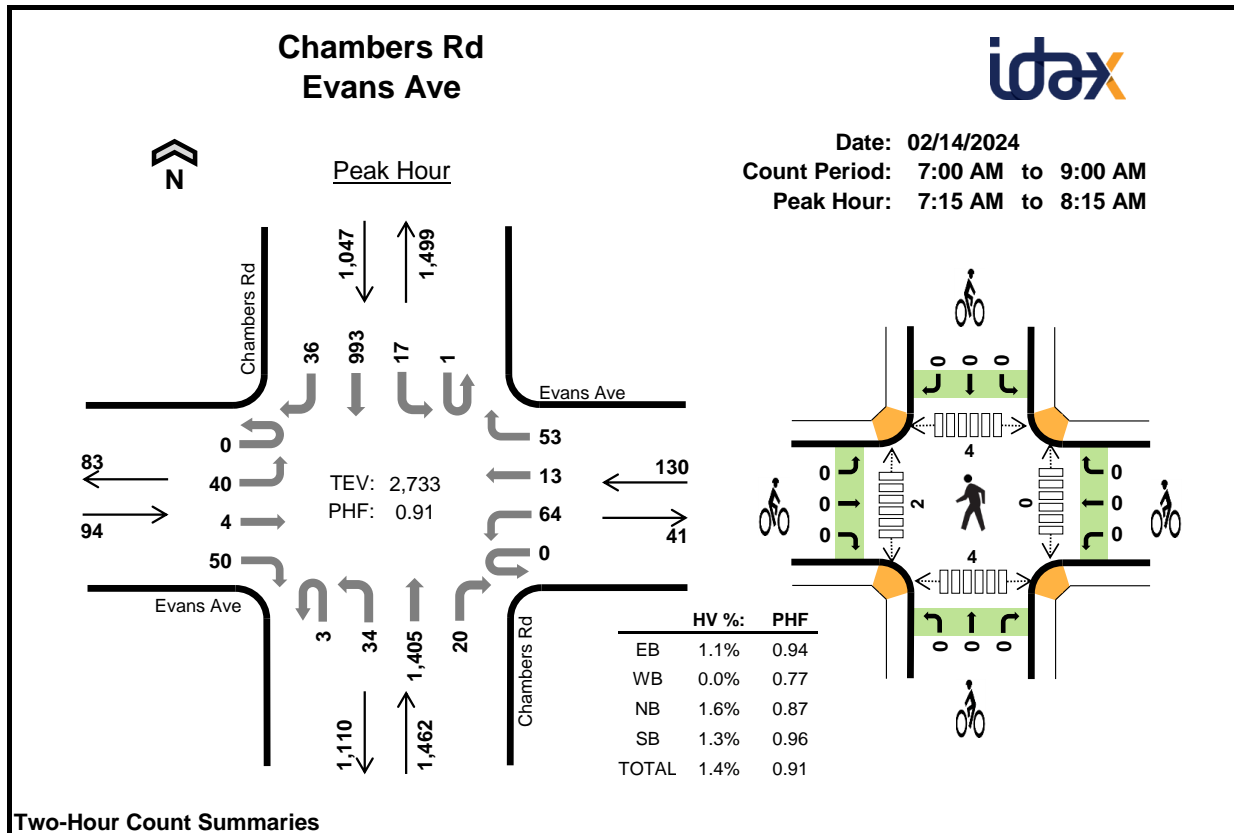
Three-Hour Count Summaries																			
Interval Start		Mexico Ave				Mexico Ave				Chambers Rd				Chambers Rd				15-min Total	Rolling One Hour
		Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT			
3:00 PM	0	13	55	22	0	37	20	49	2	11	227	33	1	20	310	9	809	0	
3:15 PM	0	13	98	18	0	27	17	44	0	14	255	43	0	41	335	13	918	0	
3:30 PM	0	11	80	20	0	37	22	79	0	10	259	39	2	38	335	7	939	0	
3:45 PM	0	14	65	11	0	47	19	69	1	10	228	53	0	27	313	13	870	3,536	
4:00 PM	0	10	28	13	0	48	13	55	0	12	257	51	0	36	379	13	915	3,642	
4:15 PM	0	13	29	11	0	45	16	58	1	10	266	56	0	85	337	12	939	3,663	
4:30 PM	0	11	41	7	0	49	24	60	0	7	288	47	0	81	316	10	941	3,665	
4:45 PM	0	6	38	8	0	42	20	60	1	10	291	51	0	71	350	19	967	3,762	
5:00 PM	0	12	61	14	0	39	21	65	0	8	250	52	1	83	310	15	931	3,778	
5:15 PM	0	7	52	14	0	43	22	44	1	17	294	69	1	72	288	14	938	3,777	
5:30 PM	0	15	48	12	0	34	22	44	0	10	276	55	1	78	328	14	937	3,773	
5:45 PM	0	8	35	12	0	36	25	52	0	12	219	53	2	93	259	26	832	3,638	
Count Total		0	133	630	162	0	484	241	679	6	131	3,110	602	8	725	3,860	165	10,936	0
Peak Hour	All	0	42	169	40	0	175	81	243	2	35	1,095	206	1	320	1,313	56	3,778	0
	HV	0	2	1	0	0	0	1	2	0	0	18	2	0	3	5	1	35	0
	HV%	-	5%	1%	0%	-	0%	1%	1%	0%	0%	2%	1%	0%	1%	0%	2%	1%	0
Note: Three-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.																			
Interval Start		Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)							
		EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total			
3:00 PM		4	0	3	1	8	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM		3	0	3	7	13	0	0	0	0	0	0	0	1	1	1	1	3	
3:30 PM		0	4	10	1	15	0	0	0	0	0	0	1	1	3	2	7		
3:45 PM		0	3	4	4	11	0	0	0	0	0	0	0	0	0	0	0	0	
4:00 PM		0	1	10	4	15	0	0	0	0	0	0	0	1	1	0	0	1	
4:15 PM		2	0	7	3	12	0	0	0	0	0	0	1	0	2	2	5		
4:30 PM		1	1	4	4	10	0	0	0	0	0	0	0	2	0	1	3		
4:45 PM		0	1	7	2	10	0	0	0	0	0	0	0	1	0	1	2		
5:00 PM		0	1	2	0	3	0	0	0	0	0	0	1	0	0	1	2		
5:15 PM		0	1	4	1	6	0	0	0	0	0	0	1	0	2	2	5		
5:30 PM		0	1	2	0	3	0	0	0	0	0	0	0	2	0	0	2		
5:45 PM		0	0	3	1	4	0	0	0	0	0	0	0	0	2	0	2		
Count Total		10	13	59	28	110	0	0	0	0	0	0	4	8	10	10	32		
Peak Hour		3	3	20	9	35	0	0	0	0	0	0	2	3	2	5	12		



Three-Hour Count Summaries - Heavy Vehicles																		
Interval Start	Mexico Ave				Mexico Ave				Chambers Rd				Chambers Rd				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
3:00 PM	0	0	1	3	0	0	0	0	0	0	3	0	0	0	1	0	8	0
3:15 PM	0	1	2	0	0	0	0	0	0	0	3	0	0	1	6	0	13	0
3:30 PM	0	0	0	0	0	0	1	3	0	0	9	1	0	0	1	0	15	0
3:45 PM	0	0	0	0	0	0	0	3	0	0	4	0	0	0	4	0	11	47
4:00 PM	0	0	0	0	0	1	0	0	0	0	9	1	0	0	4	0	15	54
4:15 PM	0	2	0	0	0	0	0	0	0	0	6	1	0	1	2	0	12	53
4:30 PM	0	0	1	0	0	0	1	0	0	0	4	0	0	1	3	0	10	48
4:45 PM	0	0	0	0	0	0	0	1	0	0	6	1	0	1	0	1	10	47
5:00 PM	0	0	0	0	0	0	0	1	0	0	2	0	0	0	0	0	3	35
5:15 PM	0	0	0	0	0	0	0	1	0	0	3	1	0	0	1	0	6	29
5:30 PM	0	0	0	0	0	0	0	1	0	0	2	0	0	0	0	0	3	22
5:45 PM	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	1	4	16
Count Total	0	3	4	3	0	1	2	10	0	0	54	5	0	4	22	2	110	0
Peak Hour	0	2	1	0	0	0	1	2	0	0	18	2	0	3	5	1	35	0

Three-Hour Count Summaries - Bikes																		
Interval Start	Mexico Ave			Mexico Ave			Chambers Rd			Chambers Rd			15-min Total	Rolling One Hour				
	Eastbound			Westbound			Northbound			Southbound								
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT						
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Peak Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0				

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

**Two-Hour Count Summaries**

Interval Start		Evans Ave				Evans Ave				Chambers Rd				Chambers Rd				15-min Total	Rolling One Hour
		Eastbound				Westbound				Northbound				Southbound					
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM		0	8	0	7	0	14	2	11	0	3	272	6	1	1	161	7	493	0
7:15 AM		0	11	0	13	0	13	1	13	2	10	321	4	0	2	234	7	631	0
7:30 AM		0	12	1	12	0	21	2	19	0	4	362	5	0	5	252	12	707	0
7:45 AM		0	9	1	13	0	17	6	13	1	9	402	7	1	4	259	8	750	2,581
8:00 AM		0	8	2	12	0	13	4	8	0	11	320	4	0	6	248	9	645	2,733
8:15 AM		0	9	1	5	0	7	5	9	0	11	270	12	1	9	222	6	567	2,669
8:30 AM		0	7	0	6	0	15	1	15	0	10	278	16	1	2	197	4	552	2,514
8:45 AM		0	6	2	9	0	6	0	7	0	10	202	4	0	10	230	3	489	2,253
Count Total		0	70	7	77	0	106	21	95	3	68	2,427	58	4	39	1,803	56	4,834	0
Peak Hour	All	0	40	4	50	0	64	13	53	3	34	1,405	20	1	17	993	36	2,733	0
	HV	0	0	0	1	0	0	0	0	0	0	23	1	0	0	14	0	39	0
	HV%	-	0%	0%	2%	-	0%	0%	0%	0%	0%	2%	5%	0%	0%	1%	0%	1%	0

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	0	0	2	2	4	0	1	0	0	1	1	1	0	0	2
7:15 AM	0	0	5	3	8	0	0	0	0	0	0	0	0	1	1
7:30 AM	0	0	6	2	8	0	0	0	0	0	0	0	1	0	1
7:45 AM	0	0	7	4	11	0	0	0	0	0	0	1	2	1	4
8:00 AM	1	0	6	5	12	0	0	0	0	0	0	1	1	2	4
8:15 AM	0	1	4	4	9	0	0	0	0	0	1	1	2	1	5
8:30 AM	1	0	7	3	11	0	0	0	0	0	1	1	2	0	4
8:45 AM	0	0	6	8	14	0	0	0	0	0	1	0	1	0	2
Count Total	2	1	43	31	77	0	1	0	0	1	4	5	9	5	23
Peak Hour	1	0	24	14	39	0	0	0	0	0	0	2	4	4	10

Two-Hour Count Summaries - Heavy Vehicles																		
Interval Start	Evans Ave				Evans Ave				Chambers Rd				Chambers Rd				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	4	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	5	0	0	0	3	0	8	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	6	0	0	0	2	0	8	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	6	1	0	0	4	0	11	31
8:00 AM	0	0	0	1	0	0	0	0	0	0	6	0	0	0	5	0	12	39
8:15 AM	0	0	0	0	0	0	0	1	0	0	4	0	0	0	4	0	9	40
8:30 AM	0	1	0	0	0	0	0	0	0	0	7	0	0	0	3	0	11	43
8:45 AM	0	0	0	0	0	0	0	0	0	0	6	0	0	0	8	0	14	46
Count Total	0	1	0	1	0	0	0	1	0	0	42	1	0	0	31	0	77	0
Peak Hour	0	0	0	1	0	0	0	0	0	0	23	1	0	0	14	0	39	0

Two-Hour Count Summaries - Bikes																		
Interval Start	Evans Ave			Evans Ave			Chambers Rd			Chambers Rd			15-min Total	Rolling One Hour				
	Eastbound			Westbound			Northbound			Southbound								
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT						
7:00 AM	0	0	0	0	1	0	0	0	0	0	0	0	1	0				
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1				
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Count Total	0	0	0	0	1	0	0	0	0	0	0	0	1	0				
Peak Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0				

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

# Chambers Rd Evans Ave

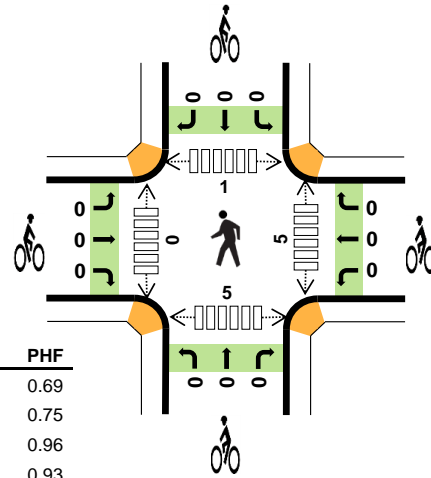
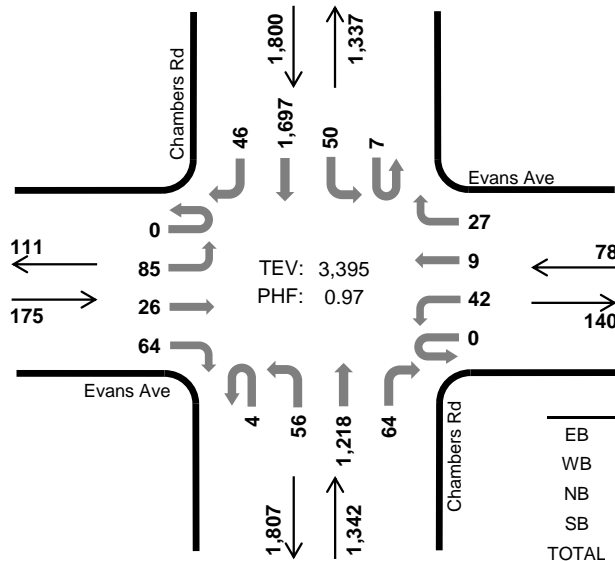


Peak Hour

Date: 02/14/2024

Count Period: 3:00 PM to 6:00 PM

Peak Hour: 4:00 PM to 5:00 PM



	HV %:	PHF
EB	1.7%	0.69
WB	0.0%	0.75
NB	2.0%	0.96
SB	0.8%	0.93
TOTAL	1.3%	0.97

## Three-Hour Count Summaries

Interval Start		Evans Ave				Evans Ave				Chambers Rd				Chambers Rd				15-min Total	Rolling One Hour
		Eastbound				Westbound				Northbound				Southbound					
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM		0	28	11	24	0	9	2	4	0	18	282	18	1	9	398	14	818	0
4:15 PM		0	19	2	14	0	6	0	6	3	15	300	19	2	12	454	16	868	0
4:30 PM		0	17	7	12	0	14	3	9	1	15	317	15	3	15	443	7	878	0
4:45 PM		0	21	6	14	0	13	4	8	0	8	319	12	1	14	402	9	831	3,395
Peak Hour	All	0	85	26	64	0	42	9	27	4	56	1,218	64	7	50	1,697	46	3,395	0
	HV	0	1	2	0	0	0	0	0	0	1	25	1	0	1	11	2	44	0
	HV%	-	1%	8%	0%	-	0%	0%	0%	0%	2%	2%	2%	0%	2%	1%	4%	1%	0

Note: For all three-hour count summary, see next page.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	3	0	8	5	16	0	0	0	0	0	0	0	0	3	3
4:15 PM	0	0	8	4	12	0	0	0	0	0	2	0	1	0	3
4:30 PM	0	0	4	3	7	0	0	0	0	0	3	0	0	0	3
4:45 PM	0	0	7	2	9	0	0	0	0	0	0	0	0	2	2
Peak Hour	3	0	27	14	44	0	0	0	0	0	5	0	1	5	11























