

Traffic Impact Study Proposed Residential Development

Oak Park, Illinois



Prepared For:



February 1, 2021

1. Introduction

This report summarizes the methodologies, results, and findings of a traffic impact study conducted by Kenig, Lindgren, O’Hara, Aboona, Inc. (KLOA, Inc.) for a proposed residential development to be located at 203 South Marion Street in Oak Park, Illinois. The site, which currently contains Drechsler Brown and Williams funeral home and its parking lot, is located in the southwest corner of Marion Street with Pleasant Street. As proposed, the site will be redeveloped to provide a seven-story building containing approximately 153 apartment units, six maisonettes, an approximate 1,127 square-foot café, and a 123-space parking garage. The parking garage will be utilized by the residents only. Access to the parking garage will be provided off the public alley.

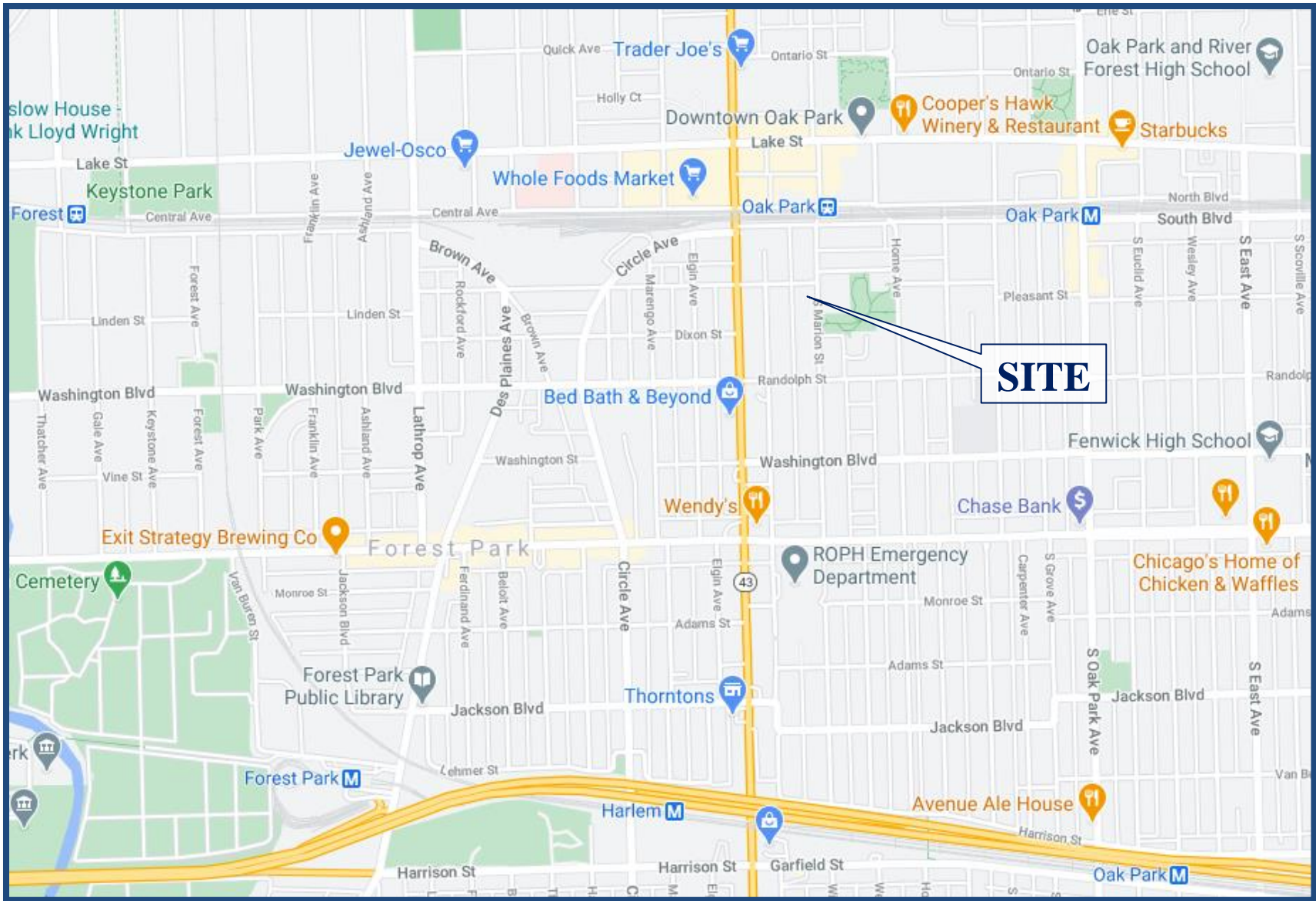
The purpose of this study was to examine background traffic conditions, assess the impact that the proposed development will have on traffic conditions in the area, and determine if any roadway or access improvements are necessary to accommodate traffic generated by the proposed development. **Figure 1** shows the location of the site in relation to the area roadway system. **Figure 2** shows an aerial view of the site.

The sections of this report present the following:

- Existing roadway conditions
- A description of the proposed development
- Directional distribution of the development traffic
- Vehicle trip generation for the development
- Future traffic conditions including access to the development
- Traffic analyses for the weekday morning, weekday evening, and Saturday midday peak hours
- Recommendations with respect to adequacy of the site access and adjacent roadway system
- Evaluation of the adequacy of the parking supply

Traffic capacity analyses were conducted for the weekday morning, weekday evening, and Saturday midday peak hours for the following conditions:

1. Existing Conditions - Analyzes the capacity of the existing roadway system using existing peak hour traffic volumes in the surrounding area.
2. Background Conditions - Analyzes the capacity of the future roadway system using the traffic volumes that include the existing traffic volumes, the ambient area growth not attributable to any particular development, and the traffic to be generated by the future parking garage located within the Rush Hospital Oak Park campus and by the full occupancy of the Eleven33 apartment building located in the southeast corner of South Boulevard with Harlem Avenue.
3. Projected Conditions – Analyzes the capacity of the future roadway system using the traffic volumes that include the existing traffic volumes, ambient area growth not attributable to any particular development, and the traffic estimated to be generated by the proposed development.

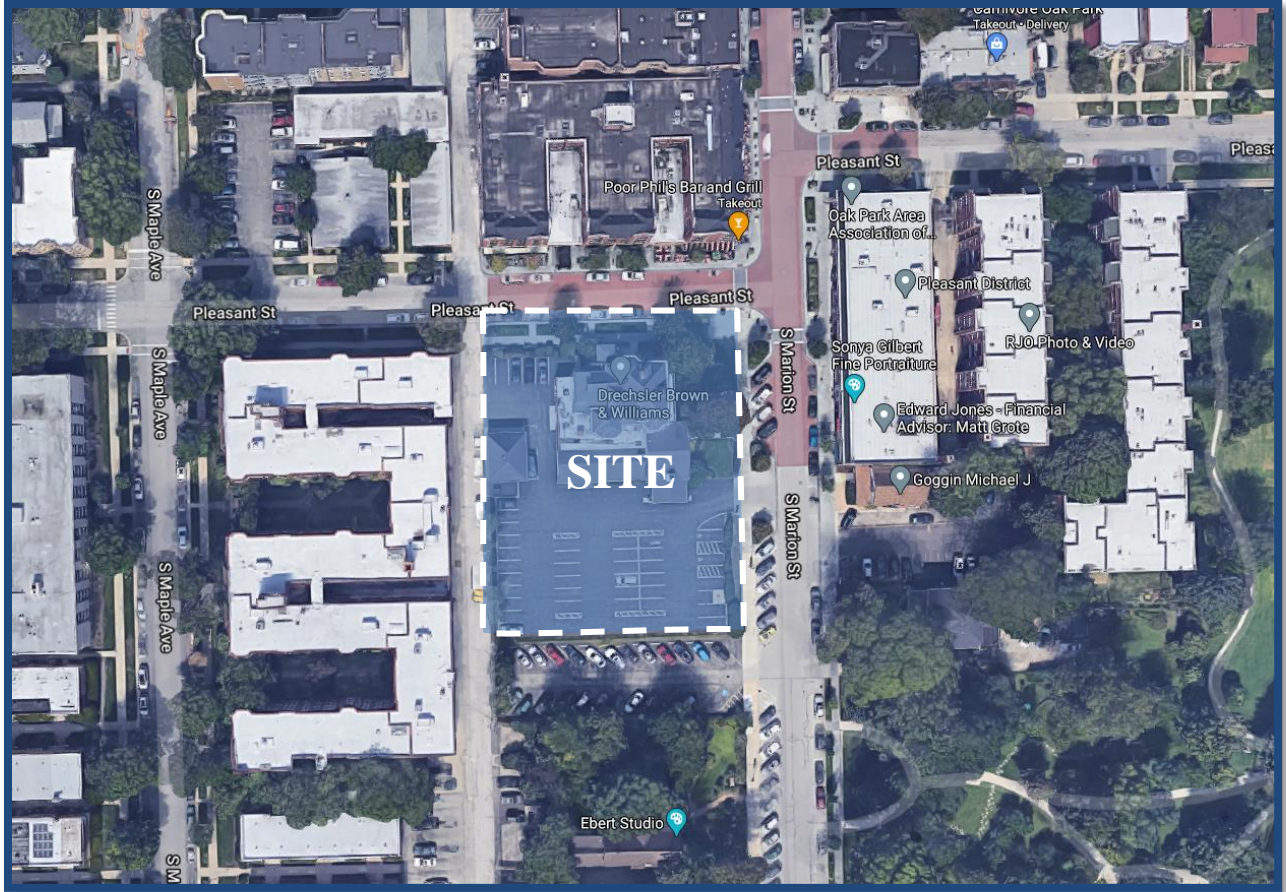


Site Location

Figure 1

*Proposed Residential Development
Oak Park, Illinois*





Aerial View of Site

Figure 2

2. Existing Conditions

The following provides a description of the geographical location of the site, physical characteristics of the area roadway system including lane usage and traffic control devices, and existing peak hour traffic volumes.

Site Location

The site, which currently contains Drechsler Brown and Williams funeral homes and its parking lot, is bounded by Pleasant Street to the north, Marion Street to the east, a parking lot and Ebert Studio to the south, and an apartment building to the west.

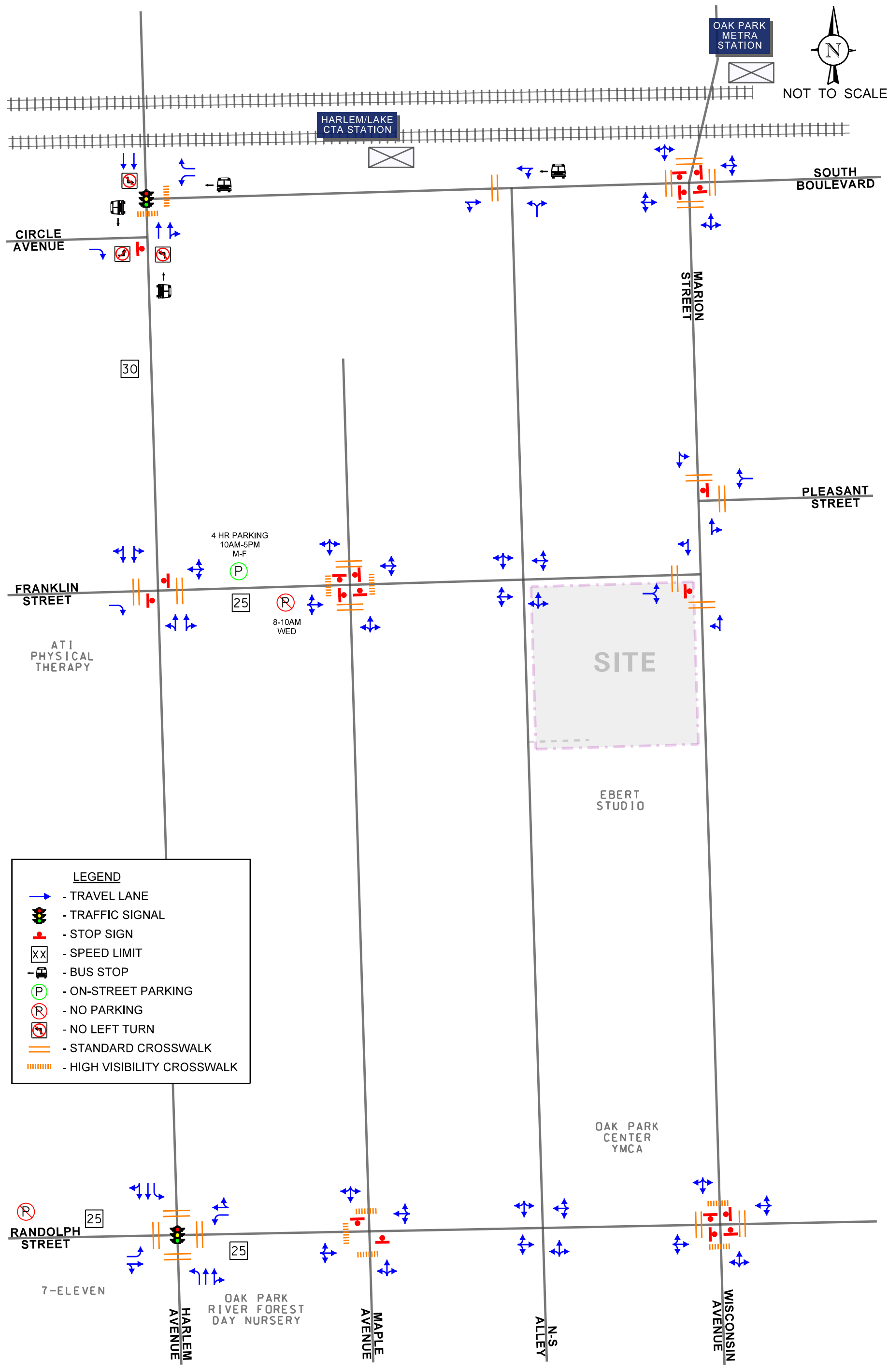
Existing Roadway System Characteristics

The characteristics of the existing roadways near the proposed development are described below and illustrated in **Figure 3**.

Harlem Avenue (IL 43) is a north-south other principal arterial roadway that generally provides two lanes in each direction within the vicinity of the site. At its signalized intersection with South Boulevard, Harlem Avenue provides a through lane and a combined through/right-turn lane on the northbound approach. The southbound approach provides two through lanes. A high-visibility crosswalk is provided on the south leg of this intersection. At its unsignalized intersection with Circle Avenue, Harlem Avenue provides two through lanes on the northbound approach. Northbound left turn movements onto Circle Avenue are prohibited. The southbound approach provides a through lane and a combined through/right-turn lane. At its unsignalized intersection with Pleasant Street and Franklin Street, Harlem Avenue provides a combined through/right-turn lane and a combined through/left-turn lane on both approaches. At its signalized intersection with Randolph Street, Harlem Avenue provides an exclusive left-turn lane, a through lane and a combined through/right-turn lane on both approaches. Standard style crosswalks are provided on the north and south legs of this intersection. Harlem Avenue is under the jurisdiction of the Illinois Department of Transportation (IDOT) and is classified as a Strategic Regional Arterial (SRA). In addition, Harlem Avenue carries an Annual Average Daily Traffic (AADT) volume of approximately 35,200 vehicles north of South Boulevard, 35,300 vehicles between South Boulevard and Randolph Street and 35,400 vehicles south of Randolph Street (IDOT 2019). Harlem Avenue has a posted speed limit of 30 miles per hour.



NOT TO SCALE



LEGEND

- TRAVEL LANE
- TRAFFIC SIGNAL
- STOP SIGN
- SPEED LIMIT
- BUS STOP
- ON-STREET PARKING
- NO PARKING
- NO LEFT TURN
- STANDARD CROSSWALK
- HIGH VISIBILITY CROSSWALK

203 SOUTH MARION STREET
 OAK PARK, ILLINOIS

EXISTING ROADWAY CHARACTERISTICS

Randolph Street is an east-west, major collector west of Harlem Avenue and a local road east of Harlem Avenue and generally provides one lane in each direction in the vicinity of the site. At its signalized intersection with Harlem Avenue, Randolph Street provides an exclusive left-turn lane and a combined through/right-turn lane on both approaches. Standard style crosswalks are provided on the east and west legs of this intersection. At its unsignalized intersection with Maple Avenue, Randolph Street provides a combined left/through/right-turn lane on both approaches. A high-visibility crosswalk is provided on the west leg of this intersection. At its all-way stop-sign controlled intersection with Marion Street, Randolph Street provides a combined left/through/right-turn lane on both approaches. Standard style crosswalks are provided on the east and west legs of this intersection. Randolph Street is under the jurisdiction of IDOT west of Harlem Avenue and under the jurisdiction of the Village of Oak Park east of Harlem Avenue, carries an AADT volume of 8,550 vehicles (IDOT 2018), and has a posted speed limit of 25 miles per hour.

Marion Street is a north-south local road that generally provides one lane in each direction and continues as Wisconsin Avenue south of Randolph Street. At its all-way stop-sign controlled intersection with South Boulevard, Marion Street provides a combined left/through/right-turn lane on both approaches. Standard style crosswalks are provided on the north and south legs of this intersection. At its offset unsignalized intersection with the east leg of Pleasant Street, Marion Street provides a combined through/right-turn lane on the northbound approach and a combined through/left-turn lane on the southbound approach. At its offset unsignalized intersection with the west leg of Pleasant Street, Marion Street provides a combined through/left-turn lane on the northbound approach and a combined through/right-turn lane on the southbound approach. Standard style crosswalks are provided on the north and south legs of this intersection. At its all-way stop-sign controlled intersection with Randolph Street, Marion Street provides a combined left/through/right-turn lane on both approaches. High-visibility crosswalks are provided on the north and south legs of this intersection. Marion Street is under the jurisdiction of the Village of Oak Park and carries an AADT volume of 2,200 vehicles (IDOT 2018).

Pleasant Street is an east-west local road that provides one lane in each direction and continues as Franklin Street west of Harlem Avenue. At its offset unsignalized intersection with Marion Street, Pleasant Street provides a combined left/right-turn lane on both approaches under stop sign control. Standard style crosswalks are provided on the east and west legs of this intersection. At its unsignalized intersection with Harlem Avenue, Franklin Street provides an exclusive right-turn lane on the eastbound approach under stop sign control and Pleasant Street provides a combined left/through/right-turn lane on the westbound approach under stop sign control. Standard style crosswalks are provided on the east and west legs of this intersection. At its all-way stop-sign controlled intersection with Maple Avenue, Pleasant Street provides a combined left/through/right-turn lane on both approaches. High-visibility crosswalks are provided on the east and west legs of this intersection. Pleasant Street is under the jurisdiction of the Village of Oak Park and has a posted speed limit of 25 miles per hour.

South Boulevard is an east-west local roadway that generally provides one lane in each direction in the vicinity of the site. At its signalized intersection with Harlem Avenue, South Boulevard provides an exclusive left-turn lane and an exclusive right-turn lane on the westbound approach. A high-visibility crosswalk is provided on the east leg of this intersection. At its all-way stop-sign controlled intersection with Marion Street, South Boulevard provides a combined left/through/right-turn lane on both approaches. Standard style crosswalks are provided on the east and west legs of this intersection. South Boulevard is under the jurisdiction of the Village of Oak Park.

Maple Avenue is a north-south local roadway that generally provides one lane in each direction in the vicinity of the site. At its all-way stop-sign controlled intersection with Pleasant Street, Maple Avenue provides a combined left/through/right-turn lane on both approaches. Standard style crosswalks are provided on the north and south legs of this intersection. At its unsignalized intersection with Randolph Street, Maple Avenue provides a combined left/through/right-turn lane on both approaches under stop sign control. High-visibility crosswalks are provided on the north and south legs of this intersection. Maple Avenue is under the jurisdiction of the Village of Oak Park.

Existing Traffic Volumes

In order to determine current traffic conditions in the vicinity of the site, KLOA, Inc. conducted peak period vehicle, pedestrian, and bicycle traffic counts using Miovision Video Scout Collection Units on Thursday, September 10, 2020 during the weekday morning (7:00 to 9:00 A.M.) and weekday evening (4:00 to 6:00 P.M.) peak periods and on Saturday, September 12, 2020 during the midday peak period (11:30 A.M. to 2:00 P.M.) at the following intersections:

- Harlem Avenue with South Boulevard and Circle Avenue
- Harlem Avenue with Pleasant Street and Franklin Street
- Harlem Avenue with Randolph Street
- Maple Avenue with Pleasant Street
- Maple Avenue with Randolph Street
- Marion Street with South Boulevard
- Marion Street with Pleasant Street
- Marion Street with Randolph Street and Wisconsin Avenue
- South Boulevard with the Public Alley
- Pleasant Street with the Public Alley
- Randolph Street with the Public Alley

It should be noted that, due to the ongoing Covid-19 pandemic, vehicular traffic counts were adjusted based on previous counts conducted by KLOA, Inc in 2015 at the intersections of Harlem Avenue with South Boulevard and Circle Avenue, Harlem Avenue with Pleasant Street and Franklin Street, Maple Avenue with Pleasant Street, Pleasant Street with Marion Street, and Marion Street with South Boulevard and based on pre-Covid-19 data in other communities. Based on the above, traffic volumes on road segments in the area were increased between 10 and 50 percent during the peak hours (See Appendix for detailed breakdown of the applied adjustments). Based on the turning movement count data, it was determined that the weekday morning peak hour generally occurs between 7:15 and 8:15 A.M., the weekday evening peak hour generally occurs between 4:15 and 5:15 P.M., and the Saturday midday peak hour generally occurs between 12:45 and 1:45 P.M. These three respective peak hours will be used for the traffic capacity analyses presented later in this report. **Figure 4** shows the adjusted Year 2020 peak hour traffic volumes. **Figure 5** illustrates the adjusted Year 2020 pedestrian and bicycle traffic volumes, showing direction of travel. Copies of the traffic count summary sheets are located in the Appendix.



NOT TO SCALE

OAK PARK METRA STATION

HARLEM/LAKE CTA STATION

SOUTH BOULEVARD

MARION STREET

PLEASANT STREET

CIRCLE AVENUE

FRANKLIN STREET

RANDOLPH STREET

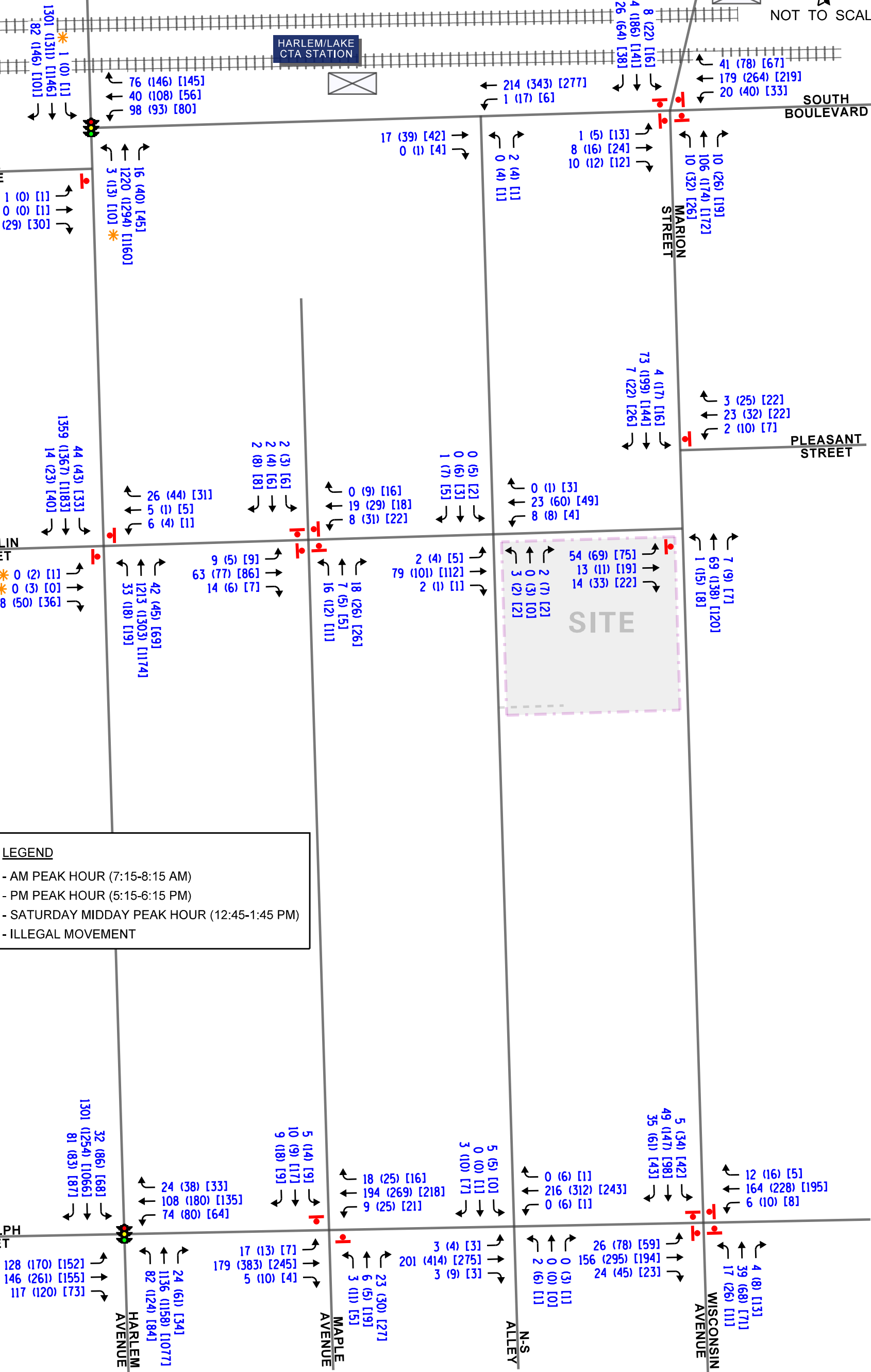
HARLEM AVENUE

MAPLE AVENUE

N-S ALLEY

WISCONSIN AVENUE

SITE



LEGEND

- 00 - AM PEAK HOUR (7:15-8:15 AM)
- (00) - PM PEAK HOUR (5:15-6:15 PM)
- [00] - SATURDAY MIDDAY PEAK HOUR (12:45-1:45 PM)
- * - ILLEGAL MOVEMENT

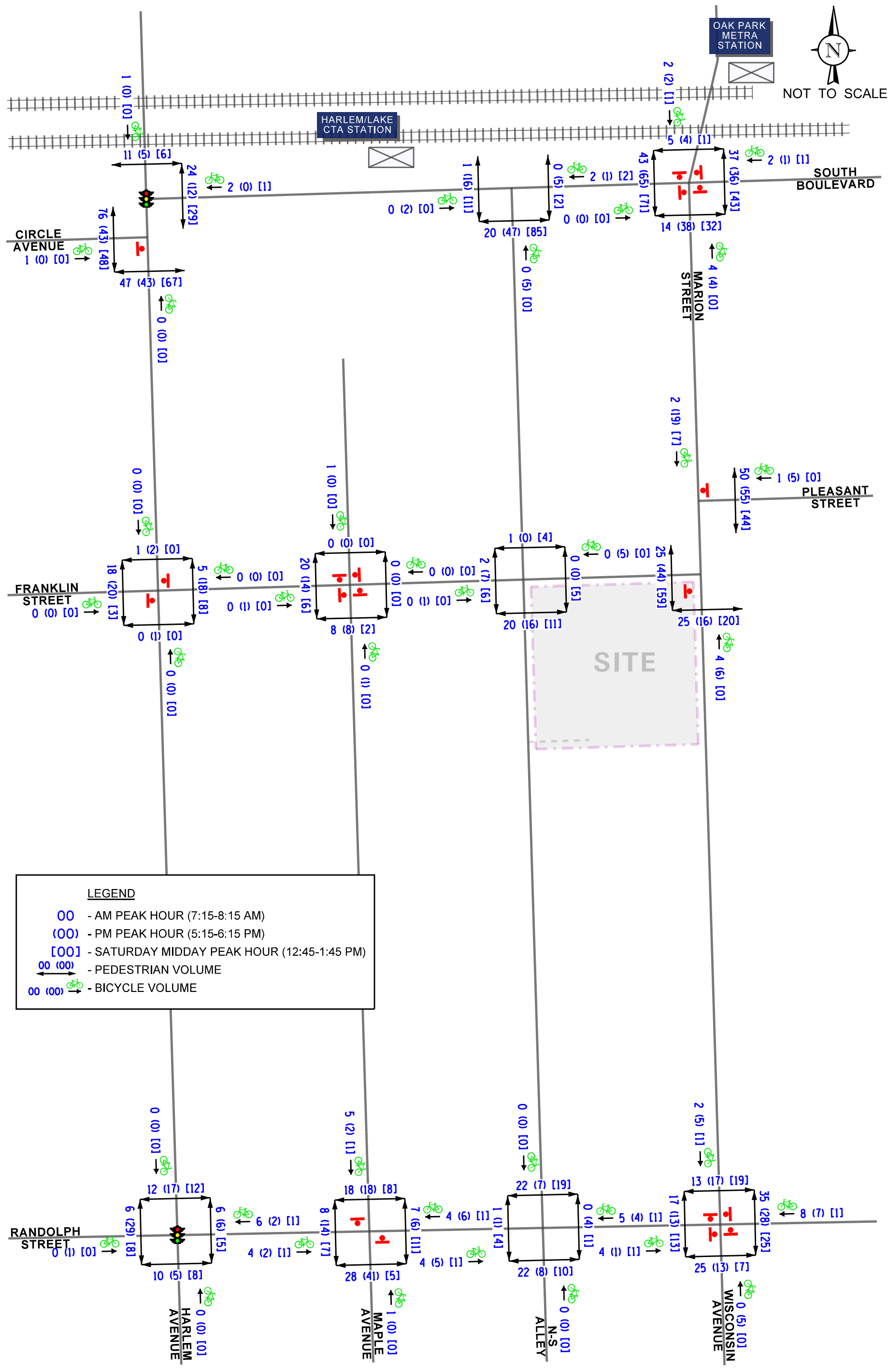
203 SOUTH MARION STREET
OAK PARK, ILLINOIS

YEAR 2020 BASE TRAFFIC VOLUMES





NOT TO SCALE



LEGEND

- 00 - AM PEAK HOUR (7:15-8:15 AM)
- (00) - PM PEAK HOUR (5:15-6:15 PM)
- [00] - SATURDAY MIDDAY PEAK HOUR (12:45-1:45 PM)
- 00 (00) - PEDESTRIAN VOLUME
- 00 (00) - BICYCLE VOLUME

203 SOUTH MARION STREET
 OAK PARK, ILLINOIS

EXISTING PEDESTRIAN AND BICYCLE TRAFFIC VOLUMES

KLOA
 Kenig, Lindgren, O'Hara, Aboona, Inc.
 Job No: 20-193 Figure: 5

Crash Analysis

KLOA, Inc. obtained accident data for the most recent available past five years (2014 to 2018) for the intersections of Harlem Avenue with South Boulevard and Circle Avenue, Harlem Avenue Pleasant Street and Franklin Street, Harlem Avenue with Randolph Street, Maple Avenue with Pleasant Street, Maple Avenue with Randolph Street, Marion Street with South Boulevard, Marion Street with Pleasant Street, Marion Street with Randolph Street and Wisconsin Avenue, South Boulevard with the public alley, Pleasant Street with the public alley and Randolph Street with the public alley. **Tables 1 through 8** show a summary of the crash data for those intersections¹. It should be noted that one pedestrian crash was reported at the intersection of Pleasant Street with the public alley in 2016 and two crashes were reported at the intersection of Randolph Street with the public alley in 2015. A review of the crash data revealed that no fatalities were reported at any location during the reviewed period.

