

08.16.2024



# Traffic Impact Study

Proposed Car Wash Development



**On behalf of:**



**Contact:**

WT Group  
Jim Glascock  
2675 Pratum Avenue  
Hoffman Estates, IL 60192

**Preparation Date:**

08/16/2024

# Traffic Study

**CLIENT** WT Group

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**LOCATION:** Commerce City, Colorado

**ADDRESS** 12411 East 104<sup>th</sup> Avenue

**COUNTY** Adams

**CITY, STATE** Commerce City, Colorado

**PREPARED BY** Robert Matko

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CESO, Inc.

**ADDRESS** 13060 S. US Hwy. 27, Suite D

**CITY, STATE** DeWitt, MI 48820

**PHONE** 517.212.4188

**DATE** August 16, 2024

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## 1. Executive Summary

### 1.1. Summary

*Recommendations are listed in Section 1.3 – Summary of Recommendations (Page 3).*

This report is submitted on behalf of WT Group, in connection with its application to Commerce City for site plan approval. The Traffic Impact Study (TIS) conducted by CESO, Inc. identifies the traffic related impacts, if any, associated with the Proposed Car Wash Development; referred to herein as “Proposed Car Wash Development.”

The Proposed Car Wash Development is to be located at 12411 East 104th Avenue within Commerce City, Adams County, Colorado. The full buildout of the Proposed Car Wash Development is projected to include a 4,600 S.F. car wash building with one (1) car wash tunnel and three (3) queueing lanes. The Proposed Car Wash Development is projected to include approximately 27 parking spaces for passenger cars, with 5 of those spaces being employee parking.

WT Group retained CESO, Inc. to prepare the Traffic Impact Study for the Proposed Car Wash Development and present details of a safe and efficient access system relating to WT Group’s application for approval of the following access point:

- Construction of the Site driveway connecting to the internal east/west strip shopping center road.

The Traffic Impact Study focused on evaluating the Existing, 2025 No-Build, 2025 Build, 2045 No-Build, and 2045 Design Year Traffic conditions near the site.

### 1.2. Conclusions

The full buildout of the Proposed Car Wash Development is estimated to generate 38 trips during the Weekday AM Peak Hour (19 inbound and 19 outbound) and 78 trips during the Weekday PM Peak Hour (39 inbound and 39 outbound).

Trips for the Site Generated Traffic Volumes are anticipated to approach and depart the Site following the distribution patterns illustrated on Figure 6.

Synchro Version 12.0 HCM 7<sup>th</sup> Edition TWSC and Signalized methodology was used to analyze the current level of service at the key study intersections.

Under the **Existing Traffic Scenario**, the signal-controlled intersection of E. 104th Avenue & Highway 2 operates at an overall level of service (LOS) “F” during the Weekday AM Peak Hour and level of service “E” during the Weekday PM Peak Hour. The signal-controlled intersection of E. 104th Avenue & Revere Street operates at an overall level of service “C” during the Weekday AM Peak Hour and level of service “B” during the Weekday PM Peak Hour. In addition, the individual movements of the stop-controlled intersections (Revere Street & E. 104<sup>th</sup> Place and E. 104<sup>th</sup> Avenue & Quari Ct.) operate at level of service (LOS) “C” or better conditions.

Under the **2025 No-Build Traffic Scenario**, the signal-controlled intersection of E. 104th Avenue & Highway 2 operates at an overall level of service (LOS) “F” during the Weekday AM Peak Hour and level of service “E” during

the Weekday PM Peak Hour. With recommended improvements, the level of service will improve to a "D" condition in the Weekday AM Peak Hour and remains unchanged during the Weekday PM Peak Hour. The signal-controlled intersection of E. 104th Avenue & Revere Street operates at an overall level of service "C" during the Weekday AM Peak Hour and level of service "B" during the Weekday PM Peak Hour. In addition, the individual movements of the stop-controlled intersections (Revere Street & E. 104<sup>th</sup> Place and E. 104<sup>th</sup> Avenue & Quari Ct.) operate at level of service (LOS) "C" or better conditions.

Under the **2025 Build Traffic Scenario**, the signal-controlled intersection of E. 104th Avenue & Highway 2 will continue to operate at an overall level of service (LOS) "D" during the Weekday AM Peak Hour and level of service "E" during the Weekday PM Peak Hour. The signal-controlled intersection of E. 104th Avenue & Revere Street will continue to operate at an overall level of service "C" during the Weekday AM Peak Hour and level of service "B" during the Weekday PM Peak Hour. In addition, the individual movements of the stop-controlled intersections (Revere Street & E. 104<sup>th</sup> Place and E. 104<sup>th</sup> Avenue & Quari Ct.) operate at level of service (LOS) "C" or better conditions.

Under the **2045 No-Build Traffic Scenario**, the signal-controlled intersection of E. 104th Avenue & Highway 2 will operate at an overall level of service (LOS) "D" during the Weekday AM Peak and PM Peak Hours. The signal-controlled intersection of E. 104th Avenue & Revere Street will operate at an overall level of service "C" during the Weekday AM Peak Hour and level of service "B" during the Weekday PM Peak Hour. In addition, the individual movements at the stop-controlled intersection of Revere Street & E. 104<sup>th</sup> Place will operate at level of service (LOS) "C" or better conditions. The stop sign controlled intersection of E. 104<sup>th</sup> Avenue & Quari Ct. will have movements that operate at level of Service "D" and "F" conditions.

Under the **2045 Build Traffic Scenario**, the signal-controlled intersection of E. 104th Avenue & Highway 2 will continue to operate at an overall level of service (LOS) "D" during the Weekday AM Peak and PM Peak Hours. The signal-controlled intersection of E. 104th Avenue & Revere Street will continue to operate at an overall level of service "C" during the Weekday AM Peak Hour and level of service "B" during the Weekday PM Peak Hour. In addition, the individual movements at the stop-controlled intersection of Revere Street & E. 104<sup>th</sup> Place will operate at level of service (LOS) "C" or better conditions. The stop sign controlled intersection of E. 104<sup>th</sup> Avenue & Quari Ct. will have movements that operate at level of Service "D", "E", and "F" conditions.

CESO conducted a queue length analyses for the study network and reached the following conclusions:

CESO reviewed all study locations to determine if calculated queue lengths exceed existing storage lengths. The queue length analysis revealed the following:

- CESO determined that there are queue lengths that will exceed existing or proposed storages in the 2025 No-Build, 2025 Build, 2045 No-Build, and 2045 Build Traffic Scenarios. However, it should be noted that the No-Build queue lengths are not significantly increased by the addition of the proposed Car Wash development.

#### **ENGINEERING VARIANCE REQUEST**

Based on the City's requirements, all movements must operate at a Level of Service "D" or better conditions. Any movement that operates > Level of Service "D" must be documented and a variance granted. The following Table shows the No-Build and Build conditions along with a summary of the proposed Car Wash impact.

Traffic Impact Study – Proposed Car Wash Development  
Commerce City, Adams County, Colorado



Lane	Existing				2025 No-Build				2025 Build				2045 No-Build				2045 Design Year			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	L O S	Delay	L O S	Delay	L O S	Delay	L O S	Delay	L O S	Delay	L O S	Delay	L O S	Delay	L O S	Delay	L O S	Delay	L O S	Delay
E. 104th Avenue & Highway 2 (Signal Controlled)																				
EBL	E	65.7	E	60.2	F	82.2	E	79.0	F	82.2	E	79.0	E	85.4	E	57.6	E	85.4	E	57.6
EBT	C	34.7	E	66.3	E	61.1	F	101.7	E	61.5	F	104.1	E	71.0	E	89.4	E	71.5	E	91.1
WBL	F	377.6	E	61.6	E	56.6	F	121.9	D	56.6	F	138.5	D	39.4	C	23.6	D	39.4	C	23.6
NBL	E	60.4	F	232.9	F	97.9	F	130.2	F	97.9	F	130.2	F	142.5	D	41.9	F	142.5	D	41.9
SBL	E	75.7	E	74.5	E	64.9	F	98.2	E	56.9	F	99.4	E	71.8	F	119.9	E	74.9	F	128.4
SBT	D	39.7	C	32.9	D	42.7	D	41.6	D	42.7	D	41.6	E	58.6	D	39.3	E	58.6	D	39.3
E. 104th Avenue & Quari Ct. (Stop Sign Controlled)																				
No movements operate at LOS "D" or worse condition.																				
E. 104th Avenue & Revere Street (Signal Controlled)																				
EBL	E	60.9	E	57.4	E	62.2	E	69.4	E	62.2	E	69.4	E	63.9	D	47.4	E	63.9	D	47.6
WBL	F	83.7	E	74.6	F	81.3	F	82.9	F	81.3	F	82.9	F	85.9	E	66.4	F	85.9	E	66.6
NBL	E	61.1	E	61.8	E	72.6	E	79.4	E	72.6	E	79.4	E	76.5	D	48.5	E	76.5	D	48.5
NBT	D	44.3	D	47.0	E	55.1	E	60.9	E	55.1	E	60.9	E	60.3	D	35.0	E	60.3	D	35.0
SBL	E	66.4	E	65.4	E	60.8	E	66.2	E	62.4	E	68.0	E	64.6	E	67.6	E	66.7	E	69.6
Revere Street & E. 104th Place (Stop Sign Controlled)																				
No movements operate at LOS "D" or worse condition.																				

The following intersections, movements, and scenarios result in a Level of Service "E" or worse condition:

#### E. 104th Avenue & Highway 2 (Signal Controlled)

- EBL (Existing AM/PM, 2025 No-Build AM/PM, 2025 Build AM/PM, 2045 No-Build AM/PM, and 2045 Design Year AM/PM)
- EBT (Existing PM, 2025 No-Build AM/PM, 2025 Build AM/PM, 2045 No-Build AM/PM, and 2045 Design Year AM/PM)
- WBL (Existing PM, 2025 No-Build PM, 2025 Build AM/PM)
- NBL (Existing PM, 2025 No-Build AM/PM, 2025 Build AM/PM, 2045 No-Build AM, and 2045 Design Year AM)
- SBL (Existing PM, 2025 No-Build AM/PM, 2025 Build AM/PM, 2045 No-Build AM/PM, and 2045 Design Year AM/PM)
- SBT (2045 No-Build AM, and 2045 Design Year AM)

#### E. 104th Avenue & Revere Street (Signal Controlled)

- EBL (Existing AM/PM, 2025 No-Build AM/PM, 2025 Build AM/PM, 2045 No-Build AM, and 2045 Design Year AM)
- WBL (Existing AM/PM, 2025 No-Build AM/PM, 2025 Build AM/PM, 2045 No-Build AM/PM, and 2045 Design Year AM/PM)
- NBL (Existing AM/PM, 2025 No-Build AM/PM, 2025 Build AM/PM, 2045 No-Build AM, and 2045 Design Year AM)
- NBT (2025 No-Build AM/PM, 2025 Build AM/PM, 2045 No-Build AM, and 2045 Design Year AM)
- SBL (Existing AM/PM, 2025 No-Build AM/PM, 2025 Build AM/PM, 2045 No-Build AM/PM, and 2045 Design Year AM/PM)

Based on the above Table, the proposed Car Wash Development will not increase the Level of Service over the Existing or No-Build traffic conditions. Additionally, the increase in delay is minimal since the proposed Car Wash Development will only add 38 total trips during the Weekday AM peak hour and 78 total trips during the Weekday PM peak hour. Once the generated trips are distributed to the street network, the impact to any single movement is 0.5% or less impact.

CESO on behalf of WT Group/Car Wash Developer respectfully requests a variance be granted based on the fact that the Level of Service conditions in the Existing or No-Build traffic conditions currently result in Levels of Service that exceed a "D" condition.

### **1.3. Summary of Recommendations**

The following summary of recommendations was generated based upon the findings in the Traffic Impact Study.

#### **2025 No-Build Traffic Scenario (Responsibility – Others):**

##### **E. 104<sup>th</sup> Avenue & CO-2**

- Extend the WB to SB dual left-turn lanes from 230' to 350' to accommodate the proposed queue length during the AM Peak Hour.
- Modify signal timing (cycle length and offsets). Refer to Synchro Summary Sheets for timing changes.

##### **E. 104<sup>th</sup> Avenue & Revere Street**

- Modify signal timing (cycle length and offsets). Refer to Synchro Summary Sheets for timing changes.

#### **2025 Build Traffic Scenario (Responsibility – Car Wash Development):**

- No improvements are recommended or required.

#### **2045 No-Build Traffic Scenario (Responsibility – Others):**

##### **E. 104<sup>th</sup> Avenue**

- Construct an additional through lane in the eastbound and westbound directions along E. 104<sup>th</sup> Avenue. According to the City, E. 104<sup>th</sup> Avenue is set up to accommodate a three (3) lane through section in each direction based on the additional width of the center grass median area.

#### **2045 Design Year Traffic Scenario (Responsibility – Car Wash Development):**

- No improvements are recommended or required.

## 2. Introduction

This report is submitted on behalf of WT Group, in connection with its application to Commerce City for site plan approval. The Traffic Impact Study (TIS) conducted by CESO, Inc. identifies the traffic related impacts, if any, associated with the Proposed Car Wash Development; referred to herein as "Proposed Car Wash Development."

The Proposed Car Wash Development is to be located at 12411 East 104th Avenue within Commerce City, Adams County, Colorado. The full buildup of the Proposed Car Wash Development is projected to include a 4,600 S.F. car wash building with one (1) car wash tunnel and three (3) queueing lanes. The Proposed Car Wash Development is projected to include approximately 27 parking spaces for passenger cars, with 5 of those spaces being employee parking spaces.

WT Group retained CESO, Inc. to prepare the Traffic Impact Study for the Proposed Car Wash Development and present the details of a safe and efficient access system relating to WT Group's application for approval of the following:

- Construction of the Site driveway connecting to the internal east/west strip shopping center road.

This report presents the methodologies, analyses, and results of the Traffic Impact Study (TIS) for traffic generated by the Proposed Car Wash Development. The purpose of the TIS was to identify and mitigate traffic related impacts, if any, during typical weekday AM and PM Peak Hours of the adjacent street traffic corresponding with the hours of operation for the Proposed Car Wash Development.

The following intersections were analyzed in the Traffic Impact Study:

- E. 104th Avenue & Highway 2 (Signal Controlled)
- E. 104th Avenue & Quari Ct. (Stop Sign Controlled)
- E. 104th Avenue & Revere Street (Signal Controlled)
- Revere Street & E. 104th Place (Stop Sign Controlled)

The following traffic scenarios were included in the analysis:

**Existing Traffic Scenario** – Represents current (Year 2024) traffic conditions during the weekday AM and PM Peak Hours of the adjacent roadway network. The Existing Traffic Scenario served as a baseline for comparison of the traffic impacts in relation to the Proposed Car Wash Development.

**2025 No-Build Traffic Scenario** – Represents traffic conditions during the weekday AM and PM Peak Hours of the adjacent roadway network that would exist during year 2025, without the Proposed Car Wash Development. NOTE: Mixed Use Traffic Volumes from the Burlington/Catellus PUD Development were added to the 2025 No-Build as an approved Development.

**2025 Build Traffic Scenario** – Represents traffic conditions during the weekday AM and PM Peak Hours of the adjacent roadway network that would exist during year 2025, with the Proposed Car Wash Development constructed and fully operational.

**2045 No-Build Traffic Scenario** – Represents traffic conditions during the weekday AM and PM Peak Hours of the adjacent roadway network that would exist during year 2045, without the Proposed Car Wash Development. NOTE: Mixed Use Traffic Volumes from the Burlington/Catellus PUD Development were added to the 2025 No-Build as an approved Development.

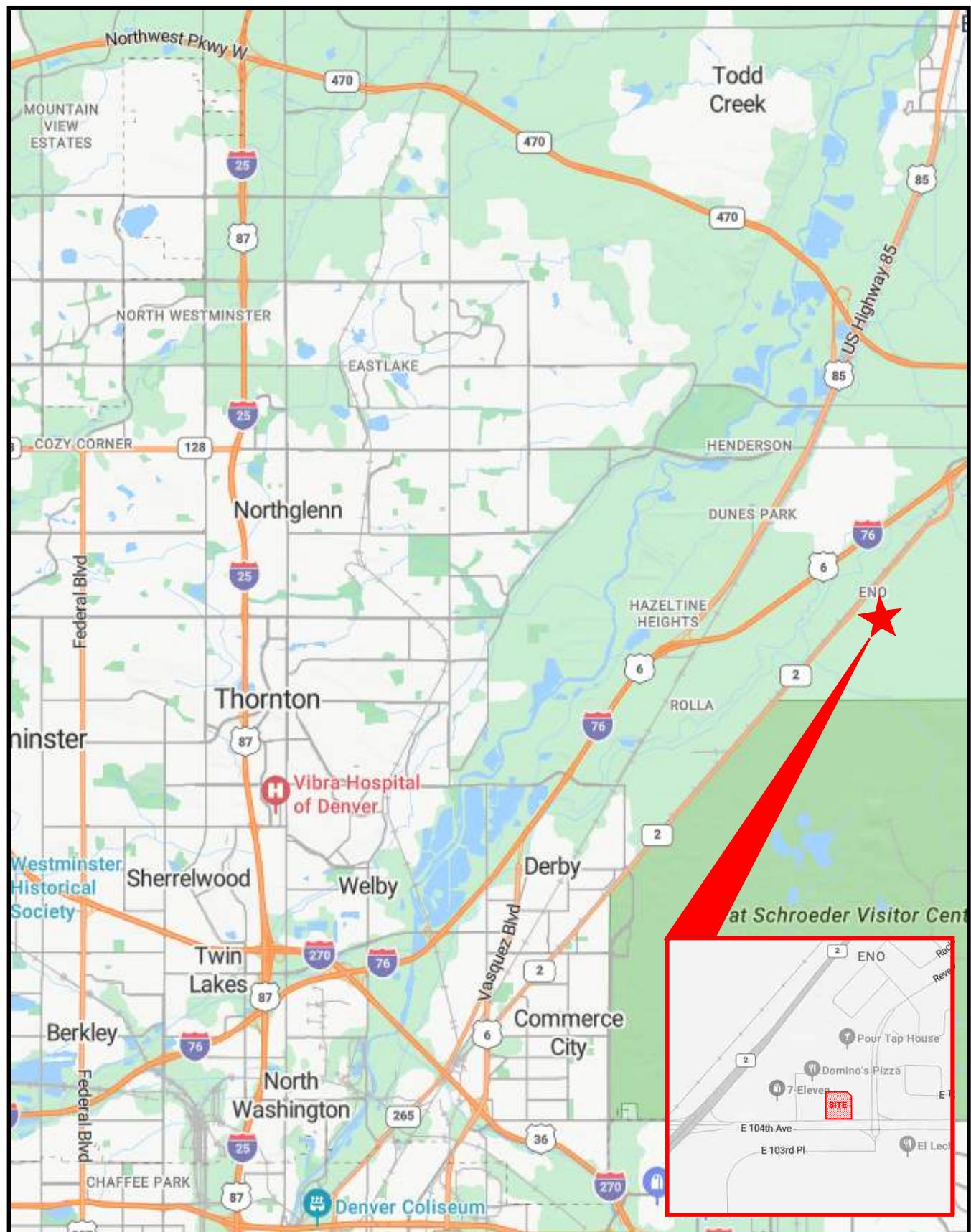
**2045 Design Year Traffic Scenario** – Represents traffic conditions during the weekday AM and PM Peak Hours of the adjacent roadway network that would exist during year 2045, with the Proposed Car Wash Development constructed and fully operational.

The Site Location with respect to the study area and the Site Plan for the Proposed Car Wash Development are illustrated on Figures 1 and 2 of the report.

## 2.1. Study Procedure

The following studies and analyses were undertaken:

1. Traffic counts were conducted by GHA, Inc. on Wednesday, April 10<sup>th</sup>, 2024, between the hours of 7:00 AM to 9:00 AM and 3:00 PM to 6:00 at the following locations:
  - E. 104th Avenue & Highway 2 (Signal Controlled)
  - E. 104th Avenue & Quari Ct. (Stop Sign Controlled)
  - E. 104th Avenue & Revere Street (Signal Controlled)
  - Revere Street & E. 104th Place (Stop Sign Controlled)
2. Capacity analyses of the Existing Peak Hour Traffic Volumes (Figure 4) were conducted to determine the capacity of the key study intersections during AM and PM Peak Hours using Synchro Version 12.0 HCM 7<sup>th</sup> Edition Signalized methodology.
3. Increase the Existing Peak Hour Traffic Volumes (Figure 4) by a two (2) percent growth rate that was supplied by the City to arrive at 2025 No-Build Peak Hour Traffic Volumes (Figure 5). In addition, the mixed-use traffic volumes from the Burlington/Catellus PUD Development were added to the 2025 No-Build as an approved Development.
4. Capacity analyses of the 2025 No-Build Peak Hour Traffic Volumes (Figure 5) were conducted to determine the capacity of the key study intersections during AM and PM Peak Hours using Synchro Version 12.0 HCM 7<sup>th</sup> Edition Signalized methodology.
5. Analyses were conducted to determine the potential traffic volumes generated by the Proposed Car Wash Development under the 2025 Build Traffic Scenario utilizing the Institute of Transportation Engineers (ITE) Trip Generation Manual, 11<sup>th</sup> Edition and traffic count data collected from three (3) similar operating Car Wash Developments (see Table 5).
6. Directional distribution analyses were conducted to determine the potential distribution of patrons for the Proposed Car Wash Development under the 2025 Build Traffic Scenario (Figure 6).
7. The Site Generated Traffic Volumes (Figure 7) were added to the 2025 No-Build Peak Hour Traffic Volumes (Figure 5) to reflect the 2025 Build Peak Hour Traffic Volumes (Figure 8).
8. Capacity analyses of the 2025 Build Peak Hour Traffic Volumes (Figure 8) were conducted to determine the capacity of the key study intersections under the 2025 Build Traffic Scenario during AM and PM Peak Hours using Synchro Version 12.0 HCM 7<sup>th</sup> Edition TWSC and Signalized methodology.



Not To Scale



### SITE LOCATION

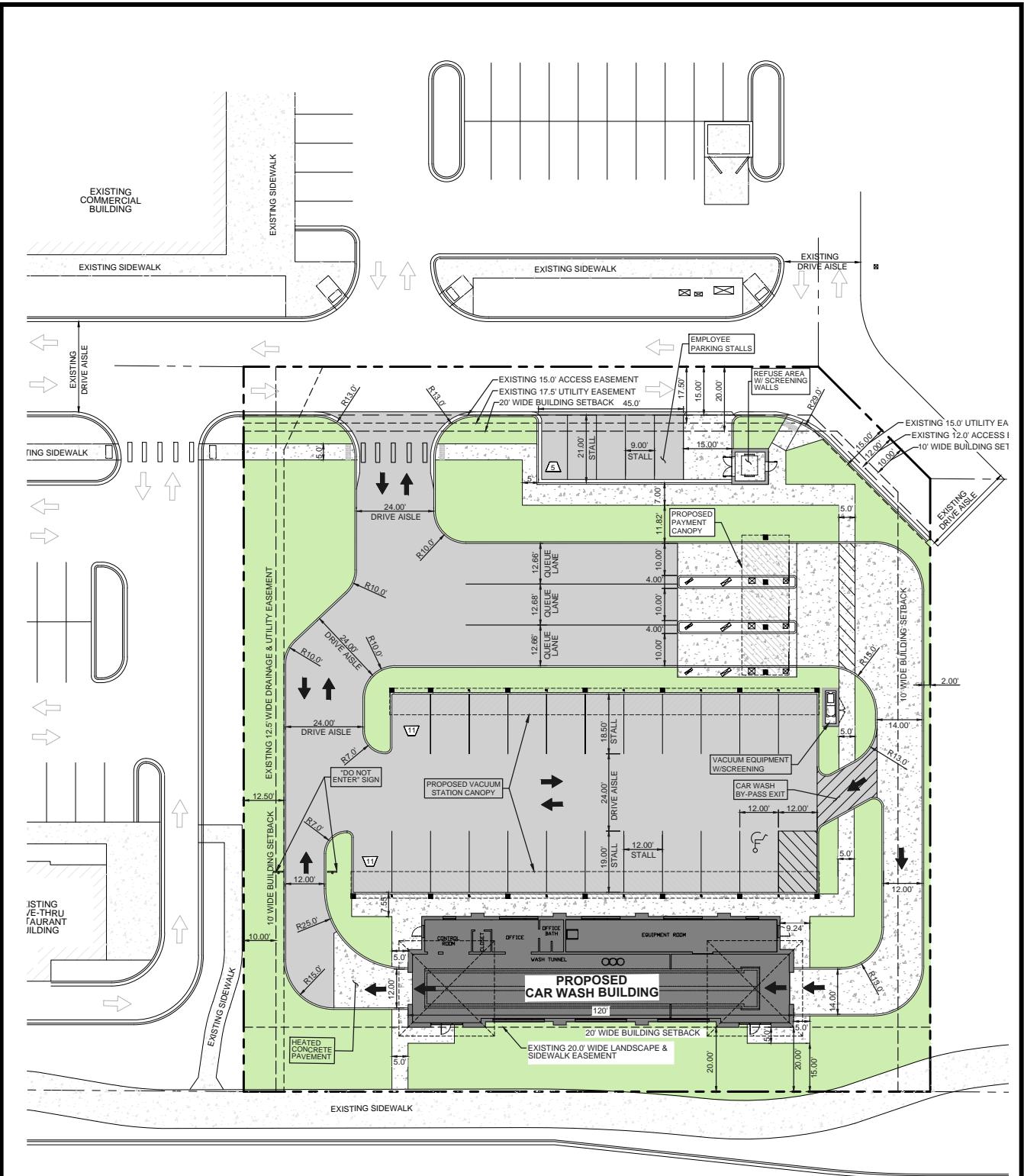
#### Car Wash Facility

City of Commerce City

Adams County, Colorado

#### FIGURE 1

Date: August 16, 2024
Job No: 764099-01
Designed By: REM
Drawn By: REM
Checked By: TC
Page: 7



Not To Scale

9. Increase the 2025 No-Build Peak Hour Traffic Volumes (Figure 5) by a two (2) percent growth rate for twenty (20) years to arrive at 2045 No-Build Peak Hour Traffic Volumes (Figure 9). In addition, the mixed-use traffic volumes from the Burlington/Catellus PUD Development were added to the 2025 No-Build as an approved Development.
10. Capacity analyses of the 2045 No-Build Peak Hour Traffic Volumes (Figure 9) were conducted to determine the capacity of the key study intersections during AM and PM Peak Hours using Synchro Version 12.0 HCM 7<sup>th</sup> Edition Signalized methodology.
11. The Site Generated Traffic Volumes (Figure 7) were added to the 2045 No-Build Peak Hour Traffic Volumes (Figure 9) to reflect the 2045 Design Year Peak Hour Traffic Volumes (Figure 10).
12. Capacity analyses of the 2045 Design Year Peak Hour Traffic Volumes (Figure 10) were conducted to determine the capacity of the key study intersections during AM and PM Peak Hours using Synchro Version 12.0 HCM 7<sup>th</sup> Edition Signalized methodology.
13. Queue length analyses were completed using Synchro Version 12.0 in combination with SimTraffic to determine if existing or proposed storage lengths would accommodate increased traffic queues as a result of the Proposed Car Wash Development.
14. Recommendations for roadway improvements were generated under the 2025 Build and 2045 Design Year Traffic Scenario based upon the capacity/queue length analyses of the surrounding roadway network. Application of the recommendations and evaluation of the capacity at the key study intersections, during the weekday AM and PM Peak Hours, were completed using Synchro Version 12.0 methodology.

## 2.2. References

This report utilizes information from the following sources:

1. *Highway Capacity Manual, Seventh Edition: A Guide for Multimodal Mobility Analysis.* Transportation Research Board, Washington, D.C., 2022.
2. *Trip Generation Manual.* 11<sup>th</sup> ed. Washington, DC: Institute of Transportation Engineers, 2021.
3. Proposed Car Wash Development. *Trip Generation Letter.* May 2023.
4. Most recent Site Plan obtained from WT Group.
5. "Commerce City, Colorado." 39°53'09.42" N and 104°50'36.69" W, *Google Earth.* May 24<sup>th</sup>, 2023.

### 3. Roadway and Traffic Conditions in the Vicinity of the Site

An inventory of existing transportation conditions in the vicinity of the Site was created to form a database for use in projecting Build conditions.

#### 3.1. Study Location and Area Land Use

The Proposed Car Wash Development is to be located at 12411 East 104th Avenue within Commerce City, Adams County, Colorado. Nearby land uses include primarily residential and commercial development.

#### 3.2. Area Roadway Characteristics

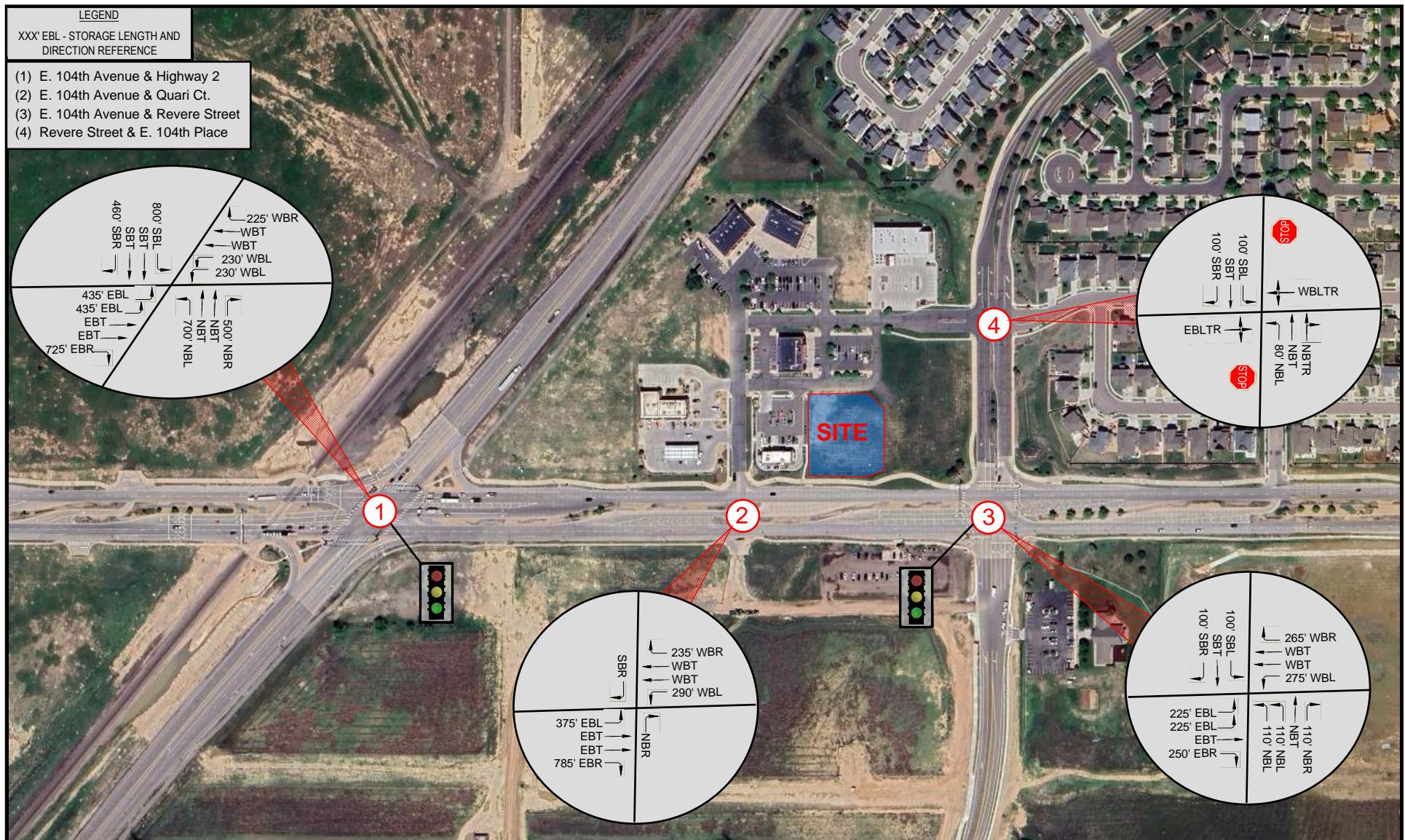
**East 104<sup>th</sup> Avenue** – East 104<sup>th</sup> Avenue runs in the east/west direction in the vicinity of the site. East 104<sup>th</sup> Avenue is a two-way divided roadway with two lanes in each direction. East 104<sup>th</sup> Avenue is classified as a Principal Arterial according to Adams County Planning and Development Department. The posted speed limit on East 104<sup>th</sup> Avenue is 45 mph.

**Revere Street** – Revere Street runs in the north/south direction in the vicinity of the site. Revere Street is a two-way roadway with two lanes in each direction. The posted speed limit on Revere Street is 30 mph.

**CO-2** – CO-2 runs in the northeast/southwest direction in the vicinity of the site. CO-2 is a two-way divided roadway with two lanes in each direction. CO-2 is classified as a state route according to the Colorado Department of Transportation (CDOT). CO-2 is under the jurisdiction of CDOT. The speed limit on CO-2 is 45 mph.

**Quari Court** – Quari Court runs in the north/south direction in the vicinity of the site. Quari Court is classified as a local road. Quari Court is under the jurisdiction of Commerce City. The speed limit on Quari Court is unposted and assumed to be 25 mph.

The Existing Transportation System is illustrated on Figure 3 of the report.



### 3.3. Existing Traffic Volumes

Traffic counts were conducted by GHA, Inc. on Wednesday, April 10<sup>th</sup>, 2024, between the hours of 7:00 AM to 9:00 AM and 3:00 PM to 6:00 PM at the following locations:

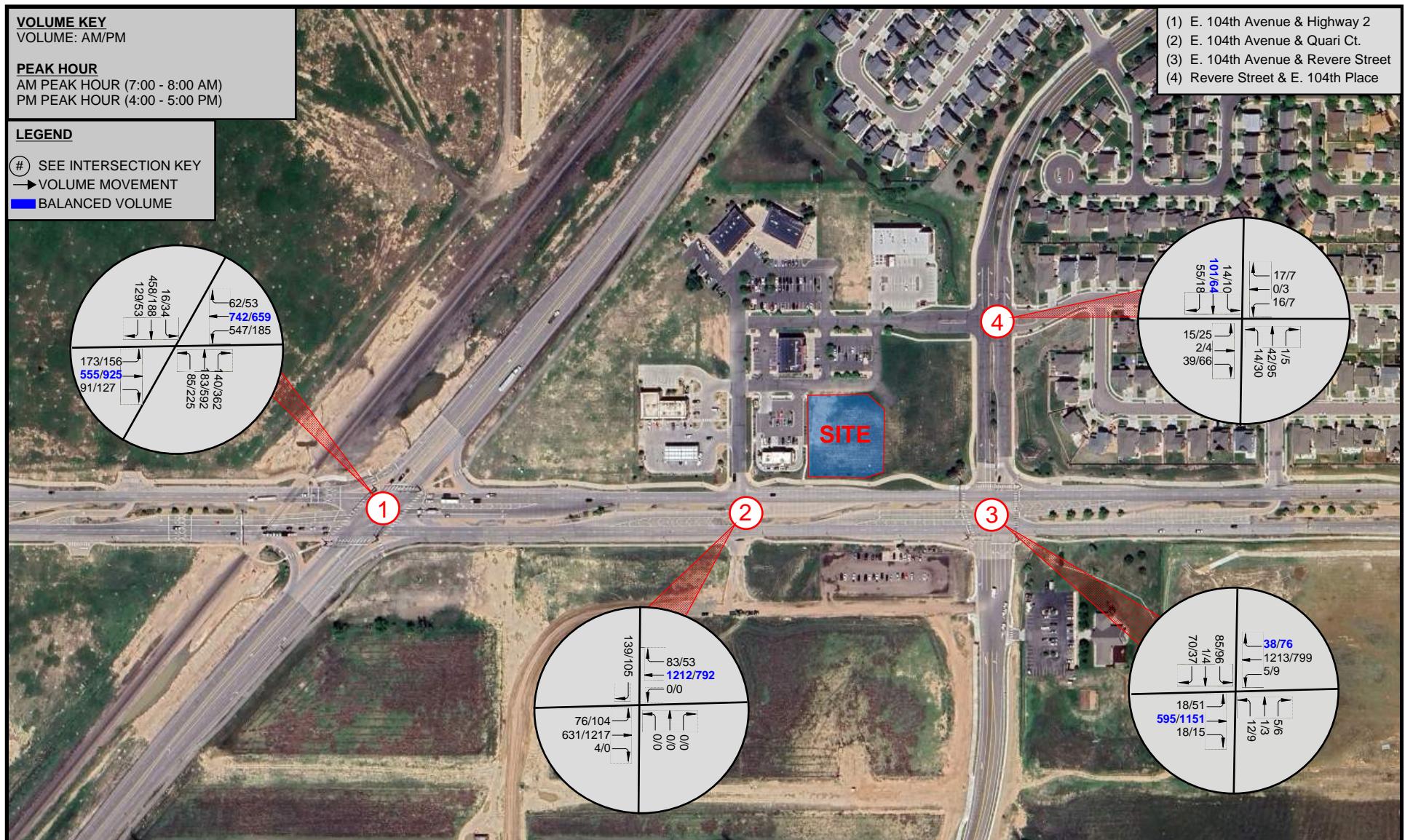
- E. 104th Avenue & Highway 2 (Signal Controlled)
- E. 104th Avenue & Quari Ct. (Stop Sign Controlled)
- E. 104th Avenue & Revere Street (Signal Controlled)
- Revere Street & E. 104th Place (Stop Sign Controlled)

The weekday peak hours of the Traffic Impact Study roadway network were determined to occur between the hours of:

- 7:15 AM – 8:15 AM (AM Peak Hour).
- 4:15 PM – 5:15 PM (PM Peak Hour).

Count data collected consists of turning movement counts with classification breakouts of lights, buses, single-unit trucks, and articulated trucks. The Existing Traffic Count Data and Signal Timing Sheets are located in **Appendix A** of the report.

The Existing Peak Hour Traffic Volumes are illustrated on Figure 4 of the report.



## EXISTING WEEKDAY PEAK HOUR TRAFFIC VOLUMES

Car Wash Facility

City of Commerce City

Adams County, Colorado

FIGURE 4

Date: August 16, 2024  
Job No: 764099-01  
Designed By: REM  
Drawn By: REM  
Checked By: TC  
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### 3.4. Capacity Analysis Parameters

The capacity of an intersection (signalized or unsignalized) can best be described by its corresponding Level of Service (LOS). The level of service of an intersection is a qualitative measure of the various attributes of an intersection. There are six levels of service ranging from “ideal” free flow conditions at LOS “A,” to forced or “breakdown” conditions at LOS “F.” The level of service for signalized intersections is based upon the average stopped delay per vehicle for various movements within the intersection. Although volume capacity ratio (v/c) affects delay, there are other parameters that more strongly affect it, such as the quality of progression, length of green phases, cycle lengths, and others. Thus, for any given v/c ratio, a range of delay values may result, and vice versa.

The level of service for unsignalized intersections is based upon total delay. Total delay is defined in the *Highway Capacity Manual, Seventh Edition: A Guide for Multimodal Mobility Analysis*, as the total elapsed time from when a vehicle stops at the end of the queue until the vehicle departs from the stop line; this time includes the time required for the vehicle to travel from the last-in-queue position to the first-in-queue position. Table 1 summarizes the LOS definitions for unsignalized intersections. Throughout the report “unsignalized intersections” are commonly referred to as “stop sign controlled.”

**Table 1**  
**Level of Service Criteria (Unsignalized Intersections)**

Level of Service	Delay per Vehicle (Sec.)	Description
A	$\leq 10.0$	Little or no delay.
B	$> 10.0 \text{ and } \leq 15.0$	Short traffic delays.
C	$> 15.0 \text{ and } \leq 25.0$	Average traffic delays.
D	$> 25.0 \text{ and } \leq 35.0$	Long traffic delays.
E	$> 35.0 \text{ and } \leq 50.0$	Very long traffic delays.
F	$\geq 50.0$	Extreme traffic delays.

Source: *Highway Capacity Manual, Seventh Edition: A Guide for Multimodal Mobility Analysis*. Transportation Research Board.

Highway Capacity Manual 2022 (HCM 7<sup>th</sup> Edition) methodology was used in the Traffic Impact Study to remain consistent with “state-of-the-practice” professional standards. It is important to note that the Level of Service Criteria for unsignalized intersections is different than for signalized intersections. For example, a delay of 18 seconds yields level of service C under the unsignalized LOS criteria (see Table 1) while yielding level of service B under the signalized intersection LOS criteria (see Table 2). Table 2 summarizes the LOS definitions for signalized intersections.

**Table 2**  
**Level of Service Criteria (Signalized Intersections)**

Level of Service	Delay per Vehicle (Sec.)	Description
A	< 10.0	Most vehicles do not stop at all.
B	> 10.0 and $\leq$ 20.0	More vehicles stop than with LOS A.
C	> 20.0 and $\leq$ 35.0	The number of vehicles stopping is significant, although many pass through without stopping.
D	> 35.0 and $\leq$ 55.0	Many Vehicles stop. Individual cycle failures are noticeable.
E	> 55.0 and $\leq$ 80.0	Considered to be the limit of acceptable delay. Individual cycle failures are frequent.
F	> 80.0	Unacceptable delay.

Source: *Highway Capacity Manual, Seventh Edition: A Guide for Multimodal Mobility Analysis*. Transportation Research Board.

Highway Capacity Manual 2022 (HCM 7<sup>th</sup> Edition) methodology was used in the Traffic Impact Study to remain consistent with “state-of-the-practice” professional standards. Synchro Version 12.0 was utilized to calculate delay and level of service values. Synchro Version 12.0 model parameters include traffic volumes, movements, peak hour factors, heavy vehicle percentage, intersection traffic control, and storage lengths. The peak hour factors (PHF) from the intersection TMCs were used and a PHF of 0.92 was used for the proposed site driveway intersections.

### 3.5. Existing Traffic Scenario Capacity Analysis

Utilizing the Existing Traffic Volumes illustrated on Figure 4, capacity calculations were performed for the key study intersections. Capacity calculations followed procedures documented in the *Highway Capacity Manual, Seventh Edition: A Guide for Multimodal Mobility Analysis* (Transportation Research Board, 2022). All study intersections were analyzed with Synchro Version 12.0 HCM 7<sup>th</sup> Edition Signalized methodology.

The capacity analyses results for the Existing Traffic Scenario are summarized in Table 3 below and can be found in **Appendix B** of the report.

**Table 3**  
**Summary of Existing Traffic Scenario Capacity Analysis**

Lane	Existing AM Peak Hour			Existing PM Peak Hour		
	LOS	Delay (sec/veh)	v/c	LOS	Delay (sec/veh)	v/c
<b>E. 104th Avenue &amp; Highway 2 (Signal Controlled)</b>						
<b>Intersection</b>	<b>F</b>	<b>109.8</b>	--	<b>E</b>	<b>69.9</b>	--
EBL	E	65.7	0.81	E	60.2	0.79
EBT	C	34.7	0.53	E	66.3	0.98
<b>EB Approach</b>	<b>D</b>	<b>42.9</b>	--	<b>E</b>	<b>65.3</b>	--
WBL	F	377.6	1.69	E	61.6	0.77
WBT	D	50.5	0.70	D	54.3	0.74
<b>WB Approach</b>	<b>F</b>	<b>189.3</b>	--	<b>E</b>	<b>55.9</b>	--
NBL	E	60.4	0.78	F	232.9	1.35
NBT	C	26.9	0.18	C	29.2	0.53
<b>NB Approach</b>	<b>D</b>	<b>39.5</b>	--	<b>F</b>	<b>96.7</b>	--
SBL	E	75.7	0.67	E	74.5	0.80
SBT	D	39.7	0.59	C	32.9	0.24
<b>SB Approach</b>	<b>D</b>	<b>41.3</b>	--	<b>D</b>	<b>41.0</b>	--
<b>E. 104th Avenue &amp; Quari Ct. (Stop Sign Controlled)</b>						
NBR	B	10.5	0.00	B	13.9	0.00
EBL	B	14.0	0.17	B	10.8	0.15
WBL	A	9.0	0.00	A	12.0	0.00
SBR	C	19.0	0.37	C	12.8	0.20
<b>E. 104th Avenue &amp; Revere Street (Signal Controlled)</b>						
<b>Intersection</b>	<b>C</b>	<b>23.9</b>	--	<b>B</b>	<b>11.5</b>	--
EBL	E	60.9	0.29	E	57.4	0.29
EBR	C	26.9	0.30	A	1.1	0.30
<b>EB Approach</b>	<b>B</b>	<b>18.4</b>	--	<b>A</b>	<b>3.5</b>	--
WBL	F	83.7	0.44	E	74.6	0.44
WBT	B	17.5	0.63	B	13.8	0.63
WBR	B	10.5	0.04	B	10.7	0.04
<b>WB Approach</b>	<b>B</b>	<b>17.6</b>	--	<b>B</b>	<b>14.2</b>	--
NBL	E	61.1	0.26	E	61.8	0.26
NBT	D	44.3	0.00	D	47.0	0.00
NBR	D	44.5	0.02	D	47.4	0.02
<b>NB Approach</b>	<b>E</b>	<b>55.9</b>	--	<b>D</b>	<b>54.6</b>	--
SBL	E	66.4	0.79	E	65.4	0.79
SBT	D	39.2	0.00	D	40.7	0.00
SBR	D	43.0	0.25	D	42.7	0.25
<b>SB Approach</b>	<b>E</b>	<b>55.8</b>	--	<b>E</b>	<b>58.6</b>	--
<b>Revere Street &amp; E. 104th Place (Stop Sign Controlled)</b>						
NBL	A	7.6	0.01	A	7.4	0.02
EBLTR	A	9.5	0.07	A	9.6	0.12
WBLTR	A	9.6	0.05	A	10.1	0.03
SBL	A	7.3	0.01	A	7.4	0.01

L – Left T – Through R – Right

Under the **Existing Traffic Scenario**, the signal-controlled intersection of E. 104th Avenue & Highway 2 operates at an overall level of service (LOS) "F" during the Weekday AM Peak Hour and level of service "E" during the Weekday PM Peak Hour. The signal-controlled intersection of E. 104th Avenue & Revere Street operates at an overall level of service "C" during the Weekday AM Peak Hour and level of service "B" during the Weekday PM Peak Hour. In addition, the individual movements of the stop-controlled intersections (Revere Street & E. 104<sup>th</sup> Place and E. 104<sup>th</sup> Avenue & Quari Ct.) operate at level of service (LOS) "C" or better conditions.

## 4. Estimates of 2025 No-Build Traffic in the Vicinity of the Site

### 4.1. 2025 No-Build Traffic Volumes

The 2025 No-Build Peak Hour Traffic Volumes – Total Volumes are illustrated on Figure 5 of the report. A growth rate of two (2) percent per year was supplied by Commerce City to be used on all study roadways. In addition, the mixed-use traffic volumes from the Burlington/Catellus PUD Development were added to the 2025 No-Build as an approved Development.

Trip Generation Worksheet									
ITE CODE	LAND USE	UNIT	QUANTITY	ADT	AM		PM		
					IN	OUT	IN	OUT	
221	Mid-Rise Multifamily	DU	240	4.54 <b>1090</b>	0.08 <b>19</b>	0.28 <b>68</b>	0.24 <b>57</b>	0.15 <b>37</b>	
945	Gas Station & Convenience Store	VFP	8	265.12 <b>2121</b>	8.03 <b>64</b>	8.03 <b>64</b>	9.21 <b>74</b>	9.21 <b>74</b>	
933	Fast-Food No Drive Thru	KSF	2	450.49 <b>901</b>	25.04 <b>50</b>	18.14 <b>36</b>	16.60 <b>33</b>	16.60 <b>33</b>	
934	Fast-Food With Drive Thru	KSF	3	487.48 <b>1462</b>	22.75 <b>68</b>	21.86 <b>66</b>	17.76 <b>53</b>	15.85 <b>48</b>	
822	Strip Retail Plaza	KSF	40	54.45 <b>2178</b>	1.42 <b>57</b>	0.94 <b>38</b>	3.30 <b>132</b>	3.30 <b>132</b>	
<b>Total Trips</b>				<b>7752</b>	<b>258</b>	<b>272</b>	<b>349</b>	<b>323</b>	

\* Table taken from TIS prepared by Aldridge Transportation Consultants, LLC prepare for Calibre Engineering dated June 10, 2024.

### 4.2. 2025 No-Build Traffic Scenario Capacity Analysis

Utilizing the 2025 No-Build Peak Hour Traffic Volumes shown on Figure 5, capacity calculations were performed for the key study intersections. All capacity calculations within the TIS followed procedures documented in the *Highway Capacity Manual, Seventh Edition: A Guide for Multimodal Mobility Analysis* (Transportation Research Board, 2022). All study intersections were analyzed using Synchro Version 12.0 HCM 7<sup>th</sup> Edition Signalized methodology.

The capacity analyses results for the 2025 No-Build Traffic Scenario are summarized in Table 4 below and can be found in **Appendix C** of the report.

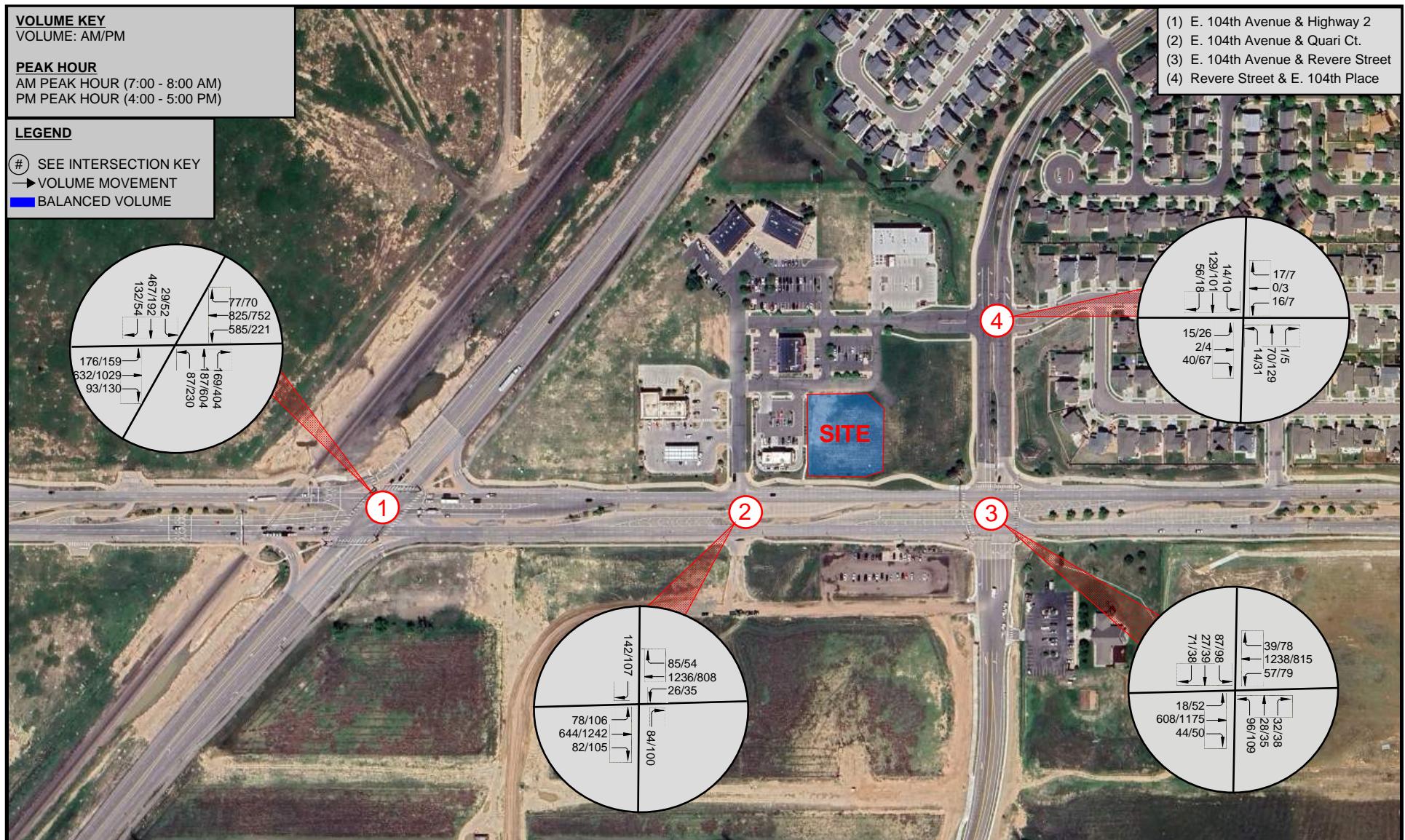
**Table 4**  
**Summary of 2025 No-Build Traffic Scenario Capacity Analysis**

Lane	2025 No-Build AM Peak Hour			2025 No-Build PM Peak Hour		
	LOS	Delay (sec/veh)	v/c	LOS	Delay (sec/veh)	v/c
<b>E. 104th Avenue &amp; Highway 2 (Signal Controlled)</b>						
<b>Intersection</b>	<b>F (D)</b>	<b>120.5 (46.6)</b>	--	<b>F (E)</b>	<b>87.2 (73.7)</b>	--
EBL	E (F)	66.0 (82.2)	0.81 (0.84)	E (E)	60.4 (79.0)	0.79 (0.76)
EBT	D (E)	36.4 (61.1)	0.61 (0.84)	F (F)	118.0 (101.7)	1.14 (1.07)
<b>EB Approach</b>	<b>D (E)</b>	<b>43.5 (66.2)</b>	--	<b>F (F)</b>	<b>109.3 (98.3)</b>	--
WBL	F (E)	429.2 (56.6)	1.80 (0.92)	E (F)	64.3 (121.9)	0.80 (1.01)
WBT	D (B)	53.8 (18.2)	0.78 (0.73)	E (D)	59.8 (38.7)	0.84 (0.86)
<b>WB Approach</b>	<b>F (D)</b>	<b>209.5 (34.2)</b>	--	<b>E (E)</b>	<b>60.8 (57.6)</b>	--
NBL	E (F)	61.2 (97.9)	0.79 (0.86)	F (F)	244.4 (130.2)	1.38 (1.07)
NBT	C (C)	28.0 (34.3)	0.19 (0.20)	C (C)	31.9 (34.2)	0.58 (0.52)

<b>NB Approach</b>	<b>D (E)</b>	<b>40.5 (58.3)</b>	--	<b>F (E)</b>	<b>102.3 (66.0)</b>	--
SBL	E (E)	78.2 (64.9)	0.80 (0.42)	E (F)	68.4 (98.2)	0.81 (0.83)
SBT	D (D)	40.0 (42.7)	0.60 (0.56)	C (D)	33.0 (41.6)	0.24 (0.25)
<b>SB Approach</b>	<b>D (D)</b>	<b>42.9 (44.4)</b>	--	<b>D (D)</b>	<b>41.0 (56.7)</b>	--
E. 104th Avenue & Quari Ct. (Stop Sign Controlled)						
NBR	B	11.5	0.00	B	13.9	0.00
EBL	B	14.4	0.18	B	10.8	0.15
WBL	A	9.5	0.00	A	12.0	0.00
SBR	C	19.6	0.39	B	12.8	0.20
E. 104th Avenue & Revere Street (Signal Controlled)						
<b>Intersection</b>	<b>C (C)</b>	<b>28.2 (24.4)</b>	--	<b>B (C)</b>	<b>16.9 (20.1)</b>	--
EBL	E (E)	60.9 (62.2)	0.29 (0.14)	E (E)	57.4 (69.4)	0.47 (0.42)
EBR	C (A)	29.7 (0.4)	0.33 (0.33)	A (A)	1.6 (1.5)	0.64 (0.63)
<b>EB Approach</b>	<b>C (A)</b>	<b>30.6 (2.3)</b>	--	<b>A (A)</b>	<b>3.9 (4.4)</b>	--
WBL	E (F)	71.4 (81.3)	0.78 (0.78)	E (F)	73.7 (82.9)	0.79 (0.81)
WBT	B (C)	18.0 (24.0)	0.64 (0.68)	B (B)	14.1 (18.3)	0.42 (0.43)
WBR	B (B)	10.6 (14.2)	0.05 (0.05)	B (B)	10.9 (14.2)	0.09 (0.09)
<b>WB Approach</b>	<b>B (C)</b>	<b>20.1 (26.2)</b>	--	<b>B (C)</b>	<b>18.7 (23.2)</b>	--
NBL	E (E)	60.6 (72.6)	0.65 (0.69)	E (E)	60.2 (79.4)	0.67 (0.73)
NBT	D (E)	45.8 (55.1)	0.11 (0.12)	D (E)	49.5 (60.9)	0.17 (0.17)
NBR	D (D)	46.7 (41.9)	0.16 (0.17)	D (D)	50.8 (45.5)	0.22 (0.22)
<b>NB Approach</b>	<b>E (F)</b>	<b>55.1 (63.2)</b>	--	<b>E (E)</b>	<b>56.2 (68.8)</b>	--
SBL	E (E)	66.2 (60.8)	0.79 (0.49)	E (E)	65.2 (66.2)	0.80 (0.56)
SBT	D (D)	43.4 (46.8)	0.10 (0.08)	D (D)	46.7 (52.3)	0.16 (0.12)
SBR	D (D)	47.2 (49.9)	0.30 (0.25)	D (D)	47.3 (52.8)	0.18 (0.14)
<b>SB Approach</b>	<b>E (D)</b>	<b>55.6 (54.6)</b>	--	<b>E (E)</b>	<b>57.3 (60.3)</b>	--
Revere Street & 104th Place (Stop Sign Controlled)						
NBL	A	7.7	0.01	A	7.5	0.02
EBLTR	A	9.8	0.08	A	9.7	0.12
WBLTR	A	9.9	0.05	A	10.1	0.03
SBL	A	7.4	0.01	A	7.5	0.01

L – Left T – Through R – Right ( ) With Improvements

Under the **2025 No-Build Traffic Scenario**, the signal-controlled intersection of E. 104th Avenue & Highway 2 operates at an overall level of service (LOS) "F" during the Weekday AM Peak PM Peak Hours. With recommended improvements, the level of service will improve to a "D" condition in the Weekday AM Peak Hour and improves to a level of service "E" during the Weekday PM Peak Hour. The signal-controlled intersection of E. 104th Avenue & Revere Street operates at an overall level of service "C" during the Weekday AM Peak Hour and PM Peak Hours. In addition, the individual movements of the stop-controlled intersections (Revere Street & E. 104<sup>th</sup> Place and E. 104<sup>th</sup> Avenue & Quari Ct.) operate at level of service (LOS) "C" or better conditions.



## 2025 NO-BUILD WEEKDAY PEAK HOUR TRAFFIC VOLUMES

Car Wash Facility

FIGURE 5

Date: August 16, 2024

Job No: 764099-01

Designed By: REM

Drawn By: REM

Checked By: TC

## 5. Development Description

### 5.1. Proposed Site Access

One (1) new full access stop sign controlled driveway (one inbound lane and one outbound lane) will be constructed on the internal east/west Strip Shopping Center Driveway. Internal circulation shows that all traffic will enter and exit the single access point from the internal east/west road. Parking spots will be located in the middle of the Site, directly to the south of the Site Driveway. Continuing straight then right on-site are three (3) queuing lanes to pay at a kiosk before entering a single lane for the car wash tunnel. Cars will follow a clockwise path to return to the Site Driveway in order to exit. A stop bar and stop sign will be provided in the drive aisle connecting the driveway to the parking lot to help facilitate vehicles entering the Site Driveway and vehicles exiting the parking lot in a safe manner.

### 5.2. Site Generated Traffic Volumes

Studies of similar developments throughout North America have shown that the amount of traffic generated will be functionally related to some unit of activity (i.e., number of dwelling units, vehicles, etc.). In development, site traffic fluctuates substantially on different days and hours throughout the year. Therefore, it is imperative to select an appropriate hourly volume on which to base the design of the external roadway and site access facilities. The weekday AM and PM Peak Hours were selected based on the adjacent street traffic during this hour.

The full buildup of the Proposed Car Wash Development is projected to include a 4,600 S.F. car wash building with one (1) car wash tunnel and three (3) queueing lanes. The Proposed Car Wash Development is projected to include approximately 27 parking spaces for passenger cars, with 5 of those spaces being for employees.

For analysis purposes, the base variable unit for the trip generation rates was number of car wash tunnels. CESO completed a Trip Generation Study to compare data contained in the Institute of Transportation Engineers (ITE) *Trip Generation Manual, 11<sup>th</sup> Edition*, against traffic count data collected from three (3) similar operating Car Wash Developments. The independent trip generation results were used for the Weekday AM peak hour since ITE does not have a trip generation category for this hour and ITE was used for the Weekday PM peak hour. **Appendix D** includes the Trip Generation Study, dated 05/17/2023 along with ITE 11<sup>th</sup> Edition Trip Generation data.

Traffic count data was collected at the following similar Car Wash Development locations:

- 262 Bethlehem Pike, Colmar, PA 18915
- 120 S Gary Ave, Carol Stream, IL 60188
- 2903 Kirk Road, Aurora, IL 60502

All three (3) sites have similar operations, with one (1) car wash tunnel on site.

Manual counts were conducted at each of the above listed study locations during the following time periods:

- Weekday AM Peak Hour (7:00 AM – 9:00 AM)
- Weekday PM Peak Hour (4:00 PM – 6:00 PM)

These counts focused on collecting the volume of cars entering the car wash tunnel for each study location.

The Similar Site Generated Traffic Volumes are listed below in Table 5, summarizing the inbound and outbound volumes for the similar Car Wash Developments during the highest peak hour of study.

**Table 5**  
**Similar Site Generated Traffic Volumes**

Location	Size	Unit	Total Generated Trips						
			Weekday AM Peak Hour			Weekday PM Peak Hour			
			Tot	In	Out	Tot	In	Out	
Colmar, PA	1	Car Wash Tunnel	42	21	21	52	26	26	
		Entering (%) / Exiting (%)	100%	50%	50%	100%	50%	50%	
Carol Stream, IL	1	Car Wash Tunnel	46	23	23	66	33	33	
		Entering (%) / Exiting (%)	100%	50%	50%	100%	50%	50%	
Aurora, IL	1	Car Wash Tunnel	24	12	12	76	38	38	
		Entering (%) / Exiting (%)	100%	50%	50%	100%	50%	50%	
<i>Total Average Car Trips</i>			37.3	18.7	18.7	64.6	32.3	32.3	
<i>Total Trip Generation</i>			38	19	19	66*	33*	33*	

\* ITE Trip Generation Manual is used for the Weekday PM Peak Hour since trips generated by ITE are higher (78 total trips: 39 inbound and 39 outbound).

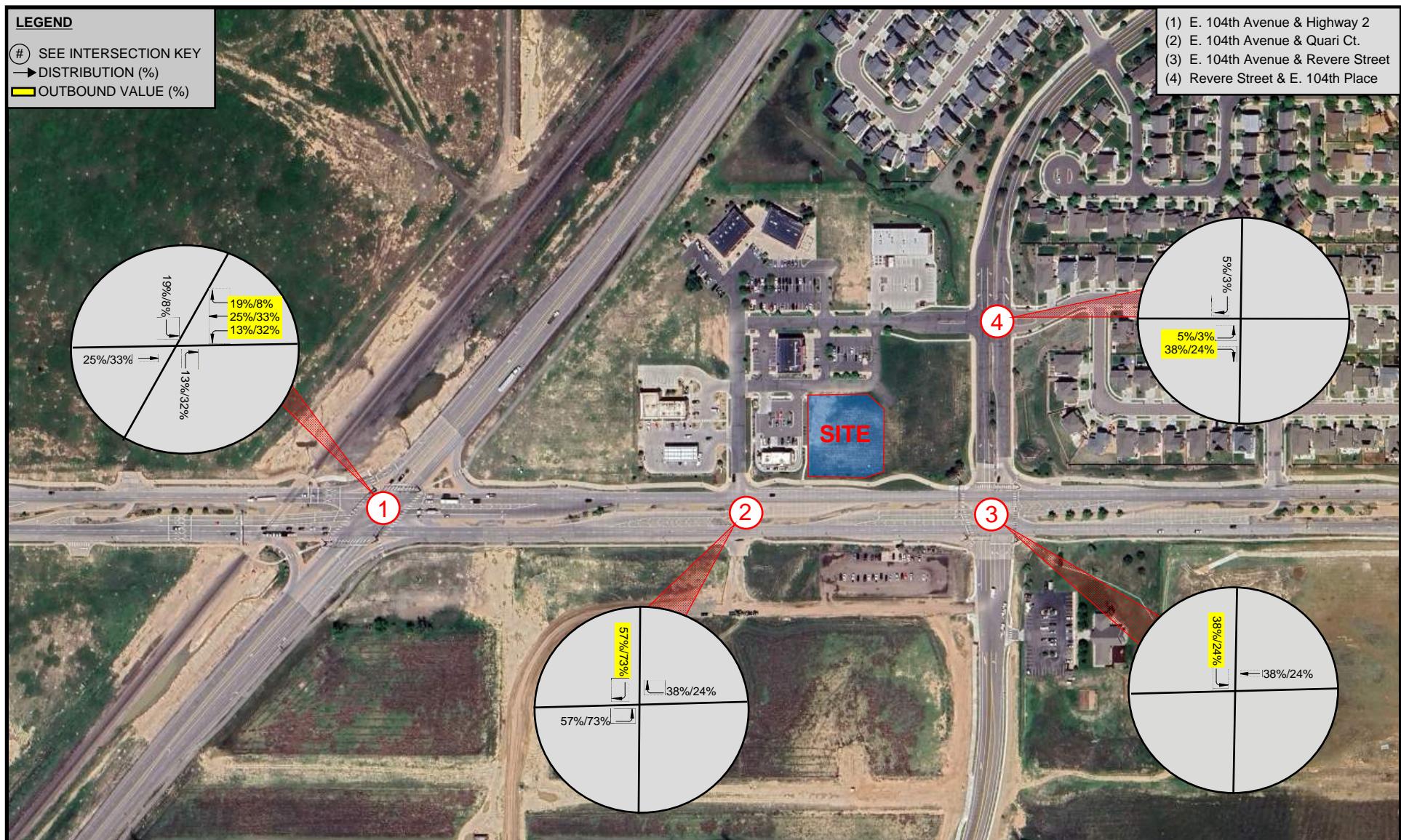
The full buildout of the Proposed Car Wash Development is estimated to generate 38 trips during the Weekday AM Peak Hour (19 inbound and 19 outbound) and 78 trips during the Weekday PM Peak Hour (39 inbound and 39 outbound).

### 5.3. Directional Distribution of Site Generated Traffic Volumes

The directional distribution of the development-generated traffic is a function of several variables. The assumptions and methods used in estimating the direction in which traffic will approach and depart the Site varies with several location-specific conditions such as:

- Size and type of the proposed development.
- Population distribution within the defined area of influence.
- Prevailing operating conditions on the existing street system.

The anticipated directional distribution of site generated trips is summarized in Table 6. Additionally, Figure 6 illustrates the primary trip directional distribution for the Site Generated Traffic Volumes.



## DIRECTIONAL DISTRIBUTION OF CAR WASH DEVELOPMENT GENERATED TRAFFIC

Car Wash Facility

City of Commerce City

Adams County, Colorado

FIGURE 6

Date: August 16, 2024

Job No: 764099-01

Designed By: REM

Drawn By: REM

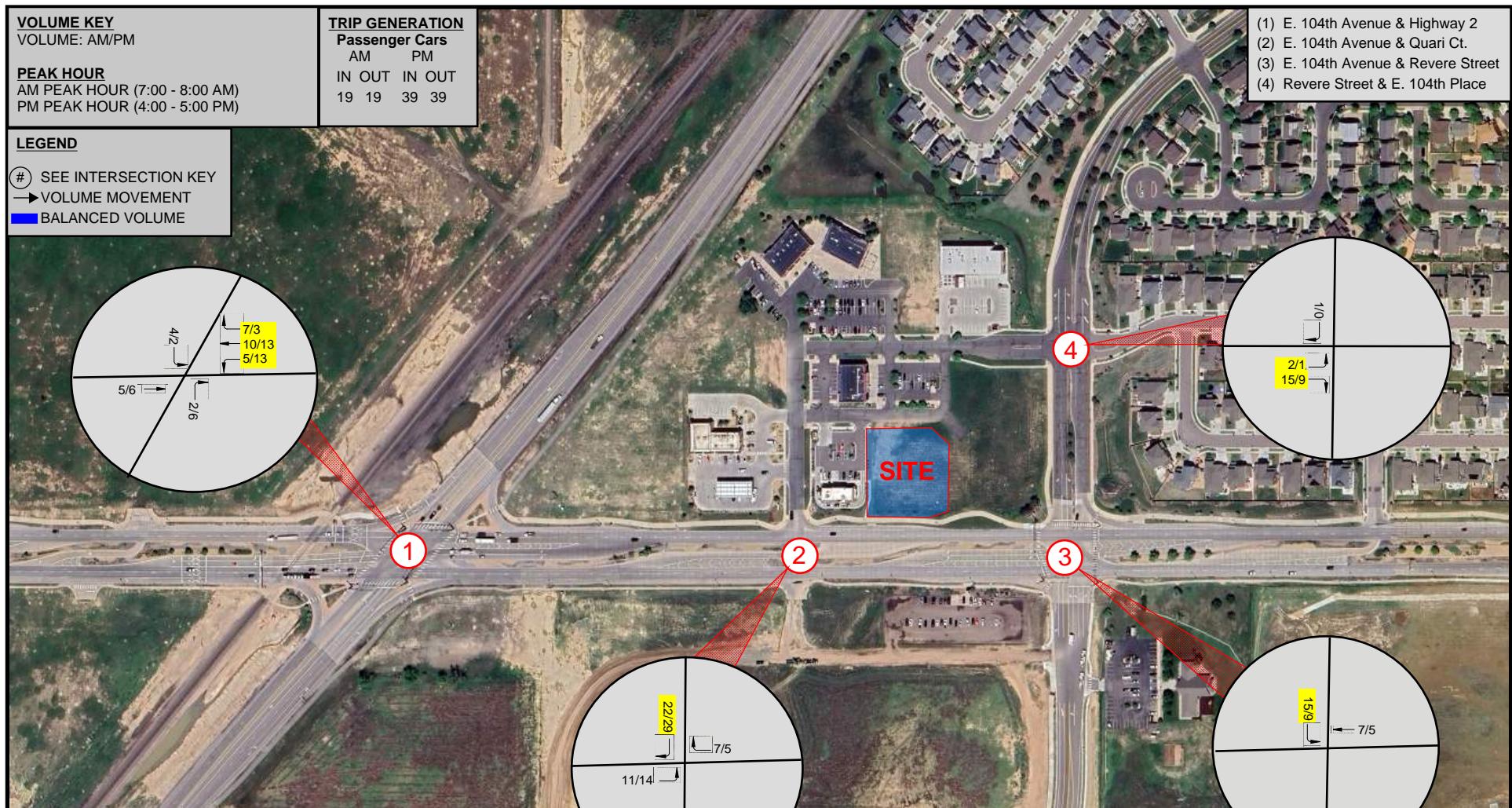
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Page: 23

**Table 6**  
**Directional Distribution of Site Generated Traffic Volumes**

Route	Distribution Approach/Departure	
	Passenger Cars	
	Weekday AM Peak Hour	Weekday PM Peak Hour
<b>Primary Trip Distribution - Cars (Figure 6)</b>		
To/From the East via E. 104 <sup>th</sup> Street	38%/38%	24%/24%
To/From the West via E. 104 <sup>th</sup> Street	25%/25%	33%/33%
To/From the North via CO-2	19%/19%	8%/8%
To/From the South via CO-2	13%/13%	32%/32%
To/From the North on Revere Street	5%/5%	3%/3%
<b>TOTAL</b>	<b>100%/100%</b>	<b>100%/100%</b>

Based upon the directional distributions listed in Table 6 and illustrated on Figure 6, the estimated Site Generated Traffic Volumes shown in Table 5 were distributed to the adjacent roadway system. The Site Generated Traffic Volumes are illustrated on Figure 7.



## CAR WASH WEEKDAY PEAK HOUR SITE GENERATED TRAFFIC VOLUMES

Car Wash Facility

FIGURE 7

Date: August 16, 2024

Job No: 764099-01

Designed By: REM

Drawn By: REM

Checked By: TC

Page: 25

## 6. Estimates of 2025 Build Traffic in the Vicinity of the Site

### 6.1. 2025 Build Traffic Volumes

The 2025 Build Peak Hour Traffic Volumes – Total Volumes (Figure 8) were calculated by adding the Site Generated Traffic Volumes (Figure 7) to the 2025 No-Build Peak Hour Traffic Volumes – Total Volumes (Figure 5).

### 6.2. 2025 Build Traffic Scenario Capacity Analysis

Utilizing the 2025 Build Peak Hour Traffic Volumes shown on Figure 8, capacity calculations were performed for the key study intersections and proposed site driveway. All capacity calculations within the TIS followed procedures documented in the *Highway Capacity Manual, Seventh Edition: A Guide for Multimodal Mobility Analysis* (Transportation Research Board, 2022). All study intersections were analyzed using Synchro Version 12.0 HCM 7<sup>th</sup> Edition TWSC and Signalized methodology.

The capacity analyses results for the 2025 Build Traffic Scenario are summarized in Table 7 below and can be found in **Appendix E** of the report.

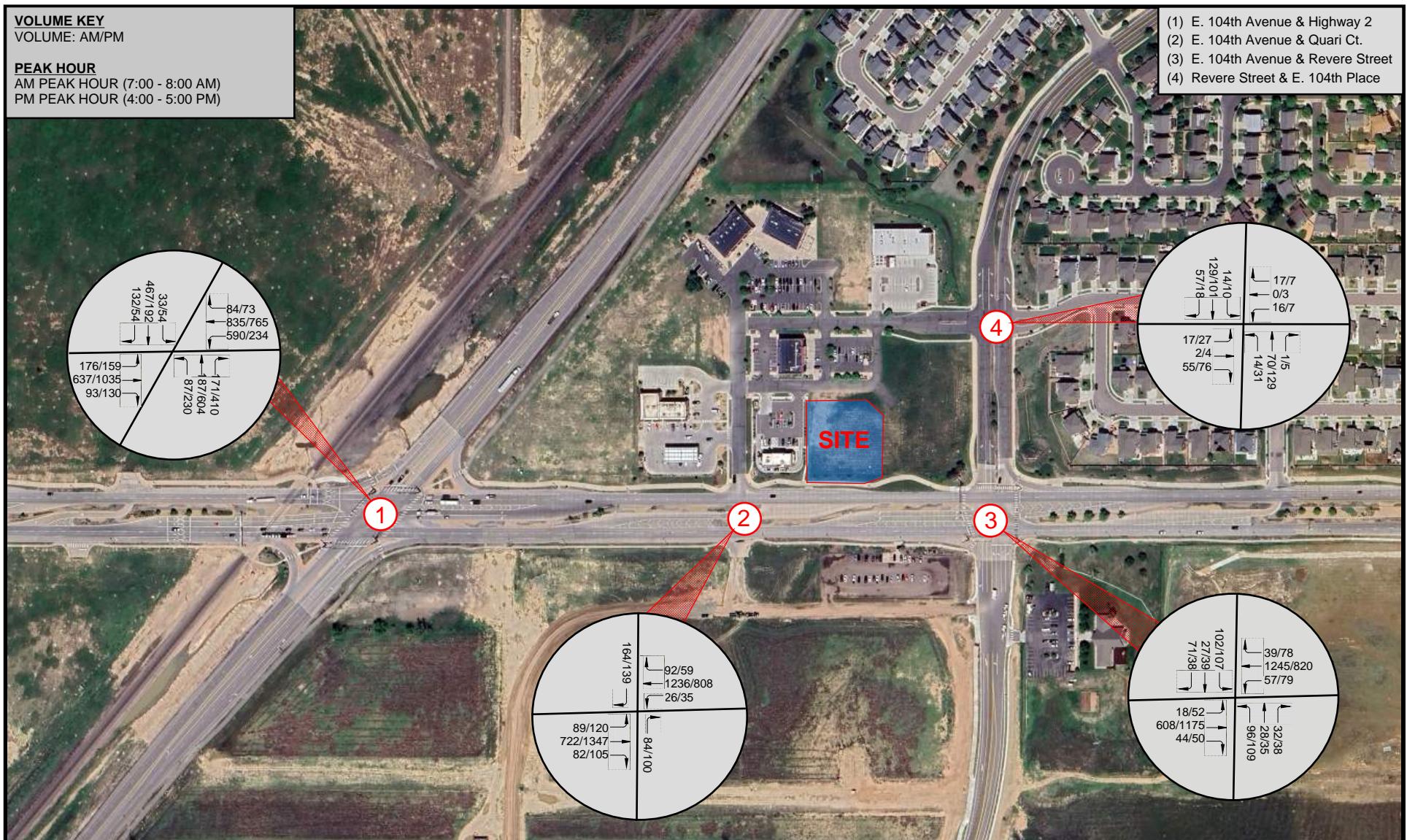
**Table 7**  
**Summary of 2025 Build Traffic Scenario Capacity Analysis**

Lane	2025 No-Build AM Peak Hour			2025 No-Build PM Peak Hour		
	LOS	Delay (sec/veh)	v/c	LOS	Delay (sec/veh)	v/c
<b>E. 104th Avenue &amp; Highway 2 (Signal Controlled)</b>						
<b>Intersection</b>	<b>D</b>	<b>46.7</b>	--	<b>E</b>	<b>76.1</b>	--
EBL	F	82.2	0.84	E	79.0	0.76
EBT	E	61.5	0.84	F	104.1	1.08
<b>EB Approach</b>	<b>E</b>	<b>66.5</b>	--	<b>F</b>	<b>100.3</b>	--
WBL	D	56.6	0.91	F	138.5	1.06
WBT	B	18.2	0.73	D	40.0	0.87
<b>WB Approach</b>	<b>C</b>	<b>34.2</b>	--	<b>D</b>	<b>63.1</b>	--
NBL	F	97.9	0.86	F	130.2	1.07
NBT	C	34.3	0.20	C	34.4	0.52
<b>NB Approach</b>	<b>E</b>	<b>58.3</b>	--	<b>E</b>	<b>66.1</b>	--
SBL	E	56.9	0.49	F	99.4	0.83
SBT	D	42.7	0.56	D	41.6	0.25
<b>SB Approach</b>	<b>D</b>	<b>44.7</b>	--	<b>D</b>	<b>57.4</b>	--
<b>E. 104th Avenue &amp; Quari Ct. (Stop Sign Controlled)</b>						
NBR	B	12.0	0.15	C	19.1	0.30
EBL	B	14.7	0.21	B	11.1	0.18
WBL	A	9.9	0.04	B	14.6	0.08
SBR	C	21.1	0.45	B	13.7	0.27
<b>E. 104th Avenue &amp; Revere Street (Signal Controlled)</b>						
<b>Intersection</b>	<b>C</b>	<b>24.8</b>	--	<b>C</b>	<b>20.2</b>	--
EBL	E	62.2	0.14	E	69.4	0.42
EBR	A	0.4	0.33	A	1.5	0.63

<b>EB Approach</b>	<b>A</b>	<b>2.3</b>	--	<b>A</b>	<b>4.4</b>	--
WBL	F	81.3	0.78	F	82.9	0.81
WBT	C	24.1	0.68	B	18.3	0.43
WBR	B	14.2	0.05	B	14.2	0.08
<b>WB Approach</b>	<b>C</b>	<b>26.3</b>	--	<b>C</b>	<b>23.2</b>	--
NBL	E	72.6	0.69	E	79.4	0.73
NBT	E	55.1	0.12	E	60.9	0.17
NBR	D	41.9	0.17	D	45.5	0.22
<b>NB Approach</b>	<b>E</b>	<b>63.2</b>	--	<b>E</b>	<b>68.8</b>	--
SBL	E	62.4	0.58	E	68.0	0.61
SBT	D	46.8	0.08	D	52.3	0.12
SBR	D	49.9	0.25	D	52.8	0.14
<b>SB Approach</b>	<b>E</b>	<b>55.9</b>	--	<b>E</b>	<b>61.6</b>	--
<b>Revere Street &amp; 104th Place (Stop Sign Controlled)</b>						
NBL	A	7.7	0.01	A	7.5	0.02
EBLTR	A	9.8	0.10	A	10.1	0.14
WBLTR	A	10.0	0.05	A	10.7	0.03
SBL	A	7.4	0.01	A	7.5	0.01

L – Left T – Through R – Right ( ) With Improvements

Under the **2025 Build Traffic Scenario**, the signal-controlled intersection of E. 104th Avenue & Highway 2 will continue to operate at an overall level of service (LOS) "D" during the Weekday AM Peak Hour and level of service "E" during the Weekday PM Peak Hour. The signal-controlled intersection of E. 104th Avenue & Revere Street will continue to operate at an overall level of service "C" during the Weekday AM Peak Hour and PM Peak Hours. In addition, the individual movements of the stop-controlled intersections (Revere Street & E. 104<sup>th</sup> Place and E. 104<sup>th</sup> Avenue & Quari Ct.) operate at level of service (LOS) "C" or better conditions.