Three-Hour Count Summaries																			
Interval Start		Evans Ave				Evans Ave				Chambers Rd				Chambers Rd				15-min Total	Rolling One Hour
		Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT			
3:00 PM	0	14	4	5	0	12	3	12	0	18	251	13	4	13	379	10	738	0	
3:15 PM	0	10	2	14	0	15	3	4	1	9	284	9	0	10	346	14	721	0	
3:30 PM	0	14	3	12	0	18	5	17	3	13	277	15	2	22	421	16	838	0	
3:45 PM	0	14	10	15	0	16	3	5	0	23	276	15	2	12	405	13	809	3,106	
4:00 PM	0	28	11	24	0	9	2	4	0	18	282	18	1	9	398	14	818	3,186	
4:15 PM	0	19	2	14	0	6	0	6	3	15	300	19	2	12	454	16	868	3,333	
4:30 PM	0	17	7	12	0	14	3	9	1	15	317	15	3	15	443	7	878	3,373	
4:45 PM	0	21	6	14	0	13	4	8	0	8	319	12	1	14	402	9	831	3,395	
5:00 PM	0	19	8	18	0	13	0	8	0	15	273	17	1	12	417	16	817	3,394	
5:15 PM	0	21	12	12	0	14	2	6	2	10	348	19	0	11	385	6	848	3,374	
5:30 PM	0	12	7	12	0	14	3	7	1	16	286	20	0	14	323	14	729	3,225	
5:45 PM	0	14	7	10	0	14	2	8	0	12	255	11	1	18	336	10	698	3,092	
Count Total		0	203	79	162	0	158	30	94	11	172	3,468	183	17	162	4,709	145	9,593	0
Peak Hour	All	0	85	26	64	0	42	9	27	4	56	1,218	64	7	50	1,697	46	3,395	0
	HV	0	1	2	0	0	0	0	0	0	1	25	1	0	1	11	2	44	0
	HV%	-	1%	8%	0%	-	0%	0%	0%	0%	2%	2%	2%	0%	2%	1%	4%	1%	0
Note: Three-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.																			
Interval Start		Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)							
		EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South				
3:00 PM		1	2	4	4	11	0	0	0	0	0	0	0	0	0	0	0	0	
3:15 PM		0	1	5	6	12	0	0	0	0	0	0	0	0	3	1	4	4	
3:30 PM		2	0	11	2	15	0	0	0	0	0	0	0	4	0	0	4	4	
3:45 PM		1	0	6	4	11	0	0	0	0	0	0	0	1	1	1	3	3	
4:00 PM		3	0	8	5	16	0	0	0	0	0	0	0	0	0	3	3	3	
4:15 PM		0	0	8	4	12	0	0	0	0	0	0	2	0	1	0	3	3	
4:30 PM		0	0	4	3	7	0	0	0	0	0	0	3	0	0	0	3	3	
4:45 PM		0	0	7	2	9	0	0	0	0	0	0	0	0	0	2	2	2	
5:00 PM		0	0	3	2	5	0	0	0	0	0	0	1	1	0	0	2	2	
5:15 PM		0	0	5	1	6	0	0	0	0	0	0	0	0	0	1	1	1	
5:30 PM		0	0	2	0	2	0	0	0	0	0	0	0	3	0	0	3	3	
5:45 PM		0	0	5	1	6	0	0	0	0	0	0	0	0	1	1	2	2	
Count Total		7	3	68	34	112	0	0	0	0	0	0	6	9	6	9	30	30	
Peak Hour		3	0	27	14	44	0	0	0	0	0	0	5	0	1	5	11	11	

Three-Hour Count Summaries - Heavy Vehicles																		
Interval Start	Evans Ave				Evans Ave				Chambers Rd				Chambers Rd				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
3:00 PM	0	0	1	0	0	2	0	0	0	1	3	0	0	0	4	0	11	0
3:15 PM	0	0	0	0	0	0	1	0	0	0	4	1	0	0	6	0	12	0
3:30 PM	0	0	0	2	0	0	0	0	0	0	11	0	0	0	2	0	15	0
3:45 PM	0	0	0	1	0	0	0	0	0	0	5	1	0	0	4	0	11	49
4:00 PM	0	1	2	0	0	0	0	0	0	1	7	0	0	0	4	1	16	54
4:15 PM	0	0	0	0	0	0	0	0	0	0	7	1	0	0	3	1	12	54
4:30 PM	0	0	0	0	0	0	0	0	0	0	4	0	0	0	3	0	7	46
4:45 PM	0	0	0	0	0	0	0	0	0	0	7	0	0	1	1	0	9	44
5:00 PM	0	0	0	0	0	0	0	0	0	0	2	1	0	0	2	0	5	33
5:15 PM	0	0	0	0	0	0	0	0	0	0	4	1	0	0	1	0	6	27
5:30 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	22
5:45 PM	0	0	0	0	0	0	0	0	0	0	5	0	0	0	1	0	6	19
Count Total	0	1	3	3	0	2	1	0	0	2	61	5	0	1	31	2	112	0
Peak Hour	0	1	2	0	0	0	0	0	0	1	25	1	0	1	11	2	44	0

Three-Hour Count Summaries - Bikes																		
Interval Start	Evans Ave			Evans Ave			Chambers Rd			Chambers Rd			15-min Total	Rolling One Hour				
	Eastbound			Westbound			Northbound			Southbound								
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT						
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
Peak Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0				

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

***Intersection Capacity Worksheets:  
2024 Existing***

											
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	
Lane Configurations											
Traffic Volume (vph)	52	53	70	216	98	301	34	1416	122	761	
Future Volume (vph)	52	53	70	216	98	301	34	1416	122	761	
Lane Group Flow (vph)	78	79	104	254	115	354	40	1737	134	882	
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	pm+pt	NA	
Protected Phases		4		3	8		5	2	1	6	
Permitted Phases	4		4	8		8	2		6		
Detector Phase	4	4	4	3	8	8	5	2	1	6	
Switch Phase											
Minimum Initial (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	11.0	6.0	11.0	
Minimum Split (s)	37.0	37.0	37.0	10.0	37.0	37.0	10.0	27.0	10.0	27.0	
Total Split (s)	37.0	37.0	37.0	30.0	67.0	67.0	27.0	61.0	12.0	46.0	
Total Split (%)	26.4%	26.4%	26.4%	21.4%	47.9%	47.9%	19.3%	43.6%	8.6%	32.9%	
Yellow Time (s)	4.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	3.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	1.0	2.0	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	0.0	0.0	
Total Lost Time (s)	6.0	6.0	6.0	4.0	6.0	6.0	4.0	6.0	4.0	6.0	
Lead/Lag	Lag	Lag	Lag	Lead			Lead	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	None	None	None	None	C-Max	None	C-Max	
v/c Ratio	0.62	0.43	0.40	0.60	0.22	0.63	0.10	0.67	0.58	0.31	
Control Delay	80.3	65.1	11.4	45.0	37.2	28.3	10.4	23.6	30.7	17.8	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	80.3	65.1	11.4	45.0	37.2	28.3	10.4	23.6	30.7	17.8	
Queue Length 50th (ft)	69	69	0	188	80	161	9	430	50	153	
Queue Length 95th (ft)	88	86	8	230	111	218	19	546	130	220	
Internal Link Dist (ft)		377			525			1050		1151	
Turn Bay Length (ft)	115		115	180		180	170		130		
Base Capacity (vph)	281	412	441	448	819	781	572	2604	230	2863	
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.28	0.19	0.24	0.57	0.14	0.45	0.07	0.67	0.58	0.31	

#### Intersection Summary

Cycle Length: 140

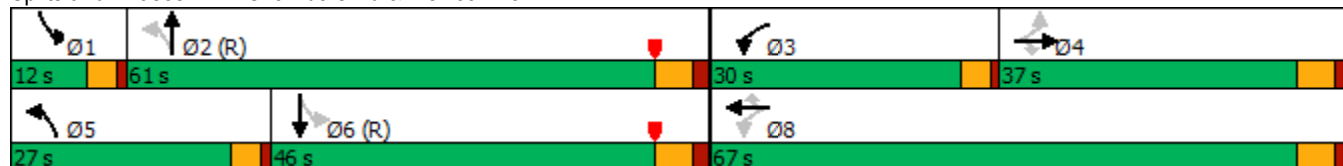
Actuated Cycle Length: 140

Offset: 15 (11%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 85

Control Type: Actuated-Coordinated

Splits and Phases: 1: Chambers Rd & Mexico Ave















































# HCM 6th Signalized Intersection Summary

04/29/2024

1: Chambers Rd & Mexico Ave  
Year 2024 Existing - AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	52	53	70	216	98	301	34	1416	77	122	761	42
Future Volume (veh/h)	52	53	70	216	98	301	34	1416	77	122	761	42
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1885	1885	1885	1885	1885	1885	1870	1870	1870
Adj Flow Rate, veh/h	78	79	104	254	115	354	40	1647	90	134	836	46
Peak Hour Factor	0.67	0.67	0.67	0.85	0.85	0.85	0.86	0.86	0.86	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	1	1	1	1	1	1	2	2	2
Cap, veh/h	148	195	165	380	513	435	426	2836	155	291	2872	158
Arrive On Green	0.10	0.10	0.10	0.14	0.27	0.27	0.07	1.00	1.00	0.05	0.58	0.58
Sat Flow, veh/h	924	1870	1585	1795	1885	1598	1795	4994	273	1781	4954	272
Grp Volume(v), veh/h	78	79	104	254	115	354	40	1131	606	134	574	308
Grp Sat Flow(s),veh/h/ln	924	1870	1585	1795	1885	1598	1795	1716	1836	1781	1702	1821
Q Serve(g_s), s	11.6	5.5	8.8	17.1	6.6	29.0	1.3	0.0	0.0	4.4	11.9	12.0
Cycle Q Clear(g_c), s	11.6	5.5	8.8	17.1	6.6	29.0	1.3	0.0	0.0	4.4	11.9	12.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.15	1.00		0.15
Lane Grp Cap(c), veh/h	148	195	165	380	513	435	426	1948	1042	291	1974	1056
V/C Ratio(X)	0.53	0.41	0.63	0.67	0.22	0.81	0.09	0.58	0.58	0.46	0.29	0.29
Avail Cap(c_a), veh/h	256	414	351	463	821	696	660	1948	1042	311	1974	1056
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	61.4	58.7	60.1	45.2	39.5	47.6	11.4	0.0	0.0	11.3	14.9	14.9
Incr Delay (d2), s/veh	2.9	1.4	3.9	2.7	0.2	4.0	0.1	1.3	2.4	1.1	0.4	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	2.7	3.7	7.9	3.1	11.9	0.5	0.3	0.7	1.8	4.6	5.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	64.3	60.0	64.1	47.9	39.7	51.6	11.4	1.3	2.4	12.4	15.2	15.6
LnGrp LOS	E	E	E	D	D	D	B	A	A	B	B	B
Approach Vol, veh/h	261			723			1777			1016		
Approach Delay, s/veh	62.9			48.4			1.9			15.0		
Approach LOS	E			D			A			B		
Timer - Assigned Phs	1	2	3	4	5	6	8					
Phs Duration (G+Y+Rc), s	10.4	85.5	23.5	20.6	8.7	87.2	44.1					
Change Period (Y+Rc), s	4.0	6.0	4.0	6.0	4.0	6.0	6.0					
Max Green Setting (Gmax), s	8.0	55.0	26.0	31.0	23.0	40.0	61.0					
Max Q Clear Time (g_c+I1), s	6.4	2.0	19.1	13.6	3.3	14.0	31.0					
Green Ext Time (p_c), s	0.0	18.4	0.4	1.0	0.1	5.8	1.9					
Intersection Summary												
HCM 6th Ctrl Delay	18.5											
HCM 6th LOS	B											

									
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	40	4	64	13	53	37	1434	18	993
Future Volume (vph)	40	4	64	13	53	37	1434	18	993
Lane Group Flow (vph)	43	57	83	17	69	43	1671	19	1072
Turn Type	Perm	NA	Perm	NA	Perm	pm+pt	NA	pm+pt	NA
Protected Phases		4		8		5	2	1	6
Permitted Phases	4		8		8	2		6	
Detector Phase	4	4	8	8	8	5	2	1	6
Switch Phase									
Minimum Initial (s)	6.0	6.0	6.0	6.0	6.0	6.0	11.0	6.0	11.0
Minimum Split (s)	38.0	38.0	38.0	38.0	38.0	15.0	90.0	12.0	87.0
Total Split (s)	38.0	38.0	38.0	38.0	38.0	15.0	90.0	12.0	87.0
Total Split (%)	27.1%	27.1%	27.1%	27.1%	27.1%	10.7%	64.3%	8.6%	62.1%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	3.0	4.0	3.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	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	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	4.0	6.0	4.0	6.0
Lead/Lag						Lead	Lag	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	None	C-Max
v/c Ratio	0.31	0.27	0.62	0.09	0.31	0.10	0.43	0.08	0.28
Control Delay	62.5	18.6	78.9	55.6	15.5	3.2	6.7	5.9	8.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	62.5	18.6	78.9	55.6	15.5	3.2	6.7	5.9	8.9
Queue Length 50th (ft)	37	3	74	14	0	6	189	2	76
Queue Length 95th (ft)	74	45	106	32	30	15	246	m17	247
Internal Link Dist (ft)		285		253			1081		1447
Turn Bay Length (ft)	70		85		85	125		125	
Base Capacity (vph)	320	411	309	429	418	477	3915	276	3862
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	0.13	0.14	0.27	0.04	0.17	0.09	0.43	0.07	0.28

#### Intersection Summary

Cycle Length: 140

Actuated Cycle Length: 140

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 140

Control Type: Actuated-Coordinated
























m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Chambers Rd & Evans Ave

					
Ø1	Ø2 (R)				Ø4
12 s	90 s				38 s
					
Ø5	Ø6 (R)				Ø8
15 s	87 s				38 s























HCM 6th Signalized Intersection Summary  
04/29/2024

2: Chambers Rd & Evans Ave  
Year 2024 Existing - AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	4	50	64	13	53	37	1434	20	18	993	36
Future Volume (veh/h)	40	4	50	64	13	53	37	1434	20	18	993	36
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1870	1870	1870	1885	1885	1885
Adj Flow Rate, veh/h	43	4	53	83	17	69	43	1648	23	19	1034	38
Peak Hour Factor	0.94	0.94	0.94	0.77	0.77	0.77	0.87	0.87	0.87	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	2	2	2	1	1	1
Cap, veh/h	186	12	166	157	208	176	503	3908	55	282	3774	139
Arrive On Green	0.11	0.11	0.11	0.11	0.11	0.11	0.03	0.75	0.75	0.04	1.00	1.00
Sat Flow, veh/h	1322	113	1502	1357	1885	1598	1781	5189	72	1795	5095	187
Grp Volume(v), veh/h	43	0	57	83	17	69	43	1081	590	19	696	376
Grp Sat Flow(s),veh/h/ln	1322	0	1615	1357	1885	1598	1781	1702	1857	1795	1716	1852
Q Serve(g_s), s	4.2	0.0	4.6	8.4	1.1	5.6	0.8	16.1	16.1	0.4	0.0	0.0
Cycle Q Clear(g_c), s	5.4	0.0	4.6	13.0	1.1	5.6	0.8	16.1	16.1	0.4	0.0	0.0
Prop In Lane	1.00		0.93	1.00		1.00	1.00		0.04	1.00		0.10
Lane Grp Cap(c), veh/h	186	0	178	157	208	176	503	2564	1399	282	2541	1371
V/C Ratio(X)	0.23	0.00	0.32	0.53	0.08	0.39	0.09	0.42	0.42	0.07	0.27	0.27
Avail Cap(c_a), veh/h	343	0	369	317	431	365	581	2564	1399	345	2541	1371
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.3	0.0	57.4	63.4	55.9	57.9	3.6	6.3	6.3	4.6	0.0	0.0
Incr Delay (d2), s/veh	0.6	0.0	1.0	2.8	0.2	1.4	0.1	0.5	0.9	0.1	0.3	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	0.0	1.9	3.1	0.6	2.4	0.2	5.1	5.8	0.1	0.1	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	59.0	0.0	58.5	66.2	56.1	59.3	3.7	6.8	7.2	4.7	0.3	0.5
LnGrp LOS	E	A	E	E	E	E	A	A	A	A	A	A
Approach Vol, veh/h	100			169			1714			1091		
Approach Delay, s/veh	58.7			62.4			6.8			0.4		
Approach LOS	E			E			A			A		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.1	111.4		21.4	8.9	109.7		21.4				
Change Period (Y+Rc), s	4.0	6.0		6.0	4.0	6.0		6.0				
Max Green Setting (Gmax), s	8.0	84.0		32.0	11.0	81.0		32.0				
Max Q Clear Time (g_c+I1), s	2.4	18.1		7.4	2.8	2.0		15.0				
Green Ext Time (p_c), s	0.0	17.8		0.4	0.0	8.5		0.5				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay	9.3											
HCM 6th LOS	A											

Timings  
04/29/2024

1: Chambers Rd & Mexico Ave  
Year 2024 Existing - PM Peak Hour

											
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	
Lane Configurations											
Traffic Volume (vph)	42	169	40	175	81	243	37	1095	321	1585	
Future Volume (vph)	42	169	40	175	81	243	37	1095	321	1585	
Lane Group Flow (vph)	58	235	56	186	86	259	39	1370	334	1709	
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	pm+pt	NA	
Protected Phases		4		3	8		5	2	1	6	
Permitted Phases	4		4	8		8	2		6		
Detector Phase	4	4	4	3	8	8	5	2	1	6	
Switch Phase											
Minimum Initial (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	11.0	6.0	11.0	
Minimum Split (s)	37.0	37.0	37.0	10.0	37.0	37.0	10.0	27.0	10.0	27.0	
Total Split (s)	37.0	37.0	37.0	15.0	52.0	52.0	35.0	68.0	15.0	48.0	
Total Split (%)	27.4%	27.4%	27.4%	11.1%	38.5%	38.5%	25.9%	50.4%	11.1%	35.6%	
Yellow Time (s)	4.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	3.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	1.0	2.0	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	0.0	0.0	
Total Lost Time (s)	6.0	6.0	6.0	4.0	6.0	6.0	4.0	6.0	4.0	6.0	
Lead/Lag	Lag	Lag	Lag	Lead			Lead	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	None	None	None	None	C-Max	None	C-Max	
v/c Ratio	0.27	0.76	0.15	0.74	0.17	0.44	0.22	0.60	0.91	0.59	
Control Delay	50.4	69.0	0.9	56.3	36.3	11.1	13.6	27.6	57.0	21.0	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	50.4	69.0	0.9	56.3	36.3	11.1	13.6	27.6	57.0	21.0	
Queue Length 50th (ft)	45	200	0	130	58	36	11	312	189	349	
Queue Length 95th (ft)	66	210	0	183	95	103	30	362	#464	464	
Internal Link Dist (ft)		377			525			1050		1151	
Turn Bay Length (ft)	115		115	180		180	170		130		
Base Capacity (vph)	302	431	460	250	640	679	489	2299	367	2917	
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.19	0.55	0.12	0.74	0.13	0.38	0.08	0.60	0.91	0.59	

#### Intersection Summary

Cycle Length: 135

Actuated Cycle Length: 135

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

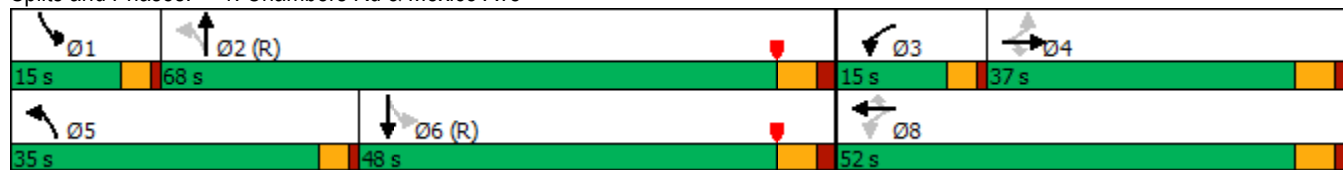
Natural Cycle: 85

Control Type: Actuated-Coordinated

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

























Queue shown is maximum after two cycles.