Table 1
HARLEM AVENUE WITH SOUTH BOULEVARD - CRASH SUMMARY

| Year | Type of Accident Frequency | | | | | | Total |
|---------------------|----------------------------|----------|----------------|------------|----------------|----------------|------------|
| | Angle | Object | Rear End | Sideswipe | Turning | Other | |
| 2014 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| 2015 | 0 | 0 | 0 | 2 | 2 | 0 | 4 |
| 2016 | 0 | 0 | 0 | 1 | 0 | 1 | 2 |
| 2017 | 1 | 0 | 2 | 1 | 1 | 1 | 6 |
| 2018 | 1 | 0 | 0 | 1 | 0 | 0 | 2 |
| Total | 2 | 0 | 2 | 5 | 4 | 2 | 15 |
| Average/Year | <1.0 | 0 | <1.0 | 1.0 | <1.0 | <1.0 | 3.0 |

¹ IDOT DISCLAIMER: The motor vehicle crash data referenced herein was provided by the Illinois Department of Transportation. Any conclusions drawn from analysis of the aforementioned data are the sole responsibility of the data recipient(s). Additionally, for coding years 2015 to present, the Bureau of Data Collection uses the exact latitude/longitude supplied by the investigating law enforcement agency to locate crashes. Therefore, location data may vary in previous years since data prior to 2015 was physically located by bureau personnel.

Table 2
 HARLEM AVENUE WITH PLEASANT STREET/FRANKLIN STREET - CRASH
 SUMMARY

| Year | Type of Accident Frequency | | | | | | Total |
|---------------------|----------------------------|----------|----------------|-----------|------------|----------|------------|
| | Angle | Object | Rear End | Sideswipe | Turning | Other | |
| 2014 | 2 | 0 | 0 | 0 | 0 | 0 | 2 |
| 2015 | 0 | 0 | 2 | 0 | 1 | 0 | 3 |
| 2016 | 1 | 0 | 0 | 0 | 2 | 0 | 3 |
| 2017 | 5 | 0 | 0 | 0 | 0 | 0 | 5 |
| 2018 | 4 | 0 | 2 | 0 | 3 | 0 | 9 |
| Total | 12 | 0 | 4 | 0 | 6 | 0 | 22 |
| Average/Year | 2.4 | 0 | <1.0 | 0 | 2.4 | 0 | 4.4 |

Table 3
 HARLEM AVENUE WITH RANDOLPH STREET - CRASH SUMMARY

| Year | Type of Accident Frequency | | | | | | Total |
|---------------------|----------------------------|----------|------------|----------------|------------|----------------|------------|
| | Angle | Object | Rear End | Sideswipe | Turning | Other | |
| 2014 | 1 | 0 | 3 | 0 | 1 | 0 | 5 |
| 2015 | 0 | 0 | 4 | 0 | 2 | 0 | 6 |
| 2016 | 0 | 0 | 5 | 0 | 2 | 1 | 8 |
| 2017 | 0 | 0 | 1 | 1 | 1 | 1 | 4 |
| 2018 | 2 | 0 | 1 | 1 | 4 | 0 | 8 |
| Total | 3 | 0 | 14 | 2 | 10 | 2 | 31 |
| Average/Year | <1.0 | 0 | 2.8 | <1.0 | 2.0 | <1.0 | 6.2 |

Table 4
 MAPLE AVENUE WITH PLEASANT STREET - CRASH SUMMARY

| Type of Accident Frequency | | | | | | | |
|----------------------------|----------------|----------------|----------|-----------|----------|----------|----------------|
| Year | Angle | Object | Rear End | Sideswipe | Turning | Other | Total |
| 2014 | 2 | 0 | 0 | 0 | 0 | 0 | 2 |
| 2015 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2016 | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| 2017 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2018 | 0 | 1 | 0 | 0 | 0 | 0 | 1 |
| Total | 3 | 1 | 0 | 0 | 0 | 0 | 4 |
| Average/Year | <1.0 | <1.0 | 0 | 0 | 0 | 0 | <1.0 |

Table 5
 MAPLE AVENUE WITH RANDOLPH STREET - CRASH SUMMARY

| Type of Accident Frequency | | | | | | | |
|----------------------------|------------|----------|----------|-----------|----------|----------|------------|
| Year | Angle | Object | Rear End | Sideswipe | Turning | Other | Total |
| 2014 | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| 2015 | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| 2016 | 2 | 0 | 0 | 0 | 0 | 0 | 2 |
| 2017 | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| 2018 | 3 | 0 | 0 | 0 | 0 | 0 | 3 |
| Total | 8 | 0 | 0 | 0 | 0 | 0 | 8 |
| Average/Year | 1.6 | 0 | 0 | 0 | 0 | 0 | 1.6 |

Table 6

MARION STREET WITH RANDOLPH STREET - CRASH SUMMARY

| Year | Type of Accident Frequency | | | | | | Total |
|---------------------|----------------------------|----------------|----------------|-----------|----------------|----------------|------------|
| | Angle | Object | Rear End | Sideswipe | Turning | Other | |
| 2014 | 0 | 1 | 0 | 0 | 0 | 1 | 2 |
| 2015 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2016 | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| 2017 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| 2018 | 0 | 0 | 1 | 0 | 1 | 0 | 2 |
| Total | 1 | 1 | 1 | 0 | 2 | 1 | 6 |
| Average/Year | <1.0 | <1.0 | <1.0 | 0 | <1.0 | <1.0 | 1.2 |

Table 7

MARION STREET WITH SOUTH BOULEVARD - CRASH SUMMARY

| Year | Type of Accident Frequency | | | | | | Total |
|---------------------|----------------------------|----------|----------|-----------|----------------|----------|------------|
| | Angle | Object | Rear End | Sideswipe | Turning | Other | |
| 2014 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2015 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2016 | 1 | 0 | 0 | 0 | 1 | 0 | 2 |
| 2017 | 2 | 0 | 0 | 0 | 0 | 0 | 2 |
| 2018 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| Total | 3 | 0 | 0 | 0 | 2 | 0 | 5 |
| Average/Year | <1.0 | 0 | 0 | 0 | <1.0 | 0 | 1.0 |

Table 8

MARION STREET WITH PLEASANT STREET - CRASH SUMMARY

| Year | Type of Accident Frequency | | | | | | Total |
|---------------------|----------------------------|----------------|----------------|----------------|----------------|----------------|------------|
| | Angle | Ped | Rear End | Sideswipe | Turning | Parked Vehicle | |
| 2014 | 0 | 0 | 0 | 0 | 1 | 3 | 4 |
| 2015 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| 2016 | 1 | 1 ¹ | 1 | 0 | 0 | 0 | 3 |
| 2017 | 1 | 0 | 0 | 0 | 0 | 5 | 6 |
| 2018 | 0 | 0 | 0 | 1 | 0 | 3 | 4 |
| Total | 2 | 1 | 1 | 1 | 1 | 12 | 18 |
| Average/Year | <1.0 | <1.0 | <1.0 | <1.0 | <1.0 | 2.4 | 3.6 |

1 – Accident occurred at the intersection of Pleasant Street and the north-south alley west of Marion Street

Notes:

- Twelve of the eighteen total accidents involved parked vehicles and, as such, did not occur at or within the intersection.
- , Approximately 58 percent of the parked vehicle accidents were due to driver error (i.e. motorists not properly gaging the available distance when parking)

3. Traffic Characteristics of Proposed Development

In order to properly evaluate future traffic conditions in the surrounding area, it was necessary to determine the traffic characteristics of the proposed development, including the directional distribution and volumes of traffic that it will generate.

Proposed Site and Development Plan

As proposed, the site will be redeveloped to provide a seven-story building containing approximately 153 apartment units, six maisonettes, an approximate 1,127 square-foot café, and a 123-space parking garage. The café is located at the northeast corner of the building and the six maisonette units are located on the east side of the site facing Marion Street. It should be noted that the parking garage will be utilized by the residents only. Access to the parking garage will be provided off the public alley. A copy of the preliminary site plan depicting the proposed development is included in the Appendix.

Proposed Pedestrian Access

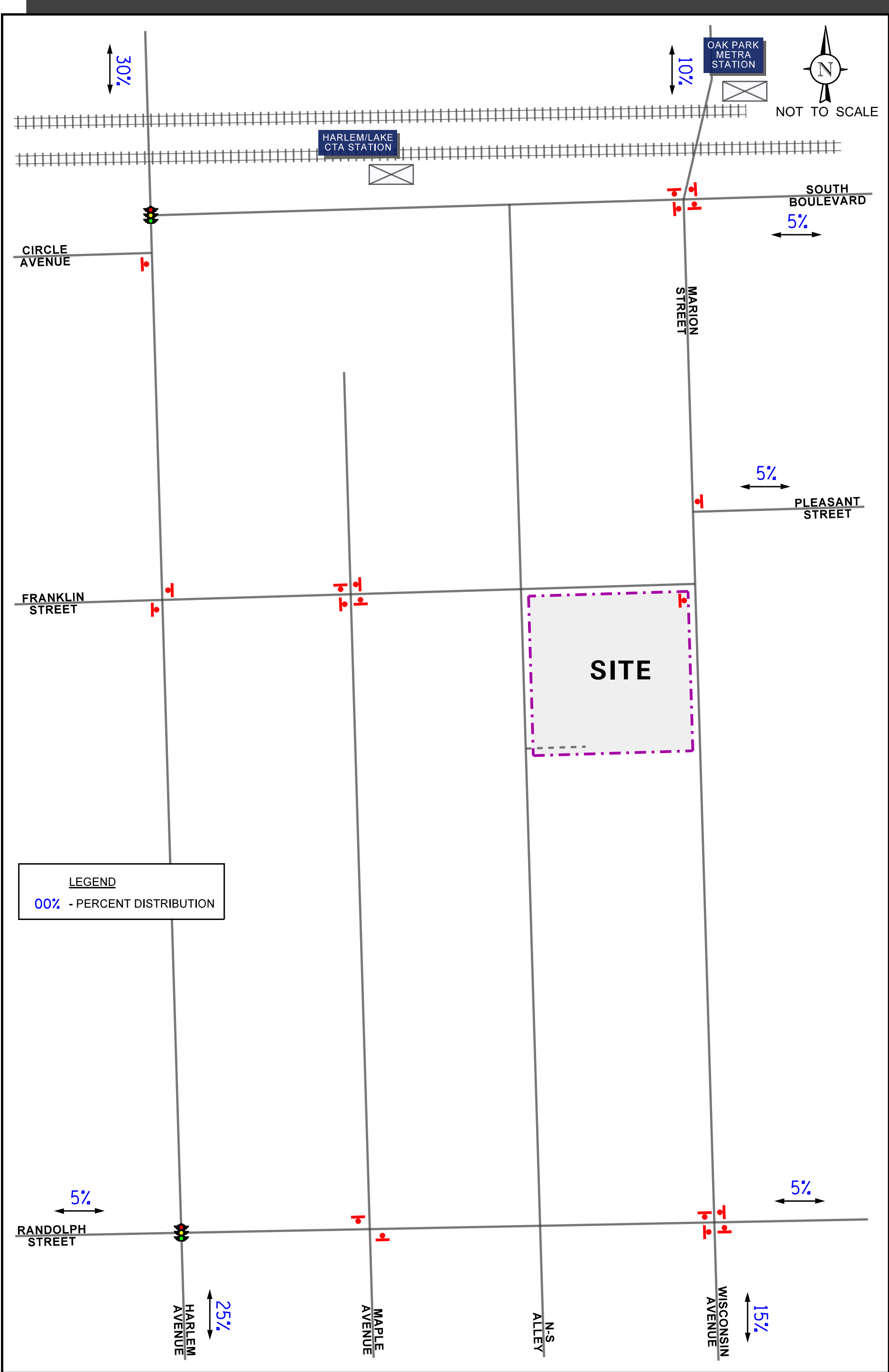
Pedestrian access to the proposed residential building will be provided via a lobby located on the north side of the building facing Pleasant Street, and a loading zone for pick-up/drop-off will be provided on the south side of Pleasant Street. Additionally, the entrance to the café will be provided off Pleasant Street.

Proposed Vehicle Access

Access to the proposed 123-space parking garage will be provided off the 18-foot wide north-south public alley located approximately 85 feet south of Pleasant Street. This access drive will provide one inbound lane and one outbound lane with outbound movements under stop sign control. Visual warning devices should be provided at both access drives. Turning movement exhibits to and from both access drives are included in the Appendix.

Directional Distribution

The directions from which residents and visitors of the development will approach and depart the site were estimated based on existing travel patterns, as determined from the traffic counts. **Figure 6** illustrates the directional distribution of the traffic to be generated by the proposed development.



203 SOUTH MARION STREET
 OAK PARK, ILLINOIS

ESTIMATED DIRECTIONAL DISTRIBUTION

Development Traffic Generation

The vehicle trip generation for the overall development was calculated using data published in the Institute of Transportation Engineers (ITE) *Trip Generation Manual*, 10th Edition. The location of the site within downtown Oak Park and its proximity to the train stations and PACE/CTA bus routes and other modes of transportation (i.e. car sharing facilities) fit the criterion of a Transit Oriented Development (TOD) that results in less dependence on automobile use. Based on a review of the census data (included in the Appendix), approximately 40 percent of the residents currently use other modes of transportation. As such, a 40 percent reduction factor was applied to the estimated vehicle traffic to be generated by the residential use. For the retail use and in order to reflect the mixed-use nature of the development, its location within downtown Oak Park and proximity to other retail destinations, the estimated trips were reduced by 20 percent. **Table 9** shows the estimated vehicle trip generation for the weekday morning, weekday evening and Saturday midday peak hours. **Table 10** shows the estimated pedestrian trip generation for the weekday morning, weekday evening and Saturday midday peak hours. It should be noted that the pedestrian trip generation shown in Table 10 also assumes that one pedestrian trip will be generated for every vehicular trip reduced in Table 9. Copies of the ITE trip generation worksheets are included in the Appendix.

Table 9

ESTIMATED PEAK HOUR VEHICLE TRIP GENERATION

| ITE Land Use Code | Type/Size | Weekday Morning Peak Hour | | | Weekday Evening Peak Hour | | | Saturday Midday Peak Hour | | |
|-------------------|-------------------------------|---------------------------|------------|------------|---------------------------|------------|------------|---------------------------|------------|------------|
| | | In | Out | Total | In | Out | Total | In | Out | Total |
| 221 | Apartments (153 units) | 14 | 41 | 55 | 41 | 26 | 67 | 35 | 36 | 71 |
| | <i>- 40 Percent Reduction</i> | <i>-6</i> | <i>-16</i> | <i>-22</i> | <i>-17</i> | <i>-10</i> | <i>-27</i> | <i>-14</i> | <i>-14</i> | <i>-28</i> |
| | Subtotal | 8 | 25 | 33 | 24 | 16 | 40 | 21 | 22 | 43 |
| 220 | Maisonette (6 units) | 1 | 2 | 3 | 3 | 2 | 5 | 2 | 2 | 4 |
| | <i>- 40 Percent Reduction</i> | <i>-0</i> | <i>-1</i> | <i>-1</i> | <i>-1</i> | <i>-1</i> | <i>-2</i> | <i>-1</i> | <i>-1</i> | <i>-2</i> |
| | Subtotal | 1 | 1 | 2 | 2 | 1 | 3 | 1 | 1 | 2 |
| 936 | Café (1,127 s.f.) | 58 | 56 | 114 | 18 | 19 | 37 | 33 | 34 | 67 |
| | <i>- 20 Percent Reduction</i> | <i>-12</i> | <i>-11</i> | <i>-23</i> | <i>-4</i> | <i>-4</i> | <i>-8</i> | <i>-7</i> | <i>-7</i> | <i>-14</i> |
| | Subtotal | 46 | 45 | 91 | 14 | 15 | 29 | 26 | 27 | 53 |
| | Total | 55 | 71 | 126 | 40 | 32 | 72 | 48 | 50 | 98 |

Table 10

ESTIMATED PEAK HOUR PEDESTRIAN TRIP GENERATION

| ITE Land Use Code | Type/Size | Weekday Morning Peak Hour | | | Weekday Evening Peak Hour | | | Saturday Midday Peak Hour | | |
|-------------------|------------------------|---------------------------|-----------|------------|---------------------------|-----------|------------|---------------------------|-----------|------------|
| | | In | Out | Total | In | Out | Total | In | Out | Total |
| 221 | Apartments (153 units) | 18 | 64 | 82 | 73 | 37 | 110 | 70 | 41 | 111 |
| 220 | Maisonette (6 units) | 0 | 3 | 3 | 3 | 2 | 5 | 3 | 2 | 5 |
| 936 | Café (1,127 s.f.) | 17 | 15 | 32 | 9 | 8 | 17 | 12 | 11 | 23 |
| Total | | 35 | 82 | 117 | 85 | 47 | 132 | 85 | 54 | 139 |

Note: Pedestrian trip generation also includes the assumption that one pedestrian trip will be generated per every vehicular trip reduced in Table 9

4. Projected Traffic Conditions

The total projected traffic volumes include the existing traffic volumes, increase in background traffic due to growth, and the traffic estimated to be generated by the proposed subject development.

Development Traffic Assignment

The estimated peak hour traffic volumes that will be generated by the proposed development were assigned to the roadway system in accordance with the previously described directional distribution. It should be noted that the café parking demand will be accommodated by the on-street parking in the area. **Figure 7** illustrates the assignment of the vehicle traffic volumes to be generated by the proposed development. **Figure 8** illustrates the assignment of the pedestrian traffic volumes to be generated by the proposed development.

Background Traffic Conditions

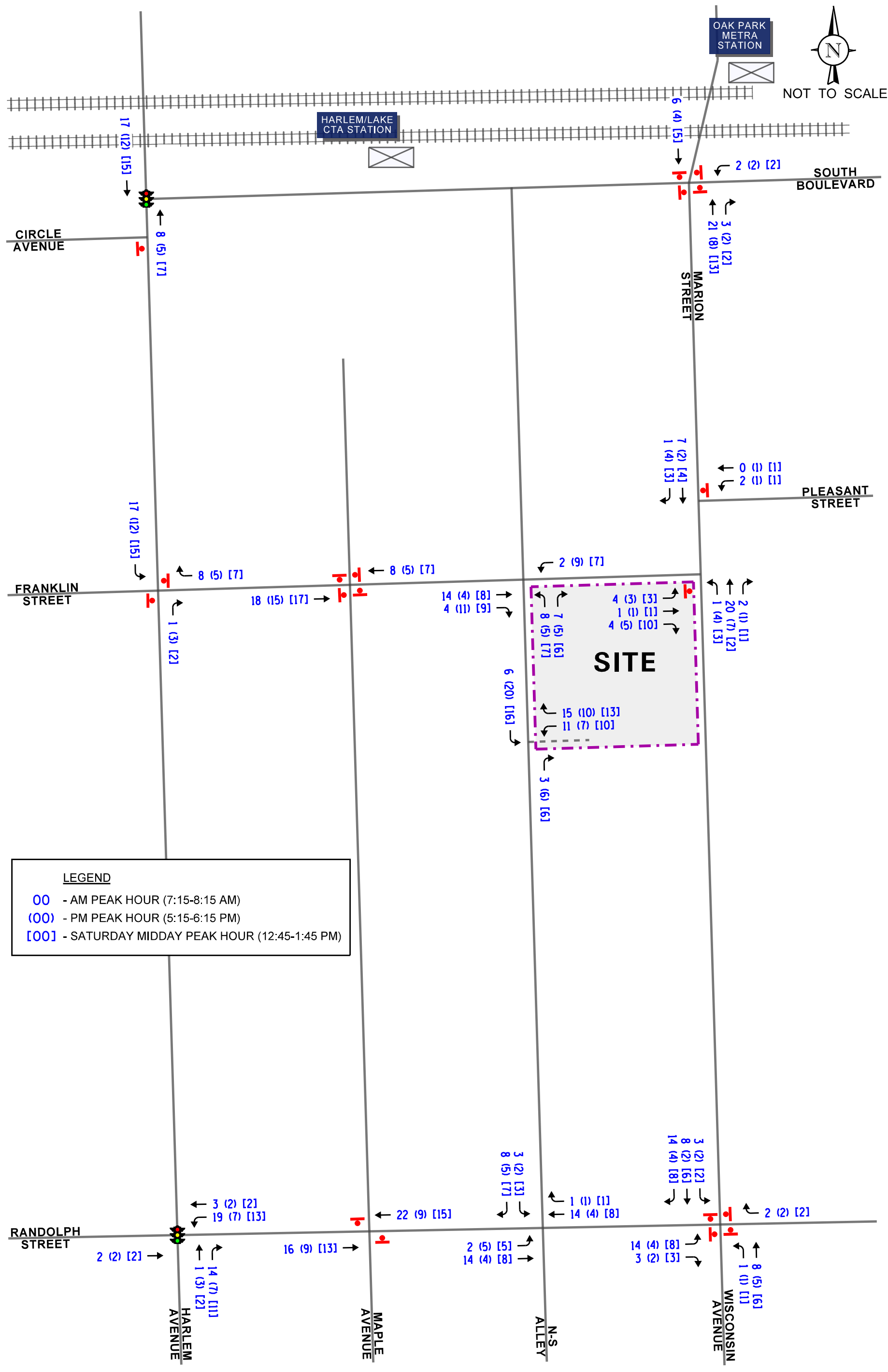
The existing traffic volumes (Figure 4) were increased by a regional growth factor to account for the increase in existing traffic related to regional growth in the area (i.e., not attributable to any particular planned development). Based on 2050 Average Daily Traffic (ADT) projections provided by the Chicago Metropolitan Agency for Planning (CMAP) in a letter dated October 1, 2020, the existing traffic volumes were increased by an annually compounded growth rate for six years (one-year buildout plus five years) totaling 1.8 percent to represent Year 2026 total projected conditions. Additionally, the Year 2026 background traffic conditions include the traffic to be generated by the future parking garage located within the Rush Hospital Oak Park campus, and by the full occupancy of the Eleven33 apartment building located at the southeast corner of South Boulevard with Harlem Avenue, which based on our understanding it is currently 75 percent occupied. **Figure 9** shows the Year 2026 background traffic conditions. A copy of the CMAP 2050 projections letter is included in the Appendix.

Total Projected Traffic Volumes

The total projected traffic volumes include the Year 2026 background traffic volumes (Figure 9) and the traffic estimated to be generated by the proposed development (Figure 7). **Figure 10** shows the Year 2026 total projected traffic volumes.



NOT TO SCALE

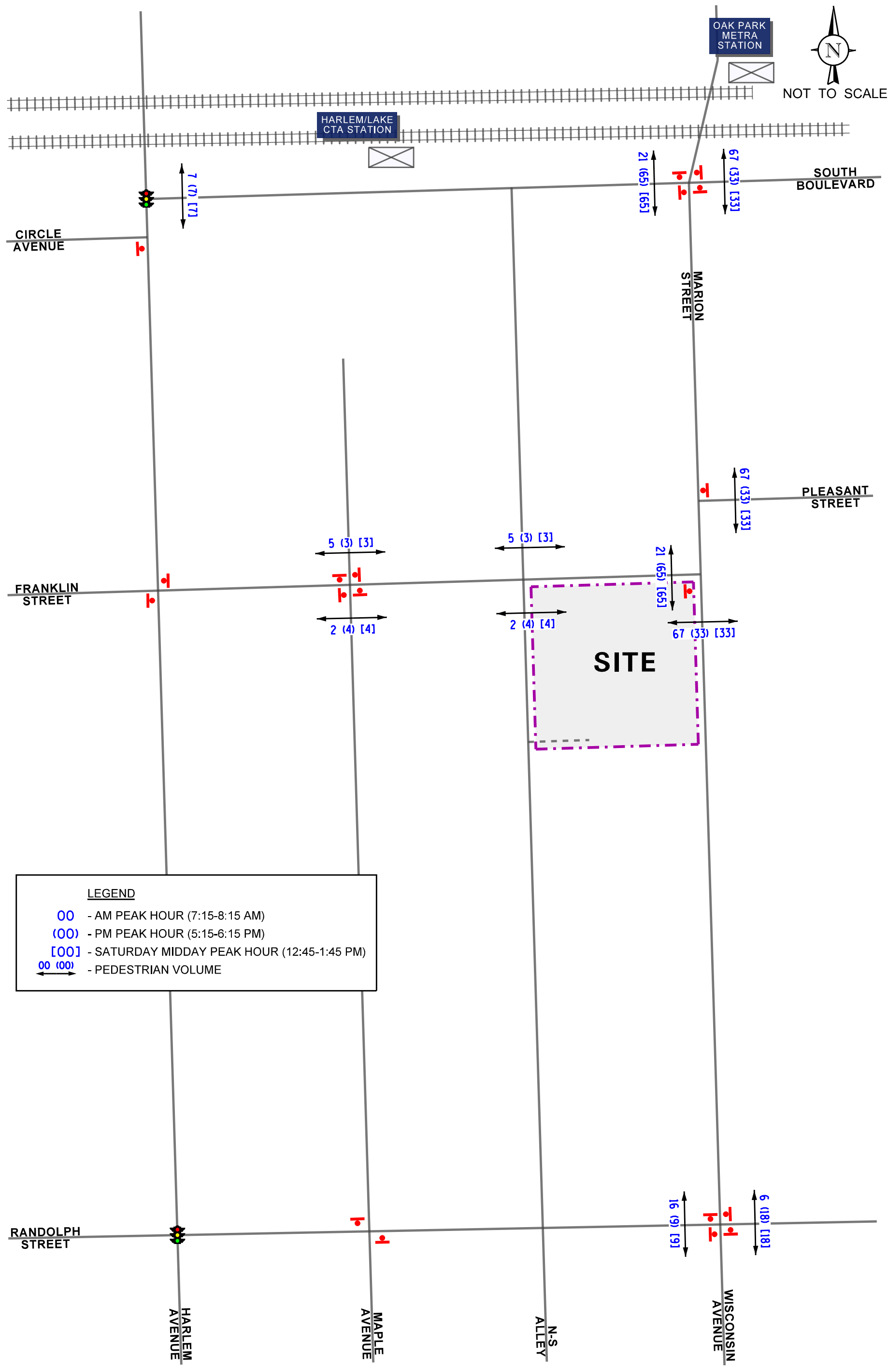


203 SOUTH MARION STREET
OAK PARK, ILLINOIS

ESTIMATED SITE-GENERATED
VEHICLE TRAFFIC VOLUMES



NOT TO SCALE



LEGEND

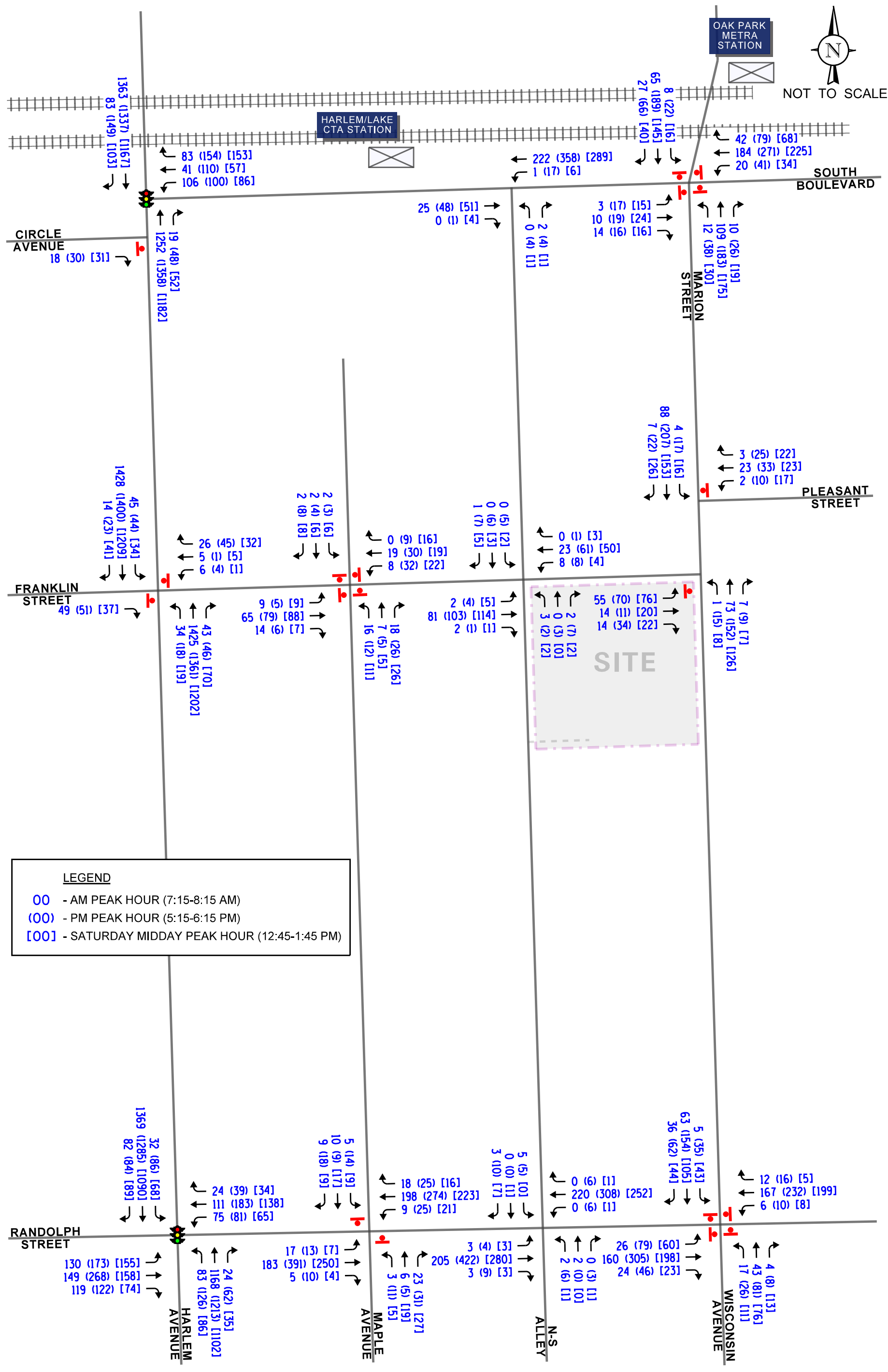
- 00 - AM PEAK HOUR (7:15-8:15 AM)
- (00) - PM PEAK HOUR (5:15-6:15 PM)
- [00] - SATURDAY MIDDAY PEAK HOUR (12:45-1:45 PM)
- 00 (00) - PEDESTRIAN VOLUME