## 2025 BUILD WEEKDAY PEAK HOUR TRAFFIC VOLUMES

Car Wash Facility

City of Commerce City

Adams County, Colorado

FIGURE 8

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Drawn By: REM

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## 7. Estimates of 2045 No-Build Traffic in the Vicinity of the Site

### 7.1. 2045 No-Build Traffic Volumes

The 2045 No-Build Weekday Peak Hour Traffic Volumes (Figure 9) were calculated by applying a two (2) percent compound growth rate to the 2025 No-Build Weekday Peak Hour Traffic Volumes (Figure 5) for twenty (20) years.

### 7.2. 2045 No-Build Traffic Scenario Capacity Analysis

Utilizing the 2045 No-Build Peak Hour Traffic Volumes shown on Figure 9, capacity calculations were performed for the key study intersections. All capacity calculations within the TIS followed procedures documented in the *Highway Capacity Manual, Seventh Edition: A Guide for Multimodal Mobility Analysis* (Transportation Research Board, 2022). All study intersections were analyzed using Synchro Version 12.0 HCM 7<sup>th</sup> Edition Signalized methodology.

The capacity analyses results for the 2045 No-Build Traffic Scenario are summarized in Table 8 and can be found in **Appendix F** of the report.

**Table 8**  
**Summary of 2045 No-Build Traffic Scenario Capacity Analysis**

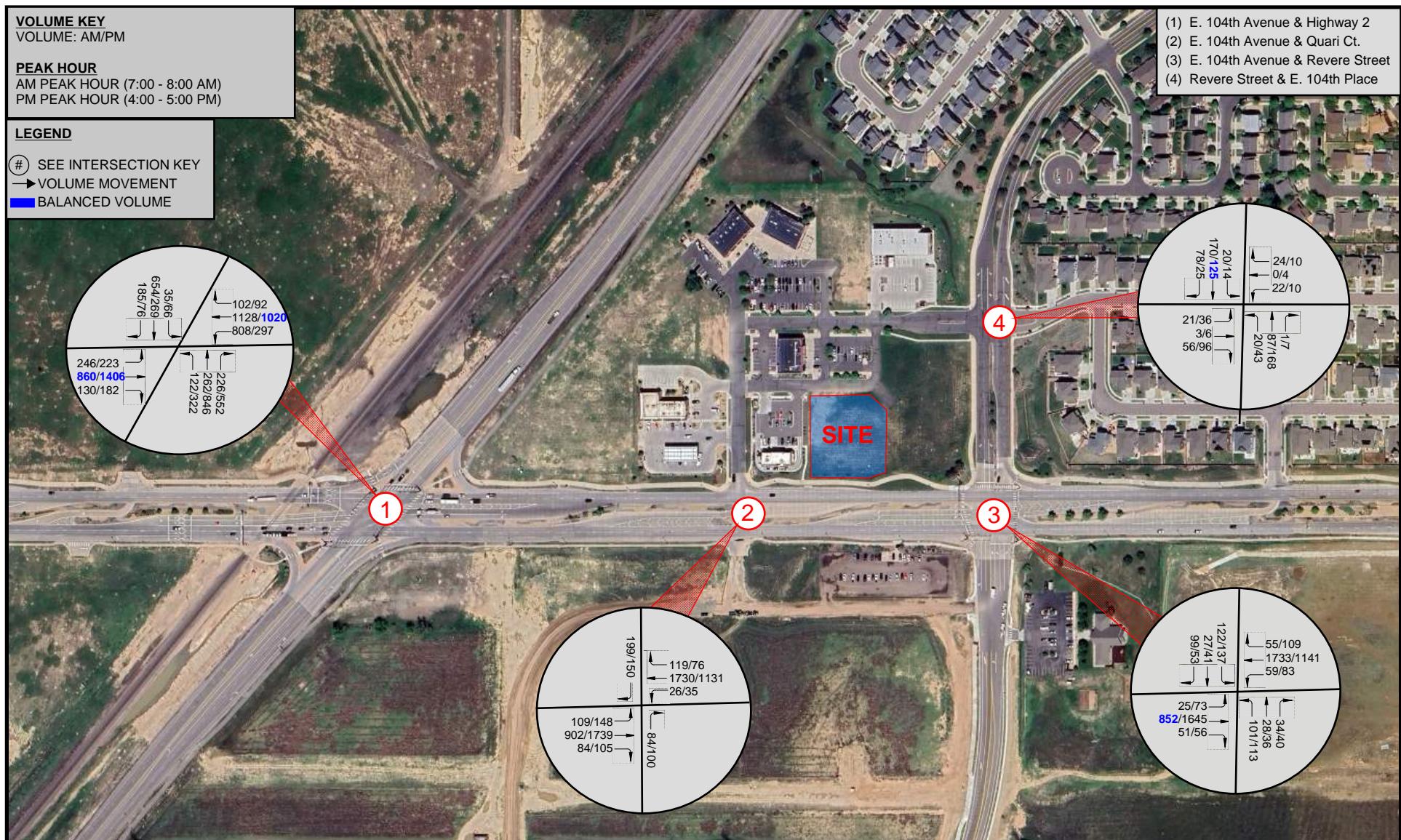
Lane	2025 No-Build AM Peak Hour			2025 No-Build PM Peak Hour		
	LOS	Delay (sec/veh)	v/c	LOS	Delay (sec/veh)	v/c
<b>E. 104th Avenue &amp; Highway 2 (Signal Controlled)</b>						
<b>Intersection</b>	<b>D</b>	<b>51.5</b>	--	<b>D</b>	<b>50.9</b>	--
EBL	E	85.4	0.88	E	57.6	0.83
EBT	E	71.0	0.91	E	89.4	1.09
<b>EB Approach</b>	<b>E</b>	<b>74.5</b>	--	<b>F</b>	<b>84.5</b>	--
WBL	D	39.4	0.78	C	23.6	0.33
WBT	C	23.2	0.58	B	12.6	0.49
<b>WB Approach</b>	<b>C</b>	<b>30.0</b>	--	<b>B</b>	<b>15.1</b>	--
NBL	F	142.5	1.03	D	41.9	0.75
NBT	D	39.0	0.29	D	46.1	0.92
<b>NB Approach</b>	<b>E</b>	<b>78.1</b>	--	<b>D</b>	<b>44.7</b>	--
SBL	E	71.8	0.54	F	119.9	0.97
SBT	E	58.6	0.84	D	39.3	0.52
<b>SB Approach</b>	<b>E</b>	<b>59.5</b>	--	<b>E</b>	<b>59.2</b>	--
<b>E. 104th Avenue &amp; Quari Ct. (Stop Sign Controlled)</b>						
NBR	C	15.1	0.20	C	21.0	0.48
EBL	F	137.2	0.96	D	34.8	0.58
WBL	C	15.8	0.08	D	30.6	0.31
SBR	F	93.0	0.95	C	22.0	0.44
<b>E. 104th Avenue &amp; Revere Street (Signal Controlled)</b>						
<b>Intersection</b>	<b>C</b>	<b>24.8</b>	--	<b>C</b>	<b>25.9</b>	--
EBL	E	63.9	0.14	D	47.4	0.46
EBR	A	0.3	0.33	C	20.9	0.80
<b>EB Approach</b>	<b>A</b>	<b>2.1</b>	--	<b>C</b>	<b>22.1</b>	--

WBL	F	85.9	0.78	E	66.4	0.79
WBT	C	26.5	0.68	C	21.7	0.55
WBR	B	16.7	0.07	B	17.5	0.17
<b>WB Approach</b>	<b>C</b>	<b>28.1</b>	--	<b>C</b>	<b>24.1</b>	--
NBL	E	76.5	0.71	D	48.5	0.59
NBT	E	60.3	0.13	D	35.0	0.12
NBR	D	46.7	0.19	C	22.5	0.15
<b>NB Approach</b>	<b>E</b>	<b>67.5</b>	--	<b>D</b>	<b>40.5</b>	--
SBL	E	64.6	0.60	E	67.6	0.83
SBT	D	48.3	0.08	C	31.7	0.11
SBR	D	37.6	0.33	C	32.6	0.17
<b>SB Approach</b>	<b>D</b>	<b>52.0</b>	--	<b>D</b>	<b>53.1</b>	--
<b>Revere Street &amp; 104th Place (Stop Sign Controlled)</b>						
NBL	A	7.8	0.02	A	7.6	0.03
EBLTR	B	10.4	0.12	A	11.0	0.20
WBLTR	B	10.7	0.07	A	11.7	0.05
SBL	A	7.4	0.02	A	7.6	0.01

L – Left T – Through R – Right

Under the **2045 No-Build Traffic Scenario**, the signal-controlled intersection of E. 104th Avenue & Highway 2 will operate at an overall level of service (LOS) "D" during the Weekday AM Peak and PM Peak Hours. The signal-controlled intersection of E. 104th Avenue & Revere Street will operate at an overall level of service "C" during the Weekday AM Peak Hour and PM Peak Hours. In addition, the individual movements at the stop-controlled intersection of Revere Street & E. 104<sup>th</sup> Place will operate at level of service (LOS) "B" or better conditions. The stop sign controlled intersection of E. 104<sup>th</sup> Avenue & Quari Ct. will have movements that operate at level of Service "D" and "F" conditions.

NOTE: The 2045 No-Build Traffic Scenario includes the construction of a third lane in each direction on E. 104<sup>th</sup> Avenue.



## 8. Estimates of 2045 Design Year Traffic in the Vicinity of the Site

### 8.1. 2045 Design Year Traffic Volumes

The 2045 Design Year Peak Hour Traffic Volumes – Total Volumes (Figure 10) were calculated by adding the Site Generated Traffic Volumes (Figure 7) to the 2045 No-Build Peak Hour Traffic Volumes (Figure 9).

### 8.2. 2045 Design Year Traffic Scenario Capacity Analysis

Utilizing the 2045 Design Year Peak Hour Traffic Volumes shown on Figure 10, capacity calculations were performed for the key study intersections and proposed site driveway. All capacity calculations within the TIS followed procedures documented in the *Highway Capacity Manual, Seventh Edition: A Guide for Multimodal Mobility Analysis* (Transportation Research Board, 2022). All study intersections were analyzed using Synchro Version 12.0 HCM 7<sup>th</sup> Edition TWSC and Signalized methodology.

The capacity analyses results for the 2045 Design Year Traffic Scenario are summarized in Table 9 can be found in **Appendix G** of the report.

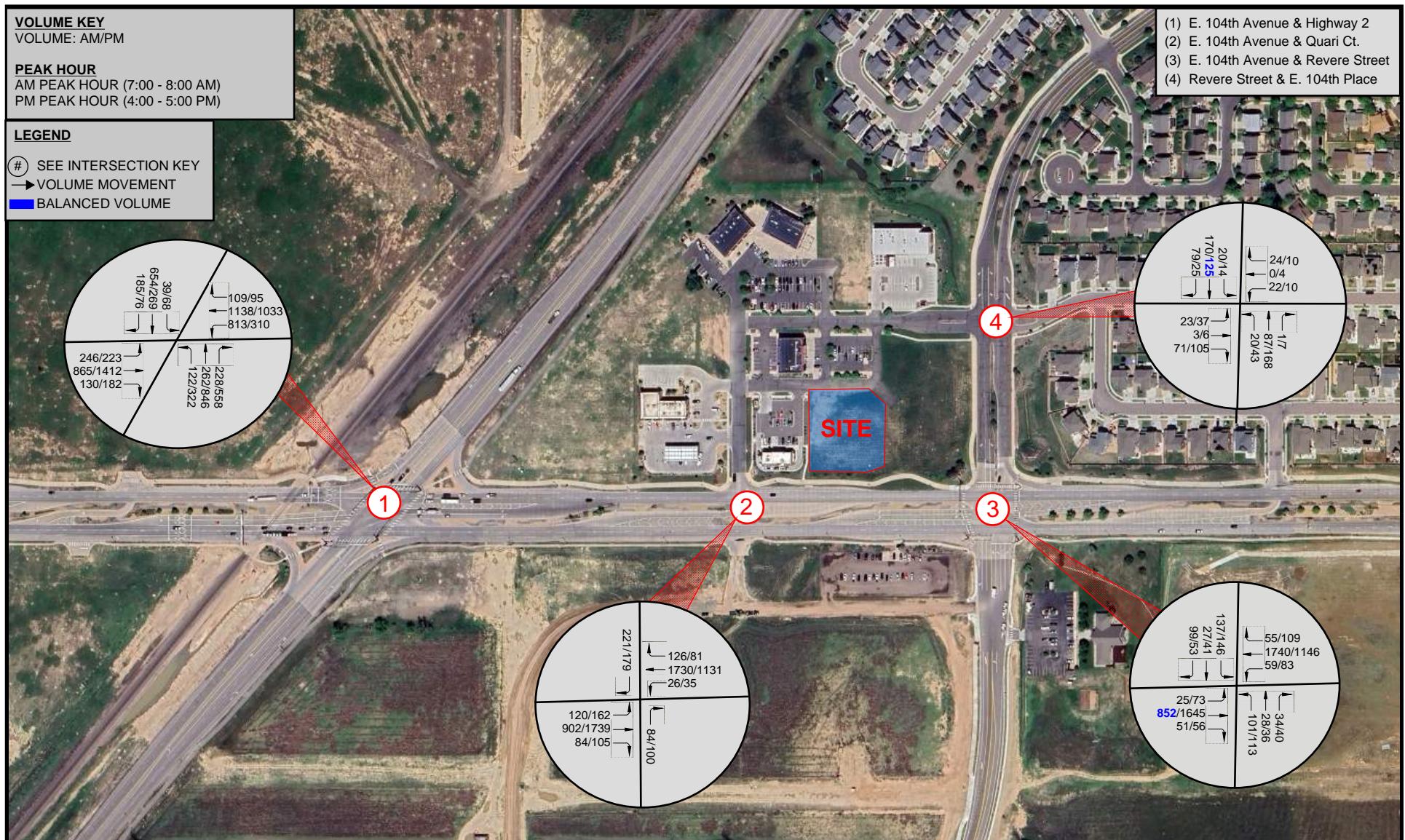
**Table 9**  
**Summary of 2045 Design Year Traffic Scenario Capacity Analysis**

Lane	2025 No-Build AM Peak Hour			2025 No-Build PM Peak Hour		
	LOS	Delay (sec/veh)	v/c	LOS	Delay (sec/veh)	v/c
<b>E. 104th Avenue &amp; Highway 2 (Signal Controlled)</b>						
<b>Intersection</b>	<b>D</b>	<b>51.5</b>	--	<b>D</b>	<b>51.0</b>	--
EBL	E	85.4	0.88	E	57.6	0.83
EBT	E	71.5	0.91	E	91.1	1.10
<b>EB Approach</b>	<b>E</b>	<b>75.0</b>	--	<b>F</b>	<b>85.9</b>	--
WBL	D	39.4	0.78	C	23.6	0.33
WBT	C	23.2	0.58	B	12.6	0.49
<b>WB Approach</b>	<b>C</b>	<b>30.0</b>	--	<b>B</b>	<b>15.1</b>	--
NBL	F	142.5	1.03	D	41.9	0.75
NBT	D	39.0	0.29	D	46.1	0.92
<b>NB Approach</b>	<b>E</b>	<b>78.1</b>	--	<b>D</b>	<b>44.7</b>	--
SBL	E	74.9	0.60	F	128.4	0.99
SBT	E	58.6	0.84	D	39.3	0.52
<b>SB Approach</b>	<b>E</b>	<b>59.8</b>	--	<b>E</b>	<b>61.8</b>	--
<b>E. 104th Avenue &amp; Quari Ct. (Stop Sign Controlled)</b>						
NBR	C	15.1	0.20	D	34.9	0.48
EBL	F	168.4	1.07	E	39.0	0.64
WBL	C	15.8	0.08	E	46.2	0.31
SBR	F	121.3	1.06	C	24.8	0.52
<b>E. 104th Avenue &amp; Revere Street (Signal Controlled)</b>						
<b>Intersection</b>	<b>C</b>	<b>25.1</b>	--	<b>C</b>	<b>25.9</b>	--
EBL	E	63.9	0.14	D	47.6	0.46
EBR	A	0.3	0.33	C	20.9	0.80

<b>EB Approach</b>	<b>A</b>	<b>2.1</b>	--	<b>C</b>	<b>22.3</b>	--
WBL	F	85.9	0.78	E	66.6	0.79
WBT	C	26.5	0.69	C	21.7	0.55
WBR	B	16.7	0.07	B	17.5	0.17
<b>WB Approach</b>	<b>C</b>	<b>28.2</b>	--	<b>C</b>	<b>24.2</b>	--
NBL	E	76.5	0.71	D	48.5	0.59
NBT	E	60.3	0.13	D	35.0	0.12
NBR	D	46.7	0.19	C	22.5	0.15
<b>NB Approach</b>	<b>E</b>	<b>67.5</b>	--	<b>D</b>	<b>40.5</b>	--
SBL	E	66.7	0.67	E	69.6	0.83
SBT	D	48.3	0.08	C	31.7	0.11
SBR	D	37.6	0.33	C	32.6	0.17
<b>SB Approach</b>	<b>D</b>	<b>53.8</b>	--	<b>D</b>	<b>54.1</b>	--
<b>Revere Street &amp; 104th Place (Stop Sign Controlled)</b>						
NBL	A	7.8	0.02	A	7.6	0.03
EBLTR	B	10.5	0.12	A	11.0	0.21
WBLTR	B	10.8	0.07	A	11.8	0.05
SBL	A	7.4	0.02	A	7.6	0.01

L – Left T – Through R – Right

Under the **2045 Build Traffic Scenario**, the signal-controlled intersection of E. 104th Avenue & Highway 2 will continue to operate at an overall level of service (LOS) "D" during the Weekday AM Peak and PM Peak Hours. The signal-controlled intersection of E. 104th Avenue & Revere Street will continue to operate at an overall level of service "C" during the Weekday AM Peak Hour and PM Peak HourS. In addition, the individual movements at the stop-controlled intersection of Revere Street & E. 104<sup>th</sup> Place will operate at level of service (LOS) "B" or better conditions. The stop sign controlled intersection of E. 104<sup>th</sup> Avenue & Quari Ct. will have movements that operate at level of Service "D", "E", and "F" conditions.



## 2045 DESIGN YEAR WEEKDAY PEAK HOUR TRAFFIC VOLUMES

Car Wash Facility

City of Commerce City

Adams County, Colorado

FIGURE 10

Date: August 16, 2024

Job No: 764099-01

Designed By: REM

Drawn By: REM

Checked By: TC

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## 9. Turn Lane Analysis

Since turn lanes (right and left) currently exist at each study location, turn lane warrants were not reviewed. However, a queueing analysis was performed to determine if any of the existing turn lane lengths would need to be extended. The Queueing Analysis is summarized in Section 10 of the report.

## 10. Queue Length Analysis

### 10.1. Queue Length Analysis Procedure and Results

The 95<sup>th</sup> percentile queue lengths were calculated using Synchro Version 12.0 in combination with SimTraffic. CESO reviewed the 2025/2045 No-Build and Build Traffic Scenarios. The results of the analyses are listed below in Tables 10 and 11. The 95<sup>th</sup> percentile queue length analysis summary sheets are located in **Appendix H** of the report.

**Table 10**  
**Queue Length Analysis – 2025 No-Build and Build Traffic Scenarios**

Location	Movement	Storage Length <i>Existing</i> [Proposed]	2025 No-Build and Build Traffic Scenario Comparison			
			Queue Length			
			Weekday AM Peak Hour	Weekday PM Peak Hour	No-Build	Build
Traffic Scenario →			No-Build	Build	No-Build	Build
E. 104th Avenue & Highway 2	EBL	435'	184 (208)	208	117 (143)	162
	EBL	435'	214 (219)	219	744 (716)	723
	EBT	--	330 (365)	393	1332 (1287)	1305
	EBT	--	310 (352)	369	1326 (1258)	1285
	EBR	725'	275 (270)	270	1203 (958)	975
	WBL	230' (350')	283 (453)	472	123 (305)	397
	WBL	230' (350')	329 (493)	532	290 (351)	429
	WBT	--	866 (708)	798	394 (395)	453
	WBT	--	506 (578)	795	404 (406)	455
	WBR	225'	149 (196)	205	268 (189)	224
	NBL	700'	144 (183)	192	966 (881)	751
	NBT	--	77 (111)	111	1581 (1168)	854
	NBT	--	39 (75)	78	1550 (1077)	791
	NBR	500'	45 (53)	53	450 (393)	393
	SBL	800'	70 (73)	82	118 (197)	197
	SBT	--	240 (291)	291	116 (134)	134
	SBT	--	210 (268)	272	79 (99)	99
	SBR	460'	29 (49)	49	15 (6)	11
E. 104th Avenue & Quari Ct.	EBL	375'	127 (110)	120	94 (70)	78
	EBT	--	16 (15)	18	12 (72)	75
	EBR	785'	12 (5)	5	57 (6)	6
	WBL	290'	390 (79)	113	9 (62)	62
	WBT	--	612 (207)	349	121 (105)	105
	WBT	--	617 (172)	263	125 (104)	104
	WBR	235'	163 (10)	48	9 (6)	10

	NBR	--	62 (69)	69	84 (90)	6
	SBR	--	284 (145)	242	69 (62)	89
Revere Street & 104th Place	EBL	225'	17 (17)	18	67(40)	48
	EBL	225'	34 (35)	35	58 (86)	106
	EBT	--	74 (168)	180	183 (343)	343
	EBT	--	103 (184)	185	202 (357)	357
	WBL	275'	461 (112)	165	126 (139)	139
	WBT	--	1632 (377)	385	254 (253)	259
	WBT	--	1643 (328)	339	224 (219)	237
	WBR	265'	387 (49)	49	47 (43)	45
	NBL	110'	183 (95)	95	75 (103)	111
	NBL	110'	265 (121)	121	119 (145)	147
	NBT	--	778 (70)	72	90 (99)	107
	NBR	110'	62 (49)	49	55 (56)	56
	SBL	100'	127 (120)	137	111 (139)	147
	SBT	--	108 (71)	97	78 (106)	113
	SBR	100'	90 (74)	76	48 (44)	44
E. 104th Avenue & Revere Street	EBLTR	--	40 (42)	42	51 (52)	52
	WBLTR	--	38 (38)	38	33 (33)	33
	NBL	80'	8 (15)	16	13 (19)	19
	SBL	100'	4 (7)	7	12 (14)	18
	SBR	100'	3 (3)	7	3 (3)	11

XXX.X [XXX.X] – Without Improvements [With Improvements]

**Table 11**  
**Queue Length Analysis – 2045 No-Build and Design Year Traffic Scenarios**

Location	Movement	Storage Length <i>Existing</i> [Proposed]	2045 No-Build and Design Year Traffic Scenario Comparison			
			Queue Length			
			Weekday AM Peak Hour		Weekday PM Peak Hour	
Traffic Scenario →			No-Build	Build	No-Build	Build
E. 104th Avenue & Highway 2	EBL	435'	305	325	197	247
	EBL	435'	346	367	678	678
	EBT	--	384	384	1198	1198
	EBT	--	349	364	1134	1134
	EBT	--	303	304	1008	1056
	EBC	725'	49	51	600	725
	WBL	230' (350')	430	441	479	480
	WBL	230' (350')	472	505	528	552
	WBT	--	936	993	655	666
	WBT	--	510	653	550	555
	WBT	--	367	420	388	395
	WBR	225'	196	220	140	149
	NBL	700'	383	388	218	225
	NBL	700'	372	385	343	355
	NBT	--	169	203	717	818
	NBT	--	148	185	840	889
	NBR	500'	67	71	633	637
	SBL	800'	87	88	151	214

	SBT	--	446	455	134	137
	SBT	--	408	421	100	102
	SBR	460'	61	104	15	16
E. 104th Avenue & Quari Ct.	EBL	375'	423	507	124	145
	WBL	290'	343	345	79	205
	WBT	--	825	826	400	405
	WBT	--	351	354	350	361
	WBT	--	83	178	98	102
	WBR	785'	18	54	7	10
	NBR	--	65	65	84	95
	SBR	--	268	272	86	100
	EBL	225'	26	30	48	56
Revere Street & 104th Place	EBL	225'	49	48	65	71
	EBT	--	133	142	204	205
	EBT	--	173	182	251	255
	EBT	--	183	191	264	265
	WBL	275'	460	485	121	148
	WBT	--	1531	1550	281	284
	WBT	--	1507	1525	238	245
	WBT	--	1349	1382	157	172
	WBR	265'	269	269	44	50
	NBL	110'	181	182	78	94
	NBL	110'	240	244	120	132
	NBT	--	540	555	71	95
	NBR	110'	84	88	57	58
	SBL	100'	152	166	146	180
	SBT	--	142	164	97	137
	SBR	100'	127	121	50	59
E. 104th Avenue & Revere Street	EBLTR	--	48	59	60	61
	WBLTR	--	41	43	36	39
	NBL	80'	20	20	22	23
	SBL	100'	13	10	17	17
	SBR	100'	4	4	3	3

## 10.2. Queue Length Analysis Summary

CESO reviewed all study locations to determine if calculated queue lengths exceed existing storage lengths. The queue length analysis revealed the following:

- CESO determined that there are queue lengths that will exceed existing or proposed storages in the 2025 No-Build, 2025 Build, 2045 No-Build, and 2045 Build Traffic Scenarios. However, it should be noted that the No-Build queue lengths are not significantly increased by the addition of the proposed Car Wash development.

### 10.3. On-Site Car Wash Queueing

An on-site queueing analysis for the Proposed Car Wash Development was evaluated to determine if any queues from the car wash would extend onto the internal East/West Strip Shopping Center Road. The proposed development provides three (3) queuing lanes, totaling approximately 153 feet of storage and an additional 55 feet for the internal drive aisle, for a total of 208 feet. Assuming one vehicle occupies 25 feet, the Site allows for 8 total vehicles to fit in queue before spilling onto the East/West Strip Shopping Center Road.

The Car Wash operator anticipates the wait time at the kiosk to be approximately 60 seconds. With this assumption, the On-Site Queueing Analysis looked at a 60 second interval to best approximate the worst-case scenario. The average of the highest 15-minute interval of peak hour demand was used to determine the flow rate in vehicles per second.

The Poisson Distribution Formula was used within an Excel spreadsheet to determine the on-site car wash queueing for the project. The formula can be used up to any (n) number of vehicles. By taking the summation of the probabilities, the formula predicts how likely zero to the (n) number of vehicles will arrive in the given interval. For this scenario, the Poisson Distribution Formula was used to determine the probability that 8 or more vehicles would be entering the site in any given 60 second interval.

It was determined that there is a zero percent chance that 8 or more vehicles will enter the Site in any 60 second interval. Narrowing the summation of probabilities down showed that it will never be expected for more than seven (7) vehicles to arrive in any 60 second interval of operation for the Proposed Car Wash Development.

The Excel spreadsheet showing the Poisson Distribution calculations can be found in **Appendix I** of the report.

## 11. Summary of Recommendations

### 11.1. Recommendations

The following summary of recommendations was generated based upon the findings in the Traffic Impact Study.

#### **2025 No-Build Traffic Scenario (Responsibility – Others):**

##### **E. 104<sup>th</sup> Avenue & CO-2**

- Extend the WB to SB dual left-turn lanes from 230' to 350' to accommodate the proposed queue length during the AM Peak Hour.
- Modify signal timing (cycle length and offsets). Refer to Synchro Summary Sheets for timing changes.

##### **E. 104<sup>th</sup> Avenue & Revere Street**

- Modify signal timing (cycle length and offsets). Refer to Synchro Summary Sheets for timing changes.

#### **2025 Build Traffic Scenario (Responsibility – Car Wash Development):**

- No improvements are recommended or required.

#### **2045 No-Build Traffic Scenario (Responsibility – Others):**

##### **E. 104<sup>th</sup> Avenue**

- Construct an additional through lane in the eastbound and westbound directions along E. 104<sup>th</sup> Avenue. According to the City, E. 104<sup>th</sup> Avenue is set up to accommodate a three (3) lane through section in each direction based on the additional width of the center grass median area.

#### **2045 Design Year Traffic Scenario (Responsibility – Car Wash Development):**

- No improvements are recommended or required.

**APPENDIX A**  
**EXISTING TRAFFIC COUNT DATA**

## 1 - E 104th Avenue &amp; CO-2 - Recount - TMC

Wed Apr 10, 2024

Full Length (7 AM-9 AM, 3 PM-6 PM)

All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses)

All Movements

ID: 1172591, Location: 39.885236, -104.8479



Provided by: Gewalt Hamilton Associates Inc.

625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg Direction	CO-2 Southbound					104th Ave Westbound					CO-2 Northbound					104th Ave Eastbound					
Time	R	T	L	U	App	R	T	L	U	App	R	T	L	U	App	R	T	L	U	App	Int
2024-04-10 7:00AM	22	124	9	0	155	8	146	115	0	269	19	46	28	1	94	52	135	16	0	203	721
7:15AM	30	143	7	0	180	6	162	145	0	313	27	43	17	0	87	66	140	28	0	234	814
7:30AM	29	128	5	0	162	13	134	160	0	307	32	53	9	0	94	40	126	24	0	190	753
7:45AM	41	112	4	0	157	24	198	125	0	347	48	48	32	0	128	37	146	20	0	203	835
Hourly Total	122	507	25	0	654	51	640	545	0	1236	126	190	86	1	403	195	547	88	0	830	3123
8:00AM	29	75	0	0	104	19	201	117	2	339	33	39	27	0	99	30	122	19	0	171	713
8:15AM	14	57	3	0	74	8	209	96	1	314	28	42	19	0	89	40	153	19	0	212	689
8:30AM	14	74	5	0	93	10	120	89	0	219	34	52	16	0	102	38	153	27	0	218	632
8:45AM	12	42	8	0	62	10	126	81	1	218	26	49	11	0	86	26	114	26	0	166	532
Hourly Total	69	248	16	0	333	47	656	383	4	1090	121	182	73	0	376	134	542	91	0	767	2566
3:00PM	8	35	1	0	44	5	135	31	0	171	60	94	21	0	175	10	159	29	0	198	588
3:15PM	15	43	5	0	63	6	123	31	0	160	61	133	36	0	230	23	159	30	0	212	665
3:30PM	18	48	12	0	78	14	137	49	0	200	70	94	33	0	197	42	239	42	0	323	798
3:45PM	11	29	3	0	43	12	141	59	2	214	84	122	54	0	260	26	228	31	0	285	802
Hourly Total	52	155	21	0	228	37	536	170	2	745	275	443	144	0	862	101	785	132	0	1018	2853
4:00PM	26	42	5	0	73	13	166	42	0	221	67	137	51	0	255	26	195	41	0	262	811
4:15PM	11	41	4	0	56	9	181	37	0	227	88	131	68	0	287	14	197	37	0	248	818
4:30PM	19	56	4	0	79	15	162	42	1	220	93	149	50	0	292	38	229	42	1	310	901
4:45PM	10	44	14	0	68	13	146	50	1	210	93	155	52	0	300	38	233	41	0	312	890
Hourly Total	66	183	27	0	276	50	655	171	2	878	341	572	221	0	1134	116	854	161	1	1132	3420
5:00PM	13	47	12	0	72	16	150	56	0	222	88	157	55	0	300	37	248	36	0	321	915
5:15PM	14	43	3	0	60	13	139	38	1	191	69	111	57	0	237	22	212	22	0	256	744
5:30PM	5	57	4	0	66	12	141	50	1	204	97	151	52	0	300	33	209	32	0	274	844
5:45PM	7	37	2	0	46	13	119	33	1	166	109	122	35	1	267	35	194	22	0	251	730
Hourly Total	39	184	21	0	244	54	549	177	3	783	363	541	199	1	1104	127	863	112	0	1102	3233
Total	348	1277	110	0	1735	239	3036	1446	11	4732	1226	1928	723	2	3879	673	3591	584	1	4849	15195
% Approach	20.1%	73.6%	6.3%	0%	-	5.1%	64.2%	30.6%	0.2%	-	31.6%	49.7%	18.6%	0.1%	-	13.9%	74.1%	12.0%	0%	-	-
% Total	2.3%	8.4%	0.7%	0%	<b>11.4%</b>	1.6%	20.0%	9.5%	0.1%	<b>31.1%</b>	8.1%	12.7%	4.8%	0%	<b>25.5%</b>	4.4%	23.6%	3.8%	0%	<b>31.9%</b>	-
Lights	300	1173	106	0	<b>1579</b>	230	2950	1416	11	<b>4607</b>	1186	1808	691	2	<b>3687</b>	632	3476	527	1	<b>4636</b>	14509
% Lights	86.2%	91.9%	96.4%	0%	<b>91.0%</b>	96.2%	97.2%	97.9%	100%	<b>97.4%</b>	96.7%	93.8%	95.6%	100%	<b>95.1%</b>	93.9%	96.8%	90.2%	100%	<b>95.6%</b>	95.5%
Articulated Trucks and Single-Unit Trucks	48	103	4	0	<b>155</b>	8	74	27	0	<b>109</b>	37	114	32	0	<b>183</b>	40	98	57	0	<b>195</b>	642
% Articulated Trucks and Single-Unit Trucks	13.8%	8.1%	3.6%	0%	<b>8.9%</b>	3.3%	2.4%	1.9%	0%	<b>2.3%</b>	3.0%	5.9%	4.4%	0%	<b>4.7%</b>	5.9%	2.7%	9.8%	0%	<b>4.0%</b>	4.2%
Buses	0	1	0	0	<b>1</b>	1	12	3	0	<b>16</b>	3	6	0	0	<b>9</b>	1	17	0	0	<b>18</b>	44
% Buses	0%	0.1%	0%	0%	<b>0.1%</b>	0.4%	0.4%	0.2%	0%	<b>0.3%</b>	0.2%	0.3%	0%	0%	<b>0.2%</b>	0.1%	0.5%	0%	0%	<b>0.4%</b>	0.3%

\*L: Left, R: Right, T: Thru, U: U-Turn

1 - E 104th Avenue & CO-2 - Recount - TMC

Wed Apr 10, 2024

Full Length (7 AM-9 AM, 3 PM-6 PM)

All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses)

All Movements

ID: 1172591, Location: 39.885236, -104.8479



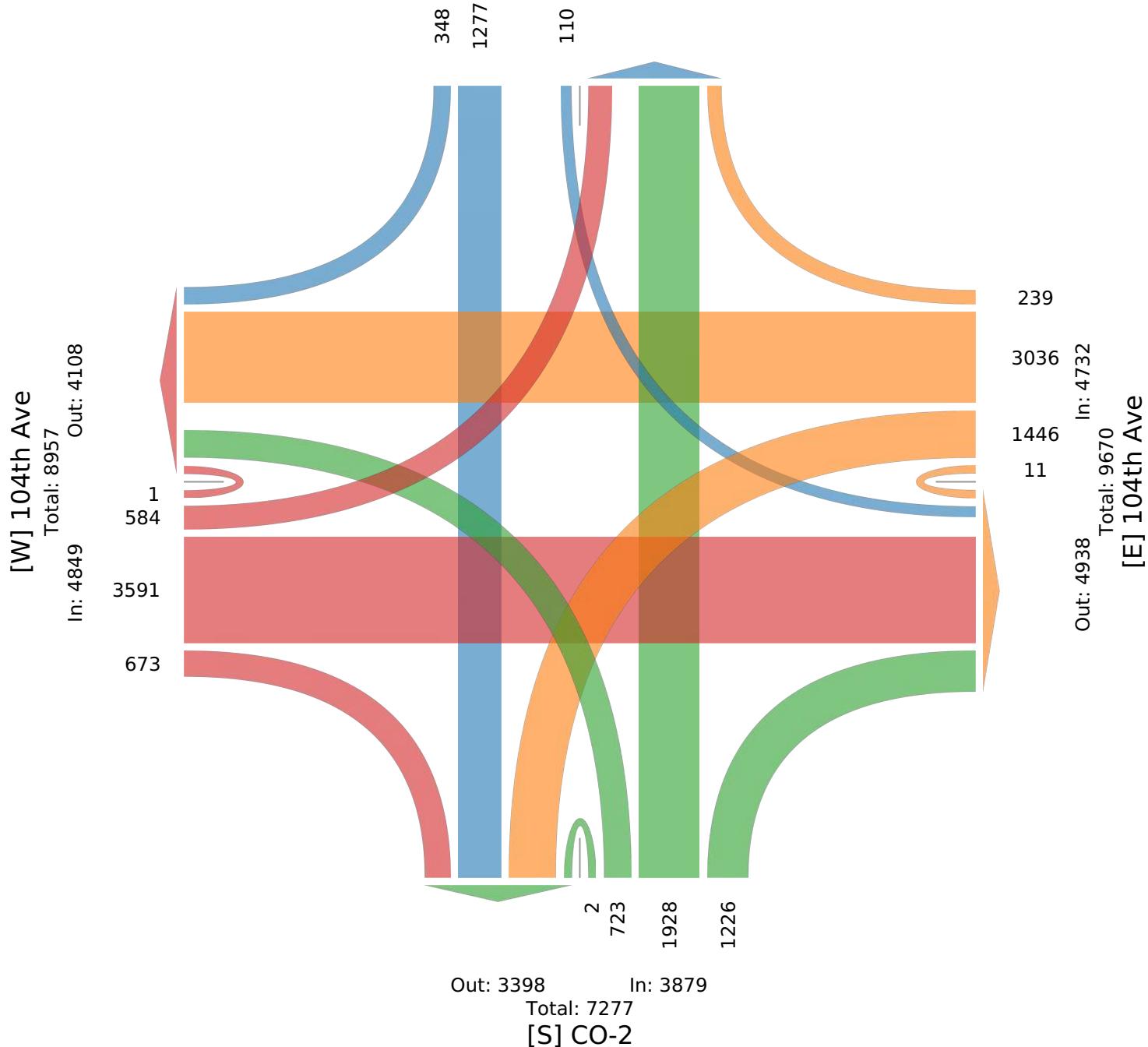
Provided by: Gewalt Hamilton Associates Inc.

625 Forest Edge Drive, Vernon Hills, IL, 60061, US

[N] CO-2

Total: 4486

In: 1735 Out: 2751



## 1 - E 104th Avenue &amp; CO-2 - Recount - TMC

Wed Apr 10, 2024

Forced Peak (7:15 AM - 8:15 AM)

All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses)

All Movements

ID: 1172591, Location: 39.885236, -104.8479



Provided by: Gewalt Hamilton Associates Inc.

625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg Direction	CO-2 Southbound					104th Ave Westbound					CO-2 Northbound					104th Ave Eastbound					
Time	R	T	L	U	App	R	T	L	U	App	R	T	L	U	App	R	T	L	U	App	Int
2024-04-10 7:15AM	30	143	7	0	180	6	162	145	0	313	27	43	17	0	87	66	140	28	0	234	814
7:30AM	29	128	5	0	162	13	134	160	0	307	32	53	9	0	94	40	126	24	0	190	753
7:45AM	41	112	4	0	157	24	198	125	0	347	48	48	32	0	128	37	146	20	0	203	835
8:00AM	29	75	0	0	104	19	201	117	2	339	33	39	27	0	99	30	122	19	0	171	713
<b>Total</b>	129	458	16	0	<b>603</b>	62	695	547	2	<b>1306</b>	140	183	85	0	<b>408</b>	173	534	91	0	<b>798</b>	<b>3115</b>
<b>% Approach</b>	21.4%	76.0%	2.7%	0%	-	4.7%	53.2%	41.9%	0.2%	-	34.3%	44.9%	20.8%	0%	-	21.7%	66.9%	11.4%	0%	-	-
<b>% Total</b>	4.1%	14.7%	0.5%	0%	<b>19.4%</b>	2.0%	22.3%	17.6%	0.1%	<b>41.9%</b>	4.5%	5.9%	2.7%	0%	<b>13.1%</b>	5.6%	17.1%	2.9%	0%	<b>25.6%</b>	-
<b>PHF</b>	0.787	0.801	0.571	-	<b>0.838</b>	0.646	0.864	0.855	0.250	<b>0.941</b>	0.729	0.863	0.664	-	<b>0.797</b>	0.655	0.914	0.813	-	<b>0.853</b>	0.933
<b>Lights</b>	116	424	14	0	<b>554</b>	60	678	539	2	<b>1279</b>	125	158	77	0	<b>360</b>	160	496	74	0	<b>730</b>	2923
<b>% Lights</b>	89.9%	92.6%	87.5%	0%	<b>91.9%</b>	96.8%	97.6%	98.5%	100%	<b>97.9%</b>	89.3%	86.3%	90.6%	0%	<b>88.2%</b>	92.5%	92.9%	81.3%	0%	<b>91.5%</b>	93.8%
<b>Articulated Trucks and Single-Unit Trucks</b>	13	34	2	0	<b>49</b>	1	15	7	0	<b>23</b>	13	23	8	0	<b>44</b>	13	31	17	0	<b>61</b>	177
<b>% Articulated Trucks and Single-Unit Trucks</b>	10.1%	7.4%	12.5%	0%	<b>8.1%</b>	1.6%	2.2%	1.3%	0%	<b>1.8%</b>	9.3%	12.6%	9.4%	0%	<b>10.8%</b>	7.5%	5.8%	18.7%	0%	<b>7.6%</b>	5.7%
<b>Buses</b>	0	0	0	0	<b>0</b>	1	2	1	0	<b>4</b>	2	2	0	0	<b>4</b>	0	7	0	0	<b>7</b>	15
<b>% Buses</b>	0%	0%	0%	0%	<b>0%</b>	1.6%	0.3%	0.2%	0%	<b>0.3%</b>	1.4%	1.1%	0%	0%	<b>1.0%</b>	0%	1.3%	0%	0%	<b>0.9%</b>	0.5%

\* L: Left, R: Right, T: Thru, U: U-Turn

1 - E 104th Avenue & CO-2 - Recount - TMC

Wed Apr 10, 2024

Forced Peak (7:15 AM - 8:15 AM)

All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses)

All Movements

ID: 1172591, Location: 39.885236, -104.8479



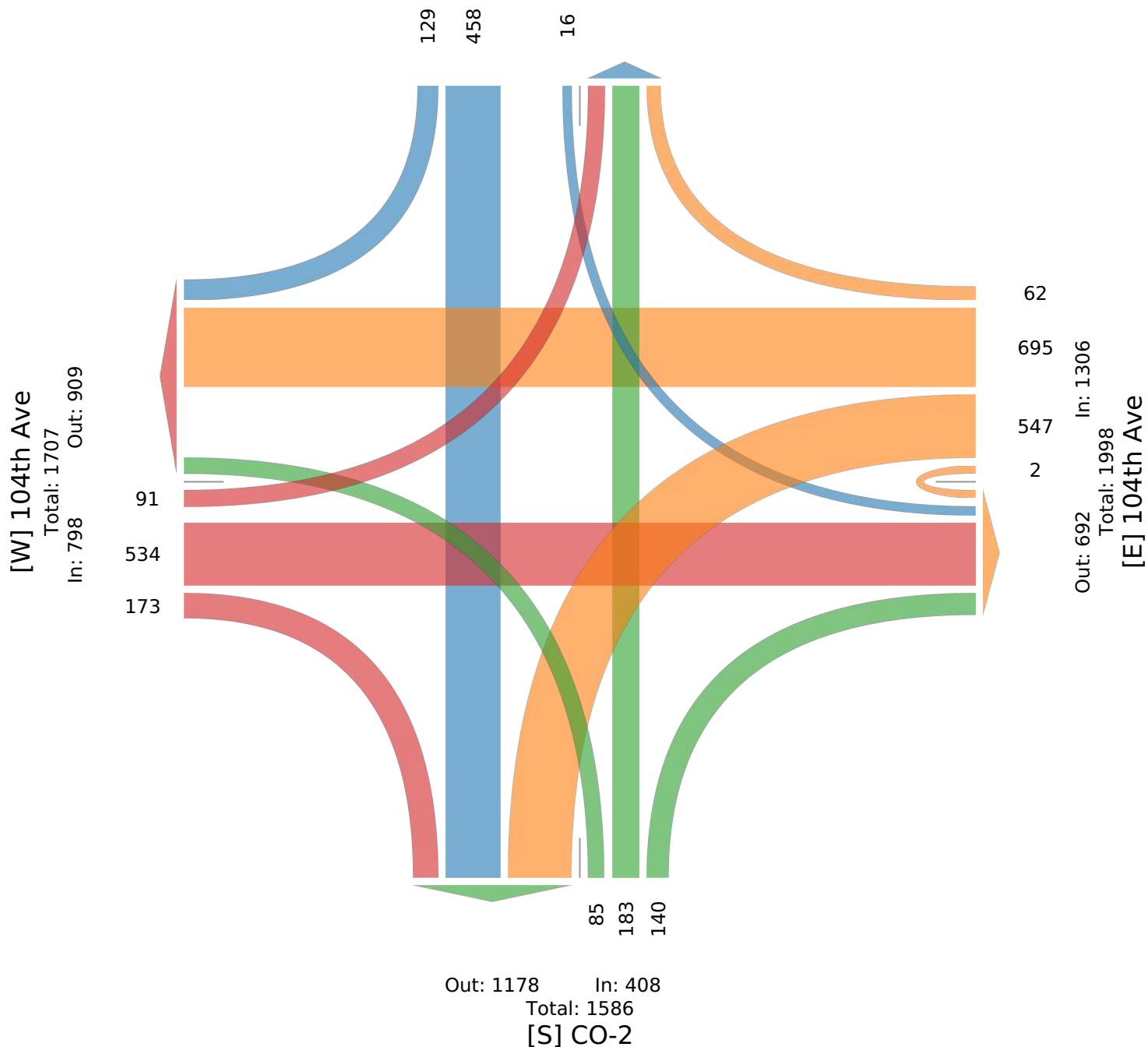
Provided by: Gewalt Hamilton Associates Inc.

625 Forest Edge Drive, Vernon Hills, IL, 60061, US

[N] CO-2

Total: 939

In: 603      Out: 336



## 1 - E 104th Avenue &amp; CO-2 - Recount - TMC

Wed Apr 10, 2024

PM Peak (4:15 PM - 5:15 PM) - Overall Peak Hour

All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses)

All Movements

ID: 1172591, Location: 39.885236, -104.8479



Provided by: Gewalt Hamilton Associates Inc.

625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg Direction	CO-2 Southbound					104th Ave Westbound					CO-2 Northbound					104th Ave Eastbound					
Time	R	T	L	U	App	R	T	L	U	App	R	T	L	U	App	R	T	L	U	App	Int
2024-04-10 4:15PM	11	41	4	0	56	9	181	37	0	227	88	131	68	0	287	14	197	37	0	248	818
4:30PM	19	56	4	0	79	15	162	42	1	220	93	149	50	0	292	38	229	42	1	310	901
4:45PM	10	44	14	0	68	13	146	50	1	210	93	155	52	0	300	38	233	41	0	312	890
5:00PM	13	47	12	0	72	16	150	56	0	222	88	157	55	0	300	37	248	36	0	321	915
<b>Total</b>	53	188	34	0	275	53	639	185	2	879	362	592	225	0	1179	127	907	156	1	1191	3524
<b>% Approach</b>	19.3%	68.4%	12.4%	0%	-	6.0%	72.7%	21.0%	0.2%	-	30.7%	50.2%	19.1%	0%	-	10.7%	76.2%	13.1%	0.1%	-	-
<b>% Total</b>	1.5%	5.3%	1.0%	0%	<b>7.8%</b>	1.5%	18.1%	5.2%	0.1%	<b>24.9%</b>	10.3%	16.8%	6.4%	0%	<b>33.5%</b>	3.6%	25.7%	4.4%	0%	<b>33.8%</b>	-
<b>PHF</b>	0.697	0.839	0.607	-	<b>0.870</b>	0.828	0.883	0.826	0.500	<b>0.968</b>	0.973	0.943	0.827	-	<b>0.983</b>	0.836	0.914	0.929	0.250	<b>0.928</b>	0.963
<b>Lights</b>	46	171	33	0	<b>250</b>	51	621	182	2	<b>856</b>	358	574	217	0	<b>1149</b>	120	898	148	1	<b>1167</b>	3422
<b>% Lights</b>	86.8%	91.0%	97.1%	0%	<b>90.9%</b>	96.2%	97.2%	98.4%	100%	<b>97.4%</b>	98.9%	97.0%	96.4%	0%	<b>97.5%</b>	94.5%	99.0%	94.9%	100%	<b>98.0%</b>	97.1%
<b>Articulated Trucks and Single-Unit Trucks</b>	7	17	1	0	<b>25</b>	2	15	3	0	<b>20</b>	4	18	8	0	<b>30</b>	6	4	8	0	<b>18</b>	93
<b>% Articulated Trucks and Single-Unit Trucks</b>	13.2%	9.0%	2.9%	0%	<b>9.1%</b>	3.8%	2.3%	1.6%	0%	<b>2.3%</b>	1.1%	3.0%	3.6%	0%	<b>2.5%</b>	4.7%	0.4%	5.1%	0%	<b>1.5%</b>	2.6%
<b>Buses</b>	0	0	0	0	<b>0</b>	0	3	0	0	<b>3</b>	0	0	0	0	<b>0</b>	1	5	0	0	<b>6</b>	9
<b>% Buses</b>	0%	0%	0%	0%	<b>0%</b>	0%	0.5%	0%	0%	<b>0.3%</b>	0%	0%	0%	0%	<b>0%</b>	0.8%	0.6%	0%	0%	<b>0.5%</b>	0.3%

\* L: Left, R: Right, T: Thru, U: U-Turn

1 - E 104th Avenue & CO-2 - Recount - TMC

Wed Apr 10, 2024

PM Peak (4:15 PM - 5:15 PM) - Overall Peak Hour

All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses)

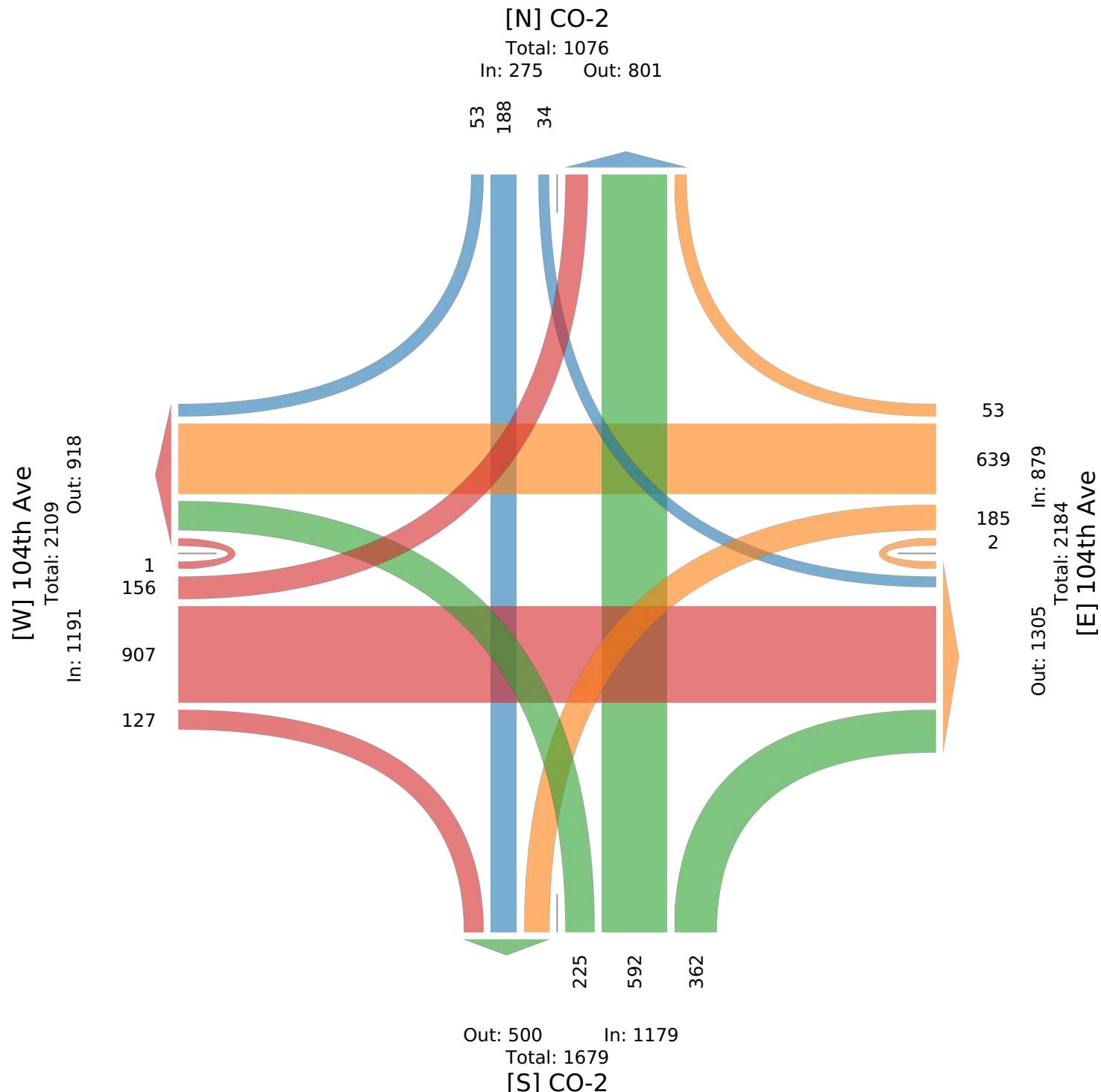
All Movements

ID: 1172591, Location: 39.885236, -104.8479



Provided by: Gewalt Hamilton Associates Inc.

625 Forest Edge Drive, Vernon Hills, IL, 60061, US



## 2 - E 104th Avenue &amp; Quari Court - Recount - TMC

Wed Apr 10, 2024

Full Length (7 AM-9 AM, 3 PM-6 PM)

All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses)

All Movements

ID: 1172599, Location: 39.885202, -104.844569



Provided by: Gewalt Hamilton Associates Inc.

625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg Direction	Quari Court Southbound	104th Ave Westbound					Quari Court Northbound	104th Ave Eastbound				
Time	R T L U App	R T L U App	R T L U App	R T L U App	R T L U App	Int						
2024-04-10 7:00AM	31 0 0 0 <b>31</b>	25 220 0 0 <b>245</b>	0 0 0 0 <b>0</b>	1 139 15 0 <b>155</b>	431							
7:15AM	24 0 0 0 <b>24</b>	11 302 0 0 <b>313</b>	0 0 0 0 <b>0</b>	4 168 17 0 <b>189</b>	526							
7:30AM	33 0 0 0 <b>33</b>	27 282 0 0 <b>309</b>	0 0 0 0 <b>0</b>	0 154 18 0 <b>172</b>	514							
7:45AM	41 0 0 0 <b>41</b>	26 288 0 0 <b>314</b>	0 0 0 0 <b>0</b>	0 175 25 0 <b>200</b>	555							
Hourly Total	129 0 0 0 <b>129</b>	89 1092 0 0 <b>1181</b>	0 0 0 0 <b>0</b>	5 636 75 0 <b>716</b>	2026							
8:00AM	41 0 0 0 <b>41</b>	19 296 0 0 <b>315</b>	0 0 0 0 <b>0</b>	0 134 16 0 <b>150</b>	506							
8:15AM	29 0 0 0 <b>29</b>	22 290 0 0 <b>312</b>	0 0 0 0 <b>0</b>	1 162 18 0 <b>181</b>	522							
8:30AM	33 0 0 0 <b>33</b>	22 197 0 0 <b>219</b>	0 0 0 0 <b>0</b>	0 165 20 0 <b>185</b>	437							
8:45AM	32 0 0 0 <b>32</b>	13 162 0 0 <b>175</b>	0 0 0 0 <b>0</b>	0 123 20 0 <b>143</b>	350							
Hourly Total	135 0 0 0 <b>135</b>	76 945 0 0 <b>1021</b>	0 0 0 0 <b>0</b>	1 584 74 0 <b>659</b>	1815							
3:00PM	16 0 0 0 <b>16</b>	10 153 0 0 <b>163</b>	0 0 0 0 <b>0</b>	0 209 11 0 <b>220</b>	399							
3:15PM	20 0 0 0 <b>20</b>	14 160 0 0 <b>174</b>	0 0 0 0 <b>0</b>	0 220 13 0 <b>233</b>	427							
3:30PM	21 0 0 0 <b>21</b>	18 170 0 0 <b>188</b>	0 0 0 0 <b>0</b>	1 280 18 0 <b>299</b>	508							
3:45PM	28 0 0 0 <b>28</b>	13 195 0 0 <b>208</b>	0 0 0 0 <b>0</b>	0 308 28 0 <b>336</b>	572							
Hourly Total	85 0 0 0 <b>85</b>	55 678 0 0 <b>733</b>	0 0 0 0 <b>0</b>	1 1017 70 0 <b>1088</b>	1906							
4:00PM	18 2 0 0 <b>20</b>	10 188 0 2 <b>200</b>	0 0 0 0 <b>0</b>	1 245 12 0 <b>258</b>	478							
4:15PM	13 0 0 0 <b>13</b>	9 220 0 0 <b>229</b>	0 0 0 0 <b>0</b>	0 278 19 1 <b>298</b>	540							
4:30PM	22 0 0 0 <b>22</b>	17 185 0 0 <b>202</b>	0 0 0 0 <b>0</b>	0 301 10 0 <b>311</b>	535							
4:45PM	17 0 0 0 <b>17</b>	14 193 0 0 <b>207</b>	0 0 0 0 <b>0</b>	0 316 18 2 <b>336</b>	560							
Hourly Total	70 2 0 0 <b>72</b>	50 786 0 2 <b>838</b>	0 0 0 0 <b>0</b>	1 1140 59 3 <b>1203</b>	2113							
5:00PM	53 0 0 0 <b>53</b>	13 191 0 0 <b>204</b>	0 0 0 0 <b>0</b>	0 322 57 0 <b>379</b>	636							
5:15PM	18 0 0 0 <b>18</b>	10 179 0 0 <b>189</b>	0 0 0 0 <b>0</b>	0 267 14 0 <b>281</b>	488							
5:30PM	14 0 0 0 <b>14</b>	12 175 0 0 <b>187</b>	0 0 0 0 <b>0</b>	0 297 18 0 <b>315</b>	516							
5:45PM	19 0 0 0 <b>19</b>	10 150 0 0 <b>160</b>	0 0 0 0 <b>0</b>	0 289 19 0 <b>308</b>	487							
Hourly Total	104 0 0 0 <b>104</b>	45 695 0 0 <b>740</b>	0 0 0 0 <b>0</b>	0 1175 108 0 <b>1283</b>	2127							
Total	523 2 0 0 <b>525</b>	315 4196 0 2 <b>4513</b>	0 0 0 0 <b>0</b>	8 4552 386 3 <b>4949</b>	9987							
% Approach	99.6% 0.4% 0% 0% -	7.0% 93.0% 0% 0% -	-0% 0% 0% 0% -	0.2% 92.0% 7.8% 0.1% -	-							
% Total	5.2% 0% 0% 0% <b>5.3%</b>	3.2% 42.0% 0% <b>45.2%</b>	0% 0% 0% 0% <b>0%</b>	0.1% 45.6% 3.9% 0% <b>49.6%</b>	-							
Lights	518 2 0 0 <b>520</b>	314 4079 0 2 <b>4395</b>	0 0 0 0 <b>0</b>	6 4406 379 3 <b>4794</b>	9709							
% Lights	99.0% 100% 0% 0% <b>99.0%</b>	99.7% 97.2% 0% 100% <b>97.4%</b>	0% 0% 0% 0% -	75.0% 96.8% 98.2% 100% <b>96.9%</b>	97.2%							
Articulated Trucks and Single-Unit Trucks	4 0 0 0 <b>4</b>	1 99 0 0 <b>100</b>	0 0 0 0 <b>0</b>	2 125 7 0 <b>134</b>	238							
% Articulated Trucks and Single-Unit Trucks	0.8% 0% 0% 0% <b>0.8%</b>	0.3% 2.4% 0% 0% <b>2.2%</b>	0% 0% 0% 0% -	25.0% 2.7% 1.8% 0% <b>2.7%</b>	2.4%							
Buses	1 0 0 0 <b>1</b>	0 18 0 0 <b>18</b>	0 0 0 0 <b>0</b>	0 21 0 0 <b>21</b>	40							
% Buses	0.2% 0% 0% 0% <b>0.2%</b>	0% 0.4% 0% 0% <b>0.4%</b>	0% 0% 0% 0% -	0% 0.5% 0% 0% <b>0.4%</b>	0.4%							

\*L: Left, R: Right, T: Thru, U: U-Turn

Wed Apr 10, 2024

Full Length (7 AM-9 AM, 3 PM-6 PM)

All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses)

All Movements

ID: 1172599, Location: 39.885202, -104.844569

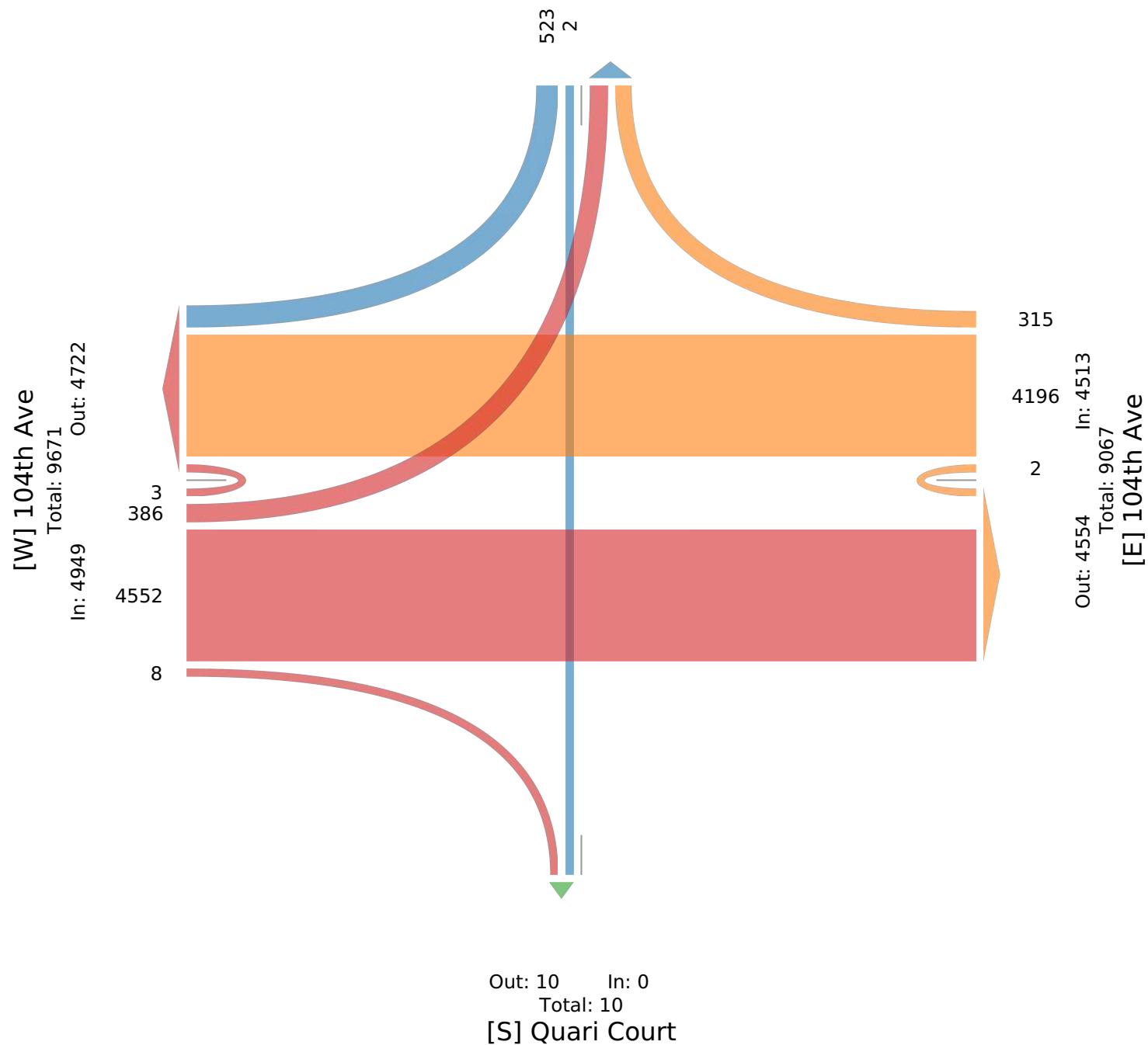
Provided by: Gewalt Hamilton Associates Inc.

625 Forest Edge Drive, Vernon Hills, IL, 60061, US

**[N] Quari Court**

Total: 1226

In: 525 Out: 701



## 2 - E 104th Avenue &amp; Quari Court - Recount - TMC

Wed Apr 10, 2024

AM Peak, Forced Peak (7:15 AM - 8:15 AM)

All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses)

All Movements

ID: 1172599, Location: 39.885202, -104.844569



Provided by: Gewalt Hamilton Associates Inc.

625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg Direction	Quari Court Southbound		104th Ave Westbound				Quari Court Northbound		104th Ave Eastbound											
Time	R	T	L	U	App	R	T	L	U	App	R	T	L	U	App	Int				
2024-04-10 7:15AM	24	0	0	0	24	11	302	0	0	313	0	0	0	0	4	168	17	0	189	526
7:30AM	33	0	0	0	33	27	282	0	0	309	0	0	0	0	0	154	18	0	172	514
7:45AM	41	0	0	0	41	26	288	0	0	314	0	0	0	0	0	175	25	0	200	555
8:00AM	41	0	0	0	41	19	296	0	0	315	0	0	0	0	0	134	16	0	150	506
<b>Total</b>	139	0	0	0	<b>139</b>	83	1168	0	0	<b>1251</b>	0	0	0	0	4	631	76	0	<b>711</b>	<b>2101</b>
<b>% Approach</b>	100%	0%	0%	0%	-	6.6%	93.4%	0%	0%	-	0%	0%	0%	0%	0.6%	88.7%	10.7%	0%	-	-
<b>% Total</b>	6.6%	0%	0%	0%	<b>6.6%</b>	4.0%	55.6%	0%	0%	<b>59.5%</b>	0%	0%	0%	0%	0.2%	30.0%	3.6%	0%	<b>33.8%</b>	-
<b>PHF</b>	0.848	-	-	-	<b>0.848</b>	0.769	0.967	-	-	<b>0.993</b>	-	-	-	-	0.250	0.901	0.760	-	<b>0.889</b>	0.946
<b>Lights</b>	137	0	0	0	<b>137</b>	83	1143	0	0	<b>1226</b>	0	0	0	0	3	582	76	0	<b>661</b>	2024
<b>% Lights</b>	98.6%	0%	0%	0%	<b>98.6%</b>	100%	97.9%	0%	0%	<b>98.0%</b>	0%	0%	0%	0%	75.0%	92.2%	100%	0%	<b>93.0%</b>	96.3%
<b>Articulated Trucks and Single-Unit Trucks</b>	2	0	0	0	<b>2</b>	0	21	0	0	<b>21</b>	0	0	0	0	1	42	0	0	<b>43</b>	66
<b>% Articulated Trucks and Single-Unit Trucks</b>	1.4%	0%	0%	0%	<b>1.4%</b>	0%	1.8%	0%	0%	<b>1.7%</b>	0%	0%	0%	0%	25.0%	6.7%	0%	0%	<b>6.0%</b>	3.1%
<b>Buses</b>	0	0	0	0	<b>0</b>	0	4	0	0	<b>4</b>	0	0	0	0	0	7	0	0	7	11
<b>% Buses</b>	0%	0%	0%	0%	<b>0%</b>	0%	0.3%	0%	0%	<b>0.3%</b>	0%	0%	0%	0%	0%	1.1%	0%	0%	<b>1.0%</b>	0.5%

\*L: Left, R: Right, T: Thru, U: U-Turn

Wed Apr 10, 2024

AM Peak, Forced Peak (7:15 AM - 8:15 AM)

All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses)

All Movements

ID: 1172599, Location: 39.885202, -104.844569

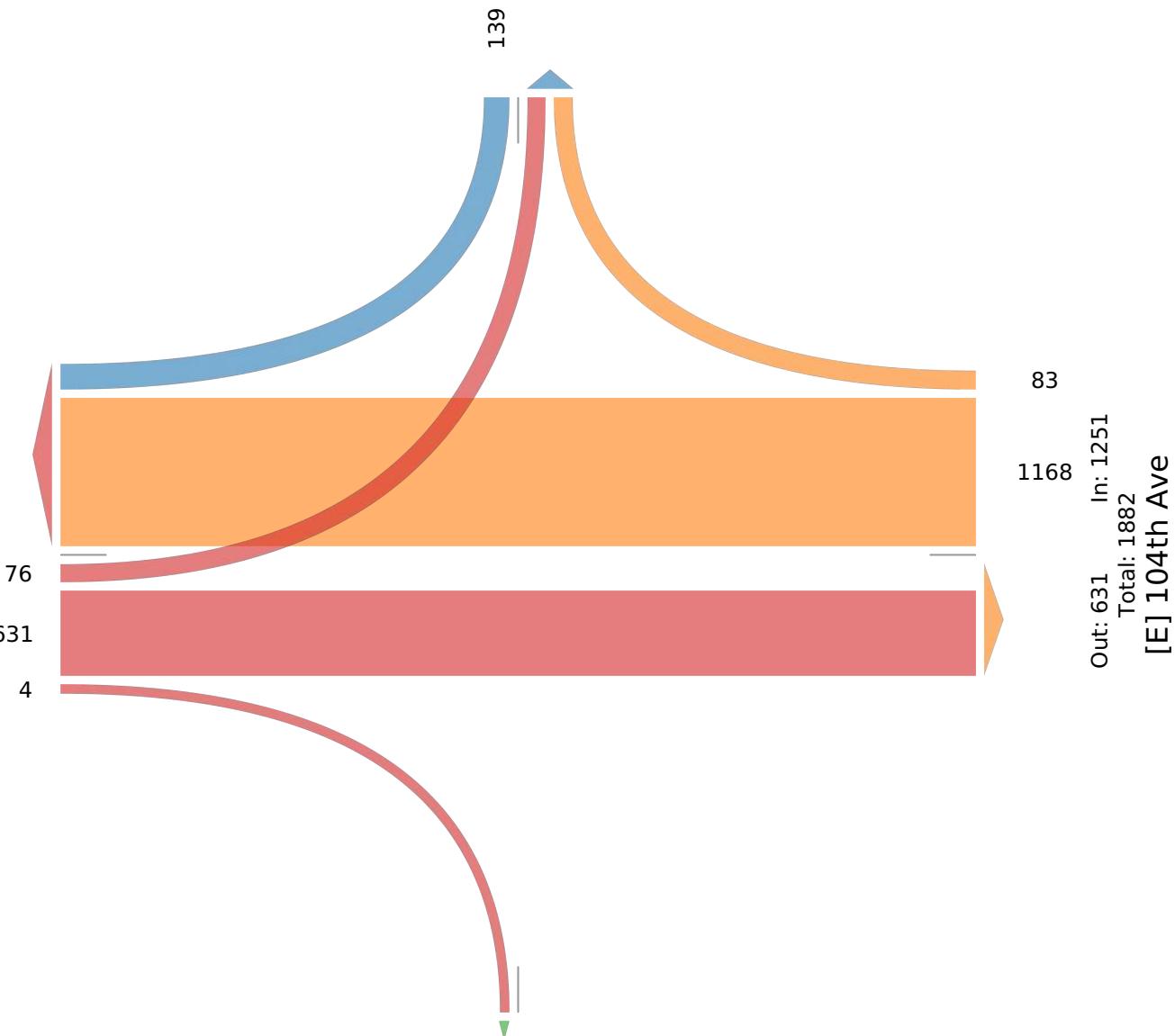
 Provided by: Gewalt Hamilton Associates Inc.  
 625 Forest Edge Drive, Vernon Hills, IL, 60061, US
**[N] Quari Court**

Total: 298

In: 139 Out: 159

139

**[W] 104th Ave**  
 Total: 2018  
 In: 711 Out: 1307



Out: 4 In: 0

Total: 4

**[S] Quari Court**

## 2 - E 104th Avenue &amp; Quari Court - Recount - TMC

Wed Apr 10, 2024

PM Peak (4:15 PM - 5:15 PM) - Overall Peak Hour

All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses)

All Movements

ID: 1172599, Location: 39.885202, -104.844569



Provided by: Gewalt Hamilton Associates Inc.

625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg Direction	Quari Court Southbound					104th Ave Westbound					Quari Court Northbound					104th Ave Eastbound					
Time	R	T	L	U	App	R	T	L	U	App	R	T	L	U	App	R	T	L	U	App	Int
2024-04-10 4:15PM	13	0	0	0	13	9	220	0	0	229	0	0	0	0	0	0	278	19	1	298	540
4:30PM	22	0	0	0	22	17	185	0	0	202	0	0	0	0	0	0	301	10	0	311	535
4:45PM	17	0	0	0	17	14	193	0	0	207	0	0	0	0	0	0	316	18	2	336	560
5:00PM	53	0	0	0	53	13	191	0	0	204	0	0	0	0	0	0	322	57	0	379	636
<b>Total</b>	<b>105</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>105</b>	<b>53</b>	<b>789</b>	<b>0</b>	<b>0</b>	<b>842</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1217</b>	<b>104</b>	<b>3</b>	<b>1324</b>	<b>2271</b>
<b>% Approach</b>	<b>100%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>-</b>	<b>6.3%</b>	<b>93.7%</b>	<b>0%</b>	<b>0%</b>	<b>-</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>-</b>	<b>0%</b>	<b>91.9%</b>	<b>7.9%</b>	<b>0.2%</b>	<b>-</b>	<b>-</b>
<b>% Total</b>	<b>4.6%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>4.6%</b>	<b>2.3%</b>	<b>34.7%</b>	<b>0%</b>	<b>0%</b>	<b>37.1%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>53.6%</b>	<b>4.6%</b>	<b>0.1%</b>	<b>58.3%</b>	<b>-</b>
<b>PHF</b>	<b>0.495</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.495</b>	<b>0.779</b>	<b>0.897</b>	<b>-</b>	<b>-</b>	<b>0.919</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.945</b>	<b>0.456</b>	<b>0.375</b>	<b>0.873</b>	<b>0.893</b>
<b>Lights</b>	<b>104</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>104</b>	<b>53</b>	<b>767</b>	<b>0</b>	<b>0</b>	<b>820</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1207</b>	<b>103</b>	<b>3</b>	<b>1313</b>	<b>2237</b>
<b>% Lights</b>	<b>99.0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>99.0%</b>	<b>100%</b>	<b>97.2%</b>	<b>0%</b>	<b>0%</b>	<b>97.4%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>-</b>	<b>0%</b>	<b>99.2%</b>	<b>99.0%</b>	<b>100%</b>	<b>99.2%</b>	<b>98.5%</b>
<b>Articulated Trucks and Single-Unit Trucks</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>19</b>	<b>0</b>	<b>0</b>	<b>19</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>5</b>	<b>1</b>	<b>0</b>	<b>6</b>	<b>25</b>
<b>% Articulated Trucks and Single-Unit Trucks</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>2.4%</b>	<b>0%</b>	<b>0%</b>	<b>2.3%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>-</b>	<b>0%</b>	<b>0.4%</b>	<b>1.0%</b>	<b>0%</b>	<b>0.5%</b>	<b>1.1%</b>
<b>Buses</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>5</b>	<b>9</b>
<b>% Buses</b>	<b>1.0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>1.0%</b>	<b>0%</b>	<b>0.4%</b>	<b>0%</b>	<b>0%</b>	<b>0.4%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>0%</b>	<b>-</b>	<b>0%</b>	<b>0.4%</b>	<b>0%</b>	<b>0%</b>	<b>0.4%</b>	<b>0.4%</b>

\*L: Left, R: Right, T: Thru, U: U-Turn

Wed Apr 10, 2024

PM Peak (4:15 PM - 5:15 PM) - Overall Peak Hour

All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses)

All Movements

ID: 1172599, Location: 39.885202, -104.844569

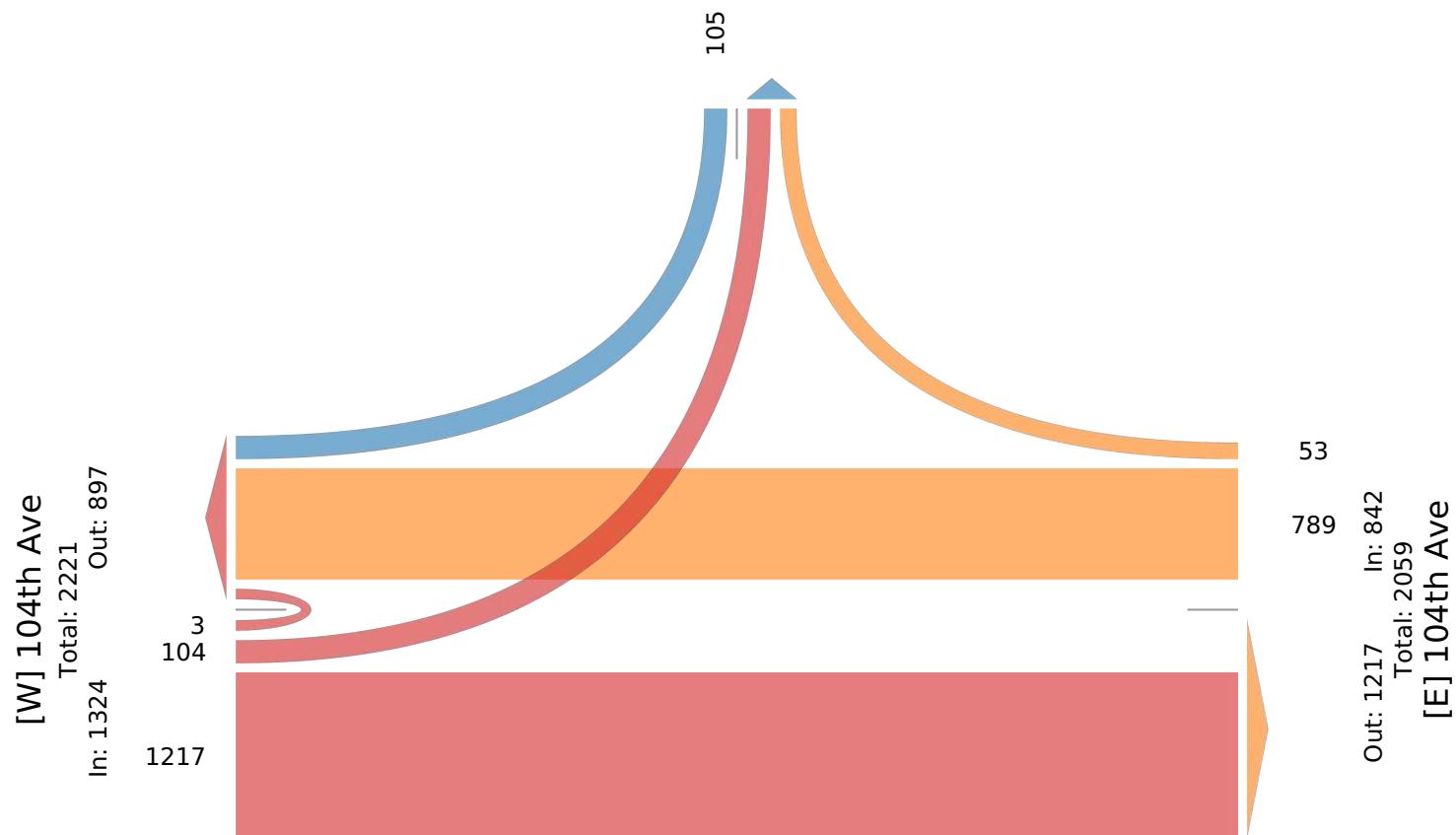
Provided by: Gewalt Hamilton Associates Inc.