Splits and Phases: 1: Chambers Rd & Mexico Ave





















HCM 6th Signalized Intersection Summary  
04/29/2024

1: Chambers Rd & Mexico Ave  
Year 2024 Existing - PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	42	169	40	175	81	243	37	1095	206	321	1585	56
Future Volume (veh/h)	42	169	40	175	81	243	37	1095	206	321	1585	56
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1870	1870	1870	1885	1885	1885
Adj Flow Rate, veh/h	58	235	56	186	86	259	39	1153	217	334	1651	58
Peak Hour Factor	0.72	0.72	0.72	0.94	0.94	0.94	0.95	0.95	0.95	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	2	2	2	1	1	1
Cap, veh/h	206	276	234	227	486	412	227	2341	440	416	3010	106
Arrive On Green	0.15	0.15	0.15	0.08	0.26	0.26	0.07	1.00	1.00	0.08	0.59	0.59
Sat Flow, veh/h	1044	1885	1598	1795	1885	1598	1781	4316	812	1795	5105	179
Grp Volume(v), veh/h	58	235	56	186	86	259	39	909	461	334	1110	599
Grp Sat Flow(s),veh/h/ln	1044	1885	1598	1795	1885	1598	1781	1702	1724	1795	1716	1853
Q Serve(g_s), s	6.8	16.4	4.2	11.0	4.8	19.4	1.3	0.0	0.0	11.0	26.5	26.5
Cycle Q Clear(g_c), s	6.8	16.4	4.2	11.0	4.8	19.4	1.3	0.0	0.0	11.0	26.5	26.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.47	1.00		0.10
Lane Grp Cap(c), veh/h	206	276	234	227	486	412	227	1846	935	416	2023	1093
V/C Ratio(X)	0.28	0.85	0.24	0.82	0.18	0.63	0.17	0.49	0.49	0.80	0.55	0.55
Avail Cap(c_a), veh/h	293	433	367	227	642	544	575	1846	935	416	2023	1093
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.1	56.2	51.0	45.8	39.0	44.4	13.6	0.0	0.0	11.0	16.8	16.8
Incr Delay (d2), s/veh	0.7	9.3	0.5	20.6	0.2	1.6	0.4	0.9	1.9	10.8	1.1	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	8.5	1.7	6.5	2.3	7.8	0.5	0.2	0.5	5.4	10.2	11.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	52.8	65.4	51.5	66.4	39.2	46.0	14.0	0.9	1.9	21.8	17.9	18.8
LnGrp LOS	D	E	D	E	D	D	B	A	A	C	B	B
Approach Vol, veh/h	349			531			1409			2043		
Approach Delay, s/veh	61.1			52.0			1.6			18.8		
Approach LOS	E			D			A			B		
Timer - Assigned Phs	1	2	3	4	5	6	8					
Phs Duration (G+Y+Rc), s	15.0	79.2	15.0	25.8	8.6	85.6	40.8					
Change Period (Y+Rc), s	4.0	6.0	4.0	6.0	4.0	6.0	6.0					
Max Green Setting (Gmax), s	11.0	62.0	11.0	31.0	31.0	42.0	46.0					
Max Q Clear Time (g_c+I1), s	13.0	2.0	13.0	18.4	3.3	28.5	21.4					
Green Ext Time (p_c), s	0.0	12.7	0.0	1.4	0.1	8.8	1.3					
Intersection Summary												
HCM 6th Ctrl Delay	20.7											
HCM 6th LOS	C											

Timings  
04/29/2024

2: Chambers Rd & Evans Ave  
Year 2024 Existing - PM Peak Hour

									
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	85	26	42	9	27	60	1226	57	1697
Future Volume (vph)	85	26	42	9	27	60	1226	57	1697
Lane Group Flow (vph)	123	131	56	12	36	63	1344	61	1874
Turn Type	Perm	NA	Perm	NA	Perm	pm+pt	NA	pm+pt	NA
Protected Phases		4		8		5	2	1	6
Permitted Phases	4		8		8	2		6	
Detector Phase	4	4	8	8	8	5	2	1	6
Switch Phase									
Minimum Initial (s)	6.0	6.0	6.0	6.0	6.0	6.0	11.0	6.0	11.0
Minimum Split (s)	38.0	38.0	38.0	38.0	38.0	15.0	90.0	12.0	87.0
Total Split (s)	38.0	38.0	38.0	38.0	38.0	15.0	82.0	15.0	82.0
Total Split (%)	28.1%	28.1%	28.1%	28.1%	28.1%	11.1%	60.7%	11.1%	60.7%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	3.0	4.0	3.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	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	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	4.0	6.0	4.0	6.0
Lead/Lag						Lead	Lag	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	None	C-Max
v/c Ratio	0.69	0.46	0.43	0.05	0.14	0.31	0.37	0.19	0.51
Control Delay	75.5	25.0	62.8	48.9	5.9	7.5	8.4	4.9	10.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	75.5	25.0	62.8	48.9	5.9	7.5	8.4	4.9	10.0
Queue Length 50th (ft)	105	36	46	9	0	10	155	9	252
Queue Length 95th (ft)	122	54	72	23	6	25	224	24	356
Internal Link Dist (ft)		285		253			1081		1447
Turn Bay Length (ft)	70		85		85	125		125	
Base Capacity (vph)	331	460	243	445	422	261	3638	381	3680
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	0.37	0.28	0.23	0.03	0.09	0.24	0.37	0.16	0.51

#### Intersection Summary

Cycle Length: 135

Actuated Cycle Length: 135

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 140

Control Type: Actuated-Coordinated
























Splits and Phases: 2: Chambers Rd & Evans Ave

		
Ø1	Ø2 (R)	Ø4
15 s	82 s	38 s
		
Ø5	Ø6 (R)	Ø8
15 s	82 s	38 s

# HCM 6th Signalized Intersection Summary

04/29/2024

2: Chambers Rd & Evans Ave  
Year 2024 Existing - PM Peak Hour





















												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	85	26	64	42	9	27	60	1226	64	57	1697	46
Future Volume (veh/h)	85	26	64	42	9	27	60	1226	64	57	1697	46
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1885	1885	1885	1870	1870	1870	1885	1885	1885
Adj Flow Rate, veh/h	123	38	93	56	12	36	62	1277	67	61	1825	49
Peak Hour Factor	0.69	0.69	0.69	0.75	0.75	0.75	0.96	0.96	0.96	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	1	1	1	2	2	2	1	1	1
Cap, veh/h	228	65	158	129	253	214	297	3513	184	373	3644	98
Arrive On Green	0.13	0.13	0.13	0.13	0.13	0.13	0.04	0.71	0.71	0.08	1.00	1.00
Sat Flow, veh/h	1357	481	1177	1269	1885	1598	1781	4967	261	1795	5153	138
Grp Volume(v), veh/h	123	0	131	56	12	36	62	875	469	61	1215	659
Grp Sat Flow(s),veh/h/ln	1357	0	1658	1269	1885	1598	1781	1702	1823	1795	1716	1860
Q Serve(g_s), s	11.7	0.0	10.0	5.9	0.7	2.7	1.2	13.7	13.7	1.2	0.0	0.0
Cycle Q Clear(g_c), s	12.5	0.0	10.0	15.9	0.7	2.7	1.2	13.7	13.7	1.2	0.0	0.0
Prop In Lane	1.00		0.71	1.00		1.00	1.00		0.14	1.00		0.07
Lane Grp Cap(c), veh/h	228	0	223	129	253	214	297	2408	1290	373	2426	1316
V/C Ratio(X)	0.54	0.00	0.59	0.43	0.05	0.17	0.21	0.36	0.36	0.16	0.50	0.50
Avail Cap(c_a), veh/h	368	0	393	260	447	379	371	2408	1290	448	2426	1316
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.4	0.0	54.9	62.4	50.9	51.8	4.5	7.8	7.8	5.1	0.0	0.0
Incr Delay (d2), s/veh	2.0	0.0	2.5	2.3	0.1	0.4	0.3	0.4	0.8	0.2	0.7	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	0.0	4.4	2.0	0.4	1.1	0.4	4.6	5.1	0.4	0.2	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	58.3	0.0	57.4	64.7	51.0	52.1	4.8	8.2	8.6	5.3	0.7	1.4
LnGrp LOS	E	A	E	E	D	D	A	A	A	A	A	A
Approach Vol, veh/h	254			104			1406			1935		
Approach Delay, s/veh	57.9			58.8			8.2			1.1		
Approach LOS	E			E			A			A		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.4	101.5		24.1	9.4	101.5		24.1				
Change Period (Y+Rc), s	4.0	6.0		6.0	4.0	6.0		6.0				
Max Green Setting (Gmax), s	11.0	76.0		32.0	11.0	76.0		32.0				
Max Q Clear Time (g_c+I1), s	3.2	15.7		14.5	3.2	2.0		17.9				
Green Ext Time (p_c), s	0.1	12.0		1.1	0.1	22.8		0.2				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay				9.3								
HCM 6th LOS				A								

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## ***Intersection Capacity Worksheets: 2027 Background***

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	54	55	72	222	101	310	35	1458	126	784
Future Volume (vph)	54	55	72	222	101	310	35	1458	126	784
Lane Group Flow (vph)	81	82	107	261	119	365	41	1787	138	909
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	pm+pt	NA
Protected Phases		4		3	8		5	2	1	6
Permitted Phases	4		4	8		8	2		6	
Detector Phase	4	4	4	3	8	8	5	2	1	6
Switch Phase										
Minimum Initial (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	11.0	6.0	11.0
Minimum Split (s)	37.0	37.0	37.0	10.0	37.0	37.0	10.0	27.0	10.0	27.0
Total Split (s)	37.0	37.0	37.0	30.0	67.0	67.0	27.0	61.0	12.0	46.0
Total Split (%)	26.4%	26.4%	26.4%	21.4%	47.9%	47.9%	19.3%	43.6%	8.6%	32.9%
Yellow Time (s)	4.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	3.0	4.0
All-Red Time (s)	2.0	2.0	2.0	1.0	2.0	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	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	4.0	6.0	6.0	4.0	6.0	4.0	6.0
Lead/Lag	Lag	Lag	Lag	Lead			Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	None	C-Max
v/c Ratio	0.63	0.43	0.40	0.60	0.22	0.64	0.11	0.70	0.61	0.32
Control Delay	80.2	64.7	12.0	44.7	36.8	29.1	10.8	25.0	36.4	18.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	80.2	64.7	12.0	44.7	36.8	29.1	10.8	25.0	36.4	18.3
Queue Length 50th (ft)	72	71	0	193	82	172	9	458	64	162
Queue Length 95th (ft)	90	88	10	234	114	228	19	575	142	230
Internal Link Dist (ft)		377			525			1050		1151
Turn Bay Length (ft)	115		115	180		180	170		130	
Base Capacity (vph)	280	412	441	453	819	781	560	2559	227	2837
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.29	0.20	0.24	0.58	0.15	0.47	0.07	0.70	0.61	0.32

#### Intersection Summary

Cycle Length: 140

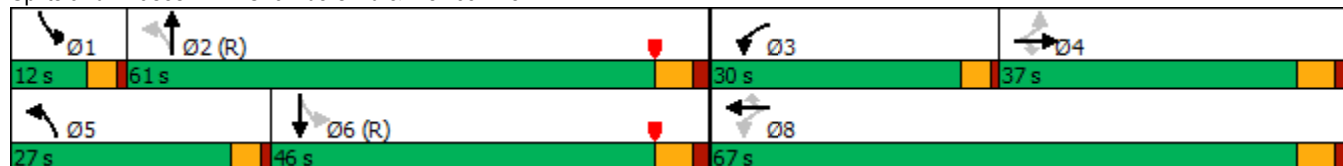
Actuated Cycle Length: 140

Offset: 15 (11%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 95

























Control Type: Actuated-Coordinated



















Splits and Phases: 1: Chambers Rd & Mexico Ave



HCM 6th Signalized Intersection Summary  
05/03/2024

1: Chambers Rd & Mexico Ave  
Year 2027 Background - AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	54	55	72	222	101	310	35	1458	79	126	784	43
Future Volume (veh/h)	54	55	72	222	101	310	35	1458	79	126	784	43
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1885	1885	1885	1885	1885	1885	1870	1870	1870
Adj Flow Rate, veh/h	81	82	107	261	119	365	41	1695	92	138	862	47
Peak Hour Factor	0.67	0.67	0.67	0.85	0.85	0.85	0.86	0.86	0.86	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	1	1	1	1	1	1	2	2	2
Cap, veh/h	151	203	172	388	527	446	411	2792	151	284	2836	154
Arrive On Green	0.11	0.11	0.11	0.14	0.28	0.28	0.07	1.00	1.00	0.05	0.57	0.57
Sat Flow, veh/h	911	1870	1585	1795	1885	1598	1795	4996	271	1781	4956	270
Grp Volume(v), veh/h	81	82	107	261	119	365	41	1163	624	138	591	318
Grp Sat Flow(s),veh/h/ln	911	1870	1585	1795	1885	1598	1795	1716	1836	1781	1702	1822
Q Serve(g_s), s	12.2	5.7	9.0	17.5	6.8	29.9	1.3	0.0	0.0	4.6	12.6	12.7
Cycle Q Clear(g_c), s	12.2	5.7	9.0	17.5	6.8	29.9	1.3	0.0	0.0	4.6	12.6	12.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.15	1.00		0.15
Lane Grp Cap(c), veh/h	151	203	172	388	527	446	411	1917	1026	284	1947	1042
V/C Ratio(X)	0.54	0.40	0.62	0.67	0.23	0.82	0.10	0.61	0.61	0.49	0.30	0.30
Avail Cap(c_a), veh/h	253	414	351	467	821	696	644	1917	1026	301	1947	1042
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	61.0	58.2	59.6	44.5	38.8	47.1	11.9	0.0	0.0	11.8	15.5	15.5
Incr Delay (d2), s/veh	3.0	1.3	3.6	2.9	0.2	4.4	0.1	1.4	2.7	1.3	0.4	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	2.8	3.8	8.1	3.2	12.3	0.5	0.4	0.8	1.9	4.9	5.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	64.0	59.4	63.3	47.4	39.0	51.5	12.0	1.4	2.7	13.1	15.9	16.3
LnGrp LOS	E	E	E	D	D	D	B	A	A	B	B	B
Approach Vol, veh/h	270			745			1828			1047		
Approach Delay, s/veh	62.3			48.0			2.1			15.6		
Approach LOS	E			D			A			B		
Timer - Assigned Phs	1	2	3	4	5	6	8					
Phs Duration (G+Y+Rc), s	10.6	84.2	23.9	21.2	8.8	86.1	45.1					
Change Period (Y+Rc), s	4.0	6.0	4.0	6.0	4.0	6.0	6.0					
Max Green Setting (Gmax), s	8.0	55.0	26.0	31.0	23.0	40.0	61.0					
Max Q Clear Time (g_c+I1), s	6.6	2.0	19.5	14.2	3.3	14.7	31.9					
Green Ext Time (p_c), s	0.0	19.3	0.4	1.0	0.1	6.0	2.0					
Intersection Summary												
HCM 6th Ctrl Delay	18.7											
HCM 6th LOS	B											

									
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	41	4	66	13	55	38	1477	19	1023
Future Volume (vph)	41	4	66	13	55	38	1477	19	1023
Lane Group Flow (vph)	44	59	86	17	71	44	1722	20	1105
Turn Type	Perm	NA	Perm	NA	Perm	pm+pt	NA	pm+pt	NA
Protected Phases		4		8		5	2	1	6
Permitted Phases	4		8		8	2		6	
Detector Phase	4	4	8	8	8	5	2	1	6
Switch Phase									
Minimum Initial (s)	6.0	6.0	6.0	6.0	6.0	6.0	11.0	6.0	11.0
Minimum Split (s)	38.0	38.0	38.0	38.0	38.0	15.0	90.0	12.0	87.0
Total Split (s)	38.0	38.0	38.0	38.0	38.0	15.0	90.0	12.0	87.0
Total Split (%)	27.1%	27.1%	27.1%	27.1%	27.1%	10.7%	64.3%	8.6%	62.1%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	3.0	4.0	3.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	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	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	4.0	6.0	4.0	6.0
Lead/Lag						Lead	Lag	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	None	C-Max
v/c Ratio	0.31	0.28	0.63	0.09	0.31	0.11	0.44	0.08	0.29
Control Delay	62.1	18.1	78.9	55.2	15.2	3.3	6.9	6.5	9.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	62.1	18.1	78.9	55.2	15.2	3.3	6.9	6.5	9.6
Queue Length 50th (ft)	38	3	76	14	0	6	200	2	80
Queue Length 95th (ft)	75	46	110	31	31	15	259	m18	268
Internal Link Dist (ft)		285		253			1081		1447
Turn Bay Length (ft)	70		85		85	125		125	
Base Capacity (vph)	320	412	309	429	420	463	3904	265	3851
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	0.14	0.14	0.28	0.04	0.17	0.10	0.44	0.08	0.29

#### Intersection Summary

Cycle Length: 140

Actuated Cycle Length: 140

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 140

Control Type: Actuated-Coordinated
























m Volume for 95th percentile queue is metered by upstream signal.





