203 SOUTH MARION STREET
 OAK PARK, ILLINOIS

ESTIMATED SITE-GENERATED PEDESTRIAN TRAFFIC VOLUMES



NOT TO SCALE



LEGEND

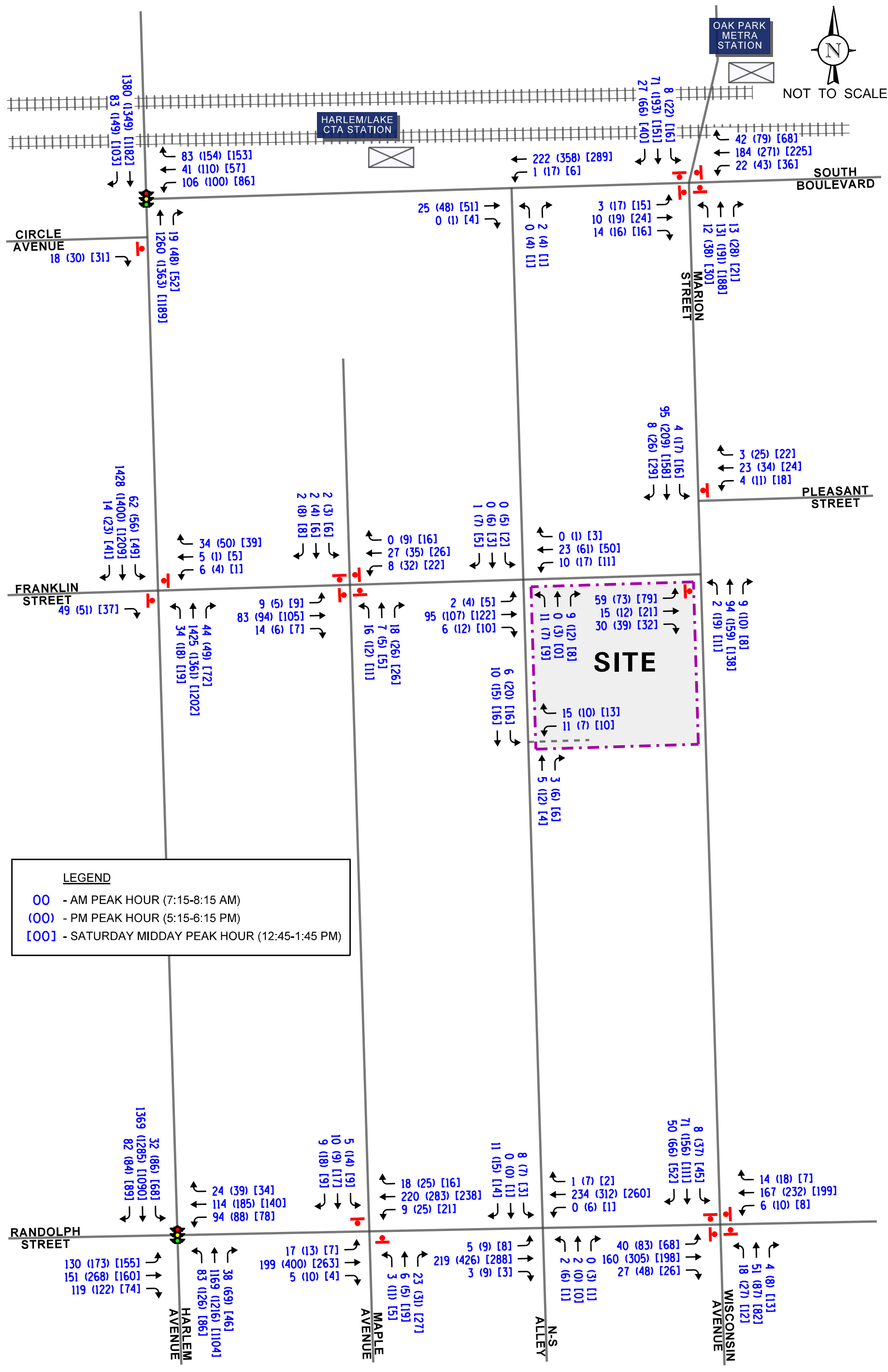
- 00 - AM PEAK HOUR (7:15-8:15 AM)
- (00) - PM PEAK HOUR (5:15-6:15 PM)
- [00] - SATURDAY MIDDAY PEAK HOUR (12:45-1:45 PM)

203 SOUTH MARION STREET
OAK PARK, ILLINOIS

YEAR 2026 NO-BUILD TRAFFIC VOLUMES



NOT TO SCALE



LEGEND

- 00 - AM PEAK HOUR (7:15-8:15 AM)
- (00) - PM PEAK HOUR (5:15-6:15 PM)
- [00] - SATURDAY MIDDAY PEAK HOUR (12:45-1:45 PM)

203 SOUTH MARION STREET
OAK PARK, ILLINOIS

YEAR 2026 TOTAL PROJECTED TRAFFIC VOLUMES

KLOA
Kenig, Lindgren, O'Hara, Aboona, Inc.
Job No: 20-193 Figure: 10

5. Traffic Analysis and Recommendations

The following provides an evaluation conducted for the weekday morning, weekday evening and Saturday midday peak hours. The analysis includes conducting capacity analyses to determine how well the roadway system and access drives are projected to operate and whether any roadway improvements or modifications are required.

Traffic Analyses

Roadway and adjacent or nearby intersection analyses were performed for the weekday morning, weekday evening, and Saturday midday peak hours for the existing (Year 2020), no-build (Year 2026), and future projected (Year 2026) traffic volumes.

The traffic analyses were performed using the methodologies outlined in the Transportation Research Board's *Highway Capacity Manual (HCM)*, 6th Edition and analyzed using Synchro/SimTraffic 10 software. The analysis for the traffic-signal controlled intersections were accomplished using actual cycle lengths, phasings, and offsets to determine the average overall vehicle delay and levels of service.

The analyses for the unsignalized intersections determine the average control delay to vehicles at an intersection. Control delay is the elapsed time from a vehicle joining the queue at a stop sign (includes the time required to decelerate to a stop) until its departure from the stop sign and resumption of free flow speed. The methodology analyzes each intersection approach controlled by a stop sign and considers traffic volumes on all approaches and lane characteristics.

The ability of an intersection to accommodate traffic flow is expressed in terms of level of service, which is assigned a letter from A to F based on the average control delay experienced by vehicles passing through the intersection. The *Highway Capacity Manual* definitions for levels of service and the corresponding control delay for signalized intersections and unsignalized intersections are included in the Appendix of this report.

Summaries of the traffic analysis results showing the level of service and overall intersection delay (measured in seconds) for the existing, Year 2026 no-build conditions, and Year 2026 total projected conditions are presented in **Tables 11** through **15**. A discussion of the intersections follows. Summary sheets for the capacity analyses are included in the Appendix.

Table 11

CAPACITY ANALYSIS RESULTS – HARLEM AVENUE WITH SOUTH BOULEVARD – SIGNALIZED

| | Peak Hour | Westbound | | Northbound | Southbound | Overall |
|-------------------------------------|---------------------------|-----------|-----------|------------|------------|-----------|
| | | L | R | T/R | T/L | |
| Year 2020 Existing Traffic Volumes | Weekday Morning Peak Hour | E 62.6 | E 60.8 | B 12.8 | A 7.0 | B 13.7 |
| | | E – 61.9 | | | | |
| | Weekday Evening Peak Hour | E 59.7 | E 64.3 | A 8.9 | A 9.3 | B 14.9 |
| | | E – 61.6 | | | | |
| Saturday Midday Peak Hour | D 50.3 | E 62.8 | A 8.6 | A 7.7 | B 13.1 | |
| | E – 56.7 | | | | | |
| Year 2026 No Build Traffic Volumes | Weekday Morning Peak Hour | E 62.4 | E 60.9 | B 13.7 | A 7.7 | B 14.5 |
| | | E – 61.8 | | | | |
| | Weekday Evening Peak Hour | E 59.1 | E 64.2 | A 9.8 | A 9.8 | B 15.6 |
| | | E – 61.3 | | | | |
| Saturday Midday Peak Hour | D 49.7 | E 62.7 | A 9.3 | A 8.1 | B 13.8 | |
| | E – 56.4 | | | | | |
| Year 2026 Projected Traffic Volumes | Weekday Morning Peak Hour | E 62.4 | E 60.9 | B 14.5 | A 7.8 | B 14.8 |
| | | E – 61.8 | | | | |
| | Weekday Evening Peak Hour | E 59.1 | E 64.2 | A 9.7 | A 9.9 | B 15.5 |
| | | E – 61.3 | | | | |
| Saturday Midday Peak Hour | D 49.7 | E 62.7 | A 9.2 | A 8.2 | B 13.7 | |
| | E – 56.4 | | | | | |

Table 12

CAPACITY ANALYSIS RESULTS – HARLEM AVENUE WITH RANDOLPH STREET – SIGNALIZED

| | Peak Hour | Eastbound | | Westbound | | Northbound | | Southbound | | Overall |
|-------------------------------------|---------------------------|-----------|-----------|-----------|-----------|------------|-----------|------------|-----------|-----------|
| | | L | T/R | L | T/R | L | T/R | L | T/R | |
| Year 2020 Existing Traffic Volumes | Weekday Morning Peak Hour | D 36.1 | E 70.5 | C 34.5 | D 51.3 | B 16.5 | C 20.0 | B 12.3 | C 33.5 | C 31.9 |
| | | E – 59.2 | | D – 45.3 | | B – 19.8 | | C – 33.1 | | |
| | Weekday Evening Peak Hour | D 41.0 | F 96.1 | D 37.1 | E 56.1 | C 34.8 | C 25.7 | B 18.1 | D 38.5 | D 40.8 |
| | E – 79.1 | | D – 51.0 | | C – 26.5 | | D – 37.3 | | | |
| Saturday Midday Peak Hour | D 39.2 | E 58.2 | C 31.9 | D 53.8 | B 12.4 | C 20.4 | B 15.0 | C 30.7 | C 29.9 | |
| | D – 50.6 | | D – 47.8 | | B – 19.9 | | C – 29.8 | | | |
| Year 2026 No Build Traffic Volumes | Weekday Morning Peak Hour | D 36.2 | E 71.7 | C 34.7 | D 51.4 | C 21.9 | C 20.5 | B 11.9 | C 34.7 | C 32.8 |
| | | E – 60.1 | | D – 45.4 | | C – 20.6 | | C – 34.2 | | |
| | Weekday Evening Peak Hour | D 41.5 | F 99+ | D 37.0 | E 56.7 | D 38.8 | C 26.7 | B 18.0 | D 38.8 | D 44.3 |
| | F – 98.9 | | D – 51.5 | | C – 27.8 | | D – 37.6 | | | |
| Saturday Midday Peak Hour | D 39.7 | E 58.5 | C 32.0 | D 54.0 | B 12.9 | C 20.9 | B 14.8 | C 30.9 | C 30.2 | |
| | D – 51.0 | | D – 48.0 | | C – 20.3 | | C – 30.0 | | | |
| Year 2026 Projected Traffic Volumes | Weekday Morning Peak Hour | D 35.1 | E 76.7 | D 36.3 | D 49.8 | C 24.3 | C 21.5 | B 11.9 | D 36.0 | C 34.1 |
| | | E – 63.2 | | D – 44.3 | | C – 21.7 | | C – 35.5 | | |
| | Weekday Evening Peak Hour | D 41.7 | F 99+ | D 38.0 | E 57.0 | D 38.8 | C 26.9 | B 18.1 | D 38.8 | D 44.9 |
| | F – 102.4 | | D – 51.6 | | C – 28.0 | | D – 37.5 | | | |
| Saturday Midday Peak Hour | D 39.3 | E 58.7 | C 32.7 | D 53.6 | B 13.1 | C 21.3 | B 14.9 | C 31.2 | C 30.4 | |
| | D – 51.0 | | D – 47.1 | | C – 20.7 | | C – 30.3 | | | |

Table 13

CAPACITY ANALYSIS RESULTS – EXISTING CONDITIONS - UNSIGNALIZED

| Intersection | Weekday Morning Peak Hour | | Weekday Evening Peak Hour | | Saturday Midday Peak Hour | |
|---|---------------------------|-------|---------------------------|-------|---------------------------|-------|
| | LOS | Delay | LOS | Delay | LOS | Delay |
| Harlem Avenue with Circle Avenue | | | | | | |
| • Eastbound Approach | C | 24.3 | C | 21.6 | C | 19.2 |
| South Boulevard with North-South Public Alley | | | | | | |
| • Northbound Approach | A | 8.5 | B | 10.9 | B | 10.8 |
| • Westbound Left Turns | A | 7.3 | A | 7.5 | A | 7.7 |
| Harlem Avenue with Pleasant Street | | | | | | |
| • Northbound Left Turns | B | 13.5 | B | 13.8 | B | 12.2 |
| • Eastbound Approach | C | 17.0 | C | 16.9 | B | 14.9 |
| • Westbound Approach | F | 99+ | F | 99+ | F | 99+ |
| • Southbound Left Turns | B | 12.5 | B | 13.3 | B | 12.6 |
| Pleasant Street with North-South Public Alley | | | | | | |
| • Northbound Approach | A | 9.5 | A | 9.7 | A | 9.5 |
| • Eastbound Left Turns | A | 7.3 | A | 7.3 | A | 7.3 |
| • Westbound Left Turns | A | 7.5 | A | 7.5 | A | 7.5 |
| • Southbound Approach | A | 8.5 | A | 9.9 | A | 9.5 |
| Marion Street with Pleasant Street | | | | | | |
| • Northbound Left Turns | A | 7.5 | A | 8.1 | A | 7.9 |
| • Eastbound Approach | B | 11.0 | C | 19.0 | C | 15.3 |
| • Westbound Approach | B | 11.1 | C | 15.3 | B | 13.0 |
| • Southbound Left Turns | A | 8.4 | A | 7.9 | A | 7.7 |
| Randolph Street with Maple Avenue | | | | | | |
| • Northbound Approach | B | 11.2 | C | 18.5 | B | 13.1 |
| • Eastbound Left Turns | A | 7.8 | A | 8.2 | A | 7.9 |
| • Westbound Left Turns | A | 7.8 | A | 8.9 | A | 7.9 |
| • Southbound Approach | B | 13.0 | C | 20.4 | B | 14.6 |
| LOS = Level of Service Delay is measured in seconds. | | | | | | |

Table 13, cont'd

CAPACITY ANALYSIS RESULTS – EXISTING CONDITIONS – UNSIGNALIZED

| Intersection | Weekday Morning Peak Hour | | Weekday Evening Peak Hour | | Saturday Midday Peak Hour | |
|---|---------------------------|-------|---------------------------|-------|---------------------------|-------|
| | LOS | Delay | LOS | Delay | LOS | Delay |
| Randolph Street with North-South Public Alley | | | | | | |
| • Northbound Approach | B | 13.0 | C | 16.4 | B | 12.4 |
| • Eastbound Left Turns | A | 7.8 | A | 8.0 | A | 7.9 |
| • Westbound Left Turns | A | 0.1 | A | 8.3 | A | 8.0 |
| • Southbound Approach | B | 12.0 | B | 13.1 | B | 10.7 |
| Maple Avenue with Pleasant Street | | | | | | |
| • Overall | A | 7.6 | A | 7.6 | A | 7.6 |
| • Eastbound Approach | A | 7.7 | A | 7.7 | A | 7.8 |
| • Westbound Approach | A | 7.4 | A | 7.7 | A | 7.5 |
| • Northbound Approach | A | 7.4 | A | 7.3 | A | 7.3 |
| • Southbound Approach | A | 7.2 | A | 7.2 | A | 7.6 |
| Randolph Street with Marion Street | | | | | | |
| • Overall | A | 9.0 | C | 17.9 | B | 11.3 |
| • Eastbound Approach | A | 9.3 | C | 23.4 | B | 12.2 |
| • Westbound Approach | A | 9.1 | B | 14.3 | B | 11.0 |
| • Northbound Approach | A | 8.6 | B | 11.7 | A | 9.8 |
| • Southbound Approach | A | 8.5 | B | 14.6 | B | 11.0 |
| LOS = Level of Service Delay is measured in seconds. | | | | | | |

Table 8

CAPACITY ANALYSIS RESULTS – NO BUILD CONDITIONS - UNSIGNALIZED

| Intersection | Weekday Morning Peak Hour | | Weekday Evening Peak Hour | | Saturday Midday Peak Hour | |
|---|---------------------------|-------|---------------------------|-------|---------------------------|-------|
| | LOS | Delay | LOS | Delay | LOS | Delay |
| Harlem Avenue with Circle Avenue | | | | | | |
| • Eastbound Approach | D | 26.4 | C | 23.2 | C | 20.6 |
| South Boulevard with North-South Public Alley | | | | | | |
| • Northbound Approach | A | 8.6 | B | 11.3 | B | 11.3 |
| • Westbound Left Turns | A | 7.3 | A | 7.6 | A | 7.8 |
| Harlem Avenue with Pleasant Street | | | | | | |
| • Northbound Left Turns | B | 14.2 | B | 14.2 | B | 12.4 |
| • Eastbound Approach | C | 18.0 | C | 17.5 | C | 15.2 |
| • Westbound Approach | F | 99+ | F | 99+ | F | 99+ |
| • Southbound Left Turns | B | 12.8 | B | 13.9 | B | 12.9 |
| Pleasant Street with North-South Public Alley | | | | | | |
| • Northbound Approach | A | 9.5 | A | 9.8 | A | 9.6 |
| • Eastbound Left Turns | A | 7.3 | A | 7.4 | A | 7.3 |
| • Westbound Left Turns | A | 7.5 | A | 7.6 | A | 7.5 |
| • Southbound Approach | A | 8.5 | A | 9.9 | A | 9.6 |
| Marion Street with Pleasant Street | | | | | | |
| • Northbound Left Turns | A | 7.5 | A | 8.1 | A | 8.0 |
| • Eastbound Approach | B | 11.4 | C | 20.8 | C | 16.4 |
| • Westbound Approach | B | 11.6 | C | 16.4 | B | 13.7 |
| • Southbound Left Turns | A | 8.4 | A | 8.0 | A | 7.8 |
| Randolph Street with Maple Avenue | | | | | | |
| • Northbound Approach | B | 11.4 | C | 19.3 | B | 13.2 |
| • Eastbound Left Turns | A | 7.9 | A | 8.3 | A | 7.8 |
| • Westbound Left Turns | A | 7.8 | A | 9.1 | A | 7.9 |
| • Southbound Approach | B | 13.2 | C | 21.3 | B | 14.6 |
| LOS = Level of Service Delay is measured in seconds. | | | | | | |

Table 14, cont'd

CAPACITY ANALYSIS RESULTS – NO BUILD CONDITIONS – UNSIGNALIZED

| Intersection | Weekday Morning Peak Hour | | Weekday Evening Peak Hour | | Saturday Midday Peak Hour | |
|---|---------------------------|-------|---------------------------|-------|---------------------------|-------|
| | LOS | Delay | LOS | Delay | LOS | Delay |
| Randolph Street with North-South Public Alley | | | | | | |
| • Northbound Approach | B | 13.2 | C | 16.7 | B | 12.5 |
| • Eastbound Left Turns | A | 7.8 | A | 8.0 | A | 8.0 |
| • Westbound Left Turns | A | 0.1 | A | 8.4 | A | 8.0 |
| • Southbound Approach | B | 12.2 | B | 13.2 | B | 10.8 |
| Maple Avenue with Pleasant Street | | | | | | |
| • Overall | A | 7.6 | A | 7.6 | A | 7.6 |
| • Eastbound Approach | A | 7.7 | A | 7.8 | A | 7.8 |
| • Westbound Approach | A | 7.4 | A | 7.7 | A | 7.5 |
| • Northbound Approach | A | 7.4 | A | 7.3 | A | 7.3 |
| • Southbound Approach | A | 7.2 | A | 7.2 | A | 7.7 |
| Randolph Street with Marion Street | | | | | | |
| • Overall | A | 9.2 | C | 19.3 | B | 11.6 |
| • Eastbound Approach | A | 9.5 | D | 25.9 | B | 12.6 |
| • Westbound Approach | A | 9.4 | C | 15.1 | B | 11.2 |
| • Northbound Approach | A | 8.7 | B | 12.2 | A | 10.0 |
| • Southbound Approach | A | 8.7 | C | 15.5 | B | 11.3 |
| LOS = Level of Service Delay is measured in seconds. | | | | | | |

Table 15

CAPACITY ANALYSIS RESULTS – PROJECTED CONDITIONS - UNSIGNALIZED

| Intersection | Weekday Morning Peak Hour | | Weekday Evening Peak Hour | | Saturday Midday Peak Hour | |
|---|---------------------------|-------|---------------------------|-------|---------------------------|-------|
| | LOS | Delay | LOS | Delay | LOS | Delay |
| Harlem Avenue with Circle Avenue | | | | | | |
| • Eastbound Approach | D | 26.7 | C | 23.3 | C | 20.8 |
| South Boulevard with North-South Public Alley | | | | | | |
| • Northbound Approach | A | 8.6 | B | 11.3 | B | 11.3 |
| • Westbound Left Turns | A | 7.4 | A | 7.6 | A | 7.8 |
| Harlem Avenue with Pleasant Street | | | | | | |
| • Northbound Left Turns | B | 14.2 | B | 14.2 | B | 12.4 |
| • Eastbound Approach | C | 18.0 | C | 17.5 | C | 15.2 |
| • Westbound Approach | F | 99+ | F | 99+ | F | 99+ |
| • Southbound Left Turns | B | 13.1 | B | 14.3 | B | 13.2 |
| Pleasant Street with North-South Public Alley | | | | | | |
| • Northbound Approach | A | 9.8 | B | 10.2 | A | 9.9 |
| • Eastbound Left Turns | A | 7.3 | A | 7.4 | A | 7.3 |
| • Westbound Left Turns | A | 7.6 | A | 7.6 | A | 7.6 |
| • Southbound Approach | A | 8.5 | B | 10.2 | A | 9.8 |
| Marion Street with Pleasant Street | | | | | | |
| • Northbound Left Turns | A | 7.6 | A | 8.6 | A | 8.4 |
| • Eastbound Approach | B | 12.8 | D | 31.0 | C | 21.9 |
| • Westbound Approach | B | 13.6 | C | 21.0 | C | 16.8 |
| • Southbound Left Turns | A | 9.0 | A | 8.2 | A | 8.0 |
| Randolph Street with Maple Avenue | | | | | | |
| • Northbound Approach | B | 11.7 | C | 19.7 | B | 13.5 |
| • Eastbound Left Turns | A | 7.9 | A | 8.3 | A | 7.9 |
| • Westbound Left Turns | A | 7.9 | A | 9.1 | A | 7.9 |
| • Southbound Approach | B | 13.7 | C | 21.9 | C | 15.1 |
| LOS = Level of Service Delay is measured in seconds. | | | | | | |

Table 15, cont'd

CAPACITY ANALYSIS RESULTS – PROJECTED CONDITIONS – UNSIGNALIZED

| Intersection | Weekday Morning Peak Hour | | Weekday Evening Peak Hour | | Saturday Midday Peak Hour | |
|---|---------------------------|-------|---------------------------|-------|---------------------------|-------|
| | LOS | Delay | LOS | Delay | LOS | Delay |
| Randolph Street with North-South Public Alley | | | | | | |
| • Northbound Approach | B | 13.8 | C | 17.3 | B | 12.9 |
| • Eastbound Left Turns | A | 7.9 | A | 8.0 | A | 8.0 |
| • Westbound Left Turns | A | 0.1 | A | 8.4 | A | 8.0 |
| • Southbound Approach | B | 11.9 | B | 13.5 | B | 11.6 |
| Maple Avenue with Pleasant Street | | | | | | |
| • Overall | A | 7.7 | A | 7.7 | A | 7.8 |
| • Eastbound Approach | A | 7.9 | A | 7.9 | A | 8.0 |
| • Westbound Approach | A | 7.5 | A | 7.7 | A | 7.6 |
| • Northbound Approach | A | 7.5 | A | 7.4 | A | 7.4 |
| • Southbound Approach | A | 7.3 | A | 7.3 | A | 7.7 |
| Randolph Street with Marion Street | | | | | | |
| • Overall | A | 9.6 | C | 20.5 | B | 12.1 |
| • Eastbound Approach | A | 10.0 | D | 28.1 | B | 13.3 |
| • Westbound Approach | A | 9.6 | C | 15.6 | B | 11.6 |
| • Northbound Approach | A | 9.0 | B | 12.6 | B | 10.3 |
| • Southbound Approach | A | 9.1 | C | 16.2 | B | 11.8 |
| North-South Public Alley with Proposed Garage Access | | | | | | |
| • Westbound Approach | A | 8.6 | A | 8.7 | A | 8.6 |
| • Southbound Left Turns | A | 7.2 | A | 7.3 | A | 7.2 |
| LOS = Level of Service Delay is measured in seconds. | | | | | | |

Discussion and Recommendations

The following summarizes how the intersections are projected to operate and identifies any roadway and traffic control improvements necessary to accommodate the development traffic.

Harlem Avenue with South Boulevard

The results of the capacity analysis indicate that overall this intersection currently operates at Level of Service (LOS) B during the weekday morning, weekday evening and Saturday midday peak hours. The westbound approach currently operates at LOS E during all three peak hours. Additionally, the northbound and southbound approaches are operating at LOS B or better during all three peak hours.

Under Year 2026 no-build conditions, overall this intersection will continue to operate at LOS B during all three peak hours with increases in delay of approximately one second. All approaches will continue to operate at the same existing levels of service with increases in delay of approximately one second.

Under Year 2026 total projected conditions, overall this intersection will continue to operate at LOS B during all three peak hours with increases in delay of approximately one second. All approaches will continue to operate at the same levels of service with increases in delay of approximately one second over no-build conditions. Furthermore, the proposed development is projected to increase the volume of traffic traversing this intersection by less than one percent during the three peak hours. As such, this intersection has sufficient reserve capacity to accommodate the traffic projected to be generated by the development and no roadway improvements and/or traffic control modifications are required.

Harlem Avenue with Randolph Street

The results of the capacity analysis indicate that overall this intersection currently operates at LOS C during the weekday morning and Saturday midday peak hours and LOS D during the weekday evening peak hour. The eastbound currently operates at LOS E during the weekday morning and evening peak hours and LOS D during the Saturday midday peak hour. In addition, the westbound, northbound, and southbound approaches are operating at an acceptable LOS D or better during all three peak hours.

Under Year 2026 no-build conditions, overall this intersection will operate at the same existing levels of service with increases in delay of approximately four seconds or less during all three peak hours. The westbound, northbound and southbound approach will operate at an acceptable LOS D or better during all three peak hours with increases in delay of approximately one second. In addition, the eastbound approach will operate at LOS E during the weekday morning peak hour, LOS F during the weekday evening peak hour, and LOS D during the Saturday midday peak hour with increases in delay of approximately one second, 20 seconds, and one second, respectively.

Under Year 2026 total projected conditions, overall this intersection will continue to operate at the same levels of service with increases in delay of approximately one second during all three peak hours. All approaches will continue to operate at the same levels of service with increases in delay of less than four seconds during all three peak hours. Furthermore, the proposed development is projected to increase the volume of traffic traversing this intersection by approximately one percent during the three peak hours. As such, this intersection has sufficient reserve capacity to accommodate the traffic projected to be generated by the development and no roadway improvements and/or traffic control modifications are required.

Harlem Avenue with Circle Avenue

The results of the capacity analysis indicate that the eastbound approach currently operates at LOS C during the weekday morning, weekday evening and Saturday midday peak hours.

Under Year 2026 no-build conditions, the eastbound approach will operate at LOS D during the weekday morning peak hour and LOS C during the weekday evening and Saturday midday peak hours with increases in delay of approximately two seconds or less.

Under Year 2026 total projected conditions, the eastbound approach will continue to operate at the same levels of service with increases in delay of less than one second during all three peak hours. As such, this intersection has sufficient reserve capacity to accommodate the traffic projected to be generated by the development and no roadway improvements and/or traffic control modifications are required.

South Boulevard with North-South Public Alley

The results of the capacity analysis indicate that the northbound approach and westbound left turning movements are operating at LOS B or better during the weekday morning, weekday evening, and Saturday midday peak hours.

Under Year 2026 no-build conditions, the northbound approach and westbound left turning movements will continue to operate at LOS B or better during all three peak hours with increases in delay of less one second.

Under Year 2026 total projected conditions, the northbound approach and westbound left turning movements will continue to operate at the same levels of service with increases in delay of less than one second during all three peak hours. As such, this intersection has sufficient reserve capacity to accommodate the traffic projected to be generated by the development and no roadway improvements and/or traffic control modifications are required.

Harlem Avenue with Pleasant Street

The results of the capacity analysis indicate that the northbound and southbound left turning movements are operating at LOS B during the weekday morning, weekday evening, and Saturday midday peak hours. The eastbound approach currently operates at LOS C or better during all three peak hours. Additionally, the westbound approach is operating at LOS F during all three peak hours. This is normal and expected when a minor approach intersects a major road such as Harlem Avenue.

Under Year 2026 no-build conditions, the eastbound approach and the northbound and southbound left turning movements will continue to operate at LOS C or better during all three peak hours with increases in delay of less than one second. In addition, the westbound approach will continue to operate at LOS F during all three peak hours.

Under Year 2026 projected conditions, all movements will continue to operate at the same levels of service with increases in delay of less than one second. As such, this intersection has sufficient reserve capacity to accommodate the traffic projected to be generated by the development and no roadway improvements and/or traffic control modifications are required.

Pleasant Street with North-South Public Alley

The results of the capacity analysis indicate that all movements are operating at LOS A during the weekday morning, weekday evening, and Saturday midday peak hours.

Under Year 2026 no-build conditions, all movements will continue to operate at LOS A during all three peak hours with increases in delay of less than one second during all three peak hours.

Under Year 2026 total projected conditions, the northbound and southbound approaches will operate at LOS A during the weekday morning and Saturday midday peak hours and LOS B during the weekday evening peak hour with increases in delay of less than one second with 95th percentile queues of one to two vehicles. The eastbound and westbound left turning movements will continue to operate at LOS A during all three peak hours with increases in delay of less than one second. As such, this intersection has sufficient reserve capacity to accommodate the traffic projected to be generated by the development and no roadway improvements and/or traffic control modifications are required.

Marion Street with Pleasant Street

The results of the capacity analysis indicate that the northbound and southbound left turning movements are operating at LOS A during the weekday morning, weekday evening and Saturday midday peak hours. Additionally, the eastbound and westbound approaches currently operate at LOS C or better during all three peak hours.

Under Year 2026 no-build conditions, all movements will continue to operate at the same existing levels of service with increases in delay of approximately two seconds or less.