625 Forest Edge Drive, Vernon Hills, IL, 60061, US

**[N] Quari Court**

Total: 262

In: 105    Out: 157



## 3 - E 104th Avenue &amp; Revere Street - Recount - TMC

Wed Apr 10, 2024

Full Length (7 AM-9 AM, 3 PM-6 PM)

All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses)

All Movements

ID: 1172603, Location: 39.885219, -104.842187



Provided by: Gewalt Hamilton Associates Inc.

625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg Direction	Revere St Southbound					104th Ave Westbound					Revere St Northbound					104th Ave Eastbound					
Time	R	T	L	U	App	R	T	L	U	App	R	T	L	U	App	R	T	L	U	App	Int
2024-04-10 7:00AM	13	1	17	0	31	6	237	1	0	244	1	0	2	0	3	1	129	6	0	136	414
7:15AM	17	1	13	0	31	2	301	2	1	306	2	0	6	0	8	3	162	3	0	168	513
7:30AM	17	0	20	0	37	15	283	1	3	302	0	0	2	0	2	3	142	4	1	150	491
7:45AM	15	0	32	0	47	9	316	1	0	326	0	0	1	0	1	3	162	6	0	171	545
Hourly Total	62	2	82	0	146	32	1137	5	4	1178	3	0	11	0	14	10	595	19	1	625	1963
8:00AM	21	0	20	0	41	6	313	1	0	320	3	1	3	0	7	3	125	5	0	133	501
8:15AM	16	2	17	0	35	18	313	2	0	333	1	0	1	0	2	3	149	7	0	159	529
8:30AM	8	0	13	0	21	8	215	0	1	224	3	0	4	0	7	3	149	4	0	156	408
8:45AM	6	1	13	0	20	6	173	3	1	183	3	0	6	0	9	2	118	2	0	122	334
Hourly Total	51	3	63	0	117	38	1014	6	2	1060	10	1	14	0	25	11	541	18	0	570	1772
3:00PM	6	2	17	0	25	5	160	1	0	166	4	0	2	0	6	0	191	13	0	204	401
3:15PM	7	1	13	0	21	9	159	1	1	170	0	1	5	0	6	1	204	18	0	223	420
3:30PM	11	3	32	0	46	17	173	4	3	197	1	0	6	0	7	4	265	3	0	272	522
3:45PM	4	0	14	0	18	14	199	5	2	220	4	1	6	0	11	4	290	13	0	307	556
Hourly Total	28	6	76	0	110	45	691	11	6	753	9	2	19	0	30	9	950	47	0	1006	1899
4:00PM	6	1	13	0	20	10	201	4	1	216	5	0	3	0	8	2	221	12	0	235	479
4:15PM	9	0	25	0	34	17	208	2	0	227	2	0	3	0	5	5	253	17	0	275	541
4:30PM	10	1	17	0	28	20	194	2	4	220	3	1	0	0	4	1	280	12	0	293	545
4:45PM	9	3	28	0	40	20	191	3	0	214	0	1	4	0	5	3	281	12	0	296	555
Hourly Total	34	5	83	0	122	67	794	11	5	877	10	2	10	0	22	11	1035	53	0	1099	2120
5:00PM	9	0	26	0	35	14	206	2	1	223	1	1	2	0	4	6	319	10	0	335	597
5:15PM	3	1	19	0	23	16	173	1	1	191	7	0	3	0	10	0	250	14	1	265	489
5:30PM	9	1	14	0	24	20	177	2	1	200	3	0	5	0	8	2	274	14	0	290	522
5:45PM	4	0	20	0	24	18	148	2	5	173	1	0	7	0	8	3	274	13	0	290	495
Hourly Total	25	2	79	0	106	68	704	7	8	787	12	1	17	0	30	11	1117	51	1	1180	2103
Total	200	18	383	0	601	250	4340	40	25	4655	44	6	71	0	121	52	4238	188	2	4480	9857
% Approach	33.3%	3.0%	63.7%	0%	-	5.4%	93.2%	0.9%	0.5%	-	36.4%	5.0%	58.7%	0%	-	1.2%	94.6%	4.2%	0%	-	-
% Total	2.0%	0.2%	3.9%	0%	<b>6.1%</b>	2.5%	44.0%	0.4%	0.3%	<b>47.2%</b>	0.4%	0.1%	0.7%	0%	<b>1.2%</b>	0.5%	43.0%	1.9%	0%	<b>45.4%</b>	-
Lights	191	18	375	0	584	245	4238	37	25	4545	40	6	66	0	112	49	4114	184	2	4349	9590
% Lights	95.5%	100%	97.9%	0%	<b>97.2%</b>	98.0%	97.6%	92.5%	100%	<b>97.6%</b>	90.9%	100%	93.0%	0%	<b>92.6%</b>	94.2%	97.1%	97.9%	100%	<b>97.1%</b>	97.3%
Articulated Trucks and Single-Unit Trucks	4	0	3	0	7	1	89	3	0	93	4	0	5	0	9	3	103	3	0	109	218
% Articulated Trucks and Single-Unit Trucks	2.0%	0%	0.8%	0%	<b>1.2%</b>	0.4%	2.1%	7.5%	0%	<b>2.0%</b>	9.1%	0%	7.0%	0%	<b>7.4%</b>	5.8%	2.4%	1.6%	0%	<b>2.4%</b>	2.2%
Buses	5	0	5	0	10	4	13	0	0	17	0	0	0	0	0	0	21	1	0	22	49
% Buses	2.5%	0%	1.3%	0%	<b>1.7%</b>	1.6%	0.3%	0%	0%	<b>0.4%</b>	0%	0%	0%	0%	0%	0%	0.5%	0.5%	0%	<b>0.5%</b>	0.5%

\*L: Left, R: Right, T: Thru, U: U-Turn

3 - E 104th Avenue & Revere Street - Recount - TMC

Wed Apr 10, 2024

Full Length (7 AM-9 AM, 3 PM-6 PM)

All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses)

All Movements

ID: 1172603, Location: 39.885219, -104.842187



Provided by: Gewalt Hamilton Associates Inc.

625 Forest Edge Drive, Vernon Hills, IL, 60061, US

[N] Revere St

Total: 1045

In: 601 Out: 444

200  
18  
383

[W] 104th Ave  
Total: 9093  
In: 4480  
Out: 4613

188  
2  
4238  
52

250  
4340  
40  
25  
Out: 4690  
Total: 9345  
In: 4655  
[E] 104th Ave

Out: 110 In: 121

Total: 231

[S] Revere St

71  
6  
44

## 3 - E 104th Avenue &amp; Revere Street - Recount - TMC

Wed Apr 10, 2024

Forced Peak (7:15 AM - 8:15 AM)

All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses)

All Movements

ID: 1172603, Location: 39.885219, -104.842187



Provided by: Gewalt Hamilton Associates Inc.

625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg Direction	Revere St Southbound					104th Ave Westbound					Revere St Northbound					104th Ave Eastbound					
Time	R	T	L	U	App	R	T	L	U	App	R	T	L	U	App	R	T	L	U	App	Int
2024-04-10 7:15AM	17	1	13	0	31	2	301	2	1	306	2	0	6	0	8	3	162	3	0	168	513
7:30AM	17	0	20	0	37	15	283	1	3	302	0	0	2	0	2	3	142	4	1	150	491
7:45AM	15	0	32	0	47	9	316	1	0	326	0	0	1	0	1	3	162	6	0	171	545
8:00AM	21	0	20	0	41	6	313	1	0	320	3	1	3	0	7	3	125	5	0	133	501
<b>Total</b>	70	1	85	0	156	32	1213	5	4	1254	5	1	12	0	18	12	591	18	1	622	2050
<b>% Approach</b>	44.9%	0.6%	54.5%	0%	-	2.6%	96.7%	0.4%	0.3%	-	27.8%	5.6%	66.7%	0%	-	1.9%	95.0%	2.9%	0.2%	-	-
<b>% Total</b>	3.4%	0%	4.1%	0%	<b>7.6%</b>	1.6%	59.2%	0.2%	0.2%	<b>61.2%</b>	0.2%	0%	0.6%	0%	<b>0.9%</b>	0.6%	28.8%	0.9%	0%	<b>30.3%</b>	-
<b>PHF</b>	0.833	0.250	0.664	-	<b>0.830</b>	0.533	0.960	0.625	0.333	<b>0.962</b>	0.417	0.250	0.500	-	<b>0.563</b>	1.000	0.912	0.750	0.250	<b>0.909</b>	0.940
<b>Lights</b>	67	1	82	0	<b>150</b>	31	1191	4	4	<b>1230</b>	4	1	11	0	<b>16</b>	11	550	15	1	<b>577</b>	1973
<b>% Lights</b>	95.7%	100%	96.5%	0%	<b>96.2%</b>	96.9%	98.2%	80.0%	100%	<b>98.1%</b>	80.0%	100%	91.7%	0%	<b>88.9%</b>	91.7%	93.1%	83.3%	100%	<b>92.8%</b>	96.2%
<b>Articulated Trucks and Single-Unit Trucks</b>	1	0	1	0	2	0	20	1	0	21	1	0	1	0	2	1	35	2	0	<b>38</b>	63
<b>% Articulated Trucks and Single-Unit Trucks</b>	1.4%	0%	1.2%	0%	<b>1.3%</b>	0%	1.6%	20.0%	0%	<b>1.7%</b>	20.0%	0%	8.3%	0%	<b>11.1%</b>	8.3%	5.9%	11.1%	0%	<b>6.1%</b>	3.1%
<b>Buses</b>	2	0	2	0	<b>4</b>	1	2	0	0	<b>3</b>	0	0	0	0	<b>0</b>	0	6	1	0	<b>7</b>	14
<b>% Buses</b>	2.9%	0%	2.4%	0%	<b>2.6%</b>	3.1%	0.2%	0%	0%	<b>0.2%</b>	0%	0%	0%	0%	<b>0%</b>	0%	1.0%	5.6%	0%	<b>1.1%</b>	0.7%

\* L: Left, R: Right, T: Thru, U: U-Turn

3 - E 104th Avenue & Revere Street - Recount - TMC

Wed Apr 10, 2024

Forced Peak (7:15 AM - 8:15 AM)

All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses)

All Movements

ID: 1172603, Location: 39.885219, -104.842187



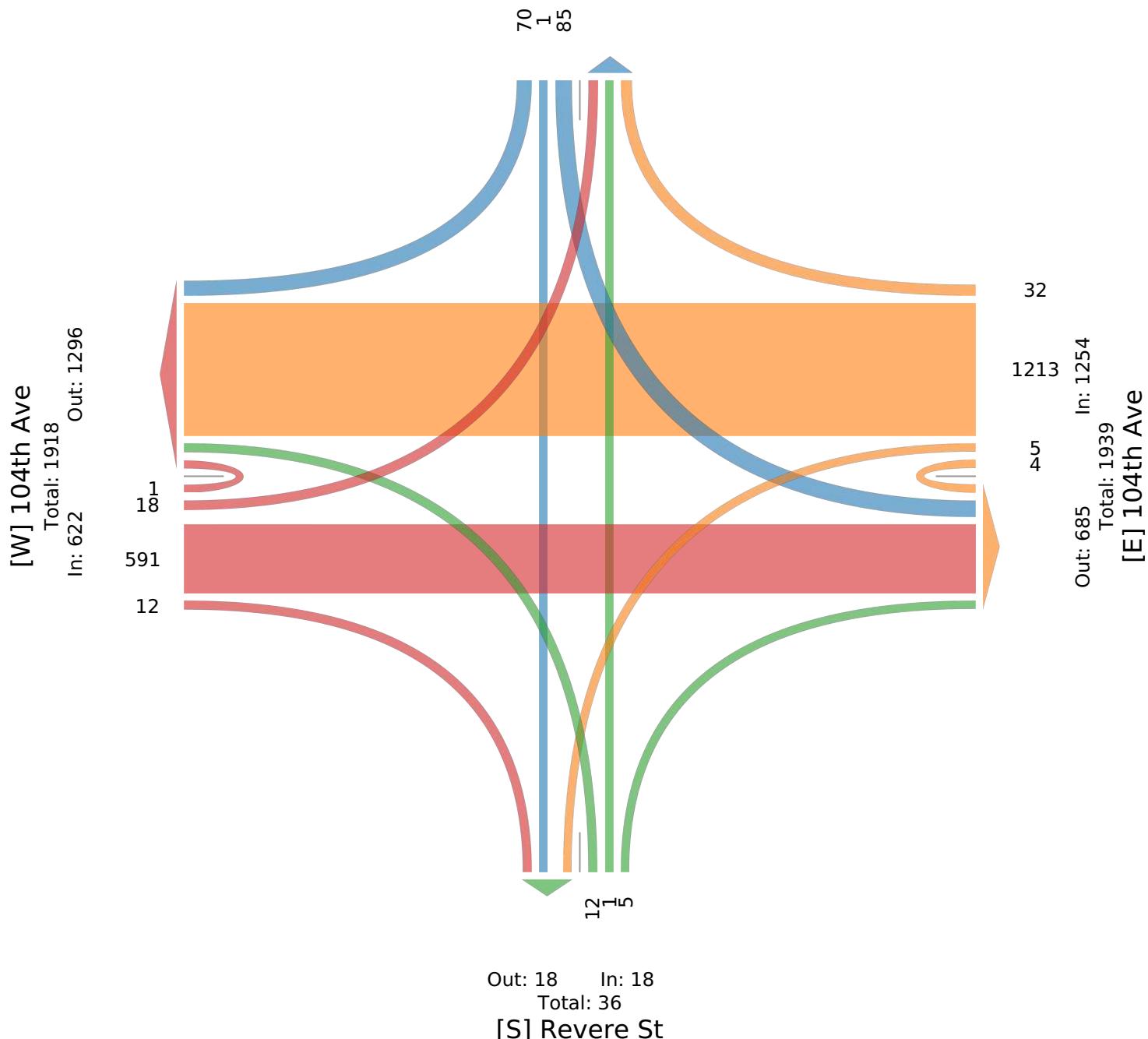
Provided by: Gewalt Hamilton Associates Inc.

625 Forest Edge Drive, Vernon Hills, IL, 60061, US

[N] Revere St

Total: 207

In: 156 Out: 51



## 3 - E 104th Avenue &amp; Revere Street - Recount - TMC

Wed Apr 10, 2024

PM Peak (4:15 PM - 5:15 PM) - Overall Peak Hour

All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses)

All Movements

ID: 1172603, Location: 39.885219, -104.842187



Provided by: Gewalt Hamilton Associates Inc.

625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg Direction	Revere St Southbound					104th Ave Westbound					Revere St Northbound					104th Ave Eastbound					
Time	R	T	L	U	App	R	T	L	U	App	R	T	L	U	App	R	T	L	U	App	Int
2024-04-10 4:15PM	9	0	25	0	34	17	208	2	0	227	2	0	3	0	5	5	253	17	0	275	541
4:30PM	10	1	17	0	28	20	194	2	4	220	3	1	0	0	4	1	280	12	0	293	545
4:45PM	9	3	28	0	40	20	191	3	0	214	0	1	4	0	5	3	281	12	0	296	555
5:00PM	9	0	26	0	35	14	206	2	1	223	1	1	2	0	4	6	319	10	0	335	597
<b>Total</b>	37	4	96	0	137	71	799	9	5	884	6	3	9	0	18	15	1133	51	0	1199	2238
<b>% Approach</b>	27.0%	2.9%	70.1%	0%	-	8.0%	90.4%	1.0%	0.6%	-	33.3%	16.7%	50.0%	0%	-	1.3%	94.5%	4.3%	0%	-	-
<b>% Total</b>	1.7%	0.2%	4.3%	0%	<b>6.1%</b>	3.2%	35.7%	0.4%	0.2%	<b>39.5%</b>	0.3%	0.1%	0.4%	0%	<b>0.8%</b>	0.7%	50.6%	2.3%	0%	<b>53.6%</b>	-
<b>PHF</b>	0.925	0.333	0.857	-	<b>0.856</b>	0.888	0.960	0.750	0.313	<b>0.974</b>	0.500	0.750	0.563	-	<b>0.900</b>	0.625	0.888	0.750	-	<b>0.895</b>	0.937
<b>Lights</b>	36	4	96	0	136	70	781	9	5	865	5	3	8	0	16	15	1124	51	0	1190	2207
<b>% Lights</b>	97.3%	100%	100%	0%	<b>99.3%</b>	98.6%	97.7%	100%	100%	<b>97.9%</b>	83.3%	100%	88.9%	0%	<b>88.9%</b>	100%	99.2%	100%	0%	<b>99.2%</b>	98.6%
<b>Articulated Trucks and Single-Unit Trucks</b>	0	0	0	0	0	1	16	0	0	17	1	0	1	0	2	0	3	0	0	3	22
<b>% Articulated Trucks and Single-Unit Trucks</b>	0%	0%	0%	0%	0%	1.4%	2.0%	0%	0%	1.9%	16.7%	0%	11.1%	0%	<b>11.1%</b>	0%	0.3%	0%	0%	<b>0.3%</b>	1.0%
<b>Buses</b>	1	0	0	0	1	0	2	0	0	2	0	0	0	0	0	0	6	0	0	6	9
<b>% Buses</b>	2.7%	0%	0%	0%	<b>0.7%</b>	0%	0.3%	0%	0%	<b>0.2%</b>	0%	0%	0%	0%	<b>0%</b>	0%	0.5%	0%	0%	<b>0.5%</b>	0.4%

\* L: Left, R: Right, T: Thru, U: U-Turn

3 - E 104th Avenue & Revere Street - Recount - TMC

Wed Apr 10, 2024

PM Peak (4:15 PM - 5:15 PM) - Overall Peak Hour

All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses)

All Movements

ID: 1172603, Location: 39.885219, -104.842187



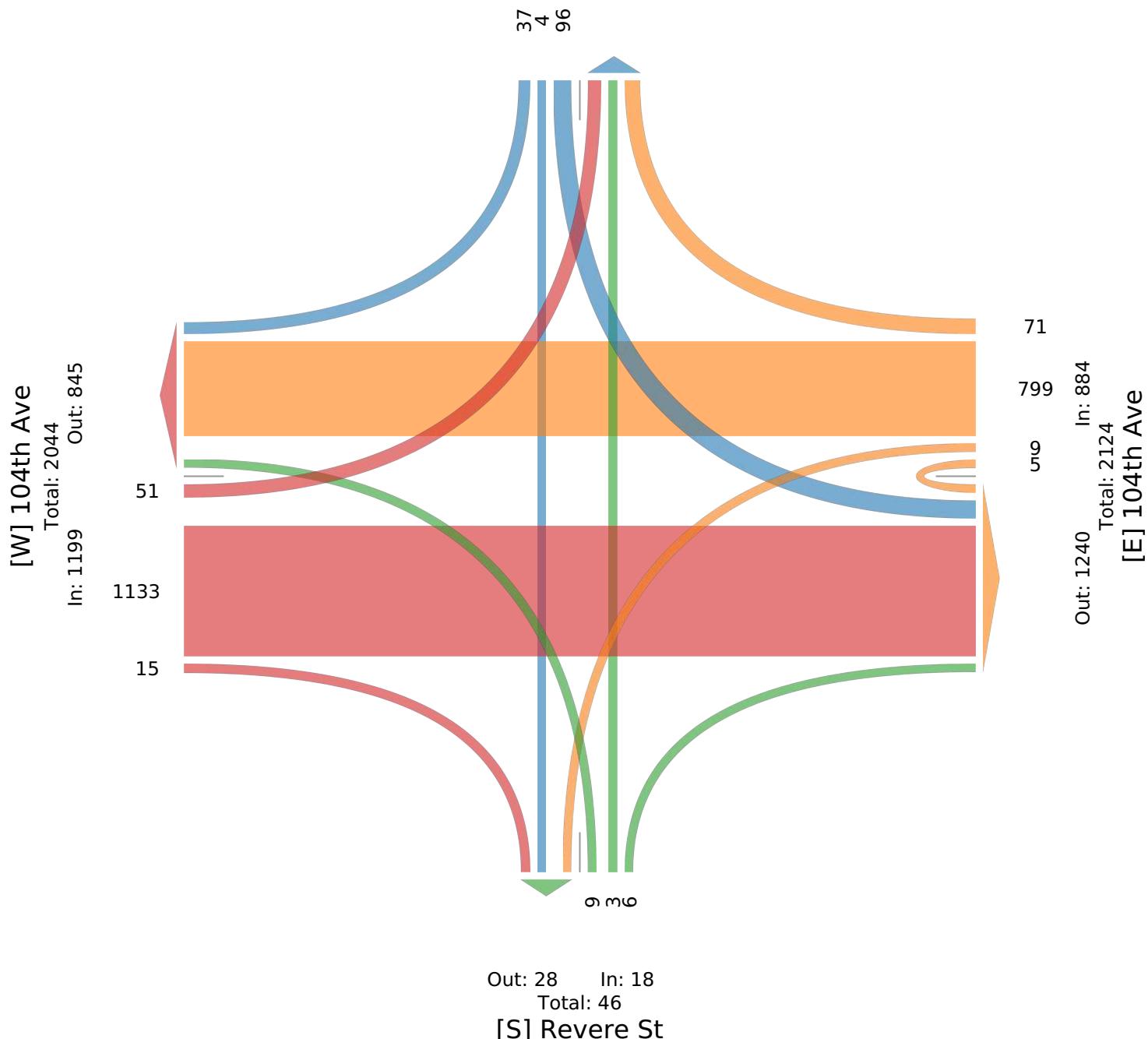
Provided by: Gewalt Hamilton Associates Inc.

625 Forest Edge Drive, Vernon Hills, IL, 60061, US

[N] Revere St

Total: 262

In: 137 Out: 125



## 4 - Revere Street &amp; E 104th Place - Recount - TMC

Wed Apr 10, 2024

Full Length (7 AM-9 AM, 3 PM-6 PM)

All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses)

All Movements

ID: 1172604, Location: 39.886448, -104.84221



Provided by: Gewalt Hamilton Associates Inc.

625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg Direction	Revere St Southbound					104th Pl Westbound					Revere St Northbound					104th Pl Eastbound					
Time	R	T	L	U	App	R	T	L	U	App	R	T	L	U	App	R	T	L	U	App	Int
2024-04-10 7:00AM	12	19	1	0	32	2	0	2	0	4	2	7	3	0	12	12	0	1	0	13	61
7:15AM	7	22	3	0	32	3	0	2	0	5	0	6	1	0	7	7	0	3	0	10	54
7:30AM	11	30	4	0	45	7	0	4	0	11	0	18	4	0	22	5	1	4	0	10	88
7:45AM	27	26	4	0	57	6	0	3	0	9	1	9	6	0	16	14	1	1	0	16	98
Hourly Total	57	97	12	0	166	18	0	11	0	29	3	40	14	0	57	38	2	9	0	49	301
8:00AM	10	22	3	0	35	1	0	7	0	8	0	9	3	0	12	13	0	7	0	20	75
8:15AM	6	23	2	0	31	0	0	0	0	0	0	16	10	0	26	10	1	3	0	14	71
8:30AM	7	11	0	0	18	2	0	0	0	2	1	6	4	0	11	10	0	5	1	16	47
8:45AM	8	12	1	0	21	1	0	2	0	3	0	5	3	0	8	9	0	5	0	14	46
Hourly Total	31	68	6	0	105	4	0	9	0	13	1	36	20	0	57	42	1	20	1	64	239
3:00PM	3	10	1	0	14	4	1	3	0	8	3	14	1	1	19	9	1	6	0	16	57
3:15PM	3	7	1	0	11	3	0	2	0	5	0	24	4	0	28	10	1	7	0	18	62
3:30PM	4	25	10	0	39	2	0	1	0	3	0	11	9	0	20	19	0	11	0	30	92
3:45PM	9	10	1	0	20	1	0	1	0	2	1	21	7	0	29	7	2	5	0	14	65
Hourly Total	19	52	13	0	84	10	1	7	0	18	4	70	21	1	96	45	4	29	0	78	276
4:00PM	5	11	1	0	17	2	2	1	0	5	1	14	8	0	23	11	1	9	0	21	66
4:15PM	1	17	3	0	21	2	0	2	0	4	0	25	8	1	34	11	1	4	0	16	75
4:30PM	6	15	2	0	23	0	1	2	0	3	2	25	8	0	35	14	0	2	0	16	77
4:45PM	8	14	3	0	25	1	2	3	0	6	2	25	8	0	35	21	1	8	0	30	96
Hourly Total	20	57	9	0	86	5	5	8	0	18	5	89	32	1	127	57	3	23	0	83	314
5:00PM	3	14	2	0	19	4	0	0	0	4	1	20	6	0	27	20	2	11	0	33	83
5:15PM	4	8	0	0	12	0	0	2	0	2	3	22	8	0	33	10	0	4	0	14	61
5:30PM	3	14	2	0	19	0	1	2	0	3	1	29	6	0	36	10	0	7	0	17	75
5:45PM	2	6	4	0	12	0	1	2	0	3	0	22	9	0	31	16	1	6	0	23	69
Hourly Total	12	42	8	0	62	4	2	6	0	12	5	93	29	0	127	56	3	28	0	87	288
Total	139	316	48	0	503	41	8	41	0	90	18	328	116	2	464	238	13	109	1	361	1418
% Approach	27.6%	62.8%	9.5%	0%	-	45.6%	8.9%	45.6%	0%	-	3.9%	70.7%	25.0%	0.4%	-	65.9%	3.6%	30.2%	0.3%	-	-
% Total	9.8%	22.3%	3.4%	0%	35.5%	2.9%	0.6%	2.9%	0%	6.3%	1.3%	23.1%	8.2%	0.1%	32.7%	16.8%	0.9%	7.7%	0.1%	25.5%	-
Lights	139	306	46	0	491	37	8	40	0	85	17	321	116	2	456	233	13	109	1	356	1388
% Lights	100%	96.8%	95.8%	0%	97.6%	90.2%	100%	97.6%	0%	94.4%	94.4%	97.9%	100%	100%	98.3%	97.9%	100%	100%	100%	98.6%	97.9%
Articulated Trucks and Single-Unit Trucks	0	2	1	0	3	1	0	1	0	2	1	2	0	0	3	4	0	0	0	4	12
% Articulated Trucks and Single-Unit Trucks	0%	0.6%	2.1%	0%	0.6%	2.4%	0%	2.4%	0%	2.2%	5.6%	0.6%	0%	0%	0.6%	1.7%	0%	0%	0%	1.1%	0.8%
Buses	0	8	1	0	9	3	0	0	0	3	0	5	0	0	5	1	0	0	0	1	18
% Buses	0%	2.5%	2.1%	0%	1.8%	7.3%	0%	0%	0%	3.3%	0%	1.5%	0%	0%	1.1%	0.4%	0%	0%	0%	0.3%	1.3%

\*L: Left, R: Right, T: Thru, U: U-Turn

4 - Revere Street & E 104th Place - Recount - TMC

Wed Apr 10, 2024

Full Length (7 AM-9 AM, 3 PM-6 PM)

All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses)

All Movements

ID: 1172604, Location: 39.886448, -104.84221



Provided by: Gewalt Hamilton Associates Inc.

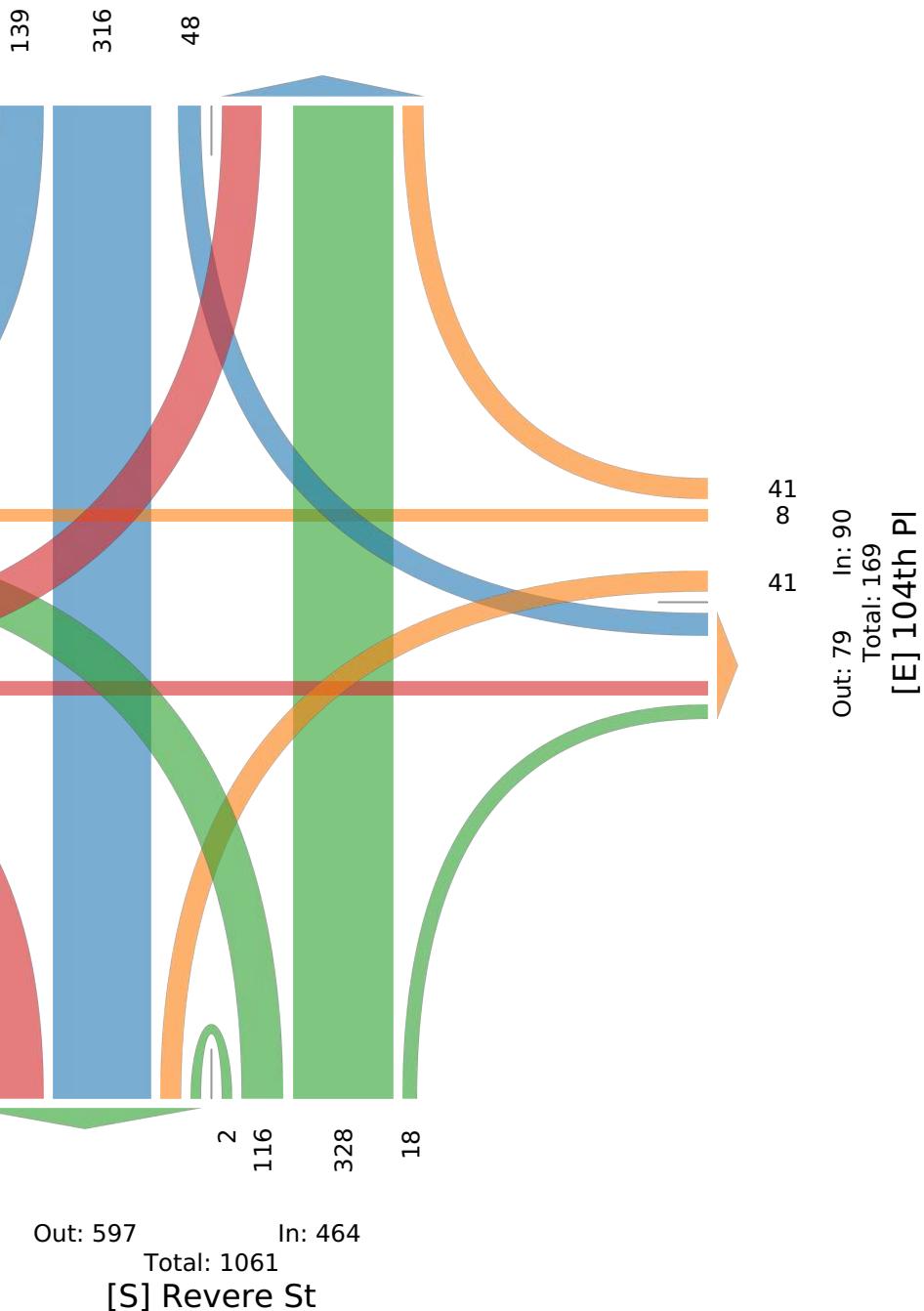
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

[N] Revere St

Total: 981

In: 503

Out: 478



## 4 - Revere Street &amp; E 104th Place - Recount - TMC

Wed Apr 10, 2024

Forced Peak (7:15 AM - 8:15 AM)

All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses)

All Movements

ID: 1172604, Location: 39.886448, -104.84221



Provided by: Gewalt Hamilton Associates Inc.

625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg Direction	Revere St Southbound					104th Pl Westbound					Revere St Northbound					104th Pl Eastbound					
Time	R	T	L	U	App	R	T	L	U	App	R	T	L	U	App	R	T	L	U	App	Int
2024-04-10 7:15AM	7	22	3	0	32	3	0	2	0	5	0	6	1	0	7	7	0	3	0	10	54
7:30AM	11	30	4	0	45	7	0	4	0	11	0	18	4	0	22	5	1	4	0	10	88
7:45AM	27	26	4	0	57	6	0	3	0	9	1	9	6	0	16	14	1	1	0	16	98
8:00AM	10	22	3	0	35	1	0	7	0	8	0	9	3	0	12	13	0	7	0	20	75
<b>Total</b>	55	100	14	0	<b>169</b>	17	0	16	0	<b>33</b>	1	42	14	0	<b>57</b>	39	2	15	0	<b>56</b>	<b>315</b>
<b>% Approach</b>	32.5%	59.2%	8.3%	0%	-	51.5%	0%	48.5%	0%	-	1.8%	73.7%	24.6%	0%	-	69.6%	3.6%	26.8%	0%	-	-
<b>% Total</b>	17.5%	31.7%	4.4%	0%	<b>53.7%</b>	5.4%	0%	5.1%	0%	<b>10.5%</b>	0.3%	13.3%	4.4%	0%	<b>18.1%</b>	12.4%	0.6%	4.8%	0%	<b>17.8%</b>	-
<b>PHF</b>	0.509	0.833	0.875	-	<b>0.741</b>	0.607	-	0.571	-	<b>0.750</b>	0.250	0.583	0.583	-	<b>0.648</b>	0.696	0.500	0.536	-	<b>0.700</b>	0.804
<b>Lights</b>	55	97	13	0	<b>165</b>	16	0	16	0	<b>32</b>	1	38	14	0	<b>53</b>	37	2	15	0	<b>54</b>	304
<b>% Lights</b>	100%	97.0%	92.9%	0%	<b>97.6%</b>	94.1%	0%	100%	0%	<b>97.0%</b>	100%	90.5%	100%	0%	<b>93.0%</b>	94.9%	100%	100%	0%	<b>96.4%</b>	96.5%
<b>Articulated Trucks and Single-Unit Trucks</b>	0	0	0	0	<b>0</b>	0	0	0	0	<b>0</b>	0	2	0	0	<b>2</b>	1	0	0	0	<b>1</b>	3
<b>% Articulated Trucks and Single-Unit Trucks</b>	0%	0%	0%	0%	<b>0%</b>	0%	0%	0%	0%	<b>0%</b>	0%	4.8%	0%	0%	<b>3.5%</b>	2.6%	0%	0%	0%	<b>1.8%</b>	1.0%
<b>Buses</b>	0	3	1	0	<b>4</b>	1	0	0	0	<b>1</b>	0	2	0	0	<b>2</b>	1	0	0	0	<b>1</b>	8
<b>% Buses</b>	0%	3.0%	7.1%	0%	<b>2.4%</b>	5.9%	0%	0%	0%	<b>3.0%</b>	0%	4.8%	0%	0%	<b>3.5%</b>	2.6%	0%	0%	0%	<b>1.8%</b>	2.5%

\* L: Left, R: Right, T: Thru, U: U-Turn

4 - Revere Street & E 104th Place - Recount - TMC

Wed Apr 10, 2024

Forced Peak (7:15 AM - 8:15 AM)

All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses)

All Movements

ID: 1172604, Location: 39.886448, -104.84221



Provided by: Gewalt Hamilton Associates Inc.

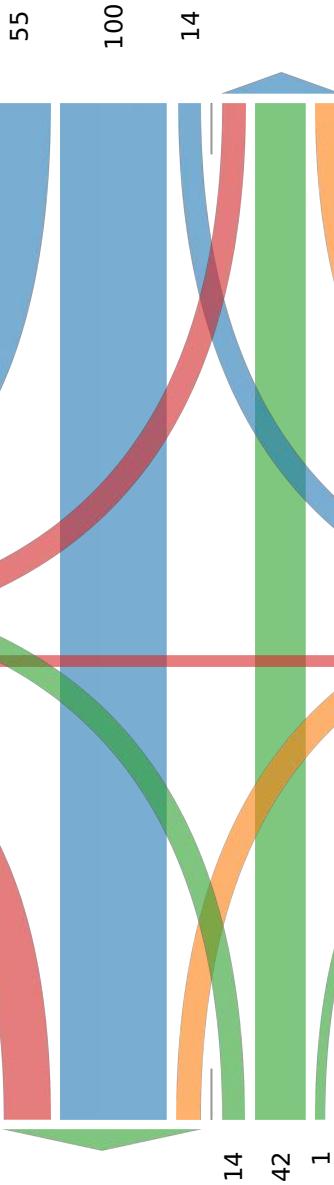
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

[N] Revere St

Total: 243

In: 169

Out: 74



[W] 104th Pl  
Total: 125  
In: 56 Out: 69

Out: 17 In: 33  
Total: 50  
[E] 104th Pl

Out: 155 In: 57  
Total: 212  
[S] Revere St

## 4 - Revere Street &amp; E 104th Place - Recount - TMC

Wed Apr 10, 2024

PM Peak (4:15 PM - 5:15 PM)

All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses)

All Movements

ID: 1172604, Location: 39.886448, -104.84221



Provided by: Gewalt Hamilton Associates Inc.

625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg Direction	Revere St Southbound					104th Pl Westbound					Revere St Northbound					104th Pl Eastbound					
Time	R	T	L	U	App	R	T	L	U	App	R	T	L	U	App	R	T	L	U	App	Int
2024-04-10 4:15PM	1	17	3	0	21	2	0	2	0	4	0	25	8	1	34	11	1	4	0	16	75
4:30PM	6	15	2	0	23	0	1	2	0	3	2	25	8	0	35	14	0	2	0	16	77
4:45PM	8	14	3	0	25	1	2	3	0	6	2	25	8	0	35	21	1	8	0	30	96
5:00PM	3	14	2	0	19	4	0	0	0	4	1	20	6	0	27	20	2	11	0	33	83
<b>Total</b>	18	60	10	0	<b>88</b>	7	3	7	0	<b>17</b>	5	95	30	1	<b>131</b>	66	4	25	0	<b>95</b>	<b>331</b>
<b>% Approach</b>	20.5%	68.2%	11.4%	0%	-	41.2%	17.6%	41.2%	0%	-	3.8%	72.5%	22.9%	0.8%	-	69.5%	4.2%	26.3%	0%	-	-
<b>% Total</b>	5.4%	18.1%	3.0%	0%	<b>26.6%</b>	2.1%	0.9%	2.1%	0%	<b>5.1%</b>	1.5%	28.7%	9.1%	0.3%	<b>39.6%</b>	19.9%	1.2%	7.6%	0%	<b>28.7%</b>	-
<b>PHF</b>	0.563	0.882	0.833	-	<b>0.880</b>	0.438	0.375	0.583	-	<b>0.708</b>	0.625	0.950	0.938	0.250	<b>0.936</b>	0.786	0.500	0.568	-	<b>0.720</b>	0.862
<b>Lights</b>	18	59	10	0	<b>87</b>	5	3	7	0	<b>15</b>	5	94	30	1	<b>130</b>	66	4	25	0	<b>95</b>	327
<b>% Lights</b>	100%	98.3%	100%	0%	<b>98.9%</b>	71.4%	100%	100%	0%	<b>88.2%</b>	100%	98.9%	100%	100%	<b>99.2%</b>	100%	100%	100%	0%	<b>100%</b>	98.8%
<b>Articulated Trucks and Single-Unit Trucks</b>	0	0	0	0	<b>0</b>	0	0	0	0	<b>0</b>	0	0	0	0	<b>0</b>	0	0	0	0	<b>0</b>	0
<b>% Articulated Trucks and Single-Unit Trucks</b>	0%	0%	0%	0%	<b>0%</b>	0%	0%	0%	0%	<b>0%</b>	0%	0%	0%	0%	<b>0%</b>	0%	0%	0%	0%	<b>0%</b>	0%
<b>Buses</b>	0	1	0	0	<b>1</b>	2	0	0	0	<b>2</b>	0	1	0	0	<b>1</b>	0	0	0	0	<b>0</b>	4
<b>% Buses</b>	0%	1.7%	0%	0%	<b>1.1%</b>	28.6%	0%	0%	0%	<b>11.8%</b>	0%	1.1%	0%	0%	<b>0.8%</b>	0%	0%	0%	0%	<b>0%</b>	1.2%

\* L: Left, R: Right, T: Thru, U: U-Turn

4 - Revere Street & E 104th Place - Recount - TMC

Wed Apr 10, 2024

PM Peak (4:15 PM - 5:15 PM)

All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses)

All Movements

ID: 1172604, Location: 39.886448, -104.84221



Provided by: Gewalt Hamilton Associates Inc.

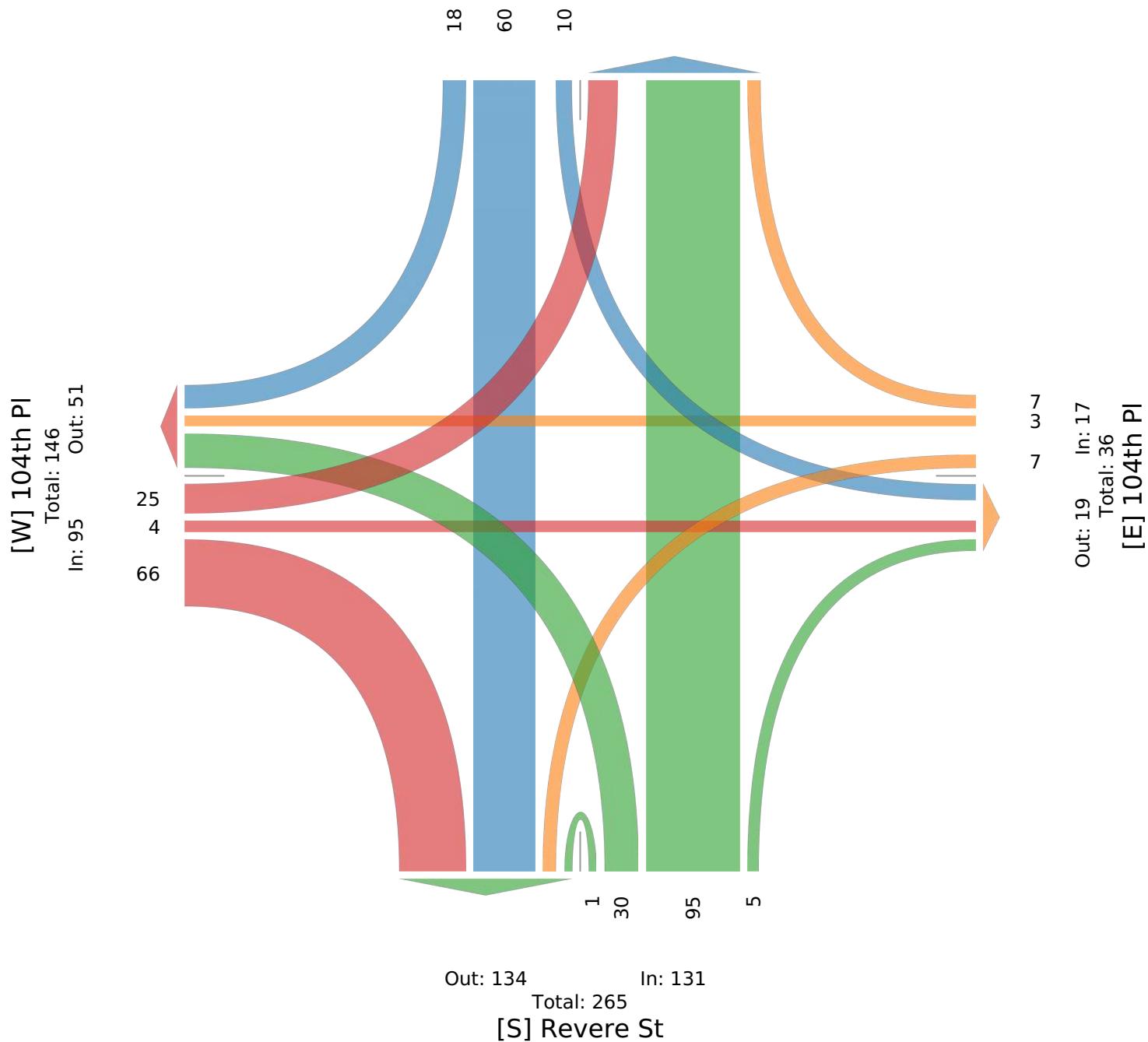
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

[N] Revere St

Total: 215

In: 88

Out: 127



**SEPAC All Data**

Date/Time: 2024-03-15 00:00:00

Intersection Name: 104th &amp; Revere

Intersection Alias: 104Revere

Access Code		Connection Method		Revision	Address	IP Address		GPS Enabled		GPS Port	
9999		Direct IP		5.2.0	1	10.254.4.144		False		8	

Phase	Phase Initialization Data															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Initial	1-Inact	3-Ylw	1-Inact	1-Inact	1-Inact	3-Ylw	1-Inact	1-Inact	None							

**Phase Data Bank 1:**

Phase Timing																						
Phase	Min Green	Passage Green	Max1	Max2	DMAX	DSTP/10	Yel/10	Red/10	Green	Yellow	Walk Delay	Offset	Walk Mode	Bike	Bike Psg	Walk	Ped Clr	Alt Walk	Alt Ped Clr	Flash Walk	Ext Ped Clr	Actuated Rest in Walk
1	5	30	20	30	0	0	48	30	0	0	0	0	0	0	0	0	0	0	0	False	0	False
2	10	40	55	50	0	0	48	30	0	0	0	0	0	0	0	5	25	0	0	False	0	False
3	8	30	15	30	0	0	40	28	0	0	0	0	0	0	0	0	0	0	0	False	0	False
4	9	40	20	50	0	0	40	28	0	0	0	0	0	0	0	5	30	0	0	False	0	False
5	5	30	20	30	0	0	48	30	0	0	0	0	0	0	0	0	0	0	0	False	0	False
6	10	40	55	50	0	0	48	30	0	0	0	0	0	0	0	5	25	0	0	False	0	False
7	8	30	15	30	0	0	40	28	0	0	0	0	0	0	0	0	0	0	0	False	0	False
8	9	40	20	50	0	0	40	28	0	0	0	0	0	0	0	5	30	0	0	False	0	False
9	0	0	0	0	0	0	30	0	0	0	0	0	0	0	0	0	0	0	0	False	0	False
10	0	0	0	0	0	0	30	0	0	0	0	0	0	0	0	0	0	0	0	False	0	False
11	0	0	0	0	0	0	30	0	0	0	0	0	0	0	0	0	0	0	0	False	0	False
12	0	0	0	0	0	0	30	0	0	0	0	0	0	0	0	0	0	0	0	False	0	False
13	0	0	0	0	0	0	30	0	0	0	0	0	0	0	0	0	0	0	0	False	0	False
14	0	0	0	0	0	0	30	0	0	0	0	0	0	0	0	0	0	0	0	False	0	False
15	0	0	0	0	0	0	30	0	0	0	0	0	0	0	0	0	0	0	0	False	0	False
16	0	0	0	0	0	0	30	0	0	0	0	0	0	0	0	0	0	0	0	False	0	False

Phase	Added Initial	Max Initial	Time B4 Redu	Car Redu	B4 Time Redu	Min Gap	Non-Act Response	Veh Recall	Recall Delay	Ped Recall	Ped Delay	Non Lock	Dual Entry	Last Car Pass	Condit No Service	No Simu Gap	Omit Yel Out	Minus Yel	Omit Call
1	0	0	0	0	0	0	False	None	0	None	0	False	False	False	False	False	0	0	0
2	0	0	0	0	0	0	True	Min	0	None	0	False	False	False	False	False	0	0	0
3	0	0	0	0	0	0	False	None	0	None	0	False	False	False	False	False	0	0	0
4	0	0	0	0	0	0	False	None	0	None	0	False	False	False	False	False	0	0	0
5	0	0	0	0	0	0	False	None	0	None	0	False	False	False	False	False	0	0	0
6	0	0	0	0	0	0	True	Min	0	None	0	False	False	False	False	False	0	0	0
7	0	0	0	0	0	0	False	None	0	None	0	False	False	False	False	False	0	0	0
8	0	0	0	0	0	0	False	None	0	None	0	False	False	False	False	False	0	0	0
9	0	0	0	0	0	0	False	None	0	None	0	False	False	False	False	False	0	0	0
10	0	0	0	0	0	0	False	None	0	None	0	False	False	False	False	False	0	0	0
11	0	0	0	0	0	0	False	None	0	None	0	False	False	False	False	False	0	0	0
12	0	0	0	0	0	0	False	None	0	None	0	False	False	False	False	False	0	0	0
13	0	0	0	0	0	0	False	None	0	None	0	False	False	False	False	False	0	0	0
14	0	0	0	0	0	0	False	None	0	None	0	False	False	False	False	False	0	0	0
15	0	0	0	0	0	0	False	None	0	None	0	False	False	False	False	False	0	0	0
16	0	0	0	0	0	0	False	None	0	None	0	False	False	False	False	False	0	0	0

Vehicle Detector Phase Assignment															
Veh Det	Assign Phase	Mode	Switch Phase	Extend	Delay	Volume	Occupied	Lock	Call	Pass	Added	Initial	Queue	Fail	QLimit
1	7	0	0	0	0	0	0	0	1	1	1	1	0	0	0
2	8	0	0	0	0	0	0	0	1	1	1	1	0	0	0
3	4	0	0	0	0	0	0	0	1	1	1	1	0	0	0
4	3	0	0	0	0	0	0	0	1	1	1	1	0	0	0
5	2	0	0	0	0	0	0	0	1	1	1	1	0	0	0
6	6	0	0	0	0	0	0	0	1	1	1	1	0	0	0
7	5	0	0	0	0	0	0	0	1	1	1	1	0	0	0
8	1	0	0	0	0	0	0	0	1	1	1	1	0	0	0

**Pedestrian Detector**

Veh Det	Assign Phase	Mode	Switch Phase	Extend	Delay	Volume	Occupied	Lock	Call	Pass	Added Initial	Queue	Fail	QLimit
1	2	1	0	0	0	0	0	0	1	0	0	0	0	0
2	4	1	0	0	0	0	0	0	1	0	0	0	0	0
3	6	1	0	0	0	0	0	0	1	0	0	0	0	0
4	8	1	0	0	0	0	0	0	1	0	0	0	0	0
5	5	1	0	0	0	0	0	0	1	0	0	0	0	0
6	6	1	0	0	0	0	0	0	1	0	0	0	0	0
7	7	1	0	0	0	0	0	0	1	0	0	0	0	0
8	4	1	0	0	0	0	0	0	1	0	0	0	0	0

**Phase Data Bank 2:****Phase Timing**

Phase	Min Passage Green	Max1	Max2	DMAX	DSTP/10	Yel/10	Red/10	Green Delay	Yellow Delay	Walk Offset	Walk Time	Bike Offset	Bike Mode	Walk Psg	Ped Clr	Alt Walk	Alt Ped	Flash Walk	Ext Ped	Actuated Clr	Rest in Walk
1	3	30	5	30	0	0	0	30	20	0	0	0	0	0	0	0	0	False	0	False	
2	10	30	26	50	0	0	0	40	20	0	0	0	0	0	0	7	11	0	0	False	
3	3	30	3	30	0	0	0	30	20	0	0	0	0	0	0	0	0	False	0	False	
4	3	30	4	50	0	0	0	30	20	0	0	0	0	0	0	7	11	0	0	False	
5	3	30	3	30	0	0	0	30	20	0	0	0	0	0	0	0	0	False	0	False	
6	10	30	28	50	0	0	0	40	20	0	0	0	0	0	0	7	11	0	0	False	
7	3	30	3	30	0	0	0	30	20	0	0	0	0	0	0	0	0	False	0	False	
8	3	30	4	50	0	0	0	30	20	0	0	0	0	0	0	7	11	0	0	False	
9	0	0	0	0	0	0	0	30	0	0	0	0	0	0	0	0	0	False	0	False	
10	0	0	0	0	0	0	0	30	0	0	0	0	0	0	0	0	0	False	0	False	
11	0	0	0	0	0	0	0	30	0	0	0	0	0	0	0	0	0	False	0	False	
12	0	0	0	0	0	0	0	30	0	0	0	0	0	0	0	0	0	False	0	False	
13	0	0	0	0	0	0	0	30	0	0	0	0	0	0	0	0	0	False	0	False	
14	0	0	0	0	0	0	0	30	0	0	0	0	0	0	0	0	0	False	0	False	
15	0	0	0	0	0	0	0	30	0	0	0	0	0	0	0	0	0	False	0	False	
16	0	0	0	0	0	0	0	30	0	0	0	0	0	0	0	0	0	False	0	False	

Phase	Added Initial	Max Initial	Time B4 Redu	Car Redu	Time to Redu	Min Gap	Non-Act Response	Veh Recall	Recall Delay	Ped Recall	Ped Recall Delay	Non Lock	Dual Entry	Last Car Pass	Condit	No Service	Simu Gap	Omit Yel	Minus Yel	Omit Call
1	0	0	0	0	0	0	False	None	0	None	0	False	False	False	False	False	0	0	0	
2	0	0	0	0	0	0	True	None	0	None	0	False	False	False	False	False	0	0	0	
3	0	0	0	0	0	0	False	None	0	None	0	False	False	False	False	False	0	0	0	
4	0	0	0	0	0	0	False	None	0	None	0	False	False	False	False	False	0	0	0	
5	0	0	0	0	0	0	False	None	0	None	0	False	False	False	False	False	0	0	0	
6	0	0	0	0	0	0	True	None	0	None	0	False	False	False	False	False	0	0	0	
7	0	0	0	0	0	0	False	None	0	None	0	False	False	False	False	False	0	0	0	
8	0	0	0	0	0	0	False	None	0	None	0	False	False	False	False	False	0	0	0	
9	0	0	0	0	0	0	False	None	0	None	0	False	False	False	False	False	0	0	0	
10	0	0	0	0	0	0	False	None	0	None	0	False	False	False	False	False	0	0	0	
11	0	0	0	0	0	0	False	None	0	None	0	False	False	False	False	False	0	0	0	
12	0	0	0	0	0	0	False	None	0	None	0	False	False	False	False	False	0	0	0	
13	0	0	0	0	0	0	False	None	0	None	0	False	False	False	False	False	0	0	0	
14	0	0	0	0	0	0	False	None	0	None	0	False	False	False	False	False	0	0	0	
15	0	0	0	0	0	0	False	None	0	None	0	False	False	False	False	False	0	0	0	
16	0	0	0	0	0	0	False	None	0	None	0	False	False	False	False	False	0	0	0	

Veh Det	Assign Phase	Mode	Switch Phase	Extend	Delay	Volume	Occupied	Lock	Call	Pass	Added Initial	Queue	Fail	QLimit
Veh Det	Assign Phase	Mode	Switch Phase	Extend	Delay	Volume	Occupied	Lock	Call	Pass	Added Initial	Queue	Fail	QLimit

**Phase Data Bank 3:****Phase Timing**

Phase	Min Passage Green	Max1	Max2	DMAX	DSTP/10	Yel/10	Red/10	Green Delay	Yellow Delay	Walk Offset	Walk Time	Bike Offset	Bike Mode	Walk Psg	Ped Clr	Alt Walk	Alt Ped	Flash Walk	Ext Ped	Actuated Clr	Rest in Walk
1	3	30	3	30	0	0	0	30	20	0	0	0	0	0	0	0	0	False	0	False	
2	10	30	28	50	0	0	0	40	20	0	0	0	0	0	0	7	11	0	0	False	



1	0	0	0	0	0	0	False	None	0	None	0	False	0	0	0						
2	0	0	0	0	0	0	True	None	0	None	0	False	0	0	0						
3	0	0	0	0	0	0	False	None	0	None	0	False	0	0	0						
4	0	0	0	0	0	0	False	None	0	None	0	False	0	0	0						
5	0	0	0	0	0	0	False	None	0	None	0	False	0	0	0						
6	0	0	0	0	0	0	True	None	0	None	0	False	0	0	0						
7	0	0	0	0	0	0	False	None	0	None	0	False	0	0	0						
8	0	0	0	0	0	0	False	None	0	None	0	False	0	0	0						
9	0	0	0	0	0	0	False	None	0	None	0	False	0	0	0						
10	0	0	0	0	0	0	False	None	0	None	0	False	0	0	0						
11	0	0	0	0	0	0	False	None	0	None	0	False	0	0	0						
12	0	0	0	0	0	0	False	None	0	None	0	False	0	0	0						
13	0	0	0	0	0	0	False	None	0	None	0	False	0	0	0						
14	0	0	0	0	0	0	False	None	0	None	0	False	0	0	0						
15	0	0	0	0	0	0	False	None	0	None	0	False	0	0	0						
16	0	0	0	0	0	0	False	None	0	None	0	False	0	0	0						

**Vehicle Detector Phase Assignment**

Veh Det	Assign Phase	Mode	Switch Phase	Extend	Delay	Volume	Occupy	Lock	Call	Pass	Added Initial	Queue	Fail	QLimit
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**Pedestrian Detector**

Veh Det	Assign Phase	Mode	Switch Phase	Extend	Delay	Volume	Occupy	Lock	Call	Pass	Added Initial	Queue	Fail	QLimit
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**Unit Data**

Startup Time	Startup State	Red Revert	Auto Ped	Stop Clr	T Reset	Sequence	Special Sequence	Test A Flash	ABC Input (Entry) Modes	ABC Output (O/STS) Modes	D Input (Entry) Modes	D Output (O/STS) Modes	Aux Switch
5	Flash	40.0	0	0	1	0	0	0	0	0	0	0	0

Ring	Input Response											Output Selection										
1	1											1										
2	2											2										
3	0											0										
4	0											0										

**Remote Flash**

LoadSwitch	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
Flash	Red	Yellow	Red	Red	Red	Red	Yellow	Red	Red	Red	Dark																
Alt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

**Cabinet Flash**

LoadSwitch	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Cabinet Flash																																

**Flash Entry/Exit Phases**

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Entry	False	False	False	True	False	False	False	True	False																							
Exit	False	True	False	False	False	True	False																									

**Overlap Data**

Overlap	Parents	Standard						+Grn Phases	-G/Y Phases	-Ped Phases				
		Trail Grn / 10	Trail Yel / 10	Trail Red / 10	Trail Grn Preempt	+Grn Phases	-G/Y Phases							
FYA														
Prot Overlaps														
None														
PRI														
Transit Red / 10														
AWS														
Parents														

**Ring**

Phase	Ring	Concur Phases
1	1	1, 5, 6
2	1	2, 5, 6
3	1	3, 7, 8
4	1	4, 7, 8
5	2	1, 2, 5
6	2	1, 2, 6
7	2	3, 4, 7
8	2	3, 4, 8
9	0	9
10	0	10
11	0	11
12	0	12
13	0	13
14	0	14
15	0	15
16	0	16

**Sequence Data**

Phase	Sequence 1															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ring																
1	1	2	3	4	0	0	0	0	0	0	0	0	0	0	0	0
2	5	6	7	8	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Phase	Sequence 2															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ring																
1	1	2	3	4	0	0	0	0	0	0	0	0	0	0	0	0
2	5	6	7	8	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Phase	Sequence 3															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ring																
1	1	2	3	4	0	0	0	0	0	0	0	0	0	0	0	0
2	5	6	7	8	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Phase	Sequence 4															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ring																
1	1	2	3	4	0	0	0	0	0	0	0	0	0	0	0	0
2	5	6	7	8	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Phase	Sequence 5															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ring																
1	1	2	3	4	0	0	0	0	0	0	0	0	0	0	0	0
2	5	6	7	8	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Phase	Sequence 6															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ring																
1	1	2	3	4	0	0	0	0	0	0	0	0	0	0	0	0
2	5	6	7	8	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Phase	Sequence 7															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ring																
1	1	2	3	4	0	0	0	0	0	0	0	0	0	0	0	0

2	5	6	7	8	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sequence 8																
Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ring	1	1	2	3	4	0	0	0	0	0	0	0	0	0	0	0
1	1	2	3	4	0	0	0	0	0	0	0	0	0	0	0	0
2	5	6	7	8	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sequence 9																
Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ring	1	1	2	3	4	0	0	0	0	0	0	0	0	0	0	0
1	1	2	3	4	0	0	0	0	0	0	0	0	0	0	0	0
2	5	6	7	8	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sequence 10																
Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ring	1	1	2	3	4	0	0	0	0	0	0	0	0	0	0	0
1	1	2	3	4	0	0	0	0	0	0	0	0	0	0	0	0
2	5	6	7	8	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sequence 11																
Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ring	1	1	2	3	4	0	0	0	0	0	0	0	0	0	0	0
1	1	2	3	4	0	0	0	0	0	0	0	0	0	0	0	0
2	5	6	7	8	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sequence 12																
Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ring	1	1	2	3	4	0	0	0	0	0	0	0	0	0	0	0
1	1	2	3	4	0	0	0	0	0	0	0	0	0	0	0	0
2	5	6	7	8	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sequence 13																
Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ring	1	1	2	3	4	0	0	0	0	0	0	0	0	0	0	0
1	1	2	3	4	0	0	0	0	0	0	0	0	0	0	0	0
2	5	6	7	8	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sequence 14																
Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ring	1	1	2	3	4	0	0	0	0	0	0	0	0	0	0	0
1	1	2	3	4	0	0	0	0	0	0	0	0	0	0	0	0
2	5	6	7	8	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sequence 15																
Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ring	1	1	2	3	4	0	0	0	0	0	0	0	0	0	0	0
1	1	2	3	4	0	0	0	0	0	0	0	0	0	0	0	0
2	5	6	7	8	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sequence 16																
Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ring	1	1	2	3	4	0	0	0	0	0	0	0	0	0	0	0
1	1	2	3	4	0	0	0	0	0	0	0	0	0	0	0	0
2	5	6	7	8	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

**Port 1 and ITS Data**

Address	Device Present	Basic Detection	Msg 40 Frame Enables
0	True	False	False
1	True	False	False
8	True	False	False
16	True	False	False
18	True	False	False

**Port Configuration**

Port Comm						
Port	Baud Rate	Data Bits	Parity	CTS	DCD	RTS
1	0	0	0	False	False	False
2	0	0	0	False	False	False
3	0	0	0	False	False	False
4	0	0	0	False	False	False
5	0	0	0	False	False	False

**Scoot**

## Phases

Stage A  
Stage B  
Stage C  
Stage D  
Stage E  
Stage F  
Stage G  
Stage H

## Det

## RPLY

## Phases

PHSMODE

COORD PH

Mode:

Msg Type:

**SPaT Data**

ID	Destination IP	DST Port	Enabled
1	0.0.0.0	1034	0
2	0.0.0.0	1034	0
3	0.0.0.0	1034	0
4	0.0.0.0	1034	0
5	0.0.0.0	1034	0
6	0.0.0.0	1034	0
7	0.0.0.0	1034	0
8	0.0.0.0	1034	0
9	0.0.0.0	1034	0
10	0.0.0.0	1034	0
11	0.0.0.0	1034	0
12	0.0.0.0	1034	0
13	0.0.0.0	1034	0
14	0.0.0.0	1034	0
15	0.0.0.0	1034	0
16	0.0.0.0	1034	0

**System**

Backup Time

900.0

**Output Mapping Configuration**

Load Switch	Red	Mode	Yellow	Mode	Green	Mode	FIO
1	Overlap A	Red	Overlap A	Yellow	Phase Vehicle 1	Green	1
2	Phase Vehicle 2	Red	Phase Vehicle 2	Yellow	Phase Vehicle 2	Green	2
3	Overlap B	Red	Overlap B	Yellow	Phase Vehicle 3	Green	3
4	Phase Vehicle 4	Red	Phase Vehicle 4	Yellow	Phase Vehicle 4	Green	4
5	Overlap C	Red	Overlap C	Yellow	Phase Vehicle 5	Green	5
6	Phase Vehicle 6	Red	Phase Vehicle 6	Yellow	Phase Vehicle 6	Green	6
7	Overlap D	Red	Overlap D	Yellow	Phase Vehicle 7	Green	7

8	Phase Vehicle 8	Red	Phase Vehicle 8	Yellow	Phase Vehicle 8	Green	8
9	Phase Pedestrian 2	Dont Walk	Overlap A	Green	Phase Pedestrian 2	Walk	9
10	Phase Pedestrian 4	Dont Walk	Overlap B	Green	Phase Pedestrian 4	Walk	10
11	Phase Pedestrian 6	Dont Walk	Overlap C	Green	Phase Pedestrian 6	Walk	11
12	Phase Pedestrian 8	Dont Walk	Overlap D	Green	Phase Pedestrian 8	Walk	12
13	None	None	None	None	None	None	13
14	None	None	None	None	None	None	14
15	None	None	None	None	None	None	15
16	None	None	None	None	None	None	16
17	Phase Pedestrian 1	Dont Walk	Phase Pedestrian 1	Ped Clear	Phase Pedestrian 1	Walk	17
18	Phase Pedestrian 3	Dont Walk	Phase Pedestrian 3	Ped Clear	Phase Pedestrian 3	Walk	18
19	Phase Pedestrian 5	Dont Walk	Phase Pedestrian 5	Ped Clear	Phase Pedestrian 5	Walk	19
20	Phase Pedestrian 7	Dont Walk	Phase Pedestrian 7	Ped Clear	Phase Pedestrian 7	Walk	20
21	Phase Status 1	On	Phase Status 1	Next	Phase Status 1	Check	21
22	Phase Status 2	On	Phase Status 2	Next	Phase Status 2	Check	22
23	Phase Status 3	On	Phase Status 3	Next	Phase Status 3	Check	23
24	Phase Status 4	On	Phase Status 4	Next	Phase Status 4	Check	24
25	Phase Status 5	On	Phase Status 5	Next	Phase Status 5	Check	25
27	Phase Status 7	On	Phase Status 7	Next	Phase Status 7	Check	27
28	Phase Status 8	On	Phase Status 8	Next	Phase Status 8	Check	28
29	None	None	None	None	None	None	29
30	None	None	None	None	None	None	30
31	None	None	None	None	None	None	31
32	None	None	None	None	None	None	32
26	Phase Status 6	On	Phase Status 6	Next	Phase Status 6	Check	26

**Unit Bank: 1**

Peer to Peer Sources			Peer Name			
PeerID	IP	Timeout				
Peer to Peer Functions						
FunctionID	SourceID	Source Func	Source Index	Input Func	Input Index	Fail Mode

**Unit Bank: 2**

Peer to Peer Sources			Peer Name			
PeerID	IP	Timeout				
Peer to Peer Functions						
FunctionID	SourceID	Source Func	Source Index	Input Func	Input Index	Fail Mode

**Unit Bank: 3**

Peer to Peer Sources			Peer Name			
PeerID	IP	Timeout				
Peer to Peer Functions						
FunctionID	SourceID	Source Func	Source Index	Input Func	Input Index	Fail Mode

**Unit Bank: 4**

Peer to Peer Sources			Peer Name			
PeerID	IP	Timeout				
Peer to Peer Functions						
FunctionID	SourceID	Source Func	Source Index	Input Func	Input Index	Fail Mode

**Coord Data**

Coord Setup												
Operation	Mode	Max	Correction	Offset	Force	Max Dwell	Yield Period		Manual Pattern			
Auto	Full Act	Inhibit	Short Way	End Green	Plan	0	0	0	1	0	0	
Pattern Data												
Pattern	Cycle Length	Coord Mode	Max Mode	Corr Mode	Coord Offset	Force Mode	Spec Func	Time Offset	Sequence	R2 Lag	R3 Lag	R4 Lag
1	120	0	0	0	0	0	0	11	0	0	0	0
Phase	1	2	3	4	5	6	7	8	9	10	11	12
Time	15	59	23	23	15	59	23	23	0	0	0	0

Mode	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None																				
Coord	False	True	False	False	False	True	False	False	False	False	False	False	False	False	False	False	False																				
DCP	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False																				
P.RED.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0																				
P.EXT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0																				
Pattern	Cycle Length	Coord Mode	Max Mode	Corr Mode	Coord Offset	Force Mode	Spec Func	Time Offset	Sequence	R2 Lag	R3 Lag	R4 Lag																									
2	110	0	0	0	0	0	0	0	107	0	0	0	0	0	0	0	0																				
Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16																					
Time	15	50	20	25	15	50	20	25	0	0	0	0	0	0	0	0	0																				
Mode	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None																				
Coord	False	True	False	False	False	True	False	False	False	False	False	False	False	False	False	False	False																				
DCP	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False																				
P.RED.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0																				
P.EXT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0																				
Pattern	Cycle Length	Coord Mode	Max Mode	Corr Mode	Coord Offset	Force Mode	Spec Func	Time Offset	Sequence	R2 Lag	R3 Lag	R4 Lag																									
3	120	0	0	0	0	0	0	0	103	0	0	0	0	0	0	0	0																				
Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16																					
Time	15	62	23	20	15	62	23	20	0	0	0	0	0	0	0	0	0																				
Mode	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None																				
Coord	False	True	False	False	False	True	False	False	False	False	False	False	False	False	False	False	False																				
DCP	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False																				
P.RED.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0																				
P.EXT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0																				
Pattern	Cycle Length	Coord Mode	Max Mode	Corr Mode	Coord Offset	Force Mode	Spec Func	Time Offset	Sequence	R2 Lag	R3 Lag	R4 Lag																									
4	110	0	0	0	0	0	0	0	37	0	0	0	0	0	0	0	0																				
Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16																					
Time	15	50	20	25	15	50	20	25	0	0	0	0	0	0	0	0	0																				
Mode	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None																				
Coord	False	True	False	False	False	True	False	False	False	False	False	False	False	False	False	False	False																				
DCP	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False																				
P.RED.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0																				
P.EXT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0																				
Pattern	Cycle Length	Coord Mode	Max Mode	Corr Mode	Coord Offset	Force Mode	Spec Func	Time Offset	Sequence	R2 Lag	R3 Lag	R4 Lag																									
7	120	0	0	0	0	0	0	0	103	0	0	0	0	0	0	0	0																				
Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16																					
Time	15	62	23	20	15	62	23	20	0	0	0	0	0	0	0	0	0																				
Mode	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None																				
Coord	False	True	False	False	False	True	False	False	False	False	False	False	False	False	False	False	False																				
DCP	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False																				
P.RED.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0																				
P.EXT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0																				
<b>Time Based Control Data</b>																																					
DST																																					
Cycle Zero: 1 day, 0:00			DST Type: 0			TimeZoneDiff: 0																															
Entry Number	Begin Month	Begin Occurrences Of Week	Begin Day Of Month	Begin Day Of Month	Begin Seconds To Transition	End Month	End Occurrences Of Week	End Day Of Month	End Day Of Month	End Seconds To Transition	End Seconds To Adjust																										
1	14	2	1	1	7200	11	1	1	1	7200	3600																										
2	14	1	1	1	0	1	1	1	1	0	0																										
Schedules																																					
Month						Day of Month						Day of Week																									
Schedule	Plan 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	1	2	3	4	5	6
1	1	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
2	2	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
3	3	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X			
Day Plan 1																																					
Event			Hour			Minute			Action																												
1			5		45	1																															
2			9		0	2																															
3			15		0	3																															
4			19		0	254																															

5	0	0	0
6	0	0	0
7	0	0	0
8	0	0	0
9	0	0	0
10	0	0	0
11	0	0	0
12	0	0	0
13	0	0	0
14	0	0	0
15	0	0	0

## Day Plan 2

Event	Hour	Minute	Action
1	8	0	4
2	20	0	254
3	0	0	0
4	0	0	0
5	0	0	0
6	0	0	0
7	0	0	0
8	0	0	0
9	0	0	0
10	0	0	0
11	0	0	0
12	0	0	0
13	0	0	0
14	0	0	0
15	0	0	0

## Day Plan 3

Event	Hour	Minute	Action
1	0	1	254
2	0	0	0
3	0	0	0
4	0	0	0
5	0	0	0
6	0	0	0
7	0	0	0
8	0	0	0
9	0	0	0
10	0	0	0
11	0	0	0
12	0	0	0
13	0	0	0
14	0	0	0
15	0	0	0

## Actions

Action Pattern	Aux1	Aux2	Aux3	SP1	SP2	SP3	SP4	SP5	SP6	SP7	SP8	DIM	Det1	Det2	Det3	Ph1	Ph2	Ph3	Ph4	Ph5	Ph6	Ph7	Ph8	Ph9	Ph10	Ph11	Ph12	Ph13	Ph14	P
1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
7	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
8	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
19	19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
37	37	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
40	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
43	43	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
46	46	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
254	254	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0			

## Special Function Maps

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Special Function 1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Special Function 2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Special Function 3	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Special Function 4	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Special Function 5	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0

Special Function 6	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Special Function 7	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Special Function 8	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
Phase Functions																			
Phase 1 Max 2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16			
Phase 2 Max 2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Phase 3 Max 2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Phase 4 Max 2	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Phase 5 Max 2	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Phase 6 Max 2	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Phase 7 Max 2	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Phase 8 Max 2	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Phase 1 Phase Omit	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
Phase 2 Phase Omit	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
Phase 3 Phase Omit	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
Phase 4 Phase Omit	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
Phase 5 Phase Omit	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
Phase 6 Phase Omit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
Phase 7 Phase Omit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
Phase 8 Phase Omit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0

**Preempt Configuration**

Preempt 1 Data																			
DET	DELAY	MXCAL	DB/10	NLOCK	EXTND	L OUT	SRMOD	LINK#	DURAT	GATE	R2C								
248	0	0	0	0	0	0	0	0	0	0	0								
MIN GRN	MIN WLK	DWL GRN	EXT PED	SEL PED CLR	SEL YEL/10	SEL RED/10	TRK GRN	TRK PED CLR	TRK YEL/10	TRK RED/10	RET PED CLR	RET YEL/10	RET RED/10						

0	0	10	0	8	40	20	0	0	40	20	8	40	20						
<b>Phase</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>	<b>13</b>	<b>14</b>	<b>15</b>	<b>16</b>			

Exit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Calls	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0
-------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

**Vehicle**

Track Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-------------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Dwell	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Cycle	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

**Ped**

Track Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-------------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Dwell	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Cycle	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

**Overlap**

Track Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-------------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Dwell	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Cycle	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Trail	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Preempt 2 Data																			
DET	DELAY	MXCAL	DB/10	NLOCK	EXTND	L OUT	SRMOD	LINK#	DURAT	GATE	R2C								
249	0	0	0	0	0	0	0	0	0	0	0								
MIN GRN	MIN WLK	DWL GRN	EXT PED	SEL PED CLR	SEL YEL/10	SEL RED/10	TRK GRN	TRK PED CLR	TRK YEL/10	TRK RED/10	RET PED CLR	RET YEL/10	RET RED/10						

0	0	10	0	8	40	20	0	0	40	20	8	40	20						
<b>Phase</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>	<b>13</b>	<b>14</b>	<b>15</b>	<b>16</b>			

Exit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Calls	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0
-------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

**Vehicle**

Track Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-------------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Dwell	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
-------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Cycle	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

**Ped**

Track Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-------------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Dwell	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
-------	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

Cycle	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Overlap</b>																
Track Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dwell	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0
Cycle	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Trail	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Preempt 3 Data</b>																
DET	DELAY	MXCAL		DB/10	NLOCK	EXTND		L OUT	SRMOD	LINK#		DURAT	GATE	R2C		
250	0	0		0	0	0		0	0	0		0	0	0		
MIN GRN	MIN WLK	DWL GRN	EXT PED	SEL CLR	SEL YEL/10	SEL RED/10	TRK GRN	TRK CLR	TRK YEL/10	TRK RED/10	RET PED CLR	RET YEL/10	RET RED/10			
0	0	10	0	8	40	20	0	0	40	20	8	40	20			
<b>Phase</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>	<b>13</b>	<b>14</b>	<b>15</b>	<b>16</b>
Exit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Calls	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Vehicle</b>																
Track Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dwell	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
Cycle	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Ped</b>																
Track Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dwell	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cycle	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Overlap</b>																
Track Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dwell	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cycle	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Trail	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Preempt 4 Data</b>																
DET	DELAY	MXCAL		DB/10	NLOCK	EXTND		L OUT	SRMOD	LINK#		DURAT	GATE	R2C		
251	0	0		0	0	0		0	0	0		0	0	0		
MIN GRN	MIN WLK	DWL GRN	EXT PED	SEL CLR	SEL YEL/10	SEL RED/10	TRK GRN	TRK CLR	TRK YEL/10	TRK RED/10	RET PED CLR	RET YEL/10	RET RED/10			
0	0	10	0	8	40	20	0	0	40	20	8	40	20			
<b>Phase</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>	<b>13</b>	<b>14</b>	<b>15</b>	<b>16</b>
Exit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Calls	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0
<b>Vehicle</b>																
Track Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dwell	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0
Cycle	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Ped</b>																
Track Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dwell	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cycle	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Overlap</b>																
Track Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dwell	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cycle	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Trail	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Preempt 5 Data</b>																
DET	DELAY	MXCAL		DB/10	NLOCK	EXTND		L OUT	SRMOD	LINK#		DURAT	GATE	R2C		
252	0	0		0	0	0		0	0	0		0	0	0		
MIN GRN	MIN WLK	DWL GRN	EXT PED	SEL CLR	SEL YEL/10	SEL RED/10	TRK GRN	TRK CLR	TRK YEL/10	TRK RED/10	RET PED CLR	RET YEL/10	RET RED/10			
0	0	10	0	8	40	20	10	8	40	20	8	40	20			
<b>Phase</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>	<b>13</b>	<b>14</b>	<b>15</b>	<b>16</b>
Exit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Calls	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Vehicle</b>																
Track Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dwell	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cycle	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

**Ped**

Track Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dwell	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cycle	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

**Overlap**

Track Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dwell	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cycle	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Trail	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

**Preempt 6 Data**

DET	DELAY	MXCAL		DB/10	NLOCK	EXTND		L OUT		SRMOD	LINK#	DURAT	GATE	R2C	
		253	0	0	0	0	0	0	0			0	0	0	
MIN GRN	MIN WLK	DWL GRN	EXT PED	SEL PED CLR	SEL YEL/10	SEL RED/10	TRK GRN	TRK PED CLR	TRK YEL/10	TRK RED/10	RET PED CLR	RET YEL/10	RET RED/10		
0	0	10	0	8	40	20	10	8	40	20	8	40	20		

**Phase**

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Exit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Calls	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

**Vehicle**

Track Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dwell	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cycle	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

**Ped**

Track Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dwell	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cycle	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

**Overlap**

Track Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dwell	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cycle	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Trail	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

**Preempt 7 Data**

DET	DELAY	MXCAL		DB/10	NLOCK	EXTND		L OUT		SRMOD	LINK#	DURAT	GATE	R2C	
		0	0	0	0	0	0	0	0			0	0	0	
MIN GRN	MIN WLK	DWL GRN	EXT PED	SEL PED CLR	SEL YEL/10	SEL RED/10	TRK GRN	TRK PED CLR	TRK YEL/10	TRK RED/10	RET PED CLR	RET YEL/10	RET RED/10		
10	10	10	0	8	40	20	10	8	40	20	8	40	20		

**Phase**

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Exit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Calls	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

**Vehicle**

Track Green	0	0	0	0	0	0	0	0	4	4	4	4	4	4	4
Dwell	0	0	0	0	0	0	0	0	4	4	4	4	4	4	4
Cycle	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

**Ped**

Track Green	3	0	3	0	3	0	3	0	3	3	3	3	3	3	3
Dwell	3	0	3	0	3	0	3	0	3	3	3	3	3	3	3
Cycle	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

**Overlap**

Track Green	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Dwell	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Cycle	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Trail	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