Splits and Phases: 2: Chambers Rd & Evans Ave

					
Ø1	Ø2 (R)				Ø4
12 s	90 s				38 s
					
Ø5	Ø6 (R)				Ø8
15 s	87 s				38 s

HCM 6th Signalized Intersection Summary  
05/03/2024

2: Chambers Rd & Evans Ave  
Year 2027 Background - AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	41	4	52	66	13	55	38	1477	21	19	1023	37
Future Volume (veh/h)	41	4	52	66	13	55	38	1477	21	19	1023	37
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1870	1870	1870	1885	1885	1885
Adj Flow Rate, veh/h	44	4	55	86	17	71	44	1698	24	20	1066	39
Peak Hour Factor	0.94	0.94	0.94	0.77	0.77	0.77	0.87	0.87	0.87	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	2	2	2	1	1	1
Cap, veh/h	191	12	171	160	214	182	490	3885	55	271	3756	137
Arrive On Green	0.11	0.11	0.11	0.11	0.11	0.11	0.04	0.75	0.75	0.05	1.00	1.00
Sat Flow, veh/h	1319	109	1505	1355	1885	1598	1781	5188	73	1795	5096	186
Grp Volume(v), veh/h	44	0	59	86	17	71	44	1114	608	20	717	388
Grp Sat Flow(s),veh/h/ln	1319	0	1614	1355	1885	1598	1781	1702	1857	1795	1716	1852
Q Serve(g_s), s	4.3	0.0	4.7	8.7	1.1	5.8	0.8	17.1	17.1	0.4	0.0	0.0
Cycle Q Clear(g_c), s	5.4	0.0	4.7	13.4	1.1	5.8	0.8	17.1	17.1	0.4	0.0	0.0
Prop In Lane	1.00		0.93	1.00		1.00	1.00		0.04	1.00		0.10
Lane Grp Cap(c), veh/h	191	0	183	160	214	182	490	2549	1391	271	2528	1365
V/C Ratio(X)	0.23	0.00	0.32	0.54	0.08	0.39	0.09	0.44	0.44	0.07	0.28	0.28
Avail Cap(c_a), veh/h	342	0	369	315	431	365	567	2549	1391	332	2528	1365
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.9	0.0	57.1	63.3	55.5	57.5	3.7	6.6	6.6	4.9	0.0	0.0
Incr Delay (d2), s/veh	0.6	0.0	1.0	2.8	0.2	1.4	0.1	0.5	1.0	0.1	0.3	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	0.0	2.0	3.2	0.6	2.4	0.3	5.5	6.2	0.1	0.1	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	58.5	0.0	58.1	66.1	55.6	58.9	3.8	7.1	7.6	5.0	0.3	0.5
LnGrp LOS	E	A	E	E	E	E	A	A	A	A	A	A
Approach Vol, veh/h		103			174			1766			1125	
Approach Delay, s/veh		58.3			62.1			7.2			0.4	
Approach LOS		E			E			A			A	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.2	110.8		21.9	8.9	109.2		21.9				
Change Period (Y+Rc), s	4.0	6.0		6.0	4.0	6.0		6.0				
Max Green Setting (Gmax), s	8.0	84.0		32.0	11.0	81.0		32.0				
Max Q Clear Time (g_c+I1), s	2.4	19.1		7.4	2.8	2.0		15.4				
Green Ext Time (p_c), s	0.0	18.8		0.4	0.0	8.9		0.5				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay			9.5									
HCM 6th LOS			A									

										
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	43	174	41	180	83	250	38	1128	331	1633
Future Volume (vph)	43	174	41	180	83	250	38	1128	331	1633
Lane Group Flow (vph)	60	242	57	191	88	266	40	1410	345	1761
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	pm+pt	NA
Protected Phases		4		3	8		5	2	1	6
Permitted Phases	4		4	8		8	2		6	
Detector Phase	4	4	4	3	8	8	5	2	1	6
Switch Phase										
Minimum Initial (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	11.0	6.0	11.0
Minimum Split (s)	37.0	37.0	37.0	10.0	37.0	37.0	10.0	27.0	10.0	27.0
Total Split (s)	37.0	37.0	37.0	15.0	52.0	52.0	35.0	68.0	15.0	48.0
Total Split (%)	27.4%	27.4%	27.4%	11.1%	38.5%	38.5%	25.9%	50.4%	11.1%	35.6%
Yellow Time (s)	4.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	3.0	4.0
All-Red Time (s)	2.0	2.0	2.0	1.0	2.0	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	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	4.0	6.0	6.0	4.0	6.0	4.0	6.0
Lead/Lag	Lag	Lag	Lag	Lead			Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	None	C-Max
v/c Ratio	0.27	0.77	0.15	0.77	0.17	0.45	0.23	0.61	0.98	0.61
Control Delay	50.1	68.9	0.9	58.4	36.0	12.1	13.1	21.6	73.8	21.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	50.1	68.9	0.9	58.4	36.0	12.1	13.1	21.6	73.8	21.8
Queue Length 50th (ft)	46	205	0	133	59	42	11	187	211	369
Queue Length 95th (ft)	67	215	0	#186	95	112	25	209	#511	490
Internal Link Dist (ft)		377			525			1050		1151
Turn Bay Length (ft)	115		115	180		180	170		130	
Base Capacity (vph)	302	431	460	248	640	678	481	2299	353	2897
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.20	0.56	0.12	0.77	0.14	0.39	0.08	0.61	0.98	0.61

#### Intersection Summary

Cycle Length: 135

Actuated Cycle Length: 135

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

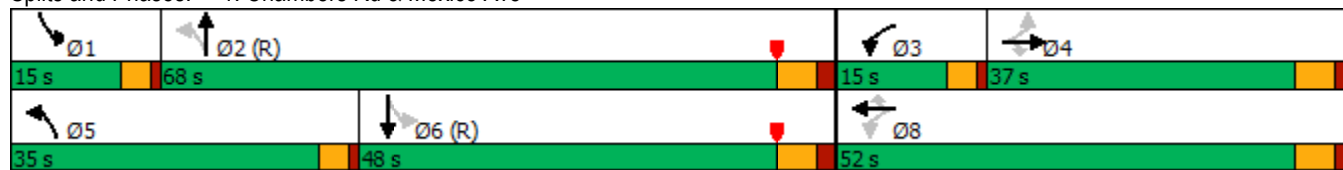
Natural Cycle: 95

Control Type: Actuated-Coordinated

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

























Queue shown is maximum after two cycles.



















Splits and Phases: 1: Chambers Rd & Mexico Ave



HCM 6th Signalized Intersection Summary  
05/03/2024

1: Chambers Rd & Mexico Ave  
Year 2027 Background - PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	43	174	41	180	83	250	38	1128	212	331	1633	58
Future Volume (veh/h)	43	174	41	180	83	250	38	1128	212	331	1633	58
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1870	1870	1870	1885	1885	1885
Adj Flow Rate, veh/h	60	242	57	191	88	266	40	1187	223	345	1701	60
Peak Hour Factor	0.72	0.72	0.72	0.94	0.94	0.94	0.95	0.95	0.95	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	2	2	2	1	1	1
Cap, veh/h	209	283	240	227	493	418	218	2325	437	407	2989	105
Arrive On Green	0.15	0.15	0.15	0.08	0.26	0.26	0.07	1.00	1.00	0.08	0.59	0.59
Sat Flow, veh/h	1035	1885	1598	1795	1885	1598	1781	4317	811	1795	5104	180
Grp Volume(v), veh/h	60	242	57	191	88	266	40	936	474	345	1143	618
Grp Sat Flow(s),veh/h/ln	1035	1885	1598	1795	1885	1598	1781	1702	1724	1795	1716	1853
Q Serve(g_s), s	7.1	16.9	4.2	11.0	4.9	19.9	1.3	0.0	0.0	11.0	28.0	28.0
Cycle Q Clear(g_c), s	7.1	16.9	4.2	11.0	4.9	19.9	1.3	0.0	0.0	11.0	28.0	28.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.47	1.00		0.10
Lane Grp Cap(c), veh/h	209	283	240	227	493	418	218	1834	929	407	2009	1085
V/C Ratio(X)	0.29	0.85	0.24	0.84	0.18	0.64	0.18	0.51	0.51	0.85	0.57	0.57
Avail Cap(c_a), veh/h	291	433	367	227	642	544	565	1834	929	407	2009	1085
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.7	55.9	50.5	46.0	38.6	44.2	14.1	0.0	0.0	12.0	17.4	17.4
Incr Delay (d2), s/veh	0.7	10.0	0.5	23.7	0.2	1.6	0.4	1.0	2.0	15.4	1.2	2.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	8.8	1.7	6.9	2.3	8.0	0.5	0.3	0.5	6.1	10.8	12.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	52.5	65.9	51.0	69.7	38.8	45.8	14.5	1.0	2.0	27.4	18.6	19.6
LnGrp LOS	D	E	D	E	D	D	B	A	A	C	B	B
Approach Vol, veh/h		359			545			1450			2106	
Approach Delay, s/veh		61.3			53.1			1.7			20.3	
Approach LOS		E			D			A			C	
Timer - Assigned Phs	1	2	3	4	5	6		8				
Phs Duration (G+Y+Rc), s	15.0	78.7	15.0	26.3	8.7	85.1		41.3				
Change Period (Y+Rc), s	4.0	6.0	4.0	6.0	4.0	6.0		6.0				
Max Green Setting (Gmax), s	11.0	62.0	11.0	31.0	31.0	42.0		46.0				
Max Q Clear Time (g_c+I1), s	13.0	2.0	13.0	18.9	3.3	30.0		21.9				
Green Ext Time (p_c), s	0.0	13.3	0.0	1.4	0.1	8.3		1.3				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay			21.6									
HCM 6th LOS			C									

									
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	88	27	43	9	28	62	1263	59	1748
Future Volume (vph)	88	27	43	9	28	62	1263	59	1748
Lane Group Flow (vph)	128	135	57	12	37	65	1385	63	1931
Turn Type	Perm	NA	Perm	NA	Perm	pm+pt	NA	pm+pt	NA
Protected Phases		4		8		5	2	1	6
Permitted Phases	4		8		8	2		6	
Detector Phase	4	4	8	8	8	5	2	1	6
Switch Phase									
Minimum Initial (s)	6.0	6.0	6.0	6.0	6.0	6.0	11.0	6.0	11.0
Minimum Split (s)	38.0	38.0	38.0	38.0	38.0	15.0	90.0	12.0	87.0
Total Split (s)	38.0	38.0	38.0	38.0	38.0	15.0	82.0	15.0	82.0
Total Split (%)	28.1%	28.1%	28.1%	28.1%	28.1%	11.1%	60.7%	11.1%	60.7%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	3.0	4.0	3.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	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	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	4.0	6.0	4.0	6.0
Lead/Lag						Lead	Lag	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	None	C-Max
v/c Ratio	0.70	0.46	0.43	0.05	0.14	0.33	0.38	0.20	0.53
Control Delay	75.2	25.6	62.4	48.3	6.0	8.2	8.7	7.5	13.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	75.2	25.6	62.4	48.3	6.0	8.2	8.7	7.5	13.9
Queue Length 50th (ft)	109	39	47	9	0	10	164	9	218
Queue Length 95th (ft)	126	57	72	23	7	26	236	m42	451
Internal Link Dist (ft)		285		253			1081		1447
Turn Bay Length (ft)	70		85		85	125		125	
Base Capacity (vph)	331	459	239	445	422	251	3617	367	3656
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	0.39	0.29	0.24	0.03	0.09	0.26	0.38	0.17	0.53

#### Intersection Summary

Cycle Length: 135

Actuated Cycle Length: 135

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 140

Control Type: Actuated-Coordinated

m Volume for 95th percentile queue is metered by upstream signal.
























Splits and Phases: 2: Chambers Rd & Evans Ave

 Ø1	 Ø2 (R)	 Ø4
15 s	82 s	38 s
 Ø5	 Ø6 (R)	 Ø8
15 s	82 s	38 s



HCM 6th Signalized Intersection Summary  
05/03/2024

2: Chambers Rd & Evans Ave  
Year 2027 Background - PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	88	27	66	43	9	28	62	1263	66	59	1748	47
Future Volume (veh/h)	88	27	66	43	9	28	62	1263	66	59	1748	47
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1885	1885	1885	1870	1870	1870	1885	1885	1885
Adj Flow Rate, veh/h	128	39	96	57	12	37	65	1316	69	63	1880	51
Peak Hour Factor	0.69	0.69	0.69	0.75	0.75	0.75	0.96	0.96	0.96	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	1	1	1	2	2	2	1	1	1
Cap, veh/h	232	66	162	130	259	219	288	3496	183	361	3624	98
Arrive On Green	0.14	0.14	0.14	0.14	0.14	0.14	0.04	0.70	0.70	0.08	1.00	1.00
Sat Flow, veh/h	1356	479	1179	1264	1885	1598	1781	4967	260	1795	5151	140
Grp Volume(v), veh/h	128	0	135	57	12	37	65	902	483	63	1252	679
Grp Sat Flow(s),veh/h/ln	1356	0	1658	1264	1885	1598	1781	1702	1823	1795	1716	1860
Q Serve(g_s), s	12.2	0.0	10.3	6.0	0.7	2.8	1.3	14.4	14.4	1.3	0.0	0.0
Cycle Q Clear(g_c), s	13.0	0.0	10.3	16.3	0.7	2.8	1.3	14.4	14.4	1.3	0.0	0.0
Prop In Lane	1.00		0.71	1.00		1.00	1.00		0.14	1.00		0.08
Lane Grp Cap(c), veh/h	232	0	228	130	259	219	288	2396	1283	361	2414	1309
V/C Ratio(X)	0.55	0.00	0.59	0.44	0.05	0.17	0.23	0.38	0.38	0.17	0.52	0.52
Avail Cap(c_a), veh/h	367	0	393	256	447	379	361	2396	1283	435	2414	1309
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.2	0.0	54.7	62.3	50.6	51.4	4.6	8.1	8.1	5.3	0.0	0.0
Incr Delay (d2), s/veh	2.0	0.0	2.5	2.3	0.1	0.4	0.4	0.5	0.8	0.2	0.8	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.4	0.0	4.5	2.0	0.4	1.1	0.5	4.9	5.4	0.4	0.3	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	58.2	0.0	57.1	64.6	50.6	51.8	5.0	8.5	8.9	5.5	0.8	1.5
LnGrp LOS	E	A	E	E	D	D	A	A	A	A	A	A
Approach Vol, veh/h		263			106			1450			1994	
Approach Delay, s/veh		57.7			58.6			8.5			1.2	
Approach LOS		E			E			A			A	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.4	101.0		24.5	9.5	101.0		24.5				
Change Period (Y+Rc), s	4.0	6.0		6.0	4.0	6.0		6.0				
Max Green Setting (Gmax), s	11.0	76.0		32.0	11.0	76.0		32.0				
Max Q Clear Time (g_c+I1), s	3.3	16.4		15.0	3.3	2.0		18.3				
Green Ext Time (p_c), s	0.1	12.6		1.1	0.1	24.3		0.2				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay			9.4									
HCM 6th LOS			A									























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## ***Intersection Capacity Worksheets: 2050 Background***

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Timings  
08/14/2024

1: Chambers Rd & Mexico Ave  
Year 2050 Background - AM Peak Hour

										
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	65	70	90	280	125	390	45	1835	160	985
Future Volume (vph)	65	70	90	280	125	390	45	1835	160	985
Lane Group Flow (vph)	97	104	134	304	136	424	49	2104	174	1131
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Prot	NA
Protected Phases		4		3	8		5	2	1	6
Permitted Phases	4		4	8		8	2			
Detector Phase	4	4	4	3	8	8	5	2	1	6
Switch Phase										
Minimum Initial (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	11.0	5.0	11.0
Minimum Split (s)	37.0	37.0	37.0	10.0	37.0	37.0	10.0	27.0	9.5	27.0
Total Split (s)	37.0	37.0	37.0	17.0	54.0	54.0	10.0	71.0	15.0	76.0
Total Split (%)	26.4%	26.4%	26.4%	12.1%	38.6%	38.6%	7.1%	50.7%	10.7%	54.3%
Yellow Time (s)	4.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	3.5	4.0
All-Red Time (s)	2.0	2.0	2.0	1.0	2.0	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	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	4.0	6.0	6.0	4.0	6.0	4.5	6.0
Lead/Lag	Lag	Lag	Lag	Lead			Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	None	C-Max
v/c Ratio	0.56	0.40	0.40	0.87	0.28	0.86	0.16	0.76	0.63	0.38
Control Delay	66.4	57.1	10.8	69.9	40.8	54.0	9.0	22.3	72.6	16.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	66.4	57.1	10.8	69.9	40.8	54.0	9.0	22.3	72.6	16.8
Queue Length 50th (ft)	84	88	0	243	99	291	11	549	79	196
Queue Length 95th (ft)	95	98	15	305	141	384	m21	704	122	274
Internal Link Dist (ft)		377			525			1050		1151
Turn Bay Length (ft)	115		115	310		390	170		265	
Base Capacity (vph)	276	412	454	348	644	615	316	2757	285	2995
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.35	0.25	0.30	0.87	0.21	0.69	0.16	0.76	0.61	0.38

#### Intersection Summary

Cycle Length: 140

Actuated Cycle Length: 140

Offset: 15 (11%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow

Natural Cycle: 105

Control Type: Actuated-Coordinated

m Volume for 95th percentile queue is metered by upstream signal.

