Under Year 2026 total projected conditions, the eastbound approach will operate at LOS B during the weekday morning peak hour, LOS D during the weekday evening peak hour, and LOS C during the Saturday midday peak hour with increases in delay of approximately one second, seven seconds and four seconds, respectively, with 95th percentile queues of one to three vehicles. The westbound approach will operate at LOS B during the weekday morning peak hour and LOS C during the weekday evening peak hour and Saturday midday peak hour with increases in delay of approximately four seconds or less. In addition, the northbound and southbound left turning movements will continue to operate at LOS A during all three peak hours with increases in delay of approximately one second and will experience 95th percentile queues of one to two vehicles during all three peak hours. As such, this intersection has sufficient reserve capacity to accommodate the traffic projected to be generated by the development and no roadway improvements and/or traffic control modifications are required.

Randolph Street with Maple Avenue

The results of the capacity analysis indicate that the eastbound and westbound left turning movements currently operate at LOS A during the weekday morning, weekday evening, and Saturday midday peak hours. Additionally, the northbound and southbound approaches currently operate at LOS C or better during all three peak hours.

Under Year 2026 no-build conditions, all movements will operate at the same existing levels of service with increases in delay of less than one second during all three peak hours.

Under Year 2026 total projected conditions, the southbound approach will operate at LOS B during the weekday morning peak hour and LOS C during the weekday evening and Saturday midday peak hours with increases in delay of less than one second. All other movements will continue to operate at the same levels of service with increases in delay of less than one second during all three peak hours. As such, this intersection has sufficient reserve capacity to accommodate the traffic projected to be generated by the development and no roadway improvements and/or traffic control modifications are required.

Randolph Street with North-South Public Alley

The results of the capacity analysis indicate that the eastbound and westbound left turning movements currently operate at LOS A during the weekday morning, weekday evening, and Saturday midday peak hours. Additionally, the northbound and southbound approaches currently operate at LOS C or better during all three peak hours.

Under Year 2026 no-build conditions, all movements will operate at the same existing levels of service with increases in delay of less than one second during all three peak hours.

Under Year 2026 total projected conditions, all movements will operate at the same levels of service with increases in delay of less than one second during all three peak hours. As such, this intersection has sufficient reserve capacity to accommodate the traffic projected to be generated by the development and no roadway improvements and/or traffic control modifications are required.

Maple Avenue with Pleasant Street

The results of the capacity analysis indicate that overall this intersection currently operates at LOS A during the weekday morning, weekday evening and Saturday midday peak hours. In addition, all approaches are operating at LOS A during all three peak hours.

Under Year 2026 no-build conditions, overall this intersection will continue to operate at LOS A during all three peak hours with increases in delay of less than one second. In addition, all approaches will continue to operate at LOS A during all three peak hours with increases in delay of less than one second.

Under Year 2026 total projected conditions, overall this intersection will continue to operate at LOS A during all three peak hours with increases in delay of less than one second. In addition, all approaches will continue to operate at LOS A during all three peak hours with increases in delay of less than one second. As such, this intersection has sufficient reserve capacity to accommodate the traffic projected to be generated by the development and no roadway improvements and/or traffic control modifications are required.

Randolph Street with Marion Street

The results of the capacity analysis indicate that overall this intersection currently operates at LOS C or better during the weekday morning, weekday evening, and Saturday midday peak hours. In addition, all approaches are operating at LOS C or better during all three peak hours.

Under Year 2026 no-build conditions, overall this intersection will operate at the same existing levels of service with increases in delay of approximately one second during all three peak hours. The eastbound approach will operate at LOS A during the weekday morning peak hour, LOS D during the weekday evening peak hour, and LOS B during the Saturday midday peak hour with increases in less than three seconds. All other approaches will operate at LOS C or better during the three peak hours with increases in delay of approximately one second.

Under Year 2026 total projected conditions, overall this intersection will continue to operate at the same levels of service with increases in delay of approximately one second over no-build conditions. All approaches will operate at the same levels of service during all three peak hours with increases in delay of approximately two seconds or less. As such, this intersection has sufficient reserve capacity to accommodate the traffic projected to be generated by the development and no roadway improvements and/or traffic control modifications are required.

North-South Public Alley with Proposed Garage Access

The results of the capacity analysis indicate that the outbound movements from the proposed garage access onto the public alley will operate at LOS A during the weekday morning, weekday evening, and Saturday midday peak hours with 95th percentile queues of one to two vehicles. In addition, the southbound left turning movements will operate at LOS A during all three peak hours with 95th percentile queues of one to two vehicles. As such, access to and from the parking garage will adequately accommodate the residential development-generated traffic. Visual warning devices should be provided at the garage exit.

Marion Street and Pleasant Street All-Way Stop Warrant Analysis

The intersection of Marion Street and Pleasant Street was further evaluated to determine if an all-way stop traffic control is warranted.

All-Way Stop Sign Warrants

The *Manual on Uniform Control Devices* (MUTCD) indicates that an all-way stop sign control should be considered if any of the following conditions are met:

1. Where traffic control signals are justified, the multi-way stop is an interim measure that can be installed quickly to control traffic while arrangements are being made for the installation of the traffic control signal.
2. A crash problem, as indicated by five or more reported crashes in a 12-month period that are susceptible to correction by a multi-way stop installation. Such crashes include right- and left-turn collisions as well as right-angle collisions.
3. Minimum volumes warranting a multi-way stop:
 - a. The vehicular volume entering the intersection from the major street approaches (total of both approaches) averages at least 300 vehicles per hour for any 8 hours of an average day, and
 - b. The combined vehicular, pedestrian, and bicycle volume entering the intersection from the minor street approaches (total of both approaches) averages at least 200 units per hour for the same 8 hours, with an average delay to minor-street vehicular traffic of at least 30 seconds per vehicle during the highest hour.
 - c. If the 85th percentile approach speed of the major-street traffic exceeds 40 mph, the minimum vehicular volume warrants are 70 percent of the values provided on a and b.
 - d. Where no single criterion is satisfied, but where Criteria 2, 3a and 3b are all satisfied to 80 percent of the minimum values. Criterion 3c is excluded from this condition.

All-Way Stop Sign Evaluation

Based on a review of the Year 2026 total volumes and the MUTCD warrants for all-way stop sign control, the weekday evening and Saturday midday peak hour vehicle, pedestrian, and bicycle volumes just meet the minimum volume thresholds. However, the MUTCD also states that the average hourly volumes over an eight-hour period on an average day must meet the minimum volume thresholds requirements. As such, since the peak hour volumes just meet the thresholds, it is unlikely that the average volumes over an eight-hour period will meet the minimum thresholds.

Further, crash data obtained from the Village of Oak Park shows that 18 accidents over the five-year period occurred within the influence of the intersection. However, 12 of the 18 accidents involved parked vehicle and, as such, did not occur at or within the intersection. As such, it can be seen that only six accidents occurred at the intersection or within the intersection and does not meet the MUTCD crash warrant which requires “five or more reported crashes in a 12-month period that are susceptible to correction by a multi-way stop installation”.

Per the request of the Village, sight distance studies were performed along both legs of Pleasant Street at its intersection with Marion Street and are included in the Appendix. The sight distance studies show that motorists stopped at the stop signs on Pleasant Street have limited sight distance looking north and south along Marion Street. However, appropriate sight distance is available once the motorists pulls closer to the edge of Marion Street after first stopping at the stop signs. This situation is common at other intersections in Oak Park and other similar urban areas. The low number of crashes at the intersection would further indicate that the sight distance at this intersection has not being an issue.

As such, it appears all-way stop sign control is not currently warranted at the intersection of Marion Street with Pleasant Street. Nevertheless, it is recommended that the intersection continue to be monitored in the future, particularly after the completion and occupancy of the subject development, to see if all-way stop sign control will be warranted and/or required.

6. Conclusion

Based on the preceding analyses and recommendations, the following conclusions have been made:

- The proposed development will not generate a significant amount of traffic, which will be reduced due to the location of the site within downtown Oak Park and its proximity to the train stations and PACE/CTA bus routes and other modes of transportation.
- The results of the capacity analysis indicate that the proposed development traffic will not have a significant impact on the area roadways.
- The development-generated traffic will only add less than one percent of the traffic projected to be traversing the intersections of Harlem Avenue with South Boulevard and Harlem Avenue with Randolph Street.
- Visual warning devices should be provided at both access drives to the parking garage.
- The proposed access drive will be adequate in accommodating the traffic projected to be generated by the proposed development and will ensure that a flexible access system is provided.

Appendix

Traffic Count Adjustment Factors
Traffic Count Summary Sheets
Site Plan
AutoTurn Exhibits
Census Data
ITE Trip Generation Sheets
CMAP Projections Letter
Level of Service Criteria
Capacity Analysis Summary Sheets
Sight Distance Analyses

Traffic Count Adjustment Factors

Traffic Adjustment Factors

Harlem Avenue

- Southbound Approach
 - AM : increased by 15 percent
 - PM: increased by 15 percent
 - Saturday: increased by nothing

- Northbound Approach
 - AM : increased by 15 percent
 - PM: increased by 15 percent
 - Saturday: increased by nothing

Circle Avenue

- Eastbound Approach
 - AM : increased by 30 percent
 - PM: increased by 15 percent
 - Saturday: increased by 30 percent

South Boulevard

- Both directions
 - AM : increased by 40 percent
 - PM: increased by 10 percent
 - Saturday: increased by 10 percent

Pleasant

- Both directions
 - AM : increased by 50 percent
 - PM: increased by 25 percent
 - Saturday: increased by 30 percent

Marion

- Both directions
 - AM : increased by 30 percent
 - PM: increased by 10 percent
 - Saturday: increased by 20 percent

Maple

- Northbound
 - AM : increased by 50 percent
 - PM: increased by 50 percent
 - Saturday: increased by 50 percent

Randolph

- Both directions
 - AM : increased by 50 percent
 - PM: increased by 25 percent
 - Saturday: increased by 30 percent

Traffic Count Summary Sheets



Kenig Lindgren O'Hara Aboona, Inc.
 9575 W. Higgins Rd., Suite 400
 Rosemont, Illinois, United States 60018
 (847)518-9990

Count Name: Harlem Avenue with Pleasant
 Street
 Site Code:
 Start Date: 09/10/2020
 Page No: 1

Turning Movement Data

| Start Time | Pleasant Street Eastbound | | | | | | Pleasant Street Westbound | | | | | | Harlem Avenue Northbound | | | | | | Harlem Avenue Southbound | | | | | | Int. Total |
|---------------|---------------------------|------|------|-------|------|------------|---------------------------|------|------|-------|------|------------|--------------------------|------|------|-------|------|------------|--------------------------|------|------|-------|------|------------|------------|
| | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | |
| 7:00 AM | 0 | 0 | 0 | 9 | 0 | 9 | 0 | 0 | 0 | 8 | 0 | 8 | 0 | 1 | 176 | 3 | 0 | 180 | 0 | 0 | 270 | 3 | 2 | 273 | 470 |
| 7:15 AM | 0 | 0 | 0 | 6 | 3 | 6 | 0 | 0 | 0 | 2 | 3 | 2 | 0 | 6 | 232 | 4 | 0 | 242 | 1 | 4 | 292 | 3 | 0 | 300 | 550 |
| 7:30 AM | 0 | 0 | 0 | 6 | 0 | 6 | 0 | 0 | 0 | 6 | 0 | 6 | 0 | 2 | 246 | 7 | 0 | 255 | 0 | 4 | 299 | 6 | 1 | 309 | 576 |
| 7:45 AM | 0 | 0 | 0 | 11 | 6 | 11 | 0 | 1 | 0 | 7 | 1 | 8 | 0 | 14 | 280 | 5 | 0 | 299 | 0 | 4 | 297 | 1 | 0 | 302 | 620 |
| Hourly Total | 0 | 0 | 0 | 32 | 9 | 32 | 0 | 1 | 0 | 23 | 4 | 24 | 0 | 23 | 934 | 19 | 0 | 976 | 1 | 12 | 1158 | 13 | 3 | 1184 | 2216 |
| 8:00 AM | 0 | 0 | 0 | 9 | 6 | 9 | 1 | 2 | 0 | 2 | 0 | 5 | 0 | 7 | 266 | 9 | 0 | 282 | 1 | 12 | 294 | 2 | 0 | 309 | 605 |
| 8:15 AM | 0 | 1 | 0 | 5 | 5 | 6 | 0 | 0 | 0 | 2 | 3 | 2 | 0 | 5 | 240 | 7 | 0 | 252 | 0 | 8 | 256 | 2 | 1 | 266 | 526 |
| 8:30 AM | 0 | 0 | 0 | 5 | 3 | 5 | 0 | 0 | 0 | 5 | 1 | 5 | 0 | 2 | 281 | 8 | 0 | 291 | 0 | 5 | 258 | 6 | 0 | 269 | 570 |
| 8:45 AM | 0 | 1 | 0 | 3 | 3 | 4 | 0 | 0 | 0 | 4 | 1 | 4 | 0 | 3 | 271 | 6 | 0 | 280 | 0 | 3 | 248 | 1 | 2 | 252 | 540 |
| Hourly Total | 0 | 2 | 0 | 22 | 17 | 24 | 1 | 2 | 0 | 13 | 5 | 16 | 0 | 17 | 1058 | 30 | 0 | 1105 | 1 | 28 | 1056 | 11 | 3 | 1096 | 2241 |
| *** BREAK *** | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 4:00 PM | 0 | 0 | 0 | 7 | 5 | 7 | 0 | 0 | 1 | 4 | 2 | 5 | 0 | 9 | 277 | 9 | 0 | 295 | 0 | 4 | 280 | 4 | 1 | 288 | 595 |
| 4:15 PM | 0 | 1 | 1 | 8 | 4 | 10 | 0 | 1 | 0 | 6 | 8 | 7 | 0 | 3 | 302 | 6 | 0 | 311 | 0 | 5 | 319 | 2 | 0 | 326 | 654 |
| 4:30 PM | 0 | 0 | 1 | 12 | 4 | 13 | 0 | 1 | 0 | 10 | 1 | 11 | 0 | 3 | 279 | 10 | 1 | 292 | 0 | 9 | 311 | 5 | 1 | 325 | 641 |
| 4:45 PM | 0 | 1 | 0 | 12 | 3 | 13 | 0 | 1 | 0 | 1 | 3 | 2 | 0 | 6 | 281 | 8 | 0 | 295 | 0 | 8 | 286 | 7 | 0 | 301 | 611 |
| Hourly Total | 0 | 2 | 2 | 39 | 16 | 43 | 0 | 3 | 1 | 21 | 14 | 25 | 0 | 21 | 1139 | 33 | 1 | 1193 | 0 | 26 | 1196 | 18 | 2 | 1240 | 2501 |
| 5:00 PM | 0 | 0 | 1 | 8 | 6 | 9 | 0 | 0 | 1 | 18 | 3 | 19 | 0 | 4 | 271 | 8 | 0 | 283 | 0 | 9 | 273 | 6 | 1 | 288 | 599 |
| 5:15 PM | 0 | 1 | 0 | 6 | 7 | 7 | 1 | 0 | 0 | 7 | 4 | 8 | 0 | 2 | 248 | 12 | 0 | 262 | 0 | 12 | 282 | 8 | 0 | 302 | 579 |
| 5:30 PM | 0 | 0 | 1 | 11 | 1 | 12 | 0 | 0 | 0 | 4 | 1 | 4 | 0 | 6 | 271 | 8 | 0 | 285 | 0 | 6 | 255 | 5 | 0 | 266 | 567 |
| 5:45 PM | 0 | 2 | 0 | 5 | 4 | 7 | 0 | 0 | 0 | 2 | 4 | 2 | 0 | 4 | 258 | 5 | 0 | 267 | 0 | 9 | 314 | 9 | 0 | 332 | 608 |
| Hourly Total | 0 | 3 | 2 | 30 | 18 | 35 | 1 | 0 | 1 | 31 | 12 | 33 | 0 | 16 | 1048 | 33 | 0 | 1097 | 0 | 36 | 1124 | 28 | 1 | 1188 | 2353 |
| *** BREAK *** | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 11:30 AM | 0 | 1 | 1 | 4 | 3 | 6 | 1 | 0 | 0 | 1 | 2 | 2 | 0 | 3 | 309 | 9 | 0 | 321 | 0 | 5 | 288 | 6 | 0 | 299 | 628 |
| 11:45 AM | 0 | 0 | 1 | 2 | 2 | 3 | 0 | 2 | 0 | 3 | 9 | 5 | 0 | 8 | 302 | 9 | 0 | 319 | 0 | 7 | 310 | 6 | 0 | 323 | 650 |
| Hourly Total | 0 | 1 | 2 | 6 | 5 | 9 | 1 | 2 | 0 | 4 | 11 | 7 | 0 | 11 | 611 | 18 | 0 | 640 | 0 | 12 | 598 | 12 | 0 | 622 | 1278 |
| 12:00 PM | 0 | 1 | 0 | 11 | 0 | 12 | 0 | 0 | 0 | 8 | 1 | 8 | 0 | 6 | 277 | 7 | 0 | 290 | 0 | 9 | 280 | 4 | 2 | 293 | 603 |
| 12:15 PM | 0 | 0 | 0 | 15 | 4 | 15 | 0 | 1 | 1 | 4 | 0 | 6 | 0 | 2 | 292 | 14 | 0 | 308 | 1 | 3 | 278 | 8 | 0 | 290 | 619 |
| 12:30 PM | 0 | 0 | 1 | 8 | 2 | 9 | 0 | 1 | 0 | 6 | 2 | 7 | 0 | 3 | 252 | 4 | 0 | 259 | 1 | 7 | 282 | 3 | 1 | 293 | 568 |
| 12:45 PM | 0 | 1 | 0 | 13 | 1 | 14 | 0 | 0 | 0 | 6 | 2 | 6 | 0 | 4 | 276 | 8 | 0 | 288 | 0 | 7 | 288 | 1 | 0 | 296 | 604 |
| Hourly Total | 0 | 2 | 1 | 47 | 7 | 50 | 0 | 2 | 1 | 24 | 5 | 27 | 0 | 15 | 1097 | 33 | 0 | 1145 | 2 | 26 | 1128 | 16 | 3 | 1172 | 2394 |
| 1:00 PM | 0 | 0 | 0 | 7 | 0 | 7 | 0 | 0 | 1 | 1 | 1 | 2 | 0 | 5 | 282 | 12 | 0 | 299 | 0 | 8 | 289 | 4 | 0 | 301 | 609 |
| 1:15 PM | 0 | 0 | 0 | 5 | 1 | 5 | 0 | 0 | 2 | 8 | 1 | 10 | 0 | 7 | 275 | 14 | 0 | 296 | 0 | 9 | 346 | 4 | 0 | 359 | 670 |
| 1:30 PM | 0 | 0 | 0 | 3 | 1 | 3 | 0 | 1 | 1 | 6 | 3 | 8 | 0 | 3 | 266 | 6 | 0 | 275 | 0 | 11 | 269 | 2 | 0 | 282 | 568 |
| 1:45 PM | 0 | 0 | 1 | 6 | 2 | 7 | 0 | 1 | 1 | 5 | 2 | 7 | 0 | 4 | 260 | 8 | 0 | 272 | 0 | 10 | 307 | 2 | 0 | 319 | 605 |
| Hourly Total | 0 | 0 | 1 | 21 | 4 | 22 | 0 | 2 | 5 | 20 | 7 | 27 | 0 | 19 | 1083 | 40 | 0 | 1142 | 0 | 38 | 1211 | 12 | 0 | 1261 | 2452 |

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------|-----|-------|-------|------|-------|------|-------|-------|-------|------|-------|------|-----|------|------|------|-------|------|-------|------|------|------|-------|------|-------|
| Grand Total | 0 | 10 | 8 | 197 | 76 | 215 | 3 | 12 | 8 | 136 | 58 | 159 | 0 | 122 | 6970 | 206 | 1 | 7298 | 4 | 178 | 7471 | 110 | 12 | 7763 | 15435 |
| Approach % | 0.0 | 4.7 | 3.7 | 91.6 | - | - | 1.9 | 7.5 | 5.0 | 85.5 | - | - | 0.0 | 1.7 | 95.5 | 2.8 | - | - | 0.1 | 2.3 | 96.2 | 1.4 | - | - | - |
| Total % | 0.0 | 0.1 | 0.1 | 1.3 | - | 1.4 | 0.0 | 0.1 | 0.1 | 0.9 | - | 1.0 | 0.0 | 0.8 | 45.2 | 1.3 | - | 47.3 | 0.0 | 1.2 | 48.4 | 0.7 | - | 50.3 | - |
| Lights | 0 | 10 | 8 | 192 | - | 210 | 3 | 12 | 8 | 131 | - | 154 | 0 | 118 | 6760 | 204 | - | 7082 | 4 | 176 | 7274 | 109 | - | 7563 | 15009 |
| % Lights | - | 100.0 | 100.0 | 97.5 | - | 97.7 | 100.0 | 100.0 | 100.0 | 96.3 | - | 96.9 | - | 96.7 | 97.0 | 99.0 | - | 97.0 | 100.0 | 98.9 | 97.4 | 99.1 | - | 97.4 | 97.2 |
| Buses | 0 | 0 | 0 | 2 | - | 2 | 0 | 0 | 0 | 0 | - | 0 | 0 | 1 | 54 | 1 | - | 56 | 0 | 0 | 54 | 0 | - | 54 | 112 |
| % Buses | - | 0.0 | 0.0 | 1.0 | - | 0.9 | 0.0 | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.8 | 0.8 | 0.5 | - | 0.8 | 0.0 | 0.0 | 0.7 | 0.0 | - | 0.7 | 0.7 |
| Single-Unit Trucks | 0 | 0 | 0 | 1 | - | 1 | 0 | 0 | 0 | 5 | - | 5 | 0 | 2 | 108 | 1 | - | 111 | 0 | 2 | 94 | 0 | - | 96 | 213 |
| % Single-Unit Trucks | - | 0.0 | 0.0 | 0.5 | - | 0.5 | 0.0 | 0.0 | 0.0 | 3.7 | - | 3.1 | - | 1.6 | 1.5 | 0.5 | - | 1.5 | 0.0 | 1.1 | 1.3 | 0.0 | - | 1.2 | 1.4 |
| Articulated Trucks | 0 | 0 | 0 | 2 | - | 2 | 0 | 0 | 0 | 0 | - | 0 | 0 | 1 | 48 | 0 | - | 49 | 0 | 0 | 49 | 1 | - | 50 | 101 |
| % Articulated Trucks | - | 0.0 | 0.0 | 1.0 | - | 0.9 | 0.0 | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.8 | 0.7 | 0.0 | - | 0.7 | 0.0 | 0.0 | 0.7 | 0.9 | - | 0.6 | 0.7 |
| Bicycles on Road | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 |
| % Bicycles on Road | - | 0.0 | 0.0 | 0.0 | - | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | - | 0.0 | 0.0 |
| Pedestrians | - | - | - | - | 76 | - | - | - | - | - | 58 | - | - | - | - | - | 1 | - | - | - | - | - | 12 | - | - |
| % Pedestrians | - | - | - | - | 100.0 | - | - | - | - | - | 100.0 | - | - | - | - | - | 100.0 | - | - | - | - | - | 100.0 | - | - |



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Rosemont, Illinois, United States 60018
(847)518-9990

Count Name: Harlem Avenue with Pleasant Street
Site Code:
Start Date: 09/10/2020
Page No: 3

Turning Movement Peak Hour Data (7:15 AM)

| Start Time | Pleasant Street Eastbound | | | | | | Pleasant Street Westbound | | | | | | Harlem Avenue Northbound | | | | | | Harlem Avenue Southbound | | | | | | Int. Total |
|----------------------|---------------------------|-------|-------|-------|-------|------------|---------------------------|-------|-------|-------|-------|------------|--------------------------|-------|-------|-------|------|------------|--------------------------|-------|-------|-------|-------|------------|------------|
| | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | |
| 7:15 AM | 0 | 0 | 0 | 6 | 3 | 6 | 0 | 0 | 0 | 2 | 3 | 2 | 0 | 6 | 232 | 4 | 0 | 242 | 1 | 4 | 292 | 3 | 0 | 300 | 550 |
| 7:30 AM | 0 | 0 | 0 | 6 | 0 | 6 | 0 | 0 | 0 | 6 | 0 | 6 | 0 | 2 | 246 | 7 | 0 | 255 | 0 | 4 | 299 | 6 | 1 | 309 | 576 |
| 7:45 AM | 0 | 0 | 0 | 11 | 6 | 11 | 0 | 1 | 0 | 7 | 1 | 8 | 0 | 14 | 280 | 5 | 0 | 299 | 0 | 4 | 297 | 1 | 0 | 302 | 620 |
| 8:00 AM | 0 | 0 | 0 | 9 | 6 | 9 | 1 | 2 | 0 | 2 | 0 | 5 | 0 | 7 | 266 | 9 | 0 | 282 | 1 | 12 | 294 | 2 | 0 | 309 | 605 |
| Total | 0 | 0 | 0 | 32 | 15 | 32 | 1 | 3 | 0 | 17 | 4 | 21 | 0 | 29 | 1024 | 25 | 0 | 1078 | 2 | 24 | 1182 | 12 | 1 | 1220 | 2351 |
| Approach % | 0.0 | 0.0 | 0.0 | 100.0 | - | - | 4.8 | 14.3 | 0.0 | 81.0 | - | - | 0.0 | 2.7 | 95.0 | 2.3 | - | - | 0.2 | 2.0 | 96.9 | 1.0 | - | - | - |
| Total % | 0.0 | 0.0 | 0.0 | 1.4 | - | 1.4 | 0.0 | 0.1 | 0.0 | 0.7 | - | 0.9 | 0.0 | 1.2 | 43.6 | 1.1 | - | 45.9 | 0.1 | 1.0 | 50.3 | 0.5 | - | 51.9 | - |
| PHF | 0.000 | 0.000 | 0.000 | 0.727 | - | 0.727 | 0.250 | 0.375 | 0.000 | 0.607 | - | 0.656 | 0.000 | 0.518 | 0.914 | 0.694 | - | 0.901 | 0.500 | 0.500 | 0.988 | 0.500 | - | 0.987 | 0.948 |
| Lights | 0 | 0 | 0 | 31 | - | 31 | 1 | 3 | 0 | 16 | - | 20 | 0 | 29 | 955 | 25 | - | 1009 | 2 | 24 | 1141 | 12 | - | 1179 | 2239 |
| % Lights | - | - | - | 96.9 | - | 96.9 | 100.0 | 100.0 | - | 94.1 | - | 95.2 | - | 100.0 | 93.3 | 100.0 | - | 93.6 | 100.0 | 100.0 | 96.5 | 100.0 | - | 96.6 | 95.2 |
| Buses | 0 | 0 | 0 | 1 | - | 1 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 11 | 0 | - | 11 | 0 | 0 | 8 | 0 | - | 8 | 20 |
| % Buses | - | - | - | 3.1 | - | 3.1 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | 1.1 | 0.0 | - | 1.0 | 0.0 | 0.0 | 0.7 | 0.0 | - | 0.7 | 0.9 |
| Single-Unit Trucks | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 1 | - | 1 | 0 | 0 | 40 | 0 | - | 40 | 0 | 0 | 23 | 0 | - | 23 | 64 |
| % Single-Unit Trucks | - | - | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 5.9 | - | 4.8 | - | 0.0 | 3.9 | 0.0 | - | 3.7 | 0.0 | 0.0 | 1.9 | 0.0 | - | 1.9 | 2.7 |
| Articulated Trucks | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 18 | 0 | - | 18 | 0 | 0 | 10 | 0 | - | 10 | 28 |
| % Articulated Trucks | - | - | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | 1.8 | 0.0 | - | 1.7 | 0.0 | 0.0 | 0.8 | 0.0 | - | 0.8 | 1.2 |
| Bicycles on Road | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 |
| % Bicycles on Road | - | - | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | - | 0.0 | 0.0 |
| Pedestrians | - | - | - | - | 15 | - | - | - | - | - | 4 | - | - | - | - | - | 0 | - | - | - | - | - | 1 | - | - |
| % Pedestrians | - | - | - | - | 100.0 | - | - | - | - | - | 100.0 | - | - | - | - | - | - | - | - | - | - | - | 100.0 | - | - |



Kenig Lindgren O'Hara Aboona, Inc.
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Count Name: Harlem Avenue with Pleasant Street
Site Code:
Start Date: 09/10/2020
Page No: 4

Turning Movement Peak Hour Data (4:15 PM)

| Start Time | Pleasant Street Eastbound | | | | | | Pleasant Street Westbound | | | | | | Harlem Avenue Northbound | | | | | | Harlem Avenue Southbound | | | | | | Int. Total |
|----------------------|---------------------------|-------|-------|-------|-------|------------|---------------------------|-------|-------|-------|-------|------------|--------------------------|-------|-------|-------|-------|------------|--------------------------|-------|-------|-------|-------|------------|------------|
| | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | |
| 4:15 PM | 0 | 1 | 1 | 8 | 4 | 10 | 0 | 1 | 0 | 6 | 8 | 7 | 0 | 3 | 302 | 6 | 0 | 311 | 0 | 5 | 319 | 2 | 0 | 326 | 654 |
| 4:30 PM | 0 | 0 | 1 | 12 | 4 | 13 | 0 | 1 | 0 | 10 | 1 | 11 | 0 | 3 | 279 | 10 | 1 | 292 | 0 | 9 | 311 | 5 | 1 | 325 | 641 |
| 4:45 PM | 0 | 1 | 0 | 12 | 3 | 13 | 0 | 1 | 0 | 1 | 3 | 2 | 0 | 6 | 281 | 8 | 0 | 295 | 0 | 8 | 286 | 7 | 0 | 301 | 611 |
| 5:00 PM | 0 | 0 | 1 | 8 | 6 | 9 | 0 | 0 | 1 | 18 | 3 | 19 | 0 | 4 | 271 | 8 | 0 | 283 | 0 | 9 | 273 | 6 | 1 | 288 | 599 |
| Total | 0 | 2 | 3 | 40 | 17 | 45 | 0 | 3 | 1 | 35 | 15 | 39 | 0 | 16 | 1133 | 32 | 1 | 1181 | 0 | 31 | 1189 | 20 | 2 | 1240 | 2505 |
| Approach % | 0.0 | 4.4 | 6.7 | 88.9 | - | - | 0.0 | 7.7 | 2.6 | 89.7 | - | - | 0.0 | 1.4 | 95.9 | 2.7 | - | - | 0.0 | 2.5 | 95.9 | 1.6 | - | - | - |
| Total % | 0.0 | 0.1 | 0.1 | 1.6 | - | 1.8 | 0.0 | 0.1 | 0.0 | 1.4 | - | 1.6 | 0.0 | 0.6 | 45.2 | 1.3 | - | 47.1 | 0.0 | 1.2 | 47.5 | 0.8 | - | 49.5 | - |
| PHF | 0.000 | 0.500 | 0.750 | 0.833 | - | 0.865 | 0.000 | 0.750 | 0.250 | 0.486 | - | 0.513 | 0.000 | 0.667 | 0.938 | 0.800 | - | 0.949 | 0.000 | 0.861 | 0.932 | 0.714 | - | 0.951 | 0.958 |
| Lights | 0 | 2 | 3 | 40 | - | 45 | 0 | 3 | 1 | 34 | - | 38 | 0 | 15 | 1102 | 32 | - | 1149 | 0 | 31 | 1156 | 20 | - | 1207 | 2439 |
| % Lights | - | 100.0 | 100.0 | 100.0 | - | 100.0 | - | 100.0 | 100.0 | 97.1 | - | 97.4 | - | 93.8 | 97.3 | 100.0 | - | 97.3 | - | 100.0 | 97.2 | 100.0 | - | 97.3 | 97.4 |
| Buses | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 1 | 8 | 0 | - | 9 | 0 | 0 | 6 | 0 | - | 6 | 15 |
| % Buses | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 6.3 | 0.7 | 0.0 | - | 0.8 | - | 0.0 | 0.5 | 0.0 | - | 0.5 | 0.6 |
| Single-Unit Trucks | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 1 | - | 1 | 0 | 0 | 14 | 0 | - | 14 | 0 | 0 | 18 | 0 | - | 18 | 33 |
| % Single-Unit Trucks | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 2.9 | - | 2.6 | - | 0.0 | 1.2 | 0.0 | - | 1.2 | - | 0.0 | 1.5 | 0.0 | - | 1.5 | 1.3 |
| Articulated Trucks | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 9 | 0 | - | 9 | 0 | 0 | 9 | 0 | - | 9 | 18 |
| % Articulated Trucks | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.8 | 0.0 | - | 0.8 | - | 0.0 | 0.8 | 0.0 | - | 0.7 | 0.7 |
| Bicycles on Road | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 |
| % Bicycles on Road | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | 0.0 |
| Pedestrians | - | - | - | - | 17 | - | - | - | - | - | 15 | - | - | - | - | - | 1 | - | - | - | - | - | 2 | - | - |
| % Pedestrians | - | - | - | - | 100.0 | - | - | - | - | - | 100.0 | - | - | - | - | - | 100.0 | - | - | - | - | - | 100.0 | - | - |