**Preempt 8 Data**

DET	DELAY	MXCAL		DB/10	NLOCK	EXTND		L OUT		SRMOD	LINK#	DURAT	GATE	R2C	
		0	0	0	0	0	0	0	0			0	0	0	
MIN GRN	MIN WLK	DWL GRN	EXT PED	SEL PED CLR	SEL YEL/10	SEL RED/10	TRK GRN	TRK PED CLR	TRK YEL/10	TRK RED/10	RET PED CLR	RET YEL/10	RET RED/10		
10	10	10	0	8	40	20	10	8	40	20	8	40	20		

**Phase**

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Exit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Calls	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

**Vehicle**

## Preempt 9 Data

## Preempt 10 Data

## Preempt 11 Data

Exit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Calls	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Vehicle</b>																	
Track Green	0	0	0	0	0	0	0	0	4	4	4	4	4	4	4	4	4
Dwell	0	0	0	0	0	0	0	0	4	4	4	4	4	4	4	4	4
Cycle	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Ped</b>																	
Track Green	3	0	3	0	3	0	3	0	3	3	3	3	3	3	3	3	3
Dwell	3	0	3	0	3	0	3	0	3	3	3	3	3	3	3	3	3
Cycle	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Overlap</b>																	
Track Green	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Dwell	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Cycle	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Trail	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

**Preempt 12 Data**

DET	DELAY		MXCAL		DB/10		NLOCK		EXTND		L OUT		SRMOD		LINK#		DURAT		GATE		R2C				
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
MIN	MIN	DWL	EXT	SEL	PED	CLR	SEL	YEL/10	SEL	TRK	GRN	TRK	PED	CLR	TRK	YEL/10	TRK	RED/10	RET	PED	CLR	RET	YEL/10	RET	RED/10
10	10	10	0	8	40	20	10	8	40	20	8	40	20	8	40	20	8	40	20	8	40	20	8	40	

<b>Phase</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>	<b>13</b>	<b>14</b>	<b>15</b>	<b>16</b>
Exit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Calls	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Vehicle</b>																
Track Green	0	0	0	0	0	0	0	0	4	4	4	4	4	4	4	4
Dwell	0	0	0	0	0	0	0	0	4	4	4	4	4	4	4	4
Cycle	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Ped</b>																
Track Green	3	0	3	0	3	0	3	0	3	3	3	3	3	3	3	3
Dwell	3	0	3	0	3	0	3	0	3	3	3	3	3	3	3	3
Cycle	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Overlap</b>																
Track Green	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Dwell	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Cycle	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Trail	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

**Priority****Priority 1**

N-Lock Delay Extend Default Pattern				Min Grn	Max Grn	No Lockout	LockoutA	LockoutB	Overlap	Pre Grn	Recall	ExCo	Phase	Svc	Signal Type	Olp Blankout	Blankout
None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	
<b>Phase</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>	<b>13</b>	<b>14</b>	<b>15</b>	<b>16</b>	
CO-Phase	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	
QJ-Phase	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	
<b>Detector</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>	<b>13</b>	<b>14</b>	<b>15</b>	<b>16</b>	
Detector Number	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	

Bank: 1

PR. Dets	PE	1A	2A	3A	4A	5A	6A	BU
TSD	0	0	0	0	0	0	0	0
TED	0	0	0	0	0	0	0	0
TTL	0	0	0	0	0	0	0	0

<b>Phase</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>	<b>13</b>	<b>14</b>	<b>15</b>	<b>16</b>
Exit Call	False	False	False	False	False	False	False									
Phase Omit	False	False	False	False	False	False	False									
Ped Omit	False	False	False	False	False	False	False									
Recovery	False	False	False	False	False	False	False									

Level Alt Seq Min Walk Freq Ped Skip FPF Override FPW Lvl CPE Ped Method Return Ped Wait Ped Override Alt Seq Enabled ForceFullPri

0	0	0	0	0	False	True	False	False	0	0	0	0	False	False
<b>Queue</b>	<b>1</b>		<b>2</b>		<b>3</b>		<b>4</b>		<b>5</b>		<b>6</b>			
Queue Phase	0		0		0		0		0		0		0	
Queue Det	0		0		0		0		0		0		0	
Queue Time	0		0		0		0		0		0		0	
Bank: 2														
<b>PR. Dets</b>	<b>PE</b>	<b>1A</b>	<b>2A</b>	<b>3A</b>	<b>4A</b>	<b>5A</b>	<b>6A</b>						<b>BU</b>	
TSD	0	0	0	0	0	0	0						0	
TED	0	0	0	0	0	0	0						0	
TTL	0	0	0	0	0	0	0						0	
<b>Phase</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>	<b>13</b>	<b>14</b>
Exit Call	False	False	False	False	False	False	False	False						
Phase Omit	False	False	False	False	False	False	False	False						
Ped Omit	False	False	False	False	False	False	False	False						
Recovery	False	False	False	False	False	False	False	False						
<b>Level Alt Seq Min Walk Freq Ped Skip FPF Override FPW Lvl CPE Ped Method Return Ped Wait Ped Override Alt Seq Enabled ForceFullPri</b>														
0	0	0	0	0	False	True	False	False	0	0	0	0	False	False
<b>Queue</b>	<b>1</b>		<b>2</b>		<b>3</b>		<b>4</b>		<b>5</b>		<b>6</b>			
Queue Phase	0		0		0		0		0		0		0	
Queue Det	0		0		0		0		0		0		0	
Queue Time	0		0		0		0		0		0		0	
Bank: 3														
<b>PR. Dets</b>	<b>PE</b>	<b>1A</b>	<b>2A</b>	<b>3A</b>	<b>4A</b>	<b>5A</b>	<b>6A</b>						<b>BU</b>	
TSD	0	0	0	0	0	0	0						0	
TED	0	0	0	0	0	0	0						0	
TTL	0	0	0	0	0	0	0						0	
<b>Phase</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>	<b>13</b>	<b>14</b>
Exit Call	False	False	False	False	False	False	False	False						
Phase Omit	False	False	False	False	False	False	False	False						
Ped Omit	False	False	False	False	False	False	False	False						
Recovery	False	False	False	False	False	False	False	False						
<b>Level Alt Seq Min Walk Freq Ped Skip FPF Override FPW Lvl CPE Ped Method Return Ped Wait Ped Override Alt Seq Enabled ForceFullPri</b>														
0	0	0	0	0	False	True	False	False	0	0	0	0	False	False
<b>Queue</b>	<b>1</b>		<b>2</b>		<b>3</b>		<b>4</b>		<b>5</b>		<b>6</b>			
Queue Phase	0		0		0		0		0		0		0	
Queue Det	0		0		0		0		0		0		0	
Queue Time	0		0		0		0		0		0		0	
Bank: 4														
<b>PR. Dets</b>	<b>PE</b>	<b>1A</b>	<b>2A</b>	<b>3A</b>	<b>4A</b>	<b>5A</b>	<b>6A</b>						<b>BU</b>	
TSD	0	0	0	0	0	0	0						0	
TED	0	0	0	0	0	0	0						0	
TTL	0	0	0	0	0	0	0						0	
<b>Phase</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>	<b>13</b>	<b>14</b>
Exit Call	False	False	False	False	False	False	False	False						
Phase Omit	False	False	False	False	False	False	False	False						
Ped Omit	False	False	False	False	False	False	False	False						
Recovery	False	False	False	False	False	False	False	False						
<b>Level Alt Seq Min Walk Freq Ped Skip FPF Override FPW Lvl CPE Ped Method Return Ped Wait Ped Override Alt Seq Enabled ForceFullPri</b>														
0	0	0	0	0	False	True	False	False	0	0	0	0	False	False
<b>Queue</b>	<b>1</b>		<b>2</b>		<b>3</b>		<b>4</b>		<b>5</b>		<b>6</b>			
Queue Phase	0		0		0		0		0		0		0	
Queue Det	0		0		0		0		0		0		0	
Queue Time	0		0		0		0		0		0		0	

Priority 2

N-Lock Delay Extend Default Pattern				Min Grn	Max Grn	No Lockout	LockoutA	LockoutB	Overlap	Pre Grn	Recall	ExCo	Phase Svc	Signal Type	Olp Blankout	Blankout
None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None
Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
CO-Phase	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None
QJ-Phase	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None
Detector	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Detector Number	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None

Bank: 1

PR. Dets	PE	1A	2A	3A	4A	5A	6A	BU								
TSD	0	0	0	0	0	0	0	0								
TED	0	0	0	0	0	0	0	0								
TTL	0	0	0	0	0	0	0	0								
Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Exit Call	False															
Phase Omit	False															
Ped Omit	False															
Recovery	False															

Level	Alt	Seq	Min Walk	Freq	Ped Skip	FPF	Override	FPW Lvl	CPE Ped	Method	Return	Ped Wait	Ped Override	Alt Seq	Enabled	ForceFullPri
0	0	0	0	0	False	True	False	False	0	0	0	0	0	False	False	False
Queue	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Queue Phase	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Queue Det	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Queue Time	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bank: 2

PR. Dets	PE	1A	2A	3A	4A	5A	6A	BU								
TSD	0	0	0	0	0	0	0	0								
TED	0	0	0	0	0	0	0	0								
TTL	0	0	0	0	0	0	0	0								
Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Exit Call	False															
Phase Omit	False															
Ped Omit	False															
Recovery	False															

Level	Alt	Seq	Min Walk	Freq	Ped Skip	FPF	Override	FPW Lvl	CPE Ped	Method	Return	Ped Wait	Ped Override	Alt Seq	Enabled	ForceFullPri
0	0	0	0	0	False	True	False	False	0	0	0	0	0	False	False	False
Queue	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Queue Phase	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Queue Det	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Queue Time	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bank: 3

PR. Dets	PE	1A	2A	3A	4A	5A	6A	BU								
TSD	0	0	0	0	0	0	0	0								
TED	0	0	0	0	0	0	0	0								
TTL	0	0	0	0	0	0	0	0								
Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Exit Call	False															
Phase Omit	False															
Ped Omit	False															
Recovery	False															

Level	Alt	Seq	Min Walk	Freq	Ped Skip	FPF	Override	FPW Lvl	CPE Ped	Method	Return	Ped Wait	Ped Override	Alt Seq	Enabled	ForceFullPri
0	0	0	0	0	False	True	False	False	0	0	0	0	0	False	False	False
Queue	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Queue Phase	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Queue Det	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Queue Time	0	0	0	0	0	0	0
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Bank: 4

PR. Dets	PE	1A	2A	3A	4A	5A	6A	BU
TSD	0	0	0	0	0	0	0	0
TED	0	0	0	0	0	0	0	0
TTL	0	0	0	0	0	0	0	0

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Exit Call	False															
Phase Omit	False															
Ped Omit	False															
Recovery	False															

Level	Alt	Seq	Min Walk	Freq	Ped Skip	FPF Override	FPW Lvl	CPE Ped	Method	Return Ped	Wait Ped	Override Alt Seq	Enabled	ForceFullPri
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0	0	0	0	0	False	True	False	False	0	0	0	0	False	False
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Queue	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	6
Queue Phase	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Queue Det	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Queue Time	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

**Priority 3**

N-Lock	Delay	Extend	Default Pattern	Min Grn	Max Grn	No Lockout	LockoutA	LockoutB	Overlap	Pre Grn	Recall	ExCo	Phase Svc	Signal Type	Olp Blankout	Blankout
None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None
Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
CO-Phase	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None
QJ-Phase	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None
Detector	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	9
Detector Number	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None

Bank: 1

PR. Dets	PE	1A	2A	3A	4A	5A	6A	BU								
TSD	0	0	0	0	0	0	0	0								
TED	0	0	0	0	0	0	0	0								
TTL	0	0	0	0	0	0	0	0								
Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Exit Call	False															
Phase Omit	False															
Ped Omit	False															
Recovery	False															

Level	Alt	Seq	Min Walk	Freq	Ped Skip	FPF Override	FPW Lvl	CPE Ped	Method	Return Ped	Wait Ped	Override Alt Seq	Enabled	ForceFullPri
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0	0	0	0	0	False	True	False	False	0	0	0	0	False	False
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Queue	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	6
Queue Phase	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Queue Det	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Queue Time	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bank: 2

PR. Dets	PE	1A	2A	3A	4A	5A	6A	BU								
TSD	0	0	0	0	0	0	0	0								
TED	0	0	0	0	0	0	0	0								
TTL	0	0	0	0	0	0	0	0								
Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Exit Call	False															
Phase Omit	False															
Ped Omit	False															
Recovery	False															

Level	Alt	Seq	Min Walk	Freq	Ped Skip	FPF Override	FPW Lvl	CPE Ped	Method	Return Ped	Wait Ped	Override Alt Seq	Enabled	ForceFullPri
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0	0	0	0	0	False	True	False	False	0	0	0	0	False	False
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Queue	1	2	3	4	5	6
Queue Phase	0	0	0	0	0	0
Queue Det	0	0	0	0	0	0
Queue Time	0	0	0	0	0	0

Bank: 3									
PR. Dets	PE	1A	2A	3A	4A	5A	6A	BU	
TSD	0	0	0	0	0	0	0	0	0
TED	0	0	0	0	0	0	0	0	0
TTL	0	0	0	0	0	0	0	0	0

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Exit Call	False															
Phase Omit	False															
Ped Omit	False															
Recovery	False															

Level	Alt	Seq	Min Walk	Freq	Ped Skip	FPF	Override	FPW	Lvl	CPE	Ped	Method	Return	Ped Wait	Ped Override	Alt Seq	Enabled	ForceFullPri
0	0	0	0	0	False		True		False	False	0	0	0	0	0	False		False

Queue	1	2	3	4	5	6
Queue Phase	0	0	0	0	0	0
Queue Det	0	0	0	0	0	0
Queue Time	0	0	0	0	0	0

Bank: 4									
PR. Dets	PE	1A	2A	3A	4A	5A	6A	BU	
TSD	0	0	0	0	0	0	0	0	0
TED	0	0	0	0	0	0	0	0	0
TTL	0	0	0	0	0	0	0	0	0

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Exit Call	False															
Phase Omit	False															
Ped Omit	False															
Recovery	False															

Level	Alt	Seq	Min Walk	Freq	Ped Skip	FPF	Override	FPW	Lvl	CPE	Ped	Method	Return	Ped Wait	Ped Override	Alt Seq	Enabled	ForceFullPri
0	0	0	0	0	False		True		False	False	0	0	0	0	0	False		False

Queue	1	2	3	4	5	6
Queue Phase	0	0	0	0	0	0
Queue Det	0	0	0	0	0	0
Queue Time	0	0	0	0	0	0

#### Priority 4

N-Lock	Delay	Extend	Default Pattern	Min Grn	Max Grn	No Lockout	LockoutA	LockoutB	Overlap	Pre Grn	Recall	ExCo	Phase Svc	Signal Type	Olp Blankout	Blankout
Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
CO-Phase	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None
QJ-Phase	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None

Detector	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Detector Number	None															

Bank: 1																
PR. Dets	PE	1A	2A	3A	4A	5A	6A	BU								
TSD	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TED	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TTL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Exit Call	False															
Phase Omit	False															
Ped Omit	False															

Recovery	False																
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Level	Alt	Seq	Min	Walk	Freq	Ped	Skip	FPF	Override	FPW	Lvl	CPE	Ped	Method	Return	Ped	Wait	Ped	Override	Alt	Seq	Enabled	Force	FullPri
0	0	0	0	0	0	False		True		False	False	0	0	0	0	0	0	0	0	False		False		False
Queue		1			2			3				4			5			6						
Queue Phase		0			0			0				0			0			0						0
Queue Det		0			0			0				0			0			0						0
Queue Time		0			0			0				0			0			0						0

Bank: 2

PR. Dets	PE	1A	2A	3A	4A	5A	6A	BU
TSD	0	0	0	0	0	0	0	0
TED	0	0	0	0	0	0	0	0
TTL	0	0	0	0	0	0	0	0

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Exit Call	False															
Phase Omit	False															
Ped Omit	False															
Recovery	False															

Level	Alt	Seq	Min	Walk	Freq	Ped	Skip	FPF	Override	FPW	Lvl	CPE	Ped	Method	Return	Ped	Wait	Ped	Override	Alt	Seq	Enabled	Force	FullPri
0	0	0	0	0	0	False		True		False	False	0	0	0	0	0	0	0	0	False		False		False
Queue		1			2			3				4			5			6						
Queue Phase		0			0			0				0			0			0						0
Queue Det		0			0			0				0			0			0						0
Queue Time		0			0			0				0			0			0						0

Bank: 3

PR. Dets	PE	1A	2A	3A	4A	5A	6A	BU
TSD	0	0	0	0	0	0	0	0
TED	0	0	0	0	0	0	0	0
TTL	0	0	0	0	0	0	0	0

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Exit Call	False															
Phase Omit	False															
Ped Omit	False															
Recovery	False															

Level	Alt	Seq	Min	Walk	Freq	Ped	Skip	FPF	Override	FPW	Lvl	CPE	Ped	Method	Return	Ped	Wait	Ped	Override	Alt	Seq	Enabled	Force	FullPri
0	0	0	0	0	0	False		True		False	False	0	0	0	0	0	0	0	0	False		False		False
Queue		1			2			3				4			5			6						
Queue Phase		0			0			0				0			0			0						0
Queue Det		0			0			0				0			0			0						0
Queue Time		0			0			0				0			0			0						0

Bank: 4

PR. Dets	PE	1A	2A	3A	4A	5A	6A	BU
TSD	0	0	0	0	0	0	0	0
TED	0	0	0	0	0	0	0	0
TTL	0	0	0	0	0	0	0	0

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Exit Call	False															
Phase Omit	False															
Ped Omit	False															
Recovery	False															

Level	Alt	Seq	Min	Walk	Freq	Ped	Skip	FPF	Override	FPW	Lvl	CPE	Ped	Method	Return	Ped	Wait	Ped	Override	Alt	Seq	Enabled	Force	FullPri
0	0	0	0	0	0	False		True		False	False	0	0	0	0	0	0	0	0	False		False		False
Queue		1			2			3				4			5			6						
Queue Phase		0			0			0				0			0			0						0
Queue Det		0			0			0				0			0			0						0
Queue Time		0			0			0				0			0			0						0

## Priority 5

N-Lock Delay Extend Default Pattern				Min Grn	Max Grn	No Lockout	LockoutA	LockoutB	Overlap	Pre Grn	Recall	ExCo	Phase Svc	Signal Type	Olp Blankout	Blankout
None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None
<b>Phase</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>	<b>13</b>	<b>14</b>	<b>15</b>	<b>16</b>
CO-Phase	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None
QJ-Phase	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None
<b>Detector</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>	<b>13</b>	<b>14</b>	<b>15</b>	<b>16</b>
Detector Number	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None
Bank: 1																
<b>PR. Dets</b>	<b>PE</b>	<b>1A</b>	<b>2A</b>	<b>3A</b>	<b>4A</b>	<b>5A</b>	<b>6A</b>	<b>7A</b>	<b>8A</b>	<b>9A</b>	<b>10A</b>	<b>11A</b>	<b>12A</b>	<b>13A</b>	<b>14A</b>	<b>BU</b>
TSD	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TED	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TTL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Phase</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>	<b>13</b>	<b>14</b>	<b>15</b>	<b>16</b>
Exit Call	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False
Phase Omit	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False
Ped Omit	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False
Recovery	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False
<b>Level Alt Seq Min Walk Freq Ped Skip FPF Override FPW Lvl CPE Ped Method Return Ped Wait Ped Override Alt Seq Enabled ForceFullPri</b>	0	0	0	0	0	False	True	False	False	0	0	0	0	False	False	False
<b>Queue</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>	<b>13</b>	<b>14</b>	<b>15</b>	<b>16</b>
Queue Phase	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Queue Det	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Queue Time	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bank: 2																
<b>PR. Dets</b>	<b>PE</b>	<b>1A</b>	<b>2A</b>	<b>3A</b>	<b>4A</b>	<b>5A</b>	<b>6A</b>	<b>7A</b>	<b>8A</b>	<b>9A</b>	<b>10A</b>	<b>11A</b>	<b>12A</b>	<b>13A</b>	<b>14A</b>	<b>BU</b>
TSD	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TED	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TTL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Phase</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>	<b>13</b>	<b>14</b>	<b>15</b>	<b>16</b>
Exit Call	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False
Phase Omit	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False
Ped Omit	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False
Recovery	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False
<b>Level Alt Seq Min Walk Freq Ped Skip FPF Override FPW Lvl CPE Ped Method Return Ped Wait Ped Override Alt Seq Enabled ForceFullPri</b>	0	0	0	0	0	False	True	False	False	0	0	0	0	False	False	False
<b>Queue</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>	<b>13</b>	<b>14</b>	<b>15</b>	<b>16</b>
Queue Phase	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Queue Det	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Queue Time	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bank: 3																
<b>PR. Dets</b>	<b>PE</b>	<b>1A</b>	<b>2A</b>	<b>3A</b>	<b>4A</b>	<b>5A</b>	<b>6A</b>	<b>7A</b>	<b>8A</b>	<b>9A</b>	<b>10A</b>	<b>11A</b>	<b>12A</b>	<b>13A</b>	<b>14A</b>	<b>BU</b>
TSD	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TED	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TTL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Phase</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>	<b>13</b>	<b>14</b>	<b>15</b>	<b>16</b>
Exit Call	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False
Phase Omit	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False
Ped Omit	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False
Recovery	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False
<b>Level Alt Seq Min Walk Freq Ped Skip FPF Override FPW Lvl CPE Ped Method Return Ped Wait Ped Override Alt Seq Enabled ForceFullPri</b>	0	0	0	0	0	False	True	False	False	0	0	0	0	False	False	False
<b>Queue</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>	<b>13</b>	<b>14</b>	<b>15</b>	<b>16</b>

Queue Phase	0	0	0	0	0	0	0
Queue Det	0	0	0	0	0	0	0
Queue Time	0	0	0	0	0	0	0

Bank: 4									
PR. Dets	PE	1A	2A	3A	4A	5A	6A	BU	
TSD	0	0	0	0	0	0	0	0	
TED	0	0	0	0	0	0	0	0	
TTL	0	0	0	0	0	0	0	0	

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Exit Call	False															
Phase Omit	False															
Ped Omit	False															
Recovery	False															

Level	Alt	Seq	Min Walk	Freq	Ped Skip	FPF	Override	FPW	Lvl	CPE	Ped	Method	Return	Ped Wait	Ped Override	Alt Seq	Enabled	ForceFullPri
0	0	0	0	0	False	True	False	False	0	0	0	0	0	0	0	False	False	
<b>Queue</b>	<b>1</b>		<b>2</b>			<b>3</b>				<b>4</b>		<b>5</b>		<b>6</b>		<b>7</b>		<b>8</b>
Queue Phase	0		0			0				0		0		0		0		0
Queue Det	0		0			0				0		0		0		0		0
Queue Time	0		0			0				0		0		0		0		0

**Priority 6**

N-Lock Delay Extend Default Pattern	Min Grn	Max Grn	No Lockout	LockoutA	LockoutB	Overlap	Pre Grn	Recall	ExCo	Phase Svc	Signal Type	Olp Blankout	Blankout			
None	None	None	None	None	None	None	None	None	None	None	None	None	None			
Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
CO-Phase	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None
QJ-Phase	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None
Detector	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Detector Number	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None

Bank: 1																
PR. Dets	PE	1A	2A	3A	4A	5A	6A	BU								
TSD	0	0	0	0	0	0	0	0								
TED	0	0	0	0	0	0	0	0								
TTL	0	0	0	0	0	0	0	0								
Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Exit Call	False															
Phase Omit	False															
Ped Omit	False															
Recovery	False															

Level	Alt	Seq	Min Walk	Freq	Ped Skip	FPF	Override	FPW	Lvl	CPE	Ped	Method	Return	Ped Wait	Ped Override	Alt Seq	Enabled	ForceFullPri
0	0	0	0	0	False	True	False	False	0	0	0	0	0	0	0	False	False	
<b>Queue</b>	<b>1</b>		<b>2</b>			<b>3</b>				<b>4</b>		<b>5</b>		<b>6</b>		<b>7</b>		<b>8</b>
Queue Phase	0		0			0				0		0		0		0		0
Queue Det	0		0			0				0		0		0		0		0
Queue Time	0		0			0				0		0		0		0		0

Bank: 2																
PR. Dets	PE	1A	2A	3A	4A	5A	6A	BU								
TSD	0	0	0	0	0	0	0	0								
TED	0	0	0	0	0	0	0	0								
TTL	0	0	0	0	0	0	0	0								
Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Exit Call	False															
Phase Omit	False															
Ped Omit	False															
Recovery	False															

Level	Alt	Seq	Min Walk Freq	Ped Skip	FPF	Override	FPW	Lvl	CPE	Ped	Method	Return	Ped Wait	Ped Override	Alt Seq Enabled	ForceFullPri
0	0	0	0	0	False	True	False	False	0	0	0	0	0	False	False	False
Queue		1		2		3		4		5		6				
Queue Phase		0		0		0		0		0		0				
Queue Det		0		0		0		0		0		0				
Queue Time		0		0		0		0		0		0				
Bank: 3																
PR. Dets	PE		1A		2A		3A		4A		5A		6A		BU	
TSD	0		0		0		0		0		0		0		0	
TED	0		0		0		0		0		0		0		0	
TTL	0		0		0		0		0		0		0		0	
Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Exit Call	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False
Phase Omit	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False
Ped Omit	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False
Recovery	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False
Bank: 4																
PR. Dets	PE		1A		2A		3A		4A		5A		6A		BU	
TSD	0		0		0		0		0		0		0		0	
TED	0		0		0		0		0		0		0		0	
TTL	0		0		0		0		0		0		0		0	
Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Exit Call	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False
Phase Omit	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False
Ped Omit	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False
Recovery	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False
Bank: 1																
PR. Dets	PE		1A		2A		3A		4A		5A		6A		BU	
TSD	0		0		0		0		0		0		0		0	
TED	0		0		0		0		0		0		0		0	
TTL	0		0		0		0		0		0		0		0	
Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Exit Call	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False

**Priority 7**

N-Lock	Delay	Extend	Default Pattern	Min Grn	Max Grn	No Lockout	LockoutA	LockoutB	Overlap	Pre Grn	Recall	ExCo	Phase Svc	Signal Type	Olp Blankout	Blankout
None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None
Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
CO-Phase	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None
QJ-Phase	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None
Detector	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Detector Number	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None
PR. Dets	PE		1A		2A		3A		4A		5A		6A		BU	
TSD	0		0		0		0		0		0		0		0	
TED	0		0		0		0		0		0		0		0	
TTL	0		0		0		0		0		0		0		0	
Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Exit Call	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False	False

Phase Omit	False																
Ped Omit	False																
Recovery	False																

Level	Alt	Seq	Min Walk	Freq	Ped Skip	FPF Override	FPW Lvl	CPE	Ped Method	Return Ped	Wait Ped	Override Alt Seq	Enabled Force	FullPri
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0	0	0	0	0	False	False	False	False	0	0	0	0	False	False	False
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Queue	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Queue Phase	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Queue Det	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Queue Time	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bank: 2

PR. Dets	PE	1A	2A	3A	4A	5A	6A	BU
TSD	0	0	0	0	0	0	0	0
TED	0	0	0	0	0	0	0	0
TTL	0	0	0	0	0	0	0	0

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Exit Call	False															
Phase Omit	False															
Ped Omit	False															
Recovery	False															

Level	Alt	Seq	Min Walk	Freq	Ped Skip	FPF Override	FPW Lvl	CPE	Ped Method	Return Ped	Wait Ped	Override Alt Seq	Enabled Force	FullPri
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0	0	0	0	0	False	False	False	False	0	0	0	0	False	False	False
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Queue	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Queue Phase	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Queue Det	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Queue Time	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bank: 3

PR. Dets	PE	1A	2A	3A	4A	5A	6A	BU
TSD	0	0	0	0	0	0	0	0
TED	0	0	0	0	0	0	0	0
TTL	0	0	0	0	0	0	0	0

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Exit Call	False															
Phase Omit	False															
Ped Omit	False															
Recovery	False															

Level	Alt	Seq	Min Walk	Freq	Ped Skip	FPF Override	FPW Lvl	CPE	Ped Method	Return Ped	Wait Ped	Override Alt Seq	Enabled Force	FullPri
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0	0	0	0	0	False	False	False	False	0	0	0	0	False	False	False
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Queue	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Queue Phase	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Queue Det	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Queue Time	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bank: 4

PR. Dets	PE	1A	2A	3A	4A	5A	6A	BU
TSD	0	0	0	0	0	0	0	0
TED	0	0	0	0	0	0	0	0
TTL	0	0	0	0	0	0	0	0

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Exit Call	False															
Phase Omit	False															
Ped Omit	False															
Recovery	False															

Level	Alt	Seq	Min Walk	Freq	Ped Skip	FPF Override	FPW Lvl	CPE	Ped Method	Return Ped	Wait Ped	Override Alt Seq	Enabled Force	FullPri
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0	0	0	0	0	False	False	False	False	0	0	0	0	False	False	False
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Queue	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Queue Phase	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Queue Det	0	0	0	0	0	0	0	0
Queue Time	0	0	0	0	0	0	0	0

**Priority 8**

N-Lock Delay Extend Default Pattern				Min Grn	Max Grn	No Lockout	LockoutA	LockoutB	Overlap	Pre Grn	Recall	ExCo	Phase Svc	Signal Type	Olp Blankout	Blankout
None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None
Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
CO-Phase	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None
QJ-Phase	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None
Detector	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Detector Number	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None

Bank: 1

PR. Dets	PE	1A	2A	3A	4A	5A	6A	BU
TSD	0	0	0	0	0	0	0	0
TED	0	0	0	0	0	0	0	0
TTL	0	0	0	0	0	0	0	0

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Exit Call	False															
Phase Omit	False															
Ped Omit	False															
Recovery	False															

Level	Alt	Seq	Min	Walk	Freq	Ped	Skip	FPF	Override	FPW	Lvl	CPE	Ped	Method	Return	Ped	Wait	Ped	Override	Alt	Seq	Enabled	ForceFullPri	
0	0	0	0	0	0	False		False	False	False	0	0	0	0	0	0	0	0	False	0	0	False	False	
Queue	1		2		3		4		5		6		7		8		9		10		11		12	
Queue Phase	0		0		0		0		0		0		0		0		0		0		0		0	
Queue Det	0		0		0		0		0		0		0		0		0		0		0		0	
Queue Time	0		0		0		0		0		0		0		0		0		0		0		0	

Bank: 2

PR. Dets	PE	1A	2A	3A	4A	5A	6A	BU
TSD	0	0	0	0	0	0	0	0
TED	0	0	0	0	0	0	0	0
TTL	0	0	0	0	0	0	0	0

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Exit Call	False															
Phase Omit	False															
Ped Omit	False															
Recovery	False															

Level	Alt	Seq	Min	Walk	Freq	Ped	Skip	FPF	Override	FPW	Lvl	CPE	Ped	Method	Return	Ped	Wait	Ped	Override	Alt	Seq	Enabled	ForceFullPri	
0	0	0	0	0	0	False		False	False	False	0	0	0	0	0	0	0	0	False	0	0	False	False	
Queue	1		2		3		4		5		6		7		8		9		10		11		12	
Queue Phase	0		0		0		0		0		0		0		0		0		0		0		0	
Queue Det	0		0		0		0		0		0		0		0		0		0		0		0	
Queue Time	0		0		0		0		0		0		0		0		0		0		0		0	

Bank: 3

PR. Dets	PE	1A	2A	3A	4A	5A	6A	BU
TSD	0	0	0	0	0	0	0	0
TED	0	0	0	0	0	0	0	0
TTL	0	0	0	0	0	0	0	0

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Exit Call	False															
Phase Omit	False															
Ped Omit	False															
Recovery	False															

Level	Alt	Seq	Min	Walk	Freq	Ped	Skip	FPF	Override	FPW	Lvl	CPE	Ped	Method	Return	Ped	Wait	Ped	Override	Alt	Seq	Enabled	ForceFullPri
0	0	0	0	0	0	False		False	False	False	0	0	0	0	0	0	0	0	False	0	0	False	False

0	0	0	0	0	False	False	False	False	0	0	0	0	False	False
<b>Queue</b>	<b>1</b>		<b>2</b>		<b>3</b>		<b>4</b>		<b>5</b>		<b>6</b>			
Queue Phase	0		0		0		0		0		0			
Queue Det	0		0		0		0		0		0			

Bank: 4														
PR. Dets	PE	1A	2A	3A	4A	5A	6A	BU						
TSD	0	0	0	0	0	0	0	0						0
TED	0	0	0	0	0	0	0	0						0
TTL	0	0	0	0	0	0	0	0						0

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Exit Call	False															
Phase Omit	False															
Ped Omit	False															
Recovery	False															

Level	Alt	Seq	Min Walk	Freq	Ped Skip	FPF Override	FPW Lvl	CPE Ped	Method	Return Ped	Wait Ped	Override Alt	Seq Enabled	ForceFullPri	
0	0	0	0	0	False	False	False	False	0	0	0	0	False	False	
<b>Queue</b>	<b>1</b>		<b>2</b>		<b>3</b>		<b>4</b>		<b>5</b>		<b>6</b>		<b>7</b>		<b>8</b>
Queue Phase	0		0		0		0		0		0		0		0
Queue Det	0		0		0		0		0		0		0		0
Queue Time	0		0		0		0		0		0		0		0

**Priority 9**

N-Lock Delay Extend Default Pattern	Min Grn	Max Grn	No Lockout	LockoutA	LockoutB	Overlap Pre Grn	Recall ExCoPhase Svc	Signal Type	Olp Blankout	Blankout
None	None	None	None	None	None	None	None	None	None	None
<b>Phase</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>
CO-Phase	None	None	None	None	None	None	None	None	None	None
QJ-Phase	None	None	None	None	None	None	None	None	None	None
<b>Detector</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>
Detector Number	None	None	None	None	None	None	None	None	None	None

Bank: 1																
PR. Dets	PE	1A	2A	3A	4A	5A	6A	BU								
TSD	0	0	0	0	0	0	0	0						0		
TED	0	0	0	0	0	0	0	0						0		
TTL	0	0	0	0	0	0	0	0						0		
<b>Phase</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>	<b>13</b>	<b>14</b>	<b>15</b>	<b>16</b>
Exit Call	False	False	False	False	False	False	False									
Phase Omit	False	False	False	False	False	False	False									
Ped Omit	False	False	False	False	False	False	False									
Recovery	False	False	False	False	False	False	False									

Level	Alt	Seq	Min Walk	Freq	Ped Skip	FPF Override	FPW Lvl	CPE Ped	Method	Return Ped	Wait Ped	Override Alt	Seq Enabled	ForceFullPri	
0	0	0	0	0	False	False	False	False	0	0	0	0	False	False	
<b>Queue</b>	<b>1</b>		<b>2</b>		<b>3</b>		<b>4</b>		<b>5</b>		<b>6</b>		<b>7</b>		<b>8</b>
Queue Phase	0		0		0		0		0		0		0		0
Queue Det	0		0		0		0		0		0		0		0
Queue Time	0		0		0		0		0		0		0		0

Bank: 2																
PR. Dets	PE	1A	2A	3A	4A	5A	6A	BU								
TSD	0	0	0	0	0	0	0	0						0		
TED	0	0	0	0	0	0	0	0						0		
TTL	0	0	0	0	0	0	0	0						0		
<b>Phase</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>	<b>13</b>	<b>14</b>	<b>15</b>	<b>16</b>
Exit Call	False	False	False	False	False	False	False									
Phase Omit	False	False	False	False	False	False	False									

Ped Omit	False																
Recovery	False																

Level	Alt	Seq	Min Walk	Freq	Ped Skip	FPF Override	FPW Lvl	CPE Ped	Method	Return	Ped Wait	Ped Override	Alt Seq	Enabled	ForceFullPri
0	0	0	0	0	False	False	False	False	0	0	0	0	False	False	False

Queue	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Queue Phase	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Queue Det	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Queue Time	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

PR. Dets	PE	1A	2A	3A	4A	5A	6A	BU
TSD	0	0	0	0	0	0	0	0
TED	0	0	0	0	0	0	0	0
TTL	0	0	0	0	0	0	0	0

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Exit Call	False															
Phase Omit	False															
Ped Omit	False															
Recovery	False															

Level	Alt	Seq	Min Walk	Freq	Ped Skip	FPF Override	FPW Lvl	CPE Ped	Method	Return	Ped Wait	Ped Override	Alt Seq	Enabled	ForceFullPri
0	0	0	0	0	False	False	False	False	0	0	0	0	False	False	False

Queue	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Queue Phase	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Queue Det	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Queue Time	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

PR. Dets	PE	1A	2A	3A	4A	5A	6A	BU
TSD	0	0	0	0	0	0	0	0
TED	0	0	0	0	0	0	0	0
TTL	0	0	0	0	0	0	0	0

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Exit Call	False															
Phase Omit	False															
Ped Omit	False															
Recovery	False															

Level	Alt	Seq	Min Walk	Freq	Ped Skip	FPF Override	FPW Lvl	CPE Ped	Method	Return	Ped Wait	Ped Override	Alt Seq	Enabled	ForceFullPri	
0	0	0	0	0	False	False	False	False	0	0	0	0	False	False	False	
Queue	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Queue Phase	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Queue Det	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Queue Time	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Detector	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Detector Number	None															
PR. Dets	PE	1A	2A	3A	4A	5A	6A	BU								
TSD	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TED	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Level	Alt	Seq	Min Walk Freq	Ped Skip	FPF	Override	FPW Lvl	CPE	Ped	Method	Return	Ped Wait	Ped Override	Alt Seq	Enabled	ForceFullPri
0	0	0	0	0	False	False	False	False	0	0	0	0	0	False	False	
<b>Queue</b>		<b>1</b>		<b>2</b>		<b>3</b>			<b>4</b>		<b>5</b>		<b>6</b>			
Queue Phase		0		0		0			0		0		0		0	
Queue Det		0		0		0			0		0		0		0	
Queue Time		0		0		0			0		0		0		0	

Bank: 2

Level	Alt	Seq	Min	Walk	Freq	Ped	Skip	FPF	Override	FPW	Lvl	CPE	Ped	Method	Return	Ped	Wait	Ped	Override	Alt	Seq	Enabled	ForceFullPri
0	0	0	0	0	0	False		False		False	False	0	0	0	0	0	0	0	False	0	0	False	False

<b>Queue</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
Queue Phase	0	0	0	0	0	0
Queue Det	0	0	0	0	0	0
Queue Time	0	0	0	0	0	0

Bank: 3

Level	Alt	Seq	Min Walk	Freq	Ped	Skip	FPF	Override	FPW	Lvl	CPE	Ped	Method	Return	Ped	Wait	Ped	Override	Alt	Seq	Enabled	ForceFullPri
0	0	0	0	0	0	False		False		False	False	0		0	0	0	0	False		False		

<b>Queue</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
Queue Phase	0	0	0	0	0	0
Queue Det	0	0	0	0	0	0
Queue Time	0	0	0	0	0	0

Bank: 4

Level	Alt	Seq	Min Walk	Freq	Ped	Skip	FPF	Override	FPW	Lvl	CPE	Ped	Method	Return	Ped	Wait	Ped	Override	Alt	Seq	Enabled	ForceFullPri
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Queue	1	2	3	4	5	6
Queue Phase	0	0	0	0	0	0
Queue Det	0	0	0	0	0	0
Queue Time	0	0	0	0	0	0

**Priority 11**

N-Lock Delay Extend Default				Min	Max	No Lockout	LockoutA	LockoutB	Overlap	Pre Grn	Recall	ExCo	Phase Svc	Signal Type	Olp Blankout	Blankout
None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None
<b>Phase</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>	<b>13</b>	<b>14</b>	<b>15</b>	<b>16</b>
CO-Phase	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None
QJ-Phase	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None
<b>Detector</b>	<b>1</b>	<b>2</b>	<b>3</b>		<b>4</b>		<b>5</b>		<b>6</b>		<b>7</b>		<b>8</b>		<b>9</b>	
Detector Number	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None

Bank: 1

<b>PR. Dets</b>	<b>PE</b>	<b>1A</b>	<b>2A</b>	<b>3A</b>	<b>4A</b>	<b>5A</b>	<b>6A</b>	<b>BU</b>								
TSD	0	0	0	0	0	0	0	0								
TED	0	0	0	0	0	0	0	0								
TTL	0	0	0	0	0	0	0	0								
<b>Phase</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>	<b>13</b>	<b>14</b>	<b>15</b>	<b>16</b>
Exit Call	False	False	False	False	False	False	False	False	False							
Phase Omit	False	False	False	False	False	False	False	False	False							
Ped Omit	False	False	False	False	False	False	False	False	False							
Recovery	False	False	False	False	False	False	False	False	False							

Level Alt Seq Min Walk Freq Ped Skip FPF Override FPW Lvl CPE Ped Method Return Ped Wait Ped Override Alt Seq Enabled ForceFullPri	0	0	0	0	0	False	False	False	False	0	0	0	0	False	False	False
<b>Queue</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>	<b>13</b>	<b>14</b>	<b>15</b>	<b>16</b>
Queue Phase	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Queue Det	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Queue Time	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bank: 2

<b>PR. Dets</b>	<b>PE</b>	<b>1A</b>	<b>2A</b>	<b>3A</b>	<b>4A</b>	<b>5A</b>	<b>6A</b>	<b>BU</b>								
TSD	0	0	0	0	0	0	0	0								
TED	0	0	0	0	0	0	0	0								
TTL	0	0	0	0	0	0	0	0								
<b>Phase</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>	<b>13</b>	<b>14</b>	<b>15</b>	<b>16</b>
Exit Call	False	False	False	False	False	False	False	False	False							
Phase Omit	False	False	False	False	False	False	False	False	False							
Ped Omit	False	False	False	False	False	False	False	False	False							
Recovery	False	False	False	False	False	False	False	False	False							

Level Alt Seq Min Walk Freq Ped Skip FPF Override FPW Lvl CPE Ped Method Return Ped Wait Ped Override Alt Seq Enabled ForceFullPri	0	0	0	0	0	False	False	False	False	0	0	0	0	False	False	False
<b>Queue</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>	<b>13</b>	<b>14</b>	<b>15</b>	<b>16</b>
Queue Phase	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Queue Det	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Queue Time	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Bank: 3

<b>PR. Dets</b>	<b>PE</b>	<b>1A</b>	<b>2A</b>	<b>3A</b>	<b>4A</b>	<b>5A</b>	<b>6A</b>	<b>BU</b>								
TSD	0	0	0	0	0	0	0	0								
TED	0	0	0	0	0	0	0	0								
TTL	0	0	0	0	0	0	0	0								
<b>Phase</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	<b>11</b>	<b>12</b>	<b>13</b>	<b>14</b>	<b>15</b>	<b>16</b>
Exit Call	False	False	False	False	False	False	False	False	False							
Phase Omit	False	False	False	False	False	False	False	False	False							
Ped Omit	False	False	False	False	False	False	False	False	False							
Recovery	False	False	False	False	False	False	False	False	False							

Recovery	False																
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Level	Alt	Seq	Min	Walk	Freq	Ped	Skip	FPF	Override	FPW	Lvl	CPE	Ped	Method	Return	Ped	Wait	Ped	Override	Alt	Seq	Enabled	Force	FullPri
0	0	0	0	0	0	False		False		False	False	0	0	0	0	0	0	0	False		False		False	
Queue		1			2			3				4			5			6						
Queue Phase		0			0			0				0			0			0						0
Queue Det		0			0			0				0			0			0						0
Queue Time		0			0			0				0			0			0						0

Bank: 4

PR. Dets	PE	1A	2A	3A	4A	5A	6A	BU
TSD	0	0	0	0	0	0	0	0
TED	0	0	0	0	0	0	0	0
TTL	0	0	0	0	0	0	0	0

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Exit Call	False															
Phase Omit	False															
Ped Omit	False															
Recovery	False															

Level	Alt	Seq	Min	Walk	Freq	Ped	Skip	FPF	Override	FPW	Lvl	CPE	Ped	Method	Return	Ped	Wait	Ped	Override	Alt	Seq	Enabled	Force	FullPri
0	0	0	0	0	0	False		False		False	False	0	0	0	0	0	0	0	False		False		False	
Queue		1			2			3				4			5			6						
Queue Phase		0			0			0				0			0			0						0
Queue Det		0			0			0				0			0			0						0
Queue Time		0			0			0				0			0			0						0

**Priority 12**

N-Lock	Delay	Extend	Default	Pattern	Min Grn	Max Grn	No Lockout	LockoutA	LockoutB	Overlap	Pre Grn	Recall	ExCo	Phase Svc	Signal Type	Olp Blankout	Blankout
None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None
Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
CO-Phase	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None
QJ-Phase	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None
Detector	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Detector Number	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None	None

Bank: 1

PR. Dets	PE	1A	2A	3A	4A	5A	6A	BU
TSD	0	0	0	0	0	0	0	0
TED	0	0	0	0	0	0	0	0
TTL	0	0	0	0	0	0	0	0

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Exit Call	False															
Phase Omit	False															
Ped Omit	False															
Recovery	False															

Level	Alt	Seq	Min	Walk	Freq	Ped	Skip	FPF	Override	FPW	Lvl	CPE	Ped	Method	Return	Ped	Wait	Ped	Override	Alt	Seq	Enabled	Force	FullPri
0	0	0	0	0	0	False		False		False	False	0	0	0	0	0	0	0	False		False		False	
Queue		1			2			3				4			5			6						
Queue Phase		0			0			0				0			0			0						0
Queue Det		0			0			0				0			0			0						0
Queue Time		0			0			0				0			0			0						0

Bank: 2

PR. Dets	PE	1A	2A	3A	4A	5A	6A	BU
TSD	0	0	0	0	0	0	0	0
TED	0	0	0	0	0	0	0	0
TTL	0	0	0	0	0	0	0	0

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Exit Call	False															
Phase Omit	False															
Ped Omit	False															
Recovery	False															

Level	Alt	Seq	Min Walk Freq	Ped Skip FPF	Override FPW	Lvl CPE	Ped Method	Return Ped	Wait Ped	Override Alt	Seq Enabled	ForceFullPri
0	0	0	0	0	False	False	False	False	0	0	0	False
Queue	1	2	3	4	5	6	7	8	9	10	11	12
Queue Phase	0	0	0	0	0	0	0	0	0	0	0	0
Queue Det	0	0	0	0	0	0	0	0	0	0	0	0
Queue Time	0	0	0	0	0	0	0	0	0	0	0	0

Bank: 3												
PR. Dets	PE	1A	2A	3A	4A	5A	6A	BU	14	15	16	17
TSD	0	0	0	0	0	0	0	0	0	0	0	0
TED	0	0	0	0	0	0	0	0	0	0	0	0
TTL	0	0	0	0	0	0	0	0	0	0	0	0

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Exit Call	False															
Phase Omit	False															
Ped Omit	False															
Recovery	False															

Level	Alt	Seq	Min Walk Freq	Ped Skip FPF	Override FPW	Lvl CPE	Ped Method	Return Ped	Wait Ped	Override Alt	Seq Enabled	ForceFullPri
0	0	0	0	0	False	False	False	False	0	0	0	False
Queue	1	2	3	4	5	6	7	8	9	10	11	12
Queue Phase	0	0	0	0	0	0	0	0	0	0	0	0
Queue Det	0	0	0	0	0	0	0	0	0	0	0	0
Queue Time	0	0	0	0	0	0	0	0	0	0	0	0

Bank: 4												
PR. Dets	PE	1A	2A	3A	4A	5A	6A	BU	14	15	16	17
TSD	0	0	0	0	0	0	0	0	0	0	0	0
TED	0	0	0	0	0	0	0	0	0	0	0	0
TTL	0	0	0	0	0	0	0	0	0	0	0	0

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Exit Call	False															
Phase Omit	False															
Ped Omit	False															
Recovery	False															

Level	Alt	Seq	Min Walk Freq	Ped Skip FPF	Override FPW	Lvl CPE	Ped Method	Return Ped	Wait Ped	Override Alt	Seq Enabled	ForceFullPri
0	0	0	0	0	False	False	False	False	0	0	0	False
Queue	1	2	3	4	5	6	7	8	9	10	11	12
Queue Phase	0	0	0	0	0	0	0	0	0	0	0	0
Queue Det	0	0	0	0	0	0	0	0	0	0	0	0
Queue Time	0	0	0	0	0	0	0	0	0	0	0	0

# SEPAC ECOM All Data

3/15/2024  
2:47:52PM

Intersection Name: **Hwy2 & 104th**

Intersection Alias: **104Hwy2**

## Access Data

1 :1200 Baud
3 :1200 Baud

Access Code: **9999**

Channel:

Address: **1**

Revision: **3.58**

IP Address: **10.254.4.138**

## Phase Initialization Data

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Initial	1-Inact	3-Yel	1-Inact	1-Inact	1-Inact	3-Yel	1-Inact	1-Inact	0-None							

## PHASE DATA

Vehical Basic Timings								Misc Timings				Pedestrian Timings									
Min	All	Dyn	Dyn	Walk	Walk	Bike	Bike	Ped	Alt	Alt	Flash	Ext	Rest in	Act.							
PhaseGrn	Passage	Max1	Max2	Yellow	Red	Max	Step	Green	Yellow	Offset	Offset	Mode	Green	Psg	Walk	Clr	Ped	Walk	Ped	Clr	Walk

## Phase Data Bank: 1

1	5	3.0	25	0	3.0	2.0	0	0.0	0.0	0.0	0	0-Advance	0.0	0.0	0	0	0	0	No	0	No
2	8	8.0	45	0	4.0	2.0	0	0.0	0.0	0.0	0	0-Advance	0.0	0.0	5	38	0	0	No	0	No
3	12	5.0	30	0	3.0	2.0	0	0.0	0.0	0.0	0	0-Advance	0.0	0.0	0	0	0	0	No	0	No
4	8	4.0	40	0	4.0	2.0	0	0.0	0.0	0.0	0	0-Advance	0.0	0.0	5	26	0	0	No	0	No
5	5	3.0	25	0	3.0	2.0	0	0.0	0.0	0.0	0	0-Advance	0.0	0.0	0	0	0	0	No	0	No
6	8	8.0	45	0	4.0	2.0	0	0.0	0.0	0.0	0	0-Advance	0.0	0.0	5	38	0	0	No	0	No
7	5	4.0	20	0	3.0	2.0	0	0.0	0.0	0.0	0	0-Advance	0.0	0.0	0	0	0	0	No	0	No
8	8	4.0	40	60	4.0	2.0	0	0.0	0.0	0.0	0	0-Advance	0.0	0.0	5	26	0	0	No	0	No
9	0	0.0	0	0	3.0	0.0	0	0.0	0.0	0.0	0	0-Advance	0.0	0.0	0	0	0	0	No	0	No
10	0	0.0	0	0	3.0	0.0	0	0.0	0.0	0.0	0	0-Advance	0.0	0.0	0	0	0	0	No	0	No
11	0	0.0	0	0	3.0	0.0	0	0.0	0.0	0.0	0	0-Advance	0.0	0.0	0	0	0	0	No	0	No
12	0	0.0	0	0	3.0	0.0	0	0.0	0.0	0.0	0	0-Advance	0.0	0.0	0	0	0	0	No	0	No
13	0	0.0	0	0	3.0	0.0	0	0.0	0.0	0.0	0	0-Advance	0.0	0.0	0	0	0	0	No	0	No
14	0	0.0	0	0	3.0	0.0	0	0.0	0.0	0.0	0	0-Advance	0.0	0.0	0	0	0	0	No	0	No
15	0	0.0	0	0	3.0	0.0	0	0.0	0.0	0.0	0	0-Advance	0.0	0.0	0	0	0	0	No	0	No
16	0	0.0	0	0	3.0	0.0	0	0.0	0.0	0.0	0	0-Advance	0.0	0.0	0	0	0	0	No	0	No

## Phase Data Bank: 2

1	10	4.0	25	30	4.0	1.0	0	0.0	0.0	0.0	0	0-Advance	0.0	0.0	0	0	0	0	No	0	No
2	15	5.0	35	50	4.0	1.0	0	0.0	0.0	0.0	0	0-Advance	0.0	0.0	7	8	0	0	No	0	No
3	10	4.0	25	30	4.0	1.0	0	0.0	0.0	0.0	0	0-Advance	0.0	0.0	0	0	0	0	No	0	No
4	15	5.0	35	50	4.0	1.0	0	0.0	0.0	0.0	0	0-Advance	0.0	0.0	7	8	0	0	No	0	No
5	10	4.0	25	30	4.0	1.0	0	0.0	0.0	0.0	0	0-Advance	0.0	0.0	0	0	0	0	No	0	No
6	15	5.0	35	50	4.0	1.0	0	0.0	0.0	0.0	0	0-Advance	0.0	0.0	7	8	0	0	No	0	No
7	10	4.0	25	30	4.0	1.0	0	0.0	0.0	0.0	0	0-Advance	0.0	0.0	0	0	0	0	No	0	No
8	15	5.0	35	50	4.0	1.0	0	0.0	0.0	0.0	0	0-Advance	0.0	0.0	7	8	0	0	No	0	No
9	0	0.0	0	0	3.0	0.0	0	0.0	0.0	0.0	0	0-Advance	0.0	0.0	0	0	0	0	No	0	No
10	0	0.0	0	0	3.0	0.0	0	0.0	0.0	0.0	0	0-Advance	0.0	0.0	0	0	0	0	No	0	No
11	0	0.0	0	0	3.0	0.0	0	0.0	0.0	0.0	0	0-Advance	0.0	0.0	0	0	0	0	No	0	No
12	0	0.0	0	0	3.0	0.0	0	0.0	0.0	0.0	0	0-Advance	0.0	0.0	0	0	0	0	No	0	No
13	0	0.0	0	0	3.0	0.0	0	0.0	0.0	0.0	0	0-Advance	0.0	0.0	0	0	0	0	No	0	No



Vehicle Density Timings							General Control					Miscellaneous					No	Special Sequence		
Added Ph.	Max Initial	Time Initial	Car Redu	Time B4 Redu	Min To Redu	Gap	Non-Act Response	Veh Recall	Veh Delay	Ped Recall	Ped Delay	Last Non Lock	Last Dual Entry	Last Car Pass	Last Condit Service	Last Simu Gap Out	Minus Omit	Yel Omit	Call	
1	0.0	0	0	0	0	3.0	None	None	0	None	0	Yes	No	No	No	No	0	0	0	
<b>Phase Data Bank: 1</b>																				
2	0.0	0	0	0	0	4.7	NonActI	None	0	None	0	Yes	Yes	No	No	No	0	0	0	
3	0.0	0	0	0	0	3.0	None	Min	0	None	0	Yes	No	No	No	No	0	0	0	
4	0.0	0	0	0	0	4.0	NonActII	Min	0	None	0	Yes	Yes	No	No	No	0	0	0	
5	0.0	0	0	0	0	3.0	None	None	0	None	0	Yes	No	No	No	No	0	0	0	
6	0.0	0	0	0	0	4.7	NonActI	None	0	None	0	Yes	Yes	No	No	No	0	0	0	
7	0.0	0	0	0	0	3.0	None	None	0	None	0	Yes	No	No	No	No	0	0	0	
8	0.0	0	0	0	0	4.0	NonActII	Min	0	None	0	Yes	Yes	No	No	No	0	0	0	
9	0.0	0	0	0	0	0.0	None	None	0	None	0	No	No	No	No	No	0	0	0	
10	0.0	0	0	0	0	0.0	None	None	0	None	0	No	No	No	No	No	0	0	0	
11	0.0	0	0	0	0	0.0	None	None	0	None	0	No	No	No	No	No	0	0	0	
12	0.0	0	0	0	0	0.0	None	None	0	None	0	No	No	No	No	No	0	0	0	
13	0.0	0	0	0	0	0.0	None	None	0	None	0	No	No	No	No	No	0	0	0	
14	0.0	0	0	0	0	0.0	None	None	0	None	0	No	No	No	No	No	0	0	0	
15	0.0	0	0	0	0	0.0	None	None	0	None	0	No	No	No	No	No	0	0	0	
16	0.0	0	0	0	0	0.0	None	None	0	None	0	No	No	No	No	No	0	0	0	
Vol/Occ period: 0																				
<b>Phase Data Bank: 2</b>																				
1	0.0	0	0	0	0	0.0	None	None	0	None	0	No	No	No	No	No	0	0	0	
2	0.0	0	0	0	0	0.0	NonActI	None	0	None	0	No	No	No	No	No	0	0	0	
3	0.0	0	0	0	0	0.0	None	None	0	None	0	No	No	No	No	No	0	0	0	
4	0.0	0	0	0	0	0.0	NonActII	None	0	None	0	No	No	No	No	No	0	0	0	
5	0.0	0	0	0	0	0.0	None	None	0	None	0	No	No	No	No	No	0	0	0	
6	0.0	0	0	0	0	0.0	NonActI	None	0	None	0	No	No	No	No	No	0	0	0	
7	0.0	0	0	0	0	0.0	None	None	0	None	0	No	No	No	No	No	0	0	0	
8	0.0	0	0	0	0	0.0	NonActII	None	0	None	0	No	No	No	No	No	0	0	0	
9	0.0	0	0	0	0	0.0	None	None	0	None	0	No	No	No	No	No	0	0	0	
10	0.0	0	0	0	0	0.0	None	None	0	None	0	No	No	No	No	No	0	0	0	
11	0.0	0	0	0	0	0.0	None	None	0	None	0	No	No	No	No	No	0	0	0	
12	0.0	0	0	0	0	0.0	None	None	0	None	0	No	No	No	No	No	0	0	0	
13	0.0	0	0	0	0	0.0	None	None	0	None	0	No	No	No	No	No	0	0	0	
14	0.0	0	0	0	0	0.0	None	None	0	None	0	No	No	No	No	No	0	0	0	
15	0.0	0	0	0	0	0.0	None	None	0	None	0	No	No	No	No	No	0	0	0	
16	0.0	0	0	0	0	0.0	None	None	0	None	0	No	No	No	No	No	0	0	0	
Vol/Occ period: 0																				
<b>Phase Data Bank: 3</b>																				
1	0.0	0	0	0	0	0.0	None	None	0	None	0	No	No	No	No	No	0	0	0	
2	0.0	0	0	0	0	0.0	NonActI	None	0	None	0	No	No	No	No	No	0	0	0	
3	0.0	0	0	0	0	0.0	None	None	0	None	0	No	No	No	No	No	0	0	0	
4	0.0	0	0	0	0	0.0	NonActII	None	0	None	0	No	No	No	No	No	0	0	0	
5	0.0	0	0	0	0	0.0	None	None	0	None	0	No	No	No	No	No	0	0	0	
6	0.0	0	0	0	0	0.0	NonActI	None	0	None	0	No	No	No	No	No	0	0	0	
7	0.0	0	0	0	0	0.0	None	None	0	None	0	No	No	No	No	No	0	0	0	
8	0.0	0	0	0	0	0.0	NonActII	None	0	None	0	No	No	No	No	No	0	0	0	
9	0.0	0	0	0	0	0.0	None	None	0	None	0	No	No	No	No	No	0	0	0	

10	0.0	0	0	0	0	0.0	None	None	0	None	0	No	No	No	No	No	0	0	0
11	0.0	0	0	0	0	0.0	None	None	0	None	0	No	No	No	No	No	0	0	0
12	0.0	0	0	0	0	0.0	None	None	0	None	0	No	No	No	No	No	0	0	0
13	0.0	0	0	0	0	0.0	None	None	0	None	0	No	No	No	No	No	0	0	0
14	0.0	0	0	0	0	0.0	None	None	0	None	0	No	No	No	No	No	0	0	0
15	0.0	0	0	0	0	0.0	None	None	0	None	0	No	No	No	No	No	0	0	0
16	0.0	0	0	0	0	0.0	None	None	0	None	0	No	No	No	No	No	0	0	0

Vol/Occ period: 0

### Phase Data Bank: 4

1	0.0	0	0	0	0	0.0	None	None	0	None	0	No	No	No	No	No	0	0	0
2	0.0	0	0	0	0	0.0	NonActI	None	0	None	0	No	No	No	No	No	0	0	0
3	0.0	0	0	0	0	0.0	None	None	0	None	0	No	No	No	No	No	0	0	0
4	0.0	0	0	0	0	0.0	NonActII	None	0	None	0	No	No	No	No	No	0	0	0
5	0.0	0	0	0	0	0.0	None	None	0	None	0	No	No	No	No	No	0	0	0
6	0.0	0	0	0	0	0.0	NonActI	None	0	None	0	No	No	No	No	No	0	0	0
7	0.0	0	0	0	0	0.0	None	None	0	None	0	No	No	No	No	No	0	0	0
8	0.0	0	0	0	0	0.0	NonActII	None	0	None	0	No	No	No	No	No	0	0	0
9	0.0	0	0	0	0	0.0	None	None	0	None	0	No	No	No	No	No	0	0	0
10	0.0	0	0	0	0	0.0	None	None	0	None	0	No	No	No	No	No	0	0	0
11	0.0	0	0	0	0	0.0	None	None	0	None	0	No	No	No	No	No	0	0	0
12	0.0	0	0	0	0	0.0	None	None	0	None	0	No	No	No	No	No	0	0	0
13	0.0	0	0	0	0	0.0	None	None	0	None	0	No	No	No	No	No	0	0	0
14	0.0	0	0	0	0	0.0	None	None	0	None	0	No	No	No	No	No	0	0	0
15	0.0	0	0	0	0	0.0	None	None	0	None	0	No	No	No	No	No	0	0	0
16	0.0	0	0	0	0	0.0	None	None	0	None	0	No	No	No	No	No	0	0	0

Vol/Occ period: 0

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**Vehicle Detector Values****Phase Data Bank: 1**

Det	Assigned Phase	Switch Phase	Op Mode	Extend	Delay	Queue Limit	Failed Time	Lock	Volume Log	Occup Log	Passage	Queue	Added Initial	Call
1	1	-	0	0.0	5.0	0	255	0	N	N	Y	N	Y	Y
2	2	-	0	0.0	0.0	0	255	0	N	N	Y	N	Y	Y
3	3	-	0	0.0	5.0	0	255	0	N	N	Y	N	Y	Y
4	4	-	0	0.0	0.0	0	255	0	N	N	Y	N	Y	Y
5	5	-	0	0.0	5.0	0	255	0	N	N	Y	N	Y	Y
6	6	-	0	0.0	0.0	0	255	0	N	N	Y	N	Y	Y
7	7	-	0	0.0	5.0	0	255	0	N	N	Y	N	Y	Y
8	8	-	0	0.0	0.0	0	255	0	N	N	Y	N	Y	Y
49	2	-	0	0.0	0.0	0	255	0	N	N	Y	N	N	N
53	6	-	0	0.0	0.0	0	255	0	N	N	Y	N	N	Y

**Phase Data Bank: 2**

Det	Assigned Phase	Switch Phase	Op Mode	Extend	Delay	Queue Limit	Failed Time	Lock	Volume Log	Occup Log	Passage	Queue	Added Initial	Call
1	1	-	0	0.0	0.0	0	255	0	N	N	Y	N	Y	Y
2	2	-	0	0.0	0.0	0	255	0	N	N	Y	N	Y	Y
3	3	-	0	0.0	0.0	0	255	0	N	N	Y	N	Y	Y
4	4	-	0	0.0	0.0	0	255	0	N	N	Y	N	Y	Y
5	5	-	0	0.0	0.0	0	255	0	N	N	Y	N	Y	Y
6	6	-	0	0.0	0.0	0	255	0	N	N	Y	N	Y	Y
7	7	-	0	0.0	0.0	0	255	0	N	N	Y	N	Y	Y
8	8	-	0	0.0	0.0	0	255	0	N	N	Y	N	Y	Y

**Phase Data Bank: 3**

Det	Assigned Phase	Switch Phase	Op Mode	Extend	Delay	Queue Limit	Failed Time	Lock	Volume Log	Occup Log	Passage	Queue	Added Initial	Call
1	1	-	0	0.0	0.0	0	255	0	N	N	Y	N	Y	Y
2	2	-	0	0.0	0.0	0	255	0	N	N	Y	N	Y	Y
3	3	-	0	0.0	0.0	0	255	0	N	N	Y	N	Y	Y
4	4	-	0	0.0	0.0	0	255	0	N	N	Y	N	Y	Y
5	5	-	0	0.0	0.0	0	255	0	N	N	Y	N	Y	Y
6	6	-	0	0.0	0.0	0	255	0	N	N	Y	N	Y	Y
7	7	-	0	0.0	0.0	0	255	0	N	N	Y	N	Y	Y
8	8	-	0	0.0	0.0	0	255	0	N	N	Y	N	Y	Y

**Phase Data Bank: 4**

Det	Assigned Phase	Switch Phase	Op Mode	Extend	Delay	Queue Limit	Failed Time	Lock	Volume Log	Occup Log	Passage	Queue	Added Initial	Call
1	1	-	0	0.0	0.0	0	255	0	N	N	Y	N	Y	Y
2	2	-	0	0.0	0.0	0	255	0	N	N	Y	N	Y	Y
3	3	-	0	0.0	0.0	0	255	0	N	N	Y	N	Y	Y
4	4	-	0	0.0	0.0	0	255	0	N	N	Y	N	Y	Y
5	5	-	0	0.0	0.0	0	255	0	N	N	Y	N	Y	Y
6	6	-	0	0.0	0.0	0	255	0	N	N	Y	N	Y	Y
7	7	-	0	0.0	0.0	0	255	0	N	N	Y	N	Y	Y
8	8	-	0	0.0	0.0	0	255	0	N	N	Y	N	Y	Y

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**Ped Detector Values****Phase Data Bank: 1**

Det	Assigned Phase	Switch Phase	Op Mode	Extend	Delay	Queue Limit	Failed Time	Lock	Volume Log	Occup Log	Passage	Queue	Added Initial	Call
1	2	-	1	0.0	0.0	0	255	0	N	N	N	N	N	Y
2	4	-	1	0.0	0.0	0	255	0	N	N	N	N	N	Y
3	6	-	1	0.0	0.0	0	255	0	N	N	N	N	N	Y
4	8	-	1	0.0	0.0	0	255	0	N	N	N	N	N	Y
5	5	-	1	0.0	0.0	0	255	0	N	N	N	N	N	Y
6	6	-	1	0.0	0.0	0	255	0	N	N	N	N	N	Y
7	7	-	1	0.0	0.0	0	255	0	N	N	N	N	N	Y
8	8	-	1	0.0	0.0	0	255	0	N	N	N	N	N	Y

**Phase Data Bank: 2**

Det	Assigned Phase	Switch Phase	Op Mode	Extend	Delay	Queue Limit	Failed Time	Lock	Volume Log	Occup Log	Passage	Queue	Added Initial	Call
1	1	-	1	0.0	0.0	0	255	0	N	N	N	N	N	Y
2	2	-	1	0.0	0.0	0	255	0	N	N	N	N	N	Y
3	3	-	1	0.0	0.0	0	255	0	N	N	N	N	N	Y
4	4	-	1	0.0	0.0	0	255	0	N	N	N	N	N	Y
5	5	-	1	0.0	0.0	0	255	0	N	N	N	N	N	Y
6	6	-	1	0.0	0.0	0	255	0	N	N	N	N	N	Y
7	7	-	1	0.0	0.0	0	255	0	N	N	N	N	N	Y
8	8	-	1	0.0	0.0	0	255	0	N	N	N	N	N	Y

**Phase Data Bank: 3**

Det	Assigned Phase	Switch Phase	Op Mode	Extend	Delay	Queue Limit	Failed Time	Lock	Volume Log	Occup Log	Passage	Queue	Added Initial	Call
1	1	-	1	0.0	0.0	0	255	0	N	N	N	N	N	Y
2	2	-	1	0.0	0.0	0	255	0	N	N	N	N	N	Y
3	3	-	1	0.0	0.0	0	255	0	N	N	N	N	N	Y
4	4	-	1	0.0	0.0	0	255	0	N	N	N	N	N	Y
5	5	-	1	0.0	0.0	0	255	0	N	N	N	N	N	Y
6	6	-	1	0.0	0.0	0	255	0	N	N	N	N	N	Y
7	7	-	1	0.0	0.0	0	255	0	N	N	N	N	N	Y
8	8	-	1	0.0	0.0	0	255	0	N	N	N	N	N	Y

**Phase Data Bank: 4**

Det	Assigned Phase	Switch Phase	Op Mode	Extend	Delay	Queue Limit	Failed Time	Lock	Volume Log	Occup Log	Passage	Queue	Added Initial	Call
1	1	-	1	0.0	0.0	0	255	0	N	N	N	N	N	Y
2	2	-	1	0.0	0.0	0	255	0	N	N	N	N	N	Y
3	3	-	1	0.0	0.0	0	255	0	N	N	N	N	N	Y
4	4	-	1	0.0	0.0	0	255	0	N	N	N	N	N	Y
5	5	-	1	0.0	0.0	0	255	0	N	N	N	N	N	Y
6	6	-	1	0.0	0.0	0	255	0	N	N	N	N	N	Y
7	7	-	1	0.0	0.0	0	255	0	N	N	N	N	N	Y
8	8	-	1	0.0	0.0	0	255	0	N	N	N	N	N	Y

## Special Detector Values

### Phase Data Bank:

Det	Assigned Phase	Switch Phase	Op Mode	Extend Delay	Queue Limit	Failed Time	Lock	Volume Log	Occupy Log	Passage Queue	Added Initial	Call
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## Unit Data

### General Control

Startup Time:	6 sec	Input Ring	Output Respons	Selection
Startup State:	Flash			
Red Revert:	4.0 sec	1	Ring 1	Ring 1
Auto Ped Clr:	No	2	Ring 2	Ring 2
Stop T Reset:	No	3	None	None
Alt Sequence:	0	4	None	None
Special Seq:	0-Standard			
I/O Modes:				
ABC Input(Entry) Modes:	0		D Input(Entry) Modes:	0
ABC Output(O/STS) Modes:	0		D Output(O/STS) Modes:	0

### Remote Flash

Test A = Flash

Phase Entry Exit

**Default Data**  
**- No Flash**

**Default Data**  
**- No Flash**

### Not Assigned Overlaps

E, F, G, H, I, J, K, L, M, N, O, P

### Standard Overlaps

Overlap	Trail Green (sec)	Yellow (sec)	Red (sec)	Tr. Grn Pt. (sec)	Parent Phases	Plus Green Phases	Minus G/Y Phases	Minus PED Phases
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### FYA Overlaps

Overlap	Delay (sec)	Permissive Phases	Protected Phases	Minus PED Phases	Permissive Overlaps	Protected Overlaps
A	0.0	2	1			
B	0.0	4	3			
C	0.0	6	5			
D	0.0	8	7			

### Pedestrian Overlaps

Overlap	Ped Walk 1 (sec)	Ped Clr 1 (sec)	Ped Walk 2 (sec)	Ped Clr 2 (sec)	Parent Phases (sec)
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### Priority Overlaps

Overlap	Transit Yellow (sec)	Transit Red (sec)
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Ring			Phase(s)																
Phase	Ring	Next Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
			Concurrent Phases	1	2	3	4	1	1	3	3	9	10	11	12	13	14	15	16
1	1	2		5	5	7	7	2	2	4	4								
2	1	3		6	6	8	8	5	6	7	8								
3	1	4																	
4	1	1																	
5	2	6																	
6	2	7																	
7	2	8																	
8	2	5																	

### Alternate Sequences

No Alternate Sequences  
Programmed

### Port 1 Data

BIU Addr	Port Status	Basic Det	Message
0	Used	No	No
1	Used	No	No
8	Used	No	No
11	Used	No	No
16	Used	No	No
18	Used	No	No

Load Switch	Red Type	Red Arg	Yellow Type	Yellow Arg	Green Type	Green Arg
1	1 - Phase Vehicle 1	Red	1 - Phase Vehicle 1	Yellow	1 - Phase Vehicle 1	Green
2	2 - Phase Vehicle 2	Red	2 - Phase Vehicle 2	Yellow	2 - Phase Vehicle 2	Green
3	3 - Phase Vehicle 3	Red	3 - Phase Vehicle 3	Yellow	3 - Phase Vehicle 3	Green
4	4 - Phase Vehicle 4	Red	4 - Phase Vehicle 4	Yellow	4 - Phase Vehicle 4	Green
5	5 - Phase Vehicle 5	Red	5 - Phase Vehicle 5	Yellow	5 - Phase Vehicle 5	Green
6	6 - Phase Vehicle 6	Red	6 - Phase Vehicle 6	Yellow	6 - Phase Vehicle 6	Green
7	7 - Phase Vehicle 7	Red	7 - Phase Vehicle 7	Yellow	7 - Phase Vehicle 7	Green
8	8 - Phase Vehicle 8	Red	8 - Phase Vehicle 8	Yellow	8 - Phase Vehicle 8	Green
9	18 - Phase Pedestrian 2	Don't Walk	37 - Overlap E	Green	18 - Phase Pedestrian 2	Walk
10	20 - Phase Pedestrian 4	Don't Walk	20 - Phase Pedestrian 4	Ped Clear	20 - Phase Pedestrian 4	Walk
11	22 - Phase Pedestrian 6	Don't Walk	22 - Phase Pedestrian 6	Ped Clear	22 - Phase Pedestrian 6	Walk
12	24 - Phase Pedestrian 8	Don't Walk	24 - Phase Pedestrian 8	Ped Clear	24 - Phase Pedestrian 8	Walk
13	33 - Overlap A	Red	33 - Overlap A	Yellow	33 - Overlap A	Green
14	34 - Overlap B	Red	34 - Overlap B	Yellow	34 - Overlap B	Green
15	35 - Overlap C	Red	35 - Overlap C	Yellow	35 - Overlap C	Green
16	36 - Overlap D	Red	36 - Overlap D	Yellow	36 - Overlap D	Green
17	17 - Phase Pedestrian 1	Don't Walk	17 - Phase Pedestrian 1	Ped Clear	17 - Phase Pedestrian 1	Walk
18	19 - Phase Pedestrian 3	Don't Walk	19 - Phase Pedestrian 3	Ped Clear	19 - Phase Pedestrian 3	Walk
19	21 - Phase Pedestrian 5	Don't Walk	21 - Phase Pedestrian 5	Ped Clear	21 - Phase Pedestrian 5	Walk
20	23 - Phase Pedestrian 7	Don't Walk	23 - Phase Pedestrian 7	Ped Clear	23 - Phase Pedestrian 7	Walk
21	61 - Phase Status 1	On	61 - Phase Status 1	Next	61 - Phase Status 1	Check
22	62 - Phase Status 2	On	62 - Phase Status 2	Next	62 - Phase Status 2	Check
23	63 - Phase Status 3	On	63 - Phase Status 3	Next	63 - Phase Status 3	Check
24	64 - Phase Status 4	On	64 - Phase Status 4	Next	64 - Phase Status 4	Check
25	65 - Phase Status 5	On	65 - Phase Status 5	Next	65 - Phase Status 5	Check
26	66 - Phase Status 6	On	66 - Phase Status 6	Next	66 - Phase Status 6	Check
27	67 - Phase Status 7	On	67 - Phase Status 7	Next	67 - Phase Status 7	Check
28	68 - Phase Status 8	On	68 - Phase Status 8	Next	68 - Phase Status 8	Check
29	0 - None	None	0 - None	None	0 - None	None
30	0 - None	None	0 - None	None	0 - None	None
31	0 - None	None	0 - None	None	0 - None	None
32	0 - None	None	0 - None	None	0 - None	None

## P2P Sources

### Unit Bank:

ID	Peer IP	Timeout	PeerName

## Peer Functions

### Unit Bank:

ID	Peer ID	Source Function	Source Index	Input Function	Input Index	Fail State

## Coordination Data

### General Coordination Data

<b>Operation Mode:</b> 1=Auto	<b>Offset Mode:</b> 1=End Grn	<b>Manual Dial:</b> 1	<b>Dial/Split</b>	<b>Cycle</b>
<b>Coordination Mode:</b> 5=Fully Actuated	<b>Force Mode:</b> 0=Plan	<b>Manual Split:</b> 1	1/1	120
<b>Maximun Mode:</b> 0=Inhibit	<b>Max Dwell Time:</b> 41	<b>Manual Offset:</b> 1	1/3	120
<b>Correction Mode:</b> 3=Short Way Plus	<b>Yield Period:</b> 0		1/4	120
			2/1	120
			3/1	120

## Split Times and Phase Modes

### Dial 1 /Split 1

Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode
1	18	0=Actuated	2	35	0=Actuated	3	27	3=Max Recall	4	40	1=Coordinate
5	18	0=Actuated	6	35	0=Actuated	7	20	0=Actuated	8	47	1=Coordinate

### Dial 1 /Split 3

Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode
1	20	0=Actuated	2	36	0=Actuated	3	23	3=Max Recall	4	41	1=Coordinate
5	20	0=Actuated	6	36	0=Actuated	7	20	0=Actuated	8	44	1=Coordinate

### Dial 1 /Split 4

Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode
1	20	0=Actuated	2	36	0=Actuated	3	20	3=Max Recall	4	44	1=Coordinate
5	20	0=Actuated	6	36	0=Actuated	7	20	0=Actuated	8	44	1=Coordinate

### Dial 2 /Split 1

Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode
1	25	0=Actuated	2	41	1=Coordinate	3	24	0=Actuated	4	30	0=Actuated
5	25	0=Actuated	6	41	1=Coordinate	7	24	0=Actuated	8	30	0=Actuated

### Dial 3 /Split 1

Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode	Ph.	Splits	Ph. Mode
1	20	0=Actuated	2	36	1=Coordinate	3	20	0=Actuated	4	44	0=Actuated
5	20	0=Actuated	6	36	1=Coordinate	7	20	0=Actuated	8	44	0=Actuated

## Traffic Plan Data

Plan: 1/1/1	Offset Time: 90 Mode: 0=Normal	Alternat Sequence: 0 Special Function: 0	Rg 2 Lag Time: 0 Correction Mode: 0=No	Rg 3 Lag Time: 0	Rg 4 Lag Time: 0
Plan: 1/3/1	Offset Time: 80 Mode: 0=Normal	Alternat Sequence: 0 Special Function: 0	Rg 2 Lag Time: 0 Correction Mode: 3=Shortway	Rg 3 Lag Time: 0	Rg 4 Lag Time: 0
Plan: 1/4/1	Offset Time: 80 Mode: 0=Normal	Alternat Sequence: 0 Special Function: 0	Rg 2 Lag Time: 0 Correction Mode: 3=Shortway	Rg 3 Lag Time: 0	Rg 4 Lag Time: 0
Plan: 3/1/1	Offset Time: 101 Mode: 0=Normal	Alternat Sequence: 0 Special Function: 0	Rg 2 Lag Time: 0 Correction Mode: 0=No	Rg 3 Lag Time: 0	Rg 4 Lag Time: 0

## Local TBC Data

Start of Daylight Saving Month: 3 Week: 2 Cycle Zero ReferenceHours: 24 Min: 0

End of Daylight Saving Month: 11 Week: 1

Source Day	Equate Days						
	1	2	3	4	5	6	7
2	3	4	5	6	0	0	0

## Traffic Data

Event	Day	Time	D/S/O	flash	PHASE FUNCTION														
					1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	2	5:45	1/1/1																
2	2	9:0	0/0/4																
3	2	15:0	1/3/1																
4	2	19:0	0/0/4																

## AUX. Events

Event	Program Day	Hour	Aux Outputs	Det.	Det.	Det.	Special Function Outputs							
				Diag.	Rpt.	Mult100	Dimming	1	2	3	4	5	6	7
				<input type="checkbox"/>										

Default Data - No Special Day(s) or Week(s) Programmed

## Special Functions

Function	SF1	SF2	SF3	SF4	SF5	SF6	SF7	SF8	SF9	SF10	SF11	SF12	SF13	SF14	SF15	SF16
Special Function 1	X															
Special Function 2		X														
Special Function 3			X													
Special Function 4				X												
Special Function 5					X											
Special Function 6						X										
Special Function 7							X									
Special Function 8								X								

## Phase Function

	PF1	PF2	PF3	PF4	PF5	PF6	PF7	PF8	PF9	PF10	PF11	PF12	PF13	PF14	PF15	PF16
Phase 1 Max2	X															
Phase 2 Max2		X														
Phase 3 Max2			X													
Phase 4 Max2				X												
Phase 5 Max2					X											
Phase 6 Max2						X										
Phase 7 Max2							X									
Phase 8 Max2								X								