Splits and Phases: 1: Chambers Rd & Mexico Ave





















# HCM 6th Signalized Intersection Summary

08/14/2024

1: Chambers Rd & Mexico Ave  
Year 2050 Background - AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	65	70	90	280	125	390	45	1835	100	160	985	55
Future Volume (veh/h)	65	70	90	280	125	390	45	1835	100	160	985	55
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1885	1885	1885	1885	1885	1885	1870	1870	1870
Adj Flow Rate, veh/h	97	104	134	304	136	424	49	1995	109	174	1071	60
Peak Hour Factor	0.67	0.67	0.67	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	1	1	1	1	1	1	2	2	2
Cap, veh/h	190	305	259	349	537	455	340	2662	145	222	2793	156
Arrive On Green	0.16	0.16	0.16	0.09	0.28	0.28	0.07	1.00	1.00	0.06	0.56	0.56
Sat Flow, veh/h	850	1870	1585	1795	1885	1598	1795	4995	272	3456	4948	277
Grp Volume(v), veh/h	97	104	134	304	136	424	49	1368	736	174	737	394
Grp Sat Flow(s),veh/h/ln	850	1870	1585	1795	1885	1598	1795	1716	1836	1728	1702	1821
Q Serve(g_s), s	15.1	6.9	10.8	13.0	7.8	36.2	1.7	0.0	0.0	6.9	16.8	16.9
Cycle Q Clear(g_c), s	15.1	6.9	10.8	13.0	7.8	36.2	1.7	0.0	0.0	6.9	16.8	16.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.15	1.00		0.15
Lane Grp Cap(c), veh/h	190	305	259	349	537	455	340	1829	979	222	1921	1028
V/C Ratio(X)	0.51	0.34	0.52	0.87	0.25	0.93	0.14	0.75	0.75	0.78	0.38	0.38
Avail Cap(c_a), veh/h	240	414	351	349	646	548	351	1829	979	259	1921	1028
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.3	51.9	53.5	49.3	38.6	48.7	13.4	0.0	0.0	64.5	16.9	17.0
Incr Delay (d2), s/veh	2.1	0.7	1.6	20.3	0.2	20.8	0.2	2.9	5.3	12.5	0.6	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.3	3.3	4.4	6.1	3.7	16.9	0.7	0.7	1.4	3.4	6.5	7.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	57.4	52.5	55.1	69.7	38.8	69.6	13.6	2.9	5.3	77.0	17.5	18.0
LnGrp LOS	E	D	E	E	D	E	B	A	A	E	B	B
Approach Vol, veh/h	335			864			2153			1305		
Approach Delay, s/veh	55.0			64.8			3.9			25.6		
Approach LOS	D			E			A			C		
Timer - Assigned Phs	1	2	3	4	5	6	8					
Phs Duration (G+Y+Rc), s	13.5	80.6	17.0	28.9	9.1	85.0	45.9					
Change Period (Y+Rc), s	4.5	6.0	4.0	6.0	4.0	6.0	6.0					
Max Green Setting (Gmax), s	10.5	65.0	13.0	31.0	6.0	70.0	48.0					
Max Q Clear Time (g_c+I1), s	8.9	2.0	15.0	17.1	3.7	18.9	38.2					
Green Ext Time (p_c), s	0.1	27.7	0.0	1.3	0.0	9.1	1.7					
Intersection Summary												
HCM 6th Ctrl Delay			25.0									
HCM 6th LOS			C									
Notes												

									
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	50	5	85	15	70	50	1855	25	1285
Future Volume (vph)	50	5	85	15	70	50	1855	25	1285
Lane Group Flow (vph)	53	74	92	16	76	54	2043	26	1386
Turn Type	Perm	NA	Perm	NA	Perm	pm+pt	NA	pm+pt	NA
Protected Phases		4		8		5	2	1	6
Permitted Phases	4		8		8	2		6	
Detector Phase	4	4	8	8	8	5	2	1	6
Switch Phase									
Minimum Initial (s)	6.0	6.0	6.0	6.0	6.0	6.0	11.0	6.0	11.0
Minimum Split (s)	38.0	38.0	38.0	38.0	38.0	15.0	90.0	12.0	87.0
Total Split (s)	38.0	38.0	38.0	38.0	38.0	15.0	90.0	12.0	87.0
Total Split (%)	27.1%	27.1%	27.1%	27.1%	27.1%	10.7%	64.3%	8.6%	62.1%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	3.0	4.0	3.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	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	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	4.0	6.0	4.0	6.0
Lead/Lag						Lead	Lag	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	None	C-Max
v/c Ratio	0.35	0.32	0.65	0.08	0.32	0.17	0.53	0.14	0.36
Control Delay	62.7	17.0	79.4	54.2	14.6	4.1	8.2	6.9	9.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	62.7	17.0	79.4	54.2	14.6	4.1	8.2	6.9	9.2
Queue Length 50th (ft)	46	4	82	13	0	7	269	3	111
Queue Length 95th (ft)	87	50	137	35	47	20	368	m19	298
Internal Link Dist (ft)		285		253			1081		1447
Turn Bay Length (ft)	165		140		85	125		125	
Base Capacity (vph)	321	423	304	429	424	368	3874	209	3817
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	0.17	0.17	0.30	0.04	0.18	0.15	0.53	0.12	0.36

#### Intersection Summary

Cycle Length: 140

Actuated Cycle Length: 140

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 140

Control Type: Actuated-Coordinated
























m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Chambers Rd & Evans Ave

					
Ø1	Ø2 (R)		Ø4		
12 s	90 s		38 s		
					
Ø5	Ø6 (R)		Ø8		
15 s	87 s		38 s		





















HCM 6th Signalized Intersection Summary  
08/14/2024

2: Chambers Rd & Evans Ave  
Year 2050 Background - AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	5	65	85	15	70	50	1855	25	25	1285	45
Future Volume (veh/h)	50	5	65	85	15	70	50	1855	25	25	1285	45
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1870	1870	1870	1885	1885	1885
Adj Flow Rate, veh/h	53	5	69	92	16	76	54	2016	27	26	1339	47
Peak Hour Factor	0.94	0.94	0.94	0.92	0.92	0.92	0.92	0.92	0.92	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	2	2	2	1	1	1
Cap, veh/h	209	14	192	165	240	203	400	3797	51	217	3680	129
Arrive On Green	0.13	0.13	0.13	0.13	0.13	0.13	0.04	0.73	0.73	0.05	1.00	1.00
Sat Flow, veh/h	1315	109	1505	1336	1885	1598	1781	5192	69	1795	5105	179
Grp Volume(v), veh/h	53	0	74	92	16	76	54	1321	722	26	900	486
Grp Sat Flow(s),veh/h/ln	1315	0	1614	1336	1885	1598	1781	1702	1858	1795	1716	1853
Q Serve(g_s), s	5.2	0.0	5.9	9.5	1.0	6.1	1.1	23.9	23.9	0.5	0.0	0.0
Cycle Q Clear(g_c), s	6.2	0.0	5.9	15.3	1.0	6.1	1.1	23.9	23.9	0.5	0.0	0.0
Prop In Lane	1.00		0.93	1.00		1.00	1.00		0.04	1.00		0.10
Lane Grp Cap(c), veh/h	209	0	205	165	240	203	400	2489	1358	217	2473	1336
V/C Ratio(X)	0.25	0.00	0.36	0.56	0.07	0.37	0.14	0.53	0.53	0.12	0.36	0.36
Avail Cap(c_a), veh/h	342	0	369	301	431	365	473	2489	1358	271	2473	1336
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.5	0.0	55.9	62.9	53.8	56.0	4.2	8.3	8.3	6.4	0.0	0.0
Incr Delay (d2), s/veh	0.6	0.0	1.1	2.9	0.1	1.1	0.2	0.8	1.5	0.2	0.4	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	0.0	2.5	3.4	0.5	2.6	0.4	8.0	9.0	0.2	0.1	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	57.1	0.0	56.9	65.8	53.9	57.1	4.4	9.1	9.8	6.6	0.4	0.8
LnGrp LOS	E	A	E	E	D	E	A	A	A	A	A	A
Approach Vol, veh/h	127			184			2097			1412		
Approach Delay, s/veh	57.0			61.2			9.2			0.7		
Approach LOS	E			E			A			A		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.8	108.4		23.8	9.3	106.9		23.8				
Change Period (Y+Rc), s	4.0	6.0		6.0	4.0	6.0		6.0				
Max Green Setting (Gmax), s	8.0	84.0		32.0	11.0	81.0		32.0				
Max Q Clear Time (g_c+I1), s	2.5	25.9		8.2	3.1	2.0		17.3				
Green Ext Time (p_c), s	0.0	25.3		0.6	0.0	12.8		0.5				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay	10.1											
HCM 6th LOS	B											

Timings  
08/14/2024

1: Chambers Rd & Mexico Ave  
Year 2050 Background - PM Peak Hour

										
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	55	220	50	225	105	315	50	1420	415	2055
Future Volume (vph)	55	220	50	225	105	315	50	1420	415	2055
Lane Group Flow (vph)	60	239	54	239	112	335	53	1774	432	2219
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Prot	NA
Protected Phases		4		3	8		5	2	1	6
Permitted Phases	4		4	8		8	2			
Detector Phase	4	4	4	3	8	8	5	2	1	6
Switch Phase										
Minimum Initial (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	11.0	6.0	11.0
Minimum Split (s)	37.0	37.0	37.0	10.0	37.0	37.0	10.0	27.0	10.0	27.0
Total Split (s)	40.0	40.0	40.0	19.0	59.0	59.0	10.0	52.0	24.0	66.0
Total Split (%)	29.6%	29.6%	29.6%	14.1%	43.7%	43.7%	7.4%	38.5%	17.8%	48.9%
Yellow Time (s)	4.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	3.0	4.0
All-Red Time (s)	2.0	2.0	2.0	1.0	2.0	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	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	4.0	6.0	6.0	4.0	6.0	4.0	6.0
Lead/Lag	Lag	Lag	Lag	Lead			Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	None	C-Max
v/c Ratio	0.28	0.76	0.15	0.80	0.19	0.49	0.35	0.85	0.78	0.81
Control Delay	50.4	68.6	0.8	55.4	33.9	8.8	24.7	33.1	64.7	30.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	50.4	68.6	0.8	55.4	33.9	8.8	24.7	33.1	64.7	30.2
Queue Length 50th (ft)	47	202	0	164	72	33	15	519	188	582
Queue Length 95th (ft)	85	277	0	#223	111	105	54	#706	245	#805
Internal Link Dist (ft)		377			525			1050		1151
Turn Bay Length (ft)	115		115	310		390	170		265	
Base Capacity (vph)	324	473	493	302	738	799	151	2075	569	2740
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.19	0.51	0.11	0.79	0.15	0.42	0.35	0.85	0.76	0.81

#### Intersection Summary

Cycle Length: 135

Actuated Cycle Length: 135

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Yellow

Natural Cycle: 105

Control Type: Actuated-Coordinated

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

Queue shown is maximum after two cycles.

























Splits and Phases: 1: Chambers Rd & Mexico Ave



# HCM 6th Signalized Intersection Summary



















08/14/2024

1: Chambers Rd & Mexico Ave  
Year 2050 Background - PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	55	220	50	225	105	315	50	1420	265	415	2055	75
Future Volume (veh/h)	55	220	50	225	105	315	50	1420	265	415	2055	75
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1870	1870	1870	1885	1885	1885
Adj Flow Rate, veh/h	60	239	54	239	112	335	53	1495	279	432	2141	78
Peak Hour Factor	0.92	0.92	0.92	0.94	0.94	0.94	0.95	0.95	0.95	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	2	2	2	1	1	1
Cap, veh/h	196	282	239	282	548	464	161	1956	364	483	2817	102
Arrive On Green	0.15	0.15	0.15	0.11	0.29	0.29	0.08	0.90	0.90	0.14	0.55	0.55
Sat Flow, veh/h	951	1885	1598	1795	1885	1598	1781	4325	805	3483	5098	185
Grp Volume(v), veh/h	60	239	54	239	112	335	53	1176	598	432	1439	780
Grp Sat Flow(s),veh/h/ln	951	1885	1598	1795	1885	1598	1781	1702	1725	1742	1716	1852
Q Serve(g_s), s	7.7	16.7	4.0	15.0	6.0	25.4	2.1	14.4	14.6	16.5	43.6	44.0
Cycle Q Clear(g_c), s	7.7	16.7	4.0	15.0	6.0	25.4	2.1	14.4	14.6	16.5	43.6	44.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.47	1.00		0.10
Lane Grp Cap(c), veh/h	196	282	239	282	548	464	161	1539	780	483	1896	1023
V/C Ratio(X)	0.31	0.85	0.23	0.85	0.20	0.72	0.33	0.76	0.77	0.89	0.76	0.76
Avail Cap(c_a), veh/h	293	475	402	282	740	627	172	1539	780	516	1896	1023
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.1	55.9	50.5	42.5	36.1	43.0	22.0	4.2	4.2	57.2	23.3	23.3
Incr Delay (d2), s/veh	0.9	7.1	0.5	20.9	0.2	2.7	1.2	3.7	7.1	17.1	2.9	5.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	8.4	1.6	8.2	2.8	10.3	0.9	2.7	3.4	8.3	17.4	19.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	53.0	62.9	51.0	63.4	36.3	45.6	23.2	7.9	11.3	74.3	26.2	28.7
LnGrp LOS	D	E	D	E	D	D	C	A	B	E	C	C
Approach Vol, veh/h	353			686			1827			2651		
Approach Delay, s/veh	59.4			50.3			9.5			34.8		
Approach LOS	E			D			A			C		
Timer - Assigned Phs	1	2	3	4	5	6	8					
Phs Duration (G+Y+Rc), s	22.7	67.0	19.0	26.2	9.2	80.6	45.2					
Change Period (Y+Rc), s	4.0	6.0	4.0	6.0	4.0	6.0	6.0					
Max Green Setting (Gmax), s	20.0	46.0	15.0	34.0	6.0	60.0	53.0					
Max Q Clear Time (g_c+I1), s	18.5	16.6	17.0	18.7	4.1	46.0	27.4					
Green Ext Time (p_c), s	0.3	15.3	0.0	1.6	0.0	11.2	1.8					
Intersection Summary												
HCM 6th Ctrl Delay	29.9											
HCM 6th LOS	C											
Notes												

Timings  
08/14/2024

2: Chambers Rd & Evans Ave  
Year 2050 Background - PM Peak Hour

									
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	110	35	55	10	35	80	1590	75	2200
Future Volume (vph)	110	35	55	10	35	80	1590	75	2200
Lane Group Flow (vph)	120	130	60	11	38	83	1745	81	2431
Turn Type	Perm	NA	Perm	NA	Perm	pm+pt	NA	pm+pt	NA
Protected Phases		4		8		5	2	1	6
Permitted Phases	4		8		8	2		6	
Detector Phase	4	4	8	8	8	5	2	1	6
Switch Phase									
Minimum Initial (s)	6.0	6.0	6.0	6.0	6.0	6.0	11.0	6.0	11.0
Minimum Split (s)	38.0	38.0	38.0	38.0	38.0	15.0	90.0	12.0	87.0
Total Split (s)	38.0	38.0	38.0	38.0	38.0	15.0	82.0	15.0	82.0
Total Split (%)	28.1%	28.1%	28.1%	28.1%	28.1%	11.1%	60.7%	11.1%	60.7%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	3.0	4.0	3.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	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	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	4.0	6.0	4.0	6.0
Lead/Lag						Lead	Lag	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	None	C-Max
v/c Ratio	0.69	0.46	0.47	0.05	0.15	0.53	0.49	0.35	0.68
Control Delay	75.5	25.4	65.2	49.0	6.6	31.1	10.2	11.0	22.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	75.5	25.4	65.2	49.0	6.6	31.1	10.2	11.0	22.8
Queue Length 50th (ft)	102	36	50	9	0	19	227	26	493
Queue Length 95th (ft)	163	95	93	26	18	77	329	m44	672
Internal Link Dist (ft)		285		253			1081		1447
Turn Bay Length (ft)	165		140		85	125		125	
Base Capacity (vph)	331	459	243	445	422	200	3553	284	3578
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	0.36	0.28	0.25	0.02	0.09	0.41	0.49	0.29	0.68

#### Intersection Summary

Cycle Length: 135

Actuated Cycle Length: 135

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 140

Control Type: Actuated-Coordinated

m Volume for 95th percentile queue is metered by upstream signal.