Kenig Lindgren O'Hara Aboona, Inc.
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Count Name: Harlem Avenue with Pleasant Street
Site Code:
Start Date: 09/10/2020
Page No: 5

Turning Movement Peak Hour Data (12:45 PM)

| Start Time | Pleasant Street Eastbound | | | | | | Pleasant Street Westbound | | | | | | Harlem Avenue Northbound | | | | | | Harlem Avenue Southbound | | | | | | Int. Total |
|----------------------|---------------------------|-------|-------|-------|-------|------------|---------------------------|-------|-------|-------|-------|------------|--------------------------|-------|-------|-------|------|------------|--------------------------|-------|-------|-------|------|------------|------------|
| | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | |
| 12:45 PM | 0 | 1 | 0 | 13 | 1 | 14 | 0 | 0 | 0 | 6 | 2 | 6 | 0 | 4 | 276 | 8 | 0 | 288 | 0 | 7 | 288 | 1 | 0 | 296 | 604 |
| 1:00 PM | 0 | 0 | 0 | 7 | 0 | 7 | 0 | 0 | 1 | 1 | 1 | 2 | 0 | 5 | 282 | 12 | 0 | 299 | 0 | 8 | 289 | 4 | 0 | 301 | 609 |
| 1:15 PM | 0 | 0 | 0 | 5 | 1 | 5 | 0 | 0 | 2 | 8 | 1 | 10 | 0 | 7 | 275 | 14 | 0 | 296 | 0 | 9 | 346 | 4 | 0 | 359 | 670 |
| 1:30 PM | 0 | 0 | 0 | 3 | 1 | 3 | 0 | 1 | 1 | 6 | 3 | 8 | 0 | 3 | 266 | 6 | 0 | 275 | 0 | 11 | 269 | 2 | 0 | 282 | 568 |
| Total | 0 | 1 | 0 | 28 | 3 | 29 | 0 | 1 | 4 | 21 | 7 | 26 | 0 | 19 | 1099 | 40 | 0 | 1158 | 0 | 35 | 1192 | 11 | 0 | 1238 | 2451 |
| Approach % | 0.0 | 3.4 | 0.0 | 96.6 | - | - | 0.0 | 3.8 | 15.4 | 80.8 | - | - | 0.0 | 1.6 | 94.9 | 3.5 | - | - | 0.0 | 2.8 | 96.3 | 0.9 | - | - | - |
| Total % | 0.0 | 0.0 | 0.0 | 1.1 | - | 1.2 | 0.0 | 0.0 | 0.2 | 0.9 | - | 1.1 | 0.0 | 0.8 | 44.8 | 1.6 | - | 47.2 | 0.0 | 1.4 | 48.6 | 0.4 | - | 50.5 | - |
| PHF | 0.000 | 0.250 | 0.000 | 0.538 | - | 0.518 | 0.000 | 0.250 | 0.500 | 0.656 | - | 0.650 | 0.000 | 0.679 | 0.974 | 0.714 | - | 0.968 | 0.000 | 0.795 | 0.861 | 0.688 | - | 0.862 | 0.915 |
| Lights | 0 | 1 | 0 | 28 | - | 29 | 0 | 1 | 4 | 20 | - | 25 | 0 | 19 | 1084 | 39 | - | 1142 | 0 | 35 | 1180 | 11 | - | 1226 | 2422 |
| % Lights | - | 100.0 | - | 100.0 | - | 100.0 | - | 100.0 | 100.0 | 95.2 | - | 96.2 | - | 100.0 | 98.6 | 97.5 | - | 98.6 | - | 100.0 | 99.0 | 100.0 | - | 99.0 | 98.8 |
| Buses | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 6 | 1 | - | 7 | 0 | 0 | 6 | 0 | - | 6 | 13 |
| % Buses | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.5 | 2.5 | - | 0.6 | - | 0.0 | 0.5 | 0.0 | - | 0.5 | 0.5 |
| Single-Unit Trucks | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 1 | - | 1 | 0 | 0 | 7 | 0 | - | 7 | 0 | 0 | 5 | 0 | - | 5 | 13 |
| % Single-Unit Trucks | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 4.8 | - | 3.8 | - | 0.0 | 0.6 | 0.0 | - | 0.6 | - | 0.0 | 0.4 | 0.0 | - | 0.4 | 0.5 |
| Articulated Trucks | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 2 | 0 | - | 2 | 0 | 0 | 1 | 0 | - | 1 | 3 |
| % Articulated Trucks | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.2 | 0.0 | - | 0.2 | - | 0.0 | 0.1 | 0.0 | - | 0.1 | 0.1 |
| Bicycles on Road | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 |
| % Bicycles on Road | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | 0.0 |
| Pedestrians | - | - | - | - | 3 | - | - | - | - | - | 7 | - | - | - | - | - | 0 | - | - | - | - | - | 0 | - | - |
| % Pedestrians | - | - | - | - | 100.0 | - | - | - | - | - | 100.0 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |



Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400

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Count Name: Harlem Avenue with Randolph Street
Site Code:
Start Date: 09/10/2020
Page No: 1

Turning Movement Data

| Start Time | Randolph Street Eastbound | | | | | | Randolph Street Westbound | | | | | | Harlem Avenue Northbound | | | | | | Harlem Avenue Southbound | | | | | | Int. Total |
|---------------|---------------------------|------|------|-------|------|------------|---------------------------|------|------|-------|------|------------|--------------------------|------|------|-------|------|------------|--------------------------|------|------|-------|------|------------|------------|
| | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | |
| 7:00 AM | 0 | 17 | 13 | 10 | 0 | 40 | 0 | 12 | 8 | 5 | 1 | 25 | 0 | 11 | 174 | 6 | 0 | 191 | 0 | 6 | 250 | 10 | 2 | 266 | 522 |
| 7:15 AM | 0 | 28 | 22 | 23 | 1 | 73 | 1 | 18 | 17 | 4 | 3 | 40 | 0 | 13 | 223 | 2 | 3 | 238 | 0 | 3 | 274 | 15 | 1 | 292 | 643 |
| 7:30 AM | 0 | 16 | 20 | 20 | 1 | 56 | 0 | 11 | 17 | 3 | 0 | 31 | 0 | 16 | 236 | 4 | 1 | 256 | 0 | 6 | 280 | 23 | 3 | 309 | 652 |
| 7:45 AM | 0 | 21 | 26 | 19 | 1 | 66 | 0 | 10 | 18 | 7 | 1 | 35 | 0 | 22 | 271 | 9 | 2 | 302 | 0 | 8 | 271 | 16 | 1 | 295 | 698 |
| Hourly Total | 0 | 82 | 81 | 72 | 3 | 235 | 1 | 51 | 60 | 19 | 5 | 131 | 0 | 62 | 904 | 21 | 6 | 987 | 0 | 23 | 1075 | 64 | 7 | 1162 | 2515 |
| 8:00 AM | 0 | 20 | 20 | 16 | 2 | 56 | 0 | 9 | 25 | 2 | 1 | 36 | 1 | 19 | 258 | 6 | 4 | 284 | 0 | 10 | 283 | 16 | 3 | 309 | 685 |
| 8:15 AM | 0 | 21 | 19 | 15 | 3 | 55 | 0 | 12 | 17 | 6 | 4 | 35 | 0 | 22 | 239 | 6 | 3 | 267 | 0 | 4 | 252 | 5 | 2 | 261 | 618 |
| 8:30 AM | 0 | 29 | 22 | 16 | 2 | 67 | 0 | 8 | 15 | 3 | 0 | 26 | 0 | 16 | 252 | 4 | 3 | 272 | 0 | 5 | 243 | 17 | 2 | 265 | 630 |
| 8:45 AM | 0 | 24 | 25 | 14 | 0 | 63 | 0 | 8 | 17 | 4 | 2 | 29 | 0 | 16 | 237 | 7 | 4 | 260 | 0 | 10 | 237 | 9 | 2 | 256 | 608 |
| Hourly Total | 0 | 94 | 86 | 61 | 7 | 241 | 0 | 37 | 74 | 15 | 7 | 126 | 1 | 73 | 986 | 23 | 14 | 1083 | 0 | 29 | 1015 | 47 | 9 | 1091 | 2541 |
| *** BREAK *** | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 4:00 PM | 0 | 37 | 52 | 25 | 4 | 114 | 0 | 14 | 35 | 4 | 5 | 53 | 0 | 35 | 244 | 10 | 7 | 289 | 0 | 11 | 253 | 19 | 5 | 283 | 739 |
| 4:15 PM | 0 | 34 | 53 | 22 | 8 | 109 | 0 | 15 | 24 | 6 | 2 | 45 | 0 | 20 | 243 | 13 | 2 | 276 | 0 | 16 | 283 | 17 | 5 | 316 | 746 |
| 4:30 PM | 0 | 37 | 40 | 29 | 3 | 106 | 0 | 13 | 35 | 7 | 2 | 55 | 0 | 25 | 272 | 21 | 0 | 318 | 0 | 18 | 294 | 18 | 3 | 330 | 809 |
| 4:45 PM | 0 | 32 | 59 | 23 | 4 | 114 | 0 | 15 | 45 | 9 | 1 | 69 | 0 | 31 | 244 | 11 | 1 | 286 | 0 | 17 | 260 | 22 | 2 | 299 | 768 |
| Hourly Total | 0 | 140 | 204 | 99 | 19 | 443 | 0 | 57 | 139 | 26 | 10 | 222 | 0 | 111 | 1003 | 55 | 10 | 1169 | 0 | 62 | 1090 | 76 | 15 | 1228 | 3062 |
| 5:00 PM | 0 | 33 | 58 | 22 | 9 | 113 | 0 | 21 | 42 | 8 | 0 | 71 | 0 | 32 | 246 | 8 | 1 | 286 | 0 | 22 | 244 | 15 | 4 | 281 | 751 |
| 5:15 PM | 0 | 34 | 57 | 29 | 3 | 120 | 0 | 14 | 36 | 7 | 3 | 57 | 0 | 29 | 218 | 15 | 1 | 262 | 0 | 20 | 239 | 22 | 3 | 281 | 720 |
| 5:30 PM | 0 | 24 | 64 | 15 | 1 | 103 | 0 | 18 | 37 | 2 | 0 | 57 | 0 | 38 | 238 | 6 | 2 | 282 | 0 | 14 | 243 | 14 | 0 | 271 | 713 |
| 5:45 PM | 0 | 31 | 40 | 22 | 2 | 93 | 0 | 14 | 23 | 6 | 2 | 43 | 0 | 30 | 247 | 15 | 1 | 292 | 0 | 13 | 287 | 21 | 2 | 321 | 749 |
| Hourly Total | 0 | 122 | 219 | 88 | 15 | 429 | 0 | 67 | 138 | 23 | 5 | 228 | 0 | 129 | 949 | 44 | 5 | 1122 | 0 | 69 | 1013 | 72 | 9 | 1154 | 2933 |
| *** BREAK *** | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 11:30 AM | 0 | 36 | 22 | 18 | 1 | 76 | 0 | 15 | 20 | 6 | 0 | 41 | 0 | 9 | 276 | 13 | 2 | 298 | 0 | 11 | 275 | 7 | 1 | 293 | 708 |
| 11:45 AM | 0 | 31 | 31 | 12 | 0 | 74 | 0 | 17 | 20 | 8 | 0 | 45 | 0 | 13 | 277 | 13 | 0 | 303 | 0 | 18 | 285 | 13 | 0 | 316 | 738 |
| Hourly Total | 0 | 67 | 53 | 30 | 1 | 150 | 0 | 32 | 40 | 14 | 0 | 86 | 0 | 22 | 553 | 26 | 2 | 601 | 0 | 29 | 560 | 20 | 1 | 609 | 1446 |
| 12:00 PM | 0 | 31 | 24 | 13 | 2 | 68 | 0 | 27 | 30 | 4 | 2 | 61 | 0 | 14 | 279 | 9 | 6 | 302 | 0 | 11 | 253 | 14 | 3 | 278 | 709 |
| 12:15 PM | 0 | 28 | 25 | 15 | 1 | 68 | 0 | 13 | 31 | 8 | 1 | 52 | 0 | 15 | 251 | 13 | 0 | 279 | 0 | 15 | 263 | 23 | 2 | 301 | 700 |
| 12:30 PM | 0 | 19 | 23 | 11 | 2 | 53 | 0 | 8 | 19 | 7 | 1 | 34 | 0 | 20 | 230 | 7 | 2 | 257 | 0 | 17 | 272 | 18 | 1 | 307 | 651 |
| 12:45 PM | 0 | 24 | 31 | 8 | 1 | 63 | 0 | 16 | 35 | 7 | 0 | 58 | 0 | 21 | 276 | 10 | 0 | 307 | 0 | 17 | 254 | 22 | 1 | 293 | 721 |
| Hourly Total | 0 | 102 | 103 | 47 | 6 | 252 | 0 | 64 | 115 | 26 | 4 | 205 | 0 | 70 | 1036 | 39 | 8 | 1145 | 0 | 60 | 1042 | 77 | 7 | 1179 | 2781 |
| 1:00 PM | 0 | 33 | 28 | 18 | 1 | 79 | 0 | 13 | 17 | 4 | 1 | 34 | 0 | 19 | 285 | 8 | 2 | 312 | 0 | 16 | 269 | 19 | 3 | 304 | 729 |
| 1:15 PM | 0 | 31 | 28 | 15 | 1 | 74 | 0 | 13 | 32 | 3 | 1 | 48 | 0 | 15 | 269 | 10 | 2 | 294 | 0 | 21 | 294 | 23 | 0 | 338 | 754 |
| 1:30 PM | 0 | 29 | 32 | 15 | 4 | 76 | 0 | 7 | 21 | 11 | 2 | 39 | 0 | 29 | 247 | 6 | 3 | 282 | 0 | 13 | 239 | 23 | 6 | 275 | 672 |
| 1:45 PM | 0 | 22 | 32 | 18 | 3 | 72 | 0 | 11 | 24 | 7 | 1 | 42 | 0 | 16 | 253 | 7 | 5 | 276 | 0 | 12 | 291 | 11 | 6 | 314 | 704 |
| Hourly Total | 0 | 115 | 120 | 66 | 9 | 301 | 0 | 44 | 94 | 25 | 5 | 163 | 0 | 79 | 1054 | 31 | 12 | 1164 | 0 | 62 | 1093 | 76 | 15 | 1231 | 2859 |

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------|-----|------|------|------|-------|------|-------|------|------|------|-------|------|-------|------|------|------|-------|------|-----|------|------|------|-------|------|-------|
| Grand Total | 0 | 722 | 866 | 463 | 60 | 2051 | 1 | 352 | 660 | 148 | 36 | 1161 | 1 | 546 | 6485 | 239 | 57 | 7271 | 0 | 334 | 6888 | 432 | 63 | 7654 | 18137 |
| Approach % | 0.0 | 35.2 | 42.2 | 22.6 | - | - | 0.1 | 30.3 | 56.8 | 12.7 | - | - | 0.0 | 7.5 | 89.2 | 3.3 | - | - | 0.0 | 4.4 | 90.0 | 5.6 | - | - | - |
| Total % | 0.0 | 4.0 | 4.8 | 2.6 | - | 11.3 | 0.0 | 1.9 | 3.6 | 0.8 | - | 6.4 | 0.0 | 3.0 | 35.8 | 1.3 | - | 40.1 | 0.0 | 1.8 | 38.0 | 2.4 | - | 42.2 | - |
| Lights | 0 | 713 | 856 | 458 | - | 2027 | 1 | 350 | 645 | 146 | - | 1142 | 0 | 540 | 6272 | 237 | - | 7049 | 0 | 330 | 6697 | 424 | - | 7451 | 17669 |
| % Lights | - | 98.8 | 98.8 | 98.9 | - | 98.8 | 100.0 | 99.4 | 97.7 | 98.6 | - | 98.4 | 0.0 | 98.9 | 96.7 | 99.2 | - | 96.9 | - | 98.8 | 97.2 | 98.1 | - | 97.3 | 97.4 |
| Buses | 0 | 1 | 1 | 1 | - | 3 | 0 | 0 | 0 | 0 | - | 0 | 0 | 2 | 57 | 0 | - | 59 | 0 | 0 | 55 | 0 | - | 55 | 117 |
| % Buses | - | 0.1 | 0.1 | 0.2 | - | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | - | 0.0 | 0.0 | 0.4 | 0.9 | 0.0 | - | 0.8 | - | 0.0 | 0.8 | 0.0 | - | 0.7 | 0.6 |
| Single-Unit Trucks | 0 | 6 | 4 | 3 | - | 13 | 0 | 1 | 4 | 2 | - | 7 | 0 | 4 | 105 | 2 | - | 111 | 0 | 4 | 91 | 8 | - | 103 | 234 |
| % Single-Unit Trucks | - | 0.8 | 0.5 | 0.6 | - | 0.6 | 0.0 | 0.3 | 0.6 | 1.4 | - | 0.6 | 0.0 | 0.7 | 1.6 | 0.8 | - | 1.5 | - | 1.2 | 1.3 | 1.9 | - | 1.3 | 1.3 |
| Articulated Trucks | 0 | 2 | 0 | 1 | - | 3 | 0 | 0 | 0 | 0 | - | 0 | 1 | 0 | 51 | 0 | - | 52 | 0 | 0 | 45 | 0 | - | 45 | 100 |
| % Articulated Trucks | - | 0.3 | 0.0 | 0.2 | - | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | - | 0.0 | 100.0 | 0.0 | 0.8 | 0.0 | - | 0.7 | - | 0.0 | 0.7 | 0.0 | - | 0.6 | 0.6 |
| Bicycles on Road | 0 | 0 | 5 | 0 | - | 5 | 0 | 1 | 11 | 0 | - | 12 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 17 |
| % Bicycles on Road | - | 0.0 | 0.6 | 0.0 | - | 0.2 | 0.0 | 0.3 | 1.7 | 0.0 | - | 1.0 | 0.0 | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | 0.1 |
| Pedestrians | - | - | - | - | 60 | - | - | - | - | - | 36 | - | - | - | - | - | 57 | - | - | - | - | - | 63 | - | - |
| % Pedestrians | - | - | - | - | 100.0 | - | - | - | - | - | 100.0 | - | - | - | - | - | 100.0 | - | - | - | - | - | 100.0 | - | - |



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Count Name: Harlem Avenue with Randolph
Street
Site Code:
Start Date: 09/10/2020
Page No: 3

Turning Movement Peak Hour Data (7:15 AM)

| Start Time | Randolph Street Eastbound | | | | | | Randolph Street Westbound | | | | | | Harlem Avenue Northbound | | | | | | Harlem Avenue Southbound | | | | | | Int. Total |
|----------------------|---------------------------|-------|-------|-------|-------|------------|---------------------------|-------|-------|-------|-------|------------|--------------------------|-------|-------|-------|-------|------------|--------------------------|-------|-------|-------|-------|------------|------------|
| | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | |
| 7:15 AM | 0 | 28 | 22 | 23 | 1 | 73 | 1 | 18 | 17 | 4 | 3 | 40 | 0 | 13 | 223 | 2 | 3 | 238 | 0 | 3 | 274 | 15 | 1 | 292 | 643 |
| 7:30 AM | 0 | 16 | 20 | 20 | 1 | 56 | 0 | 11 | 17 | 3 | 0 | 31 | 0 | 16 | 236 | 4 | 1 | 256 | 0 | 6 | 280 | 23 | 3 | 309 | 652 |
| 7:45 AM | 0 | 21 | 26 | 19 | 1 | 66 | 0 | 10 | 18 | 7 | 1 | 35 | 0 | 22 | 271 | 9 | 2 | 302 | 0 | 8 | 271 | 16 | 1 | 295 | 698 |
| 8:00 AM | 0 | 20 | 20 | 16 | 2 | 56 | 0 | 9 | 25 | 2 | 1 | 36 | 1 | 19 | 258 | 6 | 4 | 284 | 0 | 10 | 283 | 16 | 3 | 309 | 685 |
| Total | 0 | 85 | 88 | 78 | 5 | 251 | 1 | 48 | 77 | 16 | 5 | 142 | 1 | 70 | 988 | 21 | 10 | 1080 | 0 | 27 | 1108 | 70 | 8 | 1205 | 2678 |
| Approach % | 0.0 | 33.9 | 35.1 | 31.1 | - | - | 0.7 | 33.8 | 54.2 | 11.3 | - | - | 0.1 | 6.5 | 91.5 | 1.9 | - | - | 0.0 | 2.2 | 92.0 | 5.8 | - | - | - |
| Total % | 0.0 | 3.2 | 3.3 | 2.9 | - | 9.4 | 0.0 | 1.8 | 2.9 | 0.6 | - | 5.3 | 0.0 | 2.6 | 36.9 | 0.8 | - | 40.3 | 0.0 | 1.0 | 41.4 | 2.6 | - | 45.0 | - |
| PHF | 0.000 | 0.759 | 0.846 | 0.848 | - | 0.860 | 0.250 | 0.667 | 0.770 | 0.571 | - | 0.888 | 0.250 | 0.795 | 0.911 | 0.583 | - | 0.894 | 0.000 | 0.675 | 0.979 | 0.761 | - | 0.975 | 0.959 |
| Lights | 0 | 84 | 86 | 77 | - | 247 | 1 | 48 | 71 | 16 | - | 136 | 0 | 67 | 923 | 20 | - | 1010 | 0 | 26 | 1070 | 66 | - | 1162 | 2555 |
| % Lights | - | 98.8 | 97.7 | 98.7 | - | 98.4 | 100.0 | 100.0 | 92.2 | 100.0 | - | 95.8 | 0.0 | 95.7 | 93.4 | 95.2 | - | 93.5 | - | 96.3 | 96.6 | 94.3 | - | 96.4 | 95.4 |
| Buses | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 2 | 9 | 0 | - | 11 | 0 | 0 | 9 | 0 | - | 9 | 20 |
| % Buses | - | 0.0 | 0.0 | 0.0 | - | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | - | 0.0 | 0.0 | 2.9 | 0.9 | 0.0 | - | 1.0 | - | 0.0 | 0.8 | 0.0 | - | 0.7 | 0.7 |
| Single-Unit Trucks | 0 | 1 | 2 | 1 | - | 4 | 0 | 0 | 1 | 0 | - | 1 | 0 | 1 | 39 | 1 | - | 41 | 0 | 1 | 21 | 4 | - | 26 | 72 |
| % Single-Unit Trucks | - | 1.2 | 2.3 | 1.3 | - | 1.6 | 0.0 | 0.0 | 1.3 | 0.0 | - | 0.7 | 0.0 | 1.4 | 3.9 | 4.8 | - | 3.8 | - | 3.7 | 1.9 | 5.7 | - | 2.2 | 2.7 |
| Articulated Trucks | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 1 | 0 | 17 | 0 | - | 18 | 0 | 0 | 8 | 0 | - | 8 | 26 |
| % Articulated Trucks | - | 0.0 | 0.0 | 0.0 | - | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | - | 0.0 | 100.0 | 0.0 | 1.7 | 0.0 | - | 1.7 | - | 0.0 | 0.7 | 0.0 | - | 0.7 | 1.0 |
| Bicycles on Road | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 5 | 0 | - | 5 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 5 |
| % Bicycles on Road | - | 0.0 | 0.0 | 0.0 | - | 0.0 | 0.0 | 0.0 | 6.5 | 0.0 | - | 3.5 | 0.0 | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | 0.2 |
| Pedestrians | - | - | - | - | 5 | - | - | - | - | - | 5 | - | - | - | - | - | 10 | - | - | - | - | - | 8 | - | - |
| % Pedestrians | - | - | - | - | 100.0 | - | - | - | - | - | 100.0 | - | - | - | - | - | 100.0 | - | - | - | - | - | 100.0 | - | - |



Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400

Rosemont, Illinois, United States 60018
(847)518-9990

Count Name: Harlem Avenue with Randolph Street
Site Code:
Start Date: 09/10/2020
Page No: 4

Turning Movement Peak Hour Data (4:15 PM)

| Start Time | Randolph Street Eastbound | | | | | | Randolph Street Westbound | | | | | | Harlem Avenue Northbound | | | | | | Harlem Avenue Southbound | | | | | | Int. Total |
|----------------------|---------------------------|-------|-------|-------|-------|------------|---------------------------|-------|-------|-------|-------|------------|--------------------------|-------|-------|-------|-------|------------|--------------------------|-------|-------|-------|-------|------------|------------|
| | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | |
| 4:15 PM | 0 | 34 | 53 | 22 | 8 | 109 | 0 | 15 | 24 | 6 | 2 | 45 | 0 | 20 | 243 | 13 | 2 | 276 | 0 | 16 | 283 | 17 | 5 | 316 | 746 |
| 4:30 PM | 0 | 37 | 40 | 29 | 3 | 106 | 0 | 13 | 35 | 7 | 2 | 55 | 0 | 25 | 272 | 21 | 0 | 318 | 0 | 18 | 294 | 18 | 3 | 330 | 809 |
| 4:45 PM | 0 | 32 | 59 | 23 | 4 | 114 | 0 | 15 | 45 | 9 | 1 | 69 | 0 | 31 | 244 | 11 | 1 | 286 | 0 | 17 | 260 | 22 | 2 | 299 | 768 |
| 5:00 PM | 0 | 33 | 58 | 22 | 9 | 113 | 0 | 21 | 42 | 8 | 0 | 71 | 0 | 32 | 246 | 8 | 1 | 286 | 0 | 22 | 244 | 15 | 4 | 281 | 751 |
| Total | 0 | 136 | 210 | 96 | 24 | 442 | 0 | 64 | 146 | 30 | 5 | 240 | 0 | 108 | 1005 | 53 | 4 | 1166 | 0 | 73 | 1081 | 72 | 14 | 1226 | 3074 |
| Approach % | 0.0 | 30.8 | 47.5 | 21.7 | - | - | 0.0 | 26.7 | 60.8 | 12.5 | - | - | 0.0 | 9.3 | 86.2 | 4.5 | - | - | 0.0 | 6.0 | 88.2 | 5.9 | - | - | - |
| Total % | 0.0 | 4.4 | 6.8 | 3.1 | - | 14.4 | 0.0 | 2.1 | 4.7 | 1.0 | - | 7.8 | 0.0 | 3.5 | 32.7 | 1.7 | - | 37.9 | 0.0 | 2.4 | 35.2 | 2.3 | - | 39.9 | - |
| PHF | 0.000 | 0.919 | 0.890 | 0.828 | - | 0.969 | 0.000 | 0.762 | 0.811 | 0.833 | - | 0.845 | 0.000 | 0.844 | 0.924 | 0.631 | - | 0.917 | 0.000 | 0.830 | 0.919 | 0.818 | - | 0.929 | 0.950 |
| Lights | 0 | 133 | 208 | 96 | - | 437 | 0 | 64 | 144 | 28 | - | 236 | 0 | 107 | 978 | 52 | - | 1137 | 0 | 72 | 1051 | 72 | - | 1195 | 3005 |
| % Lights | - | 97.8 | 99.0 | 100.0 | - | 98.9 | - | 100.0 | 98.6 | 93.3 | - | 98.3 | - | 99.1 | 97.3 | 98.1 | - | 97.5 | - | 98.6 | 97.2 | 100.0 | - | 97.5 | 97.8 |
| Buses | 0 | 0 | 1 | 0 | - | 1 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 11 | 0 | - | 11 | 0 | 0 | 7 | 0 | - | 7 | 19 |
| % Buses | - | 0.0 | 0.5 | 0.0 | - | 0.2 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 1.1 | 0.0 | - | 0.9 | - | 0.0 | 0.6 | 0.0 | - | 0.6 | 0.6 |
| Single-Unit Trucks | 0 | 3 | 0 | 0 | - | 3 | 0 | 0 | 0 | 2 | - | 2 | 0 | 1 | 7 | 1 | - | 9 | 0 | 1 | 15 | 0 | - | 16 | 30 |
| % Single-Unit Trucks | - | 2.2 | 0.0 | 0.0 | - | 0.7 | - | 0.0 | 0.0 | 6.7 | - | 0.8 | - | 0.9 | 0.7 | 1.9 | - | 0.8 | - | 1.4 | 1.4 | 0.0 | - | 1.3 | 1.0 |
| Articulated Trucks | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 9 | 0 | - | 9 | 0 | 0 | 8 | 0 | - | 8 | 17 |
| % Articulated Trucks | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.9 | 0.0 | - | 0.8 | - | 0.0 | 0.7 | 0.0 | - | 0.7 | 0.6 |
| Bicycles on Road | 0 | 0 | 1 | 0 | - | 1 | 0 | 0 | 2 | 0 | - | 2 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 3 |
| % Bicycles on Road | - | 0.0 | 0.5 | 0.0 | - | 0.2 | - | 0.0 | 1.4 | 0.0 | - | 0.8 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | 0.1 |
| Pedestrians | - | - | - | - | 24 | - | - | - | - | - | 5 | - | - | - | - | - | 4 | - | - | - | - | - | 14 | - | - |
| % Pedestrians | - | - | - | - | 100.0 | - | - | - | - | - | 100.0 | - | - | - | - | - | 100.0 | - | - | - | - | - | 100.0 | - | - |



Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400

Rosemont, Illinois, United States 60018
(847)518-9990

Count Name: Harlem Avenue with Randolph Street
Site Code:
Start Date: 09/10/2020
Page No: 5

Turning Movement Peak Hour Data (12:45 PM)

| Start Time | Randolph Street Eastbound | | | | | | Randolph Street Westbound | | | | | | Harlem Avenue Northbound | | | | | | Harlem Avenue Southbound | | | | | | Int. Total |
|----------------------|---------------------------|-------|-------|-------|-------|------------|---------------------------|-------|-------|-------|-------|------------|--------------------------|-------|-------|-------|-------|------------|--------------------------|-------|-------|-------|-------|------------|------------|
| | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | |
| 12:45 PM | 0 | 24 | 31 | 8 | 1 | 63 | 0 | 16 | 35 | 7 | 0 | 58 | 0 | 21 | 276 | 10 | 0 | 307 | 0 | 17 | 254 | 22 | 1 | 293 | 721 |
| 1:00 PM | 0 | 33 | 28 | 18 | 1 | 79 | 0 | 13 | 17 | 4 | 1 | 34 | 0 | 19 | 285 | 8 | 2 | 312 | 0 | 16 | 269 | 19 | 3 | 304 | 729 |
| 1:15 PM | 0 | 31 | 28 | 15 | 1 | 74 | 0 | 13 | 32 | 3 | 1 | 48 | 0 | 15 | 269 | 10 | 2 | 294 | 0 | 21 | 294 | 23 | 0 | 338 | 754 |
| 1:30 PM | 0 | 29 | 32 | 15 | 4 | 76 | 0 | 7 | 21 | 11 | 2 | 39 | 0 | 29 | 247 | 6 | 3 | 282 | 0 | 13 | 239 | 23 | 6 | 275 | 672 |
| Total | 0 | 117 | 119 | 56 | 7 | 292 | 0 | 49 | 105 | 25 | 4 | 179 | 0 | 84 | 1077 | 34 | 7 | 1195 | 0 | 67 | 1056 | 87 | 10 | 1210 | 2876 |
| Approach % | 0.0 | 40.1 | 40.8 | 19.2 | - | - | 0.0 | 27.4 | 58.7 | 14.0 | - | - | 0.0 | 7.0 | 90.1 | 2.8 | - | - | 0.0 | 5.5 | 87.3 | 7.2 | - | - | - |
| Total % | 0.0 | 4.1 | 4.1 | 1.9 | - | 10.2 | 0.0 | 1.7 | 3.7 | 0.9 | - | 6.2 | 0.0 | 2.9 | 37.4 | 1.2 | - | 41.6 | 0.0 | 2.3 | 36.7 | 3.0 | - | 42.1 | - |
| PHF | 0.000 | 0.886 | 0.930 | 0.778 | - | 0.924 | 0.000 | 0.766 | 0.750 | 0.568 | - | 0.772 | 0.000 | 0.724 | 0.945 | 0.850 | - | 0.958 | 0.000 | 0.798 | 0.898 | 0.946 | - | 0.895 | 0.954 |
| Lights | 0 | 116 | 119 | 54 | - | 289 | 0 | 49 | 104 | 25 | - | 178 | 0 | 84 | 1060 | 34 | - | 1178 | 0 | 67 | 1041 | 87 | - | 1195 | 2840 |
| % Lights | - | 99.1 | 100.0 | 96.4 | - | 99.0 | - | 100.0 | 99.0 | 100.0 | - | 99.4 | - | 100.0 | 98.4 | 100.0 | - | 98.6 | - | 100.0 | 98.6 | 100.0 | - | 98.8 | 98.7 |
| Buses | 0 | 1 | 0 | 1 | - | 2 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 6 | 0 | - | 6 | 0 | 0 | 5 | 0 | - | 5 | 13 |
| % Buses | - | 0.9 | 0.0 | 1.8 | - | 0.7 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.6 | 0.0 | - | 0.5 | - | 0.0 | 0.5 | 0.0 | - | 0.4 | 0.5 |
| Single-Unit Trucks | 0 | 0 | 0 | 1 | - | 1 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 9 | 0 | - | 9 | 0 | 0 | 9 | 0 | - | 9 | 19 |
| % Single-Unit Trucks | - | 0.0 | 0.0 | 1.8 | - | 0.3 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.8 | 0.0 | - | 0.8 | - | 0.0 | 0.9 | 0.0 | - | 0.7 | 0.7 |
| Articulated Trucks | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 2 | 0 | - | 2 | 0 | 0 | 1 | 0 | - | 1 | 3 |
| % Articulated Trucks | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.2 | 0.0 | - | 0.2 | - | 0.0 | 0.1 | 0.0 | - | 0.1 | 0.1 |
| Bicycles on Road | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 1 | 0 | - | 1 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 1 |
| % Bicycles on Road | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 1.0 | 0.0 | - | 0.6 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | 0.0 |
| Pedestrians | - | - | - | - | 7 | - | - | - | - | - | 4 | - | - | - | - | - | 7 | - | - | - | - | - | 10 | - | - |
| % Pedestrians | - | - | - | - | 100.0 | - | - | - | - | - | 100.0 | - | - | - | - | - | 100.0 | - | - | - | - | - | 100.0 | - | - |



Kenig Lindgren O'Hara Aboona, Inc.
 9575 W. Higgins Rd., Suite 400
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 (847)518-9990

Count Name: Harlem Avenue with South
 Boulevard
 Site Code:
 Start Date: 09/10/2020
 Page No: 1

Turning Movement Data

| Start Time | South Boulevard Eastbound | | | | | | South Boulevard Westbound | | | | | | Harlem Avenue Northbound | | | | | | Harlem Avenue Southbound | | | | | | Int. Total |
|---------------|---------------------------|------|------|-------|------|------------|---------------------------|------|------|-------|------|------------|--------------------------|------|------|-------|------|------------|--------------------------|------|------|-------|------|------------|------------|
| | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | |
| 7:00 AM | 0 | 1 | 0 | 3 | 8 | 4 | 0 | 15 | 7 | 11 | 3 | 33 | 0 | 0 | 181 | 4 | 9 | 185 | 0 | 0 | 255 | 8 | 2 | 263 | 485 |
| 7:15 AM | 0 | 0 | 0 | 5 | 23 | 5 | 0 | 25 | 14 | 10 | 6 | 49 | 0 | 0 | 228 | 1 | 13 | 229 | 0 | 0 | 265 | 16 | 3 | 281 | 564 |
| 7:30 AM | 0 | 0 | 0 | 1 | 11 | 1 | 0 | 21 | 8 | 18 | 5 | 47 | 0 | 1 | 239 | 3 | 6 | 243 | 0 | 0 | 272 | 20 | 5 | 292 | 583 |
| 7:45 AM | 0 | 0 | 1 | 4 | 20 | 5 | 0 | 14 | 12 | 17 | 5 | 43 | 0 | 0 | 301 | 1 | 14 | 302 | 0 | 0 | 293 | 16 | 1 | 309 | 659 |
| Hourly Total | 0 | 1 | 1 | 13 | 62 | 15 | 0 | 75 | 41 | 56 | 19 | 172 | 0 | 1 | 949 | 9 | 42 | 959 | 0 | 0 | 1085 | 60 | 11 | 1145 | 2291 |
| 8:00 AM | 0 | 1 | 0 | 4 | 9 | 5 | 0 | 16 | 6 | 18 | 4 | 40 | 0 | 2 | 262 | 9 | 6 | 273 | 0 | 1 | 281 | 20 | 0 | 302 | 620 |
| 8:15 AM | 0 | 0 | 1 | 3 | 16 | 4 | 0 | 10 | 9 | 15 | 8 | 34 | 0 | 0 | 229 | 6 | 13 | 235 | 0 | 0 | 260 | 10 | 0 | 270 | 543 |
| 8:30 AM | 0 | 0 | 1 | 7 | 11 | 8 | 0 | 14 | 5 | 22 | 2 | 41 | 0 | 0 | 265 | 0 | 13 | 265 | 0 | 0 | 244 | 12 | 0 | 256 | 570 |
| 8:45 AM | 0 | 0 | 0 | 6 | 14 | 6 | 0 | 13 | 10 | 16 | 7 | 39 | 0 | 0 | 258 | 5 | 7 | 263 | 0 | 0 | 232 | 7 | 1 | 239 | 547 |
| Hourly Total | 0 | 1 | 2 | 20 | 50 | 23 | 0 | 53 | 30 | 71 | 21 | 154 | 0 | 2 | 1014 | 20 | 39 | 1036 | 0 | 1 | 1017 | 49 | 1 | 1067 | 2280 |
| *** BREAK *** | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 4:00 PM | 0 | 0 | 0 | 6 | 16 | 6 | 0 | 16 | 23 | 29 | 5 | 68 | 0 | 0 | 254 | 5 | 16 | 259 | 0 | 0 | 264 | 27 | 2 | 291 | 624 |
| 4:15 PM | 0 | 0 | 0 | 3 | 7 | 3 | 0 | 18 | 25 | 33 | 1 | 76 | 0 | 0 | 271 | 7 | 13 | 278 | 0 | 0 | 291 | 31 | 1 | 322 | 679 |
| 4:30 PM | 0 | 0 | 0 | 8 | 13 | 8 | 0 | 17 | 26 | 26 | 0 | 69 | 0 | 1 | 293 | 9 | 10 | 303 | 0 | 0 | 289 | 19 | 1 | 308 | 688 |
| 4:45 PM | 0 | 0 | 0 | 4 | 7 | 4 | 0 | 23 | 24 | 30 | 3 | 77 | 0 | 0 | 262 | 8 | 5 | 270 | 0 | 0 | 260 | 39 | 2 | 299 | 650 |
| Hourly Total | 0 | 0 | 0 | 21 | 43 | 21 | 0 | 74 | 98 | 118 | 9 | 290 | 0 | 1 | 1080 | 29 | 44 | 1110 | 0 | 0 | 1104 | 116 | 6 | 1220 | 2641 |
| 5:00 PM | 0 | 0 | 0 | 10 | 9 | 10 | 0 | 15 | 23 | 35 | 6 | 73 | 0 | 0 | 249 | 11 | 8 | 260 | 0 | 0 | 266 | 38 | 0 | 304 | 647 |
| 5:15 PM | 0 | 0 | 0 | 9 | 15 | 9 | 0 | 15 | 30 | 25 | 6 | 70 | 0 | 0 | 262 | 6 | 16 | 268 | 0 | 1 | 267 | 33 | 0 | 301 | 648 |
| 5:30 PM | 0 | 0 | 0 | 5 | 9 | 5 | 0 | 20 | 22 | 25 | 7 | 67 | 0 | 0 | 260 | 6 | 9 | 266 | 0 | 0 | 245 | 26 | 0 | 271 | 609 |
| 5:45 PM | 0 | 0 | 0 | 5 | 12 | 5 | 0 | 23 | 22 | 25 | 10 | 70 | 0 | 0 | 269 | 7 | 13 | 276 | 0 | 1 | 295 | 20 | 1 | 316 | 667 |
| Hourly Total | 0 | 0 | 0 | 29 | 45 | 29 | 0 | 73 | 97 | 110 | 29 | 280 | 0 | 0 | 1040 | 30 | 46 | 1070 | 0 | 2 | 1073 | 117 | 1 | 1192 | 2571 |
| *** BREAK *** | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 11:30 AM | 0 | 2 | 0 | 3 | 7 | 5 | 0 | 15 | 17 | 23 | 1 | 55 | 0 | 0 | 310 | 9 | 5 | 319 | 0 | 0 | 274 | 19 | 0 | 293 | 672 |
| 11:45 AM | 0 | 0 | 0 | 6 | 7 | 6 | 0 | 20 | 17 | 34 | 2 | 71 | 0 | 0 | 268 | 8 | 13 | 276 | 0 | 0 | 284 | 14 | 0 | 298 | 651 |
| Hourly Total | 0 | 2 | 0 | 9 | 14 | 11 | 0 | 35 | 34 | 57 | 3 | 126 | 0 | 0 | 578 | 17 | 18 | 595 | 0 | 0 | 558 | 33 | 0 | 591 | 1323 |
| 12:00 PM | 0 | 0 | 0 | 2 | 0 | 2 | 0 | 14 | 13 | 23 | 3 | 50 | 0 | 3 | 283 | 6 | 12 | 292 | 0 | 0 | 289 | 24 | 0 | 313 | 657 |
| 12:15 PM | 0 | 0 | 0 | 7 | 8 | 7 | 0 | 14 | 27 | 24 | 1 | 65 | 0 | 1 | 266 | 6 | 4 | 273 | 0 | 0 | 274 | 25 | 0 | 299 | 644 |
| 12:30 PM | 0 | 0 | 0 | 5 | 5 | 5 | 0 | 16 | 16 | 37 | 10 | 69 | 0 | 0 | 275 | 4 | 15 | 279 | 0 | 0 | 254 | 29 | 0 | 283 | 636 |
| 12:45 PM | 0 | 0 | 0 | 3 | 9 | 3 | 0 | 14 | 10 | 35 | 5 | 59 | 0 | 0 | 268 | 11 | 14 | 279 | 0 | 0 | 278 | 25 | 1 | 303 | 644 |
| Hourly Total | 0 | 0 | 0 | 17 | 22 | 17 | 0 | 58 | 66 | 119 | 19 | 243 | 0 | 4 | 1092 | 27 | 45 | 1123 | 0 | 0 | 1095 | 103 | 1 | 1198 | 2581 |
| 1:00 PM | 0 | 0 | 0 | 6 | 7 | 6 | 0 | 16 | 13 | 25 | 9 | 54 | 0 | 0 | 286 | 12 | 11 | 298 | 0 | 1 | 299 | 25 | 4 | 325 | 683 |
| 1:15 PM | 0 | 0 | 0 | 5 | 12 | 5 | 0 | 19 | 18 | 27 | 5 | 64 | 0 | 0 | 265 | 8 | 11 | 273 | 0 | 0 | 294 | 19 | 0 | 313 | 655 |
| 1:30 PM | 0 | 1 | 1 | 9 | 12 | 11 | 0 | 13 | 11 | 34 | 5 | 58 | 0 | 0 | 280 | 11 | 20 | 291 | 0 | 0 | 275 | 32 | 0 | 307 | 667 |
| 1:45 PM | 0 | 0 | 0 | 3 | 7 | 3 | 0 | 19 | 14 | 33 | 2 | 66 | 0 | 0 | 255 | 5 | 10 | 260 | 0 | 1 | 292 | 23 | 1 | 316 | 645 |
| Hourly Total | 0 | 1 | 1 | 23 | 38 | 25 | 0 | 67 | 56 | 119 | 21 | 242 | 0 | 0 | 1086 | 36 | 52 | 1122 | 0 | 2 | 1160 | 99 | 5 | 1261 | 2650 |

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------|-----|------|------|------|-------|------|-----|------|------|------|-------|------|-----|------|------|------|-------|------|-----|-------|------|------|-------|------|-------|
| Grand Total | 0 | 5 | 4 | 132 | 274 | 141 | 0 | 435 | 422 | 650 | 121 | 1507 | 0 | 8 | 6839 | 168 | 286 | 7015 | 0 | 5 | 7092 | 577 | 25 | 7674 | 16337 |
| Approach % | 0.0 | 3.5 | 2.8 | 93.6 | - | - | 0.0 | 28.9 | 28.0 | 43.1 | - | - | 0.0 | 0.1 | 97.5 | 2.4 | - | - | 0.0 | 0.1 | 92.4 | 7.5 | - | - | - |
| Total % | 0.0 | 0.0 | 0.0 | 0.8 | - | 0.9 | 0.0 | 2.7 | 2.6 | 4.0 | - | 9.2 | 0.0 | 0.0 | 41.9 | 1.0 | - | 42.9 | 0.0 | 0.0 | 43.4 | 3.5 | - | 47.0 | - |
| Lights | 0 | 4 | 1 | 128 | - | 133 | 0 | 430 | 412 | 597 | - | 1439 | 0 | 7 | 6596 | 167 | - | 6770 | 0 | 5 | 6905 | 568 | - | 7478 | 15820 |
| % Lights | - | 80.0 | 25.0 | 97.0 | - | 94.3 | - | 98.9 | 97.6 | 91.8 | - | 95.5 | - | 87.5 | 96.4 | 99.4 | - | 96.5 | - | 100.0 | 97.4 | 98.4 | - | 97.4 | 96.8 |
| Buses | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 48 | - | 48 | 0 | 0 | 57 | 0 | - | 57 | 0 | 0 | 55 | 0 | - | 55 | 160 |
| % Buses | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 7.4 | - | 3.2 | - | 0.0 | 0.8 | 0.0 | - | 0.8 | - | 0.0 | 0.8 | 0.0 | - | 0.7 | 1.0 |
| Single-Unit Trucks | 0 | 0 | 0 | 3 | - | 3 | 0 | 5 | 4 | 5 | - | 14 | 0 | 1 | 126 | 1 | - | 128 | 0 | 0 | 79 | 6 | - | 85 | 230 |
| % Single-Unit Trucks | - | 0.0 | 0.0 | 2.3 | - | 2.1 | - | 1.1 | 0.9 | 0.8 | - | 0.9 | - | 12.5 | 1.8 | 0.6 | - | 1.8 | - | 0.0 | 1.1 | 1.0 | - | 1.1 | 1.4 |
| Articulated Trucks | 0 | 0 | 0 | 1 | - | 1 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 60 | 0 | - | 60 | 0 | 0 | 53 | 1 | - | 54 | 115 |
| % Articulated Trucks | - | 0.0 | 0.0 | 0.8 | - | 0.7 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.9 | 0.0 | - | 0.9 | - | 0.0 | 0.7 | 0.2 | - | 0.7 | 0.7 |
| Bicycles on Road | 0 | 1 | 3 | 0 | - | 4 | 0 | 0 | 6 | 0 | - | 6 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 2 | - | 2 | 12 |
| % Bicycles on Road | - | 20.0 | 75.0 | 0.0 | - | 2.8 | - | 0.0 | 1.4 | 0.0 | - | 0.4 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.3 | - | 0.0 | 0.1 |
| Pedestrians | - | - | - | - | 274 | - | - | - | - | - | 121 | - | - | - | - | - | 286 | - | - | - | - | - | 25 | - | - |
| % Pedestrians | - | - | - | - | 100.0 | - | - | - | - | - | 100.0 | - | - | - | - | - | 100.0 | - | - | - | - | - | 100.0 | - | - |



Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400

Rosemont, Illinois, United States 60018
(847)518-9990

Count Name: Harlem Avenue with South
Boulevard
Site Code:
Start Date: 09/10/2020
Page No: 3

Turning Movement Peak Hour Data (7:15 AM)

| Start Time | South Boulevard Eastbound | | | | | | South Boulevard Westbound | | | | | | Harlem Avenue Northbound | | | | | | Harlem Avenue Southbound | | | | | | Int. Total |
|----------------------|---------------------------|-------|-------|-------|-------|------------|---------------------------|-------|-------|-------|-------|------------|--------------------------|-------|-------|-------|-------|------------|--------------------------|-------|-------|-------|-------|------------|------------|
| | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | |
| 7:15 AM | 0 | 0 | 0 | 5 | 23 | 5 | 0 | 25 | 14 | 10 | 6 | 49 | 0 | 0 | 228 | 1 | 13 | 229 | 0 | 0 | 265 | 16 | 3 | 281 | 564 |
| 7:30 AM | 0 | 0 | 0 | 1 | 11 | 1 | 0 | 21 | 8 | 18 | 5 | 47 | 0 | 1 | 239 | 3 | 6 | 243 | 0 | 0 | 272 | 20 | 5 | 292 | 583 |
| 7:45 AM | 0 | 0 | 1 | 4 | 20 | 5 | 0 | 14 | 12 | 17 | 5 | 43 | 0 | 0 | 301 | 1 | 14 | 302 | 0 | 0 | 293 | 16 | 1 | 309 | 659 |
| 8:00 AM | 0 | 1 | 0 | 4 | 9 | 5 | 0 | 16 | 6 | 18 | 4 | 40 | 0 | 2 | 262 | 9 | 6 | 273 | 0 | 1 | 281 | 20 | 0 | 302 | 620 |
| Total | 0 | 1 | 1 | 14 | 63 | 16 | 0 | 76 | 40 | 63 | 20 | 179 | 0 | 3 | 1030 | 14 | 39 | 1047 | 0 | 1 | 1111 | 72 | 9 | 1184 | 2426 |
| Approach % | 0.0 | 6.3 | 6.3 | 87.5 | - | - | 0.0 | 42.5 | 22.3 | 35.2 | - | - | 0.0 | 0.3 | 98.4 | 1.3 | - | - | 0.0 | 0.1 | 93.8 | 6.1 | - | - | - |
| Total % | 0.0 | 0.0 | 0.0 | 0.6 | - | 0.7 | 0.0 | 3.1 | 1.6 | 2.6 | - | 7.4 | 0.0 | 0.1 | 42.5 | 0.6 | - | 43.2 | 0.0 | 0.0 | 45.8 | 3.0 | - | 48.8 | - |
| PHF | 0.000 | 0.250 | 0.250 | 0.700 | - | 0.800 | 0.000 | 0.760 | 0.714 | 0.875 | - | 0.913 | 0.000 | 0.375 | 0.855 | 0.389 | - | 0.867 | 0.000 | 0.250 | 0.948 | 0.900 | - | 0.958 | 0.920 |
| Lights | 0 | 1 | 0 | 12 | - | 13 | 0 | 74 | 36 | 53 | - | 163 | 0 | 2 | 959 | 13 | - | 974 | 0 | 1 | 1077 | 70 | - | 1148 | 2298 |
| % Lights | - | 100.0 | 0.0 | 85.7 | - | 81.3 | - | 97.4 | 90.0 | 84.1 | - | 91.1 | - | 66.7 | 93.1 | 92.9 | - | 93.0 | - | 100.0 | 96.9 | 97.2 | - | 97.0 | 94.7 |
| Buses | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 9 | - | 9 | 0 | 0 | 10 | 0 | - | 10 | 0 | 0 | 8 | 0 | - | 8 | 27 |
| % Buses | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 14.3 | - | 5.0 | - | 0.0 | 1.0 | 0.0 | - | 1.0 | - | 0.0 | 0.7 | 0.0 | - | 0.7 | 1.1 |
| Single-Unit Trucks | 0 | 0 | 0 | 1 | - | 1 | 0 | 2 | 2 | 1 | - | 5 | 0 | 1 | 45 | 1 | - | 47 | 0 | 0 | 15 | 1 | - | 16 | 69 |
| % Single-Unit Trucks | - | 0.0 | 0.0 | 7.1 | - | 6.3 | - | 2.6 | 5.0 | 1.6 | - | 2.8 | - | 33.3 | 4.4 | 7.1 | - | 4.5 | - | 0.0 | 1.4 | 1.4 | - | 1.4 | 2.8 |
| Articulated Trucks | 0 | 0 | 0 | 1 | - | 1 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 16 | 0 | - | 16 | 0 | 0 | 11 | 0 | - | 11 | 28 |
| % Articulated Trucks | - | 0.0 | 0.0 | 7.1 | - | 6.3 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 1.6 | 0.0 | - | 1.5 | - | 0.0 | 1.0 | 0.0 | - | 0.9 | 1.2 |
| Bicycles on Road | 0 | 0 | 1 | 0 | - | 1 | 0 | 0 | 2 | 0 | - | 2 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 1 | - | 1 | 4 |
| % Bicycles on Road | - | 0.0 | 100.0 | 0.0 | - | 6.3 | - | 0.0 | 5.0 | 0.0 | - | 1.1 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 1.4 | - | 0.1 | 0.2 |
| Pedestrians | - | - | - | - | 63 | - | - | - | - | - | 20 | - | - | - | - | - | 39 | - | - | - | - | - | 9 | - | - |
| % Pedestrians | - | - | - | - | 100.0 | - | - | - | - | - | 100.0 | - | - | - | - | - | 100.0 | - | - | - | - | - | 100.0 | - | - |



Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400

Rosemont, Illinois, United States 60018
(847)518-9990

Count Name: Harlem Avenue with South
Boulevard
Site Code:
Start Date: 09/10/2020
Page No: 4

Turning Movement Peak Hour Data (4:15 PM)

| Start Time | South Boulevard Eastbound | | | | | | South Boulevard Westbound | | | | | | Harlem Avenue Northbound | | | | | | Harlem Avenue Southbound | | | | | | Int. Total |
|----------------------|---------------------------|-------|-------|-------|-------|------------|---------------------------|-------|-------|-------|-------|------------|--------------------------|-------|-------|-------|-------|------------|--------------------------|-------|-------|-------|-------|------------|------------|
| | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | |
| 4:15 PM | 0 | 0 | 0 | 3 | 7 | 3 | 0 | 18 | 25 | 33 | 1 | 76 | 0 | 0 | 271 | 7 | 13 | 278 | 0 | 0 | 291 | 31 | 1 | 322 | 679 |
| 4:30 PM | 0 | 0 | 0 | 8 | 13 | 8 | 0 | 17 | 26 | 26 | 0 | 69 | 0 | 1 | 293 | 9 | 10 | 303 | 0 | 0 | 289 | 19 | 1 | 308 | 688 |
| 4:45 PM | 0 | 0 | 0 | 4 | 7 | 4 | 0 | 23 | 24 | 30 | 3 | 77 | 0 | 0 | 262 | 8 | 5 | 270 | 0 | 0 | 260 | 39 | 2 | 299 | 650 |
| 5:00 PM | 0 | 0 | 0 | 10 | 9 | 10 | 0 | 15 | 23 | 35 | 6 | 73 | 0 | 0 | 249 | 11 | 8 | 260 | 0 | 0 | 266 | 38 | 0 | 304 | 647 |
| Total | 0 | 0 | 0 | 25 | 36 | 25 | 0 | 73 | 98 | 124 | 10 | 295 | 0 | 1 | 1075 | 35 | 36 | 1111 | 0 | 0 | 1106 | 127 | 4 | 1233 | 2664 |
| Approach % | 0.0 | 0.0 | 0.0 | 100.0 | - | - | 0.0 | 24.7 | 33.2 | 42.0 | - | - | 0.0 | 0.1 | 96.8 | 3.2 | - | - | 0.0 | 0.0 | 89.7 | 10.3 | - | - | - |
| Total % | 0.0 | 0.0 | 0.0 | 0.9 | - | 0.9 | 0.0 | 2.7 | 3.7 | 4.7 | - | 11.1 | 0.0 | 0.0 | 40.4 | 1.3 | - | 41.7 | 0.0 | 0.0 | 41.5 | 4.8 | - | 46.3 | - |
| PHF | 0.000 | 0.000 | 0.000 | 0.625 | - | 0.625 | 0.000 | 0.793 | 0.942 | 0.886 | - | 0.958 | 0.000 | 0.250 | 0.917 | 0.795 | - | 0.917 | 0.000 | 0.000 | 0.950 | 0.814 | - | 0.957 | 0.968 |
| Lights | 0 | 0 | 0 | 24 | - | 24 | 0 | 73 | 97 | 117 | - | 287 | 0 | 1 | 1040 | 35 | - | 1076 | 0 | 0 | 1074 | 126 | - | 1200 | 2587 |
| % Lights | - | - | - | 96.0 | - | 96.0 | - | 100.0 | 99.0 | 94.4 | - | 97.3 | - | 100.0 | 96.7 | 100.0 | - | 96.8 | - | - | 97.1 | 99.2 | - | 97.3 | 97.1 |
| Buses | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 7 | - | 7 | 0 | 0 | 8 | 0 | - | 8 | 0 | 0 | 9 | 0 | - | 9 | 24 |
| % Buses | - | - | - | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 5.6 | - | 2.4 | - | 0.0 | 0.7 | 0.0 | - | 0.7 | - | - | 0.8 | 0.0 | - | 0.7 | 0.9 |
| Single-Unit Trucks | 0 | 0 | 0 | 1 | - | 1 | 0 | 0 | 1 | 0 | - | 1 | 0 | 0 | 17 | 0 | - | 17 | 0 | 0 | 11 | 0 | - | 11 | 30 |
| % Single-Unit Trucks | - | - | - | 4.0 | - | 4.0 | - | 0.0 | 1.0 | 0.0 | - | 0.3 | - | 0.0 | 1.6 | 0.0 | - | 1.5 | - | - | 1.0 | 0.0 | - | 0.9 | 1.1 |
| Articulated Trucks | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 10 | 0 | - | 10 | 0 | 0 | 12 | 1 | - | 13 | 23 |
| % Articulated Trucks | - | - | - | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.9 | 0.0 | - | 0.9 | - | - | 1.1 | 0.8 | - | 1.1 | 0.9 |
| Bicycles on Road | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 |
| % Bicycles on Road | - | - | - | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | - | 0.0 | 0.0 | - | 0.0 | 0.0 |
| Pedestrians | - | - | - | - | 36 | - | - | - | - | - | 10 | - | - | - | - | - | 36 | - | - | - | - | - | 4 | - | - |
| % Pedestrians | - | - | - | - | 100.0 | - | - | - | - | - | 100.0 | - | - | - | - | - | 100.0 | - | - | - | - | - | 100.0 | - | - |



Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400

Rosemont, Illinois, United States 60018
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Count Name: Harlem Avenue with South
Boulevard
Site Code:
Start Date: 09/10/2020
Page No: 5