## Phase Omit

	PF1	PF2	PF3	PF4	PF5	PF6	PF7	PF8	PF9	PF10	PF11	PF12	PF13	PF14	PF15	PF16
Phase 1 Phase Omit									X							
Phase 2 Phase Omit										X						
Phase 3 Phase Omit											X					
Phase 4 Phase Omit												X				
Phase 5 Phase Omit													X			
Phase 6 Phase Omit														X		
Phase 7 Phase Omit															X	
Phase 8 Phase Omit																X

## Ped Omit

	PF1	PF2	PF3	PF4	PF5	PF6	PF7	PF8	PF9	PF10	PF11	PF12	PF13	PF14	PF15	PF16
	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□

## Veh Det Coord ReSvc

	PF1	PF2	PF3	PF4	PF5	PF6	PF7	PF8	PF9	PF10	PF11	PF12	PF13	PF14	PF15	PF16
	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□

## Function Phase Recall

	PF1	PF2	PF3	PF4	PF5	PF6	PF7	PF8	PF9	PF10	PF11	PF12	PF13	PF14	PF15	PF16
	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□

## Phase Min Recall

	PF1	PF2	PF3	PF4	PF5	PF6	PF7	PF8	PF9	PF10	PF11	PF12	PF13	PF14	PF15	PF16
	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□

## Veh Det Ped Recall

	PF1	PF2	PF3	PF4	PF5	PF6	PF7	PF8	PF9	PF10	PF11	PF12	PF13	PF14	PF15	PF16
	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□

## Veh Det Bike Recall

	PF1	PF2	PF3	PF4	PF5	PF6	PF7	PF8	PF9	PF10	PF11	PF12	PF13	PF14	PF15	PF16
	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□

## Vehicle Function

	PF1	PF2	PF3	PF4	PF5	PF6	PF7	PF8	PF9	PF10	PF11	PF12	PF13	PF14	PF15	PF16
	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□

## Veh Det Switch Omit

	PF1	PF2	PF3	PF4	PF5	PF6	PF7	PF8	PF9	PF10	PF11	PF12	PF13	PF14	PF15	PF16
	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□

## Veh Det Switch Now

	PF1	PF2	PF3	PF4	PF5	PF6	PF7	PF8	PF9	PF10	PF11	PF12	PF13	PF14	PF15	PF16
	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□

Veh Det Switch Also	PF1	PF2	PF3	PF4	PF5	PF6	PF7	PF8	PF9	PF10	PF11	PF12	PF13	PF14	PF15	PF16
	<input type="checkbox"/>															

### Overlap Function

PF1	PF2	PF3	PF4	PF5	PF6	PF7	PF8	PF9	PF10	PF11	PF12	PF13	PF14	PF15	PF16
<input type="checkbox"/>															

### Dimming Data

#### Default Data - No Dimming Programmed

### Lane Definition

Lanes	Name	Green Inbound	Yellow Inbound	Red Inbound	Green Outbound	Yellow Outbound										

#### Default Data - Lane Definition

program day program hour program minute LanePhFun

### Preemption Data

Preempt NLock	Link to	Preempt Timers				De Max Call	Lock- Out	Boun ce	Gate Ext	Min G   W	Select Ped			Track Grn Ped Yel Red			Dwell Green			Sel Ret Mode		
		Pmpt	Del	Ext	Dur						Clear	Yel	Red	Grn	Ped	Yel	Red	Green	Clear	Yel	Red	
1 N	0	0	0	0	0	0	0.0	0	2	2	3	4.0	2.0	44	3	4.0	2.0	10	3	4.0	2.0	F Aut
2 Y	0	0	0	10	120	0	0.0	0	2	2	8	4.0	2.0	0	8	4.0	2.0	10	8	4.0	2.0	F Aut
3 Y	0	0	0	10	120	0	0.0	0	2	2	8	4.0	2.0	0	8	4.0	2.0	10	8	4.0	2.0	F Aut
4 Y	0	0	0	10	120	0	0.0	0	2	2	8	4.0	2.0	0	8	4.0	2.0	10	8	4.0	2.0	F Aut
5 Y	0	0	0	10	120	0	0.0	0	2	2	8	4.0	2.0	0	8	4.0	2.0	10	8	4.0	2.0	F Aut
6 N	0	0	0	0	0	0	0.0	0	10	10	8	4.0	2.0	10	8	4.0	2.0	10	8	4.0	2.0	F Aut
7 N	0	0	0	0	0	0	0.0	0	10	10	8	4.0	2.0	10	8	4.0	2.0	10	8	4.0	2.0	F Aut
8 N	0	0	0	0	0	0	0.0	0	10	10	8	4.0	2.0	10	8	4.0	2.0	10	8	4.0	2.0	F Aut
9 N	0	0	0	0	0	0	0.0	0	10	10	8	4.0	2.0	10	8	4.0	2.0	10	8	4.0	2.0	F Aut
10 N	0	0	0	0	0	0	0.0	0	10	10	8	4.0	2.0	10	8	4.0	2.0	10	8	4.0	2.0	F Aut
11 N	0	0	0	0	0	0	0.0	0	10	10	8	4.0	2.0	10	8	4.0	2.0	10	8	4.0	2.0	F Aut
12 N	0	0	0	0	0	0	0.0	0	10	10	8	4.0	2.0	10	8	4.0	2.0	10	8	4.0	2.0	F Aut

## Preempt Timers

Preempt	Override Flash	Override Next	Ret To Coord	Override priority	Preempt Detector	Extended Ped Clear
1	Yes	Yes	No	Yes	Prmpt Det-1	0-Use Phase
2	No	Yes	No	Yes	Prmpt Det-2	0-Use Phase
3	No	Yes	No	No	Prmpt Det-3	0-Use Phase
4	No	Yes	No	No	Prmpt Det-4	0-Use Phase
5	No	Yes	No	No	Prmpt Det-5	0-Use Phase
6	Yes	Yes	No	No	Prmpt Det-6	0-Use Phase
7	Yes	Yes	No	No	0	0-Use Phase
8	Yes	Yes	No	No	0	0-Use Phase
9	Yes	Yes	No	No	0	0-Use Phase
10	Yes	Yes	No	No	0	0-Use Phase
11	Yes	Yes	No	No	0	0-Use Phase
12	Yes	N/A	No	No	0	0-Use Phase

## Preempt 1

## Preempt 2

## Preempt 3

## Preempt 4

## Preempt 5

## Preempt 6

Phase	Exit	Exit												
	Phase	Calls												
4	Yes	No	2	Yes	No	4	Yes	No	4	Yes	No	2	Yes	No
7	Yes	No	6	Yes	No	8	Yes	No	8	Yes	No	6	Yes	No

Preempt 7			Preempt 8			Preempt 9			Preempt 10			Preempt 11			Preempt 12		
Exit	Exit	Exit	Exit	Exit	Exit	Exit	Exit	Exit	Exit	Exit	Exit	Exit	Exit	Exit	Exit	Exit	Exit
Phase	Phase	Calls	Phase	Phase	Calls	Phase	Phase	Calls	Phase	Phase	Calls	Phase	Phase	Calls	Phase	Phase	Calls

## Priority Timers

Prio	Non-locking	Del	Ext	Free	Free	Min	No Lock	Lock	Lock	Max	Pre-green	Recall	Excl-co Phase Svc.	Transit	Overlap
	Locking	ay	end	Dial	Split	Green	out	out	out	A	B	Green		Signal Type	Blankout
1	No	0	0	4	4	0	0	0	0	1	0.0	0-None	No	0-None,0-No Output	0-None,0-No Output
2	No	0	0	4	4	0	0	0	0	1	0.0	0-None	No	0-None,0-No Output	0-None,0-No Output
3	No	0	0	4	4	0	0	0	0	1	0.0	0-None	No	0-None,0-No Output	0-None,0-No Output
4	No	0	0	4	4	0	0	0	0	1	0.0	0-None	No	0-None,0-No Output	0-None,0-No Output
5	No	0	0	4	4	0	0	0	0	1	0.0	0-None	No	0-None,0-No Output	0-None,0-No Output
6	No	0	0	4	4	0	0	0	0	1	0.0	0-None	No	0-None,0-No Output	0-None,0-No Output

**Priority Detector Channels**

Priority	1	2	3	4	5	6	B	C	X
Detector	1A	2A	3A	4A	5A	6A	B	C	X
Channel	0	0	0	0	0	0	0	0	0
Priority	2	3	4	5	6	B	C	X	
Detector	1A	2A	3A	4A	5A	6A	B	C	X
Channel	0	0	0	0	0	0	0	0	0
Priority	3	4	5	6	B	C	X		
Detector	1A	2A	3A	4A	5A	6A	B	C	X
Channel	0	0	0	0	0	0	0	0	0
Priority	4	5	6	B	C	X			
Detector	1A	2A	3A	4A	5A	6A	B	C	X
Channel	0	0	0	0	0	0	0	0	0
Priority	5	6	B	C	X				
Detector	1A	2A	3A	4A	5A	6A	B	C	X
Channel	0	0	0	0	0	0	0	0	0

### Priority Fixed Phases

**Priority**

**1**

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
<b>Co-Phase</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>QJ-Phase</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

**Priority**

**2**

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
<b>Co-Phase</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>QJ-Phase</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

**Priority**

**3**

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
<b>Co-Phase</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>QJ-Phase</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

**Priority**

**4**

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
<b>Co-Phase</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>QJ-Phase</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

**Priority**

**5**

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
<b>Co-Phase</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>QJ-Phase</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

**Priority**

**6**

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
<b>Co-Phase</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>QJ-Phase</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Legend:

CO-PHASE	0	1
QJ-PHASE	FALSE	TRUE

**Priority Bank**
**Priority** 1

**Priority Bank : 1**

Level 0

<b>Partial Priority</b>		<b>Full Priority</b>		<b>Recovery</b>	
Alt Seq	0	Freq. Override	False	Method	0-Normal
Alt Seq Enabled	False	Ped skip	0	Return	0-Cycle
Min Walk	0	Force full Priority	False	PedWait	0
		Frequency	0	PedOverride	0
		Freq. Level	1-Partial		

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
<b>Exit Call</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Phase Omit</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Ped Omit</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Recovery</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

**Priority Bank : 2**

Level 0

<b>Partial Priority</b>		<b>Full Priority</b>		<b>Recovery</b>	
Alt Seq	0	Freq. Override	False	Method	0-Normal
Alt Seq Enabled	False	Ped skip	0	Return	0-Cycle
Min Walk	0	Force full Priority	False	PedWait	0
		Frequency	0	PedOverride	0
		Freq. Level	1-Partial		

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
<b>Exit Call</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Phase Omit</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Ped Omit</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Recovery</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

**Priority Bank : 3**

Level 0

<b>Partial Priority</b>		<b>Full Priority</b>		<b>Recovery</b>	
Alt Seq	0	Freq. Override	False	Method	0-Normal
Alt Seq Enabled	False	Ped skip	0	Return	0-Cycle
Min Walk	0	Force full Priority	False	PedWait	0
		Frequency	0	PedOverride	0
		Freq. Level	1-Partial		

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
<b>Exit Call</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Phase Omit</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Ped Omit</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>Recovery</b>	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

**Priority Bank : 4**

Level 0

Partial Priority		Full Priority		Recovery	
Alt Seq	0	Freq. Override	False	Method	0-Normal
Alt Seq Enabled	False	Ped skip	0	Return	0-Cycle
Min Walk	0	Force full Priority	False	PedWait	0
		Frequency	0	PedOverride	0
		Freq. Level	1-Partial		

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Exit Call	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Phase Omit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Omit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Recovery	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

**Priority 2****Priority Bank : 1**

Level 0

Partial Priority		Full Priority		Recovery	
Alt Seq	0	Freq. Override	False	Method	0-Normal
Alt Seq Enabled	False	Ped skip	0	Return	0-Cycle
Min Walk	0	Force full Priority	False	PedWait	0
		Frequency	0	PedOverride	0
		Freq. Level	1-Partial		

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Exit Call	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Phase Omit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Omit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Recovery	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

**Priority Bank : 2**

Level 0

Partial Priority		Full Priority		Recovery	
Alt Seq	0	Freq. Override	False	Method	0-Normal
Alt Seq Enabled	False	Ped skip	0	Return	0-Cycle
Min Walk	0	Force full Priority	False	PedWait	0
		Frequency	0	PedOverride	0
		Freq. Level	1-Partial		

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Exit Call	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Phase Omit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Omit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Recovery	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

**Priority Bank : 3**

Level 0

Partial Priority		Full Priority		Recovery	
Alt Seq	0	Freq. Override	False	Method	0-Normal
Alt Seq Enabled	False	Ped skip	0	Return	0-Cycle
Min Walk	0	Force full Priority	False	PedWait	0
		Frequency	0	PedOverride	0
		Freq. Level	1-Partial		

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Exit Call	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Phase Omit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Omit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Recovery	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

**Priority Bank : 4**

Level 0

Partial Priority		Full Priority		Recovery	
Alt Seq	0	Freq. Override	False	Method	0-Normal
Alt Seq Enabled	False	Ped skip	0	Return	0-Cycle
Min Walk	0	Force full Priority	False	PedWait	0
		Frequency	0	PedOverride	0
		Freq. Level	1-Partial		

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Exit Call	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Phase Omit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Omit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Recovery	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

**Priority 3****Priority Bank : 1**

Level 0

Partial Priority		Full Priority		Recovery	
Alt Seq	0	Freq. Override	False	Method	0-Normal
Alt Seq Enabled	False	Ped skip	0	Return	0-Cycle
Min Walk	0	Force full Priority	False	PedWait	0
		Frequency	0	PedOverride	0
		Freq. Level	1-Partial		

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Exit Call	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Phase Omit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Omit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Recovery	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

**Priority Bank : 2**

Level 0

Partial Priority		Full Priority		Recovery	
Alt Seq	0	Freq. Override	False	Method	0-Normal
Alt Seq Enabled	False	Ped skip	0	Return	0-Cycle
Min Walk	0	Force full Priority	False	PedWait	0
		Frequency	0	PedOverride	0
		Freq. Level	1-Partial		

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Exit Call	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Phase Omit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Omit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Recovery	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

**Priority Bank : 3**

Level 0

Partial Priority		Full Priority		Recovery	
Alt Seq	0	Freq. Override	False	Method	0-Normal
Alt Seq Enabled	False	Ped skip	0	Return	0-Cycle
Min Walk	0	Force full Priority	False	PedWait	0
		Frequency	0	PedOverride	0
		Freq. Level	1-Partial		

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Exit Call	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Phase Omit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Omit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Recovery	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

**Priority Bank : 4**

Level 0

Partial Priority		Full Priority		Recovery	
Alt Seq	0	Freq. Override	False	Method	0-Normal
Alt Seq Enabled	False	Ped skip	0	Return	0-Cycle
Min Walk	0	Force full Priority	False	PedWait	0
		Frequency	0	PedOverride	0
		Freq. Level	1-Partial		

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Exit Call	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Phase Omit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Omit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Recovery	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

**Priority 4****Priority Bank : 1**

Level 0

Partial Priority		Full Priority		Recovery	
Alt Seq	0	Freq. Override	False	Method	0-Normal
Alt Seq Enabled	False	Ped skip	0	Return	0-Cycle
Min Walk	0	Force full Priority	False	PedWait	0
		Frequency	0	PedOverride	0
		Freq. Level	1-Partial		

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Exit Call	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Phase Omit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Omit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Recovery	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

**Priority Bank : 2**

Level 0

Partial Priority		Full Priority		Recovery	
Alt Seq	0	Freq. Override	False	Method	0-Normal
Alt Seq Enabled	False	Ped skip	0	Return	0-Cycle
Min Walk	0	Force full Priority	False	PedWait	0
		Frequency	0	PedOverride	0
		Freq. Level	1-Partial		

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Exit Call	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Phase Omit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Omit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Recovery	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

**Priority Bank : 3**

Level 0

Partial Priority		Full Priority		Recovery	
Alt Seq	0	Freq. Override	False	Method	0-Normal
Alt Seq Enabled	False	Ped skip	0	Return	0-Cycle
Min Walk	0	Force full Priority	False	PedWait	0
		Frequency	0	PedOverride	0
		Freq. Level	1-Partial		

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Exit Call	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Phase Omit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Omit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Recovery	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

**Priority Bank : 4**

Level 0

Partial Priority		Full Priority		Recovery	
Alt Seq	0	Freq. Override	False	Method	0-Normal
Alt Seq Enabled	False	Ped skip	0	Return	0-Cycle
Min Walk	0	Force full Priority	False	PedWait	0
		Frequency	0	PedOverride	0
		Freq. Level	1-Partial		

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Exit Call	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Phase Omit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Omit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Recovery	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

**Priority 5****Priority Bank : 1**

Level 0

Partial Priority		Full Priority		Recovery	
Alt Seq	0	Freq. Override	False	Method	0-Normal
Alt Seq Enabled	False	Ped skip	0	Return	0-Cycle
Min Walk	0	Force full Priority	False	PedWait	0
		Frequency	0	PedOverride	0
		Freq. Level	1-Partial		

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Exit Call	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Phase Omit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Omit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Recovery	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

**Priority Bank : 2**

Level 0

Partial Priority		Full Priority		Recovery	
Alt Seq	0	Freq. Override	False	Method	0-Normal
Alt Seq Enabled	False	Ped skip	0	Return	0-Cycle
Min Walk	0	Force full Priority	False	PedWait	0
		Frequency	0	PedOverride	0
		Freq. Level	1-Partial		

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Exit Call	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Phase Omit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Omit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Recovery	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

**Priority Bank : 3**

Level 0

Partial Priority		Full Priority		Recovery	
Alt Seq	0	Freq. Override	False	Method	0-Normal
Alt Seq Enabled	False	Ped skip	0	Return	0-Cycle
Min Walk	0	Force full Priority	False	PedWait	0
		Frequency	0	PedOverride	0
		Freq. Level	1-Partial		

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Exit Call	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Phase Omit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Omit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Recovery	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

**Priority Bank : 4**

Level 0

Partial Priority		Full Priority		Recovery	
Alt Seq	0	Freq. Override	False	Method	0-Normal
Alt Seq Enabled	False	Ped skip	0	Return	0-Cycle
Min Walk	0	Force full Priority	False	PedWait	0
		Frequency	0	PedOverride	0
		Freq. Level	1-Partial		

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Exit Call	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Phase Omit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Omit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Recovery	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

**Priority 6****Priority Bank : 1**

Level 0

Partial Priority		Full Priority		Recovery	
Alt Seq	0	Freq. Override	False	Method	0-Normal
Alt Seq Enabled	False	Ped skip	0	Return	0-Cycle
Min Walk	0	Force full Priority	False	PedWait	0
		Frequency	0	PedOverride	0
		Freq. Level	1-Partial		

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Exit Call	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Phase Omit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Omit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Recovery	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

**Priority Bank : 2**

Level 0

Partial Priority		Full Priority		Recovery	
Alt Seq	0	Freq. Override	False	Method	0-Normal
Alt Seq Enabled	False	Ped skip	0	Return	0-Cycle
Min Walk	0	Force full Priority	False	PedWait	0
		Frequency	0	PedOverride	0
		Freq. Level	1-Partial		

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Exit Call	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Phase Omit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Omit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Recovery	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

**Priority Bank : 3**

Level 0

Partial Priority		Full Priority		Recovery	
Alt Seq	0	Freq. Override	False	Method	0-Normal
Alt Seq Enabled	False	Ped skip	0	Return	0-Cycle
Min Walk	0	Force full Priority	False	PedWait	0
		Frequency	0	PedOverride	0
		Freq. Level	1-Partial		

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Exit Call	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Phase Omit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Omit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Recovery	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

**Priority Bank : 4**

Level 0

<b>Partial Priority</b>		<b>Full Priority</b>		<b>Recovery</b>	
Alt Seq	0	Freq. Override	False	Method	0-Normal
Alt Seq Enabled	False	Ped skip	0	Return	0-Cycle
Min Walk	0	Force full Priority	False	PedWait	0
		Frequency	0	PedOverride	0
		Freq. Level	1-Partial		

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Exit Call	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Phase Omit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Omit	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Recovery	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Codes: 0 X  
FALSE TRUE

<b>Priority : 1</b>	<b>Priority : 2</b>	<b>Priority : 3</b>
<b>Priority Bank :1</b> Queue Phase Detector Time <b>Default data</b>	<b>Priority Bank :1</b> Queue Phase Detector Time <b>Default data</b>	<b>Priority Bank :1</b> Queue Phase Detector Time <b>Default data</b>
<b>Priority Bank :2</b> Queue Phase Detector Time <b>Default data</b>	<b>Priority Bank :2</b> Queue Phase Detector Time <b>Default data</b>	<b>Priority Bank :2</b> Queue Phase Detector Time <b>Default data</b>
<b>Priority Bank :3</b> Queue Phase Detector Time <b>Default data</b>	<b>Priority Bank :3</b> Queue Phase Detector Time <b>Default data</b>	<b>Priority Bank :3</b> Queue Phase Detector Time <b>Default data</b>
<b>Priority Bank :4</b> Queue Phase Detector Time <b>Default data</b>	<b>Priority Bank :4</b> Queue Phase Detector Time <b>Default data</b>	<b>Priority Bank :4</b> Queue Phase Detector Time <b>Default data</b>
<b>Priority : 4</b>	<b>Priority : 5</b>	<b>Priority : 6</b>
<b>Priority Bank :1</b> Queue Phase Detector Time <b>Default data</b>	<b>Priority Bank :1</b> Queue Phase Detector Time <b>Default data</b>	<b>Priority Bank :1</b> Queue Phase Detector Time <b>Default data</b>
<b>Priority Bank :2</b> Queue Phase Detector Time <b>Default data</b>	<b>Priority Bank :2</b> Queue Phase Detector Time <b>Default data</b>	<b>Priority Bank :2</b> Queue Phase Detector Time <b>Default data</b>
<b>Priority Bank :3</b> Queue Phase Detector Time <b>Default data</b>	<b>Priority Bank :3</b> Queue Phase Detector Time <b>Default data</b>	<b>Priority Bank :3</b> Queue Phase Detector Time <b>Default data</b>
<b>Priority Bank :4</b> Queue Phase Detector Time <b>Default data</b>	<b>Priority Bank :4</b> Queue Phase Detector Time <b>Default data</b>	<b>Priority Bank :4</b> Queue Phase Detector Time <b>Default data</b>

Priority : 1								Priority : 2									
Bank Detector	1 PE	1A	2A	3A	4A	5A	6A	B	Bank Detector	1 PE	1A	2A	3A	4A	5A	6A	B
Default Data								Default Data									
Bank Detector	2 PE	1A	2A	3A	4A	5A	6A	B	Bank Detector	2 PE	1A	2A	3A	4A	5A	6A	B
Default Data								Default Data									
Bank Detector	3 PE	1A	2A	3A	4A	5A	6A	B	Bank Detector	3 PE	1A	2A	3A	4A	5A	6A	B
Default Data								Default Data									
Bank Detector	4 PE	1A	2A	3A	4A	5A	6A	B	Bank Detector	4 PE	1A	2A	3A	4A	5A	6A	B
Default Data								Default Data									
Priority : 3								Priority : 4									
Bank Detector	1 PE	1A	2A	3A	4A	5A	6A	B	Bank Detector	1 PE	1A	2A	3A	4A	5A	6A	B
Default Data								Default Data									
Bank Detector	2 PE	1A	2A	3A	4A	5A	6A	B	Bank Detector	2 PE	1A	2A	3A	4A	5A	6A	B
Default Data								Default Data									
Bank Detector	3 PE	1A	2A	3A	4A	5A	6A	B	Bank Detector	3 PE	1A	2A	3A	4A	5A	6A	B
Default Data								Default Data									
Bank Detector	4 PE	1A	2A	3A	4A	5A	6A	B	Bank Detector	4 PE	1A	2A	3A	4A	5A	6A	B
Default Data								Default Data									
Priority : 5								Priority : 6									
Bank Detector	1 PE	1A	2A	3A	4A	5A	6A	B	Bank Detector	1 PE	1A	2A	3A	4A	5A	6A	B
Default Data								Default Data									
Bank Detector	2 PE	1A	2A	3A	4A	5A	6A	B	Bank Detector	2 PE	1A	2A	3A	4A	5A	6A	B
Default Data								Default Data									
Bank Detector	3 PE	1A	2A	3A	4A	5A	6A	B	Bank Detector	3 PE	1A	2A	3A	4A	5A	6A	B
Default Data								Default Data									
Bank Detector	4 PE	1A	2A	3A	4A	5A	6A	B	Bank Detector	4 PE	1A	2A	3A	4A	5A	6A	B
Default Data								Default Data									

## Preempt 1

Vehical Phases			Pedestrian Phases			Overlaps						
Ph.	Track	Dwell	Cycle	Ph.	Track	Dwell	Cycle	Ovlp.	Track	Dwell	Cycle	Trail Grn
1	Red	Red	Actuated	1	Dark	Dark	No	A	Red	Red	Actuated	No Trail
2	Red	Red	Actuated	3	Dark	Dark	No	B	Red	Red	Actuated	No Trail
3	Red	Red	Actuated	5	Dark	Dark	No	D	Flash Grn	Flash Grn	No	No Trail
4	Green	Red	No	7	Dark	Dark	No	E	Green	Green	No	No Trail
6	Red	Red	Actuated	9	Dark	Dark	No	F	Dark	Dark	No	No Trail
7	Green	Red	No	10	Dark	Dark	No	G	Dark	Dark	No	No Trail
9	Dark	Dark	No	11	Dark	Dark	No	H	Dark	Dark	No	No Trail
10	Dark	Dark	No	12	Dark	Dark	No	I	Dark	Dark	No	No Trail
11	Dark	Dark	No	13	Dark	Dark	No	J	Dark	Dark	No	No Trail
12	Dark	Dark	No	14	Dark	Dark	No	K	Dark	Dark	No	No Trail
13	Dark	Dark	Actuated	15	Dark	Dark	No	L	Dark	Dark	No	No Trail
14	Dark	Dark	Actuated	16	Dark	Dark	No	M	Dark	Dark	No	No Trail
15	Dark	Dark	No					N	Dark	Dark	No	No Trail
16	Dark	Dark	No					O	Dark	Dark	No	No Trail
								P	Dark	Dark	No	No Trail

## Preempt 2

Vehical Phases			Pedestrian Phases			Overlaps						
Ph.	Track	Dwell	Cycle	Ph.	Track	Dwell	Cycle	Ovlp.	Track	Dwell	Cycle	Trail Grn
2	Red	Green	No	1	Dark	Dark	No	E	Dark	Dark	No	No Trail
6	Red	Green	No	3	Dark	Dark	No	F	Dark	Dark	No	No Trail
9	Dark	Dark	No	5	Dark	Dark	No	G	Dark	Dark	No	No Trail
10	Dark	Dark	No	7	Dark	Dark	No	H	Dark	Dark	No	No Trail
11	Dark	Dark	No	9	Dark	Dark	No	I	Dark	Dark	No	No Trail
12	Dark	Dark	No	10	Dark	Dark	No	J	Dark	Dark	No	No Trail
13	Dark	Dark	No	11	Dark	Dark	No	K	Dark	Dark	No	No Trail
14	Dark	Dark	No	12	Dark	Dark	No	L	Dark	Dark	No	No Trail
15	Dark	Dark	No	13	Dark	Dark	No	M	Dark	Dark	No	No Trail
16	Dark	Dark	No	14	Dark	Dark	No	N	Dark	Dark	No	No Trail
				15	Dark	Dark	No	O	Dark	Dark	No	No Trail
				16	Dark	Dark	No	P	Dark	Dark	No	No Trail

## Preempt 3

Vehical Phases			Pedestrian Phases			Overlaps						
Ph.	Track	Dwell	Cycle	Ph.	Track	Dwell	Cycle	Ovlp.	Track	Dwell	Cycle	Trail Grn
4	Red	Green	No	1	Dark	Dark	No	E	Dark	Dark	No	No Trail
8	Red	Green	No	3	Dark	Dark	No	F	Dark	Dark	No	No Trail
9	Dark	Dark	No	5	Dark	Dark	No	G	Dark	Dark	No	No Trail
10	Dark	Dark	No	7	Dark	Dark	No	H	Dark	Dark	No	No Trail
11	Dark	Dark	No	9	Dark	Dark	No	I	Dark	Dark	No	No Trail
12	Dark	Dark	No	10	Dark	Dark	No	J	Dark	Dark	No	No Trail
13	Dark	Dark	No	11	Dark	Dark	No	K	Dark	Dark	No	No Trail
14	Dark	Dark	No	12	Dark	Dark	No	L	Dark	Dark	No	No Trail
15	Dark	Dark	No	13	Dark	Dark	No	M	Dark	Dark	No	No Trail
16	Dark	Dark	No	14	Dark	Dark	No	N	Dark	Dark	No	No Trail
				15	Dark	Dark	No	O	Dark	Dark	No	No Trail
				16	Dark	Dark	No	P	Dark	Dark	No	No Trail

**Preempt 4**

Vehical Phases			Pedestrian Phases			Overlaps							
Ph.	Track	Dwell	Cycle	Ph.	Track	Dwell	Cycle	Ovlp.	Track	Dwell	Cycle	Trail Grn	
3	Red	Green	No	1	Dark	Dark	No	A	Dark	Dark	No	No Trail	
8	Red	Green	No	3	Dark	Dark	No	B	Dark	Dark	No	No Trail	
9	Dark	Dark	No	5	Dark	Dark	No	C	Dark	Dark	No	No Trail	
10	Dark	Dark	No	7	Dark	Dark	No	D	Dark	Dark	No	No Trail	
11	Dark	Dark	No	9	Dark	Dark	No	E	Dark	Dark	No	No Trail	
12	Dark	Dark	No	10	Dark	Dark	No	F	Dark	Dark	No	No Trail	
13	Dark	Dark	No	11	Dark	Dark	No	G	Dark	Dark	No	No Trail	
14	Dark	Dark	No	12	Dark	Dark	No	H	Dark	Dark	No	No Trail	
15	Dark	Dark	No	13	Dark	Dark	No	I	Dark	Dark	No	No Trail	
16	Dark	Dark	No	14	Dark	Dark	No	J	Dark	Dark	No	No Trail	
				15	Dark	Dark	No	K	Dark	Dark	No	No Trail	
				16	Dark	Dark	No	L	Dark	Dark	No	No Trail	
								M	Dark	Dark	No	No Trail	
								N	Dark	Dark	No	No Trail	
								O	Dark	Dark	No	No Trail	
								P	Dark	Dark	No	No Trail	

**Preempt 5**

Vehical Phases			Pedestrian Phases			Overlaps							
Ph.	Track	Dwell	Cycle	Ph.	Track	Dwell	Cycle	Ovlp.	Track	Dwell	Cycle	Trail Grn	
1	Red	Green	No	1	Dark	Dark	No	A	Dark	Dark	No	No Trail	
6	Red	Green	No	3	Dark	Dark	No	B	Dark	Dark	No	No Trail	
9	Dark	Dark	No	5	Dark	Dark	No	C	Dark	Dark	No	No Trail	
10	Dark	Dark	No	7	Dark	Dark	No	D	Dark	Dark	No	No Trail	
11	Dark	Dark	No	9	Dark	Dark	No	E	Dark	Dark	No	No Trail	
12	Dark	Dark	No	10	Dark	Dark	No	F	Dark	Dark	No	No Trail	
13	Dark	Dark	No	11	Dark	Dark	No	G	Dark	Dark	No	No Trail	
14	Dark	Dark	No	12	Dark	Dark	No	H	Dark	Dark	No	No Trail	
15	Dark	Dark	No	13	Dark	Dark	No	I	Dark	Dark	No	No Trail	
16	Dark	Dark	No	14	Dark	Dark	No	J	Dark	Dark	No	No Trail	
				15	Dark	Dark	No	K	Dark	Dark	No	No Trail	
				16	Dark	Dark	No	L	Dark	Dark	No	No Trail	
								M	Dark	Dark	No	No Trail	
								N	Dark	Dark	No	No Trail	
								O	Dark	Dark	No	No Trail	
								P	Dark	Dark	No	No Trail	

**Preempt 6**

Vehical Phases			Pedestrian Phases			Overlaps							
Ph.	Track	Dwell	Cycle	Ph.	Track	Dwell	Cycle	Ovlp.	Track	Dwell	Cycle	Trail Grn	
9	Dark	Dark	No	1	Dark	Dark	No	A	Dark	Dark	No	No Trail	
10	Dark	Dark	No	3	Dark	Dark	No	B	Dark	Dark	No	No Trail	
11	Dark	Dark	No	5	Dark	Dark	No	C	Dark	Dark	No	No Trail	
12	Dark	Dark	No	7	Dark	Dark	No	D	Dark	Dark	No	No Trail	
13	Dark	Dark	No	9	Dark	Dark	No	E	Dark	Dark	No	No Trail	
14	Dark	Dark	No	10	Dark	Dark	No	F	Dark	Dark	No	No Trail	
15	Dark	Dark	No	11	Dark	Dark	No	G	Dark	Dark	No	No Trail	
16	Dark	Dark	No	12	Dark	Dark	No	H	Dark	Dark	No	No Trail	
				13	Dark	Dark	No	I	Dark	Dark	No	No Trail	
				14	Dark	Dark	No	J	Dark	Dark	No	No Trail	
				15	Dark	Dark	No	K	Dark	Dark	No	No Trail	
				16	Dark	Dark	No	L	Dark	Dark	No	No Trail	
								M	Dark	Dark	No	No Trail	
								N	Dark	Dark	No	No Trail	
								O	Dark	Dark	No	No Trail	
								P	Dark	Dark	No	No Trail	

## Preempt 7

Vehical Phases			Pedestrian Phases			Overlaps							
Ph.	Track	Dwell	Cycle	Ph	Track	Dwell	Cycle	Ovlp	Track	Dwell	Cycle	Trail Grn	
9	Dark	Dark	No	1	Dark	Dark	No	A	Dark	Dark	No	No Trail	
10	Dark	Dark	No	3	Dark	Dark	No	B	Dark	Dark	No	No Trail	
11	Dark	Dark	No	5	Dark	Dark	No	C	Dark	Dark	No	No Trail	
12	Dark	Dark	No	7	Dark	Dark	No	D	Dark	Dark	No	No Trail	
13	Dark	Dark	No	9	Dark	Dark	No	E	Dark	Dark	No	No Trail	
14	Dark	Dark	No	10	Dark	Dark	No	F	Dark	Dark	No	No Trail	
15	Dark	Dark	No	11	Dark	Dark	No	G	Dark	Dark	No	No Trail	
16	Dark	Dark	No	12	Dark	Dark	No	H	Dark	Dark	No	No Trail	
				13	Dark	Dark	No	I	Dark	Dark	No	No Trail	
				14	Dark	Dark	No	J	Dark	Dark	No	No Trail	
				15	Dark	Dark	No	K	Dark	Dark	No	No Trail	
				16	Dark	Dark	No	L	Dark	Dark	No	No Trail	
								M	Dark	Dark	No	No Trail	
								N	Dark	Dark	No	No Trail	
								O	Dark	Dark	No	No Trail	
								P	Dark	Dark	No	No Trail	

## Preempt 8

Vehical Phases			Pedestrian Phases			Overlaps					
Ph.	Track	Dwell	Ph	Track	Dwell	Cycle	Ovlp	Track	Dwell	Cycle	Trail Grn
		Cycle									
9	Dark	Dark	No	1	Dark	Dark	No	A	Dark	Dark	No Trail
10	Dark	Dark	No	3	Dark	Dark	No	B	Dark	Dark	No Trail
11	Dark	Dark	No	5	Dark	Dark	No	C	Dark	Dark	No Trail
12	Dark	Dark	No	7	Dark	Dark	No	D	Dark	Dark	No Trail
13	Dark	Dark	No	9	Dark	Dark	No	E	Dark	Dark	No Trail
14	Dark	Dark	No	10	Dark	Dark	No	F	Dark	Dark	No Trail
15	Dark	Dark	No	11	Dark	Dark	No	G	Dark	Dark	No Trail
16	Dark	Dark	No	12	Dark	Dark	No	H	Dark	Dark	No Trail
				13	Dark	Dark	No	I	Dark	Dark	No Trail
				14	Dark	Dark	No	J	Dark	Dark	No Trail
				15	Dark	Dark	No	K	Dark	Dark	No Trail
				16	Dark	Dark	No	L	Dark	Dark	No Trail
							M	Dark	Dark	No	No Trail
							N	Dark	Dark	No	No Trail
							O	Dark	Dark	No	No Trail
							P	Dark	Dark	No	No Trail

## Preempt 9

Vehical Phases			Pedestrian Phases			Overlaps					
Ph.	Track	Dwell	Ph	Track	Dwell	Cycle	Ovlp	Track	Dwell	Cycle	Trail Grn
9	Dark	Dark	No	1	Dark	Dark	No	A	Dark	Dark	No Trail
10	Dark	Dark	No	3	Dark	Dark	No	B	Dark	Dark	No Trail
11	Dark	Dark	No	5	Dark	Dark	No	C	Dark	Dark	No Trail
12	Dark	Dark	No	7	Dark	Dark	No	D	Dark	Dark	No Trail
13	Dark	Dark	No	9	Dark	Dark	No	E	Dark	Dark	No Trail
14	Dark	Dark	No	10	Dark	Dark	No	F	Dark	Dark	No Trail
15	Dark	Dark	No	11	Dark	Dark	No	G	Dark	Dark	No Trail
16	Dark	Dark	No	12	Dark	Dark	No	H	Dark	Dark	No Trail
				13	Dark	Dark	No	I	Dark	Dark	No Trail
				14	Dark	Dark	No	J	Dark	Dark	No Trail
				15	Dark	Dark	No	K	Dark	Dark	No Trail
				16	Dark	Dark	No	L	Dark	Dark	No Trail
							M	Dark	Dark	No Trail	
							N	Dark	Dark	No Trail	
							O	Dark	Dark	No Trail	
							P	Dark	Dark	No Trail	

Preempt 10-

Vehical Phases			Pedestrian Phases			Overlaps					
Ph.	Track	Dwell	Ph	Track	Dwell	Cycle	Ovlp	Track	Dwell	Cycle	Trail Grn
9	Dark	Dark	No	1	Dark	Dark	No	A	Dark	Dark	No Trail
10	Dark	Dark	No	3	Dark	Dark	No	B	Dark	Dark	No Trail
11	Dark	Dark	No	5	Dark	Dark	No	C	Dark	Dark	No Trail
12	Dark	Dark	No	7	Dark	Dark	No	D	Dark	Dark	No Trail
13	Dark	Dark	No	9	Dark	Dark	No	E	Dark	Dark	No Trail
14	Dark	Dark	No	10	Dark	Dark	No	F	Dark	Dark	No Trail
15	Dark	Dark	No	11	Dark	Dark	No	G	Dark	Dark	No Trail
16	Dark	Dark	No	12	Dark	Dark	No	H	Dark	Dark	No Trail
				13	Dark	Dark	No	I	Dark	Dark	No Trail
				14	Dark	Dark	No	J	Dark	Dark	No Trail
				15	Dark	Dark	No	K	Dark	Dark	No Trail
				16	Dark	Dark	No	L	Dark	Dark	No Trail
							M	Dark	Dark	No Trail	
							N	Dark	Dark	No Trail	
							O	Dark	Dark	No Trail	
							P	Dark	Dark	No Trail	

## Preempt 11

Vehicle Phases			Pedestrian Phases			Overlaps						
Ph.	Track	Dwell	Ph	Track	Dwell	Cycle	Ovlp	Track	Dwell	Cycle	Trail Grn	
9	Dark	Dark	No	1	Dark	Dark	No	A	Dark	Dark	No	No Trail
10	Dark	Dark	No	3	Dark	Dark	No	B	Dark	Dark	No	No Trail
11	Dark	Dark	No	5	Dark	Dark	No	C	Dark	Dark	No	No Trail
12	Dark	Dark	No	7	Dark	Dark	No	D	Dark	Dark	No	No Trail
13	Dark	Dark	No	9	Dark	Dark	No	E	Dark	Dark	No	No Trail
14	Dark	Dark	No	10	Dark	Dark	No	F	Dark	Dark	No	No Trail
15	Dark	Dark	No	11	Dark	Dark	No	G	Dark	Dark	No	No Trail
16	Dark	Dark	No	12	Dark	Dark	No	H	Dark	Dark	No	No Trail
				13	Dark	Dark	No	I	Dark	Dark	No	No Trail
				14	Dark	Dark	No	J	Dark	Dark	No	No Trail
				15	Dark	Dark	No	K	Dark	Dark	No	No Trail
				16	Dark	Dark	No	L	Dark	Dark	No	No Trail
							M	Dark	Dark	No	No Trail	
							N	Dark	Dark	No	No Trail	
							O	Dark	Dark	No	No Trail	
							P	Dark	Dark	No	No Trail	

## Preempt 12

Vehical Phases			Pedestrian Phases			Overlaps							
Ph.	Track	Dwell	Cycle	Ph	Track	Dwell	Cycle	Ovlp	Track	Dwell	Cycle	Trail Grn	
9	Dark	Dark	No	1	Dark	Dark	No	A	Dark	Dark	No	No Trail	
10	Dark	Dark	No	3	Dark	Dark	No	B	Dark	Dark	No	No Trail	
11	Dark	Dark	No	5	Dark	Dark	No	C	Dark	Dark	No	No Trail	
12	Dark	Dark	No	7	Dark	Dark	No	D	Dark	Dark	No	No Trail	
13	Dark	Dark	No	9	Dark	Dark	No	E	Dark	Dark	No	No Trail	
14	Dark	Dark	No	10	Dark	Dark	No	F	Dark	Dark	No	No Trail	
14	Dark	Dark	No	11	Dark	Dark	No	G	Dark	Dark	No	No Trail	
15	Dark	Dark	No	12	Dark	Dark	No	H	Dark	Dark	No	No Trail	
16	Dark	Dark	No	13	Dark	Dark	No	I	Dark	Dark	No	No Trail	
				14	Dark	Dark	No	J	Dark	Dark	No	No Trail	
				15	Dark	Dark	No	K	Dark	Dark	No	No Trail	
				16	Dark	Dark	No	L	Dark	Dark	No	No Trail	
								M	Dark	Dark	No	No Trail	
								N	Dark	Dark	No	No Trail	
								O	Dark	Dark	No	No Trail	
								P	Dark	Dark	No	No Trail	

# System/Detectors Data

## Local Critical Alarms

Local Free: No Cycle Failure: No Coord Failure: No Conflict Flash: No Remote Flash: No Revert to Backup: 15 1st Phone:  
 Local Fash: No Cycle Fault: No Coord Fault: No Preemption: No Voltage Monitor: No  
 Special Status 1: No Special Status 2: No Special Status 3: No Special Status 4: No Special Status 5: No Special Status 6: No

## Traffic Responsive

System Detector Detector Channel	Veh/ Name	Average Hr	Occupancy Time(mins)	Min Correction/10	Queue 1 Detectors	System Detectors	Weight Factor	Queue 2 Detectors	System Detectors	Weight Factor
-------------------------------------	--------------	---------------	-------------------------	----------------------	----------------------	---------------------	------------------	----------------------	---------------------	------------------

## Default Data

Sample Interval: 0

**Queue: 1** Input Selection: 0=Average  
 Detector Failed Level : 0  
**Queue: 2** Input Selection: 0=Average  
 Detector Failed Level : 0

## Default Data

**Queue:**  
 Level Enter Leave Dial / Split / Offset  
 / /

## Default Data

## Vehical Detector

Diagnostic Value 0		
Max Detector	No Presence	Erratic Activity
Count		

## Vehical Detector

Diagnostic Value 1		
Max Detector	No Presence	Erratic Activity
Count		

## Special Detector

Diagnostic Value 0		
Max Detector	No Presence	Erratic Activity
Count		

## Default Data - Diag 0 Values

## Default Data - No Diag 1 Values

## Default Data - No Diag 0 Valu

## Pedestrian Detector

Diagnostic Value 0		
Max Detector	No Presence	Erratic Activity
Count		

## Pedestrian Detector

Diagnostic Value 1		
Max Detector	No Presence	Erratic Activity
Count		

## Special Detector

Diagnostic Value 1		
Max Detector	No Presence	Erratic Activity
Count		

## Default Data - No Diag 0 Values

## Default Data - No Diag 1 Values

## Default Data - No Diag 1 Values

## Speed Trap Data

Speed Trap:

Measurement:  
 Detector 1 Detector\_2 Distance :

Dial/Split/Offset

//

Speed Trap

Low Treshold

Speed Trap

High Treshold

## Default Data

**APPENDIX B**  
**EXISTING TRAFFIC SCENARIO CAPACITY**  
**ANALYSIS SUMMARY SHEETS**

## HCM 7th Signalized Intersection Summary

3: CO-2 &amp; E. 104th Street

04/24/2024

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	↑↑	↑↑	↑	↑↑	↑↑	↑	↑	↑↑	↑	↑	↑↑	↑
Traffic Volume (veh/h)	173	555	91	547	742	62	85	183	140	16	458	129
Future Volume (veh/h)	173	555	91	547	742	62	85	183	140	16	458	129
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
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		No		No	
Adj Sat Flow, veh/h/ln	1618	1811	1781	1885	1870	1870	1767	1707	1767	1707	1796	1752
Adj Flow Rate, veh/h	214	597	0	636	863	0	129	213	0	27	572	0
Peak Hour Factor	0.81	0.93	0.93	0.86	0.86	0.65	0.66	0.86	0.73	0.60	0.80	0.79
Percent Heavy Veh, %	19	6	8	1	2	2	9	13	9	13	7	10
Cap, veh/h	264	1123		377	1231		166	1159		40	967	
Arrive On Green	0.09	0.33	0.00	0.04	0.11	0.00	0.10	0.36	0.00	0.02	0.28	0.00
Sat Flow, veh/h	2990	3441	1510	3483	3554	1585	1682	3244	1497	1626	3413	1485
Grp Volume(v), veh/h	214	597	0	636	863	0	129	213	0	27	572	0
Grp Sat Flow(s), veh/h/ln	1495	1721	1510	1742	1777	1585	1682	1622	1497	1626	1706	1485
Q Serve(g_s), s	8.4	17.0	0.0	13.0	28.1	0.0	9.0	5.4	0.0	2.0	17.3	0.0
Cycle Q Clear(g_c), s	8.4	17.0	0.0	13.0	28.1	0.0	9.0	5.4	0.0	2.0	17.3	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	264	1123		377	1231		166	1159		40	967	
V/C Ratio(X)	0.81	0.53		1.69	0.70		0.78	0.18		0.67	0.59	
Avail Cap(c_a), veh/h	324	1123		377	1231		308	1159		203	967	
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	53.7	32.9	0.0	57.9	47.2	0.0	52.8	26.5	0.0	58.0	37.0	0.0
Incr Delay (d2), s/veh	12.0	1.8	0.0	319.8	3.3	0.0	7.6	0.3	0.0	17.7	2.7	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	3.5	7.1	0.0	22.8	13.9	0.0	4.1	2.1	0.0	1.0	7.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	65.7	34.7	0.0	377.6	50.5	0.0	60.4	26.9	0.0	75.7	39.7	0.0
LnGrp LOS	E	C		F	D		E	C		E	D	
Approach Vol, veh/h		811			1499			342			599	
Approach Delay, s/veh		42.9			189.3			39.5			41.3	
Approach LOS		D			F			D			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	18.0	45.2	16.8	40.0	15.6	47.6	8.0	48.9				
Change Period (Y+Rc), s	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0				
Max Green Setting (Gmax), s	13.0	29.0	22.0	34.0	13.0	29.0	15.0	41.0				
Max Q Clear Time (g_c+l1), s	15.0	19.0	11.0	19.3	10.4	30.1	4.0	7.4				
Green Ext Time (p_c), s	0.0	2.6	0.2	3.0	0.2	0.0	0.0	1.3				

## Intersection Summary

HCM 7th Control Delay, s/veh

109.8

HCM 7th LOS

F

## Notes

User approved pedestrian interval to be less than phase max green.

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

## HCM 7th Signalized Intersection Summary

6: Revere Street &amp; E. 104th Street

04/24/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑
Traffic Volume (veh/h)	18	595	18	5	1213	38	12	1	5	85	1	70
Future Volume (veh/h)	18	595	18	5	1213	38	12	1	5	85	1	70
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
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											
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	20	647	0	5	1318	41	13	1	5	92	1	76
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	70	2143		11	2094	934	51	265	225	117	360	305
Arrive On Green	0.01	0.20	0.00	0.01	0.59	0.59	0.01	0.14	0.14	0.07	0.19	0.19
Sat Flow, veh/h	3456	3554	1585	1781	3554	1585	3456	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	20	647	0	5	1318	41	13	1	5	92	1	76
Grp Sat Flow(s), veh/h/ln1728	1777	1585	1781	1777	1585	1728	1870	1585	1781	1870	1585	
Q Serve(g_s), s	0.7	18.6	0.0	0.3	29.1	1.3	0.4	0.1	0.3	6.1	0.1	4.9
Cycle Q Clear(g_c), s	0.7	18.6	0.0	0.3	29.1	1.3	0.4	0.1	0.3	6.1	0.1	4.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	70	2143		11	2094	934	51	265	225	117	360	305
V/C Ratio(X)	0.29	0.30		0.44	0.63	0.04	0.26	0.00	0.02	0.79	0.00	0.25
Avail Cap(c_a), veh/h	288	2143		148	2094	934	518	265	225	267	360	305
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.7	26.5	0.0	59.4	16.1	10.4	58.5	44.2	44.3	55.3	39.1	41.1
Incr Delay (d2), s/veh	2.2	0.4	0.0	24.3	1.4	0.1	2.6	0.0	0.2	11.2	0.0	1.9
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/ln0.3	8.9	0.0	0.2	11.0	0.5	0.2	0.0	0.1	3.1	0.0	2.1	
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	60.9	26.9	0.0	83.7	17.5	10.5	61.1	44.3	44.5	66.4	39.2	43.0
LnGrp LOS	E	C		F	B	B	E	D	D	E	D	D
Approach Vol, veh/h		667			1364			19			169	
Approach Delay, s/veh		27.9			17.6			55.9			55.8	
Approach LOS		C			B			E			E	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	5.8	78.4	6.8	29.1	7.4	76.7	12.9	23.0				
Change Period (Y+Rc), s	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0				
Max Green Setting (Gmax), s	53.0	18.0	17.0	10.0	53.0	18.0	17.0					
Max Q Clear Time (g_c+l12,3)	20.6	2.4	6.9	2.7	31.1	8.1	2.3					
Green Ext Time (p_c), s	0.0	4.4	0.0	0.1	0.0	9.7	0.1	0.0				

## Intersection Summary

HCM 7th Control Delay, s/veh

23.9

HCM 7th LOS

C

## Notes

User approved pedestrian interval to be less than phase max green.

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

## Intersection

Int Delay, s/veh 3.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
<b>Lane Configurations</b>												
Traffic Vol, veh/h	15	2	39	16	1	17	14	42	1	14	101	55
Future Vol, veh/h	15	2	39	16	1	17	14	42	1	14	101	55
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	80	-	-	100	-	100
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	16	2	42	17	1	18	15	46	1	15	110	60

Major/Minor	Minor2	Minor1			Major1			Major2				
Conflicting Flow All	194	217	110	218	277	23	170	0	0	47	0	0
Stage 1	140	140	-	77	77	-	-	-	-	-	-	-
Stage 2	54	77	-	141	200	-	-	-	-	-	-	-
Critical Hdwy	7.33	6.53	6.23	7.33	6.53	6.93	4.13	-	-	4.13	-	-
Critical Hdwy Stg 1	6.13	5.53	-	6.53	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.53	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.519	4.019	3.319	3.519	4.019	3.319	2.219	-	-	2.219	-	-
Pot Cap-1 Maneuver	757	680	943	729	630	1048	1407	-	-	1560	-	-
Stage 1	862	780	-	924	831	-	-	-	-	-	-	-
Stage 2	953	830	-	861	735	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	727	666	943	680	617	1048	1407	-	-	1560	-	-
Mov Cap-2 Maneuver	727	666	-	680	617	-	-	-	-	-	-	-
Stage 1	854	773	-	914	822	-	-	-	-	-	-	-
Stage 2	924	821	-	812	728	-	-	-	-	-	-	-

Approach	EB	WB			NB			SB			
HCM Control Delay, s/v	9.5	9.59			1.86			0.6			
HCM LOS	A	A			A			A			
<hr/>											
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR			
Capacity (veh/h)	1407	-	-	862	822	1560	-	-			
HCM Lane V/C Ratio	0.011	-	-	0.071	0.045	0.01	-	-			
HCM Control Delay (s/veh)	7.6	-	-	9.5	9.6	7.3	-	-			
HCM Lane LOS	A	-	-	A	A	A	-	-			
HCM 95th %tile Q(veh)	0	-	-	0.2	0.1	0	-	-			

## Intersection

Int Delay, s/veh 1.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↑	↑	↑	↑↑	↑			↑	0	0	↑
Traffic Vol, veh/h	76	631	4	1	1212	83	0	0	1	0	0	139
Future Vol, veh/h	76	631	4	1	1212	83	0	0	1	0	0	139
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None									
Storage Length	375	-	785	290	-	235	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	83	686	4	1	1317	90	0	0	1	0	0	151

Major/Minor	Major1	Major2		Minor1		Minor2	
Conflicting Flow All	1408	0	0	690	0	0	-
Stage 1	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-
Critical Hdwy	4.14	-	-	4.14	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.32
Pot Cap-1 Maneuver	481	-	-	900	-	0	653
Stage 1	-	-	-	-	-	0	0
Stage 2	-	-	-	-	-	0	0
Platoon blocked, %	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	481	-	-	900	-	-	653
Mov Cap-2 Maneuver	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-

Approach	EB	WB		NB		SB		
HCM Control Delay, s/v	1.5	0.01		10.52		19.01		
HCM LOS				B		C		
<hr/>								
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	653	481	-	-	900	-	-	406
HCM Lane V/C Ratio	0.002	0.172	-	-	0.001	-	-	0.372
HCM Control Delay (s/veh)	10.5	14	-	-	9	-	-	19
HCM Lane LOS	B	B	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0	0.6	-	-	0	-	-	1.7

## HCM 7th Signalized Intersection Summary

3: CO-2 &amp; E. 104th Street

04/24/2024

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑
Traffic Volume (veh/h)	156	925	127	185	659	53	225	592	362	34	188	53
Future Volume (veh/h)	156	925	127	185	659	53	225	592	362	34	188	53
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
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		No		No	
Adj Sat Flow, veh/h/ln	1618	1811	1781	1885	1870	1870	1767	1707	1767	1707	1796	1752
Adj Flow Rate, veh/h	193	995	0	215	766	0	341	688	0	57	235	0
Peak Hour Factor	0.81	0.93	0.93	0.86	0.86	0.65	0.66	0.86	0.73	0.60	0.80	0.79
Percent Heavy Veh, %	19	6	8	1	2	2	9	13	9	13	7	10
Cap, veh/h	246	1013		281	1041		252	1290		72	995	
Arrive On Green	0.08	0.29	0.00	0.03	0.10	0.00	0.15	0.40	0.00	0.04	0.29	0.00
Sat Flow, veh/h	2990	3441	1510	3483	3554	1585	1682	3244	1497	1626	3413	1485
Grp Volume(v), veh/h	193	995	0	215	766	0	341	688	0	57	235	0
Grp Sat Flow(s), veh/h/ln	1495	1721	1510	1742	1777	1585	1682	1622	1497	1626	1706	1485
Q Serve(g_s), s	7.6	34.4	0.0	7.4	25.2	0.0	18.0	19.5	0.0	4.2	6.3	0.0
Cycle Q Clear(g_c), s	7.6	34.4	0.0	7.4	25.2	0.0	18.0	19.5	0.0	4.2	6.3	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	246	1013		281	1041		252	1290		72	995	
V/C Ratio(X)	0.79	0.98		0.77	0.74		1.35	0.53		0.80	0.24	
Avail Cap(c_a), veh/h	374	1013		435	1041		252	1290		203	995	
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	54.0	42.0	0.0	57.3	49.7	0.0	51.0	27.6	0.0	56.8	32.3	0.0
Incr Delay (d2), s/veh	6.1	24.3	0.0	4.4	4.6	0.0	181.9	1.6	0.0	17.7	0.6	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	3.0	17.4	0.0	3.5	12.6	0.0	20.1	7.5	0.0	2.0	2.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	60.2	66.3	0.0	61.6	54.3	0.0	232.9	29.2	0.0	74.5	32.9	0.0
LnGrp LOS	E	E		E	D		F	C		E	C	
Approach Vol, veh/h		1188			981			1029			292	
Approach Delay, s/veh		65.3			55.9			96.7			41.0	
Approach LOS		E			E			F			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	14.7	41.3	23.0	41.0	14.9	41.1	10.3	53.7				
Change Period (Y+Rc), s	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0				
Max Green Setting (Gmax), s	15.0	30.0	18.0	35.0	15.0	30.0	15.0	38.0				
Max Q Clear Time (g_c+l1), s	9.4	36.4	20.0	8.3	9.6	27.2	6.2	21.5				
Green Ext Time (p_c), s	0.3	0.0	0.0	1.3	0.3	1.3	0.1	3.9				

## Intersection Summary

HCM 7th Control Delay, s/veh

69.9

HCM 7th LOS

E

## Notes

User approved pedestrian interval to be less than phase max green.

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

## HCM 7th Signalized Intersection Summary

6: Revere Street &amp; E. 104th Street

04/24/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑
Traffic Volume (veh/h)	51	1151	15	9	799	76	9	3	6	96	4	37
Future Volume (veh/h)	51	1151	15	9	799	76	9	3	6	96	4	37
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
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											
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	55	1251	0	10	868	83	10	3	7	104	4	40
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	121	2186		21	2104	938	41	218	185	130	333	282
Arrive On Green	0.07	1.00	0.00	0.01	0.59	0.59	0.01	0.12	0.12	0.07	0.18	0.18
Sat Flow, veh/h	3456	3554	1585	1781	3554	1585	3456	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	55	1251	0	10	868	83	10	3	7	104	4	40
Grp Sat Flow(s), veh/h/ln1728	1777	1585	1781	1777	1585	1728	1870	1585	1781	1870	1585	
Q Serve(g_s), s	1.8	0.0	0.0	0.7	15.8	2.7	0.3	0.2	0.5	6.9	0.2	2.6
Cycle Q Clear(g_c), s	1.8	0.0	0.0	0.7	15.8	2.7	0.3	0.2	0.5	6.9	0.2	2.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	121	2186		21	2104	938	41	218	185	130	333	282
V/C Ratio(X)	0.45	0.57		0.48	0.41	0.09	0.25	0.01	0.04	0.80	0.01	0.14
Avail Cap(c_a), veh/h	288	2186		148	2104	938	518	218	185	267	333	282
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.7	0.0	0.0	58.9	13.2	10.5	58.8	46.9	47.0	54.8	40.6	41.6
Incr Delay (d2), s/veh	2.7	1.1	0.0	15.7	0.6	0.2	3.1	0.1	0.4	10.7	0.1	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/ln0.8	0.3	0.0	0.4	5.9	1.0	0.2	0.1	0.2	3.5	0.1	1.1	
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	57.4	1.1	0.0	74.6	13.8	10.7	61.8	47.0	47.4	65.4	40.7	42.7
LnGrp LOS	E	A		E	B	B	E	D	D	E	D	D
Approach Vol, veh/h	1306			961			20			148		
Approach Delay, s/veh	3.5			14.2			54.6			58.6		
Approach LOS	A			B			D			E		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	6.4	79.8	6.4	27.3	9.2	77.0	13.8	20.0				
Change Period (Y+Rc), s	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0				
Max Green Setting (Gmax), s	56.0	18.0	14.0	10.0	56.0	18.0	14.0					
Max Q Clear Time (g_c+l <sub>q</sub> , s)	2.0	2.3	4.6	3.8	17.8	8.9	2.5					
Green Ext Time (p_c), s	0.0	11.5	0.0	0.0	0.0	6.8	0.1	0.0				

## Intersection Summary

HCM 7th Control Delay, s/veh

11.5

HCM 7th LOS

B

## Notes

User approved pedestrian interval to be less than phase max green.

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

## Intersection

Int Delay, s/veh 4.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
<b>Lane Configurations</b>												
Traffic Vol, veh/h	25	4	66	7	3	7	30	95	5	10	64	18
Future Vol, veh/h	25	4	66	7	3	7	30	95	5	10	64	18
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	80	-	-	100	-	100
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	27	4	72	8	3	8	33	103	5	11	70	20

Major/Minor	Minor2	Minor1			Major1			Major2				
Conflicting Flow All	210	265	70	265	282	54	89	0	0	109	0	0
Stage 1	91	91	-	171	171	-	-	-	-	-	-	-
Stage 2	118	174	-	93	111	-	-	-	-	-	-	-
Critical Hdwy	7.33	6.53	6.23	7.33	6.53	6.93	4.13	-	-	4.13	-	-
Critical Hdwy Stg 1	6.13	5.53	-	6.53	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.53	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.519	4.019	3.319	3.519	4.019	3.319	2.219	-	-	2.219	-	-
Pot Cap-1 Maneuver	738	640	993	677	626	1002	1505	-	-	1481	-	-
Stage 1	915	819	-	814	757	-	-	-	-	-	-	-
Stage 2	874	754	-	913	803	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	708	621	993	606	608	1002	1505	-	-	1481	-	-
Mov Cap-2 Maneuver	708	621	-	606	608	-	-	-	-	-	-	-
Stage 1	909	813	-	797	740	-	-	-	-	-	-	-
Stage 2	845	738	-	836	797	-	-	-	-	-	-	-

Approach	EB	WB			NB		SB		
HCM Control Delay, s/v	9.65	10.1			1.72		0.81		
HCM LOS	A	B							
<b>Minor Lane/Major Mvmt</b>									
Capacity (veh/h)	1505	-	-	878	724	1481	-	-	-
HCM Lane V/C Ratio	0.022	-	-	0.118	0.026	0.007	-	-	-
HCM Control Delay (s/veh)	7.4	-	-	9.6	10.1	7.4	-	-	-
HCM Lane LOS	A	-	-	A	B	A	-	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.4	0.1	0	-	-	-

## Intersection

Int Delay, s/veh 1.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↑	↑	↑	↑↑	↑			↑	0	0	105
Traffic Vol, veh/h	104	1217	1	1	792	53	0	0	1	0	0	105
Future Vol, veh/h	104	1217	1	1	792	53	0	0	1	0	0	105
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None									
Storage Length	375	-	785	290	-	235	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	113	1323	1	1	861	58	0	0	1	0	0	114

Major/Minor	Major1	Major2			Minor1			Minor2				
Conflicting Flow All	918	0	0	1324	0	0	-	-	661	-	-	430
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	4.14	-	-	4.14	-	-	-	-	6.94	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	-	-	3.32	-	-	3.32
Pot Cap-1 Maneuver	739	-	-	518	-	-	0	0	405	0	0	573
Stage 1	-	-	-	-	-	-	0	0	-	0	0	-
Stage 2	-	-	-	-	-	-	0	0	-	0	0	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	739	-	-	518	-	-	-	-	405	-	-	573
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB			NB			SB				
HCM Control Delay, s/v	0.85	0.01			13.92			12.84				
HCM LOS					B			B				
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	405	739	-	-	518	-	-	573				
HCM Lane V/C Ratio	0.003	0.153	-	-	0.002	-	-	0.199				
HCM Control Delay (s/veh)	13.9	10.8	-	-	12	-	-	12.8				
HCM Lane LOS	B	B	-	-	B	-	-	B				
HCM 95th %tile Q(veh)	0	0.5	-	-	0	-	-	0.7				

**APPENDIX C**  
**ITE TRIP GENERATION RESOURCES AND CALCULATIONS**

**APPENDIX D**  
**2025 NO-BUILD TRAFFIC SCENARIO CAPACITY**  
**ANALYSIS SUMMARY SHEETS**

## HCM 7th Signalized Intersection Summary

3: CO-2 &amp; E. 104th Street

08/15/2024

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	↑↑	↑↑	↑	↑↑	↑↑	↑	↑	↑↑	↑	↑	↑↑	↑
Traffic Volume (veh/h)	176	632	93	585	825	77	87	187	169	29	467	132
Future Volume (veh/h)	176	632	93	585	825	77	87	187	169	29	467	132
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
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		No		No	
Adj Sat Flow, veh/h/ln	1618	1811	1781	1885	1870	1870	1767	1707	1767	1707	1796	1752
Adj Flow Rate, veh/h	217	680	0	680	959	0	132	217	0	48	584	0
Peak Hour Factor	0.81	0.93	0.93	0.86	0.86	0.65	0.66	0.86	0.73	0.60	0.80	0.79
Percent Heavy Veh, %	19	6	8	1	2	2	9	13	9	13	7	10
Cap, veh/h	267	1123		377	1227		166	1120		60	967	
Arrive On Green	0.09	0.33	0.00	0.04	0.11	0.00	0.10	0.35	0.00	0.04	0.28	0.00
Sat Flow, veh/h	2990	3441	1510	3483	3554	1585	1682	3244	1497	1626	3413	1485
Grp Volume(v), veh/h	217	680	0	680	959	0	132	217	0	48	584	0
Grp Sat Flow(s), veh/h/ln	1495	1721	1510	1742	1777	1585	1682	1622	1497	1626	1706	1485
Q Serve(g_s), s	8.6	19.9	0.0	13.0	31.5	0.0	9.2	5.6	0.0	3.5	17.8	0.0
Cycle Q Clear(g_c), s	8.6	19.9	0.0	13.0	31.5	0.0	9.2	5.6	0.0	3.5	17.8	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	267	1123		377	1227		166	1120		60	967	
V/C Ratio(X)	0.81	0.61		1.80	0.78		0.79	0.19		0.80	0.60	
Avail Cap(c_a), veh/h	324	1123		377	1227		308	1120		203	967	
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	53.7	33.9	0.0	57.9	48.8	0.0	52.9	27.6	0.0	57.3	37.2	0.0
Incr Delay (d2), s/veh	12.3	2.4	0.0	371.4	5.0	0.0	8.3	0.4	0.0	20.8	2.8	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	3.6	8.4	0.0	25.5	15.8	0.0	4.2	2.2	0.0	1.8	7.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	66.0	36.4	0.0	429.2	53.8	0.0	61.2	28.0	0.0	78.2	40.0	0.0
LnGrp LOS	E	D		F	D		E	C		E	D	
Approach Vol, veh/h		897			1639			349			632	
Approach Delay, s/veh		43.5			209.5			40.5			42.9	
Approach LOS		D			F			D			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	18.0	45.1	16.9	40.0	15.7	47.4	9.4	47.4				
Change Period (Y+Rc), s	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0				
Max Green Setting (Gmax), s	13.0	29.0	22.0	34.0	13.0	29.0	15.0	41.0				
Max Q Clear Time (g_c+l1), s	15.0	21.9	11.2	19.8	10.6	33.5	5.5	7.6				
Green Ext Time (p_c), s	0.0	2.4	0.2	3.0	0.2	0.0	0.0	1.3				

## Intersection Summary

HCM 7th Control Delay, s/veh

120.5

HCM 7th LOS

F

## Notes

User approved pedestrian interval to be less than phase max green.

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

## HCM 7th Signalized Intersection Summary

6: Revere Street &amp; E. 104th Street

08/15/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑
Traffic Volume (veh/h)	18	608	44	57	1238	39	96	28	32	87	27	71
Future Volume (veh/h)	18	608	44	57	1238	39	96	28	32	87	27	71
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
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											
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	20	661	0	62	1346	42	104	30	35	95	29	77
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	70	2000		80	2087	931	161	265	225	120	304	258
Arrive On Green	0.01	0.19	0.00	0.04	0.59	0.59	0.05	0.14	0.14	0.07	0.16	0.16
Sat Flow, veh/h	3456	3554	1585	1781	3554	1585	3456	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	20	661	0	62	1346	42	104	30	35	95	29	77
Grp Sat Flow(s), veh/h/ln1728	1777	1585	1781	1777	1585	1728	1870	1585	1781	1870	1585	
Q Serve(g_s), s	0.7	19.4	0.0	4.1	30.2	1.3	3.6	1.7	2.3	6.3	1.6	5.1
Cycle Q Clear(g_c), s	0.7	19.4	0.0	4.1	30.2	1.3	3.6	1.7	2.3	6.3	1.6	5.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	70	2000		80	2087	931	161	265	225	120	304	258
V/C Ratio(X)	0.29	0.33		0.78	0.64	0.05	0.65	0.11	0.16	0.79	0.10	0.30
Avail Cap(c_a), veh/h	288	2000		148	2087	931	518	265	225	267	304	258
HCM Platoon Ratio	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.7	29.2	0.0	56.7	16.4	10.5	56.2	44.9	45.2	55.1	42.7	44.2
Incr Delay (d2), s/veh	2.2	0.4	0.0	14.7	1.6	0.1	4.3	0.9	1.5	11.0	0.6	3.0
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/ln0.3	9.3	0.0	2.1	11.5	0.5	1.6	0.8	1.0	3.2	0.8	2.2	
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	60.9	29.7	0.0	71.4	18.0	10.6	60.6	45.8	46.7	66.2	43.4	47.2
LnGrp LOS	E	C		E	B	B	E	D	D	E	D	D
Approach Vol, veh/h		681			1450			169			201	
Approach Delay, s/veh		30.6			20.1			55.1			55.6	
Approach LOS		C			C			E			E	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	0.4	73.5	10.6	25.5	7.4	76.5	13.1	23.0				
Change Period (Y+Rc), s	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0				
Max Green Setting (Gmax), s	53.0	18.0	17.0	10.0	53.0	18.0	17.0					
Max Q Clear Time (g_c+l16), s	21.4	5.6	7.1	2.7	32.2	8.3	4.3					
Green Ext Time (p_c), s	0.0	4.5	0.2	0.2	0.0	9.7	0.1	0.1				

## Intersection Summary

HCM 7th Control Delay, s/veh

28.2

HCM 7th LOS

C

## Notes

User approved pedestrian interval to be less than phase max green.

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

## Intersection

Int Delay, s/veh 2.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	15	2	40	16	1	17	14	70	1	14	129	56
Future Vol, veh/h	15	2	40	16	1	17	14	70	1	14	129	56
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	80	-	-	100	-	100
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	16	2	43	17	1	18	15	76	1	15	140	61

Major/Minor	Minor2	Minor1			Major1			Major2				
Conflicting Flow All	240	278	140	279	339	39	201	0	0	77	0	0
Stage 1	171	171	-	107	107	-	-	-	-	-	-	-
Stage 2	69	108	-	172	232	-	-	-	-	-	-	-
Critical Hdwy	7.33	6.53	6.23	7.33	6.53	6.93	4.13	-	-	4.13	-	-
Critical Hdwy Stg 1	6.13	5.53	-	6.53	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.53	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.519	4.019	3.319	3.519	4.019	3.319	2.219	-	-	2.219	-	-
Pot Cap-1 Maneuver	704	629	907	662	582	1025	1370	-	-	1520	-	-
Stage 1	831	757	-	887	806	-	-	-	-	-	-	-
Stage 2	933	806	-	830	712	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	676	616	907	615	570	1025	1370	-	-	1520	-	-
Mov Cap-2 Maneuver	676	616	-	615	570	-	-	-	-	-	-	-
Stage 1	822	749	-	877	797	-	-	-	-	-	-	-
Stage 2	905	797	-	780	705	-	-	-	-	-	-	-

Approach	EB	WB			NB			SB				
HCM Control Delay, s/v	9.75	9.93			1.26			0.52				
HCM LOS	A	A										
<hr/>												
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR				
Capacity (veh/h)	1370	-	-	820	767	1520	-	-				
HCM Lane V/C Ratio	0.011	-	-	0.076	0.048	0.01	-	-				
HCM Control Delay (s/veh)	7.7	-	-	9.8	9.9	7.4	-	-				
HCM Lane LOS	A	-	-	A	A	A	-	-				
HCM 95th %tile Q(veh)	0	-	-	0.2	0.2	0	-	-				

## Intersection

Int Delay, s/veh 2.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↑	↑	↑	↑↑	↑			↑			↑
Traffic Vol, veh/h	78	644	82	26	1236	85	0	0	84	0	0	142
Future Vol, veh/h	78	644	82	26	1236	85	0	0	84	0	0	142
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None									
Storage Length	375	-	785	290	-	235	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	85	700	89	28	1343	92	0	0	91	0	0	154

Major/Minor	Major1	Major2		Minor1		Minor2	
Conflicting Flow All	1436	0	0	789	0	0	-
Stage 1	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-
Critical Hdwy	4.14	-	-	4.14	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.32
Pot Cap-1 Maneuver	469	-	-	826	-	-	646
Stage 1	-	-	-	-	-	0	0
Stage 2	-	-	-	-	-	0	0
Platoon blocked, %	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	469	-	-	826	-	-	646
Mov Cap-2 Maneuver	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-

Approach	EB	WB		NB		SB		
HCM Control Delay, s/v	1.39	0.18		11.49		19.63		
HCM LOS				B		C		
<hr/>								
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	646	469	-	-	826	-	-	398
HCM Lane V/C Ratio	0.141	0.181	-	-	0.034	-	-	0.387
HCM Control Delay (s/veh)	11.5	14.4	-	-	9.5	-	-	19.6
HCM Lane LOS	B	B	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.5	0.7	-	-	0.1	-	-	1.8

## HCM 7th Signalized Intersection Summary

3: CO-2 &amp; E. 104th Street

08/15/2024

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑
Traffic Volume (veh/h)	159	1029	130	221	752	70	230	604	404	52	192	54
Future Volume (veh/h)	159	1029	130	221	752	70	230	604	404	52	192	54
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
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		No		No	
Adj Sat Flow, veh/h/ln	1618	1811	1781	1885	1870	1870	1767	1707	1767	1707	1796	1752
Adj Flow Rate, veh/h	196	1106	0	257	874	0	348	702	0	87	240	0
Peak Hour Factor	0.81	0.93	0.93	0.86	0.86	0.65	0.66	0.86	0.73	0.60	0.80	0.79
Percent Heavy Veh, %	19	6	8	1	2	2	9	13	9	13	7	10
Cap, veh/h	249	972		323	1037		252	1218		108	995	
Arrive On Green	0.08	0.28	0.00	0.03	0.10	0.00	0.15	0.38	0.00	0.07	0.29	0.00
Sat Flow, veh/h	2990	3441	1510	3483	3554	1585	1682	3244	1497	1626	3413	1485
Grp Volume(v), veh/h	196	1106	0	257	874	0	348	702	0	87	240	0
Grp Sat Flow(s), veh/h/ln	1495	1721	1510	1742	1777	1585	1682	1622	1497	1626	1706	1485
Q Serve(g_s), s	7.7	33.9	0.0	8.8	29.0	0.0	18.0	20.7	0.0	6.3	6.4	0.0
Cycle Q Clear(g_c), s	7.7	33.9	0.0	8.8	29.0	0.0	18.0	20.7	0.0	6.3	6.4	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	249	972		323	1037		252	1218		108	995	
V/C Ratio(X)	0.79	1.14		0.80	0.84		1.38	0.58		0.81	0.24	
Avail Cap(c_a), veh/h	374	972		435	1037		252	1218		203	995	
HCM Platoon Ratio	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	54.0	43.1	0.0	57.0	51.5	0.0	51.0	29.9	0.0	55.3	32.4	0.0
Incr Delay (d2), s/veh	6.4	74.9	0.0	7.2	8.3	0.0	193.4	2.0	0.0	13.1	0.6	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	3.1	23.9	0.0	4.3	15.0	0.0	20.9	8.1	0.0	2.9	2.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	60.4	118.0	0.0	64.3	59.8	0.0	244.4	31.9	0.0	68.4	33.0	0.0
LnGrp LOS	E	F		E	E		F	C		E	C	
Approach Vol, veh/h		1302			1131			1050			327	
Approach Delay, s/veh		109.3			60.8			102.3			42.4	
Approach LOS		F			E			F			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	16.1	39.9	23.0	41.0	15.0	41.0	13.0	51.0				
Change Period (Y+Rc), s	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0				
Max Green Setting (Gmax), s	15.0	30.0	18.0	35.0	15.0	30.0	15.0	38.0				
Max Q Clear Time (g_c+l1), s	10.8	35.9	20.0	8.4	9.7	31.0	8.3	22.7				
Green Ext Time (p_c), s	0.3	0.0	0.0	1.4	0.3	0.0	0.1	3.9				

## Intersection Summary

HCM 7th Control Delay, s/veh 87.2

HCM 7th LOS F

## Notes

User approved pedestrian interval to be less than phase max green.

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

## HCM 7th Signalized Intersection Summary

6: Revere Street &amp; E. 104th Street

08/15/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑
Traffic Volume (veh/h)	52	1175	50	79	815	78	109	35	38	98	39	38
Future Volume (veh/h)	52	1175	50	79	815	78	109	35	38	98	39	38
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
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											
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	57	1277	0	86	886	85	118	38	41	107	42	41
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	122	2005		108	2096	935	177	218	185	133	262	222
Arrive On Green	0.07	1.00	0.00	0.06	0.59	0.59	0.05	0.12	0.12	0.07	0.14	0.14
Sat Flow, veh/h	3456	3554	1585	1781	3554	1585	3456	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	57	1277	0	86	886	85	118	38	41	107	42	41
Grp Sat Flow(s), veh/h/ln1728	1777	1585	1781	1777	1585	1728	1870	1585	1781	1870	1585	
Q Serve(g_s), s	1.9	0.0	0.0	5.7	16.4	2.8	4.0	2.2	2.8	7.1	2.4	2.7
Cycle Q Clear(g_c), s	1.9	0.0	0.0	5.7	16.4	2.8	4.0	2.2	2.8	7.1	2.4	2.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	122	2005		108	2096	935	177	218	185	133	262	222
V/C Ratio(X)	0.47	0.64		0.79	0.42	0.09	0.67	0.17	0.22	0.80	0.16	0.18
Avail Cap(c_a), veh/h	288	2005		148	2096	935	518	218	185	267	262	222
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.7	0.0	0.0	55.6	13.5	10.7	55.9	47.8	48.1	54.6	45.4	45.5
Incr Delay (d2), s/veh	2.7	1.6	0.0	18.1	0.6	0.2	4.3	1.7	2.8	10.6	1.3	1.8
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/ln0.8	0.4	0.0	3.1	6.2	1.0	1.9	1.1	1.3	3.6	1.2	1.2	
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	57.4	1.6	0.0	73.7	14.1	10.9	60.2	49.5	50.8	65.2	46.7	47.3
LnGrp LOS	E	A		E	B	B	E	D	D	E	D	D
Approach Vol, veh/h	1334			1057			197			190		
Approach Delay, s/veh	3.9			18.7			56.2			57.3		
Approach LOS	A			B			E			E		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	2.3	73.7	11.1	22.8	9.3	76.8	14.0	20.0				
Change Period (Y+Rc), s	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0				
Max Green Setting (Gmax), s	56.0	18.0	14.0	10.0	56.0	18.0	14.0					
Max Q Clear Time (g_c+l7), s	2.0	6.0	4.7	3.9	18.4	9.1	4.8					
Green Ext Time (p_c), s	0.0	11.9	0.2	0.2	0.0	7.0	0.1	0.1				

## Intersection Summary

HCM 7th Control Delay, s/veh

16.9

HCM 7th LOS

B

## Notes

User approved pedestrian interval to be less than phase max green.