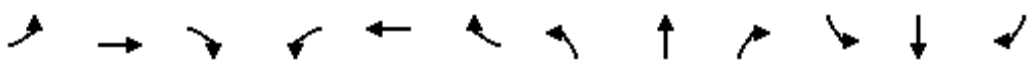





















Splits and Phases: 2: Chambers Rd & Evans Ave

























HCM 6th Signalized Intersection Summary  
08/14/2024

2: Chambers Rd & Evans Ave  
Year 2050 Background - PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	35	85	55	10	35	80	1590	85	75	2200	60
Future Volume (veh/h)	110	35	85	55	10	35	80	1590	85	75	2200	60
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1885	1885	1885	1870	1870	1870	1885	1885	1885
Adj Flow Rate, veh/h	120	38	92	60	11	38	83	1656	89	81	2366	65
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.96	0.96	0.96	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	1	1	1	2	2	2	1	1	1
Cap, veh/h	232	66	160	133	257	218	217	3485	187	283	3618	99
Arrive On Green	0.14	0.14	0.14	0.14	0.14	0.14	0.04	0.70	0.70	0.06	0.93	0.93
Sat Flow, veh/h	1356	485	1174	1270	1885	1598	1781	4960	266	1795	5150	141
Grp Volume(v), veh/h	120	0	130	60	11	38	83	1136	609	81	1573	858
Grp Sat Flow(s),veh/h/ln	1356	0	1659	1270	1885	1598	1781	1702	1822	1795	1716	1860
Q Serve(g_s), s	11.4	0.0	9.9	6.3	0.7	2.8	1.7	20.1	20.1	1.6	10.4	10.6
Cycle Q Clear(g_c), s	12.1	0.0	9.9	16.2	0.7	2.8	1.7	20.1	20.1	1.6	10.4	10.6
Prop In Lane	1.00		0.71	1.00		1.00	1.00		0.15	1.00		0.08
Lane Grp Cap(c), veh/h	232	0	226	133	257	218	217	2392	1281	283	2410	1307
V/C Ratio(X)	0.52	0.00	0.57	0.45	0.04	0.17	0.38	0.47	0.48	0.29	0.65	0.66
Avail Cap(c_a), veh/h	368	0	393	261	447	379	286	2392	1281	354	2410	1307
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33
Upstream Filter(l)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.9	0.0	54.6	62.2	50.6	51.6	5.6	9.0	9.0	6.6	1.7	1.7
Incr Delay (d2), s/veh	1.8	0.0	2.3	2.4	0.1	0.4	1.1	0.7	1.3	0.5	1.4	2.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.1	0.0	4.3	2.1	0.3	1.2	0.6	6.9	7.6	0.6	2.0	2.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	57.7	0.0	56.9	64.5	50.7	51.9	6.7	9.6	10.2	7.2	3.1	4.3
LnGrp LOS	E	A	E	E	D	D	A	A	B	A	A	A
Approach Vol, veh/h		250			109			1828			2512	
Approach Delay, s/veh		57.3			58.8			9.7			3.6	
Approach LOS		E			E			A			A	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.7	100.9		24.4	9.7	100.8		24.4				
Change Period (Y+Rc), s	4.0	6.0		6.0	4.0	6.0		6.0				
Max Green Setting (Gmax), s	11.0	76.0		32.0	11.0	76.0		32.0				
Max Q Clear Time (g_c+l1), s	3.6	22.1		14.1	3.7	12.6		18.2				
Green Ext Time (p_c), s	0.1	18.6		1.0	0.1	36.3		0.2				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay			10.1									
HCM 6th LOS			B									

***Intersection Capacity Worksheets:  
2027 Background  
+ Project***

										
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	54	55	73	223	101	310	45	1468	126	789
Future Volume (vph)	54	55	73	223	101	310	45	1468	126	789
Lane Group Flow (vph)	81	82	109	262	119	365	52	1800	138	914
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	pm+pt	NA
Protected Phases		4		3	8		5	2	1	6
Permitted Phases	4		4	8		8	2		6	
Detector Phase	4	4	4	3	8	8	5	2	1	6
Switch Phase										
Minimum Initial (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	11.0	6.0	11.0
Minimum Split (s)	37.0	37.0	37.0	10.0	37.0	37.0	10.0	27.0	10.0	27.0
Total Split (s)	45.0	45.0	45.0	22.0	67.0	67.0	27.0	61.0	12.0	46.0
Total Split (%)	32.1%	32.1%	32.1%	15.7%	47.9%	47.9%	19.3%	43.6%	8.6%	32.9%
Yellow Time (s)	4.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	3.0	4.0
All-Red Time (s)	2.0	2.0	2.0	1.0	2.0	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	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	4.0	6.0	6.0	4.0	6.0	4.0	6.0
Lead/Lag	Lag	Lag	Lag	Lead			Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	None	C-Max
v/c Ratio	0.62	0.43	0.41	0.70	0.25	0.70	0.13	0.66	0.58	0.31
Control Delay	79.7	64.5	12.4	53.4	41.3	34.0	8.3	20.8	31.0	15.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	79.7	64.5	12.4	53.4	41.3	34.0	8.3	20.8	31.0	15.5
Queue Length 50th (ft)	72	71	0	204	86	181	11	430	53	149
Queue Length 95th (ft)	90	88	11	257	125	250	22	527	130	205
Internal Link Dist (ft)		377			525			1050		1151
Turn Bay Length (ft)	115		115	180		180	170		130	
Base Capacity (vph)	353	518	525	377	819	781	579	2720	237	2991
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.23	0.16	0.21	0.69	0.15	0.47	0.09	0.66	0.58	0.31

#### Intersection Summary

Cycle Length: 140

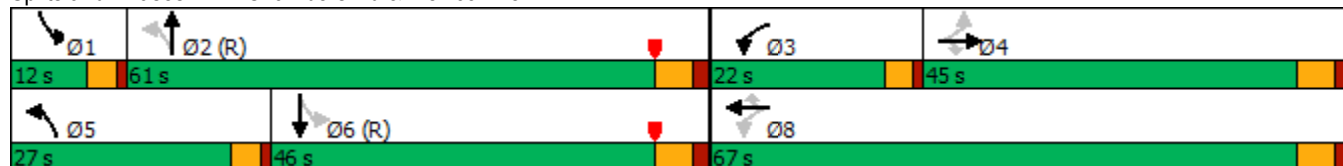
Actuated Cycle Length: 140

Offset: 15 (11%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 95

























Control Type: Actuated-Coordinated



















Splits and Phases: 1: Chambers Rd & Mexico Ave



HCM 6th Signalized Intersection Summary  
08/14/2024

1: Chambers Rd & Mexico Ave  
Year 2027 Background + Project - AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	54	55	73	223	101	310	45	1468	80	126	789	43
Future Volume (veh/h)	54	55	73	223	101	310	45	1468	80	126	789	43
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1885	1885	1885	1885	1885	1885	1870	1870	1870
Adj Flow Rate, veh/h	81	82	109	262	119	365	52	1707	93	138	867	47
Peak Hour Factor	0.67	0.67	0.67	0.85	0.85	0.85	0.86	0.86	0.86	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	1	1	1	1	1	1	2	2	2
Cap, veh/h	151	205	174	365	503	426	422	2860	156	284	2884	156
Arrive On Green	0.11	0.11	0.11	0.13	0.27	0.27	0.07	1.00	1.00	0.05	0.58	0.58
Sat Flow, veh/h	911	1870	1585	1795	1885	1598	1795	4995	272	1781	4958	268
Grp Volume(v), veh/h	81	82	109	262	119	365	52	1172	628	138	595	319
Grp Sat Flow(s),veh/h/ln	911	1870	1585	1795	1885	1598	1795	1716	1836	1781	1702	1822
Q Serve(g_s), s	12.2	5.7	9.2	17.9	6.9	30.4	1.6	0.0	0.0	4.5	12.4	12.4
Cycle Q Clear(g_c), s	12.2	5.7	9.2	17.9	6.9	30.4	1.6	0.0	0.0	4.5	12.4	12.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.15	1.00		0.15
Lane Grp Cap(c), veh/h	151	205	174	365	503	426	422	1964	1051	284	1980	1060
V/C Ratio(X)	0.54	0.40	0.63	0.72	0.24	0.86	0.12	0.60	0.60	0.49	0.30	0.30
Avail Cap(c_a), veh/h	305	521	442	365	821	696	650	1964	1051	303	1980	1060
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	60.9	58.0	59.6	46.1	40.2	48.8	11.0	0.0	0.0	11.0	14.8	14.8
Incr Delay (d2), s/veh	2.9	1.3	3.7	6.7	0.2	5.9	0.1	1.3	2.5	1.3	0.4	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	2.8	3.9	8.6	3.3	12.7	0.6	0.4	0.7	1.8	4.8	5.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	63.8	59.3	63.3	52.7	40.4	54.7	11.1	1.3	2.5	12.3	15.2	15.6
LnGrp LOS	E	E	E	D	D	D	B	A	A	B	B	B
Approach Vol, veh/h	272			746			1852			1052		
Approach Delay, s/veh	62.2			51.7			2.0			14.9		
Approach LOS	E			D			A			B		
Timer - Assigned Phs	1	2	3	4	5	6	8					
Phs Duration (G+Y+Rc), s	10.5	86.2	22.0	21.3	9.2	87.4	43.3					
Change Period (Y+Rc), s	4.0	6.0	4.0	6.0	4.0	6.0	6.0					
Max Green Setting (Gmax), s	8.0	55.0	18.0	39.0	23.0	40.0	61.0					
Max Q Clear Time (g_c+I1), s	6.5	2.0	19.9	14.2	3.6	14.4	32.4					
Green Ext Time (p_c), s	0.0	19.6	0.0	1.2	0.1	6.1	2.0					
Intersection Summary												
HCM 6th Ctrl Delay	19.1											
HCM 6th LOS	B											

									
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	41	4	66	13	55	38	1482	26	1032
Future Volume (vph)	41	4	66	13	55	38	1482	26	1032
Lane Group Flow (vph)	44	59	86	17	71	44	1727	27	1114
Turn Type	Perm	NA	Perm	NA	Perm	pm+pt	NA	pm+pt	NA
Protected Phases		4		8		5	2	1	6
Permitted Phases	4		8		8	2		6	
Detector Phase	4	4	8	8	8	5	2	1	6
Switch Phase									
Minimum Initial (s)	6.0	6.0	6.0	6.0	6.0	6.0	11.0	6.0	11.0
Minimum Split (s)	38.0	38.0	38.0	38.0	38.0	15.0	90.0	12.0	87.0
Total Split (s)	38.0	38.0	38.0	38.0	38.0	15.0	90.0	12.0	87.0
Total Split (%)	27.1%	27.1%	27.1%	27.1%	27.1%	10.7%	64.3%	8.6%	62.1%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	3.0	4.0	3.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	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	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	4.0	6.0	4.0	6.0
Lead/Lag						Lead	Lag	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	None	C-Max
v/c Ratio	0.31	0.28	0.63	0.09	0.31	0.11	0.44	0.11	0.29
Control Delay	62.1	18.1	78.9	55.2	15.2	3.3	7.0	4.2	6.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	62.1	18.1	78.9	55.2	15.2	3.3	7.0	4.2	6.1
Queue Length 50th (ft)	38	3	76	14	0	6	200	3	81
Queue Length 95th (ft)	75	46	110	31	31	15	262	m13	175
Internal Link Dist (ft)		285		253			1081		1447
Turn Bay Length (ft)	70		85		85	125		125	
Base Capacity (vph)	320	412	309	429	420	459	3902	263	3850
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	0.14	0.14	0.28	0.04	0.17	0.10	0.44	0.10	0.29

#### Intersection Summary

Cycle Length: 140

Actuated Cycle Length: 140




Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 140

Control Type: Actuated-Coordinated
























m Volume for 95th percentile queue is metered by upstream signal.




Splits and Phases: 2: Chambers Rd & Evans Ave























					
Ø1	Ø2 (R)				Ø4
12 s	90 s				38 s
					
Ø5	Ø6 (R)				Ø8
15 s	87 s				38 s

HCM 6th Signalized Intersection Summary  
08/14/2024

2: Chambers Rd & Evans Ave  
Year 2027 Background + Project - AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	41	4	52	66	13	55	38	1482	21	26	1032	37
Future Volume (veh/h)	41	4	52	66	13	55	38	1482	21	26	1032	37
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1870	1870	1870	1885	1885	1885
Adj Flow Rate, veh/h	44	4	55	86	17	71	44	1703	24	27	1075	39
Peak Hour Factor	0.94	0.94	0.94	0.77	0.77	0.77	0.87	0.87	0.87	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	2	2	2	1	1	1
Cap, veh/h	191	12	171	160	214	182	487	3861	54	277	3757	136
Arrive On Green	0.11	0.11	0.11	0.11	0.11	0.11	0.04	0.74	0.74	0.06	1.00	1.00
Sat Flow, veh/h	1319	109	1505	1355	1885	1598	1781	5188	73	1795	5098	185
Grp Volume(v), veh/h	44	0	59	86	17	71	44	1117	610	27	723	391
Grp Sat Flow(s),veh/h/ln	1319	0	1614	1355	1885	1598	1781	1702	1857	1795	1716	1852
Q Serve(g_s), s	4.3	0.0	4.7	8.7	1.1	5.8	0.8	17.5	17.5	0.5	0.0	0.0
Cycle Q Clear(g_c), s	5.4	0.0	4.7	13.4	1.1	5.8	0.8	17.5	17.5	0.5	0.0	0.0
Prop In Lane	1.00		0.93	1.00		1.00	1.00		0.04	1.00		0.10
Lane Grp Cap(c), veh/h	191	0	183	160	214	182	487	2533	1382	277	2528	1365
V/C Ratio(X)	0.23	0.00	0.32	0.54	0.08	0.39	0.09	0.44	0.44	0.10	0.29	0.29
Avail Cap(c_a), veh/h	342	0	369	315	431	365	564	2533	1382	329	2528	1365
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.9	0.0	57.1	63.3	55.5	57.5	3.7	6.8	6.8	4.9	0.0	0.0
Incr Delay (d2), s/veh	0.6	0.0	1.0	2.8	0.2	1.4	0.1	0.6	1.0	0.2	0.3	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	0.0	2.0	3.2	0.6	2.4	0.3	5.7	6.4	0.2	0.1	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	58.5	0.0	58.1	66.1	55.6	58.9	3.8	7.4	7.8	5.0	0.3	0.5
LnGrp LOS	E	A	E	E	E	E	A	A	A	A	A	A
Approach Vol, veh/h	103			174			1771			1141		
Approach Delay, s/veh	58.3			62.1			7.4			0.5		
Approach LOS	E			E			A			A		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.9	110.2		21.9	8.9	109.2		21.9				
Change Period (Y+Rc), s	4.0	6.0		6.0	4.0	6.0		6.0				
Max Green Setting (Gmax), s	8.0	84.0		32.0	11.0	81.0		32.0				
Max Q Clear Time (g_c+I1), s	2.5	19.5		7.4	2.8	2.0		15.4				
Green Ext Time (p_c), s	0.0	18.9		0.4	0.0	9.0		0.5				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay	9.6											
HCM 6th LOS	A											

Intersection						
Int Delay, s/veh	0.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	21	1573	12	0	1094
Future Vol, veh/h	0	21	1573	12	0	1094
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	86	86	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	23	1829	14	0	1176
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	-	922	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.14	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.92	-	-	-	-
Pot Cap-1 Maneuver	0	234	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	234	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	22	0		0		
HCM LOS	C					
Minor Lane/Major Mvmt	NBT	NBRWBLn1		SBT		
Capacity (veh/h)	-	234		-		
HCM Lane V/C Ratio	-	0.098		-		
HCM Control Delay (s)	-	22		-		
HCM Lane LOS	-	C		-		
HCM 95th %tile Q(veh)	-	0.3		-		

											
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	
Lane Configurations											
Traffic Volume (vph)	43	174	42	181	83	250	45	1134	331	1641	
Future Volume (vph)	43	174	42	181	83	250	45	1134	331	1641	
Lane Group Flow (vph)	60	242	58	193	88	266	47	1418	345	1769	
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	pm+pt	NA	
Protected Phases		4		3	8		5	2	1	6	
Permitted Phases	4		4	8		8	2		6		
Detector Phase	4	4	4	3	8	8	5	2	1	6	
Switch Phase											
Minimum Initial (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	11.0	6.0	11.0	
Minimum Split (s)	37.0	37.0	37.0	10.0	37.0	37.0	10.0	27.0	10.0	27.0	
Total Split (s)	37.0	37.0	37.0	17.0	54.0	54.0	10.0	48.0	33.0	71.0	
Total Split (%)	27.4%	27.4%	27.4%	12.6%	40.0%	40.0%	7.4%	35.6%	24.4%	52.6%	
Yellow Time (s)	4.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	3.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	1.0	2.0	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	0.0	0.0	
Total Lost Time (s)	6.0	6.0	6.0	4.0	6.0	6.0	4.0	6.0	4.0	6.0	
Lead/Lag	Lag	Lag	Lag	Lead			Lead	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	None	None	None	None	C-Max	None	C-Max	
v/c Ratio	0.27	0.77	0.16	0.71	0.16	0.41	0.28	0.70	0.86	0.62	
Control Delay	50.1	68.9	0.9	50.5	34.5	5.4	15.5	29.8	55.4	23.0	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	50.1	68.9	0.9	50.5	34.5	5.4	15.5	29.8	55.4	23.0	
Queue Length 50th (ft)	46	205	0	131	57	0	13	385	225	387	
Queue Length 95th (ft)	67	215	0	183	93	60	29	#500	#355	496	
Internal Link Dist (ft)		377			525			1050		1151	
Turn Bay Length (ft)	115		115	180		180	170		130		
Base Capacity (vph)	302	431	460	274	668	739	166	2031	454	2837	
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.20	0.56	0.13	0.70	0.13	0.36	0.28	0.70	0.76	0.62	

#### Intersection Summary

Cycle Length: 135

Actuated Cycle Length: 135

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

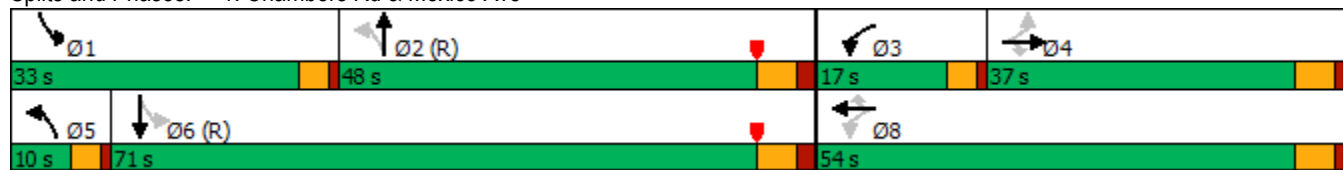
Natural Cycle: 95

Control Type: Actuated-Coordinated

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

Queue shown is maximum after two cycles.