Turning Movement Peak Hour Data (12:45 PM)

| Start Time | South Boulevard Eastbound | | | | | | South Boulevard Westbound | | | | | | Harlem Avenue Northbound | | | | | | Harlem Avenue Southbound | | | | | | Int. Total |
|----------------------|---------------------------|-------|-------|-------|-------|------------|---------------------------|-------|-------|-------|-------|------------|--------------------------|-------|-------|-------|-------|------------|--------------------------|-------|-------|-------|-------|------------|------------|
| | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | |
| 12:45 PM | 0 | 0 | 0 | 3 | 9 | 3 | 0 | 14 | 10 | 35 | 5 | 59 | 0 | 0 | 268 | 11 | 14 | 279 | 0 | 0 | 278 | 25 | 1 | 303 | 644 |
| 1:00 PM | 0 | 0 | 0 | 6 | 7 | 6 | 0 | 16 | 13 | 25 | 9 | 54 | 0 | 0 | 286 | 12 | 11 | 298 | 0 | 1 | 299 | 25 | 4 | 325 | 683 |
| 1:15 PM | 0 | 0 | 0 | 5 | 12 | 5 | 0 | 19 | 18 | 27 | 5 | 64 | 0 | 0 | 265 | 8 | 11 | 273 | 0 | 0 | 294 | 19 | 0 | 313 | 655 |
| 1:30 PM | 0 | 1 | 1 | 9 | 12 | 11 | 0 | 13 | 11 | 34 | 5 | 58 | 0 | 0 | 280 | 11 | 20 | 291 | 0 | 0 | 275 | 32 | 0 | 307 | 667 |
| Total | 0 | 1 | 1 | 23 | 40 | 25 | 0 | 62 | 52 | 121 | 24 | 235 | 0 | 0 | 1099 | 42 | 56 | 1141 | 0 | 1 | 1146 | 101 | 5 | 1248 | 2649 |
| Approach % | 0.0 | 4.0 | 4.0 | 92.0 | - | - | 0.0 | 26.4 | 22.1 | 51.5 | - | - | 0.0 | 0.0 | 96.3 | 3.7 | - | - | 0.0 | 0.1 | 91.8 | 8.1 | - | - | - |
| Total % | 0.0 | 0.0 | 0.0 | 0.9 | - | 0.9 | 0.0 | 2.3 | 2.0 | 4.6 | - | 8.9 | 0.0 | 0.0 | 41.5 | 1.6 | - | 43.1 | 0.0 | 0.0 | 43.3 | 3.8 | - | 47.1 | - |
| PHF | 0.000 | 0.250 | 0.250 | 0.639 | - | 0.568 | 0.000 | 0.816 | 0.722 | 0.864 | - | 0.918 | 0.000 | 0.000 | 0.961 | 0.875 | - | 0.957 | 0.000 | 0.250 | 0.958 | 0.789 | - | 0.960 | 0.970 |
| Lights | 0 | 1 | 1 | 23 | - | 25 | 0 | 61 | 51 | 116 | - | 228 | 0 | 0 | 1082 | 42 | - | 1124 | 0 | 1 | 1135 | 101 | - | 1237 | 2614 |
| % Lights | - | 100.0 | 100.0 | 100.0 | - | 100.0 | - | 98.4 | 98.1 | 95.9 | - | 97.0 | - | - | 98.5 | 100.0 | - | 98.5 | - | 100.0 | 99.0 | 100.0 | - | 99.1 | 98.7 |
| Buses | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 5 | - | 5 | 0 | 0 | 6 | 0 | - | 6 | 0 | 0 | 6 | 0 | - | 6 | 17 |
| % Buses | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 4.1 | - | 2.1 | - | - | 0.5 | 0.0 | - | 0.5 | - | 0.0 | 0.5 | 0.0 | - | 0.5 | 0.6 |
| Single-Unit Trucks | 0 | 0 | 0 | 0 | - | 0 | 0 | 1 | 0 | 0 | - | 1 | 0 | 0 | 7 | 0 | - | 7 | 0 | 0 | 4 | 0 | - | 4 | 12 |
| % Single-Unit Trucks | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 1.6 | 0.0 | 0.0 | - | 0.4 | - | - | 0.6 | 0.0 | - | 0.6 | - | 0.0 | 0.3 | 0.0 | - | 0.3 | 0.5 |
| Articulated Trucks | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 4 | 0 | - | 4 | 0 | 0 | 1 | 0 | - | 1 | 5 |
| % Articulated Trucks | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | - | 0.4 | 0.0 | - | 0.4 | - | 0.0 | 0.1 | 0.0 | - | 0.1 | 0.2 |
| Bicycles on Road | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 1 | 0 | - | 1 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 1 |
| % Bicycles on Road | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 1.9 | 0.0 | - | 0.4 | - | - | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | 0.0 |
| Pedestrians | - | - | - | - | 40 | - | - | - | - | - | 24 | - | - | - | - | - | 56 | - | - | - | - | - | 5 | - | - |
| % Pedestrians | - | - | - | - | 100.0 | - | - | - | - | - | 100.0 | - | - | - | - | - | 100.0 | - | - | - | - | - | 100.0 | - | - |



Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400

Rosemont, Illinois, United States 60018
(847)518-9990

Count Name: Maple Street with Pleasant Street
Site Code:
Start Date: 09/10/2020
Page No: 1

Turning Movement Data

| Start Time | Pleasant Street Eastbound | | | | | | Pleasant Street Westbound | | | | | Maple Street Northbound | | | | | | Maple Street Southbound | | | | | Int. Total |
|---------------|---------------------------|------|------|-------|------|------------|---------------------------|------|------|-------|------------|-------------------------|------|------|-------|------|------------|-------------------------|------|------|-------|------------|------------|
| | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | App. Total | |
| 7:00 AM | 0 | 1 | 3 | 2 | 0 | 6 | 0 | 1 | 4 | 1 | 6 | 0 | 4 | 0 | 1 | 0 | 5 | 0 | 0 | 2 | 0 | 2 | 19 |
| 7:15 AM | 0 | 0 | 10 | 1 | 0 | 11 | 0 | 1 | 3 | 0 | 4 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 16 |
| 7:30 AM | 0 | 0 | 9 | 2 | 8 | 11 | 0 | 2 | 2 | 0 | 4 | 0 | 2 | 2 | 3 | 1 | 7 | 0 | 1 | 1 | 0 | 2 | 24 |
| 7:45 AM | 0 | 1 | 8 | 2 | 3 | 11 | 0 | 0 | 3 | 0 | 3 | 0 | 3 | 1 | 3 | 4 | 7 | 0 | 0 | 1 | 1 | 2 | 23 |
| Hourly Total | 0 | 2 | 30 | 7 | 11 | 39 | 0 | 4 | 12 | 1 | 17 | 0 | 9 | 4 | 7 | 6 | 20 | 0 | 1 | 4 | 1 | 6 | 82 |
| 8:00 AM | 1 | 4 | 15 | 4 | 6 | 24 | 0 | 2 | 3 | 0 | 5 | 0 | 2 | 0 | 2 | 1 | 4 | 0 | 1 | 1 | 1 | 3 | 36 |
| 8:15 AM | 0 | 4 | 6 | 3 | 1 | 13 | 0 | 3 | 0 | 1 | 4 | 0 | 0 | 0 | 1 | 2 | 1 | 0 | 1 | 2 | 1 | 4 | 22 |
| 8:30 AM | 0 | 0 | 14 | 3 | 4 | 17 | 0 | 0 | 4 | 0 | 4 | 0 | 0 | 0 | 2 | 2 | 2 | 0 | 0 | 1 | 0 | 1 | 24 |
| 8:45 AM | 0 | 0 | 7 | 1 | 3 | 8 | 0 | 3 | 4 | 0 | 7 | 0 | 2 | 1 | 3 | 4 | 6 | 0 | 0 | 0 | 0 | 0 | 21 |
| Hourly Total | 1 | 8 | 42 | 11 | 14 | 62 | 0 | 8 | 11 | 1 | 20 | 0 | 4 | 1 | 8 | 9 | 13 | 0 | 2 | 4 | 2 | 8 | 103 |
| *** BREAK *** | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 4:00 PM | 0 | 0 | 12 | 2 | 5 | 14 | 0 | 6 | 2 | 3 | 11 | 0 | 1 | 1 | 3 | 4 | 5 | 0 | 0 | 1 | 2 | 3 | 33 |
| 4:15 PM | 2 | 2 | 10 | 0 | 3 | 14 | 0 | 2 | 4 | 1 | 7 | 1 | 1 | 0 | 1 | 2 | 3 | 0 | 1 | 1 | 0 | 2 | 26 |
| 4:30 PM | 0 | 0 | 19 | 1 | 0 | 20 | 0 | 7 | 7 | 1 | 15 | 0 | 2 | 1 | 4 | 2 | 7 | 0 | 0 | 0 | 3 | 3 | 45 |
| 4:45 PM | 0 | 0 | 17 | 1 | 4 | 18 | 0 | 6 | 2 | 0 | 8 | 0 | 0 | 1 | 6 | 2 | 7 | 0 | 0 | 1 | 1 | 2 | 35 |
| Hourly Total | 2 | 2 | 58 | 4 | 12 | 66 | 0 | 21 | 15 | 5 | 41 | 1 | 4 | 3 | 14 | 10 | 22 | 0 | 1 | 3 | 6 | 10 | 139 |
| 5:00 PM | 0 | 0 | 12 | 3 | 5 | 15 | 0 | 3 | 10 | 5 | 18 | 0 | 4 | 0 | 6 | 1 | 10 | 0 | 2 | 2 | 4 | 8 | 51 |
| 5:15 PM | 1 | 3 | 19 | 4 | 2 | 27 | 0 | 6 | 3 | 0 | 9 | 0 | 2 | 2 | 12 | 2 | 16 | 0 | 1 | 4 | 1 | 6 | 58 |
| 5:30 PM | 0 | 1 | 12 | 0 | 1 | 13 | 0 | 8 | 3 | 0 | 11 | 1 | 3 | 1 | 5 | 1 | 10 | 0 | 1 | 2 | 0 | 3 | 37 |
| 5:45 PM | 0 | 1 | 13 | 1 | 3 | 15 | 0 | 1 | 3 | 0 | 4 | 0 | 1 | 0 | 3 | 1 | 4 | 0 | 0 | 1 | 0 | 1 | 24 |
| Hourly Total | 1 | 5 | 56 | 8 | 11 | 70 | 0 | 18 | 19 | 5 | 42 | 1 | 10 | 3 | 26 | 5 | 40 | 0 | 4 | 9 | 5 | 18 | 170 |
| *** BREAK *** | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 11:30 AM | 0 | 0 | 14 | 3 | 3 | 17 | 0 | 4 | 4 | 0 | 8 | 0 | 1 | 0 | 1 | 1 | 2 | 0 | 1 | 2 | 1 | 4 | 31 |
| 11:45 AM | 0 | 1 | 13 | 2 | 2 | 16 | 0 | 2 | 2 | 1 | 5 | 2 | 2 | 1 | 1 | 1 | 6 | 0 | 0 | 1 | 0 | 1 | 28 |
| Hourly Total | 0 | 1 | 27 | 5 | 5 | 33 | 0 | 6 | 6 | 1 | 13 | 2 | 3 | 1 | 2 | 2 | 8 | 0 | 1 | 3 | 1 | 5 | 59 |
| 12:00 PM | 1 | 0 | 11 | 2 | 1 | 14 | 0 | 4 | 5 | 1 | 10 | 0 | 3 | 0 | 3 | 7 | 6 | 0 | 0 | 1 | 0 | 1 | 31 |
| 12:15 PM | 0 | 1 | 17 | 2 | 0 | 20 | 0 | 0 | 3 | 0 | 3 | 0 | 5 | 0 | 7 | 1 | 12 | 0 | 0 | 1 | 0 | 1 | 36 |
| 12:30 PM | 1 | 0 | 13 | 1 | 2 | 15 | 0 | 3 | 5 | 1 | 9 | 0 | 2 | 0 | 4 | 0 | 6 | 0 | 1 | 1 | 0 | 2 | 32 |
| 12:45 PM | 0 | 2 | 13 | 0 | 2 | 15 | 0 | 6 | 4 | 5 | 15 | 0 | 1 | 1 | 5 | 1 | 7 | 0 | 3 | 1 | 3 | 7 | 44 |
| Hourly Total | 2 | 3 | 54 | 5 | 5 | 64 | 0 | 13 | 17 | 7 | 37 | 0 | 11 | 1 | 19 | 9 | 31 | 0 | 4 | 4 | 3 | 11 | 143 |
| 1:00 PM | 1 | 0 | 20 | 2 | 1 | 23 | 0 | 2 | 3 | 1 | 6 | 0 | 1 | 0 | 2 | 0 | 3 | 0 | 1 | 4 | 0 | 5 | 37 |
| 1:15 PM | 1 | 1 | 19 | 3 | 0 | 24 | 0 | 4 | 5 | 5 | 14 | 0 | 4 | 1 | 4 | 1 | 9 | 0 | 2 | 1 | 3 | 6 | 53 |
| 1:30 PM | 1 | 1 | 13 | 0 | 2 | 15 | 0 | 5 | 2 | 1 | 8 | 0 | 1 | 1 | 6 | 0 | 8 | 0 | 0 | 0 | 2 | 2 | 33 |
| 1:45 PM | 1 | 1 | 14 | 2 | 5 | 18 | 0 | 1 | 4 | 0 | 5 | 0 | 3 | 1 | 1 | 2 | 5 | 0 | 1 | 0 | 0 | 1 | 29 |
| Hourly Total | 4 | 3 | 66 | 7 | 8 | 80 | 0 | 12 | 14 | 7 | 33 | 0 | 9 | 3 | 13 | 3 | 25 | 0 | 4 | 5 | 5 | 14 | 152 |

| | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------|-------|-------|------|------|-------|------|-----|-------|------|------|------|------|------|------|------|-------|------|-----|------|------|------|------|------|
| Grand Total | 10 | 24 | 333 | 47 | 66 | 414 | 0 | 82 | 94 | 27 | 203 | 4 | 50 | 16 | 89 | 44 | 159 | 0 | 17 | 32 | 23 | 72 | 848 |
| Approach % | 2.4 | 5.8 | 80.4 | 11.4 | - | - | 0.0 | 40.4 | 46.3 | 13.3 | - | 2.5 | 31.4 | 10.1 | 56.0 | - | - | 0.0 | 23.6 | 44.4 | 31.9 | - | - |
| Total % | 1.2 | 2.8 | 39.3 | 5.5 | - | 48.8 | 0.0 | 9.7 | 11.1 | 3.2 | 23.9 | 0.5 | 5.9 | 1.9 | 10.5 | - | 18.8 | 0.0 | 2.0 | 3.8 | 2.7 | 8.5 | - |
| Lights | 10 | 24 | 328 | 46 | - | 408 | 0 | 82 | 92 | 25 | 199 | 3 | 47 | 13 | 82 | - | 145 | 0 | 16 | 29 | 21 | 66 | 818 |
| % Lights | 100.0 | 100.0 | 98.5 | 97.9 | - | 98.6 | - | 100.0 | 97.9 | 92.6 | 98.0 | 75.0 | 94.0 | 81.3 | 92.1 | - | 91.2 | - | 94.1 | 90.6 | 91.3 | 91.7 | 96.5 |
| Buses | 0 | 0 | 1 | 0 | - | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | - | 1 | 0 | 0 | 0 | 0 | 0 | 2 |
| % Buses | 0.0 | 0.0 | 0.3 | 0.0 | - | 0.2 | - | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.1 | - | 0.6 | - | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 |
| Single-Unit Trucks | 0 | 0 | 3 | 0 | - | 3 | 0 | 0 | 1 | 2 | 3 | 1 | 2 | 1 | 5 | - | 9 | 0 | 1 | 2 | 2 | 5 | 20 |
| % Single-Unit Trucks | 0.0 | 0.0 | 0.9 | 0.0 | - | 0.7 | - | 0.0 | 1.1 | 7.4 | 1.5 | 25.0 | 4.0 | 6.3 | 5.6 | - | 5.7 | - | 5.9 | 6.3 | 8.7 | 6.9 | 2.4 |
| Articulated Trucks | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| % Articulated Trucks | 0.0 | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Bicycles on Road | 0 | 0 | 1 | 1 | - | 2 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 2 | 1 | - | 4 | 0 | 0 | 1 | 0 | 1 | 8 |
| % Bicycles on Road | 0.0 | 0.0 | 0.3 | 2.1 | - | 0.5 | - | 0.0 | 1.1 | 0.0 | 0.5 | 0.0 | 2.0 | 12.5 | 1.1 | - | 2.5 | - | 0.0 | 3.1 | 0.0 | 1.4 | 0.9 |
| Pedestrians | - | - | - | - | 66 | - | - | - | - | - | - | - | - | - | - | 44 | - | - | - | - | - | - | - |
| % Pedestrians | - | - | - | - | 100.0 | - | - | - | - | - | - | - | - | - | - | 100.0 | - | - | - | - | - | - | - |



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Count Name: Maple Street with Pleasant Street
Site Code:
Start Date: 09/10/2020
Page No: 3

Turning Movement Peak Hour Data (7:15 AM)

| Start Time | Pleasant Street Eastbound | | | | | | Pleasant Street Westbound | | | | | Maple Street Northbound | | | | | | Maple Street Southbound | | | | | Int. Total |
|----------------------|---------------------------|----------|-----------|----------|-----------|------------|---------------------------|----------|-----------|----------|------------|-------------------------|----------|----------|----------|----------|------------|-------------------------|----------|----------|----------|------------|------------|
| | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | App. Total | |
| 7:15 AM | 0 | 0 | 10 | 1 | 0 | 11 | 0 | 1 | 3 | 0 | 4 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 16 |
| 7:30 AM | 0 | 0 | 9 | 2 | 8 | 11 | 0 | 2 | 2 | 0 | 4 | 0 | 2 | 2 | 3 | 1 | 7 | 0 | 1 | 1 | 0 | 2 | 24 |
| 7:45 AM | 0 | 1 | 8 | 2 | 3 | 11 | 0 | 0 | 3 | 0 | 3 | 0 | 3 | 1 | 3 | 4 | 7 | 0 | 0 | 1 | 1 | 2 | 23 |
| 8:00 AM | 1 | 4 | 15 | 4 | 6 | 24 | 0 | 2 | 3 | 0 | 5 | 0 | 2 | 0 | 2 | 1 | 4 | 0 | 1 | 1 | 1 | 3 | 36 |
| Total | 1 | 5 | 42 | 9 | 17 | 57 | 0 | 5 | 11 | 0 | 16 | 0 | 7 | 4 | 8 | 7 | 19 | 0 | 2 | 3 | 2 | 7 | 99 |
| Approach % | 1.8 | 8.8 | 73.7 | 15.8 | - | - | 0.0 | 31.3 | 68.8 | 0.0 | - | 0.0 | 36.8 | 21.1 | 42.1 | - | - | 0.0 | 28.6 | 42.9 | 28.6 | - | - |
| Total % | 1.0 | 5.1 | 42.4 | 9.1 | - | 57.6 | 0.0 | 5.1 | 11.1 | 0.0 | 16.2 | 0.0 | 7.1 | 4.0 | 8.1 | - | 19.2 | 0.0 | 2.0 | 3.0 | 2.0 | 7.1 | - |
| PHF | 0.250 | 0.313 | 0.700 | 0.563 | - | 0.594 | 0.000 | 0.625 | 0.917 | 0.000 | 0.800 | 0.000 | 0.583 | 0.500 | 0.667 | - | 0.679 | 0.000 | 0.500 | 0.750 | 0.500 | 0.583 | 0.688 |
| Lights | 1 | 5 | 42 | 9 | - | 57 | 0 | 5 | 11 | 0 | 16 | 0 | 7 | 3 | 7 | - | 17 | 0 | 2 | 2 | 1 | 5 | 95 |
| % Lights | 100.0 | 100.0 | 100.0 | 100.0 | - | 100.0 | - | 100.0 | 100.0 | - | 100.0 | - | 100.0 | 75.0 | 87.5 | - | 89.5 | - | 100.0 | 66.7 | 50.0 | 71.4 | 96.0 |
| Buses | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| % Buses | 0.0 | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Single-Unit Trucks | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | - | 2 | 0 | 0 | 0 | 1 | 1 | 3 |
| % Single-Unit Trucks | 0.0 | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 25.0 | 12.5 | - | 10.5 | - | 0.0 | 0.0 | 50.0 | 14.3 | 3.0 |
| Articulated Trucks | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| % Articulated Trucks | 0.0 | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Bicycles on Road | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 1 | 0 | 1 | 1 |
| % Bicycles on Road | 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 | 33.3 | 0.0 | 14.3 | 1.0 |
| Pedestrians | - | - | - | - | 17 | - | - | - | - | - | - | - | - | - | - | 7 | - | - | - | - | - | - | - |
| % Pedestrians | - | - | - | - | 100.0 | - | - | - | - | - | - | - | - | - | - | 100.0 | - | - | - | - | - | - | - |



Kenig Lindgren O'Hara Aboona, Inc.
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Count Name: Maple Street with Pleasant Street
Site Code:
Start Date: 09/10/2020
Page No: 4

Turning Movement Peak Hour Data (4:15 PM)

| Start Time | Pleasant Street Eastbound | | | | | | Pleasant Street Westbound | | | | | Maple Street Northbound | | | | | | Maple Street Southbound | | | | | Int. Total |
|----------------------|---------------------------|----------|-----------|----------|-----------|------------|---------------------------|-----------|-----------|----------|------------|-------------------------|----------|----------|-----------|----------|------------|-------------------------|----------|----------|----------|------------|------------|
| | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | App. Total | |
| 4:15 PM | 2 | 2 | 10 | 0 | 3 | 14 | 0 | 2 | 4 | 1 | 7 | 1 | 1 | 0 | 1 | 2 | 3 | 0 | 1 | 1 | 0 | 2 | 26 |
| 4:30 PM | 0 | 0 | 19 | 1 | 0 | 20 | 0 | 7 | 7 | 1 | 15 | 0 | 2 | 1 | 4 | 2 | 7 | 0 | 0 | 0 | 3 | 3 | 45 |
| 4:45 PM | 0 | 0 | 17 | 1 | 4 | 18 | 0 | 6 | 2 | 0 | 8 | 0 | 0 | 1 | 6 | 2 | 7 | 0 | 0 | 1 | 1 | 2 | 35 |
| 5:00 PM | 0 | 0 | 12 | 3 | 5 | 15 | 0 | 3 | 10 | 5 | 18 | 0 | 4 | 0 | 6 | 1 | 10 | 0 | 2 | 2 | 4 | 8 | 51 |
| Total | 2 | 2 | 58 | 5 | 12 | 67 | 0 | 18 | 23 | 7 | 48 | 1 | 7 | 2 | 17 | 7 | 27 | 0 | 3 | 4 | 8 | 15 | 157 |
| Approach % | 3.0 | 3.0 | 86.6 | 7.5 | - | - | 0.0 | 37.5 | 47.9 | 14.6 | - | 3.7 | 25.9 | 7.4 | 63.0 | - | - | 0.0 | 20.0 | 26.7 | 53.3 | - | - |
| Total % | 1.3 | 1.3 | 36.9 | 3.2 | - | 42.7 | 0.0 | 11.5 | 14.6 | 4.5 | 30.6 | 0.6 | 4.5 | 1.3 | 10.8 | - | 17.2 | 0.0 | 1.9 | 2.5 | 5.1 | 9.6 | - |
| PHF | 0.250 | 0.250 | 0.763 | 0.417 | - | 0.838 | 0.000 | 0.643 | 0.575 | 0.350 | 0.667 | 0.250 | 0.438 | 0.500 | 0.708 | - | 0.675 | 0.000 | 0.375 | 0.500 | 0.500 | 0.469 | 0.770 |
| Lights | 2 | 2 | 57 | 5 | - | 66 | 0 | 18 | 23 | 7 | 48 | 0 | 7 | 1 | 15 | - | 23 | 0 | 3 | 4 | 7 | 14 | 151 |
| % Lights | 100.0 | 100.0 | 98.3 | 100.0 | - | 98.5 | - | 100.0 | 100.0 | 100.0 | 100.0 | 0.0 | 100.0 | 50.0 | 88.2 | - | 85.2 | - | 100.0 | 100.0 | 87.5 | 93.3 | 96.2 |
| Buses | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | - | 1 | 0 | 0 | 0 | 0 | 0 | 1 |
| % Buses | 0.0 | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 5.9 | - | 3.7 | - | 0.0 | 0.0 | 0.0 | 0.0 | 0.6 |
| Single-Unit Trucks | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | - | 2 | 0 | 0 | 0 | 1 | 1 | 3 |
| % Single-Unit Trucks | 0.0 | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 5.9 | - | 7.4 | - | 0.0 | 0.0 | 12.5 | 6.7 | 1.9 |
| Articulated Trucks | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| % Articulated Trucks | 0.0 | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Bicycles on Road | 0 | 0 | 1 | 0 | - | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | - | 1 | 0 | 0 | 0 | 0 | 0 | 2 |
| % Bicycles on Road | 0.0 | 0.0 | 1.7 | 0.0 | - | 1.5 | - | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 50.0 | 0.0 | - | 3.7 | - | 0.0 | 0.0 | 0.0 | 0.0 | 1.3 |
| Pedestrians | - | - | - | - | 12 | - | - | - | - | - | - | - | - | - | - | 7 | - | - | - | - | - | - | - |
| % Pedestrians | - | - | - | - | 100.0 | - | - | - | - | - | - | - | - | - | - | 100.0 | - | - | - | - | - | - | - |



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Count Name: Maple Street with Pleasant Street
Site Code:
Start Date: 09/10/2020
Page No: 5

Turning Movement Peak Hour Data (12:45 PM)

| Start Time | Pleasant Street Eastbound | | | | | | Pleasant Street Westbound | | | | | Maple Street Northbound | | | | | | Maple Street Southbound | | | | | Int. Total |
|----------------------|---------------------------|----------|-----------|----------|----------|------------|---------------------------|-----------|-----------|-----------|------------|-------------------------|----------|----------|-----------|----------|------------|-------------------------|----------|----------|----------|------------|------------|
| | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | App. Total | |
| 12:45 PM | 0 | 2 | 13 | 0 | 2 | 15 | 0 | 6 | 4 | 5 | 15 | 0 | 1 | 1 | 5 | 1 | 7 | 0 | 3 | 1 | 3 | 7 | 44 |
| 1:00 PM | 1 | 0 | 20 | 2 | 1 | 23 | 0 | 2 | 3 | 1 | 6 | 0 | 1 | 0 | 2 | 0 | 3 | 0 | 1 | 4 | 0 | 5 | 37 |
| 1:15 PM | 1 | 1 | 19 | 3 | 0 | 24 | 0 | 4 | 5 | 5 | 14 | 0 | 4 | 1 | 4 | 1 | 9 | 0 | 2 | 1 | 3 | 6 | 53 |
| 1:30 PM | 1 | 1 | 13 | 0 | 2 | 15 | 0 | 5 | 2 | 1 | 8 | 0 | 1 | 1 | 6 | 0 | 8 | 0 | 0 | 0 | 2 | 2 | 33 |
| Total | 3 | 4 | 65 | 5 | 5 | 77 | 0 | 17 | 14 | 12 | 43 | 0 | 7 | 3 | 17 | 2 | 27 | 0 | 6 | 6 | 8 | 20 | 167 |
| Approach % | 3.9 | 5.2 | 84.4 | 6.5 | - | - | 0.0 | 39.5 | 32.6 | 27.9 | - | 0.0 | 25.9 | 11.1 | 63.0 | - | - | 0.0 | 30.0 | 30.0 | 40.0 | - | - |
| Total % | 1.8 | 2.4 | 38.9 | 3.0 | - | 46.1 | 0.0 | 10.2 | 8.4 | 7.2 | 25.7 | 0.0 | 4.2 | 1.8 | 10.2 | - | 16.2 | 0.0 | 3.6 | 3.6 | 4.8 | 12.0 | - |
| PHF | 0.750 | 0.500 | 0.813 | 0.417 | - | 0.802 | 0.000 | 0.708 | 0.700 | 0.600 | 0.717 | 0.000 | 0.438 | 0.750 | 0.708 | - | 0.750 | 0.000 | 0.500 | 0.375 | 0.667 | 0.714 | 0.788 |
| Lights | 3 | 4 | 64 | 5 | - | 76 | 0 | 17 | 13 | 10 | 40 | 0 | 7 | 3 | 17 | - | 27 | 0 | 5 | 5 | 8 | 18 | 161 |
| % Lights | 100.0 | 100.0 | 98.5 | 100.0 | - | 98.7 | - | 100.0 | 92.9 | 83.3 | 93.0 | - | 100.0 | 100.0 | 100.0 | - | 100.0 | - | 83.3 | 83.3 | 100.0 | 90.0 | 96.4 |
| Buses | 0 | 0 | 1 | 0 | - | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| % Buses | 0.0 | 0.0 | 1.5 | 0.0 | - | 1.3 | - | 0.0 | 0.0 | 0.0 | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | 0.0 | 0.6 |
| Single-Unit Trucks | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 1 | 2 | 3 | 0 | 0 | 0 | 0 | - | 0 | 0 | 1 | 1 | 0 | 2 | 5 |
| % Single-Unit Trucks | 0.0 | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 7.1 | 16.7 | 7.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 16.7 | 16.7 | 0.0 | 10.0 | 3.0 |
| Articulated Trucks | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| % Articulated Trucks | 0.0 | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Bicycles on Road | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| % Bicycles on Road | 0.0 | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Pedestrians | - | - | - | - | 5 | - | - | - | - | - | - | - | - | - | - | 2 | - | - | - | - | - | - | - |
| % Pedestrians | - | - | - | - | 100.0 | - | - | - | - | - | - | - | - | - | - | 100.0 | - | - | - | - | - | - | - |



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Count Name: Marion Street with Pleasant Street
Site Code:
Start Date: 09/10/2020
Page No: 1