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

## Intersection

Int Delay, s/veh 3.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
<b>Lane Configurations</b>												
Traffic Vol, veh/h	26	4	67	7	3	7	31	129	5	10	101	18
Future Vol, veh/h	26	4	67	7	3	7	31	129	5	10	101	18
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	80	-	-	100	-	100
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	28	4	73	8	3	8	34	140	5	11	110	20

Major/Minor	Minor2	Minor1			Major1			Major2				
Conflicting Flow All	271	345	110	344	361	73	129	0	0	146	0	0
Stage 1	132	132	-	210	210	-	-	-	-	-	-	-
Stage 2	139	213	-	134	151	-	-	-	-	-	-	-
Critical Hdwy	7.33	6.53	6.23	7.33	6.53	6.93	4.13	-	-	4.13	-	-
Critical Hdwy Stg 1	6.13	5.53	-	6.53	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.53	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.519	4.019	3.319	3.519	4.019	3.319	2.219	-	-	2.219	-	-
Pot Cap-1 Maneuver	671	578	943	598	565	975	1455	-	-	1435	-	-
Stage 1	871	787	-	773	728	-	-	-	-	-	-	-
Stage 2	850	726	-	869	772	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	642	560	943	531	548	975	1455	-	-	1435	-	-
Mov Cap-2 Maneuver	642	560	-	531	548	-	-	-	-	-	-	-
Stage 1	865	781	-	755	711	-	-	-	-	-	-	-
Stage 2	820	709	-	792	766	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v10.06		10.63		1.42
HCM LOS	B	B		0.58

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1455	-	-	817	658	1435	-	-
HCM Lane V/C Ratio	0.023	-	-	0.129	0.028	0.008	-	-
HCM Control Delay (s/veh)	7.5	-	-	10.1	10.6	7.5	-	-
HCM Lane LOS	A	-	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.4	0.1	0	-	-

Intersection												
Int Delay, s/veh	1.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↑	↑	↑	↑↑	↑			↑			↑
Traffic Vol, veh/h	106	1242	105	35	808	54	0	0	100	0	0	107
Future Vol, veh/h	106	1242	105	35	808	54	0	0	100	0	0	107
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	375	-	785	290	-	235	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	115	1350	114	38	878	59	0	0	109	0	0	116
Major/Minor	Major1		Major2		Minor1		Minor2					
Conflicting Flow All	937	0	0	1464	0	0	-	-	675	-	-	439
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	4.14	-	-	4.14	-	-	-	-	6.94	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	-	-	3.32	-	-	3.32
Pot Cap-1 Maneuver	727	-	-	457	-	-	0	0	396	0	0	566
Stage 1	-	-	-	-	-	-	0	0	-	0	0	-
Stage 2	-	-	-	-	-	-	0	0	-	0	0	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	727	-	-	457	-	-	-	-	396	-	-	566
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s/v	0.79			0.53			17.47		13.01			
HCM LOS							C		B			
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	396	727	-	-	457	-	-	566				
HCM Lane V/C Ratio	0.274	0.159	-	-	0.083	-	-	0.206				
HCM Control Delay (s/veh)	17.5	10.9	-	-	13.6	-	-	13				
HCM Lane LOS	C	B	-	-	B	-	-	B				
HCM 95th %tile Q(veh)	1.1	0.6	-	-	0.3	-	-	0.8				

## HCM 7th Signalized Intersection Summary

3: CO-2 &amp; E. 104th Street

08/15/2024

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	↑↑	↑↑	↑	↑↑	↑↑	↑	↑	↑↑	↑	↑	↑↑	↑
Traffic Volume (veh/h)	176	632	93	585	825	77	87	187	169	29	467	132
Future Volume (veh/h)	176	632	93	585	825	77	87	187	169	29	467	132
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
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											
Adj Sat Flow, veh/h/ln	1618	1811	1781	1885	1870	1870	1767	1707	1767	1707	1796	1752
Adj Flow Rate, veh/h	217	680	0	680	959	0	132	217	0	48	584	0
Peak Hour Factor	0.81	0.93	0.93	0.86	0.86	0.65	0.66	0.86	0.73	0.60	0.80	0.79
Percent Heavy Veh, %	19	6	8	1	2	2	9	13	9	13	7	10
Cap, veh/h	258	811		736	1308		153	1066		113	1048	
Arrive On Green	0.09	0.24	0.00	0.42	0.74	0.00	0.09	0.33	0.00	0.07	0.31	0.00
Sat Flow, veh/h	2990	3441	1510	3483	3554	1585	1682	3244	1497	1626	3413	1485
Grp Volume(v), veh/h	217	680	0	680	959	0	132	217	0	48	584	0
Grp Sat Flow(s), veh/h/ln	1495	1721	1510	1742	1777	1585	1682	1622	1497	1626	1706	1485
Q Serve(g_s), s	10.0	26.4	0.0	25.9	21.7	0.0	10.8	6.7	0.0	4.0	20.0	0.0
Cycle Q Clear(g_c), s	10.0	26.4	0.0	25.9	21.7	0.0	10.8	6.7	0.0	4.0	20.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	258	811		736	1308		153	1066		113	1048	
V/C Ratio(X)	0.84	0.84		0.92	0.73		0.86	0.20		0.42	0.56	
Avail Cap(c_a), veh/h	278	811		736	1308		156	1066		116	1048	
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	63.0	51.0	0.0	39.3	14.5	0.0	62.7	33.8	0.0	62.4	40.5	0.0
Incr Delay (d2), s/veh	19.2	10.1	0.0	17.3	3.7	0.0	35.2	0.4	0.0	2.5	2.1	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	4.4	12.2	0.0	10.3	5.4	0.0	6.1	2.7	0.0	1.7	8.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	82.2	61.1	0.0	56.6	18.2	0.0	97.9	34.3	0.0	64.9	42.7	0.0
LnGrp LOS	F	E		E	B		F	C		E	D	
Approach Vol, veh/h		897			1639			349			632	
Approach Delay, s/veh		66.2			34.2			58.3			44.4	
Approach LOS		E			C			E			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	35.6	39.0	17.8	49.0	17.1	57.5	14.8	52.0				
Change Period (Y+Rc), s	6.0	* 6	5.0	6.0	5.0	6.0	5.0	6.0				
Max Green Setting (Gmax), s	29.0	* 33	13.0	43.0	13.0	49.0	10.0	46.0				
Max Q Clear Time (g_c+l1), s	27.9	28.4	12.8	22.0	12.0	23.7	6.0	8.7				
Green Ext Time (p_c), s	0.4	1.7	0.0	3.5	0.1	6.7	0.0	1.3				

## Intersection Summary

HCM 7th Control Delay, s/veh 46.6

HCM 7th LOS D

## Notes

User approved pedestrian interval to be less than phase max green.

\* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

## HCM 7th Signalized Intersection Summary

6: Revere Street &amp; E. 104th Street

08/15/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑
Traffic Volume (veh/h)	18	608	44	57	1238	39	96	28	32	87	27	71
Future Volume (veh/h)	18	608	44	57	1238	39	96	28	32	87	27	71
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
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											
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	20	661	0	62	1346	42	104	30	35	95	29	77
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	146	1997		79	1980	883	150	240	204	192	361	306
Arrive On Green	0.08	1.00	0.00	0.04	0.56	0.56	0.04	0.13	0.13	0.11	0.19	0.19
Sat Flow, veh/h	3456	3554	1585	1781	3554	1585	3456	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	20	661	0	62	1346	42	104	30	35	95	29	77
Grp Sat Flow(s), veh/h/ln1728	1777	1585	1781	1777	1585	1728	1870	1585	1781	1870	1585	
Q Serve(g_s), s	0.8	0.0	0.0	4.8	37.8	1.7	4.2	2.0	2.4	7.0	1.8	5.8
Cycle Q Clear(g_c), s	0.8	0.0	0.0	4.8	37.8	1.7	4.2	2.0	2.4	7.0	1.8	5.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	146	1997		79	1980	883	150	240	204	192	361	306
V/C Ratio(X)	0.14	0.33		0.78	0.68	0.05	0.69	0.12	0.17	0.49	0.08	0.25
Avail Cap(c_a), veh/h	146	1997		140	1980	883	197	240	204	216	361	306
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	61.7	0.0	0.0	66.2	22.1	14.1	66.0	54.0	40.1	58.9	46.3	47.9
Incr Delay (d2), s/veh	0.4	0.4	0.0	15.1	1.9	0.1	6.6	1.1	1.8	2.0	0.4	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/ln0.3	0.1	0.0	2.5	15.3	0.6	2.0	1.0	1.2	3.3	0.9	0.2	
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	62.2	0.4	0.0	81.3	24.0	14.2	72.6	55.1	41.9	60.8	46.8	49.9
LnGrp LOS	E	A		F	C	B	E	E	D	E	D	D
Approach Vol, veh/h	681			1450			169			201		
Approach Delay, s/veh	2.3			26.2			63.2			54.6		
Approach LOS	A			C			E			D		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), \$1.2	84.7	11.1	33.0	11.9	84.0	20.1	24.0					
Change Period (Y+Rc), s	5.0	6.0	5.0	6.0	6.0	* 6	5.0	6.0				
Max Green Setting (Gmax), s	72.0	8.0	27.0	5.0	* 78	17.0	18.0					
Max Q Clear Time (g_c+l16.8)	2.0	6.2	7.8	2.8	39.8	9.0	4.4					
Green Ext Time (p_c), s	0.0	4.7	0.0	0.3	0.0	12.3	0.1	0.1				

## Intersection Summary

HCM 7th Control Delay, s/veh 24.4

HCM 7th LOS C

## Notes

User approved pedestrian interval to be less than phase max green.

\* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

## Intersection

Int Delay, s/veh 2.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
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## Lane Configurations

Traffic Vol, veh/h	15	2	40	16	1	17	14	70	1	14	129	56
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Future Vol, veh/h	15	2	40	16	1	17	14	70	1	14	129	56
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Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
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Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
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RT Channelized	-	-	None									
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Storage Length	-	-	-	-	-	-	80	-	-	100	-	100
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Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
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Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
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Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
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Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
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Mvmt Flow	16	2	43	17	1	18	15	76	1	15	140	61
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Major/Minor	Minor2	Minor1			Major1		Major2		
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Conflicting Flow All	240	278	140	279	339	39	201	0	0	77	0	0
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Stage 1	171	171	-	107	107	-	-	-	-	-	-	-
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Stage 2	69	108	-	172	232	-	-	-	-	-	-	-
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Critical Hdwy	7.33	6.53	6.23	7.33	6.53	6.93	4.13	-	-	4.13	-	-
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Critical Hdwy Stg 1	6.13	5.53	-	6.53	5.53	-	-	-	-	-	-	-
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Critical Hdwy Stg 2	6.53	5.53	-	6.13	5.53	-	-	-	-	-	-	-
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Follow-up Hdwy	3.519	4.019	3.319	3.519	4.019	3.319	2.219	-	-	2.219	-	-
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Pot Cap-1 Maneuver	704	629	907	662	582	1025	1370	-	-	1520	-	-
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Stage 1	831	757	-	887	806	-	-	-	-	-	-	-
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Stage 2	933	806	-	830	712	-	-	-	-	-	-	-
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Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
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Mov Cap-1 Maneuver	676	616	907	615	570	1025	1370	-	-	1520	-	-
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Mov Cap-2 Maneuver	676	616	-	615	570	-	-	-	-	-	-	-
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Stage 1	822	749	-	877	797	-	-	-	-	-	-	-
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Stage 2	905	797	-	780	705	-	-	-	-	-	-	-
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Approach	EB	WB			NB		SB		
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HCM Control Delay, s/v	9.75	9.93			1.26		0.52		
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HCM LOS	A	A							
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Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
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Capacity (veh/h)	1370	-	-	820	767	1520	-	-
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HCM Lane V/C Ratio	0.011	-	-	0.076	0.048	0.01	-	-
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HCM Control Delay (s/veh)	7.7	-	-	9.8	9.9	7.4	-	-
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HCM Lane LOS	A	-	-	A	A	A	-	-
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HCM 95th %tile Q(veh)	0	-	-	0.2	0.2	0	-	-
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## Intersection

Int Delay, s/veh 2.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↑	↑	↑	↑↑	↑			↑			↑
Traffic Vol, veh/h	78	644	82	26	1236	85	0	0	84	0	0	142
Future Vol, veh/h	78	644	82	26	1236	85	0	0	84	0	0	142
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None									
Storage Length	375	-	785	290	-	235	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	85	700	89	28	1343	92	0	0	91	0	0	154

Major/Minor	Major1	Major2		Minor1		Minor2	
Conflicting Flow All	1436	0	0	789	0	0	-
Stage 1	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-
Critical Hdwy	4.14	-	-	4.14	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.32
Pot Cap-1 Maneuver	469	-	-	826	-	-	646
Stage 1	-	-	-	-	-	0	0
Stage 2	-	-	-	-	-	0	0
Platoon blocked, %	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	469	-	-	826	-	-	646
Mov Cap-2 Maneuver	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-

Approach	EB	WB		NB		SB		
HCM Control Delay, s/v	1.39	0.18		11.49		19.63		
HCM LOS				B		C		
<hr/>								
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	646	469	-	-	826	-	-	398
HCM Lane V/C Ratio	0.141	0.181	-	-	0.034	-	-	0.387
HCM Control Delay (s/veh)	11.5	14.4	-	-	9.5	-	-	19.6
HCM Lane LOS	B	B	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.5	0.7	-	-	0.1	-	-	1.8

## HCM 7th Signalized Intersection Summary

3: CO-2 &amp; E. 104th Street

08/15/2024

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	↑↑	↑↑	↑	↑↑	↑↑	↑	↑	↑↑	↑	↑	↑↑	↑
Traffic Volume (veh/h)	159	1029	130	221	752	70	230	604	404	52	192	54
Future Volume (veh/h)	159	1029	130	221	752	70	230	604	404	52	192	54
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
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		No		No	
Adj Sat Flow, veh/h/ln	1618	1811	1781	1885	1870	1870	1767	1707	1767	1707	1796	1752
Adj Flow Rate, veh/h	196	1106	0	257	874	0	348	702	0	87	240	0
Peak Hour Factor	0.81	0.93	0.93	0.86	0.86	0.65	0.66	0.86	0.73	0.60	0.80	0.79
Percent Heavy Veh, %	19	6	8	1	2	2	9	13	9	13	7	10
Cap, veh/h	259	1032		255	1019		325	1347		105	978	
Arrive On Green	0.09	0.30	0.00	0.15	0.57	0.00	0.19	0.42	0.00	0.06	0.29	0.00
Sat Flow, veh/h	2990	3441	1510	3483	3554	1585	1682	3244	1497	1626	3413	1485
Grp Volume(v), veh/h	196	1106	0	257	874	0	348	702	0	87	240	0
Grp Sat Flow(s), veh/h/ln	1495	1721	1510	1742	1777	1585	1682	1622	1497	1626	1706	1485
Q Serve(g_s), s	9.6	45.0	0.0	11.0	31.0	0.0	29.0	24.2	0.0	7.9	8.1	0.0
Cycle Q Clear(g_c), s	9.6	45.0	0.0	11.0	31.0	0.0	29.0	24.2	0.0	7.9	8.1	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	259	1032		255	1019		325	1347		105	978	
V/C Ratio(X)	0.76	1.07		1.01	0.86		1.07	0.52		0.83	0.25	
Avail Cap(c_a), veh/h	259	1032		255	1019		325	1347		130	978	
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	67.0	52.5	0.0	64.0	29.4	0.0	60.5	32.7	0.0	69.3	41.1	0.0
Incr Delay (d2), s/veh	12.0	49.2	0.0	57.9	9.3	0.0	69.7	1.4	0.0	28.8	0.6	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	4.0	25.9	0.0	6.5	10.5	0.0	18.4	9.6	0.0	4.1	3.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	79.0	101.7	0.0	121.9	38.7	0.0	130.2	34.2	0.0	98.2	41.6	0.0
LnGrp LOS	E	F		F	D		F	C		F	D	
Approach Vol, veh/h		1302			1131			1050			327	
Approach Delay, s/veh		98.3			57.6			66.0			56.7	
Approach LOS		F			E			E			E	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	16.0	51.0	34.0	49.0	18.0	49.0	14.7	68.3				
Change Period (Y+Rc), s	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0				
Max Green Setting (Gmax), s	11.0	45.0	29.0	43.0	13.0	43.0	12.0	60.0				
Max Q Clear Time (g_c+l1), s	13.0	47.0	31.0	10.1	11.6	33.0	9.9	26.2				
Green Ext Time (p_c), s	0.0	0.0	0.0	1.4	0.1	3.9	0.0	4.9				

## Intersection Summary

HCM 7th Control Delay, s/veh

73.7

HCM 7th LOS

E

## Notes

User approved pedestrian interval to be less than phase max green.

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

## HCM 7th Signalized Intersection Summary

6: Revere Street &amp; E. 104th Street

08/15/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑
Traffic Volume (veh/h)	52	1175	50	79	815	78	109	35	38	98	39	38
Future Volume (veh/h)	52	1175	50	79	815	78	109	35	38	98	39	38
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
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		No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	57	1277	0	86	886	85	118	38	41	107	42	41
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	137	2013		107	2061	919	163	224	190	191	337	285
Arrive On Green	0.08	1.00	0.00	0.06	0.58	0.58	0.05	0.12	0.12	0.11	0.18	0.18
Sat Flow, veh/h	3456	3554	1585	1781	3554	1585	3456	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	57	1277	0	86	886	85	118	38	41	107	42	41
Grp Sat Flow(s), veh/h/ln1728	1777	1585	1781	1777	1585	1728	1870	1585	1781	1870	1585	
Q Serve(g_s), s	2.4	0.0	0.0	7.2	20.9	3.6	5.1	2.7	3.0	8.6	2.8	3.3
Cycle Q Clear(g_c), s	2.4	0.0	0.0	7.2	20.9	3.6	5.1	2.7	3.0	8.6	2.8	3.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	137	2013		107	2061	919	163	224	190	191	337	285
V/C Ratio(X)	0.42	0.63		0.81	0.43	0.09	0.73	0.17	0.22	0.56	0.12	0.14
Avail Cap(c_a), veh/h	137	2013		190	2061	919	207	224	190	214	337	285
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	67.4	0.0	0.0	69.7	17.6	14.0	70.5	59.3	42.9	63.6	51.6	51.8
Incr Delay (d2), s/veh	2.0	1.5	0.0	13.2	0.7	0.2	8.9	1.6	2.6	2.6	0.8	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/ln1.0	0.4	0.0	3.6	8.4	1.4	2.4	1.4	1.6	4.0	1.4	1.4	
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	69.4	1.5	0.0	82.9	18.3	14.2	79.4	60.9	45.5	66.2	52.3	52.8
LnGrp LOS	E	A		F	B	B	E	E	D	E	D	D
Approach Vol, veh/h	1334			1057			197			190		
Approach Delay, s/veh	4.4			23.2			68.8			60.3		
Approach LOS	A			C			E			E		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	\$4.0	91.0	12.1	33.0	11.9	93.0	21.1	24.0				
Change Period (Y+Rc), s	5.0	6.0	5.0	6.0	6.0	* 6	5.0	6.0				
Max Green Setting (Gmax), s	76.0	9.0	27.0	5.0	* 87	18.0	18.0					
Max Q Clear Time (g_c+l), s	2.0	7.1	5.3	4.4	22.9	10.6	5.0					
Green Ext Time (p_c), s	0.1	12.2	0.1	0.3	0.0	7.2	0.1	0.2				

## Intersection Summary

HCM 7th Control Delay, s/veh 20.0

HCM 7th LOS B

## Notes

User approved pedestrian interval to be less than phase max green.

\* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

## Intersection

Int Delay, s/veh 3.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
<b>Lane Configurations</b>												
Traffic Vol, veh/h	26	4	67	7	3	7	31	129	5	10	101	18
Future Vol, veh/h	26	4	67	7	3	7	31	129	5	10	101	18
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	80	-	-	100	-	100
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	28	4	73	8	3	8	34	140	5	11	110	20

Major/Minor	Minor2	Minor1			Major1			Major2				
Conflicting Flow All	271	345	110	344	361	73	129	0	0	146	0	0
Stage 1	132	132	-	210	210	-	-	-	-	-	-	-
Stage 2	139	213	-	134	151	-	-	-	-	-	-	-
Critical Hdwy	7.33	6.53	6.23	7.33	6.53	6.93	4.13	-	-	4.13	-	-
Critical Hdwy Stg 1	6.13	5.53	-	6.53	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.53	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.519	4.019	3.319	3.519	4.019	3.319	2.219	-	-	2.219	-	-
Pot Cap-1 Maneuver	671	578	943	598	565	975	1455	-	-	1435	-	-
Stage 1	871	787	-	773	728	-	-	-	-	-	-	-
Stage 2	850	726	-	869	772	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	642	560	943	531	548	975	1455	-	-	1435	-	-
Mov Cap-2 Maneuver	642	560	-	531	548	-	-	-	-	-	-	-
Stage 1	865	781	-	755	711	-	-	-	-	-	-	-
Stage 2	820	709	-	792	766	-	-	-	-	-	-	-

Approach	EB	WB			NB			SB			
HCM Control Delay, s/v10.06		10.63			1.42			0.58			
HCM LOS	B	B									
<hr/>											
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR			
Capacity (veh/h)	1455	-	-	817	658	1435	-	-			
HCM Lane V/C Ratio	0.023	-	-	0.129	0.028	0.008	-	-			
HCM Control Delay (s/veh)	7.5	-	-	10.1	10.6	7.5	-	-			
HCM Lane LOS	A	-	-	B	B	A	-	-			
HCM 95th %tile Q(veh)	0.1	-	-	0.4	0.1	0	-	-			

## Intersection

Int Delay, s/veh 1.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
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Lane Configurations

Traffic Vol, veh/h	106	1242	105	35	808	54	0	0	100	0	0	107
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Future Vol, veh/h	106	1242	105	35	808	54	0	0	100	0	0	107
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Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
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Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
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RT Channelized	-	-	None									
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Storage Length	375	-	785	290	-	235	-	-	-	-	-	-
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Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
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Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
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Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
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Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
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Mvmt Flow	115	1350	114	38	878	59	0	0	109	0	0	116
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Major/Minor	Major1	Major2		Minor1		Minor2	
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Conflicting Flow All	937	0	0	1464	0	0	-	-	675	-	-	439
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Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
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Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
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Critical Hdwy	4.14	-	-	4.14	-	-	-	-	6.94	-	-	6.94
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Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
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Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
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Follow-up Hdwy	2.22	-	-	2.22	-	-	-	-	3.32	-	-	3.32
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Pot Cap-1 Maneuver	727	-	-	457	-	-	0	0	396	0	0	566
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Stage 1	-	-	-	-	-	-	0	0	-	0	0	-
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Stage 2	-	-	-	-	-	-	0	0	-	0	0	-
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Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
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Mov Cap-1 Maneuver	727	-	-	457	-	-	-	-	396	-	-	566
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Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
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Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
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Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
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Approach	EB	WB		NB		SB	
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HCM Control Delay, s/v	0.79	0.53		17.47		13.01	
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HCM LOS				C		B	
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Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
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Capacity (veh/h)	396	727	-	-	457	-	-	566
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HCM Lane V/C Ratio	0.274	0.159	-	-	0.083	-	-	0.206
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HCM Control Delay (s/veh)	17.5	10.9	-	-	13.6	-	-	13
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HCM Lane LOS	C	B	-	-	B	-	-	B
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HCM 95th %tile Q(veh)	1.1	0.6	-	-	0.3	-	-	0.8
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**APPENDIX E**  
**2025 BUILD TRAFFIC SCENARIO CAPACITY**  
**ANALYSIS SUMMARY SHEETS**

## HCM 7th Signalized Intersection Summary

3: CO-2 &amp; E. 104th Street

08/16/2024

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	↑↑	↑↑	↑	↑↑	↑↑	↑	↑	↑↑	↑	↑	↑↑	↑
Traffic Volume (veh/h)	176	637	93	590	835	84	87	187	171	33	467	132
Future Volume (veh/h)	176	637	93	590	835	84	87	187	171	33	467	132
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
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											
Adj Sat Flow, veh/h/ln	1618	1811	1781	1885	1870	1870	1767	1707	1767	1707	1796	1752
Adj Flow Rate, veh/h	217	685	0	686	971	0	132	217	0	55	584	0
Peak Hour Factor	0.81	0.93	0.93	0.86	0.86	0.65	0.66	0.86	0.73	0.60	0.80	0.79
Percent Heavy Veh, %	19	6	8	1	2	2	9	13	9	13	7	10
Cap, veh/h	258	811		751	1322		153	1066		113	1048	
Arrive On Green	0.09	0.24	0.00	0.43	0.74	0.00	0.09	0.33	0.00	0.07	0.31	0.00
Sat Flow, veh/h	2990	3441	1510	3483	3554	1585	1682	3244	1497	1626	3413	1485
Grp Volume(v), veh/h	217	685	0	686	971	0	132	217	0	55	584	0
Grp Sat Flow(s), veh/h/ln	1495	1721	1510	1742	1777	1585	1682	1622	1497	1626	1706	1485
Q Serve(g_s), s	10.0	26.6	0.0	25.9	21.6	0.0	10.8	6.7	0.0	4.6	20.0	0.0
Cycle Q Clear(g_c), s	10.0	26.6	0.0	25.9	21.6	0.0	10.8	6.7	0.0	4.6	20.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	258	811		751	1322		153	1066		113	1048	
V/C Ratio(X)	0.84	0.84		0.91	0.73		0.86	0.20		0.49	0.56	
Avail Cap(c_a), veh/h	278	811		751	1322		156	1066		116	1048	
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	63.0	51.1	0.0	38.6	14.0	0.0	62.7	33.8	0.0	62.7	40.5	0.0
Incr Delay (d2), s/veh	19.2	10.5	0.0	15.6	3.6	0.0	35.2	0.4	0.0	3.2	2.1	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	4.4	12.4	0.0	10.1	5.3	0.0	6.1	2.7	0.0	2.0	8.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	82.2	61.5	0.0	54.2	17.6	0.0	97.9	34.3	0.0	65.9	42.7	0.0
LnGrp LOS	F	E		D	B		F	C		E	D	
Approach Vol, veh/h		902			1657			349			639	
Approach Delay, s/veh		66.5			32.8			58.3			44.7	
Approach LOS		E			C			E			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	36.2	39.0	17.8	49.0	17.1	58.1	14.8	52.0				
Change Period (Y+Rc), s	6.0	* 6	5.0	6.0	5.0	6.0	5.0	6.0				
Max Green Setting (Gmax), s	29.0	* 33	13.0	43.0	13.0	49.0	10.0	46.0				
Max Q Clear Time (g_c+l1), s	27.9	28.6	12.8	22.0	12.0	23.6	6.6	8.7				
Green Ext Time (p_c), s	0.4	1.7	0.0	3.5	0.1	6.9	0.0	1.3				

## Intersection Summary

HCM 7th Control Delay, s/veh

46.0

HCM 7th LOS

D

## Notes

User approved pedestrian interval to be less than phase max green.

\* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

## HCM 7th Signalized Intersection Summary

6: Revere Street &amp; E. 104th Street

08/16/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑	↑↑
Traffic Volume (veh/h)	18	608	44	57	1245	39	96	28	32	102	27	71
Future Volume (veh/h)	18	608	44	57	1245	39	96	28	32	102	27	71
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
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											
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	20	661	0	62	1353	42	104	30	35	111	29	77
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	146	1997		79	1980	883	150	240	204	192	361	306
Arrive On Green	0.08	1.00	0.00	0.04	0.56	0.56	0.04	0.13	0.13	0.11	0.19	0.19
Sat Flow, veh/h	3456	3554	1585	1781	3554	1585	3456	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	20	661	0	62	1353	42	104	30	35	111	29	77
Grp Sat Flow(s), veh/h/ln1728	1777	1585	1781	1777	1585	1728	1870	1585	1781	1870	1585	
Q Serve(g_s), s	0.8	0.0	0.0	4.8	38.1	1.7	4.2	2.0	2.4	8.3	1.8	5.8
Cycle Q Clear(g_c), s	0.8	0.0	0.0	4.8	38.1	1.7	4.2	2.0	2.4	8.3	1.8	5.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	146	1997		79	1980	883	150	240	204	192	361	306
V/C Ratio(X)	0.14	0.33		0.78	0.68	0.05	0.69	0.12	0.17	0.58	0.08	0.25
Avail Cap(c_a), veh/h	146	1997		140	1980	883	197	240	204	216	361	306
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	61.7	0.0	0.0	66.2	22.2	14.1	66.0	54.0	40.1	59.4	46.3	47.9
Incr Delay (d2), s/veh	0.4	0.4	0.0	15.1	1.9	0.1	6.6	1.1	1.8	3.0	0.4	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/ln0.3	0.1	0.0	2.5	15.4	0.6	2.0	1.0	1.2	3.9	0.9	0.2	
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	62.2	0.4	0.0	81.3	24.1	14.2	72.6	55.1	41.9	62.4	46.8	49.9
LnGrp LOS	E	A		F	C	B	E	E	D	E	D	D
Approach Vol, veh/h	681			1457			169			217		
Approach Delay, s/veh	2.3			26.3			63.2			55.9		
Approach LOS	A			C			E			E		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	1.2	84.7	11.1	33.0	11.9	84.0	20.1	24.0				
Change Period (Y+Rc), s	5.0	6.0	5.0	6.0	6.0	* 6	5.0	6.0				
Max Green Setting (Gmax), s	72.0	8.0	27.0	5.0	* 78	17.0	18.0					
Max Q Clear Time (g_c+l16.8)	2.0	6.2	7.8	2.8	40.1	10.3	4.4					
Green Ext Time (p_c), s	0.0	4.7	0.0	0.3	0.0	12.4	0.1	0.1				

## Intersection Summary

HCM 7th Control Delay, s/veh 24.8

HCM 7th LOS C

## Notes

User approved pedestrian interval to be less than phase max green.

\* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

## Intersection

Int Delay, s/veh 3.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
<b>Lane Configurations</b>												
Traffic Vol, veh/h	17	2	55	16	1	17	14	70	1	14	129	57
Future Vol, veh/h	17	2	55	16	1	17	14	70	1	14	129	57
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	80	-	-	100	-	100
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	18	2	60	17	1	18	15	76	1	15	140	62

Major/Minor	Minor2	Minor1			Major1			Major2				
Conflicting Flow All	240	278	140	279	340	39	202	0	0	77	0	0
Stage 1	171	171	-	107	107	-	-	-	-	-	-	-
Stage 2	69	108	-	172	233	-	-	-	-	-	-	-
Critical Hdwy	7.33	6.53	6.23	7.33	6.53	6.93	4.13	-	-	4.13	-	-
Critical Hdwy Stg 1	6.13	5.53	-	6.53	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.53	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.519	4.019	3.319	3.519	4.019	3.319	2.219	-	-	2.219	-	-
Pot Cap-1 Maneuver	704	629	907	662	581	1025	1368	-	-	1520	-	-
Stage 1	831	757	-	887	806	-	-	-	-	-	-	-
Stage 2	933	806	-	830	712	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	676	616	907	604	569	1025	1368	-	-	1520	-	-
Mov Cap-2 Maneuver	676	616	-	604	569	-	-	-	-	-	-	-
Stage 1	822	749	-	877	797	-	-	-	-	-	-	-
Stage 2	905	797	-	765	704	-	-	-	-	-	-	-

Approach	EB	WB			NB			SB		
HCM Control Delay, s/v	9.79	9.99			1.26			0.52		
HCM LOS	A	A								
<hr/>										
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR		
Capacity (veh/h)	1368	-	-	831	758	1520	-	-		
HCM Lane V/C Ratio	0.011	-	-	0.097	0.049	0.01	-	-		
HCM Control Delay (s/veh)	7.7	-	-	9.8	10	7.4	-	-		
HCM Lane LOS	A	-	-	A	A	A	-	-		
HCM 95th %tile Q(veh)	0	-	-	0.3	0.2	0	-	-		

Intersection												
Int Delay, s/veh	2.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↑	↑	↑	↑↑	↑			↑			
Traffic Vol, veh/h	89	722	82	26	1236	92	0	0	84	0	0	164
Future Vol, veh/h	89	722	82	26	1236	92	0	0	84	0	0	164
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	375	-	785	290	-	235	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	97	785	89	28	1343	100	0	0	91	0	0	178
Major/Minor	Major1		Major2		Minor1		Minor2					
Conflicting Flow All	1443	0	0	874	0	0	-	-	392	-	-	672
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	4.14	-	-	4.14	-	-	-	-	6.94	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	-	-	3.32	-	-	3.32
Pot Cap-1 Maneuver	466	-	-	768	-	-	0	0	607	0	0	398
Stage 1	-	-	-	-	-	-	0	0	-	0	0	-
Stage 2	-	-	-	-	-	-	0	0	-	0	0	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	466	-	-	768	-	-	-	-	607	-	-	398
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s/v	1.47			0.19			11.98		21.15			
HCM LOS							B		C			
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1				
Capacity (veh/h)	607	466	-	-	768	-	-	398				
HCM Lane V/C Ratio	0.151	0.208	-	-	0.037	-	-	0.447				
HCM Control Delay (s/veh)	12	14.7	-	-	9.9	-	-	21.1				
HCM Lane LOS	B	B	-	-	A	-	-	C				
HCM 95th %tile Q(veh)	0.5	0.8	-	-	0.1	-	-	2.2				

HCM 7th Signalized Intersection Summary

3: CO-2 & E. 104th Street

08/16/2024

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	↑↓	↑↓	↑↓	↑↓	↑↓	↑↓	↑↓	↑↓	↑↓	↑↓	↑↓	↑↓
Traffic Volume (veh/h)	159	1035	130	234	765	73	230	604	410	54	192	54
Future Volume (veh/h)	159	1035	130	234	765	73	230	604	410	54	192	54
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
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		No	
Adj Sat Flow, veh/h/ln	1618	1811	1781	1885	1870	1870	1767	1707	1767	1707	1796	1752
Adj Flow Rate, veh/h	196	1113	0	272	890	0	348	702	0	90	240	0
Peak Hour Factor	0.81	0.93	0.93	0.86	0.86	0.65	0.66	0.86	0.73	0.60	0.80	0.79
Percent Heavy Veh, %	19	6	8	1	2	2	9	13	9	13	7	10
Cap, veh/h	259	1032		255	1019		325	1341		108	978	
Arrive On Green	0.09	0.30	0.00	0.15	0.57	0.00	0.19	0.41	0.00	0.07	0.29	0.00
Sat Flow, veh/h	2990	3441	1510	3483	3554	1585	1682	3244	1497	1626	3413	1485
Grp Volume(v), veh/h	196	1113	0	272	890	0	348	702	0	90	240	0
Grp Sat Flow(s),veh/h/ln	1495	1721	1510	1742	1777	1585	1682	1622	1497	1626	1706	1485
Q Serve(g_s), s	9.6	45.0	0.0	11.0	32.1	0.0	29.0	24.3	0.0	8.2	8.1	0.0
Cycle Q Clear(g_c), s	9.6	45.0	0.0	11.0	32.1	0.0	29.0	24.3	0.0	8.2	8.1	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	259	1032		255	1019		325	1341		108	978	
V/C Ratio(X)	0.76	1.08		1.06	0.87		1.07	0.52		0.83	0.25	
Avail Cap(c_a), veh/h	259	1032		255	1019		325	1341		130	978	
HCM Platoon Ratio	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	67.0	52.5	0.0	64.0	29.7	0.0	60.5	32.9	0.0	69.2	41.1	0.0
Incr Delay (d2), s/veh	12.0	51.6	0.0	74.5	10.3	0.0	69.7	1.5	0.0	30.2	0.6	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	26.3	0.0	7.1	10.9	0.0	18.4	9.6	0.0	4.3	3.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	79.0	104.1	0.0	138.5	40.0	0.0	130.2	34.4	0.0	99.4	41.6	0.0
LnGrp LOS	E	F		F	D		F	C		F	D	
Approach Vol, veh/h		1309			1162			1050			330	
Approach Delay, s/veh		100.3			63.1			66.1			57.4	
Approach LOS		F			E			E			E	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	16.0	51.0	34.0	49.0	18.0	49.0	15.0	68.0				
Change Period (Y+Rc), s	5.0	6.0	5.0	6.0	5.0	6.0	5.0	6.0				
Max Green Setting (Gmax), s	11.0	45.0	29.0	43.0	13.0	43.0	12.0	60.0				
Max Q Clear Time (g_c+l1), s	13.0	47.0	31.0	10.1	11.6	34.1	10.2	26.3				
Green Ext Time (p_c), s	0.0	0.0	0.0	1.4	0.1	3.7	0.0	4.9				

## Intersection Summary

HCM 7th Control Delay, s/veh

HCM 7th LOS

## Notes

User approved pedestrian interval to be less than phase max green.

Unsignaled Delay for [NER, EBR, WBR, SWR] is excluded from calculations of the approach delay and intersection delay.

# HCM 7th Signalized Intersection Summary

6: Revere Street & E. 104th Street

08/16/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑↓	↑↑	↑	↓↑	↑↑	↓↑	↑↓	↑	↓↑	↓↑	↑↑	↓↑
Traffic Volume (veh/h)	52	1175	50	79	820	78	109	35	38	107	39	38
Future Volume (veh/h)	52	1175	50	79	820	78	109	35	38	107	39	38
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
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		No		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	57	1277	0	86	891	85	118	38	41	116	42	41
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	137	2013		107	2061	919	163	224	190	191	337	285
Arrive On Green	0.08	1.00	0.00	0.06	0.58	0.58	0.05	0.12	0.12	0.11	0.18	0.18
Sat Flow, veh/h	3456	3554	1585	1781	3554	1585	3456	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	57	1277	0	86	891	85	118	38	41	116	42	41
Grp Sat Flow(s), veh/h/ln1728	1777	1585	1781	1777	1585	1728	1870	1585	1781	1870	1585	
Q Serve(g_s), s	2.4	0.0	0.0	7.2	21.1	3.6	5.1	2.7	3.0	9.3	2.8	3.3
Cycle Q Clear(g_c), s	2.4	0.0	0.0	7.2	21.1	3.6	5.1	2.7	3.0	9.3	2.8	3.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	137	2013		107	2061	919	163	224	190	191	337	285
V/C Ratio(X)	0.42	0.63		0.81	0.43	0.09	0.73	0.17	0.22	0.61	0.12	0.14
Avail Cap(c_a), veh/h	137	2013		190	2061	919	207	224	190	214	337	285
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	67.4	0.0	0.0	69.7	17.7	14.0	70.5	59.3	42.9	64.0	51.6	51.8
Incr Delay (d2), s/veh	2.0	1.5	0.0	13.2	0.7	0.2	8.9	1.6	2.6	4.1	0.8	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/ln1.0	0.4	0.0	3.6	8.5	1.4	2.4	1.4	1.6	4.5	1.4	1.4	
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	69.4	1.5	0.0	82.9	18.3	14.2	79.4	60.9	45.5	68.0	52.3	52.8
LnGrp LOS	E	A		F	B	B	E	E	D	E	D	D
Approach Vol, veh/h	1334			1062			197			199		
Approach Delay, s/veh	4.4			23.2			68.8			61.6		
Approach LOS	A			C			E			E		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	\$4.0	91.0	12.1	33.0	11.9	93.0	21.1	24.0				
Change Period (Y+Rc), s	5.0	6.0	5.0	6.0	6.0	* 6	5.0	6.0				
Max Green Setting (Gmax), s	76.0	9.0	27.0	5.0	* 87	18.0	18.0					
Max Q Clear Time (g_c+l), s	2.0	7.1	5.3	4.4	23.1	11.3	5.0					
Green Ext Time (p_c), s	0.1	12.2	0.1	0.3	0.0	7.3	0.1	0.2				

## Intersection Summary

HCM 7th Control Delay, s/veh 20.2

HCM 7th LOS C

## Notes

User approved pedestrian interval to be less than phase max green.

\* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

## Intersection

Int Delay, s/veh 3.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
<b>Lane Configurations</b>												
Traffic Vol, veh/h	27	4	76	7	3	7	31	129	5	10	101	18
Future Vol, veh/h	27	4	76	7	3	7	31	129	5	10	101	18
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	80	-	-	100	-	100
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	29	4	83	8	3	8	34	140	5	11	110	20

Major/Minor	Minor2	Minor1			Major1			Major2				
Conflicting Flow All	271	345	110	344	361	73	129	0	0	146	0	0
Stage 1	132	132	-	210	210	-	-	-	-	-	-	-
Stage 2	139	213	-	134	151	-	-	-	-	-	-	-
Critical Hdwy	7.33	6.53	6.23	7.33	6.53	6.93	4.13	-	-	4.13	-	-
Critical Hdwy Stg 1	6.13	5.53	-	6.53	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.53	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.519	4.019	3.319	3.519	4.019	3.319	2.219	-	-	2.219	-	-
Pot Cap-1 Maneuver	671	578	943	598	565	975	1455	-	-	1435	-	-
Stage 1	871	787	-	773	728	-	-	-	-	-	-	-
Stage 2	850	726	-	869	772	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	642	560	943	525	548	975	1455	-	-	1435	-	-
Mov Cap-2 Maneuver	642	560	-	525	548	-	-	-	-	-	-	-
Stage 1	865	781	-	755	711	-	-	-	-	-	-	-
Stage 2	820	709	-	783	766	-	-	-	-	-	-	-

Approach	EB	WB			NB			SB				
HCM Control Delay, s/v10.08		10.66			1.42			0.58				
HCM LOS	B	B										
<hr/>												
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR				
Capacity (veh/h)	1455	-	-	824	654	1435	-	-				
HCM Lane V/C Ratio	0.023	-	-	0.141	0.028	0.008	-	-				
HCM Control Delay (s/veh)	7.5	-	-	10.1	10.7	7.5	-	-				
HCM Lane LOS	A	-	-	B	B	A	-	-				
HCM 95th %tile Q(veh)	0.1	-	-	0.5	0.1	0	-	-				

## Intersection

Int Delay, s/veh 2.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↑	↑	↑	↑↑	↑			↑			↑
Traffic Vol, veh/h	120	1347	105	35	808	59	0	0	100	0	0	139
Future Vol, veh/h	120	1347	105	35	808	59	0	0	100	0	0	139
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None									
Storage Length	375	-	785	290	-	235	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	130	1464	114	38	878	64	0	0	109	0	0	151

Major/Minor	Major1	Major2		Minor1		Minor2	
Conflicting Flow All	942	0	0	1578	0	0	-
Stage 1	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-
Critical Hdwy	4.14	-	-	4.14	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.32
Pot Cap-1 Maneuver	723	-	-	413	-	0	364
Stage 1	-	-	-	-	-	0	0
Stage 2	-	-	-	-	-	0	0
Platoon blocked, %	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	723	-	-	413	-	-	364
Mov Cap-2 Maneuver	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-

Approach	EB	WB		NB		SB		
HCM Control Delay, s/v	0.84	0.57		19.07		13.67		
HCM LOS				C		B		
<hr/>								
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	364	723	-	-	413	-	-	566
HCM Lane V/C Ratio	0.299	0.18	-	-	0.092	-	-	0.267
HCM Control Delay (s/veh)	19.1	11.1	-	-	14.6	-	-	13.7
HCM Lane LOS	C	B	-	-	B	-	-	B
HCM 95th %tile Q(veh)	1.2	0.7	-	-	0.3	-	-	1.1

**APPENDIX F**  
**2045 NO-BUILD TRAFFIC SCENARIO CAPACITY ANALYSIS**  
**SUMMARY SHEETS**

Lanes, Volumes, Timings  
3: CO-2 & E. 104th Street

08/16/2024

	→	→	↗	↖	←	↙	↗	↖	→	↗	↖	←
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	↑↑	↑↑↑↑	↑	↑↑	↑↑↑↑	↑	↑↑	↑↑	↑	↑↑	↑↑↑↑	↑
Traffic Volume (vph)	246	860	130	808	1128	102	122	262	226	35	654	185
Future Volume (vph)	246	860	130	808	1128	102	122	262	226	35	654	185
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	435		725	350		225	700		500	800		460
Storage Lanes	2		1	2		1	1		1	1		1
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	2943	4893	1495	3467	5085	1583	1656	3195	1482	1597	3374	1468
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	2943	4893	1495	3467	5085	1583	1656	3195	1482	1597	3374	1468
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			145			138			310			234
Link Speed (mph)	45			45			45			45		
Link Distance (ft)	1187			929			1494			1261		
Travel Time (s)	18.0			14.1			22.6			19.1		
Peak Hour Factor	0.81	0.93	0.93	0.86	0.86	0.65	0.66	0.86	0.73	0.60	0.80	0.79
Heavy Vehicles (%)	19%	6%	8%	1%	2%	2%	9%	13%	9%	13%	7%	10%
Adj. Flow (vph)	304	925	140	940	1312	157	185	305	310	58	818	234
Shared Lane Traffic (%)												
Lane Group Flow (vph)	304	925	140	940	1312	157	185	305	310	58	818	234
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)	24			36			12			12		
Link Offset(ft)	0			0			0			0		
Crosswalk Width(ft)	16			16			16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right									
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex											
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)	94			94			94			94		
Detector 2 Size(ft)	6			6			6			6		
Detector 2 Type	Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex		
Detector 2 Channel												
Detector 2 Extend (s)	0.0			0.0			0.0			0.0		
Turn Type	Prot	NA	Perm									
Protected Phases	5	2		1	6		3	8		7	4	

## HCM 7th Signalized Intersection Summary

3: CO-2 &amp; E. 104th Street

08/16/2024

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	↑↑	↑↑↑↑	↑	↑↑	↑↑↑↑	↑	↑	↑↑	↑	↑	↑↑↑↑	↑
Traffic Volume (veh/h)	246	860	130	808	1128	102	122	262	226	35	654	185
Future Volume (veh/h)	246	860	130	808	1128	102	122	262	226	35	654	185
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
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		No		No	
Adj Sat Flow, veh/h/ln	1618	1811	1781	1885	1870	1870	1767	1707	1767	1707	1796	1752
Adj Flow Rate, veh/h	304	925	0	940	1312	0	185	305	0	58	818	0
Peak Hour Factor	0.81	0.93	0.93	0.86	0.86	0.65	0.66	0.86	0.73	0.60	0.80	0.79
Percent Heavy Veh, %	19	6	8	1	2	2	9	13	9	13	7	10
Cap, veh/h	344	1022		1199	2260		179	1038		108	978	
Arrive On Green	0.11	0.21	0.00	0.46	0.59	0.00	0.11	0.32	0.00	0.07	0.29	0.00
Sat Flow, veh/h	2990	4944	1510	3483	5106	1585	1682	3244	1497	1626	3413	1485
Grp Volume(v), veh/h	304	925	0	940	1312	0	185	305	0	58	818	0
Grp Sat Flow(s), veh/h/ln	1495	1648	1510	1742	1702	1585	1682	1622	1497	1626	1706	1485
Q Serve(g_s), s	15.0	27.4	0.0	34.2	24.1	0.0	16.0	10.6	0.0	5.2	33.7	0.0
Cycle Q Clear(g_c), s	15.0	27.4	0.0	34.2	24.1	0.0	16.0	10.6	0.0	5.2	33.7	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	344	1022		1199	2260		179	1038		108	978	
V/C Ratio(X)	0.88	0.91		0.78	0.58		1.03	0.29		0.54	0.84	
Avail Cap(c_a), veh/h	379	1022		1199	2260		179	1038		119	978	
HCM Platoon Ratio	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	65.4	58.1	0.0	35.9	22.1	0.0	67.0	38.3	0.0	67.7	50.2	0.0
Incr Delay (d2), s/veh	20.0	12.9	0.0	3.5	1.1	0.0	75.5	0.7	0.0	4.1	8.4	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	6.6	12.4	0.0	13.7	8.5	0.0	10.5	4.3	0.0	2.2	15.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	85.4	71.0	0.0	39.4	23.2	0.0	142.5	39.0	0.0	71.8	58.6	0.0
LnGrp LOS	F	E		D	C		F	D		E	E	
Approach Vol, veh/h												
Approach Delay, s/veh	1229			2252			490			876		
Approach LOS	74.5			30.0			78.1			59.5		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	57.6	37.0	21.0	49.0	22.2	72.4	16.0	54.0				
Change Period (Y+Rc), s	6.0	* 6	5.0	6.0	5.0	6.0	6.0	* 6				
Max Green Setting (Gmax), s	38.0	* 31	16.0	43.0	19.0	50.0	11.0	* 48				
Max Q Clear Time (g_c+l1), s	36.2	29.4	18.0	35.7	17.0	26.1	7.2	12.6				
Green Ext Time (p_c), s	0.8	0.9	0.0	3.0	0.2	9.5	0.0	1.9				
Intersection Summary												
HCM 7th Control Delay, s/veh				51.5								
HCM 7th LOS				D								
Notes												
User approved pedestrian interval to be less than phase max green.												
* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.												

Lanes, Volumes, Timings  
6: Revere Street & E. 104th Street

08/16/2024

	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group												
Lane Configurations	↑↑	↑↑↑↑	↑	↑	↑↑↑↑	↑	↑↑	↑	↑	↑	↑	↑
Traffic Volume (vph)	25	852	51	59	1733	55	101	28	34	122	27	99
Future Volume (vph)	25	852	51	59	1733	55	101	28	34	122	27	99
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	215		250	275		265	110		110	100		100
Storage Lanes	2		1	1		1	2		1	1		1
Taper Length (ft)	100			100			100			100		
Lane Util. Factor	0.97	0.91	1.00	1.00	0.91	1.00	0.97	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	3433	5085	1583	1770	5085	1583	3433	1863	1583	1770	1863	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3433	5085	1583	1770	5085	1583	3433	1863	1583	1770	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			138			145			145			138
Link Speed (mph)		45			45			30			30	
Link Distance (ft)		670			1265			643			449	
Travel Time (s)		10.2			19.2			14.6			10.2	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	27	926	55	64	1884	60	110	30	37	133	29	108
Shared Lane Traffic (%)												
Lane Group Flow (vph)	27	926	55	64	1884	60	110	30	37	133	29	108
Enter Blocked Intersection	No											
Lane Alignment	Left	Left	Right									
Median Width(ft)		24			24			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right									
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex											
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type	Cl+Ex				Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA	Perm									
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			8			4

## HCM 7th Signalized Intersection Summary

6: Revere Street &amp; E. 104th Street

08/16/2024

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑↑	↑↑↑↑	↑	↑	↑↑↑↑	↑	↑↑	↑	↑	↑	↑	↑
Traffic Volume (veh/h)	25	852	51	59	1733	55	101	28	34	122	27	99
Future Volume (veh/h)	25	852	51	59	1733	55	101	28	34	122	27	99
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
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											
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	27	926	0	64	1884	60	110	30	37	133	29	108
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	190	2839		82	2757	856	155	224	190	223	387	328
Arrive On Green	0.11	1.00	0.00	0.05	0.54	0.54	0.04	0.12	0.12	0.12	0.21	0.21
Sat Flow, veh/h	3456	5106	1585	1781	5106	1585	3456	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	27	926	0	64	1884	60	110	30	37	133	29	108
Grp Sat Flow(s), veh/h/ln	1728	1702	1585	1781	1702	1585	1728	1870	1585	1781	1870	1585
Q Serve(g_s), s	1.1	0.0	0.0	5.3	40.3	2.7	4.7	2.2	2.7	10.6	1.9	7.2
Cycle Q Clear(g_c), s	1.1	0.0	0.0	5.3	40.3	2.7	4.7	2.2	2.7	10.6	1.9	7.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	190	2839		82	2757	856	155	224	190	223	387	328
V/C Ratio(X)	0.14	0.33		0.78	0.68	0.07	0.71	0.13	0.19	0.60	0.08	0.33
Avail Cap(c_a), veh/h	190	2839		154	2757	856	253	224	190	285	387	328
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	63.5	0.0	0.0	70.8	25.1	16.5	70.7	59.0	44.5	62.1	47.9	34.9
Incr Delay (d2), s/veh	0.3	0.3	0.0	15.1	1.4	0.2	5.8	1.2	2.3	2.6	0.4	2.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	0.5	0.1	0.0	2.7	15.9	1.1	2.2	1.1	1.4	5.0	0.9	3.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	63.9	0.3	0.0	85.9	26.5	16.7	76.5	60.3	46.7	64.6	48.3	37.6
LnGrp LOS	E	A		F	C	B	E	E	D	E	D	D
Approach Vol, veh/h	953				2008				177		270	
Approach Delay, s/veh	2.1				28.1				67.5		52.0	
Approach LOS	A				C				E		D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	11.9	89.4	11.7	37.0	14.3	87.0	24.7	24.0				
Change Period (Y+Rc), s	5.0	6.0	5.0	6.0	6.0	* 6	6.0	* 6				
Max Green Setting (Gmax), s	13.0	73.0	11.0	31.0	5.0	* 81	24.0	* 18				
Max Q Clear Time (g_c+l1), s	7.3	2.0	6.7	9.2	3.1	42.3	12.6	4.7				
Green Ext Time (p_c), s	0.0	7.2	0.1	0.4	0.0	19.6	0.2	0.1				

## Intersection Summary

HCM 7th Control Delay, s/veh

24.8

HCM 7th LOS

C

## Notes

User approved pedestrian interval to be less than phase max green.

\* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

## Lanes, Volumes, Timings

9: Revere Street

08/16/2024



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	21	3	56	22	1	24	20	87	1	20	170	78
Future Volume (vph)	21	3	56	22	1	24	20	87	1	20	170	78
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	80		0	100		100
Storage Lanes	0		0	0		0	1		0	1		1
Taper Length (ft)	25			25			100			100		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Frt		0.905			0.931			0.998				0.850
Flt Protected		0.987			0.977		0.950			0.950		
Satd. Flow (prot)	0	1664	0	0	1694	0	1770	3532	0	1770	1863	1583
Flt Permitted		0.987			0.977		0.950			0.950		
Satd. Flow (perm)	0	1664	0	0	1694	0	1770	3532	0	1770	1863	1583
Link Speed (mph)		25			25			30			30	
Link Distance (ft)		268			444			449			637	
Travel Time (s)		7.3			11.8			10.3			14.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	23	3	61	24	1	26	22	95	1	22	185	85
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	87	0	0	51	0	22	96	0	22	185	85
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

## Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 27.5%

ICU Level of Service A

Analysis Period (min) 15

## Intersection

Int Delay, s/veh 3.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
<b>Lane Configurations</b>												
Traffic Vol, veh/h	21	3	56	22	1	24	20	87	1	20	170	78
Future Vol, veh/h	21	3	56	22	1	24	20	87	1	20	170	78
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	80	-	-	100	-	100
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	23	3	61	24	1	26	22	95	1	22	185	85

Major/Minor	Minor2	Minor1			Major1			Major2				
Conflicting Flow All	320	367	185	368	452	48	270	0	0	96	0	0
Stage 1	228	228	-	139	139	-	-	-	-	-	-	-
Stage 2	91	139	-	230	313	-	-	-	-	-	-	-
Critical Hdwy	7.33	6.53	6.23	7.33	6.53	6.93	4.13	-	-	4.13	-	-
Critical Hdwy Stg 1	6.13	5.53	-	6.53	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.53	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.519	4.019	3.319	3.519	4.019	3.319	2.219	-	-	2.219	-	-
Pot Cap-1 Maneuver	621	561	857	575	503	1011	1292	-	-	1497	-	-
Stage 1	774	715	-	851	781	-	-	-	-	-	-	-
Stage 2	906	781	-	772	656	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	585	543	857	515	487	1011	1292	-	-	1497	-	-
Mov Cap-2 Maneuver	585	543	-	515	487	-	-	-	-	-	-	-
Stage 1	763	704	-	836	768	-	-	-	-	-	-	-
Stage 2	867	768	-	704	647	-	-	-	-	-	-	-

Approach	EB	WB			NB			SB		
HCM Control Delay, s/v10.43		10.67			1.45			0.56		
HCM LOS	B	B								
<hr/>										
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR		
Capacity (veh/h)	1292	-	-	749	686	1497	-	-		
HCM Lane V/C Ratio	0.017	-	-	0.116	0.074	0.015	-	-		
HCM Control Delay (s/veh)	7.8	-	-	10.4	10.7	7.4	-	-		
HCM Lane LOS	A	-	-	B	B	A	-	-		
HCM 95th %tile Q(veh)	0.1	-	-	0.4	0.2	0	-	-		



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑	↑↑↑	↑	↑	↑↑↑	↑			↑			↑
Traffic Volume (vph)	109	902	84	26	1730	119	0	0	84	0	0	199
Future Volume (vph)	109	902	84	26	1730	119	0	0	84	0	0	199
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	375		785	290		235	0		219	0		281
Storage Lanes	1		1	1		1	0		0	0		0
Taper Length (ft)	100			100			25			25		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.865			0.865
Flt Protected	0.950			0.950								
Satd. Flow (prot)	1770	5085	1583	1770	5085	1583	0	0	1611	0	0	1611
Flt Permitted	0.950			0.950								
Satd. Flow (perm)	1770	5085	1583	1770	5085	1583	0	0	1611	0	0	1611
Link Speed (mph)		45			45			25			25	
Link Distance (ft)		929			670			219			281	
Travel Time (s)		14.1			10.2			6.0			7.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	118	980	91	28	1880	129	0	0	91	0	0	216
Shared Lane Traffic (%)												
Lane Group Flow (vph)	118	980	91	28	1880	129	0	0	91	0	0	216
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			0				0
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop		Stop		
Intersection Summary												
Area Type:	Other											
Control Type:	Unsignalized											
Intersection Capacity Utilization	52.4%				ICU Level of Service A							
Analysis Period (min)	15											

Intersection												
Int Delay, s/veh	10.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑↑↑↑↑↑↑↑↑↑	↑↑↑↑↑↑↑↑↑↑	↑↑↑↑↑↑↑↑↑↑	↑↑↑↑↑↑↑↑↑↑	↑↑↑↑↑↑↑↑↑↑	↑↑↑↑↑↑↑↑↑↑	↑↑↑↑↑↑↑↑↑↑	↑↑↑↑↑↑↑↑↑↑	↑↑↑↑↑↑↑↑↑↑	↑↑↑↑↑↑↑↑↑↑	↑↑↑↑↑↑↑↑↑↑	↑↑↑↑↑↑↑↑↑↑
Traffic Vol, veh/h	109	902	84	26	1730	119	0	0	84	0	0	199
Future Vol, veh/h	109	902	84	26	1730	119	0	0	84	0	0	199
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None									
Storage Length	375	-	785	290	-	235	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	118	980	91	28	1880	129	0	0	91	0	0	216

Major/Minor	Major1	Major2			Minor1		Minor2					
Conflicting Flow All	2010	0	0	1072	0	0	-	-	490	-	-	940
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	5.34	-	-	5.34	-	-	-	-	7.14	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.12	-	-	3.12	-	-	-	-	3.92	-	-	3.92
Pot Cap-1 Maneuver	124	-	-	361	-	-	0	0	448	0	0	227
Stage 1	-	-	-	-	-	-	0	0	-	0	0	-
Stage 2	-	-	-	-	-	-	0	0	-	0	0	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	124	-	-	361	-	-	-	-	448	-	-	227
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB			NB		SB		
HCM Control Delay, s/v13.66		0.22			15.07		92.98		
HCM LOS					C		F		
<hr/>									
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	
Capacity (veh/h)	448	124	-	-	361	-	-	227	
HCM Lane V/C Ratio	0.204	0.958	-	-	0.078	-	-	0.951	
HCM Control Delay (s/veh)	15.1	137.2	-	-	15.8	-	-	93	
HCM Lane LOS	C	F	-	-	C	-	-	F	
HCM 95th %tile Q(veh)	0.8	6.4	-	-	0.3	-	-	8.3	

## HCM 7th Signalized Intersection Summary

3: CO-2 &amp; E. 104th Street

08/16/2024

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	↑↑	↑↑↑↑	↑	↑↑	↑↑↑↑	↑	↑↑	↑↑	↑	↑	↑↑↑↑	↑
Traffic Volume (veh/h)	223	1406	182	297	1020	92	322	846	552	66	269	76
Future Volume (veh/h)	223	1406	182	297	1020	92	322	846	552	66	269	76
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
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									
Adj Sat Flow, veh/h/ln	1618	1811	1781	1885	1870	1870	1767	1707	1767	1707	1796	1752
Adj Flow Rate, veh/h	275	1512	0	345	1186	0	488	984	0	110	336	0
Peak Hour Factor	0.81	0.93	0.93	0.86	0.86	0.65	0.66	0.86	0.73	0.60	0.80	0.79
Percent Heavy Veh, %	19	6	8	1	2	2	9	13	9	13	7	10
Cap, veh/h	332	1384		1033	2428		653	1071		114	648	
Arrive On Green	0.11	0.28	0.00	0.39	0.63	0.00	0.20	0.33	0.00	0.07	0.19	0.00
Sat Flow, veh/h	2990	4944	1510	3483	5106	1585	3264	3244	1497	1626	3413	1485
Grp Volume(v), veh/h	275	1512	0	345	1186	0	488	984	0	110	336	0
Grp Sat Flow(s), veh/h/ln	1495	1648	1510	1742	1702	1585	1632	1622	1497	1626	1706	1485
Q Serve(g_s), s	9.0	28.0	0.0	6.9	12.4	0.0	14.1	29.2	0.0	6.7	8.8	0.0
Cycle Q Clear(g_c), s	9.0	28.0	0.0	6.9	12.4	0.0	14.1	29.2	0.0	6.7	8.8	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	332	1384		1033	2428		653	1071		114	648	
V/C Ratio(X)	0.83	1.09		0.33	0.49		0.75	0.92		0.97	0.52	
Avail Cap(c_a), veh/h	359	1384		1033	2428		685	1071		114	648	
HCM Platoon Ratio	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	43.5	36.0	0.0	23.4	11.9	0.0	37.6	32.2	0.0	46.4	36.4	0.0
Incr Delay (d2), s/veh	14.0	53.4	0.0	0.2	0.7	0.0	4.3	13.9	0.0	73.5	2.9	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	3.9	17.4	0.0	2.6	3.8	0.0	5.7	12.7	0.0	5.0	3.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	57.6	89.4	0.0	23.6	12.6	0.0	41.9	46.1	0.0	119.9	39.3	0.0
LnGrp LOS	E	F		C	B		D	D		F	D	
Approach Vol, veh/h		1787			1531			1472			446	
Approach Delay, s/veh		84.5			15.1			44.7			59.2	
Approach LOS		F			B			D			E	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	35.7	34.0	26.0	25.0	16.1	53.6	12.0	39.0				
Change Period (Y+Rc), s	6.0	* 6	6.0	* 6	5.0	6.0	5.0	6.0				
Max Green Setting (Gmax), s	10.0	* 28	21.0	* 19	12.0	26.0	7.0	33.0				
Max Q Clear Time (g_c+l1), s	8.9	30.0	16.1	10.8	11.0	14.4	8.7	31.2				
Green Ext Time (p_c), s	0.1	0.0	0.8	1.2	0.1	5.8	0.0	1.1				

## Intersection Summary

HCM 7th Control Delay, s/veh

50.9

HCM 7th LOS

D

## Notes

\* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

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

## HCM 7th Signalized Intersection Summary

6: Revere Street &amp; E. 104th Street

08/16/2024

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑↑	↑↑↑↑	↑	↑	↑↑↑↑	↑	↑↑	↑↑	↑	↑	↑	↑
Traffic Volume (veh/h)	73	1645	56	83	1141	109	113	36	40	137	41	53
Future Volume (veh/h)	73	1645	56	83	1141	109	113	36	40	137	41	53
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
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											
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	79	1788	0	90	1240	118	123	39	43	149	45	58
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	170	2221		114	2247	697	210	337	285	179	411	349
Arrive On Green	0.07	0.58	0.00	0.06	0.44	0.44	0.06	0.18	0.18	0.10	0.22	0.22
Sat Flow, veh/h	3456	5106	1585	1781	5106	1585	3456	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	79	1788	0	90	1240	118	123	39	43	149	45	58
Grp Sat Flow(s), veh/h/ln	1728	1702	1585	1781	1702	1585	1728	1870	1585	1781	1870	1585
Q Serve(g_s), s	2.2	27.6	0.0	5.0	18.0	4.5	3.5	1.7	1.8	8.2	1.9	3.0
Cycle Q Clear(g_c), s	2.2	27.6	0.0	5.0	18.0	4.5	3.5	1.7	1.8	8.2	1.9	3.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	170	2221		114	2247	697	210	337	285	179	411	349
V/C Ratio(X)	0.46	0.80		0.79	0.55	0.17	0.59	0.12	0.15	0.83	0.11	0.17
Avail Cap(c_a), veh/h	173	2221		143	2247	697	242	337	285	196	411	349
HCM Platoon Ratio	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.5	17.7	0.0	46.1	20.7	16.9	45.7	34.3	21.4	44.1	31.2	31.6
Incr Delay (d2), s/veh	2.0	3.2	0.0	20.3	1.0	0.5	2.7	0.7	1.1	23.4	0.5	1.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	1.0	8.4	0.0	2.8	6.7	1.7	1.6	0.9	1.0	4.8	0.9	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	47.4	20.9	0.0	66.4	21.7	17.5	48.5	35.0	22.5	67.6	31.7	32.6
LnGrp LOS	D	C		E	C	B	D	D	C	E	C	C
Approach Vol, veh/h		1867			1448			205			252	
Approach Delay, s/veh		22.1			24.1			40.5			53.1	
Approach LOS		C			C			D			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	11.4	49.5	11.1	28.0	10.9	50.0	15.1	24.0				
Change Period (Y+Rc), s	5.0	6.0	5.0	6.0	6.0	* 6	5.0	6.0				
Max Green Setting (Gmax), s	8.0	41.0	7.0	22.0	5.0	* 44	11.0	18.0				
Max Q Clear Time (g_c+l1), s	7.0	29.6	5.5	5.0	4.2	20.0	10.2	3.8				
Green Ext Time (p_c), s	0.0	8.2	0.0	0.3	0.0	9.4	0.0	0.2				

## Intersection Summary

HCM 7th Control Delay, s/veh

25.9

HCM 7th LOS

C

## Notes

\* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

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

## Lanes, Volumes, Timings

9: Revere Street

08/16/2024



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	36	6	96	10	4	10	43	168	7	14	125	25
Future Volume (vph)	36	6	96	10	4	10	43	168	7	14	125	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	80		0	100		100
Storage Lanes	0		0	0		0	1		0	1		1
Taper Length (ft)	25			25			100			100		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Frt		0.906			0.943			0.994				0.850
Flt Protected		0.987			0.979		0.950			0.950		
Satd. Flow (prot)	0	1666	0	0	1720	0	1770	3518	0	1770	1863	1583
Flt Permitted		0.987			0.979		0.950			0.950		
Satd. Flow (perm)	0	1666	0	0	1720	0	1770	3518	0	1770	1863	1583
Link Speed (mph)		25			25			30			30	
Link Distance (ft)		268			431			455			637	
Travel Time (s)		7.3			11.8			10.3			14.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	39	7	104	11	4	11	47	183	8	15	136	27
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	150	0	0	26	0	47	191	0	15	136	27
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

## Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 29.2%

ICU Level of Service A

Analysis Period (min) 15

## Intersection

Int Delay, s/veh 4.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
<b>Lane Configurations</b>												
Traffic Vol, veh/h	36	6	96	10	4	10	43	168	7	14	125	25
Future Vol, veh/h	36	6	96	10	4	10	43	168	7	14	125	25
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	80	-	-	100	-	100
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	39	7	104	11	4	11	47	183	8	15	136	27

Major/Minor	Minor2	Minor1			Major1			Major2				
Conflicting Flow All	353	450	136	449	473	95	163	0	0	190	0	0
Stage 1	166	166	-	280	280	-	-	-	-	-	-	-
Stage 2	187	284	-	170	193	-	-	-	-	-	-	-
Critical Hdwy	7.33	6.53	6.23	7.33	6.53	6.93	4.13	-	-	4.13	-	-
Critical Hdwy Stg 1	6.13	5.53	-	6.53	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.53	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.519	4.019	3.319	3.519	4.019	3.319	2.219	-	-	2.219	-	-
Pot Cap-1 Maneuver	589	504	912	506	489	943	1414	-	-	1382	-	-
Stage 1	835	760	-	704	678	-	-	-	-	-	-	-
Stage 2	797	676	-	832	740	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	552	482	912	423	467	943	1414	-	-	1382	-	-
Mov Cap-2 Maneuver	552	482	-	423	467	-	-	-	-	-	-	-
Stage 1	826	752	-	681	656	-	-	-	-	-	-	-
Stage 2	757	654	-	722	732	-	-	-	-	-	-	-

Approach	EB	WB			NB			SB		
HCM Control Delay, s/v10.95		11.73			1.51			0.65		
HCM LOS	B	B								
<hr/>										
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR		
Capacity (veh/h)	1414	-	-	755	561	1382	-	-		
HCM Lane V/C Ratio	0.033	-	-	0.199	0.047	0.011	-	-		
HCM Control Delay (s/veh)	7.6	-	-	11	11.7	7.6	-	-		
HCM Lane LOS	A	-	-	B	B	A	-	-		
HCM 95th %tile Q(veh)	0.1	-	-	0.7	0.1	0	-	-		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	148	1739	105	35	1131	76	0	0	100	0	0	150
Future Volume (vph)	148	1739	105	35	1131	76	0	0	100	0	0	150
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	375		785	290		235	0		219	0		281
Storage Lanes	1		1	1		1	0		0	0		0
Taper Length (ft)	100			100			25			25		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.865			0.865
Flt Protected	0.950			0.950								
Satd. Flow (prot)	1770	5085	1583	1770	5085	1583	0	0	1611	0	0	1611
Flt Permitted	0.950			0.950								
Satd. Flow (perm)	1770	5085	1583	1770	5085	1583	0	0	1611	0	0	1611
Link Speed (mph)		45			45			25			25	
Link Distance (ft)		929			670			219			281	
Travel Time (s)		14.1			10.2			6.0			7.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	161	1890	114	38	1229	83	0	0	109	0	0	163
Shared Lane Traffic (%)												
Lane Group Flow (vph)	161	1890	114	38	1229	83	0	0	109	0	0	163
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			0				0
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop		Stop		
Intersection Summary												
Area Type:	Other											
Control Type:	Unsignalized											
Intersection Capacity Utilization	46.5%				ICU Level of Service A							
Analysis Period (min)	15											

## Intersection

Int Delay, s/veh 3.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑↑↑↑↑↑	↑↑↑↑↑↑	↑↑↑↑↑↑	↑↑↑↑↑↑	↑↑↑↑↑↑	↑↑↑↑↑↑				↑↑↑↑↑↑	↑↑↑↑↑↑	↑↑↑↑↑↑
Traffic Vol, veh/h	148	1739	105	35	1131	76	0	0	100	0	0	150
Future Vol, veh/h	148	1739	105	35	1131	76	0	0	100	0	0	150
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	375	-	785	290	-	235	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	161	1890	114	38	1229	83	0	0	109	0	0	163

Major/Minor	Major1	Major2			Minor1		Minor2					
Conflicting Flow All	1312	0	0	2004	0	0	-	-	945	-	-	615
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	5.34	-	-	5.34	-	-	-	-	7.14	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.12	-	-	3.12	-	-	-	-	3.92	-	-	3.92
Pot Cap-1 Maneuver	276	-	-	124	-	-	0	0	226	0	0	372
Stage 1	-	-	-	-	-	-	0	0	-	0	0	-
Stage 2	-	-	-	-	-	-	0	0	-	0	0	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	276	-	-	124	-	-	-	-	226	-	-	372
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB			NB		SB		
HCM Control Delay, s/v	2.59	1.3			34.94		22		
HCM LOS					D		C		
<hr/>									
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	
Capacity (veh/h)	226	276	-	-	124	-	-	372	
HCM Lane V/C Ratio	0.482	0.583	-	-	0.306	-	-	0.438	
HCM Control Delay (s/veh)	34.9	34.8	-	-	46.2	-	-	22	
HCM Lane LOS	D	D	-	-	E	-	-	C	
HCM 95th %tile Q(veh)	2.4	3.4	-	-	1.2	-	-	2.2	

**APPENDIX G**  
**2045 DESIGN YEAR TRAFFIC SCENARIO CAPACITY ANALYSIS**  
**SUMMARY SHEETS**

## HCM 7th Signalized Intersection Summary

3: CO-2 &amp; E. 104th Street

08/16/2024

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	↑↑	↑↑↑↑	↑	↑↑	↑↑↑↑	↑	↑	↑↑	↑	↑	↑↑↑↑	↑
Traffic Volume (veh/h)	246	865	130	813	1138	109	122	262	228	39	654	185
Future Volume (veh/h)	246	865	130	813	1138	109	122	262	228	39	654	185
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
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		No		No	
Adj Sat Flow, veh/h/ln	1618	1811	1781	1885	1870	1870	1767	1707	1767	1707	1796	1752
Adj Flow Rate, veh/h	304	930	0	945	1323	0	185	305	0	65	818	0
Peak Hour Factor	0.81	0.93	0.93	0.86	0.86	0.65	0.66	0.86	0.73	0.60	0.80	0.79
Percent Heavy Veh, %	19	6	8	1	2	2	9	13	9	13	7	10
Cap, veh/h	344	1022		1211	2278		179	1038		108	978	
Arrive On Green	0.11	0.21	0.00	0.46	0.59	0.00	0.11	0.32	0.00	0.07	0.29	0.00
Sat Flow, veh/h	2990	4944	1510	3483	5106	1585	1682	3244	1497	1626	3413	1485
Grp Volume(v), veh/h	304	930	0	945	1323	0	185	305	0	65	818	0
Grp Sat Flow(s), veh/h/ln	1495	1648	1510	1742	1702	1585	1682	1622	1497	1626	1706	1485
Q Serve(g_s), s	15.0	27.6	0.0	34.2	24.1	0.0	16.0	10.6	0.0	5.8	33.7	0.0
Cycle Q Clear(g_c), s	15.0	27.6	0.0	34.2	24.1	0.0	16.0	10.6	0.0	5.8	33.7	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	344	1022		1211	2278		179	1038		108	978	
V/C Ratio(X)	0.88	0.91		0.78	0.58		1.03	0.29		0.60	0.84	
Avail Cap(c_a), veh/h	379	1022		1211	2278		179	1038		119	978	
HCM Platoon Ratio	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	65.4	58.1	0.0	35.5	21.8	0.0	67.0	38.3	0.0	68.1	50.2	0.0
Incr Delay (d2), s/veh	20.0	13.4	0.0	3.3	1.1	0.0	75.5	0.7	0.0	6.9	8.4	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	6.6	12.5	0.0	13.6	8.4	0.0	10.5	4.3	0.0	2.6	15.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	85.4	71.5	0.0	38.9	22.9	0.0	142.5	39.0	0.0	74.9	58.6	0.0
LnGrp LOS	F	E		D	C		F	D		E	E	
Approach Vol, veh/h												
Approach Delay, s/veh	1234				2268			490			883	
Approach LOS	75.0				29.5			78.1			59.8	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	58.2	37.0	21.0	49.0	22.2	72.9	16.0	54.0				
Change Period (Y+Rc), s	6.0	* 6	5.0	6.0	5.0	6.0	6.0	* 6				
Max Green Setting (Gmax), s	38.0	* 31	16.0	43.0	19.0	50.0	11.0	* 48				
Max Q Clear Time (g_c+l1), s	36.2	29.6	18.0	35.7	17.0	26.1	7.8	12.6				
Green Ext Time (p_c), s	0.8	0.8	0.0	3.0	0.2	9.6	0.0	1.9				

## Intersection Summary

HCM 7th Control Delay, s/veh

51.4

HCM 7th LOS

D

## Notes

User approved pedestrian interval to be less than phase max green.

\* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.

## HCM 7th Signalized Intersection Summary

6: Revere Street &amp; E. 104th Street

08/16/2024

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑↑	↑↑↑↑	↑	↑	↑↑↑↑	↑	↑↑	↑	↑	↑	↑	↑
Traffic Volume (veh/h)	25	852	51	59	1740	55	101	28	34	137	27	99
Future Volume (veh/h)	25	852	51	59	1740	55	101	28	34	137	27	99
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
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		No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	27	926	0	64	1891	60	110	30	37	149	29	108
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	190	2839		82	2757	856	155	224	190	223	387	328
Arrive On Green	0.11	1.00	0.00	0.05	0.54	0.54	0.04	0.12	0.12	0.12	0.21	0.21
Sat Flow, veh/h	3456	5106	1585	1781	5106	1585	3456	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	27	926	0	64	1891	60	110	30	37	149	29	108
Grp Sat Flow(s), veh/h/ln	1728	1702	1585	1781	1702	1585	1728	1870	1585	1781	1870	1585
Q Serve(g_s), s	1.1	0.0	0.0	5.3	40.6	2.7	4.7	2.2	2.7	12.0	1.9	7.2
Cycle Q Clear(g_c), s	1.1	0.0	0.0	5.3	40.6	2.7	4.7	2.2	2.7	12.0	1.9	7.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	190	2839		82	2757	856	155	224	190	223	387	328
V/C Ratio(X)	0.14	0.33		0.78	0.69	0.07	0.71	0.13	0.19	0.67	0.08	0.33
Avail Cap(c_a), veh/h	190	2839		154	2757	856	253	224	190	285	387	328
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	63.5	0.0	0.0	70.8	25.2	16.5	70.7	59.0	44.5	62.7	47.9	34.9
Incr Delay (d2), s/veh	0.3	0.3	0.0	15.1	1.4	0.2	5.8	1.2	2.3	4.0	0.4	2.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	0.5	0.1	0.0	2.7	16.0	1.1	2.2	1.1	1.4	5.7	0.9	3.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	63.9	0.3	0.0	85.9	26.6	16.7	76.5	60.3	46.7	66.7	48.3	37.6
LnGrp LOS	E	A		F	C	B	E	E	D	E	D	D
Approach Vol, veh/h	953				2015				177		286	
Approach Delay, s/veh	2.1				28.2				67.5		53.8	
Approach LOS	A				C				E		D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	11.9	89.4	11.7	37.0	14.3	87.0	24.7	24.0				
Change Period (Y+Rc), s	5.0	6.0	5.0	6.0	6.0	* 6	6.0	* 6				
Max Green Setting (Gmax), s	13.0	73.0	11.0	31.0	5.0	* 81	24.0	* 18				
Max Q Clear Time (g_c+l1), s	7.3	2.0	6.7	9.2	3.1	42.6	14.0	4.7				
Green Ext Time (p_c), s	0.0	7.2	0.1	0.4	0.0	19.6	0.3	0.1				
<b>Intersection Summary</b>												
HCM 7th Control Delay, s/veh				25.1								
HCM 7th LOS				C								
<b>Notes</b>												
User approved pedestrian interval to be less than phase max green.												
* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.												