Splits and Phases: 1: Chambers Rd & Mexico Ave















































# HCM 6th Signalized Intersection Summary

08/14/2024

1: Chambers Rd & Mexico Ave  
Year 2027 Background + Project - PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	43	174	42	181	83	250	45	1134	213	331	1641	58
Future Volume (veh/h)	43	174	42	181	83	250	45	1134	213	331	1641	58
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1870	1870	1870	1885	1885	1885
Adj Flow Rate, veh/h	60	242	58	193	88	266	47	1194	224	345	1709	60
Peak Hour Factor	0.72	0.72	0.72	0.94	0.94	0.94	0.95	0.95	0.95	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	2	2	2	1	1	1
Cap, veh/h	209	283	240	254	521	441	214	2131	400	439	2902	102
Arrive On Green	0.15	0.15	0.15	0.10	0.28	0.28	0.07	0.99	0.99	0.11	0.57	0.57
Sat Flow, veh/h	1035	1885	1598	1795	1885	1598	1781	4318	810	1795	5105	179
Grp Volume(v), veh/h	60	242	58	193	88	266	47	941	477	345	1148	621
Grp Sat Flow(s),veh/h/ln	1035	1885	1598	1795	1885	1598	1781	1702	1725	1795	1716	1853
Q Serve(g_s), s	7.1	16.9	4.3	12.0	4.8	19.5	1.7	1.1	1.1	12.2	29.3	29.3
Cycle Q Clear(g_c), s	7.1	16.9	4.3	12.0	4.8	19.5	1.7	1.1	1.1	12.2	29.3	29.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.47	1.00		0.10
Lane Grp Cap(c), veh/h	209	283	240	254	521	441	214	1680	851	439	1950	1053
V/C Ratio(X)	0.29	0.85	0.24	0.76	0.17	0.60	0.22	0.56	0.56	0.79	0.59	0.59
Avail Cap(c_a), veh/h	291	433	367	254	670	568	227	1680	851	624	1950	1053
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.7	55.9	50.6	42.9	37.1	42.4	16.3	0.4	0.4	12.4	18.9	18.9
Incr Delay (d2), s/veh	0.7	10.0	0.5	12.7	0.2	1.3	0.5	1.4	2.7	4.3	1.3	2.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	8.8	1.8	6.2	2.2	7.8	0.7	0.5	0.8	5.2	11.4	12.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	52.5	65.9	51.1	55.5	37.2	43.8	16.8	1.8	3.1	16.7	20.2	21.3
LnGrp LOS	D	E	D	E	D	D	B	A	A	B	C	C
Approach Vol, veh/h	360			547			1465			2114		
Approach Delay, s/veh	61.3			46.9			2.7			20.0		
Approach LOS	E			D			A			B		
Timer - Assigned Phs	1	2	3	4	5	6	8					
Phs Duration (G+Y+Rc), s	19.1	72.6	17.0	26.3	9.0	82.7	43.3					
Change Period (Y+Rc), s	4.0	6.0	4.0	6.0	4.0	6.0	6.0					
Max Green Setting (Gmax), s	29.0	42.0	13.0	31.0	6.0	65.0	48.0					
Max Q Clear Time (g_c+I1), s	14.2	3.1	14.0	18.9	3.7	31.3	21.5					
Green Ext Time (p_c), s	0.9	12.4	0.0	1.4	0.0	16.0	1.4					
Intersection Summary												
HCM 6th Ctrl Delay	20.9											
HCM 6th LOS	C											

									
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	88	27	43	9	28	62	1270	69	1754
Future Volume (vph)	88	27	43	9	28	62	1270	69	1754
Lane Group Flow (vph)	128	135	57	12	37	65	1392	74	1937
Turn Type	Perm	NA	Perm	NA	Perm	pm+pt	NA	pm+pt	NA
Protected Phases		4		8		5	2	1	6
Permitted Phases	4		8		8	2		6	
Detector Phase	4	4	8	8	8	5	2	1	6
Switch Phase									
Minimum Initial (s)	6.0	6.0	6.0	6.0	6.0	6.0	11.0	6.0	11.0
Minimum Split (s)	38.0	38.0	38.0	38.0	38.0	15.0	90.0	12.0	87.0
Total Split (s)	42.0	42.0	42.0	42.0	42.0	13.0	83.0	10.0	80.0
Total Split (%)	31.1%	31.1%	31.1%	31.1%	31.1%	9.6%	61.5%	7.4%	59.3%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	3.0	4.0	3.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	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	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	4.0	6.0	4.0	6.0
Lead/Lag						Lead	Lag	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	None	C-Max
v/c Ratio	0.70	0.46	0.43	0.05	0.14	0.33	0.39	0.24	0.53
Control Delay	75.0	24.1	62.3	48.2	6.0	8.2	8.8	8.2	15.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	75.0	24.1	62.3	48.2	6.0	8.2	8.8	8.2	15.1
Queue Length 50th (ft)	109	36	47	9	0	10	166	14	261
Queue Length 95th (ft)	126	54	72	23	7	26	241	m50	463
Internal Link Dist (ft)		285		253			1081		1447
Turn Bay Length (ft)	70		85		85	125		125	
Base Capacity (vph)	372	509	269	501	468	225	3610	312	3650
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	0.34	0.27	0.21	0.02	0.08	0.29	0.39	0.24	0.53

#### Intersection Summary

Cycle Length: 135

Actuated Cycle Length: 135

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 140

Control Type: Actuated-Coordinated
























m Volume for 95th percentile queue is metered by upstream signal.




Splits and Phases: 2: Chambers Rd & Evans Ave



HCM 6th Signalized Intersection Summary  
08/14/2024

2: Chambers Rd & Evans Ave  
Year 2027 Background + Project - PM Peak Hour





















												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	88	27	66	43	9	28	62	1270	66	69	1754	47
Future Volume (veh/h)	88	27	66	43	9	28	62	1270	66	69	1754	47
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1885	1885	1885	1870	1870	1870	1885	1885	1885
Adj Flow Rate, veh/h	128	39	96	57	12	37	65	1323	69	74	1886	51
Peak Hour Factor	0.69	0.69	0.69	0.75	0.75	0.75	0.96	0.96	0.96	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	1	1	1	2	2	2	1	1	1
Cap, veh/h	232	66	162	131	259	220	276	3489	182	361	3623	98
Arrive On Green	0.14	0.14	0.14	0.14	0.14	0.14	0.04	0.70	0.70	0.06	0.94	0.94
Sat Flow, veh/h	1356	479	1179	1264	1885	1598	1781	4969	259	1795	5152	139
Grp Volume(v), veh/h	128	0	135	57	12	37	65	906	486	74	1255	682
Grp Sat Flow(s),veh/h/ln	1356	0	1658	1264	1885	1598	1781	1702	1824	1795	1716	1860
Q Serve(g_s), s	12.2	0.0	10.3	6.0	0.7	2.8	1.3	14.6	14.6	1.5	6.2	6.2
Cycle Q Clear(g_c), s	13.0	0.0	10.3	16.3	0.7	2.8	1.3	14.6	14.6	1.5	6.2	6.2
Prop In Lane	1.00		0.71	1.00		1.00	1.00		0.14	1.00		0.07
Lane Grp Cap(c), veh/h	232	0	228	131	259	220	276	2390	1281	361	2413	1308
V/C Ratio(X)	0.55	0.00	0.59	0.44	0.05	0.17	0.24	0.38	0.38	0.21	0.52	0.52
Avail Cap(c_a), veh/h	407	0	442	294	503	426	323	2390	1281	366	2413	1308
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.1	0.0	54.7	62.3	50.5	51.4	4.8	8.2	8.2	5.5	1.5	1.5
Incr Delay (d2), s/veh	2.0	0.0	2.4	2.3	0.1	0.4	0.4	0.5	0.9	0.3	0.8	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.4	0.0	4.5	2.0	0.4	1.1	0.5	5.0	5.5	0.5	1.4	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	58.2	0.0	57.1	64.6	50.6	51.7	5.3	8.6	9.0	5.8	2.3	3.0
LnGrp LOS	E	A	E	E	D	D	A	A	A	A	A	A
Approach Vol, veh/h	263			106			1457			2011		
Approach Delay, s/veh	57.6			58.5			8.6			2.7		
Approach LOS	E			E			A			A		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.6	100.8		24.6	9.5	100.9		24.6				
Change Period (Y+Rc), s	4.0	6.0		6.0	4.0	6.0		6.0				
Max Green Setting (Gmax), s	6.0	77.0		36.0	9.0	74.0		36.0				
Max Q Clear Time (g_c+I1), s	3.5	16.6		15.0	3.3	8.2		18.3				
Green Ext Time (p_c), s	0.0	12.8		1.2	0.0	23.7		0.3				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay				10.2								
HCM 6th LOS				B								

Intersection						
Int Delay, s/veh	0.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	14	1378	17	0	1870
Future Vol, veh/h	0	14	1378	17	0	1870
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	95	95	94	94
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	15	1451	18	0	1989
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	-	735	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.14	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.92	-	-	-	-
Pot Cap-1 Maneuver	0	311	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	311	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	17.2	0		0		
HCM LOS	C					
Minor Lane/Major Mvmt	NBT	NBRWBLn1		SBT		
Capacity (veh/h)	-	311		-		
HCM Lane V/C Ratio	-	0.049		-		
HCM Control Delay (s)	-	17.2		-		
HCM Lane LOS	-	C		-		
HCM 95th %tile Q(veh)	-	0.2		-		

***Intersection Capacity Worksheets:  
2050 Background +  
Project***

Timings  
08/14/2024

1: Chambers Rd & Mexico Ave  
Year 2050 Background + Project - AM Peak Hour

										
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations										
Traffic Volume (vph)	65	70	91	281	125	390	55	1845	160	990
Future Volume (vph)	65	70	91	281	125	390	55	1845	160	990
Lane Group Flow (vph)	97	104	136	305	136	424	60	2115	174	1136
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Prot	NA
Protected Phases		4		3	8		5	2	1	6
Permitted Phases	4		4	8		8	2			
Detector Phase	4	4	4	3	8	8	5	2	1	6
Switch Phase										
Minimum Initial (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	11.0	6.0	11.0
Minimum Split (s)	37.0	37.0	37.0	10.0	37.0	37.0	10.0	27.0	10.0	27.0
Total Split (s)	37.0	37.0	37.0	17.0	54.0	54.0	10.0	71.0	15.0	76.0
Total Split (%)	26.4%	26.4%	26.4%	12.1%	38.6%	38.6%	7.1%	50.7%	10.7%	54.3%
Yellow Time (s)	4.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	3.0	4.0
All-Red Time (s)	2.0	2.0	2.0	1.0	2.0	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	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	4.0	6.0	6.0	4.0	6.0	4.0	6.0
Lead/Lag	Lag	Lag	Lag	Lead			Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	None	C-Max
v/c Ratio	0.56	0.40	0.40	0.88	0.28	0.86	0.19	0.76	0.62	0.38
Control Delay	66.8	57.4	10.8	71.2	41.0	52.8	9.1	22.0	72.2	16.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	66.8	57.4	10.8	71.2	41.0	52.8	9.1	22.0	72.2	16.8
Queue Length 50th (ft)	84	88	0	245	100	286	13	546	79	197
Queue Length 95th (ft)	95	98	15	307	141	378	26	710	121	275
Internal Link Dist (ft)		377			525			1050		1151
Turn Bay Length (ft)	115		115	310		390	170		265	
Base Capacity (vph)	276	412	456	346	644	619	317	2777	290	2994
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.35	0.25	0.30	0.88	0.21	0.68	0.19	0.76	0.60	0.38

#### Intersection Summary

Cycle Length: 140

Actuated Cycle Length: 140

Offset: 15 (11%), Referenced to phase 2:NBTL and 6:SBT, Start of Yellow

Natural Cycle: 95

























Control Type: Actuated-Coordinated



















Splits and Phases: 1: Chambers Rd & Mexico Ave



HCM 6th Signalized Intersection Summary  
08/14/2024

1: Chambers Rd & Mexico Ave  
Year 2050 Background + Project - AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	65	70	91	281	125	390	55	1845	101	160	990	55
Future Volume (veh/h)	65	70	91	281	125	390	55	1845	101	160	990	55
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1885	1885	1885	1885	1885	1885	1870	1870	1870
Adj Flow Rate, veh/h	97	104	136	305	136	424	60	2005	110	174	1076	60
Peak Hour Factor	0.67	0.67	0.67	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	1	1	1	1	1	1	2	2	2
Cap, veh/h	190	305	259	349	537	455	341	2679	146	223	2783	155
Arrive On Green	0.16	0.16	0.16	0.09	0.28	0.28	0.08	1.00	1.00	0.06	0.56	0.56
Sat Flow, veh/h	850	1870	1585	1795	1885	1598	1795	4994	273	3456	4949	276
Grp Volume(v), veh/h	97	104	136	305	136	424	60	1375	740	174	740	396
Grp Sat Flow(s),veh/h/ln	850	1870	1585	1795	1885	1598	1795	1716	1836	1728	1702	1821
Q Serve(g_s), s	15.1	6.9	11.0	13.0	7.8	36.2	2.0	0.0	0.0	6.9	17.0	17.0
Cycle Q Clear(g_c), s	15.1	6.9	11.0	13.0	7.8	36.2	2.0	0.0	0.0	6.9	17.0	17.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.15	1.00		0.15
Lane Grp Cap(c), veh/h	190	305	259	349	537	455	341	1840	985	223	1914	1024
V/C Ratio(X)	0.51	0.34	0.53	0.87	0.25	0.93	0.18	0.75	0.75	0.78	0.39	0.39
Avail Cap(c_a), veh/h	240	414	351	349	646	548	348	1840	985	272	1914	1024
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.3	51.9	53.6	49.4	38.6	48.7	13.2	0.0	0.0	64.5	17.1	17.1
Incr Delay (d2), s/veh	2.1	0.7	1.6	20.9	0.2	20.8	0.2	2.8	5.3	11.2	0.6	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.3	3.3	4.5	6.2	3.7	16.9	0.8	0.7	1.4	3.4	6.6	7.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	57.4	52.5	55.2	70.3	38.8	69.6	13.5	2.8	5.3	75.7	17.7	18.3
LnGrp LOS	E	D	E	E	D	E	B	A	A	E	B	B
Approach Vol, veh/h	337			865			2175			1310		
Approach Delay, s/veh	55.0			65.0			3.9			25.6		
Approach LOS	E			E			A			C		
Timer - Assigned Phs	1	2	3	4	5	6	8					
Phs Duration (G+Y+Rc), s	13.0	81.1	17.0	28.9	9.4	84.7	45.9					
Change Period (Y+Rc), s	4.0	6.0	4.0	6.0	4.0	6.0	6.0					
Max Green Setting (Gmax), s	11.0	65.0	13.0	31.0	6.0	70.0	48.0					
Max Q Clear Time (g_c+I1), s	8.9	2.0	15.0	17.1	4.0	19.0	38.2					
Green Ext Time (p_c), s	0.1	28.0	0.0	1.3	0.0	9.1	1.7					
Intersection Summary												
HCM 6th Ctrl Delay	24.9											
HCM 6th LOS	C											

									
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	50	5	85	15	70	50	1860	32	1294
Future Volume (vph)	50	5	85	15	70	50	1860	32	1294
Lane Group Flow (vph)	53	74	92	16	76	54	2049	33	1395
Turn Type	Perm	NA	Perm	NA	Perm	pm+pt	NA	pm+pt	NA
Protected Phases		4		8		5	2	1	6
Permitted Phases	4		8		8	2		6	
Detector Phase	4	4	8	8	8	5	2	1	6
Switch Phase									
Minimum Initial (s)	6.0	6.0	6.0	6.0	6.0	6.0	11.0	6.0	11.0
Minimum Split (s)	38.0	38.0	38.0	38.0	38.0	15.0	90.0	12.0	87.0
Total Split (s)	38.0	38.0	38.0	38.0	38.0	15.0	90.0	12.0	87.0
Total Split (%)	27.1%	27.1%	27.1%	27.1%	27.1%	10.7%	64.3%	8.6%	62.1%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	3.0	4.0	3.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	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	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	4.0	6.0	4.0	6.0
Lead/Lag						Lead	Lag	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	None	C-Max
v/c Ratio	0.35	0.32	0.65	0.08	0.32	0.17	0.53	0.18	0.37
Control Delay	62.7	17.0	79.4	54.2	14.6	4.2	8.2	7.9	9.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	62.7	17.0	79.4	54.2	14.6	4.2	8.2	7.9	9.2
Queue Length 50th (ft)	46	4	82	13	0	7	271	4	112
Queue Length 95th (ft)	87	50	137	35	47	20	372	m26	300
Internal Link Dist (ft)		285		253			1081		1447
Turn Bay Length (ft)	165		140		85	125		125	
Base Capacity (vph)	321	423	304	429	424	365	3872	207	3817
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	0.17	0.17	0.30	0.04	0.18	0.15	0.53	0.16	0.37

#### Intersection Summary

Cycle Length: 140

Actuated Cycle Length: 140

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 140

Control Type: Actuated-Coordinated

m Volume for 95th percentile queue is metered by upstream signal.
