## Lanes, Volumes, Timings

9: Revere Street

08/16/2024



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	23	3	71	22	1	24	20	87	1	20	170	79
Future Volume (vph)	23	3	71	22	1	24	20	87	1	20	170	79
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	80		0	100		100
Storage Lanes	0		0	0		0	1		0	1		1
Taper Length (ft)	25			25			100			100		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Frt		0.901			0.931			0.998				0.850
Flt Protected		0.988			0.977		0.950			0.950		
Satd. Flow (prot)	0	1658	0	0	1694	0	1770	3532	0	1770	1863	1583
Flt Permitted		0.988			0.977		0.950			0.950		
Satd. Flow (perm)	0	1658	0	0	1694	0	1770	3532	0	1770	1863	1583
Link Speed (mph)	25			25			30			30		
Link Distance (ft)	268			444			449			637		
Travel Time (s)	7.3			11.8			10.3			14.4		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	25	3	77	24	1	26	22	95	1	22	185	86
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	105	0	0	51	0	22	96	0	22	185	86
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)	0				0			12			12	
Link Offset(ft)	0				0			0			0	
Crosswalk Width(ft)	16				16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

## Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 28.5%

ICU Level of Service A

Analysis Period (min) 15

## Intersection

Int Delay, s/veh 3.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
<b>Lane Configurations</b>												
Traffic Vol, veh/h	23	3	71	22	1	24	20	87	1	20	170	79
Future Vol, veh/h	23	3	71	22	1	24	20	87	1	20	170	79
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	80	-	-	100	-	100
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	25	3	77	24	1	26	22	95	1	22	185	86

Major/Minor	Minor2	Minor1			Major1			Major2				
Conflicting Flow All	320	367	185	368	453	48	271	0	0	96	0	0
Stage 1	228	228	-	139	139	-	-	-	-	-	-	-
Stage 2	91	139	-	230	314	-	-	-	-	-	-	-
Critical Hdwy	7.33	6.53	6.23	7.33	6.53	6.93	4.13	-	-	4.13	-	-
Critical Hdwy Stg 1	6.13	5.53	-	6.53	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.53	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.519	4.019	3.319	3.519	4.019	3.319	2.219	-	-	2.219	-	-
Pot Cap-1 Maneuver	621	561	857	575	502	1011	1291	-	-	1497	-	-
Stage 1	774	715	-	851	781	-	-	-	-	-	-	-
Stage 2	906	781	-	772	655	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	585	543	857	504	486	1011	1291	-	-	1497	-	-
Mov Cap-2 Maneuver	585	543	-	504	486	-	-	-	-	-	-	-
Stage 1	763	704	-	836	768	-	-	-	-	-	-	-
Stage 2	867	768	-	689	646	-	-	-	-	-	-	-

Approach	EB	WB			NB			SB		
HCM Control Delay, s/v	10.5	10.75			1.45			0.55		
HCM LOS	B	B								
<hr/>										
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR		
Capacity (veh/h)	1291	-	-	760	677	1497	-	-		
HCM Lane V/C Ratio	0.017	-	-	0.139	0.075	0.015	-	-		
HCM Control Delay (s/veh)	7.8	-	-	10.5	10.8	7.4	-	-		
HCM Lane LOS	A	-	-	B	B	A	-	-		
HCM 95th %tile Q(veh)	0.1	-	-	0.5	0.2	0	-	-		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	120	902	84	26	1730	126	0	0	84	0	0	221
Future Volume (vph)	120	902	84	26	1730	126	0	0	84	0	0	221
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	375		785	290		235	0		219	0		281
Storage Lanes	1		1	1		1	0		0	0		0
Taper Length (ft)	100			100			25			25		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.865			0.865
Flt Protected	0.950			0.950								
Satd. Flow (prot)	1770	5085	1583	1770	5085	1583	0	0	1611	0	0	1611
Flt Permitted	0.950			0.950								
Satd. Flow (perm)	1770	5085	1583	1770	5085	1583	0	0	1611	0	0	1611
Link Speed (mph)		45			45			25			25	
Link Distance (ft)		929			670			219			281	
Travel Time (s)		14.1			10.2			6.0			7.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	130	980	91	28	1880	137	0	0	91	0	0	240
Shared Lane Traffic (%)												
Lane Group Flow (vph)	130	980	91	28	1880	137	0	0	91	0	0	240
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop		Stop		
Intersection Summary												
Area Type:	Other											
Control Type:	Unsignalized											
Intersection Capacity Utilization	53.8%				ICU Level of Service A							
Analysis Period (min)	15											

## Intersection

Int Delay, s/veh 14.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑↑↑↑↑↑	↑↑↑↑↑↑	↑↑↑↑↑↑	↑↑↑↑↑↑	↑↑↑↑↑↑	↑↑↑↑↑↑				↑↑↑↑↑↑	↑↑↑↑↑↑	↑↑↑↑↑↑
Traffic Vol, veh/h	120	902	84	26	1730	126	0	0	84	0	0	221
Future Vol, veh/h	120	902	84	26	1730	126	0	0	84	0	0	221
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	375	-	785	290	-	235	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	130	980	91	28	1880	137	0	0	91	0	0	240

Major/Minor	Major1	Major2			Minor1			Minor2				
Conflicting Flow All	2017	0	0	1072	0	0	-	-	490	-	-	940
Stage 1	-	-	-	-	-	-	-	-	-	-	-	
Stage 2	-	-	-	-	-	-	-	-	-	-	-	
Critical Hdwy	5.34	-	-	5.34	-	-	-	-	7.14	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	
Follow-up Hdwy	3.12	-	-	3.12	-	-	-	-	3.92	-	-	3.92
Pot Cap-1 Maneuver	~ 123	-	-	361	-	-	0	0	448	0	0	~ 227
Stage 1	-	-	-	-	-	-	0	0	-	0	0	-
Stage 2	-	-	-	-	-	-	0	0	-	0	0	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	
Mov Cap-1 Maneuver	~ 123	-	-	361	-	-	-	-	448	-	-	~ 227
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	
Stage 1	-	-	-	-	-	-	-	-	-	-	-	
Stage 2	-	-	-	-	-	-	-	-	-	-	-	

Approach	EB	WB			NB			SB		
HCM Control Delay, s/v	18.27	0.22			15.07			121.29		
HCM LOS					C			F		
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1		
Capacity (veh/h)	448	~ 123	-	-	361	-	-	227		
HCM Lane V/C Ratio	0.204	1.065	-	-	0.078	-	-	1.057		
HCM Control Delay (s/veh)	15.1	168.4	-	-	15.8	-	-	121.3		
HCM Lane LOS	C	F	-	-	C	-	-	F		
HCM 95th %tile Q(veh)	0.8	7.5	-	-	0.3	-	-	10.3		

## Notes

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

## HCM 7th Signalized Intersection Summary

3: CO-2 &amp; E. 104th Street

08/16/2024

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	↑↑	↑↑↑↑	↑	↑↑	↑↑↑↑	↑	↑↑	↑↑	↑	↑	↑↑↑↑	↑
Traffic Volume (veh/h)	223	1412	182	310	1033	95	322	846	558	68	269	76
Future Volume (veh/h)	223	1412	182	310	1033	95	322	846	558	68	269	76
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
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									
Adj Sat Flow, veh/h/ln	1618	1811	1781	1885	1870	1870	1767	1707	1767	1707	1796	1752
Adj Flow Rate, veh/h	275	1518	0	360	1201	0	488	984	0	113	336	0
Peak Hour Factor	0.81	0.93	0.93	0.86	0.86	0.65	0.66	0.86	0.73	0.60	0.80	0.79
Percent Heavy Veh, %	19	6	8	1	2	2	9	13	9	13	7	10
Cap, veh/h	332	1384		1108	2538		653	1071		114	648	
Arrive On Green	0.11	0.28	0.00	0.42	0.66	0.00	0.20	0.33	0.00	0.07	0.19	0.00
Sat Flow, veh/h	2990	4944	1510	3483	5106	1585	3264	3244	1497	1626	3413	1485
Grp Volume(v), veh/h	275	1518	0	360	1201	0	488	984	0	113	336	0
Grp Sat Flow(s), veh/h/ln	1495	1648	1510	1742	1702	1585	1632	1622	1497	1626	1706	1485
Q Serve(g_s), s	9.0	28.0	0.0	6.9	11.6	0.0	14.1	29.2	0.0	6.9	8.8	0.0
Cycle Q Clear(g_c), s	9.0	28.0	0.0	6.9	11.6	0.0	14.1	29.2	0.0	6.9	8.8	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	332	1384		1108	2538		653	1071		114	648	
V/C Ratio(X)	0.83	1.10		0.33	0.47		0.75	0.92		0.99	0.52	
Avail Cap(c_a), veh/h	359	1384		1108	2538		685	1071		114	648	
HCM Platoon Ratio	1.00	1.00	1.00	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	43.5	36.0	0.0	21.7	10.5	0.0	37.6	32.2	0.0	46.5	36.4	0.0
Incr Delay (d2), s/veh	14.0	55.1	0.0	0.2	0.6	0.0	4.3	13.9	0.0	82.0	2.9	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	3.9	17.6	0.0	2.6	3.5	0.0	5.7	12.7	0.0	5.3	3.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	57.6	91.1	0.0	21.8	11.1	0.0	41.9	46.1	0.0	128.4	39.3	0.0
LnGrp LOS	E	F		C	B		D	D		F	D	
Approach Vol, veh/h		1793			1561			1472			449	
Approach Delay, s/veh		85.9			13.6			44.7			61.8	
Approach LOS		F			B			D			E	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	37.9	34.0	26.0	25.0	16.1	55.8	12.0	39.0				
Change Period (Y+Rc), s	6.0	* 6	6.0	* 6	5.0	6.0	5.0	6.0				
Max Green Setting (Gmax), s	10.0	* 28	21.0	* 19	12.0	26.0	7.0	33.0				
Max Q Clear Time (g_c+l1), s	8.9	30.0	16.1	10.8	11.0	13.6	8.9	31.2				
Green Ext Time (p_c), s	0.2	0.0	0.8	1.2	0.1	6.1	0.0	1.1				
<b>Intersection Summary</b>												
HCM 7th Control Delay, s/veh				51.0								
HCM 7th LOS				D								
<b>Notes</b>												
* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.												
Unsignalized Delay for [NER, EBR, WBR, SWR] is excluded from calculations of the approach delay and intersection delay.												

## HCM 7th Signalized Intersection Summary

6: Revere Street &amp; E. 104th Street

08/16/2024

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑↑	↑↑↑↑	↑	↑	↑↑↑↑	↑	↑↑	↑	↑	↑	↑	↑
Traffic Volume (veh/h)	73	1645	56	83	1146	109	113	36	40	146	41	53
Future Volume (veh/h)	73	1645	56	83	1146	109	113	36	40	146	41	53
Initial Q (Q <sub>b</sub> ), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width 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
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											
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	79	1788	0	90	1246	118	123	39	43	159	45	58
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	244	2330		114	2247	697	229	337	285	189	411	349
Arrive On Green	0.09	0.61	0.00	0.06	0.44	0.44	0.07	0.18	0.18	0.11	0.22	0.22
Sat Flow, veh/h	3456	5106	1585	1781	5106	1585	3456	1870	1585	1781	1870	1585
Grp Volume(v), veh/h	79	1788	0	90	1246	118	123	39	43	159	45	58
Grp Sat Flow(s), veh/h/ln	1728	1702	1585	1781	1702	1585	1728	1870	1585	1781	1870	1585
Q Serve(g_s), s	2.1	25.8	0.0	5.0	18.1	4.5	3.4	1.7	1.9	8.8	1.9	3.0
Cycle Q Clear(g_c), s	2.1	25.8	0.0	5.0	18.1	4.5	3.4	1.7	1.9	8.8	1.9	3.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	244	2330		114	2247	697	229	337	285	189	411	349
V/C Ratio(X)	0.32	0.77		0.79	0.55	0.17	0.54	0.12	0.15	0.84	0.11	0.17
Avail Cap(c_a), veh/h	244	2330		143	2247	697	242	337	285	196	411	349
HCM Platoon Ratio	1.33	1.33	1.33	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(l)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.1	15.7	0.0	46.1	20.7	16.9	45.2	34.3	23.3	43.8	31.2	31.6
Incr Delay (d2), s/veh	0.8	2.5	0.0	20.3	1.0	0.5	2.1	0.7	1.1	25.7	0.5	1.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%), veh/ln	0.9	7.4	0.0	2.8	6.8	1.7	1.5	0.9	1.0	5.2	0.9	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	43.8	18.2	0.0	66.4	21.7	17.5	47.3	35.0	24.4	69.6	31.7	32.6
LnGrp LOS	D	B		E	C	B	D	D	C	E	C	C
Approach Vol, veh/h		1867			1454			205			262	
Approach Delay, s/veh		19.3			24.2			40.1			54.9	
Approach LOS		B			C			D			D	
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	11.4	51.7	11.6	28.0	13.1	50.0	15.6	24.0				
Change Period (Y+Rc), s	5.0	6.0	5.0	6.0	6.0	* 6	5.0	6.0				
Max Green Setting (Gmax), s	8.0	41.0	7.0	22.0	5.0	* 44	11.0	18.0				
Max Q Clear Time (g_c+l1), s	7.0	27.8	5.4	5.0	4.1	20.1	10.8	3.9				
Green Ext Time (p_c), s	0.0	9.2	0.0	0.3	0.0	9.4	0.0	0.2				
<b>Intersection Summary</b>												
HCM 7th Control Delay, s/veh				24.8								
HCM 7th LOS				C								
<b>Notes</b>												
* HCM 7th computational engine requires equal clearance times for the phases crossing the barrier.												
Unsignalized Delay for [EBR] is excluded from calculations of the approach delay and intersection delay.												

## Lanes, Volumes, Timings

9: Revere Street

08/16/2024



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	37	6	105	10	4	10	43	168	7	14	125	25
Future Volume (vph)	37	6	105	10	4	10	43	168	7	14	125	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	80		0	100		100
Storage Lanes	0		0	0		0	1		0	1		1
Taper Length (ft)	25			25			100			100		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Frt		0.904			0.943			0.994				0.850
Flt Protected		0.988			0.979		0.950			0.950		
Satd. Flow (prot)	0	1664	0	0	1720	0	1770	3518	0	1770	1863	1583
Flt Permitted		0.988			0.979		0.950			0.950		
Satd. Flow (perm)	0	1664	0	0	1720	0	1770	3518	0	1770	1863	1583
Link Speed (mph)		25			25			30			30	
Link Distance (ft)		268			431			455			637	
Travel Time (s)		7.3			11.8			10.3			14.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	40	7	114	11	4	11	47	183	8	15	136	27
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	161	0	0	26	0	47	191	0	15	136	27
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		0			0			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Stop			Stop			Free			Free	

## Intersection Summary

Area Type: Other

Control Type: Unsignalized

Intersection Capacity Utilization 29.8%

ICU Level of Service A

Analysis Period (min) 15

## Intersection

Int Delay, s/veh 4.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	37	6	105	10	4	10	43	168	7	14	125	25
Future Vol, veh/h	37	6	105	10	4	10	43	168	7	14	125	25
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	80	-	-	100	-	100
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	40	7	114	11	4	11	47	183	8	15	136	27

Major/Minor	Minor2	Minor1			Major1			Major2				
Conflicting Flow All	353	450	136	449	473	95	163	0	0	190	0	0
Stage 1	166	166	-	280	280	-	-	-	-	-	-	-
Stage 2	187	284	-	170	193	-	-	-	-	-	-	-
Critical Hdwy	7.33	6.53	6.23	7.33	6.53	6.93	4.13	-	-	4.13	-	-
Critical Hdwy Stg 1	6.13	5.53	-	6.53	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.53	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.519	4.019	3.319	3.519	4.019	3.319	2.219	-	-	2.219	-	-
Pot Cap-1 Maneuver	589	504	912	506	489	943	1414	-	-	1382	-	-
Stage 1	835	760	-	704	678	-	-	-	-	-	-	-
Stage 2	797	676	-	832	740	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	552	482	912	418	467	943	1414	-	-	1382	-	-
Mov Cap-2 Maneuver	552	482	-	418	467	-	-	-	-	-	-	-
Stage 1	826	752	-	681	656	-	-	-	-	-	-	-
Stage 2	757	654	-	713	732	-	-	-	-	-	-	-

Approach	EB	WB			NB			SB		
HCM Control Delay, s/v	11	11.78			1.51			0.65		
HCM LOS	B	B								
<hr/>										
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR		
Capacity (veh/h)	1414	-	-	761	557	1382	-	-		
HCM Lane V/C Ratio	0.033	-	-	0.211	0.047	0.011	-	-		
HCM Control Delay (s/veh)	7.6	-	-	11	11.8	7.6	-	-		
HCM Lane LOS	A	-	-	B	B	A	-	-		
HCM 95th %tile Q(veh)	0.1	-	-	0.8	0.1	0	-	-		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	162	1739	105	35	1131	81	0	0	100	0	0	179
Future Volume (vph)	162	1739	105	35	1131	81	0	0	100	0	0	179
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	375		785	290		235	0		219	0		281
Storage Lanes	1		1	1		1	0		0	0		0
Taper Length (ft)	100			100			25			25		
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt			0.850			0.850			0.865			0.865
Flt Protected	0.950			0.950								
Satd. Flow (prot)	1770	5085	1583	1770	5085	1583	0	0	1611	0	0	1611
Flt Permitted	0.950			0.950								
Satd. Flow (perm)	1770	5085	1583	1770	5085	1583	0	0	1611	0	0	1611
Link Speed (mph)		45			45			25			25	
Link Distance (ft)		929			670			219			281	
Travel Time (s)		14.1			10.2			6.0			7.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	176	1890	114	38	1229	88	0	0	109	0	0	195
Shared Lane Traffic (%)												
Lane Group Flow (vph)	176	1890	114	38	1229	88	0	0	109	0	0	195
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			0			0	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Sign Control		Free			Free			Stop		Stop		
Intersection Summary												
Area Type:	Other											
Control Type:	Unsignalized											
Intersection Capacity Utilization	46.5%				ICU Level of Service A							
Analysis Period (min)	15											

## Intersection

Int Delay, s/veh 4.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↑↑↑↑↑↑	↑↑↑↑↑↑	↑↑↑↑↑↑	↑↑↑↑↑↑	↑↑↑↑↑↑	↑↑↑↑↑↑				↑↑↑↑↑↑	↑↑↑↑↑↑	↑↑↑↑↑↑
Traffic Vol, veh/h	162	1739	105	35	1131	81	0	0	100	0	0	179
Future Vol, veh/h	162	1739	105	35	1131	81	0	0	100	0	0	179
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	375	-	785	290	-	235	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	176	1890	114	38	1229	88	0	0	109	0	0	195

Major/Minor	Major1	Major2			Minor1		Minor2					
Conflicting Flow All	1317	0	0	2004	0	0	-	-	945	-	-	615
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	5.34	-	-	5.34	-	-	-	-	7.14	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.12	-	-	3.12	-	-	-	-	3.92	-	-	3.92
Pot Cap-1 Maneuver	274	-	-	124	-	-	0	0	226	0	0	372
Stage 1	-	-	-	-	-	-	0	0	-	0	0	-
Stage 2	-	-	-	-	-	-	0	0	-	0	0	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	274	-	-	124	-	-	-	-	226	-	-	372
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB			NB		SB		
HCM Control Delay, s/v	3.15	1.3			34.94		24.78		
HCM LOS					D		C		
<hr/>									
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	
Capacity (veh/h)	226	274	-	-	124	-	-	372	
HCM Lane V/C Ratio	0.482	0.642	-	-	0.306	-	-	0.523	
HCM Control Delay (s/veh)	34.9	39	-	-	46.2	-	-	24.8	
HCM Lane LOS	D	E	-	-	E	-	-	C	
HCM 95th %tile Q(veh)	2.4	4	-	-	1.2	-	-	2.9	

**APPENDIX H**  
**QUEUE LENGTH ANALYSIS RESOURCES**

**APPENDIX I**  
**QUEUE LENGTH ANALYSIS SUMMARY SHEETS**

Queuing and Blocking Report  
Existing Weekday AM Peak Hour

04/24/2024

Intersection: 3: CO-2 & E. 104th Street

Movement	EB	EB	EB	EB	WB	WB	WB	WB	WB	NE	NE	NE
Directions Served	L	L	T	T	L	L	T	T	R	L	T	T
Maximum Queue (ft)	218	243	317	276	280	330	824	798	259	178	97	54
Average Queue (ft)	81	133	192	165	278	329	807	252	20	68	28	6
95th Queue (ft)	188	220	281	242	283	329	862	580	149	141	77	37
Link Distance (ft)			1091	1091			803	803			1395	1395
Upstream Blk Time (%)							61	0				
Queuing Penalty (veh)							435	1				
Storage Bay Dist (ft)	435	435			230	230			225	700		
Storage Blk Time (%)					67	93	4	10				
Queuing Penalty (veh)					279	388	27	9				

Intersection: 3: CO-2 & E. 104th Street

Movement	NE	SW	SW	SW	SW
Directions Served	R	L	T	T	R
Maximum Queue (ft)	61	69	276	247	24
Average Queue (ft)	4	9	144	108	2
95th Queue (ft)	29	38	248	222	17
Link Distance (ft)		1163	1163		
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	500	800		460	
Storage Blk Time (%)					
Queuing Penalty (veh)					

Queuing and Blocking Report  
Existing Weekday AM Peak Hour

04/24/2024

Intersection: 6: Revere Street & E. 104th Street

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	NB
Directions Served	L	L	T	T	L	T	T	R	L	L	T	R
Maximum Queue (ft)	30	50	50	79	310	1262	1261	365	46	41	17	29
Average Queue (ft)	4	13	10	29	27	969	948	117	12	10	0	4
95th Queue (ft)	19	38	34	64	175	1616	1627	391	38	33	6	19
Link Distance (ft)					588	588		1214	1214			584
Upstream Blk Time (%)								60	51			
Queuing Penalty (veh)								0	0			
Storage Bay Dist (ft)	215	215			275				265	110	110	110
Storage Blk Time (%)								74	64			
Queuing Penalty (veh)								4	26			

Intersection: 6: Revere Street & E. 104th Street

Movement	SB	SB	SB
Directions Served	L	T	R
Maximum Queue (ft)	117	70	84
Average Queue (ft)	66	9	32
95th Queue (ft)	111	45	66
Link Distance (ft)		343	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	100		100
Storage Blk Time (%)	3		0
Queuing Penalty (veh)	2		0

Intersection: 9: Revere Street

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	L	L
Maximum Queue (ft)	44	30	26	11
Average Queue (ft)	20	17	3	1
95th Queue (ft)	38	37	17	7
Link Distance (ft)	220	391		
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)		80	100	
Storage Blk Time (%)				
Queuing Penalty (veh)				

# Queuing and Blocking Report

## Existing Weekday AM Peak Hour

04/24/2024

### Intersection: 12: E. 104th Street & Quari Ct.

Movement	EB	WB	WB	WB	WB	NB	SB
Directions Served	L	L	T	T	R	R	R
Maximum Queue (ft)	95	78	607	617	272	12	243
Average Queue (ft)	34	3	535	335	24	0	195
95th Queue (ft)	76	56	797	742	162	5	288
Link Distance (ft)			588	588		152	214
Upstream Blk Time (%)			39	1			81
Queuing Penalty (veh)			265	9			0
Storage Bay Dist (ft)	375	290			235		
Storage Blk Time (%)			85	12			
Queuing Penalty (veh)			1	10			

### Network Summary

Network wide Queuing Penalty: 1455

Queuing and Blocking Report  
Existing Weekday PM Peak Hour

04/24/2024

Intersection: 3: CO-2 & E. 104th Street

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NE	NE
Directions Served	L	L	T	T	R	L	L	T	T	R	L	T
Maximum Queue (ft)	148	535	1141	1140	825	106	329	421	400	322	800	1305
Average Queue (ft)	51	354	758	717	278	40	96	258	269	27	630	741
95th Queue (ft)	123	708	1286	1261	921	87	236	363	366	173	975	1537
Link Distance (ft)			1091	1091				803	803			1395
Upstream Blk Time (%)			19	12								12
Queuing Penalty (veh)			0	0								0
Storage Bay Dist (ft)	435	435			725	230	230			225	700	
Storage Blk Time (%)			50	30				0	17	23		42
Queuing Penalty (veh)			92	41				0	35	17		140
												27

Intersection: 3: CO-2 & E. 104th Street

Movement	NE	NE	SW	SW	SW	SW
Directions Served	T	R	L	T	T	R
Maximum Queue (ft)	1300	545	111	133	123	14
Average Queue (ft)	706	143	30	48	18	0
95th Queue (ft)	1516	416	84	107	76	9
Link Distance (ft)	1395		1163	1163		
Upstream Blk Time (%)	9					
Queuing Penalty (veh)	0					
Storage Bay Dist (ft)	500	800		460		
Storage Blk Time (%)	4	0				
Queuing Penalty (veh)	19	0				

Queuing and Blocking Report  
Existing Weekday PM Peak Hour

04/24/2024

Intersection: 6: Revere Street & E. 104th Street

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	NB
Directions Served	L	L	T	T	L	T	T	R	L	L	T	R
Maximum Queue (ft)	62	80	152	178	40	268	237	56	30	54	17	35
Average Queue (ft)	17	28	61	84	11	166	127	19	2	9	2	4
95th Queue (ft)	48	61	128	148	33	244	213	44	13	34	13	21
Link Distance (ft)			588	588		1204	1204				591	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	215	215			275			265	110	110		110
Storage Blk Time (%)								0	0			
Queuing Penalty (veh)								0	0			

Intersection: 6: Revere Street & E. 104th Street

Movement	SB	SB	SB
Directions Served	L	T	R
Maximum Queue (ft)	145	30	64
Average Queue (ft)	67	3	16
95th Queue (ft)	124	19	44
Link Distance (ft)		355	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	100		100
Storage Blk Time (%)	4		0
Queuing Penalty (veh)	2		0

Intersection: 9: Revere Street

Movement	EB	WB	NB	SB	SB
Directions Served	LTR	LTR	L	L	R
Maximum Queue (ft)	61	29	34	22	4
Average Queue (ft)	28	12	3	1	0
95th Queue (ft)	50	33	18	11	3
Link Distance (ft)	220	378			
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)		80	100	100	
Storage Blk Time (%)		0			
Queuing Penalty (veh)		0			

Queuing and Blocking Report  
Existing Weekday PM Peak Hour

04/24/2024

Intersection: 12: E. 104th Street & Quari Ct.

Movement	EB	WB	WB	NB	SB
Directions Served	L	L	R	R	R
Maximum Queue (ft)	136	16	27	4	80
Average Queue (ft)	51	1	1	0	34
95th Queue (ft)	101	8	10	4	63
Link Distance (ft)			152	215	
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	375	290	235		
Storage Blk Time (%)					
Queuing Penalty (veh)					

Network Summary

Network wide Queuing Penalty: 375

Queuing and Blocking Report  
2025 No-Build Weekday AM Peak Hour

08/15/2024

Intersection: 3: CO-2 & E. 104th Street, Interval #1

Movement	EB	EB	EB	EB	WB	WB	WB	WB	WB	NE	NE	NE
Directions Served	L	L	T	T	L	L	T	T	R	L	T	T
Maximum Queue (ft)	155	184	307	308	280	330	820	701	260	141	90	65
Average Queue (ft)	91	140	233	221	277	329	788	417	83	76	29	13
95th Queue (ft)	181	206	328	321	283	330	903	772	317	146	86	61
Link Distance (ft)			1091	1091			803	803			1395	1395
Upstream Blk Time (%)							48	1				
Queuing Penalty (veh)							360	4				
Storage Bay Dist (ft)	435	435			230	230			225	700		
Storage Blk Time (%)					57	92	22	33				
Queuing Penalty (veh)					272	439	149	39				

Intersection: 3: CO-2 & E. 104th Street, Interval #1

Movement	NE	SW	SW	SW	SW
Directions Served	R	L	T	T	R
Maximum Queue (ft)	55	74	253	186	37
Average Queue (ft)	13	28	153	125	9
95th Queue (ft)	60	81	268	225	39
Link Distance (ft)		1163	1163		
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	500	800		460	
Storage Blk Time (%)					
Queuing Penalty (veh)					

Queuing and Blocking Report  
2025 No-Build Weekday AM Peak Hour

08/15/2024

Intersection: 3: CO-2 & E. 104th Street, Interval #2

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NE	NE	NE	NE
Directions Served	L	L	T	T	L	L	T	T	L	T	T	R
Maximum Queue (ft)	126	147	274	268	280	330	822	240	106	60	14	21
Average Queue (ft)	50	93	211	200	278	330	813	152	52	26	2	5
95th Queue (ft)	138	169	293	287	282	330	821	250	120	63	12	24
Link Distance (ft)			1091	1091			803	803		1395	1395	
Upstream Blk Time (%)							67					
Queuing Penalty (veh)							461					
Storage Bay Dist (ft)	435	435			230	230			700			500
Storage Blk Time (%)					77	95	1	2				
Queuing Penalty (veh)					319	389	4	1				

Intersection: 3: CO-2 & E. 104th Street, Interval #2

Movement	SW	SW	SW	SW
Directions Served	L	T	T	R
Maximum Queue (ft)	67	195	171	26
Average Queue (ft)	25	121	75	4
95th Queue (ft)	78	197	178	20
Link Distance (ft)		1163	1163	
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	800		460	
Storage Blk Time (%)				
Queuing Penalty (veh)				

Queuing and Blocking Report  
2025 No-Build Weekday AM Peak Hour

08/15/2024

Intersection: 3: CO-2 & E. 104th Street, Interval #3

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NE	NE	NE	NE
Directions Served	L	L	T	T	L	L	T	T	L	T	T	R
Maximum Queue (ft)	192	224	356	333	280	330	820	387	173	98	54	55
Average Queue (ft)	92	141	238	213	279	329	811	192	69	30	8	9
95th Queue (ft)	197	224	344	313	281	329	819	338	151	78	35	45
Link Distance (ft)		1091	1091				803	803		1395	1395	
Upstream Blk Time (%)								65				
Queuing Penalty (veh)								487				
Storage Bay Dist (ft)	435	435			230	230			700			500
Storage Blk Time (%)						75	93	3	6			
Queuing Penalty (veh)					360	447	20	7				

Intersection: 3: CO-2 & E. 104th Street, Interval #3

Movement	SW	SW	SW	SW
Directions Served	L	T	T	R
Maximum Queue (ft)	74	249	212	42
Average Queue (ft)	19	144	109	4
95th Queue (ft)	59	241	209	26
Link Distance (ft)		1163	1163	
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	800		460	
Storage Blk Time (%)				
Queuing Penalty (veh)				

Queuing and Blocking Report  
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Intersection: 3: CO-2 & E. 104th Street, All Intervals

Movement	EB	EB	EB	EB	WB	WB	WB	WB	WB	NE	NE	NE
Directions Served	L	L	T	T	L	L	T	T	R	L	T	T
Maximum Queue (ft)	192	226	367	340	280	330	822	702	260	178	119	81
Average Queue (ft)	82	129	230	212	278	329	806	237	20	67	29	8
95th Queue (ft)	184	214	330	310	283	329	866	506	149	144	77	39
Link Distance (ft)			1091	1091			803	803			1395	1395
Upstream Blk Time (%)							61	0				
Queuing Penalty (veh)							449	1				
Storage Bay Dist (ft)	435	435			230	230			225	700		
Storage Blk Time (%)						71	93	7	12			
Queuing Penalty (veh)					328	430	48	14				

Intersection: 3: CO-2 & E. 104th Street, All Intervals

Movement	NE	SW	SW	SW	SW
Directions Served	R	L	T	T	R
Maximum Queue (ft)	67	98	276	236	54
Average Queue (ft)	9	23	141	105	5
95th Queue (ft)	45	70	240	210	29
Link Distance (ft)		1163	1163		
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	500	800		460	
Storage Blk Time (%)					
Queuing Penalty (veh)					

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Intersection: 6: Revere Street & E. 104th Street, Interval #1

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	NB
Directions Served	L	L	T	T	L	T	T	R	L	L	T	R
Maximum Queue (ft)	8	31	88	112	263	811	756	167	88	94	50	43
Average Queue (ft)	2	15	41	59	119	400	356	40	49	54	21	15
95th Queue (ft)	11	37	88	111	335	789	722	203	95	92	52	45
Link Distance (ft)			588	588		1214	1214				584	
Upstream Blk Time (%)							1					
Queuing Penalty (veh)							0					
Storage Bay Dist (ft)	215	215			275			265	110	110		110
Storage Blk Time (%)							34	20		9	1	
Queuing Penalty (veh)							21	8		6	0	

Intersection: 6: Revere Street & E. 104th Street, Interval #1

Movement	SB	SB	SB
Directions Served	L	T	R
Maximum Queue (ft)	138	122	94
Average Queue (ft)	75	45	42
95th Queue (ft)	133	139	94
Link Distance (ft)		343	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	100		100
Storage Blk Time (%)	7	3	5
Queuing Penalty (veh)	7	6	6

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Intersection: 6: Revere Street & E. 104th Street, Interval #2

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	NB
Directions Served	L	L	T	T	L	T	T	R	L	L	T	R
Maximum Queue (ft)	20	36	80	107	374	1243	1238	365	130	177	355	110
Average Queue (ft)	3	12	30	59	199	1145	1123	114	112	137	185	28
95th Queue (ft)	16	37	68	106	487	1436	1454	393	164	256	565	107
Link Distance (ft)			588	588		1214	1214				584	
Upstream Blk Time (%)						65	52				11	
Queuing Penalty (veh)						0	0				0	
Storage Bay Dist (ft)	215	215			275			265	110	110		110
Storage Blk Time (%)						0	89	77		76	33	
Queuing Penalty (veh)						0	51	30		46	20	

Intersection: 6: Revere Street & E. 104th Street, Interval #2

Movement	SB	SB	SB
Directions Served	L	T	R
Maximum Queue (ft)	92	67	54
Average Queue (ft)	59	21	31
95th Queue (ft)	99	64	60
Link Distance (ft)		343	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	100		100
Storage Blk Time (%)	2	0	
Queuing Penalty (veh)	2	0	

Queuing and Blocking Report  
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Intersection: 6: Revere Street & E. 104th Street, Interval #3

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	NB
Directions Served	L	L	T	T	L	T	T	R	L	L	T	R
Maximum Queue (ft)	26	35	74	106	375	1259	1259	365	160	210	615	56
Average Queue (ft)	5	12	28	53	209	1234	1235	148	140	198	546	5
95th Queue (ft)	20	32	68	98	490	1251	1252	440	165	216	750	33
Link Distance (ft)			588	588		1214	1214				584	
Upstream Blk Time (%)						95	75				81	
Queuing Penalty (veh)						0	0				0	
Storage Bay Dist (ft)	215	215			275			265	110	110		110
Storage Blk Time (%)						88	83		99	40		0
Queuing Penalty (veh)						55	35		64	26		0

Intersection: 6: Revere Street & E. 104th Street, Interval #3

Movement	SB	SB	SB
Directions Served	L	T	R
Maximum Queue (ft)	132	106	105
Average Queue (ft)	72	38	41
95th Queue (ft)	134	107	98
Link Distance (ft)		343	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	100		100
Storage Blk Time (%)	3	2	2
Queuing Penalty (veh)	3	3	3

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Intersection: 6: Revere Street & E. 104th Street, All Intervals

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	NB
Directions Served	L	L	T	T	L	T	T	R	L	L	T	R
Maximum Queue (ft)	26	44	102	126	375	1261	1259	365	160	210	615	128
Average Queue (ft)	4	13	32	56	185	1011	996	114	111	149	332	13
95th Queue (ft)	17	34	74	103	461	1632	1643	387	183	265	778	62
Link Distance (ft)			588	588		1214	1214				584	
Upstream Blk Time (%)						64	50				43	
Queuing Penalty (veh)						0	0				0	
Storage Bay Dist (ft)	215	215			275			265	110	110		110
Storage Blk Time (%)						0	75	66	71	28		0
Queuing Penalty (veh)						0	45	27	45	18		0

Intersection: 6: Revere Street & E. 104th Street, All Intervals

Movement	SB	SB	SB
Directions Served	L	T	R
Maximum Queue (ft)	157	168	132
Average Queue (ft)	70	36	39
95th Queue (ft)	127	108	90
Link Distance (ft)		343	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	100		100
Storage Blk Time (%)	3	2	2
Queuing Penalty (veh)	4	3	3

Intersection: 9: Revere Street, Interval #1

Movement	EB	WB	NB
Directions Served	LTR	LTR	L
Maximum Queue (ft)	42	30	10
Average Queue (ft)	21	19	1
95th Queue (ft)	45	38	11
Link Distance (ft)	220	391	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)		80	
Storage Blk Time (%)			
Queuing Penalty (veh)			

Queuing and Blocking Report  
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Intersection: 9: Revere Street, Interval #2

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	L	L
Maximum Queue (ft)	31	25	5	6
Average Queue (ft)	21	20	1	1
95th Queue (ft)	33	36	7	8
Link Distance (ft)	220	391		
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)		80	100	
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 9: Revere Street, Interval #3

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	L	R
Maximum Queue (ft)	49	34	10	4
Average Queue (ft)	22	17	1	0
95th Queue (ft)	40	38	7	4
Link Distance (ft)	220	391		
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)		80	100	
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 9: Revere Street, All Intervals

Movement	EB	WB	NB	SB	SB
Directions Served	LTR	LTR	L	L	R
Maximum Queue (ft)	54	34	20	6	4
Average Queue (ft)	21	18	1	0	0
95th Queue (ft)	40	38	8	4	3
Link Distance (ft)	220	391			
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)		80	100	100	
Storage Blk Time (%)					
Queuing Penalty (veh)					

Queuing and Blocking Report  
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Intersection: 12: E. 104th Street & Quari Ct., Interval #1

Movement	EB	WB	WB	WB	WB	NB	SB
Directions Served	L	L	T	T	R	R	R
Maximum Queue (ft)	87	315	599	502	143	61	223
Average Queue (ft)	51	80	395	229	22	28	149
95th Queue (ft)	101	334	759	600	149	61	265
Link Distance (ft)			588	588		152	214
Upstream Blk Time (%)			19	0			36
Queuing Penalty (veh)			147	2			0
Storage Bay Dist (ft)	375	290			235		
Storage Blk Time (%)			58	4			
Queuing Penalty (veh)			16	3			

Intersection: 12: E. 104th Street & Quari Ct., Interval #2

Movement	EB	EB	EB	WB	WB	WB	WB	NB	SB
Directions Served	L	T	R	L	T	T	R	R	R
Maximum Queue (ft)	60	16	8	389	600	601	204	71	232
Average Queue (ft)	35	2	1	195	594	244	20	39	226
95th Queue (ft)	67	24	12	507	601	662	148	72	237
Link Distance (ft)		803			588	588		152	214
Upstream Blk Time (%)					48	1			100
Queuing Penalty (veh)					338	9			0
Storage Bay Dist (ft)	375		785	290			235		
Storage Blk Time (%)					97	7			
Queuing Penalty (veh)					25	6			

Intersection: 12: E. 104th Street & Quari Ct., Interval #3

Movement	EB	EB	WB	WB	WB	WB	NB	SB
Directions Served	L	R	L	T	T	R	R	R
Maximum Queue (ft)	119	4	390	612	617	138	69	237
Average Queue (ft)	42	0	156	596	440	27	30	222
95th Queue (ft)	108	4	470	607	825	176	56	239
Link Distance (ft)			588	588		152		214
Upstream Blk Time (%)			45	5			100	
Queuing Penalty (veh)			346	39			0	
Storage Bay Dist (ft)	375	785	290			235		
Storage Blk Time (%)			97	13				
Queuing Penalty (veh)			27	12				

Queuing and Blocking Report  
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Intersection: 12: E. 104th Street & Quari Ct., All Intervals

Movement	EB	EB	EB	WB	WB	WB	WB	NB	SB
Directions Served	L	T	R	L	T	T	R	R	R
Maximum Queue (ft)	127	16	12	390	612	617	335	85	237
Average Queue (ft)	42	1	0	147	547	342	24	32	205
95th Queue (ft)	99	11	7	455	775	766	163	62	284
Link Distance (ft)		803			588	588		152	214
Upstream Blk Time (%)					39	3			84
Queuing Penalty (veh)					294	22			0
Storage Bay Dist (ft)	375		785	290			235		
Storage Blk Time (%)					87	9			
Queuing Penalty (veh)					24	8			

Network Summary

Network wide Queuing Penalty, Interval #1: 1486

Network wide Queuing Penalty, Interval #2: 1700

Network wide Queuing Penalty, Interval #3: 1933

Network wide Queuing Penalty, All Intervals: 1763

Queuing and Blocking Report  
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Intersection: 3: CO-2 & E. 104th Street, Interval #1

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NE	NE
Directions Served	L	L	T	T	R	L	L	T	T	R	L	T
Maximum Queue (ft)	88	535	1052	1041	660	108	279	367	394	195	620	603
Average Queue (ft)	41	429	903	893	353	63	124	278	285	46	405	277
95th Queue (ft)	103	734	1321	1307	1026	136	277	382	377	232	752	619
Link Distance (ft)			1091	1091				803	803			1395
Upstream Blk Time (%)			35	31								
Queuing Penalty (veh)			0	0								
Storage Bay Dist (ft)	435	435			725	230	230			225	700	
Storage Blk Time (%)			70	50				22	28		6	1
Queuing Penalty (veh)			136	69				56	31		19	4

Intersection: 3: CO-2 & E. 104th Street, Interval #1

Movement	NE	NE	SW	SW	SW	SW
Directions Served	T	R	L	T	T	R
Maximum Queue (ft)	481	237	118	115	78	33
Average Queue (ft)	233	125	61	67	30	6
95th Queue (ft)	536	234	134	127	98	28
Link Distance (ft)	1395		1163	1163		
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)		500	800		460	
Storage Blk Time (%)		1				
Queuing Penalty (veh)		4				

Queuing and Blocking Report  
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Intersection: 3: CO-2 & E. 104th Street, Interval #2

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NE	NE
Directions Served	L	L	T	T	R	L	L	T	T	R	L	T
Maximum Queue (ft)	134	535	1110	1080	660	71	194	343	380	323	606	666
Average Queue (ft)	54	467	1064	1041	518	30	89	263	281	46	547	522
95th Queue (ft)	134	741	1285	1298	1175	74	239	364	388	233	879	1263
Link Distance (ft)			1091	1091				803	803			1395
Upstream Blk Time (%)			56	43								
Queuing Penalty (veh)			0	0								
Storage Bay Dist (ft)	435	435			725	230	230			225	700	
Storage Blk Time (%)			75	60				18	25		24	4
Queuing Penalty (veh)			119	78				40	18		73	8

Intersection: 3: CO-2 & E. 104th Street, Interval #2

Movement	NE	NE	SW	SW	SW	SW
Directions Served	T	R	L	T	T	R
Maximum Queue (ft)	561	252	80	101	30	2
Average Queue (ft)	460	137	36	56	6	0
95th Queue (ft)	1173	340	87	105	32	4
Link Distance (ft)	1395		1163	1163		
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)		500	800		460	
Storage Blk Time (%)		3				
Queuing Penalty (veh)		14				

Queuing and Blocking Report  
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Intersection: 3: CO-2 & E. 104th Street, Interval #3

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NE	NE
Directions Served	L	L	T	T	R	L	L	T	T	R	L	T
Maximum Queue (ft)	127	535	1147	1147	825	138	308	418	414	323	773	1288
Average Queue (ft)	49	460	1120	1110	726	65	145	282	301	73	690	986
95th Queue (ft)	115	748	1185	1188	1168	129	312	412	422	297	1001	1816
Link Distance (ft)			1091	1091				803	803			1395
Upstream Blk Time (%)			74	64								27
Queuing Penalty (veh)			0	0								0
Storage Bay Dist (ft)	435	435			725	230	230			225	700	
Storage Blk Time (%)		0	78	80				0	17	26		57
Queuing Penalty (veh)		0	153	112				0	45	28		202
												63

Intersection: 3: CO-2 & E. 104th Street, Interval #3

Movement	NE	NE	SW	SW	SW	SW
Directions Served	T	R	L	T	T	R
Maximum Queue (ft)	1275	493	125	130	122	12
Average Queue (ft)	957	226	54	50	23	1
95th Queue (ft)	1807	549	121	113	85	9
Link Distance (ft)	1395			1163	1163	
Upstream Blk Time (%)	27					
Queuing Penalty (veh)	0					
Storage Bay Dist (ft)	500	800			460	
Storage Blk Time (%)	7	1				
Queuing Penalty (veh)	37	5				

Queuing and Blocking Report  
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Intersection: 3: CO-2 & E. 104th Street, All Intervals

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NE	NE
Directions Served	L	L	T	T	R	L	L	T	T	R	L	T
Maximum Queue (ft)	158	535	1150	1147	825	140	308	422	432	325	773	1288
Average Queue (ft)	48	454	1054	1041	586	56	126	277	293	60	587	703
95th Queue (ft)	117	744	1332	1326	1203	123	290	394	404	268	966	1581
Link Distance (ft)			1091	1091				803	803			1395
Upstream Blk Time (%)			60	50								13
Queuing Penalty (veh)			0	0								0
Storage Bay Dist (ft)	435	435			725	230	230			225	700	
Storage Blk Time (%)		0	75	68				0	19	26		36
Queuing Penalty (veh)		0	140	93				0	46	26		124
												34

Intersection: 3: CO-2 & E. 104th Street, All Intervals

Movement	NE	NE	SW	SW	SW	SW
Directions Served	T	R	L	T	T	R
Maximum Queue (ft)	1275	493	141	139	131	33
Average Queue (ft)	662	180	51	56	20	2
95th Queue (ft)	1550	450	118	116	79	15
Link Distance (ft)	1395		1163	1163		
Upstream Blk Time (%)	13					
Queuing Penalty (veh)	0					
Storage Bay Dist (ft)	500	800		460		
Storage Blk Time (%)	4	1				
Queuing Penalty (veh)	23	3				

Queuing and Blocking Report  
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Intersection: 6: Revere Street & E. 104th Street, Interval #1

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	NB
Directions Served	L	L	T	T	L	T	T	R	L	L	T	R
Maximum Queue (ft)	44	50	172	190	127	235	195	39	64	118	72	49
Average Queue (ft)	17	34	117	133	80	166	138	25	23	69	32	26
95th Queue (ft)	44	59	186	193	131	242	223	41	72	123	83	55
Link Distance (ft)			588	588		1204	1204				591	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	215	215			275			265	110	110		110
Storage Blk Time (%)								0	0	0	3	0
Queuing Penalty (veh)								0	0	0	3	0

Intersection: 6: Revere Street & E. 104th Street, Interval #1

Movement	SB	SB	SB
Directions Served	L	T	R
Maximum Queue (ft)	102	76	46
Average Queue (ft)	62	33	22
95th Queue (ft)	105	86	47
Link Distance (ft)		355	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	100		100
Storage Blk Time (%)	2	0	
Queuing Penalty (veh)	2	0	

Queuing and Blocking Report  
2025 No-Build Weekday PM Peak Hour

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Intersection: 6: Revere Street & E. 104th Street, Interval #2

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	NB
Directions Served	L	L	T	T	L	T	T	R	L	L	T	R
Maximum Queue (ft)	33	48	136	153	115	235	183	48	53	83	63	49
Average Queue (ft)	12	26	79	101	66	177	129	21	26	50	27	27
95th Queue (ft)	37	57	132	157	118	252	211	52	63	92	64	60
Link Distance (ft)			588	588		1204	1204				591	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	215	215			275			265	110	110		110
Storage Blk Time (%)											1	
Queuing Penalty (veh)											0	

Intersection: 6: Revere Street & E. 104th Street, Interval #2

Movement	SB	SB	SB
Directions Served	L	T	R
Maximum Queue (ft)	106	75	48
Average Queue (ft)	68	28	16
95th Queue (ft)	110	71	42
Link Distance (ft)		355	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	100		100
Storage Blk Time (%)	3	0	
Queuing Penalty (veh)	3	0	

Queuing and Blocking Report  
2025 No-Build Weekday PM Peak Hour

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Intersection: 6: Revere Street & E. 104th Street, Interval #3

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	NB
Directions Served	L	L	T	T	L	T	T	R	L	L	T	R
Maximum Queue (ft)	39	68	204	221	125	273	232	48	92	127	117	57
Average Queue (ft)	13	25	97	117	72	170	143	23	29	66	39	19
95th Queue (ft)	36	56	195	217	126	260	229	47	81	125	102	51
Link Distance (ft)			588	588		1204	1204				591	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	215	215			275			265	110	110		110
Storage Blk Time (%)			0	0		0	0		0	5	1	
Queuing Penalty (veh)			0	0		0	0		0	4	1	

Intersection: 6: Revere Street & E. 104th Street, Interval #3

Movement	SB	SB	SB
Directions Served	L	T	R
Maximum Queue (ft)	118	90	61
Average Queue (ft)	69	32	21
95th Queue (ft)	113	78	50
Link Distance (ft)		355	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	100		100
Storage Blk Time (%)	4	0	
Queuing Penalty (veh)	3	0	

Queuing and Blocking Report  
2025 No-Build Weekday PM Peak Hour

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Intersection: 6: Revere Street & E. 104th Street, All Intervals

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	NB
Directions Served	L	L	T	T	L	T	T	R	L	L	T	R
Maximum Queue (ft)	51	72	208	222	136	273	240	53	96	128	118	66
Average Queue (ft)	14	28	98	117	73	170	139	23	27	63	35	23
95th Queue (ft)	38	58	183	202	126	254	224	47	75	119	90	55
Link Distance (ft)			588	588		1204	1204				591	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	215	215			275			265	110	110		110
Storage Blk Time (%)			0	0		0	0		0	3	0	
Queuing Penalty (veh)			0	0		0	0		0	3	1	

Intersection: 6: Revere Street & E. 104th Street, All Intervals

Movement	SB	SB	SB
Directions Served	L	T	R
Maximum Queue (ft)	120	101	61
Average Queue (ft)	67	31	20
95th Queue (ft)	111	78	48
Link Distance (ft)		355	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	100		100
Storage Blk Time (%)	3	0	
Queuing Penalty (veh)	3	0	

Intersection: 9: Revere Street, Interval #1

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	L	L
Maximum Queue (ft)	55	25	10	11
Average Queue (ft)	30	15	1	2
95th Queue (ft)	56	35	11	12
Link Distance (ft)	220	378		
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)		80	100	
Storage Blk Time (%)				
Queuing Penalty (veh)				

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Intersection: 9: Revere Street, Interval #2

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	L	L
Maximum Queue (ft)	53	25	10	5
Average Queue (ft)	30	10	1	1
95th Queue (ft)	54	30	11	8
Link Distance (ft)	220	378		
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)		80	100	
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 9: Revere Street, Interval #3

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	L	L
Maximum Queue (ft)	54	30	15	17
Average Queue (ft)	27	12	2	2
95th Queue (ft)	46	33	14	13
Link Distance (ft)	220	378		
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)		80	100	
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 9: Revere Street, All Intervals

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	L	L
Maximum Queue (ft)	68	30	20	22
Average Queue (ft)	28	12	2	2
95th Queue (ft)	51	33	13	12
Link Distance (ft)	220	378		
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)		80	100	
Storage Blk Time (%)				
Queuing Penalty (veh)				

Queuing and Blocking Report  
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Intersection: 12: E. 104th Street & Quari Ct., Interval #1

Movement	EB	EB	WB	WB	NB	SB
Directions Served	L	R	L	R	R	R
Maximum Queue (ft)	88	4	47	8	74	67
Average Queue (ft)	34	1	23	1	42	35
95th Queue (ft)	90	7	58	9	77	67
Link Distance (ft)				152	215	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	375	785	290	235		
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 12: E. 104th Street & Quari Ct., Interval #2

Movement	EB	EB	WB	WB	NB	SB
Directions Served	L	R	L	R	R	R
Maximum Queue (ft)	77	11	52	9	79	54
Average Queue (ft)	43	2	24	1	37	31
95th Queue (ft)	85	13	58	10	70	57
Link Distance (ft)				152	215	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	375	785	290	235		
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 12: E. 104th Street & Quari Ct., Interval #3

Movement	EB	EB	WB	WB	NB	SB
Directions Served	L	R	L	R	R	R
Maximum Queue (ft)	113	24	68	16	102	77
Average Queue (ft)	42	2	22	1	41	37
95th Queue (ft)	98	14	56	9	91	71
Link Distance (ft)				152	215	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	375	785	290	235		
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 12: E. 104th Street & Quari Ct., All Intervals

Movement	EB	EB	WB	WB	NB	SB
Directions Served	L	R	L	R	R	R
Maximum Queue (ft)	120	27	73	21	111	84
Average Queue (ft)	41	1	23	1	40	35
95th Queue (ft)	94	12	57	9	84	67
Link Distance (ft)				152	215	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	375	785	290	235		
Storage Blk Time (%)						
Queuing Penalty (veh)						

Network Summary

Network wide Queuing Penalty, Interval #1: 324

Network wide Queuing Penalty, Interval #2: 353

Network wide Queuing Penalty, Interval #3: 653

Network wide Queuing Penalty, All Intervals: 496

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## Intersection: 3: CO-2 &amp; E. 104th Street, Interval #1

Movement	EB	EB	EB	EB	WB	WB	WB	WB	WB	NE	NE	NE
Directions Served	L	L	T	T	L	L	T	T	R	L	T	T
Maximum Queue (ft)	197	222	334	348	364	402	408	357	195	162	133	126
Average Queue (ft)	109	154	239	246	253	279	257	259	37	87	58	32
95th Queue (ft)	235	255	354	362	410	436	414	371	206	152	128	111
Link Distance (ft)			1091	1091			803	803			1395	1395
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	435	435			350	350			225	700		
Storage Blk Time (%)						3	5	1	10			
Queuing Penalty (veh)						13	23	8	12			

## Intersection: 3: CO-2 &amp; E. 104th Street, Interval #1

Movement	NE	SW	SW	SW	SW
Directions Served	R	L	T	T	R
Maximum Queue (ft)	64	57	291	255	61
Average Queue (ft)	17	28	186	146	12
95th Queue (ft)	67	71	295	259	56
Link Distance (ft)		1163	1163		
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	500	800		460	
Storage Blk Time (%)					
Queuing Penalty (veh)					

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Intersection: 3: CO-2 & E. 104th Street, Interval #2

Movement	EB	EB	EB	EB	WB	WB	WB	WB	WB	NE	NE	NE
Directions Served	L	L	T	T	L	L	T	T	R	L	T	T
Maximum Queue (ft)	170	220	339	320	356	392	383	366	194	154	93	59
Average Queue (ft)	65	123	246	236	278	297	238	247	28	68	38	11
95th Queue (ft)	171	214	340	325	428	456	437	403	177	152	91	54
Link Distance (ft)			1091	1091			803	803			1395	1395
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	435	435			350	350			225	700		
Storage Blk Time (%)			0			4	6	0	6			
Queuing Penalty (veh)			1		16	25	2	5				

Intersection: 3: CO-2 & E. 104th Street, Interval #2

Movement	NE	SW	SW	SW	SW
Directions Served	R	L	T	T	R
Maximum Queue (ft)	9	49	220	195	30
Average Queue (ft)	2	16	147	116	6
95th Queue (ft)	15	52	245	225	32
Link Distance (ft)		1163	1163		
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	500	800		460	
Storage Blk Time (%)					
Queuing Penalty (veh)					

## Queuing and Blocking Report

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## Intersection: 3: CO-2 &amp; E. 104th Street, Interval #3

Movement	EB	EB	EB	EB	WB	WB	WB	WB	WB	NE	NE	NE
Directions Served	L	L	T	T	L	L	T	T	R	L	T	T
Maximum Queue (ft)	198	295	419	378	400	447	694	648	260	209	128	82
Average Queue (ft)	98	140	261	247	322	355	423	358	34	105	49	17
95th Queue (ft)	206	257	379	358	470	518	863	690	199	202	110	61
Link Distance (ft)			1091	1091			803	803			1395	1395
Upstream Blk Time (%)							6	0				
Queuing Penalty (veh)							46	0				
Storage Bay Dist (ft)	435	435			350	350			225	700		
Storage Blk Time (%)	0	0			17	30		3	12			
Queuing Penalty (veh)	0	1			83	143		21	14			

## Intersection: 3: CO-2 &amp; E. 104th Street, Interval #3

Movement	NE	SW	SW	SW	SW
Directions Served	R	L	T	T	R
Maximum Queue (ft)	91	92	325	293	68
Average Queue (ft)	9	32	186	158	14
95th Queue (ft)	57	80	304	286	52
Link Distance (ft)		1163	1163		
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	500	800		460	
Storage Blk Time (%)					
Queuing Penalty (veh)					

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Intersection: 3: CO-2 & E. 104th Street, All Intervals

Movement	EB	EB	EB	EB	WB	WB	WB	WB	WB	NE	NE	NE
Directions Served	L	L	T	T	L	L	T	T	R	L	T	T
Maximum Queue (ft)	227	330	435	399	400	449	720	669	325	221	150	126
Average Queue (ft)	93	139	252	244	294	323	338	307	33	92	49	19
95th Queue (ft)	208	248	365	352	453	493	708	578	196	183	111	75
Link Distance (ft)			1091	1091			803	803			1395	1395
Upstream Blk Time (%)							3	0				
Queuing Penalty (veh)							23	0				
Storage Bay Dist (ft)	435	435			350	350			225	700		
Storage Blk Time (%)		0	0		10	18	2	10				
Queuing Penalty (veh)		0	1		49	84	13	11				

Intersection: 3: CO-2 & E. 104th Street, All Intervals

Movement	NE	SW	SW	SW	SW
Directions Served	R	L	T	T	R
Maximum Queue (ft)	109	96	348	315	86
Average Queue (ft)	9	27	176	145	12
95th Queue (ft)	53	73	291	268	49
Link Distance (ft)		1163	1163		
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	500	800		460	
Storage Blk Time (%)					
Queuing Penalty (veh)					

Queuing and Blocking Report  
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Intersection: 6: Revere Street & E. 104th Street, Interval #1

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	NB
Directions Served	L	L	T	T	L	T	T	R	L	L	T	R
Maximum Queue (ft)	18	40	165	192	103	368	331	33	82	107	90	46
Average Queue (ft)	5	12	96	120	54	285	239	11	37	68	35	16
95th Queue (ft)	18	38	178	198	102	397	356	35	88	110	90	46
Link Distance (ft)			588	588		1214	1214				584	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	215	215			275			265	110	110		110
Storage Blk Time (%)			0	0		9	3		0	3		0
Queuing Penalty (veh)			0	0		6	1		0	2		0

Intersection: 6: Revere Street & E. 104th Street, Interval #1

Movement	SB	SB	SB
Directions Served	L	T	R
Maximum Queue (ft)	124	91	78
Average Queue (ft)	74	24	44
95th Queue (ft)	133	72	86
Link Distance (ft)		343	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	100		100
Storage Blk Time (%)	9	0	2
Queuing Penalty (veh)	10	0	2

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Intersection: 6: Revere Street & E. 104th Street, Interval #2

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	NB
Directions Served	L	L	T	T	L	T	T	R	L	L	T	R
Maximum Queue (ft)	14	31	149	166	125	328	298	35	80	101	59	38
Average Queue (ft)	3	14	95	110	64	236	205	13	36	60	25	15
95th Queue (ft)	16	32	166	181	131	334	310	37	81	110	58	41
Link Distance (ft)			588	588		1214	1214				584	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	215	215			275			265	110	110		110
Storage Blk Time (%)			0			3	1		0	0	3	
Queuing Penalty (veh)			0			2	0		0	0	2	

Intersection: 6: Revere Street & E. 104th Street, Interval #2

Movement	SB	SB	SB
Directions Served	L	T	R
Maximum Queue (ft)	120	43	60
Average Queue (ft)	65	15	29
95th Queue (ft)	118	48	60
Link Distance (ft)		343	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	100		100
Storage Blk Time (%)	5		
Queuing Penalty (veh)	4		

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## Intersection: 6: Revere Street &amp; E. 104th Street, Interval #3

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	L	T	T	R	L	T	T	R	L	L	T
Maximum Queue (ft)	19	44	168	179	9	118	388	306	69	101	133	64
Average Queue (ft)	4	11	101	117	1	55	267	218	16	43	69	27
95th Queue (ft)	17	33	163	176	9	106	381	319	58	103	129	63
Link Distance (ft)			588	588			1214	1214				584
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	215	215			250	275			265	110	110	
Storage Blk Time (%)			0				7	2		1	3	0
Queuing Penalty (veh)			0				4	1		1	2	0

## Intersection: 6: Revere Street &amp; E. 104th Street, Interval #3

Movement	NB	SB	SB	SB
Directions Served	R	L	T	R
Maximum Queue (ft)	60	121	86	82
Average Queue (ft)	24	62	30	31
95th Queue (ft)	53	113	78	72
Link Distance (ft)		343		
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	110	100		100
Storage Blk Time (%)		3	1	1
Queuing Penalty (veh)		3	1	1

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Intersection: 6: Revere Street & E. 104th Street, All Intervals

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	L	T	T	R	L	T	T	R	L	L	T
Maximum Queue (ft)	25	46	185	206	9	143	388	355	73	118	140	93
Average Queue (ft)	4	12	98	116	0	57	264	220	14	40	67	29
95th Queue (ft)	17	35	168	184	6	112	377	328	49	95	121	70
Link Distance (ft)			588	588			1214	1214				584
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	215	215			250	275			265	110	110	
Storage Blk Time (%)			0	0			7	2		1	3	0
Queuing Penalty (veh)			0	0			4	1		0	2	0

Intersection: 6: Revere Street & E. 104th Street, All Intervals

Movement	NB	SB	SB	SB
Directions Served	R	L	T	R
Maximum Queue (ft)	66	137	103	94
Average Queue (ft)	20	66	25	34
95th Queue (ft)	49	120	71	74
Link Distance (ft)			343	
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	110	100		100
Storage Blk Time (%)		5	0	1
Queuing Penalty (veh)		5	0	1

Intersection: 9: Revere Street, Interval #1

Movement	EB	WB	NB	SB	SB
Directions Served	LTR	LTR	L	L	R
Maximum Queue (ft)	37	26	20	6	4
Average Queue (ft)	24	16	3	1	1
95th Queue (ft)	42	36	17	8	7
Link Distance (ft)	220	391			
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)		80	100	100	
Storage Blk Time (%)					
Queuing Penalty (veh)					

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Intersection: 9: Revere Street, Interval #2

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	L	L
Maximum Queue (ft)	41	26	7	11
Average Queue (ft)	22	17	1	2
95th Queue (ft)	40	36	9	12
Link Distance (ft)	220	391		
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)		80	100	
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 9: Revere Street, Interval #3

Movement	EB	WB	NB
Directions Served	LTR	LTR	L
Maximum Queue (ft)	47	38	20
Average Queue (ft)	21	18	3
95th Queue (ft)	42	40	16
Link Distance (ft)	220	391	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)		80	
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 9: Revere Street, All Intervals

Movement	EB	WB	NB	SB	SB
Directions Served	LTR	LTR	L	L	R
Maximum Queue (ft)	51	39	20	11	4
Average Queue (ft)	22	17	3	1	0
95th Queue (ft)	42	38	15	7	3
Link Distance (ft)	220	391			
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)		80	100	100	
Storage Blk Time (%)					
Queuing Penalty (veh)					

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Intersection: 12: E. 104th Street & Quari Ct., Interval #1

Movement	EB	EB	WB	WB	WB	NB	SB
Directions Served	L	R	L	T	R	R	R
Maximum Queue (ft)	103	4	45	4	4	68	132
Average Queue (ft)	55	1	15	1	1	35	69
95th Queue (ft)	115	7	47	6	7	70	137
Link Distance (ft)				588		152	214
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)	375	785	290		235		
Storage Blk Time (%)							
Queuing Penalty (veh)							

Intersection: 12: E. 104th Street & Quari Ct., Interval #2

Movement	EB	WB	WB	NB	SB
Directions Served	L	L	R	R	R
Maximum Queue (ft)	91	45	4	73	111
Average Queue (ft)	51	11	1	36	57
95th Queue (ft)	104	41	6	76	117
Link Distance (ft)				152	214
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	375	290	235		
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 12: E. 104th Street & Quari Ct., Interval #3

Movement	EB	EB	WB	WB	WB	WB	NB	SB
Directions Served	L	R	L	T	T	R	R	R
Maximum Queue (ft)	134	4	115	182	142	9	74	146
Average Queue (ft)	51	0	24	58	40	2	31	79
95th Queue (ft)	110	4	101	294	245	13	64	158
Link Distance (ft)				588	588		152	214
Upstream Blk Time (%)				0			6	
Queuing Penalty (veh)				1			0	
Storage Bay Dist (ft)	375	785	290		235			
Storage Blk Time (%)				4	0			
Queuing Penalty (veh)				1	0			

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Intersection: 12: E. 104th Street & Quari Ct., All Intervals

Movement	EB	EB	WB	WB	WB	WB	NB	SB
Directions Served	L	R	L	T	T	R	R	R
Maximum Queue (ft)	149	9	122	186	142	18	85	158
Average Queue (ft)	52	0	19	30	21	1	33	71
95th Queue (ft)	110	5	79	207	172	10	69	145
Link Distance (ft)				588	588		152	214
Upstream Blk Time (%)				0			3	
Queuing Penalty (veh)				0			0	
Storage Bay Dist (ft)	375	785	290			235		
Storage Blk Time (%)				2	0			
Queuing Penalty (veh)				1	0			

Network Summary

Network wide Queuing Penalty, Interval #1: 77

Network wide Queuing Penalty, Interval #2: 57

Network wide Queuing Penalty, Interval #3: 322

Network wide Queuing Penalty, All Intervals: 195

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Intersection: 3: CO-2 & E. 104th Street, Interval #1

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NE	NE
Directions Served	L	L	T	T	R	L	L	T	T	R	L	T
Maximum Queue (ft)	155	467	754	682	165	169	197	344	360	195	544	490
Average Queue (ft)	93	254	577	531	24	105	128	236	256	65	354	208
95th Queue (ft)	171	566	833	759	250	190	206	373	400	279	569	441
Link Distance (ft)		1091	1091					803	803			1395
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	435	435				725	350	350			225	700
Storage Blk Time (%)			30	2					1	7		2
Queuing Penalty (veh)			58	3					3	8		6

Intersection: 3: CO-2 & E. 104th Street, Interval #1

Movement	NE	NE	SW	SW	SW	SW
Directions Served	T	R	L	T	T	R
Maximum Queue (ft)	426	310	144	135	88	4
Average Queue (ft)	153	166	79	62	22	1
95th Queue (ft)	265	327	167	124	77	5
Link Distance (ft)	1395		1163	1163		
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	500	800			460	
Storage Blk Time (%)						
Queuing Penalty (veh)						

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Intersection: 3: CO-2 & E. 104th Street, Interval #2

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NE	NE
Directions Served	L	L	T	T	R	L	L	T	T	R	L	T
Maximum Queue (ft)	111	535	909	862	330	217	229	281	294	127	420	402
Average Queue (ft)	48	388	725	680	94	146	160	180	198	18	325	289
95th Queue (ft)	131	724	1012	946	527	238	247	292	301	140	722	745
Link Distance (ft)		1091	1091					803	803			1395
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	435	435				725	350	350		225	700	
Storage Blk Time (%)			52	8					0	5	12	6
Queuing Penalty (veh)			82	11					0	3	35	13

Intersection: 3: CO-2 & E. 104th Street, Interval #2

Movement	NE	NE	SW	SW	SW	SW
Directions Served	T	R	L	T	T	R
Maximum Queue (ft)	380	276	68	106	86	0
Average Queue (ft)	263	101	32	49	27	0
95th Queue (ft)	686	217	76	116	107	1
Link Distance (ft)	1395		1163	1163		
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)		500	800		460	
Storage Blk Time (%)		3				
Queuing Penalty (veh)		12				

## Queuing and Blocking Report

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## Intersection: 3: CO-2 &amp; E. 104th Street, Interval #3

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NE	NE
Directions Served	L	L	T	T	R	L	L	T	T	R	L	T
Maximum Queue (ft)	132	535	1144	1141	825	286	399	421	460	258	800	1269
Average Queue (ft)	47	408	1038	1008	532	180	225	236	251	22	621	686
95th Queue (ft)	122	751	1332	1321	1179	359	414	436	442	154	943	1429
Link Distance (ft)			1091	1091				803	803			1395
Upstream Blk Time (%)			40	26								6
Queuing Penalty (veh)			0	0								0
Storage Bay Dist (ft)	435	435			725	350	350			225	700	
Storage Blk Time (%)		0	67	54		2	6	3	10		36	6
Queuing Penalty (veh)		0	131	76		7	28	9	11		128	22

## Intersection: 3: CO-2 &amp; E. 104th Street, Interval #3

Movement	NE	NE	SW	SW	SW	SW
Directions Served	T	R	L	T	T	R
Maximum Queue (ft)	1202	480	207	141	109	8
Average Queue (ft)	603	214	107	74	34	1
95th Queue (ft)	1345	463	235	142	104	8
Link Distance (ft)	1395		1163	1163		
Upstream Blk Time (%)	5					
Queuing Penalty (veh)	0					
Storage Bay Dist (ft)	500	800		460		
Storage Blk Time (%)	6					
Queuing Penalty (veh)	31					

## Queuing and Blocking Report

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## Intersection: 3: CO-2 &amp; E. 104th Street, All Intervals

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NE	NE
Directions Served	L	L	T	T	R	L	L	T	T	R	L	T
Maximum Queue (ft)	168	535	1144	1141	825	290	399	442	487	325	800	1269
Average Queue (ft)	58	366	851	814	304	154	186	223	239	31	485	475
95th Queue (ft)	143	716	1287	1258	958	305	349	395	406	189	881	1168
Link Distance (ft)			1091	1091				803	803			1395
Upstream Blk Time (%)			20	13								3
Queuing Penalty (veh)			0	0								0
Storage Bay Dist (ft)	435	435			725	350	350			225	700	
Storage Blk Time (%)		0	54	30		1	3	2	8		22	5
Queuing Penalty (veh)		0	100	41		4	14	5	8		74	14

## Intersection: 3: CO-2 &amp; E. 104th Street, All Intervals

Movement	NE	NE	SW	SW	SW	SW
Directions Served	T	R	L	T	T	R
Maximum Queue (ft)	1202	500	207	162	142	11
Average Queue (ft)	412	175	82	65	29	1
95th Queue (ft)	1077	393	197	134	99	6
Link Distance (ft)	1395		1163	1163		
Upstream Blk Time (%)	2					
Queuing Penalty (veh)	0					
Storage Bay Dist (ft)	500	800		460		
Storage Blk Time (%)	4					
Queuing Penalty (veh)	18					

## Queuing and Blocking Report

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## Intersection: 6: Revere Street &amp; E. 104th Street, Interval #1

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	L	T	T	R	L	T	T	R	L	L	T
Maximum Queue (ft)	51	48	332	349	70	129	223	198	42	116	143	106
Average Queue (ft)	16	23	273	285	10	80	169	130	15	42	96	44
95th Queue (ft)	49	54	339	360	106	148	246	209	41	116	159	118
Link Distance (ft)			588	588			1204	1204				591
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	215	215			250	275			265	110	110	
Storage Blk Time (%)			19	15						0	13	0
Queuing Penalty (veh)			10	8						0	11	0

## Intersection: 6: Revere Street &amp; E. 104th Street, Interval #1

Movement	NB	SB	SB	SB
Directions Served	R	L	T	R
Maximum Queue (ft)	54	145	91	50
Average Queue (ft)	24	90	37	20
95th Queue (ft)	55	151	93	48
Link Distance (ft)			355	
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	110	100		100
Storage Blk Time (%)		14	0	
Queuing Penalty (veh)		11	0	

## Queuing and Blocking Report

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## Intersection: 6: Revere Street &amp; E. 104th Street, Interval #2

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	L	T	T	R	L	T	T	R	L	L	T
Maximum Queue (ft)	34	99	352	355	9	132	251	212	33	106	135	104
Average Queue (ft)	15	33	270	281	1	87	163	120	20	37	78	42
95th Queue (ft)	39	117	363	373	13	139	245	210	40	94	146	103
Link Distance (ft)			588	588			1204	1204				591
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	215	215			250	275			265	110	110	
Storage Blk Time (%)			20	15			0	0		0	9	0
Queuing Penalty (veh)			11	8			0	0		0	7	0

## Intersection: 6: Revere Street &amp; E. 104th Street, Interval #2

Movement	NB	SB	SB	SB
Directions Served	R	L	T	R
Maximum Queue (ft)	48	118	95	32
Average Queue (ft)	24	70	37	16
95th Queue (ft)	54	127	93	39
Link Distance (ft)			355	
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	110	100		100
Storage Blk Time (%)		5	2	
Queuing Penalty (veh)		4	3	

## Queuing and Blocking Report

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## Intersection: 6: Revere Street &amp; E. 104th Street, Interval #3

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	L	T	T	R	L	T	T	R	L	L	T
Maximum Queue (ft)	39	92	333	352	11	144	269	239	46	123	145	100
Average Queue (ft)	14	29	254	271	1	74	168	130	19	41	78	39
95th Queue (ft)	36	81	332	347	11	133	260	227	45	100	135	87
Link Distance (ft)			588	588			1204	1204				591
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	215	215			250	275			265	110	110	
Storage Blk Time (%)			16	12			0	0		0	7	0
Queuing Penalty (veh)			9	6			0	0		0	5	0

## Intersection: 6: Revere Street &amp; E. 104th Street, Interval #3

Movement	NB	SB	SB	SB
Directions Served	R	L	T	R
Maximum Queue (ft)	59	155	146	50
Average Queue (ft)	24	82	49	18
95th Queue (ft)	57	137	116	44
Link Distance (ft)			355	
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	110	100		100
Storage Blk Time (%)		10	2	
Queuing Penalty (veh)		8	3	

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## Intersection: 6: Revere Street & E. 104th Street, All Intervals

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	L	T	T	R	L	T	T	R	L	L	T
Maximum Queue (ft)	51	146	364	380	81	152	279	248	48	140	167	148
Average Queue (ft)	15	28	262	277	3	79	167	128	19	40	82	41
95th Queue (ft)	40	86	343	357	52	139	253	219	43	103	145	99
Link Distance (ft)			588	588			1204	1204				591
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	215	215			250	275			265	110	110	
Storage Blk Time (%)			18	14			0	0		0	9	0
Queuing Penalty (veh)			10	7			0	0		0	7	0

## Intersection: 6: Revere Street & E. 104th Street, All Intervals

Movement	NB	SB	SB	SB
Directions Served	R	L	T	R
Maximum Queue (ft)	67	164	153	59
Average Queue (ft)	24	81	43	18
95th Queue (ft)	56	139	106	44
Link Distance (ft)			355	
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	110	100		100
Storage Blk Time (%)		10	2	
Queuing Penalty (veh)		8	2	

## Intersection: 9: Revere Street, Interval #1

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	L	L
Maximum Queue (ft)	48	25	25	17
Average Queue (ft)	30	12	5	4
95th Queue (ft)	50	32	21	19
Link Distance (ft)	220	378		
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)		80	100	
Storage Blk Time (%)				
Queuing Penalty (veh)				

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Intersection: 9: Revere Street, Interval #2

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	L	L
Maximum Queue (ft)	45	30	10	6
Average Queue (ft)	26	12	1	1
95th Queue (ft)	47	34	11	8
Link Distance (ft)	220	378		
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)		80	100	
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 9: Revere Street, Interval #3

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	L	L
Maximum Queue (ft)	58	34	30	22
Average Queue (ft)	31	11	4	2
95th Queue (ft)	54	33	21	13
Link Distance (ft)	220	378		
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)		80	100	
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 9: Revere Street, All Intervals

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	L	L
Maximum Queue (ft)	59	34	30	28
Average Queue (ft)	29	11	4	2
95th Queue (ft)	52	33	19	14
Link Distance (ft)	220	378		
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)		80	100	
Storage Blk Time (%)				
Queuing Penalty (veh)				

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Intersection: 12: E. 104th Street & Quari Ct., Interval #1

Movement	EB	WB	WB	NB	SB
Directions Served	L	L	R	R	R
Maximum Queue (ft)	67	68	5	70	53
Average Queue (ft)	35	26	1	41	28
95th Queue (ft)	72	85	7	76	52
Link Distance (ft)			152	215	
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	375	290	235		
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 12: E. 104th Street & Quari Ct., Interval #2

Movement	EB	WB	NB	SB
Directions Served	L	L	R	R
Maximum Queue (ft)	73	46	96	71
Average Queue (ft)	35	25	55	34
95th Queue (ft)	78	49	113	68
Link Distance (ft)		152	215	
Upstream Blk Time (%)		0		
Queuing Penalty (veh)		0		
Storage Bay Dist (ft)	375	290		
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 12: E. 104th Street & Quari Ct., Interval #3

Movement	EB	EB	WB	WB	NB	SB
Directions Served	L	R	L	R	R	R
Maximum Queue (ft)	73	8	54	9	96	64
Average Queue (ft)	35	1	22	1	44	36
95th Queue (ft)	70	9	52	6	82	62
Link Distance (ft)			152	215		
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	375	785	290	235		
Storage Blk Time (%)						
Queuing Penalty (veh)						

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Intersection: 12: E. 104th Street & Quari Ct., All Intervals

Movement	EB	EB	WB	WB	NB	SB
Directions Served	L	R	L	R	R	R
Maximum Queue (ft)	98	8	81	9	112	75
Average Queue (ft)	35	0	24	0	46	33
95th Queue (ft)	72	6	62	6	90	62
Link Distance (ft)				152	215	
Upstream Blk Time (%)				0		
Queuing Penalty (veh)				0		
Storage Bay Dist (ft)	375	785	290	235		
Storage Blk Time (%)						
Queuing Penalty (veh)						

Network Summary

Network wide Queuing Penalty, Interval #1: 119

Network wide Queuing Penalty, Interval #2: 189

Network wide Queuing Penalty, Interval #3: 475

Network wide Queuing Penalty, All Intervals: 315

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Intersection: 3: CO-2 & E. 104th Street, Interval #1

Movement	EB	EB	EB	EB	WB	WB	WB	WB	WB	NE	NE	NE
Directions Served	L	L	T	T	L	L	T	T	R	L	T	T
Maximum Queue (ft)	163	197	357	330	394	438	590	480	260	206	94	48
Average Queue (ft)	88	129	252	237	306	333	347	269	55	109	42	16
95th Queue (ft)	189	201	362	339	459	496	671	424	256	240	101	61
Link Distance (ft)			1091	1091			803	803			1395	1395
Upstream Blk Time (%)									1			
Queuing Penalty (veh)									5			
Storage Bay Dist (ft)	435	435			350	350			225	700		
Storage Blk Time (%)			0			6	23	0	10			
Queuing Penalty (veh)			0		31	111	3	13				

Intersection: 3: CO-2 & E. 104th Street, Interval #1

Movement	NE	SW	SW	SW	SW
Directions Served	R	L	T	T	R
Maximum Queue (ft)	32	85	266	225	58
Average Queue (ft)	9	32	175	144	17
95th Queue (ft)	40	95	272	244	62
Link Distance (ft)		1163	1163		
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	500	800		460	
Storage Blk Time (%)					
Queuing Penalty (veh)					

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Intersection: 3: CO-2 & E. 104th Street, Interval #2

Movement	EB	EB	EB	EB	WB	WB	WB	WB	WB	NE	NE	NE
Directions Served	L	L	T	T	L	L	T	T	R	L	T	T
Maximum Queue (ft)	148	193	381	353	389	426	649	620	65	171	130	96
Average Queue (ft)	64	111	277	254	367	410	530	370	18	74	53	26
95th Queue (ft)	161	196	439	402	472	536	957	718	141	185	127	95
Link Distance (ft)			1091	1091			803	803			1395	1395
Upstream Blk Time (%)							9	0				
Queuing Penalty (veh)							62	0				
Storage Bay Dist (ft)	435	435			350	350			225	700		
Storage Blk Time (%)			2		24	43	0	6				
Queuing Penalty (veh)			4		101	178	2	5				

Intersection: 3: CO-2 & E. 104th Street, Interval #2

Movement	NE	SW	SW	SW	SW
Directions Served	R	L	T	T	R
Maximum Queue (ft)	30	49	223	196	47
Average Queue (ft)	4	13	160	129	11
95th Queue (ft)	28	45	245	218	43
Link Distance (ft)		1163	1163		
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	500	800		460	
Storage Blk Time (%)					
Queuing Penalty (veh)					

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Intersection: 3: CO-2 & E. 104th Street, Interval #3

Movement	EB	EB	EB	EB	WB	WB	WB	WB	WB	NE	NE	NE
Directions Served	L	L	T	T	L	L	T	T	R	L	T	T
Maximum Queue (ft)	194	234	396	374	400	450	798	796	325	171	118	93
Average Queue (ft)	113	145	264	246	368	425	634	517	108	91	51	21
95th Queue (ft)	205	231	382	364	456	508	1017	901	360	162	107	75
Link Distance (ft)			1091	1091			803	803			1395	1395
Upstream Blk Time (%)							17	1				
Queuing Penalty (veh)							129	4				
Storage Bay Dist (ft)	435	435			350	350			225	700		
Storage Blk Time (%)			0			19	51	14	25			
Queuing Penalty (veh)			1		92	248	94	32				

Intersection: 3: CO-2 & E. 104th Street, Interval #3

Movement	NE	SW	SW	SW	SW
Directions Served	R	L	T	T	R
Maximum Queue (ft)	92	110	300	279	60
Average Queue (ft)	14	32	189	161	11
95th Queue (ft)	63	89	281	256	44
Link Distance (ft)		1163	1163		
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	500	800		460	
Storage Blk Time (%)					
Queuing Penalty (veh)					

Queuing and Blocking Report  
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Intersection: 3: CO-2 & E. 104th Street, All Intervals

Movement	EB	EB	EB	EB	WB	WB	WB	WB	WB	NE	NE	NE
Directions Served	L	L	T	T	L	L	T	T	R	L	T	T
Maximum Queue (ft)	201	242	454	441	400	450	799	796	325	227	143	111
Average Queue (ft)	95	133	264	246	353	400	539	422	74	91	50	21
95th Queue (ft)	196	219	393	369	472	532	966	798	297	192	111	78
Link Distance (ft)			1091	1091			803	803			1395	1395
Upstream Blk Time (%)							11	0				
Queuing Penalty (veh)							81	2				
Storage Bay Dist (ft)	435	435			350	350			225	700		
Storage Blk Time (%)			1			17	42		7	16		
Queuing Penalty (veh)			1		79	196		48	21			

Intersection: 3: CO-2 & E. 104th Street, All Intervals

Movement	NE	SW	SW	SW	SW
Directions Served	R	L	T	T	R
Maximum Queue (ft)	93	116	317	284	83
Average Queue (ft)	11	28	179	149	12
95th Queue (ft)	51	82	272	247	49
Link Distance (ft)		1163	1163		
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	500	800		460	
Storage Blk Time (%)					
Queuing Penalty (veh)					

Queuing and Blocking Report  
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Intersection: 6: Revere Street & E. 104th Street, Interval #1

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	NB
Directions Served	L	L	T	T	L	T	T	R	L	L	T	R
Maximum Queue (ft)	15	33	161	168	152	350	301	27	83	102	47	42
Average Queue (ft)	4	10	87	115	81	270	222	10	42	56	24	21
95th Queue (ft)	18	35	160	173	163	366	313	32	86	112	53	49
Link Distance (ft)			588	588		1214	1214				584	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	215	215			275			265	110	110		110
Storage Blk Time (%)								6	2	0	1	
Queuing Penalty (veh)								4	1	0	1	

Intersection: 6: Revere Street & E. 104th Street, Interval #1

Movement	SB	SB	SB
Directions Served	L	T	R
Maximum Queue (ft)	149	110	63
Average Queue (ft)	80	35	32
95th Queue (ft)	138	103	64
Link Distance (ft)		343	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	100		100
Storage Blk Time (%)	7	0	0
Queuing Penalty (veh)	7	0	0

Queuing and Blocking Report  
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Intersection: 6: Revere Street & E. 104th Street, Interval #2

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	NB
Directions Served	L	L	T	T	L	T	T	R	L	L	T	R
Maximum Queue (ft)	14	35	163	165	113	352	303	39	69	108	55	46
Average Queue (ft)	2	10	103	109	54	249	187	10	34	64	28	22
95th Queue (ft)	13	34	176	182	114	363	325	32	75	110	62	48
Link Distance (ft)			588	588		1214	1214				584	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	215	215			275			265	110	110		110
Storage Blk Time (%)								6	2	0	3	
Queuing Penalty (veh)								3	1	0	2	

Intersection: 6: Revere Street & E. 104th Street, Interval #2

Movement	SB	SB	SB
Directions Served	L	T	R
Maximum Queue (ft)	132	88	62
Average Queue (ft)	87	30	30
95th Queue (ft)	139	91	65
Link Distance (ft)		343	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	100		100
Storage Blk Time (%)	11	0	0
Queuing Penalty (veh)	11	1	0

Queuing and Blocking Report  
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Intersection: 6: Revere Street & E. 104th Street, Interval #3

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	NB
Directions Served	L	L	T	T	L	T	T	R	L	L	T	R
Maximum Queue (ft)	30	41	180	185	224	406	377	42	88	122	73	50
Average Queue (ft)	4	11	101	112	71	276	227	10	35	61	30	20
95th Queue (ft)	20	35	189	191	182	400	350	35	84	118	71	48
Link Distance (ft)			588	588		1214	1214				584	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	215	215			275			265	110	110		110
Storage Blk Time (%)			0		0	8	3		0	4		0
Queuing Penalty (veh)			0		0	5	1		0	2		0

Intersection: 6: Revere Street & E. 104th Street, Interval #3

Movement	SB	SB	SB
Directions Served	L	T	R
Maximum Queue (ft)	156	114	105
Average Queue (ft)	79	34	38
95th Queue (ft)	135	97	86
Link Distance (ft)		343	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	100		100
Storage Blk Time (%)	9	0	1
Queuing Penalty (veh)	9	1	1

Queuing and Blocking Report  
2025 Build Weekday AM Peak Hour

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Intersection: 6: Revere Street & E. 104th Street, All Intervals

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	NB
Directions Served	L	L	T	T	L	T	T	R	L	L	T	R
Maximum Queue (ft)	30	46	194	193	269	416	393	49	97	142	73	58
Average Queue (ft)	4	11	98	112	69	268	216	10	36	60	28	21
95th Queue (ft)	18	35	180	185	165	385	339	34	83	115	65	48
Link Distance (ft)			588	588		1214	1214				584	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	215	215			275			265	110	110		110
Storage Blk Time (%)			0		0	7	2		0	3		0
Queuing Penalty (veh)			0		0	4	1		0	2		0

Intersection: 6: Revere Street & E. 104th Street, All Intervals

Movement	SB	SB	SB
Directions Served	L	T	R
Maximum Queue (ft)	172	146	105
Average Queue (ft)	81	33	34
95th Queue (ft)	137	97	76
Link Distance (ft)		343	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	100		100
Storage Blk Time (%)	9	0	0
Queuing Penalty (veh)	9	1	1

Intersection: 9: Revere Street, Interval #1

Movement	EB	WB	NB
Directions Served	LTR	LTR	L
Maximum Queue (ft)	40	25	25
Average Queue (ft)	22	14	4
95th Queue (ft)	42	34	20
Link Distance (ft)	220	391	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)		80	
Storage Blk Time (%)			
Queuing Penalty (veh)			

Queuing and Blocking Report  
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Intersection: 9: Revere Street, Interval #2

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	L	L
Maximum Queue (ft)	44	26	10	11
Average Queue (ft)	25	19	1	2
95th Queue (ft)	45	37	11	12
Link Distance (ft)	220	391		
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)		80	100	
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 9: Revere Street, Interval #3

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	L	L
Maximum Queue (ft)	47	34	19	6
Average Queue (ft)	21	17	1	0
95th Queue (ft)	38	38	10	6
Link Distance (ft)	220	391		
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)		80	100	
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 9: Revere Street, All Intervals

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	L	L
Maximum Queue (ft)	49	34	26	11
Average Queue (ft)	22	16	2	1
95th Queue (ft)	41	37	13	7
Link Distance (ft)	220	391		
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)		80	100	
Storage Blk Time (%)				
Queuing Penalty (veh)				

Queuing and Blocking Report  
2025 Build Weekday AM Peak Hour

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Intersection: 12: E. 104th Street & Quari Ct., Interval #1

Movement	EB	EB	WB	WB	WB	NB	SB
Directions Served	L	R	L	T	R	R	R
Maximum Queue (ft)	114	9	37	58	4	65	136
Average Queue (ft)	53	2	14	4	1	35	73
95th Queue (ft)	119	12	41	42	7	68	136
Link Distance (ft)			588		152	214	
Upstream Blk Time (%)					0		
Queuing Penalty (veh)					0		
Storage Bay Dist (ft)	375	785	290		235		
Storage Blk Time (%)				0			
Queuing Penalty (veh)				0			

Intersection: 12: E. 104th Street & Quari Ct., Interval #2

Movement	EB	WB	WB	WB	WB	NB	SB
Directions Served	L	L	T	T	R	R	R
Maximum Queue (ft)	124	51	94	68	13	52	143
Average Queue (ft)	62	18	62	28	2	27	98
95th Queue (ft)	132	51	255	164	12	49	212
Link Distance (ft)		588	588		152	214	
Upstream Blk Time (%)					18		
Queuing Penalty (veh)					0		
Storage Bay Dist (ft)	375	290		235			
Storage Blk Time (%)			2				
Queuing Penalty (veh)			0				

Intersection: 12: E. 104th Street & Quari Ct., Interval #3

Movement	EB	WB	WB	WB	WB	NB	SB
Directions Served	L	L	T	T	R	R	R
Maximum Queue (ft)	117	182	371	333	77	66	222
Average Queue (ft)	59	27	145	96	6	29	148
95th Queue (ft)	115	150	449	351	67	54	276
Link Distance (ft)		588	588		152	214	
Upstream Blk Time (%)			1	0		38	
Queuing Penalty (veh)			11	0		0	
Storage Bay Dist (ft)	375	290		235			
Storage Blk Time (%)			10	0			
Queuing Penalty (veh)			3	0			

Intersection: 12: E. 104th Street & Quari Ct., All Intervals

Movement	EB	EB	WB	WB	WB	WB	NB	SB
Directions Served	L	R	L	T	T	R	R	R
Maximum Queue (ft)	152	9	190	371	333	82	83	222
Average Queue (ft)	58	0	22	91	56	4	30	117
95th Queue (ft)	120	5	113	349	263	48	57	242
Link Distance (ft)				588	588		152	214
Upstream Blk Time (%)				1	0			23
Queuing Penalty (veh)				6	0			0
Storage Bay Dist (ft)	375	785	290			235		
Storage Blk Time (%)				6	0			
Queuing Penalty (veh)				2	0			

Network Summary

Network wide Queuing Penalty, Interval #1: 175

Network wide Queuing Penalty, Interval #2: 369

Network wide Queuing Penalty, Interval #3: 635

Network wide Queuing Penalty, All Intervals: 453

Queuing and Blocking Report  
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Intersection: 3: CO-2 & E. 104th Street, Interval #1

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NE	NE
Directions Served	L	L	T	T	R	L	L	T	T	R	L	T
Maximum Queue (ft)	152	534	894	869	420	173	293	375	411	130	434	353
Average Queue (ft)	81	299	700	635	84	127	168	261	290	19	292	208
95th Queue (ft)	174	655	1072	950	478	201	289	409	440	143	489	336
Link Distance (ft)			1091	1091				803	803			1395
Upstream Blk Time (%)			3	1								
Queuing Penalty (veh)			0	0								
Storage Bay Dist (ft)	435	435			725	350	350			225	700	
Storage Blk Time (%)			45	9				0	2	15		
Queuing Penalty (veh)			88	12				0	5	17		

Intersection: 3: CO-2 & E. 104th Street, Interval #1

Movement	NE	NE	SW	SW	SW	SW
Directions Served	T	R	L	T	T	R
Maximum Queue (ft)	301	282	158	111	94	12
Average Queue (ft)	184	156	84	50	19	2
95th Queue (ft)	290	278	171	110	71	13
Link Distance (ft)	1395		1163	1163		
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	500	800			460	
Storage Blk Time (%)						
Queuing Penalty (veh)						

Queuing and Blocking Report  
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Intersection: 3: CO-2 & E. 104th Street, Interval #2

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NE	NE
Directions Served	L	L	T	T	R	L	L	T	T	R	L	T
Maximum Queue (ft)	90	466	933	923	495	203	278	328	351	256	429	325
Average Queue (ft)	28	298	859	828	306	151	183	183	210	37	329	173
95th Queue (ft)	97	683	1277	1265	964	221	293	343	361	205	569	337
Link Distance (ft)			1091	1091				803	803			1395
Upstream Blk Time (%)			27	22								
Queuing Penalty (veh)			0	0								
Storage Bay Dist (ft)	435	435			725	350	350			225	700	
Storage Blk Time (%)		0	56	32					1	7		
Queuing Penalty (veh)		0	89	42					1	5		

Intersection: 3: CO-2 & E. 104th Street, Interval #2

Movement	NE	NE	SW	SW	SW	SW
Directions Served	T	R	L	T	T	R
Maximum Queue (ft)	232	235	139	88	55	3
Average Queue (ft)	138	141	69	56	20	0
95th Queue (ft)	262	256	166	112	78	5
Link Distance (ft)	1395		1163	1163		
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	500	800		460		
Storage Blk Time (%)						
Queuing Penalty (veh)						

Queuing and Blocking Report  
2025 Build Weekday PM Peak Hour

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Intersection: 3: CO-2 & E. 104th Street, Interval #3

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NE	NE
Directions Served	L	L	T	T	R	L	L	T	T	R	L	T
Maximum Queue (ft)	214	535	1135	1102	825	380	429	481	484	260	701	863
Average Queue (ft)	66	411	1009	987	430	301	323	283	294	60	541	448
95th Queue (ft)	174	749	1307	1302	1108	438	463	498	485	268	830	1108
Link Distance (ft)			1091	1091				803	803			1395
Upstream Blk Time (%)			37	26								0
Queuing Penalty (veh)			0	0								0
Storage Bay Dist (ft)	435	435			725	350	350			225	700	
Storage Blk Time (%)	0	66	49			9	20	7	20		19	2
Queuing Penalty (veh)	0	130	68			40	87	19	22		66	8

Intersection: 3: CO-2 & E. 104th Street, Interval #3

Movement	NE	NE	SW	SW	SW	SW
Directions Served	T	R	L	T	T	R
Maximum Queue (ft)	850	384	148	164	134	19
Average Queue (ft)	408	175	77	68	35	2
95th Queue (ft)	1036	351	152	140	109	12
Link Distance (ft)	1395		1163	1163		
Upstream Blk Time (%)	0					
Queuing Penalty (veh)	0					
Storage Bay Dist (ft)	500	800		460		
Storage Blk Time (%)	0	0				
Queuing Penalty (veh)	1	1				

Queuing and Blocking Report  
2025 Build Weekday PM Peak Hour

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Intersection: 3: CO-2 & E. 104th Street, All Intervals

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NE	NE
Directions Served	L	L	T	T	R	L	L	T	T	R	L	T
Maximum Queue (ft)	230	535	1137	1103	825	380	429	489	498	323	717	913
Average Queue (ft)	61	357	898	864	316	223	252	254	272	45	430	324
95th Queue (ft)	162	723	1305	1285	975	397	429	453	455	228	751	854
Link Distance (ft)			1091	1091					803	803		1395
Upstream Blk Time (%)			26	19								0
Queuing Penalty (veh)			0	0								0
Storage Bay Dist (ft)	435	435			725	350	350			225	700	
Storage Blk Time (%)	0	58	35		5	10	4	15		9	1	
Queuing Penalty (veh)	0	109	48		20	44	11	17		33	4	

Intersection: 3: CO-2 & E. 104th Street, All Intervals

Movement	NE	NE	SW	SW	SW	SW
Directions Served	T	R	L	T	T	R
Maximum Queue (ft)	856	415	198	164	136	22
Average Queue (ft)	289	162	77	61	27	1
95th Queue (ft)	791	315	161	128	94	11
Link Distance (ft)	1395		1163	1163		
Upstream Blk Time (%)	0					
Queuing Penalty (veh)	0					
Storage Bay Dist (ft)	500	800		460		
Storage Blk Time (%)	0	0				
Queuing Penalty (veh)	1	1				

Queuing and Blocking Report  
2025 Build Weekday PM Peak Hour

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Intersection: 6: Revere Street & E. 104th Street, Interval #1

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	L	T	T	R	L	T	T	R	L	L	T
Maximum Queue (ft)	42	80	318	317	69	117	273	222	37	110	133	92
Average Queue (ft)	13	32	243	251	10	72	171	136	15	48	87	36
95th Queue (ft)	37	88	317	324	104	132	253	231	38	118	151	107
Link Distance (ft)			588	588			1204	1204				591
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	215	215			250	275			265	110	110	
Storage Blk Time (%)		0	14	10			1	0		0	12	3
Queuing Penalty (veh)		0	8	5			1	0		0	9	5

Intersection: 6: Revere Street & E. 104th Street, Interval #1

Movement	NB	SB	SB	SB
Directions Served	R	L	T	R
Maximum Queue (ft)	44	120	99	44
Average Queue (ft)	24	69	45	20
95th Queue (ft)	49	117	105	46
Link Distance (ft)			355	
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	110	100		100
Storage Blk Time (%)		4	0	
Queuing Penalty (veh)		3	0	

Queuing and Blocking Report  
2025 Build Weekday PM Peak Hour

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Intersection: 6: Revere Street & E. 104th Street, Interval #2

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	L	T	T	R	L	T	T	R	L	L	T
Maximum Queue (ft)	52	199	347	360	70	145	245	212	33	82	119	82
Average Queue (ft)	24	52	281	284	10	90	164	126	15	33	80	35
95th Queue (ft)	57	164	358	373	106	141	245	217	39	82	132	83
Link Distance (ft)			588	588			1204	1204				591
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	215	215			250	275			265	110	110	
Storage Blk Time (%)		0	20	14			0	0		0	9	
Queuing Penalty (veh)		0	10	7			0	0		0	6	

Intersection: 6: Revere Street & E. 104th Street, Interval #2

Movement	NB	SB	SB	SB
Directions Served	R	L	T	R
Maximum Queue (ft)	58	143	117	36
Average Queue (ft)	22	82	48	13
95th Queue (ft)	56	150	137	38
Link Distance (ft)			355	
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	110	100		100
Storage Blk Time (%)		11	0	
Queuing Penalty (veh)		8	0	

Queuing and Blocking Report  
2025 Build Weekday PM Peak Hour

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Intersection: 6: Revere Street & E. 104th Street, Interval #3

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	NB
Directions Served	L	L	T	T	L	T	T	R	L	L	T	R
Maximum Queue (ft)	49	80	342	346	133	271	242	47	139	153	142	60
Average Queue (ft)	18	34	252	257	79	181	151	23	43	89	41	24
95th Queue (ft)	47	72	335	333	129	267	247	49	118	152	115	54
Link Distance (ft)			588	588		1204	1204				591	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	215	215			275			265	110	110		110
Storage Blk Time (%)			15	10		0	0		0	12	1	
Queuing Penalty (veh)			8	5		0	0		0	9	2	

Intersection: 6: Revere Street & E. 104th Street, Interval #3

Movement	SB	SB	SB
Directions Served	L	T	R
Maximum Queue (ft)	164	118	55
Average Queue (ft)	89	42	18
95th Queue (ft)	156	102	46
Link Distance (ft)		355	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)	100		100
Storage Blk Time (%)	14	2	
Queuing Penalty (veh)	12	2	

Queuing and Blocking Report  
2025 Build Weekday PM Peak Hour

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Intersection: 6: Revere Street & E. 104th Street, All Intervals

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	L	T	T	R	L	T	T	R	L	L	T
Maximum Queue (ft)	70	226	365	378	139	166	284	261	51	147	167	157
Average Queue (ft)	18	38	257	262	5	80	174	141	19	42	86	38
95th Queue (ft)	48	106	340	344	71	134	259	237	45	111	147	107
Link Distance (ft)			588	588			1204	1204				591
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	215	215			250	275			265	110	110	
Storage Blk Time (%)		0	16	11			0	0		0	11	1
Queuing Penalty (veh)		0	8	6			0	0		0	9	2

Intersection: 6: Revere Street & E. 104th Street, All Intervals

Movement	NB	SB	SB	SB
Directions Served	R	L	T	R
Maximum Queue (ft)	69	165	145	56
Average Queue (ft)	23	83	44	17
95th Queue (ft)	54	147	113	44
Link Distance (ft)			355	
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)	110	100		100
Storage Blk Time (%)		11	1	
Queuing Penalty (veh)		9	1	

Intersection: 9: Revere Street, Interval #1

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	L	L
Maximum Queue (ft)	37	20	25	11
Average Queue (ft)	26	10	4	2
95th Queue (ft)	39	29	18	12
Link Distance (ft)	220	378		
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)		80	100	
Storage Blk Time (%)				
Queuing Penalty (veh)				

Queuing and Blocking Report  
2025 Build Weekday PM Peak Hour

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Intersection: 9: Revere Street, Interval #2

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	L	L
Maximum Queue (ft)	42	29	14	6
Average Queue (ft)	26	13	2	1
95th Queue (ft)	42	35	13	8
Link Distance (ft)	220	378		
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)		80	100	
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 9: Revere Street, Interval #3

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	L	L
Maximum Queue (ft)	60	25	25	17
Average Queue (ft)	33	11	4	1
95th Queue (ft)	57	31	19	12
Link Distance (ft)	220	378		
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)		80	100	
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 9: Revere Street, All Intervals

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	L	L
Maximum Queue (ft)	60	30	25	17
Average Queue (ft)	30	11	4	1
95th Queue (ft)	51	32	18	11
Link Distance (ft)	220	378		
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)		80	100	
Storage Blk Time (%)				
Queuing Penalty (veh)				

Queuing and Blocking Report  
2025 Build Weekday PM Peak Hour

08/16/2024

Intersection: 12: E. 104th Street & Quari Ct., Interval #1

Movement	EB	EB	WB	WB	NB	SB
Directions Served	L	R	L	R	R	R
Maximum Queue (ft)	80	9	47	13	92	77
Average Queue (ft)	47	0	20	2	46	45
95th Queue (ft)	88	0	49	12	94	82
Link Distance (ft)				152	215	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	375	785	290	235		
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 12: E. 104th Street & Quari Ct., Interval #2

Movement	EB	WB	WB	NB	SB
Directions Served	L	L	R	R	R
Maximum Queue (ft)	71	65	4	100	67
Average Queue (ft)	34	24	1	44	37
95th Queue (ft)	76	62	7	97	70
Link Distance (ft)			152	215	
Upstream Blk Time (%)			0		
Queuing Penalty (veh)			0		
Storage Bay Dist (ft)	375	290	235		
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 12: E. 104th Street & Quari Ct., Interval #3

Movement	EB	EB	WB	WB	NB	SB
Directions Served	L	R	L	R	R	R
Maximum Queue (ft)	82	4	51	18	114	126
Average Queue (ft)	39	0	22	2	50	45
95th Queue (ft)	72	4	47	11	98	93
Link Distance (ft)			152	215		
Upstream Blk Time (%)			0			
Queuing Penalty (veh)			0			
Storage Bay Dist (ft)	375	785	290	235		
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 12: E. 104th Street & Quari Ct., All Intervals

Movement	EB	EB	WB	WB	NB	SB
Directions Served	L	R	L	R	R	R
Maximum Queue (ft)	98	13	70	18	132	126
Average Queue (ft)	40	0	22	2	48	43
95th Queue (ft)	78	3	52	11	97	86
Link Distance (ft)				152	215	
Upstream Blk Time (%)				0		
Queuing Penalty (veh)				0		
Storage Bay Dist (ft)	375	785	290	235		
Storage Blk Time (%)						
Queuing Penalty (veh)						

Network Summary

Network wide Queuing Penalty, Interval #1: 153

Network wide Queuing Penalty, Interval #2: 170

Network wide Queuing Penalty, Interval #3: 483

Network wide Queuing Penalty, All Intervals: 323

Queuing and Blocking Report  
2045 No-Build Weekday AM Peak Hour

08/16/2024

Intersection: 3: CO-2 & E. 104th Street, Interval #1

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	WB	NE
Directions Served	L	L	T	T	T	L	L	T	T	T	R	L
Maximum Queue (ft)	253	290	316	288	285	400	450	800	625	393	260	289
Average Queue (ft)	163	202	265	232	202	391	439	681	370	293	74	186
95th Queue (ft)	288	332	351	314	297	420	489	981	678	416	299	334
Link Distance (ft)			1080	1080	1080			786	786	786		
Upstream Blk Time (%)								19	0			
Queuing Penalty (veh)								134	0			
Storage Bay Dist (ft)	435	435				350	350			225	700	
Storage Blk Time (%)						36	61	5		15		
Queuing Penalty (veh)						157	267	44		23		

Intersection: 3: CO-2 & E. 104th Street, Interval #1

Movement	NE	NE	NE	SW	SW	SW	SW
Directions Served	T	T	R	L	T	T	R
Maximum Queue (ft)	150	145	59	79	363	332	64
Average Queue (ft)	76	48	18	31	283	243	23
95th Queue (ft)	154	143	57	94	382	360	65
Link Distance (ft)	1380	1380			1138	1138	
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)		500	800			460	
Storage Blk Time (%)							
Queuing Penalty (veh)							

Queuing and Blocking Report  
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Intersection: 3: CO-2 & E. 104th Street, Interval #2

Movement	EB	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	WB
Directions Served	L	L	T	T	T	R	L	L	T	T	T	R
Maximum Queue (ft)	218	309	363	313	248	38	400	450	803	420	358	193
Average Queue (ft)	129	184	281	244	188	5	395	449	795	264	242	46
95th Queue (ft)	320	375	403	353	271	58	415	452	806	505	365	231
Link Distance (ft)			1080	1080	1080				786	786	786	
Upstream Blk Time (%)									46			
Queuing Penalty (veh)									297			
Storage Bay Dist (ft)	435	435				725	350	350				225
Storage Blk Time (%)	0	1	0				61	72	1			9
Queuing Penalty (veh)	0	3	1				228	271	9			10

Intersection: 3: CO-2 & E. 104th Street, Interval #2

Movement	NE	NE	NE	NE	SW	SW	SW	SW
Directions Served	L	T	T	R	L	T	T	R
Maximum Queue (ft)	278	121	92	44	62	292	272	31
Average Queue (ft)	142	75	37	10	18	208	182	8
95th Queue (ft)	301	136	103	50	54	295	271	35
Link Distance (ft)		1380	1380			1138	1138	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	700			500	800			460
Storage Blk Time (%)								
Queuing Penalty (veh)								

Queuing and Blocking Report  
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Intersection: 3: CO-2 & E. 104th Street, Interval #3

Movement	EB	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	WB
Directions Served	L	L	T	T	T	R	L	L	T	T	T	R
Maximum Queue (ft)	264	330	404	370	312	56	400	450	805	378	329	128
Average Queue (ft)	164	206	282	262	220	4	392	449	795	216	196	9
95th Queue (ft)	298	332	388	358	316	56	438	452	806	371	313	94
Link Distance (ft)		1080	1080	1080					786	786	786	
Upstream Blk Time (%)									51			
Queuing Penalty (veh)									358			
Storage Bay Dist (ft)	435	435				725	350	350				225
Storage Blk Time (%)	0	0					46	77	10			5
Queuing Penalty (veh)	0	1					201	336	94			8

Intersection: 3: CO-2 & E. 104th Street, Interval #3

Movement	NE	NE	NE	NE	SW	SW	SW	SW
Directions Served	L	T	T	R	L	T	T	R
Maximum Queue (ft)	366	196	172	93	121	515	477	94
Average Queue (ft)	245	101	74	22	34	334	295	20
95th Queue (ft)	414	184	162	77	95	490	450	67
Link Distance (ft)		1380	1380			1138	1138	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	700			500	800			460
Storage Blk Time (%)						0		
Queuing Penalty (veh)						0		

Queuing and Blocking Report  
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Intersection: 3: CO-2 & E. 104th Street, All Intervals

Movement	EB	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	WB
Directions Served	L	L	T	T	T	R	L	L	T	T	T	R
Maximum Queue (ft)	317	398	416	372	321	94	400	450	806	635	417	325
Average Queue (ft)	156	199	278	251	208	3	393	447	768	265	231	33
95th Queue (ft)	305	346	384	349	303	49	430	472	936	510	367	196
Link Distance (ft)			1080	1080	1080				786	786	786	
Upstream Blk Time (%)									42	0		
Queuing Penalty (veh)									287	0		
Storage Bay Dist (ft)	435	435				725	350	350				225
Storage Blk Time (%)	0	0	0				47	72	6			8
Queuing Penalty (veh)	0	1	1				197	303	60			12

Intersection: 3: CO-2 & E. 104th Street, All Intervals

Movement	NE	NE	NE	NE	SW	SW	SW	SW
Directions Served	L	T	T	R	L	T	T	R
Maximum Queue (ft)	367	206	187	105	121	515	477	98
Average Queue (ft)	206	88	59	18	29	291	255	18
95th Queue (ft)	383	169	148	67	87	446	408	61
Link Distance (ft)		1380	1380			1138	1138	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	700			500	800			460
Storage Blk Time (%)						0		
Queuing Penalty (veh)						0		

Queuing and Blocking Report  
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Intersection: 6: Revere Street & E. 104th Street, Interval #1

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	L	L	T	T	T	L	T	T	T	R	L	L
Maximum Queue (ft)	14	44	110	162	163	314	692	649	432	33	97	137
Average Queue (ft)	4	17	57	98	111	119	441	366	237	15	45	73
95th Queue (ft)	21	46	122	174	184	336	741	680	470	40	103	138
Link Distance (ft)			588	588	588		1215	1215	1215			
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	215	215				275			265	110	110	
Storage Blk Time (%)							31		4		10	11
Queuing Penalty (veh)							20		2		7	7

Intersection: 6: Revere Street & E. 104th Street, Interval #1

Movement	NB	NB	SB	SB	SB
Directions Served	T	R	L	T	R
Maximum Queue (ft)	108	37	163	151	148
Average Queue (ft)	43	18	92	45	56
95th Queue (ft)	121	44	162	144	137
Link Distance (ft)	578		337		
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	110	100		100	
Storage Blk Time (%)	0		12	3	1
Queuing Penalty (veh)	0		17	7	2

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Intersection: 6: Revere Street & E. 104th Street, Interval #2

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	L	L	T	T	T	L	T	T	T	R	L	L
Maximum Queue (ft)	35	50	99	123	154	261	918	858	700	160	121	142
Average Queue (ft)	12	20	48	76	101	172	754	678	443	35	70	93
95th Queue (ft)	36	52	116	137	159	428	1415	1375	951	168	155	185
Link Distance (ft)			588	588	588		1215	1215	1215			
Upstream Blk Time (%)							17	3	0			
Queuing Penalty (veh)							0	0	0			
Storage Bay Dist (ft)	215	215				275				265	110	110
Storage Blk Time (%)							58			14	22	17
Queuing Penalty (veh)							34			8	14	10

Intersection: 6: Revere Street & E. 104th Street, Interval #2

Movement	NB	NB	SB	SB	SB
Directions Served	T	R	L	T	R
Maximum Queue (ft)	150	82	131	102	104
Average Queue (ft)	53	27	80	31	52
95th Queue (ft)	183	88	139	97	111
Link Distance (ft)	578		337		
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	110	100		100	
Storage Blk Time (%)		11	1	4	
Queuing Penalty (veh)		14	2	6	

Queuing and Blocking Report  
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Intersection: 6: Revere Street & E. 104th Street, Interval #3

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	L	L	T	T	T	L	T	T	T	R	L	L
Maximum Queue (ft)	26	60	141	174	188	375	1253	1242	1222	365	155	210
Average Queue (ft)	5	19	74	111	127	254	1144	1101	947	101	126	163
95th Queue (ft)	21	50	141	181	189	497	1488	1466	1473	355	185	269
Link Distance (ft)			588	588	588		1215	1215	1215			
Upstream Blk Time (%)							67	17	4			
Queuing Penalty (veh)							0	0	0			
Storage Bay Dist (ft)	215	215				275				265	110	110
Storage Blk Time (%)						0	0	90		39	78	30
Queuing Penalty (veh)						0	0	58		23	52	20

Intersection: 6: Revere Street & E. 104th Street, Interval #3

Movement	NB	NB	SB	SB	SB
Directions Served	T	R	L	T	R
Maximum Queue (ft)	522	143	152	199	145
Average Queue (ft)	296	25	91	53	67
95th Queue (ft)	701	94	151	158	127
Link Distance (ft)	578		337		
Upstream Blk Time (%)	23		0		
Queuing Penalty (veh)	0		0		
Storage Bay Dist (ft)	110	100		100	
Storage Blk Time (%)	1		14	3	3
Queuing Penalty (veh)	2		19	6	5

Queuing and Blocking Report  
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Intersection: 6: Revere Street & E. 104th Street, All Intervals

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	L	L	T	T	T	L	T	T	T	R	L	L
Maximum Queue (ft)	43	65	141	176	188	375	1253	1246	1222	365	155	210
Average Queue (ft)	6	18	64	99	117	202	880	822	654	64	93	124
95th Queue (ft)	26	49	133	173	183	460	1531	1507	1349	269	181	240
Link Distance (ft)			588	588	588		1215	1215	1215			
Upstream Blk Time (%)							38	9	2			
Queuing Penalty (veh)							0	0	0			
Storage Bay Dist (ft)	215	215				275				265	110	110
Storage Blk Time (%)						0	0	67	24		47	22
Queuing Penalty (veh)						0	0	42	14		31	14

Intersection: 6: Revere Street & E. 104th Street, All Intervals

Movement	NB	NB	SB	SB	SB
Directions Served	T	R	L	T	R
Maximum Queue (ft)	522	149	171	218	176
Average Queue (ft)	176	24	88	46	61
95th Queue (ft)	540	84	152	142	127
Link Distance (ft)	578		337		
Upstream Blk Time (%)	12		0		
Queuing Penalty (veh)	0		0		
Storage Bay Dist (ft)	110	100		100	
Storage Blk Time (%)	1	13	2	3	
Queuing Penalty (veh)	1	17	5	5	

Intersection: 9: Revere Street, Interval #1

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	L	L
Maximum Queue (ft)	56	34	25	6
Average Queue (ft)	28	21	6	1
95th Queue (ft)	56	41	23	9
Link Distance (ft)	220	391		
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)		80	100	
Storage Blk Time (%)				
Queuing Penalty (veh)				

Queuing and Blocking Report  
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Intersection: 9: Revere Street, Interval #2

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	L	L
Maximum Queue (ft)	46	30	10	11
Average Queue (ft)	27	18	4	2
95th Queue (ft)	46	39	20	15
Link Distance (ft)	220	391		
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)		80	100	
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 9: Revere Street, Interval #3

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	L	L
Maximum Queue (ft)	47	39	33	17
Average Queue (ft)	25	23	3	2
95th Queue (ft)	44	41	20	13
Link Distance (ft)	220	391		
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)		80	100	
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 9: Revere Street, All Intervals

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	L	L
Maximum Queue (ft)	62	44	33	23
Average Queue (ft)	26	21	4	2
95th Queue (ft)	48	41	20	13
Link Distance (ft)	220	391		
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)		80	100	
Storage Blk Time (%)				
Queuing Penalty (veh)				

Queuing and Blocking Report  
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Intersection: 12: E. 104th Street & Quari Ct., Interval #1

Movement	EB	WB	WB	WB	WB	WB	NB	SB
Directions Served	L	L	T	T	T	R	R	R
Maximum Queue (ft)	158	258	522	402	75	10	61	217
Average Queue (ft)	97	34	239	83	11	1	33	149
95th Queue (ft)	197	181	647	364	82	16	64	256
Link Distance (ft)			588	588	588		140	203
Upstream Blk Time (%)			7	0			33	
Queuing Penalty (veh)			48	0			0	
Storage Bay Dist (ft)	375	290			235			
Storage Blk Time (%)			23					
Queuing Penalty (veh)			6					

Intersection: 12: E. 104th Street & Quari Ct., Interval #2

Movement	EB	EB	WB	WB	WB	WB	WB	NB	SB
Directions Served	L	T	L	T	T	T	R	R	R
Maximum Queue (ft)	276	90	311	598	388	59	17	49	230
Average Queue (ft)	177	15	85	552	158	16	4	29	214
95th Queue (ft)	356	120	336	726	526	90	18	53	235
Link Distance (ft)		786		588	588	588		140	203
Upstream Blk Time (%)			19	0			95		
Queuing Penalty (veh)			124	1			0		
Storage Bay Dist (ft)	375		290		235				
Storage Blk Time (%)	2	0		53					
Queuing Penalty (veh)	7	0		14					

Intersection: 12: E. 104th Street & Quari Ct., Interval #3

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	SB
Directions Served	L	T	T	T	R	L	T	T	T	R	R	R
Maximum Queue (ft)	370	444	299	157	5	390	606	333	77	26	85	223
Average Queue (ft)	253	131	66	10	0	114	594	36	13	4	34	212
95th Queue (ft)	493	507	392	159	5	397	616	217	80	19	70	226
Link Distance (ft)		786	786	786			588	588	588		140	203
Upstream Blk Time (%)		0	0	0			36	0			100	
Queuing Penalty (veh)		1	0	0			249	0			0	
Storage Bay Dist (ft)	375				785	290				235		
Storage Blk Time (%)	26	0		0			74					
Queuing Penalty (veh)	83	0		0			21					

Queuing and Blocking Report  
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Intersection: 12: E. 104th Street & Quari Ct., All Intervals

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	SB
Directions Served	L	T	T	T	R	L	T	T	T	R	R	R
Maximum Queue (ft)	383	460	299	157	5	390	607	494	149	32	85	242
Average Queue (ft)	197	71	34	5	0	88	498	77	13	3	33	197
95th Queue (ft)	423	365	275	113	3	343	825	351	83	18	65	268
Link Distance (ft)		786	786	786			588	588	588		140	203
Upstream Blk Time (%)		0	0	0			24	0				82
Queuing Penalty (veh)		0	0	0			168	0				0
Storage Bay Dist (ft)	375				785	290				235		
Storage Blk Time (%)	13	0		0			56					
Queuing Penalty (veh)	43	0		0			15					

Network Summary

Network wide Queuing Penalty, Interval #1: 741

Network wide Queuing Penalty, Interval #2: 1053

Network wide Queuing Penalty, Interval #3: 1539

Network wide Queuing Penalty, All Intervals: 1218

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Intersection: 3: CO-2 & E. 104th Street, Interval #1

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NE	NE
Directions Served	L	L	T	T	T	L	L	T	T	T	L	L
Maximum Queue (ft)	193	428	696	584	492	276	295	272	225	248	192	232
Average Queue (ft)	106	237	449	407	327	157	178	171	171	180	128	163
95th Queue (ft)	206	499	781	686	547	318	337	281	248	275	208	235
Link Distance (ft)			1072	1072	1072			784	784	784		
Upstream Blk Time (%)			0									
Queuing Penalty (veh)			0									
Storage Bay Dist (ft)	435	435				350	350				700	700
Storage Blk Time (%)		0	16			0	1	5			6	
Queuing Penalty (veh)		0	44			0	4	20			8	

Intersection: 3: CO-2 & E. 104th Street, Interval #1

Movement	NE	NE	NE	SW	SW	SW	SW
Directions Served	T	T	R	L	T	T	R
Maximum Queue (ft)	575	591	472	157	117	89	6
Average Queue (ft)	264	312	350	95	63	34	1
95th Queue (ft)	558	738	644	207	123	94	6
Link Distance (ft)	1373	1373			1141	1141	
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)			500	800		460	
Storage Blk Time (%)	0		17				
Queuing Penalty (veh)	0		81				

Queuing and Blocking Report  
2045 No-Build Weekday PM Peak Hour

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Intersection: 3: CO-2 & E. 104th Street, Interval #2

Movement	EB	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	WB
Directions Served	L	L	T	T	T	R	L	L	T	T	T	R
Maximum Queue (ft)	151	353	688	651	538	165	320	361	427	382	245	51
Average Queue (ft)	69	274	579	539	446	47	264	301	235	213	158	0
95th Queue (ft)	173	618	1057	1005	844	363	425	474	508	430	248	0
Link Distance (ft)			1072	1072	1072				784	784	784	
Upstream Blk Time (%)			6	1	0							
Queuing Penalty (veh)			0	0	0							
Storage Bay Dist (ft)	435	435				725	350	350				225
Storage Blk Time (%)			31			5		3	20	6	3	0
Queuing Penalty (veh)			69			9		9	69	16	3	0

Intersection: 3: CO-2 & E. 104th Street, Interval #2

Movement	NE	NE	NE	NE	NE	SW	SW	SW	SW
Directions Served	L	L	T	T	R	L	T	T	R
Maximum Queue (ft)	123	285	515	538	434	83	123	83	14
Average Queue (ft)	54	139	247	274	236	26	74	26	2
95th Queue (ft)	134	416	680	769	558	97	142	96	13
Link Distance (ft)			1373	1373			1141	1141	
Upstream Blk Time (%)									
Queuing Penalty (veh)									
Storage Bay Dist (ft)	700	700			500	800			460
Storage Blk Time (%)			0	0	10				
Queuing Penalty (veh)			1	0	44				

Queuing and Blocking Report  
2045 No-Build Weekday PM Peak Hour

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Intersection: 3: CO-2 & E. 104th Street, Interval #3

Movement	EB	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	WB
Directions Served	L	L	T	T	T	R	L	L	T	T	T	R
Maximum Queue (ft)	203	535	1110	1064	889	330	400	449	666	612	392	195
Average Queue (ft)	91	430	833	784	674	213	356	398	441	339	257	35
95th Queue (ft)	200	721	1300	1240	1142	803	468	514	744	655	456	200
Link Distance (ft)			1072	1072	1072				784	784	784	
Upstream Blk Time (%)			19	9	6				1	0		
Queuing Penalty (veh)			0	0	0				4	0		
Storage Bay Dist (ft)	435	435				725	350	350				225
Storage Blk Time (%)	0	58			22		35	63	15		23	0
Queuing Penalty (veh)	0	158			44		140	250	51		33	0

Intersection: 3: CO-2 & E. 104th Street, Interval #3

Movement	NE	NE	NE	NE	NE	SW	SW	SW	SW
Directions Served	L	L	T	T	R	L	T	T	R
Maximum Queue (ft)	235	373	615	650	542	138	139	117	25
Average Queue (ft)	129	171	321	344	395	54	70	35	2
95th Queue (ft)	233	328	791	911	616	129	136	104	18
Link Distance (ft)			1373	1373			1141	1141	
Upstream Blk Time (%)			1	1					
Queuing Penalty (veh)	0	0							
Storage Bay Dist (ft)	700	700			500	800			460
Storage Blk Time (%)	0	2			13				
Queuing Penalty (veh)	1	13			66				

Queuing and Blocking Report  
2045 No-Build Weekday PM Peak Hour

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Intersection: 3: CO-2 & E. 104th Street, All Intervals

Movement	EB	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	WB
Directions Served	L	L	T	T	T	R	L	L	T	T	T	R
Maximum Queue (ft)	215	535	1110	1064	889	330	400	449	675	626	405	246
Average Queue (ft)	89	346	679	634	535	121	286	322	326	268	214	18
95th Queue (ft)	197	678	1198	1134	1008	600	479	528	655	550	388	140
Link Distance (ft)			1072	1072	1072				784	784	784	
Upstream Blk Time (%)			11	5	3				0	0		
Queuing Penalty (veh)			0	0	0				2	0		
Storage Bay Dist (ft)	435	435				725	350	350				225
Storage Blk Time (%)	0	41			13		19	38	9		14	0
Queuing Penalty (veh)	0	107			24		73	147	30		19	0

Intersection: 3: CO-2 & E. 104th Street, All Intervals

Movement	NE	NE	NE	NE	NE	SW	SW	SW	SW
Directions Served	L	L	T	T	R	L	T	T	R
Maximum Queue (ft)	250	509	890	954	598	188	151	134	28
Average Queue (ft)	111	161	290	319	346	57	69	33	2
95th Queue (ft)	218	343	717	840	633	151	134	100	15
Link Distance (ft)			1373	1373			1141	1141	
Upstream Blk Time (%)	0	1							
Queuing Penalty (veh)	0	0							
Storage Bay Dist (ft)	700	700			500	800			460
Storage Blk Time (%)	0	1	13						
Queuing Penalty (veh)	1	7	64						

Queuing and Blocking Report  
2045 No-Build Weekday PM Peak Hour

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Intersection: 6: Revere Street & E. 104th Street, Interval #1

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	L	L	T	T	T	L	T	T	T	R	L	L
Maximum Queue (ft)	38	49	199	238	248	142	272	218	178	36	64	103
Average Queue (ft)	20	32	148	190	206	77	206	158	108	22	24	60
95th Queue (ft)	46	59	218	258	268	144	300	242	177	42	63	111
Link Distance (ft)			587	587	587		1203	1203	1203			
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	215	215				275				265	110	110
Storage Blk Time (%)			1			1		1			0	1
Queuing Penalty (veh)			0			1		1			0	1

Intersection: 6: Revere Street & E. 104th Street, Interval #1

Movement	NB	NB	SB	SB	SB
Directions Served	T	R	L	T	R
Maximum Queue (ft)	64	42	120	72	48
Average Queue (ft)	29	21	73	32	23
95th Queue (ft)	72	51	128	73	50
Link Distance (ft)	579		343		
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	110	100		100	
Storage Blk Time (%)	0		5	0	
Queuing Penalty (veh)	0		5	0	

Queuing and Blocking Report  
2045 No-Build Weekday PM Peak Hour

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Intersection: 6: Revere Street & E. 104th Street, Interval #2

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	L	L	T	T	T	L	T	T	T	R	L	L
Maximum Queue (ft)	34	73	194	239	247	99	278	216	163	45	70	110
Average Queue (ft)	18	37	148	194	214	62	192	133	79	24	29	72
95th Queue (ft)	43	72	209	254	272	105	272	228	142	45	70	125
Link Distance (ft)			587	587	587		1203	1203	1203			
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	215	215				275				265	110	110
Storage Blk Time (%)			0			2		1			0	3
Queuing Penalty (veh)			0			1		1			0	3

Intersection: 6: Revere Street & E. 104th Street, Interval #2

Movement	NB	NB	SB	SB	SB
Directions Served	T	R	L	T	R
Maximum Queue (ft)	71	47	115	57	32
Average Queue (ft)	34	23	73	22	19
95th Queue (ft)	76	52	126	54	37
Link Distance (ft)	579		343		
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	110	100		100	
Storage Blk Time (%)	0		6		
Queuing Penalty (veh)	0		6		

Queuing and Blocking Report  
2045 No-Build Weekday PM Peak Hour

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Intersection: 6: Revere Street & E. 104th Street, Interval #3

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	L	L	T	T	T	L	T	T	T	R	L	L
Maximum Queue (ft)	56	74	195	254	261	124	275	236	150	45	119	130
Average Queue (ft)	20	31	142	192	205	64	199	149	85	24	33	72
95th Queue (ft)	51	64	194	246	258	114	275	238	150	45	87	120
Link Distance (ft)			587	587	587		1203	1203	1203			
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	215	215				275				265	110	110
Storage Blk Time (%)			0			1			0		0	4
Queuing Penalty (veh)			0			1			0		0	3

Intersection: 6: Revere Street & E. 104th Street, Interval #3

Movement	NB	NB	SB	SB	SB
Directions Served	T	R	L	T	R
Maximum Queue (ft)	76	58	168	150	62
Average Queue (ft)	31	29	93	45	26
95th Queue (ft)	67	61	158	118	55
Link Distance (ft)	579		343		
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	110	100		100	
Storage Blk Time (%)	0		13	0	
Queuing Penalty (veh)	0		14	1	

Queuing and Blocking Report  
2045 No-Build Weekday PM Peak Hour

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Intersection: 6: Revere Street & E. 104th Street, All Intervals

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	L	L	T	T	T	L	T	T	T	R	L	L
Maximum Queue (ft)	57	82	217	262	275	152	302	258	182	50	120	138
Average Queue (ft)	19	32	145	192	207	66	199	147	89	24	30	69
95th Queue (ft)	48	65	204	251	264	121	281	238	157	44	78	120
Link Distance (ft)			587	587	587		1203	1203	1203			
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	215	215				275				265	110	110
Storage Blk Time (%)			0			1		1			0	3
Queuing Penalty (veh)			0			1		1			0	2

Intersection: 6: Revere Street & E. 104th Street, All Intervals

Movement	NB	NB	SB	SB	SB
Directions Served	T	R	L	T	R
Maximum Queue (ft)	86	63	171	150	62
Average Queue (ft)	31	25	83	36	24
95th Queue (ft)	71	57	146	97	50
Link Distance (ft)	579		343		
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	110	100		100	
Storage Blk Time (%)	0		9	0	
Queuing Penalty (veh)	0		10	0	

Intersection: 9: Revere Street, Interval #1

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	L	L
Maximum Queue (ft)	55	34	29	11
Average Queue (ft)	34	18	6	2
95th Queue (ft)	59	40	25	15
Link Distance (ft)	220	378		
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)		80	100	
Storage Blk Time (%)				
Queuing Penalty (veh)				

Queuing and Blocking Report  
2045 No-Build Weekday PM Peak Hour

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Intersection: 9: Revere Street, Interval #2

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	L	L
Maximum Queue (ft)	57	25	24	16
Average Queue (ft)	31	16	5	5
95th Queue (ft)	58	35	24	22
Link Distance (ft)	220	378		
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)		80	100	
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 9: Revere Street, Interval #3

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	L	L
Maximum Queue (ft)	68	30	24	15
Average Queue (ft)	34	14	4	2
95th Queue (ft)	60	35	21	16
Link Distance (ft)	220	378		
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)		80	100	
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 9: Revere Street, All Intervals

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	L	L
Maximum Queue (ft)	80	38	38	21
Average Queue (ft)	33	15	5	3
95th Queue (ft)	60	36	22	17
Link Distance (ft)	220	378		
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)		80	100	
Storage Blk Time (%)				
Queuing Penalty (veh)				

Queuing and Blocking Report  
2045 No-Build Weekday PM Peak Hour

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Intersection: 12: E. 104th Street & Quari Ct., Interval #1

Movement	EB	EB	WB	WB	NB	SB
Directions Served	L	R	L	R	R	R
Maximum Queue (ft)	128	4	77	4	75	99
Average Queue (ft)	66	1	37	1	41	52
95th Queue (ft)	120	7	89	7	76	95
Link Distance (ft)				140	203	
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (ft)	375	785	290	235		
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 12: E. 104th Street & Quari Ct., Interval #2

Movement	EB	WB	WB	NB	SB
Directions Served	L	L	R	R	R
Maximum Queue (ft)	115	71	4	81	65
Average Queue (ft)	69	34	1	46	42
95th Queue (ft)	116	74	7	82	67
Link Distance (ft)			140	203	
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	375	290	235		
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 12: E. 104th Street & Quari Ct., Interval #3

Movement	EB	EB	WB	WB	WB	WB	NB	SB
Directions Served	L	R	L	T	T	R	R	R
Maximum Queue (ft)	138	4	85	47	26	13	99	112
Average Queue (ft)	71	0	34	4	2	1	47	45
95th Queue (ft)	129	4	76	37	26	8	88	89
Link Distance (ft)			587	587			140	203
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	375	785	290		235			
Storage Blk Time (%)								
Queuing Penalty (veh)								

Queuing and Blocking Report  
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Intersection: 12: E. 104th Street & Quari Ct., All Intervals

Movement	EB	EB	WB	WB	WB	WB	NB	SB
Directions Served	L	R	L	T	T	R	R	R
Maximum Queue (ft)	146	9	94	47	26	18	103	121
Average Queue (ft)	69	0	35	2	1	1	45	46
95th Queue (ft)	124	5	79	26	18	7	84	86
Link Distance (ft)				587	587		140	203
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	375	785	290			235		
Storage Blk Time (%)								
Queuing Penalty (veh)								

Network Summary

Network wide Queuing Penalty, Interval #1: 167

Network wide Queuing Penalty, Interval #2: 232

Network wide Queuing Penalty, Interval #3: 779

Network wide Queuing Penalty, All Intervals: 489

## Queuing and Blocking Report

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## Intersection: 3: CO-2 &amp; E. 104th Street, Interval #1

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	WB	NE
Directions Served	L	L	T	T	T	L	L	T	T	T	R	L
Maximum Queue (ft)	281	333	364	350	307	399	450	803	686	397	260	270
Average Queue (ft)	171	213	294	270	228	387	437	719	349	289	111	189
95th Queue (ft)	325	367	383	364	304	441	505	993	653	420	363	321
Link Distance (ft)			1080	1080	1080			786	786	786		
Upstream Blk Time (%)								27	0			
Queuing Penalty (veh)								192	0			
Storage Bay Dist (ft)	435	435				350	350			225	700	
Storage Blk Time (%)	0	1				44	59	10		14		
Queuing Penalty (veh)	0	3				195	259	92		24		

## Intersection: 3: CO-2 &amp; E. 104th Street, Interval #1

Movement	NE	NE	NE	SW	SW	SW	SW
Directions Served	T	T	R	L	T	T	R
Maximum Queue (ft)	200	168	80	74	427	404	111
Average Queue (ft)	105	75	16	35	330	295	35
95th Queue (ft)	203	185	71	85	455	421	104
Link Distance (ft)	1380	1380			1138	1138	
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)		500	800		460		
Storage Blk Time (%)					0		
Queuing Penalty (veh)					1		

Queuing and Blocking Report  
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Intersection: 3: CO-2 & E. 104th Street, Interval #2

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	WB	NE
Directions Served	L	L	T	T	T	L	L	T	T	T	R	L
Maximum Queue (ft)	260	315	415	390	283	400	450	803	391	356	128	249
Average Queue (ft)	145	188	301	264	204	390	449	795	214	231	18	134
95th Queue (ft)	288	351	450	418	311	461	454	805	384	365	140	296
Link Distance (ft)			1080	1080	1080			786	786	786		
Upstream Blk Time (%)								48				
Queuing Penalty (veh)								314				
Storage Bay Dist (ft)	435	435				350	350			225	700	
Storage Blk Time (%)			1			51	73	5		7		
Queuing Penalty (veh)			2			193	278	38		8		

Intersection: 3: CO-2 & E. 104th Street, Interval #2

Movement	NE	NE	NE	SW	SW	SW	SW
Directions Served	T	T	R	L	T	T	R
Maximum Queue (ft)	156	130	40	56	366	320	52
Average Queue (ft)	73	45	6	27	270	235	13
95th Queue (ft)	149	124	37	81	388	350	62
Link Distance (ft)	1380	1380			1138	1138	
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)		500	800			460	
Storage Blk Time (%)							
Queuing Penalty (veh)							

Queuing and Blocking Report  
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Intersection: 3: CO-2 & E. 104th Street, Interval #3

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	WB	NE
Directions Served	L	L	T	T	T	L	L	T	T	T	R	L
Maximum Queue (ft)	300	428	645	524	411	400	450	804	395	352	193	616
Average Queue (ft)	182	279	378	329	274	395	449	796	222	209	13	414
95th Queue (ft)	368	518	651	558	453	423	449	805	374	330	117	750
Link Distance (ft)		1080	1080	1080				786	786	786		
Upstream Blk Time (%)								51				
Queuing Penalty (veh)								360				
Storage Bay Dist (ft)	435	435				350	350			225	700	
Storage Blk Time (%)	1	3	11			45	76	6		5		5
Queuing Penalty (veh)	4	10	33			198	336	56		9		8

Intersection: 3: CO-2 & E. 104th Street, Interval #3

Movement	NE	NE	NE	SW	SW	SW	SW
Directions Served	T	T	R	L	T	T	R
Maximum Queue (ft)	518	410	94	102	495	457	78
Average Queue (ft)	233	180	30	40	332	296	23
95th Queue (ft)	631	531	90	92	478	444	70
Link Distance (ft)	1380	1380			1138	1138	
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)		500	800		460		
Storage Blk Time (%)	1				0		
Queuing Penalty (veh)	2				1		

## Queuing and Blocking Report

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## Intersection: 3: CO-2 &amp; E. 104th Street, All Intervals

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	WB	NE
Directions Served	L	L	T	T	T	L	L	T	T	T	R	L
Maximum Queue (ft)	361	448	645	540	427	400	450	805	686	475	323	616
Average Queue (ft)	171	241	339	299	246	392	446	777	251	234	38	292
95th Queue (ft)	341	456	563	493	398	441	481	922	473	372	209	629
Link Distance (ft)			1080	1080	1080			786	786	786		
Upstream Blk Time (%)								44	0			
Queuing Penalty (veh)								307	0			
Storage Bay Dist (ft)	435	435				350	350			225	700	
Storage Blk Time (%)	1	2	6			46	71	7		8		3
Queuing Penalty (veh)	2	6	17			196	302	61		13		4

## Intersection: 3: CO-2 &amp; E. 104th Street, All Intervals

Movement	NE	NE	NE	SW	SW	SW	SW
Directions Served	T	T	R	L	T	T	R
Maximum Queue (ft)	529	423	101	103	495	467	119
Average Queue (ft)	164	122	21	36	316	281	23
95th Queue (ft)	480	402	76	88	458	423	79
Link Distance (ft)	1380	1380			1138	1138	
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)		500	800		460		
Storage Blk Time (%)	0				0		
Queuing Penalty (veh)	1				1		

Queuing and Blocking Report  
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Intersection: 6: Revere Street & E. 104th Street, Interval #1

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	L	L	T	T	T	L	T	T	T	R	L	L
Maximum Queue (ft)	23	53	147	170	173	215	730	634	421	163	106	116
Average Queue (ft)	6	21	77	112	128	83	457	379	218	30	55	76
95th Queue (ft)	27	54	144	178	189	239	695	632	386	168	111	123
Link Distance (ft)			588	588	588		1215	1215	1215			
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	215	215				275				265	110	110
Storage Blk Time (%)							35			5	6	5
Queuing Penalty (veh)							22			3	4	4

Intersection: 6: Revere Street & E. 104th Street, Interval #1

Movement	NB	NB	SB	SB	SB
Directions Served	T	R	L	T	R
Maximum Queue (ft)	67	46	159	150	126
Average Queue (ft)	27	24	100	47	62
95th Queue (ft)	69	52	156	139	131
Link Distance (ft)	578		337		
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	110	100		100	
Storage Blk Time (%)		15	2	4	
Queuing Penalty (veh)		21	4	6	

Queuing and Blocking Report  
2045 Design Year Weekday AM Peak Hour

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Intersection: 6: Revere Street & E. 104th Street, Interval #2

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	L	L	T	T	T	L	T	T	T	R	L	L
Maximum Queue (ft)	38	64	114	143	162	375	1074	1000	741	171	122	133
Average Queue (ft)	10	20	64	99	114	251	896	828	427	32	90	93
95th Queue (ft)	43	56	134	175	177	516	1299	1236	776	169	154	192
Link Distance (ft)			588	588	588		1215	1215	1215			
Upstream Blk Time (%)							13	1	0			
Queuing Penalty (veh)							0	0	0			
Storage Bay Dist (ft)	215	215				275				265	110	110
Storage Blk Time (%)						0		82		11		31
Queuing Penalty (veh)						0		48		6		19
												2

Intersection: 6: Revere Street & E. 104th Street, Interval #2

Movement	NB	NB	SB	SB	SB
Directions Served	T	R	L	T	R
Maximum Queue (ft)	155	54	157	187	116
Average Queue (ft)	97	20	97	74	58
95th Queue (ft)	381	53	178	224	127
Link Distance (ft)	578		337		
Upstream Blk Time (%)	6		0		
Queuing Penalty (veh)	0		0		
Storage Bay Dist (ft)	110	100		100	
Storage Blk Time (%)	2		16	2	5
Queuing Penalty (veh)	3		20	4	8

Queuing and Blocking Report  
2045 Design Year Weekday AM Peak Hour

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Intersection: 6: Revere Street & E. 104th Street, Interval #3

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	L	L	T	T	T	L	T	T	T	R	L	L
Maximum Queue (ft)	34	43	150	190	209	375	1246	1241	1214	365	156	209
Average Queue (ft)	6	15	73	116	132	270	1145	1093	824	93	116	146
95th Queue (ft)	24	39	144	186	196	514	1470	1441	1335	335	192	253
Link Distance (ft)			588	588	588		1215	1215	1215			
Upstream Blk Time (%)							66	6	1			
Queuing Penalty (veh)							0	0	0			
Storage Bay Dist (ft)	215	215				275				265	110	110
Storage Blk Time (%)						0	0	91		35	67	13
Queuing Penalty (veh)						0	0	58		21	45	9

Intersection: 6: Revere Street & E. 104th Street, Interval #3

Movement	NB	NB	SB	SB	SB
Directions Served	T	R	L	T	R
Maximum Queue (ft)	440	49	176	176	129
Average Queue (ft)	244	13	98	50	61
95th Queue (ft)	663	42	164	140	113
Link Distance (ft)	578		337		
Upstream Blk Time (%)	30				
Queuing Penalty (veh)	0				
Storage Bay Dist (ft)	110	100		100	
Storage Blk Time (%)	0	15	1	3	
Queuing Penalty (veh)	1	20	4	6	

# Queuing and Blocking Report

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## Intersection: 6: Revere Street & E. 104th Street, All Intervals

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	L	L	T	T	T	L	T	T	T	R	L	L
Maximum Queue (ft)	49	72	156	192	213	375	1246	1241	1214	365	157	209
Average Queue (ft)	7	18	72	111	127	221	919	857	582	63	95	116
95th Queue (ft)	30	48	142	182	191	485	1484	1447	1179	268	175	224
Link Distance (ft)			588	588	588		1215	1215	1215			
Upstream Blk Time (%)							36	3	0			
Queuing Penalty (veh)							0	0	0			
Storage Bay Dist (ft)	215	215				275				265	110	110
Storage Blk Time (%)						0	0	75		21	43	9
Queuing Penalty (veh)						0	0	47		13	28	6

## Intersection: 6: Revere Street & E. 104th Street, All Intervals

Movement	NB	NB	SB	SB	SB
Directions Served	T	R	L	T	R
Maximum Queue (ft)	440	62	188	237	160
Average Queue (ft)	156	17	98	55	60
95th Queue (ft)	524	48	166	164	121
Link Distance (ft)	578		337		
Upstream Blk Time (%)	17		0		
Queuing Penalty (veh)	0		0		
Storage Bay Dist (ft)	110	100		100	
Storage Blk Time (%)	1		15	1	4
Queuing Penalty (veh)	1		20	4	7

## Intersection: 9: Revere Street, Interval #1

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	L	L
Maximum Queue (ft)	56	39	15	11
Average Queue (ft)	36	22	4	2
95th Queue (ft)	66	46	18	12
Link Distance (ft)	220	391		
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)		80	100	
Storage Blk Time (%)				
Queuing Penalty (veh)				

Queuing and Blocking Report  
2045 Design Year Weekday AM Peak Hour

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Intersection: 9: Revere Street, Interval #2

Movement	EB	WB	NB
Directions Served	LTR	LTR	L
Maximum Queue (ft)	56	37	24
Average Queue (ft)	31	21	6
95th Queue (ft)	56	40	25
Link Distance (ft)	220	391	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)		80	
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 9: Revere Street, Interval #3

Movement	EB	WB	NB	SB	SB
Directions Served	LTR	LTR	L	L	R
Maximum Queue (ft)	60	48	25	17	8
Average Queue (ft)	31	23	4	1	1
95th Queue (ft)	57	43	19	12	6
Link Distance (ft)	220	391			
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)		80	100	100	
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 9: Revere Street, All Intervals

Movement	EB	WB	NB	SB	SB
Directions Served	LTR	LTR	L	L	R
Maximum Queue (ft)	76	48	30	22	8
Average Queue (ft)	32	22	4	1	0
95th Queue (ft)	59	43	20	10	4
Link Distance (ft)	220	391			
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)		80	100	100	
Storage Blk Time (%)					
Queuing Penalty (veh)					

Queuing and Blocking Report  
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Intersection: 12: E. 104th Street & Quari Ct., Interval #1

Movement	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	SB
Directions Served	L	T	T	R	L	T	T	T	R	R	R
Maximum Queue (ft)	212	55	15	4	389	599	441	172	84	51	218
Average Queue (ft)	121	8	2	1	86	345	155	29	13	29	188
95th Queue (ft)	228	83	23	7	316	762	462	200	105	57	255
Link Distance (ft)		786	786			588	588	588		140	203
Upstream Blk Time (%)						10	0	0			50
Queuing Penalty (veh)						68	0	2			0
Storage Bay Dist (ft)	375			785	290				235		
Storage Blk Time (%)						34		1			
Queuing Penalty (veh)						10		2			

Intersection: 12: E. 104th Street & Quari Ct., Interval #2

Movement	EB	EB	EB	WB	WB	WB	WB	WB	NB	SB	
Directions Served	L	T	T	L	T	T	T	R	R	R	
Maximum Queue (ft)	366	173	28	389	601	240	104	21	60	230	
Average Queue (ft)	281	45	10	82	593	89	38	4	36	211	
95th Queue (ft)	401	202	67	335	602	330	149	19	68	232	
Link Distance (ft)		786	786		588	588	588		140	203	
Upstream Blk Time (%)					31	0			100		
Queuing Penalty (veh)					200	0				0	
Storage Bay Dist (ft)	375			290			235				
Storage Blk Time (%)	10				68						
Queuing Penalty (veh)	31				18						

Intersection: 12: E. 104th Street & Quari Ct., Interval #3

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	SB
Directions Served	L	T	T	T	R	L	T	T	T	R	R	R
Maximum Queue (ft)	423	505	416	325	157	390	607	274	258	29	78	238
Average Queue (ft)	331	305	182	80	10	147	594	70	34	4	34	216
95th Queue (ft)	575	859	697	467	159	456	605	298	179	20	67	235
Link Distance (ft)		786	786	786			588	588	588		140	203
Upstream Blk Time (%)		9	4	0	0		35	0	0		100	
Queuing Penalty (veh)		38	16	2	0		247	0	0			0
Storage Bay Dist (ft)	375				785	290			235			
Storage Blk Time (%)	45	4		0	0		75					
Queuing Penalty (veh)	146	5		0	0		21					

# Queuing and Blocking Report

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## Intersection: 12: E. 104th Street & Quari Ct., All Intervals

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	SB
Directions Served	L	T	T	T	R	L	T	T	T	R	R	R
Maximum Queue (ft)	433	560	431	325	162	390	609	536	341	88	83	245
Average Queue (ft)	268	170	97	41	6	117	534	95	34	6	33	208
95th Queue (ft)	507	639	496	327	113	400	804	354	178	54	65	250
Link Distance (ft)		786	786	786			588	588	588		140	203
Upstream Blk Time (%)		4	2	0	0		28	0	0			88
Queuing Penalty (veh)		19	8	1	0		191	0	1			0
Storage Bay Dist (ft)	375				785	290				235		
Storage Blk Time (%)	25	2		0	0		63		0			
Queuing Penalty (veh)	81	2		0	0		17		0			

## Network Summary

Network wide Queuing Penalty, Interval #1: 914

Network wide Queuing Penalty, Interval #2: 1194

Network wide Queuing Penalty, Interval #3: 1655

Network wide Queuing Penalty, All Intervals: 1355

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Intersection: 3: CO-2 & E. 104th Street, Interval #1

Movement	EB	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NE
Directions Served	L	L	T	T	T	R	L	L	T	T	T	L
Maximum Queue (ft)	237	348	604	557	534	274	239	294	339	247	259	203
Average Queue (ft)	134	239	461	417	353	39	163	193	187	170	180	122
95th Queue (ft)	277	480	804	738	650	285	307	348	328	247	271	199
Link Distance (ft)			1072	1072	1072				784	784	784	
Upstream Blk Time (%)			4	0								
Queuing Penalty (veh)			0	0								
Storage Bay Dist (ft)	435	435				725	350	350				700
Storage Blk Time (%)		0	14		4		2	4	2			5
Queuing Penalty (veh)		1	38		8		9	18	8			7

Intersection: 3: CO-2 & E. 104th Street, Interval #1

Movement	NE	NE	NE	NE	SW	SW	SW	SW
Directions Served	L	T	T	R	L	T	T	R
Maximum Queue (ft)	228	452	451	432	135	129	97	4
Average Queue (ft)	153	235	232	257	72	70	38	1
95th Queue (ft)	236	509	552	496	150	141	104	9
Link Distance (ft)		1373	1373			1141	1141	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	700			500	800		460	
Storage Blk Time (%)		0		6				
Queuing Penalty (veh)		0		30				

## Queuing and Blocking Report

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## Intersection: 3: CO-2 &amp; E. 104th Street, Interval #2

Movement	EB	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NE
Directions Served	L	L	T	T	T	R	L	L	T	T	T	L
Maximum Queue (ft)	159	385	666	608	558	165	290	335	531	492	234	137
Average Queue (ft)	94	243	573	532	471	165	234	282	365	224	163	72
95th Queue (ft)	201	561	1032	1002	936	709	492	562	840	538	245	147
Link Distance (ft)			1072	1072	1072				784	784	784	
Upstream Blk Time (%)			11	3	1				3	0		
Queuing Penalty (veh)			0	0	0				15	0		
Storage Bay Dist (ft)	435	435				725	350	350				700
Storage Blk Time (%)		0	29		16		28	44	2		4	
Queuing Penalty (veh)		0	63		29		96	150	7		3	

## Intersection: 3: CO-2 &amp; E. 104th Street, Interval #2

Movement	NE	NE	NE	NE	SW	SW	SW	SW
Directions Served	L	T	T	R	L	T	T	R
Maximum Queue (ft)	169	331	346	413	115	117	89	8
Average Queue (ft)	114	172	168	217	42	64	23	1
95th Queue (ft)	180	348	412	472	147	126	83	13
Link Distance (ft)		1373	1373			1141	1141	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	700			500	800			460
Storage Blk Time (%)				4				
Queuing Penalty (veh)				18				

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Intersection: 3: CO-2 & E. 104th Street, Interval #3

Movement	EB	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	WB
Directions Served	L	L	T	T	T	R	L	L	T	T	T	R
Maximum Queue (ft)	274	535	1059	1020	966	660	399	450	737	590	405	257
Average Queue (ft)	105	454	849	793	703	244	332	392	581	319	235	39
95th Queue (ft)	248	720	1279	1218	1161	862	474	541	1010	602	409	212
Link Distance (ft)			1072	1072	1072				784	784	784	
Upstream Blk Time (%)			23	11	9				33	0		
Queuing Penalty (veh)			0	0	0				158	0		
Storage Bay Dist (ft)	435	435				725	350	350				225
Storage Blk Time (%)	0	0	61		25		30	61	19			21
Queuing Penalty (veh)	0	0	168		49		119	243	69			30

Intersection: 3: CO-2 & E. 104th Street, Interval #3

Movement	NE	NE	NE	NE	NE	SW	SW	SW	SW
Directions Served	L	L	T	T	R	L	T	T	R
Maximum Queue (ft)	186	449	1008	1003	585	235	153	129	27
Average Queue (ft)	116	178	419	465	417	117	69	38	3
95th Queue (ft)	190	398	1032	1111	703	249	139	108	19
Link Distance (ft)			1373	1373			1141	1141	
Upstream Blk Time (%)			2	3					
Queuing Penalty (veh)			0	0					
Storage Bay Dist (ft)	700	700			500	800			460
Storage Blk Time (%)			0	1	26				
Queuing Penalty (veh)			2	5	130				

Queuing and Blocking Report  
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Intersection: 3: CO-2 & E. 104th Street, All Intervals

Movement	EB	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	WB
Directions Served	L	L	T	T	T	R	L	L	T	T	T	R
Maximum Queue (ft)	322	535	1059	1020	966	716	399	450	737	658	405	257
Average Queue (ft)	109	351	689	639	562	175	268	318	434	260	204	20
95th Queue (ft)	247	677	1193	1134	1056	725	480	552	911	539	353	149
Link Distance (ft)			1072	1072	1072				784	784	784	
Upstream Blk Time (%)			15	6	5				17	0		
Queuing Penalty (veh)			0	0	0				82	0		
Storage Bay Dist (ft)	435	435				725	350	350				225
Storage Blk Time (%)	0	0	41		17		23	42	11			13
Queuing Penalty (veh)	0	0	109		34		86	163	38			18

Intersection: 3: CO-2 & E. 104th Street, All Intervals

Movement	NE	NE	NE	NE	NE	SW	SW	SW	SW
Directions Served	L	L	T	T	R	L	T	T	R
Maximum Queue (ft)	224	466	1008	1003	585	235	172	137	28
Average Queue (ft)	107	156	315	337	330	88	68	34	2
95th Queue (ft)	189	328	818	889	637	214	137	102	16
Link Distance (ft)			1373	1373			1141	1141	
Upstream Blk Time (%)			1	2					
Queuing Penalty (veh)			0	0					
Storage Bay Dist (ft)	700	700			500	800			460
Storage Blk Time (%)			0	0	16				
Queuing Penalty (veh)			1	3	77				

Queuing and Blocking Report  
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Intersection: 6: Revere Street & E. 104th Street, Interval #1

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	L	L	T	T	T	L	T	T	T	R	L	L
Maximum Queue (ft)	38	60	181	232	239	145	258	228	177	45	110	129
Average Queue (ft)	14	36	140	189	204	86	198	159	101	23	37	82
95th Queue (ft)	42	62	185	237	245	183	280	249	196	45	106	138
Link Distance (ft)			587	587	587		1203	1203	1203			
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	215	215				275				265	110	110
Storage Blk Time (%)			0			0		1			0	5
Queuing Penalty (veh)			0			0		1			0	4

Intersection: 6: Revere Street & E. 104th Street, Interval #1

Movement	NB	NB	SB	SB	SB
Directions Served	T	R	L	T	R
Maximum Queue (ft)	87	52	166	160	48
Average Queue (ft)	41	28	110	58	23
95th Queue (ft)	111	60	190	174	48
Link Distance (ft)	579		343		
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	110	100		100	
Storage Blk Time (%)	1		24	0	
Queuing Penalty (veh)	1		24	0	

Queuing and Blocking Report  
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Intersection: 6: Revere Street & E. 104th Street, Interval #2

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	L	L	T	T	T	L	T	T	T	R	L	L
Maximum Queue (ft)	42	68	200	216	227	94	247	188	145	42	59	93
Average Queue (ft)	19	29	144	176	194	60	198	136	86	26	26	54
95th Queue (ft)	46	76	205	229	239	106	260	210	148	48	59	104
Link Distance (ft)			587	587	587		1203	1203	1203			
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	215	215				275				265	110	110
Storage Blk Time (%)			0			0		0				1
Queuing Penalty (veh)			0			0		0				1

Intersection: 6: Revere Street & E. 104th Street, Interval #2

Movement	NB	NB	SB	SB	SB
Directions Served	T	R	L	T	R
Maximum Queue (ft)	86	41	181	159	41
Average Queue (ft)	39	21	116	47	23
95th Queue (ft)	89	50	194	167	44
Link Distance (ft)	579		343		
Upstream Blk Time (%)			0		
Queuing Penalty (veh)			1		
Storage Bay Dist (ft)	110	100		100	
Storage Blk Time (%)	0		27	0	
Queuing Penalty (veh)	0		26	0	

Queuing and Blocking Report  
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Intersection: 6: Revere Street & E. 104th Street, Interval #3

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	L	L	T	T	T	L	T	T	T	R	L	L
Maximum Queue (ft)	38	74	208	257	254	145	322	274	182	58	136	153
Average Queue (ft)	16	29	150	194	207	79	195	146	100	25	36	75
95th Queue (ft)	42	70	204	256	255	143	294	255	170	53	100	137
Link Distance (ft)			587	587	587		1203	1203	1203			
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	215	215				275				265	110	110
Storage Blk Time (%)			0			1		1			1	4
Queuing Penalty (veh)			0			0		1			1	3

Intersection: 6: Revere Street & E. 104th Street, Interval #3

Movement	NB	NB	SB	SB	SB
Directions Served	T	R	L	T	R
Maximum Queue (ft)	114	57	174	113	88
Average Queue (ft)	28	29	95	31	25
95th Queue (ft)	88	59	165	94	69
Link Distance (ft)	579		343		
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	110	100		100	
Storage Blk Time (%)	0		16	1	
Queuing Penalty (veh)	0		16	1	

Queuing and Blocking Report  
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Intersection: 6: Revere Street & E. 104th Street, All Intervals

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	L	L	T	T	T	L	T	T	T	R	L	L
Maximum Queue (ft)	55	91	222	264	261	188	322	274	204	58	141	161
Average Queue (ft)	16	31	146	188	203	76	196	147	97	25	34	72
95th Queue (ft)	43	71	201	247	250	148	284	245	172	50	94	132
Link Distance (ft)			587	587	587		1203	1203	1203			
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	215	215				275				265	110	110
Storage Blk Time (%)			0			1		1			0	4
Queuing Penalty (veh)			0			0		1			0	3

Intersection: 6: Revere Street & E. 104th Street, All Intervals

Movement	NB	NB	SB	SB	SB
Directions Served	T	R	L	T	R
Maximum Queue (ft)	142	66	190	216	88
Average Queue (ft)	34	27	104	41	24
95th Queue (ft)	95	58	180	137	59
Link Distance (ft)	579		343		
Upstream Blk Time (%)			0		
Queuing Penalty (veh)			0		
Storage Bay Dist (ft)	110	100		100	
Storage Blk Time (%)	0		21	0	
Queuing Penalty (veh)	0		21	1	

Intersection: 9: Revere Street, Interval #1

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	L	L
Maximum Queue (ft)	52	30	19	22
Average Queue (ft)	35	18	5	4
95th Queue (ft)	55	38	23	20
Link Distance (ft)	220	378		
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)		80	100	
Storage Blk Time (%)				
Queuing Penalty (veh)				

Queuing and Blocking Report  
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Intersection: 9: Revere Street, Interval #2

Movement	EB	WB	NB	SB	SB
Directions Served	LTR	LTR	L	L	R
Maximum Queue (ft)	54	33	20	11	5
Average Queue (ft)	38	17	6	2	1
95th Queue (ft)	64	39	24	12	7
Link Distance (ft)	220	378			
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)		80	100	100	
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 9: Revere Street, Interval #3

Movement	EB	WB	NB	SB	SB
Directions Served	LTR	LTR	L	L	
Maximum Queue (ft)	61	43	25	22	
Average Queue (ft)	33	14	5	2	
95th Queue (ft)	56	38	21	14	
Link Distance (ft)	220	378			
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)		80	100	100	
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 9: Revere Street, All Intervals

Movement	EB	WB	NB	SB	SB
Directions Served	LTR	LTR	L	L	R
Maximum Queue (ft)	65	44	30	22	5
Average Queue (ft)	34	16	5	2	0
95th Queue (ft)	58	39	23	15	3
Link Distance (ft)	220	378			
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)		80	100	100	
Storage Blk Time (%)					
Queuing Penalty (veh)					

Queuing and Blocking Report  
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Intersection: 12: E. 104th Street & Quari Ct., Interval #1

Movement	EB	EB	WB	NB	SB
Directions Served	L	R	L	R	R
Maximum Queue (ft)	105	9	64	74	94
Average Queue (ft)	67	2	30	45	56
95th Queue (ft)	115	15	67	78	101
Link Distance (ft)			140		203
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)	375	785	290		
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 12: E. 104th Street & Quari Ct., Interval #2

Movement	EB	WB	WB	WB	WB	NB	SB
Directions Served	L	L	T	T	R	R	R
Maximum Queue (ft)	139	77	51	43	16	82	97
Average Queue (ft)	72	35	15	6	2	36	59
95th Queue (ft)	140	81	79	48	19	80	116
Link Distance (ft)		587	587		140	203	
Upstream Blk Time (%)					0		
Queuing Penalty (veh)					0		
Storage Bay Dist (ft)	375	290		235			
Storage Blk Time (%)							
Queuing Penalty (veh)							

Intersection: 12: E. 104th Street & Quari Ct., Interval #3

Movement	EB	EB	WB	WB	WB	WB	WB	NB	SB
Directions Served	L	R	L	T	T	T	R	R	R
Maximum Queue (ft)	158	4	267	350	323	201	9	102	191
Average Queue (ft)	88	0	77	191	164	17	1	49	120
95th Queue (ft)	157	4	274	553	497	144	6	106	239
Link Distance (ft)			587	587	587		140	203	
Upstream Blk Time (%)				1	0		0	29	
Queuing Penalty (veh)				5	0		0	0	
Storage Bay Dist (ft)	375	785	290		235				
Storage Blk Time (%)				25		0			
Queuing Penalty (veh)				10		0			

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Intersection: 12: E. 104th Street & Quari Ct., All Intervals

Movement	EB	EB	WB	WB	WB	WB	WB	NB	SB
Directions Served	L	R	L	T	T	T	R	R	R
Maximum Queue (ft)	178	13	280	350	323	201	20	117	191
Average Queue (ft)	79	1	56	102	86	9	1	45	90
95th Queue (ft)	145	8	205	405	361	102	10	95	196
Link Distance (ft)				587	587	587		140	203
Upstream Blk Time (%)				1	0			0	14
Queuing Penalty (veh)				2	0			0	0
Storage Bay Dist (ft)	375	785	290				235		
Storage Blk Time (%)				13		0			
Queuing Penalty (veh)				5		0			

Network Summary

Network wide Queuing Penalty, Interval #1: 150

Network wide Queuing Penalty, Interval #2: 410

Network wide Queuing Penalty, Interval #3: 1011

Network wide Queuing Penalty, All Intervals: 646