Splits and Phases: 2: Chambers Rd & Evans Ave






























HCM 6th Signalized Intersection Summary  
08/14/2024

2: Chambers Rd & Evans Ave  
Year 2050 Background + Project - AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	5	65	85	15	70	50	1860	25	32	1294	45
Future Volume (veh/h)	50	5	65	85	15	70	50	1860	25	32	1294	45
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1870	1870	1870	1885	1885	1885
Adj Flow Rate, veh/h	53	5	69	92	16	76	54	2022	27	33	1348	47
Peak Hour Factor	0.94	0.94	0.94	0.92	0.92	0.92	0.92	0.92	0.92	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	2	2	2	1	1	1
Cap, veh/h	209	14	192	165	240	203	397	3777	50	222	3681	128
Arrive On Green	0.13	0.13	0.13	0.13	0.13	0.13	0.04	0.73	0.73	0.06	1.00	1.00
Sat Flow, veh/h	1315	109	1505	1336	1885	1598	1781	5193	69	1795	5106	178
Grp Volume(v), veh/h	53	0	74	92	16	76	54	1325	724	33	906	489
Grp Sat Flow(s),veh/h/ln	1315	0	1614	1336	1885	1598	1781	1702	1858	1795	1716	1853
Q Serve(g_s), s	5.2	0.0	5.9	9.5	1.0	6.1	1.1	24.3	24.4	0.6	0.0	0.0
Cycle Q Clear(g_c), s	6.2	0.0	5.9	15.3	1.0	6.1	1.1	24.3	24.4	0.6	0.0	0.0
Prop In Lane	1.00		0.93	1.00		1.00	1.00		0.04	1.00		0.10
Lane Grp Cap(c), veh/h	209	0	205	165	240	203	397	2476	1352	222	2473	1336
V/C Ratio(X)	0.25	0.00	0.36	0.56	0.07	0.37	0.14	0.54	0.54	0.15	0.37	0.37
Avail Cap(c_a), veh/h	342	0	369	301	431	365	470	2476	1352	268	2473	1336
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.5	0.0	55.9	62.9	53.8	56.0	4.2	8.5	8.5	6.5	0.0	0.0
Incr Delay (d2), s/veh	0.6	0.0	1.1	2.9	0.1	1.1	0.2	0.8	1.5	0.3	0.4	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	0.0	2.5	3.4	0.5	2.6	0.4	8.2	9.2	0.2	0.1	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	57.1	0.0	56.9	65.8	53.9	57.1	4.4	9.3	10.0	6.8	0.4	0.8
LnGrp LOS	E	A	E	E	D	E	A	A	B	A	A	A
Approach Vol, veh/h	127			184			2103			1428		
Approach Delay, s/veh	57.0			61.2			9.5			0.7		
Approach LOS	E			E			A			A		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.3	107.8		23.8	9.3	106.9		23.8				
Change Period (Y+Rc), s	4.0	6.0		6.0	4.0	6.0		6.0				
Max Green Setting (Gmax), s	8.0	84.0		32.0	11.0	81.0		32.0				
Max Q Clear Time (g_c+I1), s	2.6	26.4		8.2	3.1	2.0		17.3				
Green Ext Time (p_c), s	0.0	25.4		0.6	0.0	13.0		0.5				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay				10.2								
HCM 6th LOS				B								

Intersection						
Int Delay, s/veh	0.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	21	1975	12	0	1371
Future Vol, veh/h	0	21	1975	12	0	1371
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	23	2147	13	0	1474
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	-	1080	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.14	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.92	-	-	-	-
Pot Cap-1 Maneuver	0	183	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	183	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	27.5	0		0		
HCM LOS	D					
Minor Lane/Major Mvmt	NBT	NBRWBLn1		SBT		
Capacity (veh/h)	-	183		-		
HCM Lane V/C Ratio	-	0.125		-		
HCM Control Delay (s)	-	27.5		-		
HCM Lane LOS	-	D		-		
HCM 95th %tile Q(veh)	-	0.4		-		

											
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	SBL	SBT	
Lane Configurations											
Traffic Volume (vph)	55	220	51	226	105	315	57	1426	415	2063	
Future Volume (vph)	55	220	51	226	105	315	57	1426	415	2063	
Lane Group Flow (vph)	60	239	55	240	112	335	60	1781	432	2227	
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Prot	NA	
Protected Phases		4		3	8		5	2	1	6	
Permitted Phases	4		4	8		8	2				
Detector Phase	4	4	4	3	8	8	5	2	1	6	
Switch Phase											
Minimum Initial (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	11.0	6.0	11.0	
Minimum Split (s)	37.0	37.0	37.0	10.0	37.0	37.0	10.0	27.0	10.0	27.0	
Total Split (s)	37.0	37.0	37.0	20.0	57.0	57.0	10.0	54.0	24.0	68.0	
Total Split (%)	27.4%	27.4%	27.4%	14.8%	42.2%	42.2%	7.4%	40.0%	17.8%	50.4%	
Yellow Time (s)	4.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	3.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	1.0	2.0	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	0.0	0.0	
Total Lost Time (s)	6.0	6.0	6.0	4.0	6.0	6.0	4.0	6.0	4.0	6.0	
Lead/Lag	Lag	Lag	Lag	Lead			Lead	Lag	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes			Yes	Yes	Yes	Yes	
Recall Mode	None	None	None	None	None	None	None	C-Max	None	C-Max	
v/c Ratio	0.28	0.76	0.15	0.78	0.19	0.49	0.41	0.86	0.80	0.82	
Control Delay	50.6	68.9	0.9	52.2	33.3	9.3	28.2	33.3	66.7	30.8	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	50.6	68.9	0.9	52.2	33.3	9.3	28.2	33.3	66.7	30.8	
Queue Length 50th (ft)	47	203	0	163	72	38	17	527	188	598	
Queue Length 95th (ft)	85	277	0	220	110	110	63	#685	#264	#758	
Internal Link Dist (ft)		377			525			1050		1151	
Turn Bay Length (ft)	115		115	310		390	170		265		
Base Capacity (vph)	295	431	460	313	710	775	148	2071	554	2725	
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.20	0.55	0.12	0.77	0.16	0.43	0.41	0.86	0.78	0.82	

#### Intersection Summary

Cycle Length: 135

Actuated Cycle Length: 135

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Yellow

Natural Cycle: 105

Control Type: Actuated-Coordinated

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

Queue shown is maximum after two cycles.

























Splits and Phases: 1: Chambers Rd & Mexico Ave



# HCM 6th Signalized Intersection Summary



















08/14/2024

1: Chambers Rd & Mexico Ave  
Year 2050 Background + Project - PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	55	220	51	226	105	315	57	1426	266	415	2063	75
Future Volume (veh/h)	55	220	51	226	105	315	57	1426	266	415	2063	75
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1885	1885	1885	1885	1885	1885	1870	1870	1870	1885	1885	1885
Adj Flow Rate, veh/h	60	239	55	240	112	335	60	1501	280	432	2149	78
Peak Hour Factor	0.92	0.92	0.92	0.94	0.94	0.94	0.95	0.95	0.95	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	2	2	2	1	1	1
Cap, veh/h	195	281	238	294	560	474	161	1928	359	483	2777	100
Arrive On Green	0.15	0.15	0.15	0.12	0.30	0.30	0.08	0.89	0.89	0.14	0.54	0.54
Sat Flow, veh/h	951	1885	1598	1795	1885	1598	1781	4325	804	3483	5099	184
Grp Volume(v), veh/h	60	239	55	240	112	335	60	1180	601	432	1444	783
Grp Sat Flow(s),veh/h/ln	951	1885	1598	1795	1885	1598	1781	1702	1726	1742	1716	1852
Q Serve(g_s), s	7.7	16.7	4.1	15.0	6.0	25.2	2.4	16.6	16.8	16.5	44.7	45.0
Cycle Q Clear(g_c), s	7.7	16.7	4.1	15.0	6.0	25.2	2.4	16.6	16.8	16.5	44.7	45.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.47	1.00		0.10
Lane Grp Cap(c), veh/h	195	281	238	294	560	474	161	1517	769	483	1869	1009
V/C Ratio(X)	0.31	0.85	0.23	0.82	0.20	0.71	0.37	0.78	0.78	0.89	0.77	0.78
Avail Cap(c_a), veh/h	272	433	367	294	712	604	169	1517	769	516	1869	1009
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.2	56.0	50.6	41.8	35.5	42.2	23.1	5.0	5.0	57.2	24.2	24.2
Incr Delay (d2), s/veh	0.9	9.6	0.5	16.3	0.2	2.7	1.4	4.0	7.7	17.1	3.2	5.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	8.6	1.7	7.9	2.8	10.2	1.0	3.0	3.9	8.3	17.9	20.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	53.1	65.6	51.1	58.1	35.6	44.9	24.5	9.0	12.7	74.3	27.3	30.1
LnGrp LOS	D	E	D	E	D	D	C	A	B	E	C	C
Approach Vol, veh/h	354				687				1841			
Approach Delay, s/veh	61.2				48.0				10.7			
Approach LOS	E				D				B			
Timer - Assigned Phs	1	2	3	4	5	6	8					
Phs Duration (G+Y+Rc), s	22.7	66.2	20.0	26.1	9.4	79.5	46.1					
Change Period (Y+Rc), s	4.0	6.0	4.0	6.0	4.0	6.0	6.0					
Max Green Setting (Gmax), s	20.0	48.0	16.0	31.0	6.0	62.0	51.0					
Max Q Clear Time (g_c+I1), s	18.5	18.8	17.0	18.7	4.4	47.0	27.2					
Green Ext Time (p_c), s	0.3	15.3	0.0	1.4	0.0	11.9	1.8					
Intersection Summary												
HCM 6th Ctrl Delay	30.6											
HCM 6th LOS	C											

Timings  
08/14/2024

2: Chambers Rd & Evans Ave  
Year 2050 Background + Project - PM Peak Hour

									
Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	SBL	SBT
Lane Configurations									
Traffic Volume (vph)	110	35	55	10	35	80	1591	85	2206
Future Volume (vph)	110	35	55	10	35	80	1591	85	2206
Lane Group Flow (vph)	120	130	60	11	38	83	1746	91	2437
Turn Type	Perm	NA	Perm	NA	Perm	pm+pt	NA	pm+pt	NA
Protected Phases		4		8		5	2	1	6
Permitted Phases	4		8		8	2		6	
Detector Phase	4	4	8	8	8	5	2	1	6
Switch Phase									
Minimum Initial (s)	6.0	6.0	6.0	6.0	6.0	6.0	11.0	6.0	11.0
Minimum Split (s)	38.0	38.0	38.0	38.0	38.0	15.0	90.0	12.0	87.0
Total Split (s)	38.0	38.0	38.0	38.0	38.0	15.0	82.0	15.0	82.0
Total Split (%)	28.1%	28.1%	28.1%	28.1%	28.1%	11.1%	60.7%	11.1%	60.7%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	3.0	4.0	3.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	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	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	4.0	6.0	4.0	6.0
Lead/Lag						Lead	Lag	Lead	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	None	C-Max
v/c Ratio	0.69	0.46	0.47	0.05	0.15	0.53	0.49	0.38	0.68
Control Delay	75.5	25.4	65.2	49.0	6.6	31.3	10.4	11.9	23.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	75.5	25.4	65.2	49.0	6.6	31.3	10.4	11.9	23.0
Queue Length 50th (ft)	102	36	50	9	0	19	228	30	510
Queue Length 95th (ft)	163	95	93	26	18	77	336	m51	659
Internal Link Dist (ft)		285		253			1081		1447
Turn Bay Length (ft)	165		140		85	125		125	
Base Capacity (vph)	331	459	243	445	422	200	3542	284	3578
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	0.36	0.28	0.25	0.02	0.09	0.41	0.49	0.32	0.68

#### Intersection Summary

Cycle Length: 135

Actuated Cycle Length: 135

Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBTL, Start of Yellow

Natural Cycle: 140

Control Type: Actuated-Coordinated
























m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Chambers Rd & Evans Ave

		
Ø1	Ø2 (R)	Ø4
15 s	82 s	38 s
		
Ø5	Ø6 (R)	Ø8
15 s	82 s	38 s

HCM 6th Signalized Intersection Summary  
08/14/2024

2: Chambers Rd & Evans Ave  
Year 2050 Background + Project - PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	35	85	55	10	35	80	1591	85	85	2206	60
Future Volume (veh/h)	110	35	85	55	10	35	80	1591	85	85	2206	60
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1885	1885	1885	1870	1870	1870	1885	1885	1885
Adj Flow Rate, veh/h	120	38	92	60	11	38	83	1657	89	91	2372	65
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.96	0.96	0.96	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	1	1	1	2	2	2	1	1	1
Cap, veh/h	232	66	160	133	257	218	216	3482	187	284	3618	99
Arrive On Green	0.14	0.14	0.14	0.14	0.14	0.14	0.04	0.70	0.70	0.06	0.93	0.93
Sat Flow, veh/h	1356	485	1174	1270	1885	1598	1781	4960	266	1795	5150	141
Grp Volume(v), veh/h	120	0	130	60	11	38	83	1137	609	91	1577	860
Grp Sat Flow(s),veh/h/ln	1356	0	1659	1270	1885	1598	1781	1702	1822	1795	1716	1860
Q Serve(g_s), s	11.4	0.0	9.9	6.3	0.7	2.8	1.7	20.2	20.2	1.8	10.5	10.6
Cycle Q Clear(g_c), s	12.1	0.0	9.9	16.2	0.7	2.8	1.7	20.2	20.2	1.8	10.5	10.6
Prop In Lane	1.00		0.71	1.00		1.00	1.00		0.15	1.00		0.08
Lane Grp Cap(c), veh/h	232	0	226	133	257	218	216	2390	1279	284	2410	1307
V/C Ratio(X)	0.52	0.00	0.57	0.45	0.04	0.17	0.38	0.48	0.48	0.32	0.65	0.66
Avail Cap(c_a), veh/h	368	0	393	261	447	379	286	2390	1279	353	2410	1307
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.33	1.33	1.33
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.9	0.0	54.6	62.2	50.6	51.6	5.6	9.0	9.0	6.8	1.7	1.7
Incr Delay (d2), s/veh	1.8	0.0	2.3	2.4	0.1	0.4	1.1	0.7	1.3	0.6	1.4	2.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.1	0.0	4.3	2.1	0.3	1.2	0.6	6.9	7.6	0.6	2.0	2.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	57.7	0.0	56.9	64.5	50.7	51.9	6.8	9.7	10.3	7.4	3.1	4.3
LnGrp LOS	E	A	E	E	D	D	A	A	B	A	A	A
Approach Vol, veh/h	250			109			1829			2528		
Approach Delay, s/veh	57.3			58.8			9.7			3.6		
Approach LOS	E			E			A			A		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.8	100.8		24.4	9.7	100.8		24.4				
Change Period (Y+Rc), s	4.0	6.0		6.0	4.0	6.0		6.0				
Max Green Setting (Gmax), s	11.0	76.0		32.0	11.0	76.0		32.0				
Max Q Clear Time (g_c+I1), s	3.8	22.2		14.1	3.7	12.6		18.2				
Green Ext Time (p_c), s	0.1	18.6		1.0	0.1	36.4		0.2				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay	10.1											
HCM 6th LOS	B											

Intersection						
Int Delay, s/veh	0.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations		↗ ↘ ↘ ↘	↗ ↘ ↘ ↘			↗ ↘ ↘ ↘
Traffic Vol, veh/h	0	14	1735	17	0	2346
Future Vol, veh/h	0	14	1735	17	0	2346
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	95	95	94	94
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	15	1826	18	0	2496
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	-	922	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.14	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.92	-	-	-	-
Pot Cap-1 Maneuver	0	234	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	234	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	21.5	0		0		
HCM LOS	C					
Minor Lane/Major Mvmt	NBT	NBRWBLn1		SBT		
Capacity (veh/h)	-	234		-		
HCM Lane V/C Ratio	-	0.065		-		
HCM Control Delay (s)	-	21.5		-		
HCM Lane LOS	-	C		-		
HCM 95th %tile Q(veh)	-	0.2		-		