Turning Movement Data

| Start Time | Pleasant Street Eastbound | | | | | | Pleasant Street Westbound | | | | | | Marion Street Northbound | | | | | | Marion Street Southbound | | | | | Int. Total |
|---------------|---------------------------|------|------|-------|------|------------|---------------------------|------|------|-------|------|------------|--------------------------|------|------|-------|------|------------|--------------------------|------|------|-------|------------|------------|
| | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | App. Total | |
| 7:00 AM | 0 | 3 | 0 | 1 | 7 | 4 | 0 | 1 | 0 | 0 | 6 | 1 | 0 | 1 | 9 | 1 | 1 | 11 | 0 | 0 | 10 | 1 | 11 | 27 |
| 7:15 AM | 0 | 9 | 0 | 0 | 3 | 9 | 0 | 1 | 0 | 0 | 7 | 1 | 0 | 0 | 4 | 2 | 7 | 6 | 0 | 0 | 13 | 1 | 14 | 30 |
| 7:30 AM | 0 | 8 | 3 | 4 | 3 | 15 | 0 | 0 | 2 | 0 | 5 | 2 | 0 | 0 | 9 | 0 | 3 | 9 | 0 | 1 | 18 | 3 | 22 | 48 |
| 7:45 AM | 0 | 9 | 0 | 2 | 9 | 11 | 0 | 0 | 1 | 2 | 13 | 3 | 0 | 0 | 16 | 0 | 8 | 16 | 0 | 2 | 14 | 1 | 17 | 47 |
| Hourly Total | 0 | 29 | 3 | 7 | 22 | 39 | 0 | 2 | 3 | 2 | 31 | 7 | 0 | 1 | 38 | 3 | 19 | 42 | 0 | 3 | 55 | 6 | 64 | 152 |
| 8:00 AM | 0 | 10 | 2 | 3 | 6 | 15 | 0 | 0 | 1 | 1 | 17 | 2 | 0 | 1 | 17 | 3 | 3 | 21 | 0 | 0 | 13 | 0 | 13 | 51 |
| 8:15 AM | 0 | 3 | 0 | 5 | 3 | 8 | 0 | 1 | 0 | 0 | 12 | 1 | 0 | 2 | 14 | 0 | 4 | 16 | 0 | 3 | 17 | 1 | 21 | 46 |
| 8:30 AM | 0 | 12 | 3 | 2 | 6 | 17 | 0 | 1 | 0 | 3 | 7 | 4 | 0 | 2 | 8 | 1 | 4 | 11 | 0 | 1 | 15 | 0 | 16 | 48 |
| 8:45 AM | 0 | 5 | 1 | 1 | 6 | 7 | 0 | 2 | 1 | 4 | 5 | 7 | 0 | 1 | 16 | 2 | 2 | 19 | 0 | 2 | 15 | 2 | 19 | 52 |
| Hourly Total | 0 | 30 | 6 | 11 | 21 | 47 | 0 | 4 | 2 | 8 | 41 | 14 | 0 | 6 | 55 | 6 | 13 | 67 | 0 | 6 | 60 | 3 | 69 | 197 |
| *** BREAK *** | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 4:00 PM | 0 | 9 | 1 | 3 | 8 | 13 | 0 | 1 | 2 | 1 | 12 | 4 | 0 | 2 | 24 | 2 | 6 | 28 | 0 | 5 | 36 | 11 | 52 | 97 |
| 4:15 PM | 0 | 7 | 1 | 6 | 11 | 14 | 0 | 3 | 0 | 3 | 9 | 6 | 0 | 3 | 24 | 3 | 2 | 30 | 0 | 4 | 28 | 2 | 34 | 84 |
| 4:30 PM | 0 | 19 | 1 | 2 | 6 | 22 | 0 | 2 | 2 | 5 | 12 | 9 | 0 | 4 | 30 | 2 | 4 | 36 | 0 | 3 | 42 | 7 | 52 | 119 |
| 4:45 PM | 0 | 16 | 4 | 9 | 10 | 29 | 0 | 3 | 2 | 4 | 16 | 9 | 0 | 3 | 33 | 1 | 2 | 37 | 0 | 5 | 34 | 8 | 47 | 122 |
| Hourly Total | 0 | 51 | 7 | 20 | 35 | 78 | 0 | 9 | 6 | 13 | 49 | 28 | 0 | 12 | 111 | 8 | 14 | 131 | 0 | 17 | 140 | 28 | 185 | 422 |
| 5:00 PM | 0 | 13 | 2 | 9 | 10 | 24 | 0 | 0 | 2 | 11 | 9 | 13 | 0 | 4 | 39 | 5 | 5 | 48 | 0 | 4 | 51 | 7 | 62 | 147 |
| 5:15 PM | 0 | 20 | 2 | 5 | 8 | 27 | 0 | 0 | 0 | 6 | 10 | 6 | 0 | 1 | 31 | 0 | 7 | 32 | 0 | 4 | 48 | 6 | 58 | 123 |
| 5:30 PM | 0 | 12 | 1 | 5 | 9 | 18 | 0 | 2 | 2 | 5 | 4 | 9 | 0 | 0 | 30 | 0 | 4 | 30 | 0 | 6 | 46 | 6 | 58 | 115 |
| 5:45 PM | 0 | 9 | 2 | 4 | 7 | 15 | 0 | 3 | 1 | 9 | 10 | 13 | 0 | 0 | 24 | 3 | 3 | 27 | 0 | 6 | 46 | 2 | 54 | 109 |
| Hourly Total | 0 | 54 | 7 | 23 | 34 | 84 | 0 | 5 | 5 | 31 | 33 | 41 | 0 | 5 | 124 | 8 | 19 | 137 | 0 | 20 | 191 | 21 | 232 | 494 |
| *** BREAK *** | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 11:30 AM | 0 | 8 | 4 | 2 | 6 | 14 | 0 | 1 | 1 | 4 | 6 | 6 | 0 | 2 | 26 | 6 | 4 | 34 | 1 | 4 | 35 | 3 | 43 | 97 |
| 11:45 AM | 0 | 10 | 3 | 2 | 7 | 15 | 0 | 7 | 2 | 10 | 13 | 19 | 0 | 0 | 32 | 2 | 2 | 34 | 0 | 5 | 31 | 1 | 37 | 105 |
| Hourly Total | 0 | 18 | 7 | 4 | 13 | 29 | 0 | 8 | 3 | 14 | 19 | 25 | 0 | 2 | 58 | 8 | 6 | 68 | 1 | 9 | 66 | 4 | 80 | 202 |
| 12:00 PM | 0 | 11 | 2 | 2 | 6 | 15 | 0 | 7 | 1 | 5 | 4 | 13 | 0 | 2 | 19 | 0 | 2 | 21 | 0 | 8 | 38 | 5 | 51 | 100 |
| 12:15 PM | 0 | 17 | 4 | 4 | 16 | 25 | 0 | 7 | 2 | 7 | 9 | 16 | 0 | 2 | 16 | 3 | 5 | 21 | 0 | 0 | 37 | 4 | 41 | 103 |
| 12:30 PM | 0 | 12 | 2 | 8 | 17 | 22 | 0 | 4 | 0 | 3 | 10 | 7 | 0 | 3 | 17 | 2 | 2 | 22 | 0 | 8 | 26 | 5 | 39 | 90 |
| 12:45 PM | 0 | 14 | 5 | 3 | 5 | 22 | 0 | 2 | 2 | 8 | 9 | 12 | 0 | 2 | 22 | 0 | 2 | 24 | 0 | 3 | 37 | 8 | 48 | 106 |
| Hourly Total | 0 | 54 | 13 | 17 | 44 | 84 | 0 | 20 | 5 | 23 | 32 | 48 | 0 | 9 | 74 | 5 | 11 | 88 | 0 | 19 | 138 | 22 | 179 | 399 |
| 1:00 PM | 0 | 18 | 3 | 2 | 14 | 23 | 0 | 3 | 2 | 7 | 10 | 12 | 0 | 2 | 17 | 3 | 4 | 22 | 0 | 0 | 29 | 4 | 33 | 90 |
| 1:15 PM | 0 | 16 | 5 | 2 | 16 | 23 | 0 | 4 | 4 | 1 | 9 | 9 | 1 | 2 | 24 | 3 | 7 | 30 | 0 | 6 | 22 | 5 | 33 | 95 |
| 1:30 PM | 0 | 10 | 1 | 10 | 14 | 21 | 0 | 4 | 0 | 1 | 9 | 5 | 0 | 0 | 18 | 0 | 4 | 18 | 0 | 5 | 34 | 5 | 44 | 88 |
| 1:45 PM | 0 | 6 | 4 | 5 | 5 | 15 | 0 | 1 | 1 | 0 | 13 | 2 | 0 | 3 | 33 | 1 | 4 | 37 | 0 | 3 | 28 | 2 | 33 | 87 |
| Hourly Total | 0 | 50 | 13 | 19 | 49 | 82 | 0 | 12 | 7 | 9 | 41 | 28 | 1 | 7 | 92 | 7 | 19 | 107 | 0 | 14 | 113 | 16 | 143 | 360 |

| | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------|-----|------|-------|------|-------|------|-----|------|------|------|-------|------|-------|------|------|------|-------|------|-------|------|------|------|------|------|
| Grand Total | 0 | 286 | 56 | 101 | 218 | 443 | 0 | 60 | 31 | 100 | 246 | 191 | 1 | 42 | 552 | 45 | 101 | 640 | 1 | 88 | 763 | 100 | 952 | 2226 |
| Approach % | 0.0 | 64.6 | 12.6 | 22.8 | - | - | 0.0 | 31.4 | 16.2 | 52.4 | - | - | 0.2 | 6.6 | 86.3 | 7.0 | - | - | 0.1 | 9.2 | 80.1 | 10.5 | - | - |
| Total % | 0.0 | 12.8 | 2.5 | 4.5 | - | 19.9 | 0.0 | 2.7 | 1.4 | 4.5 | - | 8.6 | 0.0 | 1.9 | 24.8 | 2.0 | - | 28.8 | 0.0 | 4.0 | 34.3 | 4.5 | 42.8 | - |
| Lights | 0 | 280 | 56 | 95 | - | 431 | 0 | 58 | 27 | 92 | - | 177 | 1 | 41 | 537 | 42 | - | 621 | 1 | 79 | 750 | 94 | 924 | 2153 |
| % Lights | - | 97.9 | 100.0 | 94.1 | - | 97.3 | - | 96.7 | 87.1 | 92.0 | - | 92.7 | 100.0 | 97.6 | 97.3 | 93.3 | - | 97.0 | 100.0 | 89.8 | 98.3 | 94.0 | 97.1 | 96.7 |
| Buses | 0 | 0 | 0 | 2 | - | 2 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 1 | 0 | - | 1 | 0 | 0 | 0 | 0 | 0 | 3 |
| % Buses | - | 0.0 | 0.0 | 2.0 | - | 0.5 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | - | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 |
| Single-Unit Trucks | 0 | 5 | 0 | 2 | - | 7 | 0 | 1 | 1 | 1 | - | 3 | 0 | 1 | 5 | 0 | - | 6 | 0 | 3 | 3 | 1 | 7 | 23 |
| % Single-Unit Trucks | - | 1.7 | 0.0 | 2.0 | - | 1.6 | - | 1.7 | 3.2 | 1.0 | - | 1.6 | 0.0 | 2.4 | 0.9 | 0.0 | - | 0.9 | 0.0 | 3.4 | 0.4 | 1.0 | 0.7 | 1.0 |
| Articulated Trucks | 0 | 0 | 0 | 1 | - | 1 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| % Articulated Trucks | - | 0.0 | 0.0 | 1.0 | - | 0.2 | - | 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 | 0.0 | 0.0 |
| Bicycles on Road | 0 | 1 | 0 | 1 | - | 2 | 0 | 1 | 3 | 7 | - | 11 | 0 | 0 | 9 | 3 | - | 12 | 0 | 6 | 10 | 5 | 21 | 46 |
| % Bicycles on Road | - | 0.3 | 0.0 | 1.0 | - | 0.5 | - | 1.7 | 9.7 | 7.0 | - | 5.8 | 0.0 | 0.0 | 1.6 | 6.7 | - | 1.9 | 0.0 | 6.8 | 1.3 | 5.0 | 2.2 | 2.1 |
| Pedestrians | - | - | - | - | 218 | - | - | - | - | - | 246 | - | - | - | - | - | 101 | - | - | - | - | - | - | - |
| % Pedestrians | - | - | - | - | 100.0 | - | - | - | - | - | 100.0 | - | - | - | - | - | 100.0 | - | - | - | - | - | - | - |



Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400

Rosemont, Illinois, United States 60018
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Count Name: Marion Street with Pleasant Street
Site Code:
Start Date: 09/10/2020
Page No: 3

Turning Movement Peak Hour Data (7:15 AM)

| Start Time | Pleasant Street Eastbound | | | | | | Pleasant Street Westbound | | | | | | Marion Street Northbound | | | | | | Marion Street Southbound | | | | | Int. Total |
|----------------------|---------------------------|-------|-------|-------|-------|------------|---------------------------|-------|-------|-------|-------|------------|--------------------------|-------|-------|-------|-------|------------|--------------------------|-------|-------|-------|------------|------------|
| | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | App. Total | |
| 7:15 AM | 0 | 9 | 0 | 0 | 3 | 9 | 0 | 1 | 0 | 0 | 7 | 1 | 0 | 0 | 4 | 2 | 7 | 6 | 0 | 0 | 13 | 1 | 14 | 30 |
| 7:30 AM | 0 | 8 | 3 | 4 | 3 | 15 | 0 | 0 | 2 | 0 | 5 | 2 | 0 | 0 | 9 | 0 | 3 | 9 | 0 | 1 | 18 | 3 | 22 | 48 |
| 7:45 AM | 0 | 9 | 0 | 2 | 9 | 11 | 0 | 0 | 1 | 2 | 13 | 3 | 0 | 0 | 16 | 0 | 8 | 16 | 0 | 2 | 14 | 1 | 17 | 47 |
| 8:00 AM | 0 | 10 | 2 | 3 | 6 | 15 | 0 | 0 | 1 | 1 | 17 | 2 | 0 | 1 | 17 | 3 | 3 | 21 | 0 | 0 | 13 | 0 | 13 | 51 |
| Total | 0 | 36 | 5 | 9 | 21 | 50 | 0 | 1 | 4 | 3 | 42 | 8 | 0 | 1 | 46 | 5 | 21 | 52 | 0 | 3 | 58 | 5 | 66 | 176 |
| Approach % | 0.0 | 72.0 | 10.0 | 18.0 | - | - | 0.0 | 12.5 | 50.0 | 37.5 | - | - | 0.0 | 1.9 | 88.5 | 9.6 | - | - | 0.0 | 4.5 | 87.9 | 7.6 | - | - |
| Total % | 0.0 | 20.5 | 2.8 | 5.1 | - | 28.4 | 0.0 | 0.6 | 2.3 | 1.7 | - | 4.5 | 0.0 | 0.6 | 26.1 | 2.8 | - | 29.5 | 0.0 | 1.7 | 33.0 | 2.8 | 37.5 | - |
| PHF | 0.000 | 0.900 | 0.417 | 0.563 | - | 0.833 | 0.000 | 0.250 | 0.500 | 0.375 | - | 0.667 | 0.000 | 0.250 | 0.676 | 0.417 | - | 0.619 | 0.000 | 0.375 | 0.806 | 0.417 | 0.750 | 0.863 |
| Lights | 0 | 35 | 5 | 9 | - | 49 | 0 | 1 | 4 | 2 | - | 7 | 0 | 1 | 42 | 5 | - | 48 | 0 | 1 | 56 | 5 | 62 | 166 |
| % Lights | - | 97.2 | 100.0 | 100.0 | - | 98.0 | - | 100.0 | 100.0 | 66.7 | - | 87.5 | - | 100.0 | 91.3 | 100.0 | - | 92.3 | - | 33.3 | 96.6 | 100.0 | 93.9 | 94.3 |
| Buses | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| % Buses | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Single-Unit Trucks | 0 | 1 | 0 | 0 | - | 1 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 1 | 0 | - | 1 | 0 | 2 | 0 | 0 | 2 | 4 |
| % Single-Unit Trucks | - | 2.8 | 0.0 | 0.0 | - | 2.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 2.2 | 0.0 | - | 1.9 | - | 66.7 | 0.0 | 0.0 | 3.0 | 2.3 |
| Articulated Trucks | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| % Articulated Trucks | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Bicycles on Road | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 1 | - | 1 | 0 | 0 | 3 | 0 | - | 3 | 0 | 0 | 2 | 0 | 2 | 6 |
| % Bicycles on Road | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 33.3 | - | 12.5 | - | 0.0 | 6.5 | 0.0 | - | 5.8 | - | 0.0 | 3.4 | 0.0 | 3.0 | 3.4 |
| Pedestrians | - | - | - | - | 21 | - | - | - | - | - | 42 | - | - | - | - | - | 21 | - | - | - | - | - | - | - |
| % Pedestrians | - | - | - | - | 100.0 | - | - | - | - | - | 100.0 | - | - | - | - | - | 100.0 | - | - | - | - | - | - | - |



Kenig Lindgren O'Hara Aboona, Inc.
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(847)518-9990

Count Name: Marion Street with Pleasant Street
Site Code:
Start Date: 09/10/2020
Page No: 4

Turning Movement Peak Hour Data (4:15 PM)

| Start Time | Pleasant Street Eastbound | | | | | | Pleasant Street Westbound | | | | | | Marion Street Northbound | | | | | | Marion Street Southbound | | | | | Int. Total |
|----------------------|---------------------------|-------|-------|-------|-------|------------|---------------------------|-------|-------|-------|-------|------------|--------------------------|-------|-------|-------|-------|------------|--------------------------|-------|-------|-------|------------|------------|
| | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | App. Total | |
| 4:15 PM | 0 | 7 | 1 | 6 | 11 | 14 | 0 | 3 | 0 | 3 | 9 | 6 | 0 | 3 | 24 | 3 | 2 | 30 | 0 | 4 | 28 | 2 | 34 | 84 |
| 4:30 PM | 0 | 19 | 1 | 2 | 6 | 22 | 0 | 2 | 2 | 5 | 12 | 9 | 0 | 4 | 30 | 2 | 4 | 36 | 0 | 3 | 42 | 7 | 52 | 119 |
| 4:45 PM | 0 | 16 | 4 | 9 | 10 | 29 | 0 | 3 | 2 | 4 | 16 | 9 | 0 | 3 | 33 | 1 | 2 | 37 | 0 | 5 | 34 | 8 | 47 | 122 |
| 5:00 PM | 0 | 13 | 2 | 9 | 10 | 24 | 0 | 0 | 2 | 11 | 9 | 13 | 0 | 4 | 39 | 5 | 5 | 48 | 0 | 4 | 51 | 7 | 62 | 147 |
| Total | 0 | 55 | 8 | 26 | 37 | 89 | 0 | 8 | 6 | 23 | 46 | 37 | 0 | 14 | 126 | 11 | 13 | 151 | 0 | 16 | 155 | 24 | 195 | 472 |
| Approach % | 0.0 | 61.8 | 9.0 | 29.2 | - | - | 0.0 | 21.6 | 16.2 | 62.2 | - | - | 0.0 | 9.3 | 83.4 | 7.3 | - | - | 0.0 | 8.2 | 79.5 | 12.3 | - | - |
| Total % | 0.0 | 11.7 | 1.7 | 5.5 | - | 18.9 | 0.0 | 1.7 | 1.3 | 4.9 | - | 7.8 | 0.0 | 3.0 | 26.7 | 2.3 | - | 32.0 | 0.0 | 3.4 | 32.8 | 5.1 | 41.3 | - |
| PHF | 0.000 | 0.724 | 0.500 | 0.722 | - | 0.767 | 0.000 | 0.667 | 0.750 | 0.523 | - | 0.712 | 0.000 | 0.875 | 0.808 | 0.550 | - | 0.786 | 0.000 | 0.800 | 0.760 | 0.750 | 0.786 | 0.803 |
| Lights | 0 | 55 | 8 | 24 | - | 87 | 0 | 8 | 5 | 20 | - | 33 | 0 | 14 | 124 | 8 | - | 146 | 0 | 15 | 152 | 20 | 187 | 453 |
| % Lights | - | 100.0 | 100.0 | 92.3 | - | 97.8 | - | 100.0 | 83.3 | 87.0 | - | 89.2 | - | 100.0 | 98.4 | 72.7 | - | 96.7 | - | 93.8 | 98.1 | 83.3 | 95.9 | 96.0 |
| Buses | 0 | 0 | 0 | 1 | - | 1 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| % Buses | - | 0.0 | 0.0 | 3.8 | - | 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 | 0.2 |
| Single-Unit Trucks | 0 | 0 | 0 | 1 | - | 1 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| % Single-Unit Trucks | - | 0.0 | 0.0 | 3.8 | - | 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 | 0.2 |
| Articulated Trucks | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| % Articulated Trucks | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Bicycles on Road | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 1 | 3 | - | 4 | 0 | 0 | 2 | 3 | - | 5 | 0 | 1 | 3 | 4 | 8 | 17 |
| % Bicycles on Road | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 16.7 | 13.0 | - | 10.8 | - | 0.0 | 1.6 | 27.3 | - | 3.3 | - | 6.3 | 1.9 | 16.7 | 4.1 | 3.6 |
| Pedestrians | - | - | - | - | 37 | - | - | - | - | - | 46 | - | - | - | - | - | 13 | - | - | - | - | - | - | - |
| % Pedestrians | - | - | - | - | 100.0 | - | - | - | - | - | 100.0 | - | - | - | - | - | 100.0 | - | - | - | - | - | - | - |



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Count Name: Marion Street with Pleasant Street
Site Code:
Start Date: 09/10/2020
Page No: 5

Turning Movement Peak Hour Data (12:45 PM)

| Start Time | Pleasant Street Eastbound | | | | | | Pleasant Street Westbound | | | | | | Marion Street Northbound | | | | | | Marion Street Southbound | | | | | Int. Total |
|----------------------|---------------------------|-------|-------|-------|-------|------------|---------------------------|-------|-------|-------|-------|------------|--------------------------|-------|-------|-------|-------|------------|--------------------------|-------|-------|-------|------------|------------|
| | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | App. Total | |
| 12:45 PM | 0 | 14 | 5 | 3 | 5 | 22 | 0 | 2 | 2 | 8 | 9 | 12 | 0 | 2 | 22 | 0 | 2 | 24 | 0 | 3 | 37 | 8 | 48 | 106 |
| 1:00 PM | 0 | 18 | 3 | 2 | 14 | 23 | 0 | 3 | 2 | 7 | 10 | 12 | 0 | 2 | 17 | 3 | 4 | 22 | 0 | 0 | 29 | 4 | 33 | 90 |
| 1:15 PM | 0 | 16 | 5 | 2 | 16 | 23 | 0 | 4 | 4 | 1 | 9 | 9 | 1 | 2 | 24 | 3 | 7 | 30 | 0 | 6 | 22 | 5 | 33 | 95 |
| 1:30 PM | 0 | 10 | 1 | 10 | 14 | 21 | 0 | 4 | 0 | 1 | 9 | 5 | 0 | 0 | 18 | 0 | 4 | 18 | 0 | 5 | 34 | 5 | 44 | 88 |
| Total | 0 | 58 | 14 | 17 | 49 | 89 | 0 | 13 | 8 | 17 | 37 | 38 | 1 | 6 | 81 | 6 | 17 | 94 | 0 | 14 | 122 | 22 | 158 | 379 |
| Approach % | 0.0 | 65.2 | 15.7 | 19.1 | - | - | 0.0 | 34.2 | 21.1 | 44.7 | - | - | 1.1 | 6.4 | 86.2 | 6.4 | - | - | 0.0 | 8.9 | 77.2 | 13.9 | - | - |
| Total % | 0.0 | 15.3 | 3.7 | 4.5 | - | 23.5 | 0.0 | 3.4 | 2.1 | 4.5 | - | 10.0 | 0.3 | 1.6 | 21.4 | 1.6 | - | 24.8 | 0.0 | 3.7 | 32.2 | 5.8 | 41.7 | - |
| PHF | 0.000 | 0.806 | 0.700 | 0.425 | - | 0.967 | 0.000 | 0.813 | 0.500 | 0.531 | - | 0.792 | 0.250 | 0.750 | 0.844 | 0.500 | - | 0.783 | 0.000 | 0.583 | 0.824 | 0.688 | 0.823 | 0.894 |
| Lights | 0 | 58 | 14 | 15 | - | 87 | 0 | 13 | 7 | 17 | - | 37 | 1 | 6 | 81 | 6 | - | 94 | 0 | 13 | 120 | 22 | 155 | 373 |
| % Lights | - | 100.0 | 100.0 | 88.2 | - | 97.8 | - | 100.0 | 87.5 | 100.0 | - | 97.4 | 100.0 | 100.0 | 100.0 | 100.0 | - | 100.0 | - | 92.9 | 98.4 | 100.0 | 98.1 | 98.4 |
| Buses | 0 | 0 | 0 | 1 | - | 1 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| % Buses | - | 0.0 | 0.0 | 5.9 | - | 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 | 0.3 |
| Single-Unit Trucks | 0 | 0 | 0 | 1 | - | 1 | 0 | 0 | 1 | 0 | - | 1 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| % Single-Unit Trucks | - | 0.0 | 0.0 | 5.9 | - | 1.1 | - | 0.0 | 12.5 | 0.0 | - | 2.6 | 0.0 | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | 0.0 | 0.5 |
| Articulated Trucks | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| % Articulated Trucks | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Bicycles on Road | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 1 | 2 | 0 | 3 | 3 |
| % Bicycles on Road | - | 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 | - | 7.1 | 1.6 | 0.0 | 1.9 | 0.8 |
| Pedestrians | - | - | - | - | 49 | - | - | - | - | - | 37 | - | - | - | - | - | 17 | - | - | - | - | - | - | - |
| % Pedestrians | - | - | - | - | 100.0 | - | - | - | - | - | 100.0 | - | - | - | - | - | 100.0 | - | - | - | - | - | - | - |



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Count Name: Marion Street with Randolph
Street
Site Code:
Start Date: 09/10/2020
Page No: 1

Turning Movement Data

| Start Time | Randolph Street Eastbound | | | | | | Randolph Street Westbound | | | | | | Marion Street Northbound | | | | | | Marion Street Southbound | | | | | | Int. Total |
|---------------|---------------------------|------|------|-------|------|------------|---------------------------|------|------|-------|------|------------|--------------------------|------|------|-------|------|------------|--------------------------|------|------|-------|------|------------|------------|
| | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | |
| 7:00 AM | 0 | 2 | 17 | 0 | 2 | 19 | 0 | 0 | 16 | 2 | 4 | 18 | 0 | 3 | 7 | 1 | 4 | 11 | 0 | 1 | 7 | 6 | 4 | 14 | 62 |
| 7:15 AM | 0 | 3 | 25 | 2 | 1 | 30 | 0 | 1 | 22 | 0 | 5 | 23 | 0 | 2 | 2 | 0 | 4 | 4 | 0 | 1 | 7 | 8 | 2 | 16 | 73 |
| 7:30 AM | 0 | 3 | 20 | 5 | 4 | 28 | 0 | 2 | 26 | 2 | 3 | 30 | 0 | 3 | 5 | 3 | 7 | 11 | 0 | 0 | 12 | 5 | 2 | 17 | 86 |
| 7:45 AM | 0 | 7 | 29 | 6 | 4 | 42 | 0 | 2 | 21 | 4 | 10 | 27 | 0 | 4 | 11 | 0 | 6 | 15 | 0 | 2 | 7 | 3 | 3 | 12 | 96 |
| Hourly Total | 0 | 15 | 91 | 13 | 11 | 119 | 0 | 5 | 85 | 8 | 22 | 98 | 0 | 12 | 25 | 4 | 21 | 41 | 0 | 4 | 33 | 22 | 11 | 59 | 317 |
| 8:00 AM | 0 | 5 | 26 | 3 | 5 | 34 | 0 | 0 | 21 | 3 | 11 | 24 | 0 | 4 | 12 | 0 | 4 | 16 | 0 | 1 | 6 | 11 | 4 | 18 | 92 |
| 8:15 AM | 0 | 6 | 20 | 2 | 5 | 28 | 0 | 0 | 22 | 2 | 9 | 24 | 0 | 0 | 6 | 1 | 4 | 7 | 0 | 3 | 10 | 6 | 5 | 19 | 78 |
| 8:30 AM | 0 | 7 | 20 | 4 | 8 | 31 | 0 | 1 | 16 | 2 | 10 | 19 | 0 | 0 | 4 | 1 | 3 | 5 | 0 | 1 | 9 | 5 | 8 | 15 | 70 |
| 8:45 AM | 0 | 11 | 27 | 6 | 3 | 44 | 0 | 0 | 16 | 1 | 5 | 17 | 0 | 1 | 7 | 1 | 2 | 9 | 0 | 2 | 11 | 6 | 1 | 19 | 89 |
| Hourly Total | 0 | 29 | 93 | 15 | 21 | 137 | 0 | 1 | 75 | 8 | 35 | 84 | 0 | 5 | 29 | 3 | 13 | 37 | 0 | 7 | 36 | 28 | 18 | 71 | 329 |
| *** BREAK *** | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 4:00 PM | 0 | 11 | 54 | 5 | 3 | 70 | 0 | 0 | 21 | 6 | 7 | 27 | 0 | 7 | 14 | 3 | 8 | 24 | 0 | 5 | 16 | 17 | 7 | 38 | 159 |
| 4:15 PM | 0 | 14 | 49 | 9 | 2 | 72 | 0 | 5 | 31 | 5 | 6 | 41 | 0 | 5 | 14 | 1 | 3 | 20 | 0 | 8 | 21 | 5 | 7 | 34 | 167 |
| 4:30 PM | 0 | 18 | 51 | 10 | 4 | 79 | 0 | 0 | 33 | 3 | 5 | 36 | 0 | 8 | 14 | 2 | 3 | 24 | 0 | 8 | 30 | 10 | 4 | 48 | 187 |
| 4:45 PM | 0 | 14 | 70 | 10 | 3 | 94 | 0 | 1 | 41 | 4 | 8 | 46 | 1 | 7 | 20 | 3 | 1 | 31 | 0 | 5 | 20 | 20 | 0 | 45 | 216 |
| Hourly Total | 0 | 57 | 224 | 34 | 12 | 315 | 0 | 6 | 126 | 18 | 26 | 150 | 1 | 27 | 62 | 9 | 15 | 99 | 0 | 26 | 87 | 52 | 18 | 165 | 729 |
| 5:00 PM | 0 | 16 | 58 | 8 | 2 | 82 | 0 | 3 | 34 | 4 | 4 | 41 | 0 | 4 | 17 | 1 | 4 | 22 | 0 | 11 | 31 | 21 | 3 | 63 | 208 |
| 5:15 PM | 0 | 15 | 46 | 7 | 3 | 68 | 0 | 0 | 30 | 6 | 2 | 36 | 0 | 3 | 16 | 1 | 1 | 20 | 0 | 8 | 38 | 11 | 5 | 57 | 181 |
| 5:30 PM | 0 | 11 | 57 | 8 | 4 | 76 | 0 | 1 | 33 | 2 | 3 | 36 | 0 | 9 | 15 | 4 | 2 | 28 | 0 | 4 | 25 | 19 | 1 | 48 | 188 |
| 5:45 PM | 0 | 7 | 51 | 10 | 4 | 68 | 0 | 2 | 24 | 2 | 3 | 28 | 0 | 5 | 13 | 0 | 2 | 18 | 0 | 7 | 28 | 19 | 4 | 54 | 168 |
| Hourly Total | 0 | 49 | 212 | 33 | 13 | 294 | 0 | 6 | 121 | 14 | 12 | 141 | 0 | 21 | 61 | 6 | 9 | 88 | 0 | 30 | 122 | 70 | 13 | 222 | 745 |
| *** BREAK *** | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 11:30 AM | 0 | 13 | 27 | 4 | 3 | 44 | 0 | 0 | 25 | 5 | 1 | 30 | 0 | 4 | 16 | 0 | 0 | 20 | 0 | 1 | 23 | 12 | 2 | 36 | 130 |
| 11:45 AM | 0 | 10 | 46 | 3 | 2 | 59 | 0 | 1 | 22 | 4 | 3 | 27 | 0 | 4 | 19 | 2 | 2 | 25 | 0 | 8 | 16 | 9 | 3 | 33 | 144 |
| Hourly Total | 0 | 23 | 73 | 7 | 5 | 103 | 0 | 1 | 47 | 9 | 4 | 57 | 0 | 8 | 35 | 2 | 2 | 45 | 0 | 9 | 39 | 21 | 5 | 69 | 274 |
| 12:00 PM | 0 | 11 | 31 | 4 | 5 | 46 | 0 | 2 | 42 | 5 | 0 | 49 | 0 | 3 | 8 | 0 | 0 | 11 | 0 | 6 | 28 | 17 | 4 | 51 | 157 |
| 12:15 PM | 0 | 7 | 38 | 4 | 3 | 49 | 0 | 2 | 22 | 2 | 5 | 26 | 0 | 4 | 16 | 1 | 3 | 21 | 0 | 6 | 24 | 14 | 3 | 44 | 140 |
| 12:30 PM | 0 | 6 | 34 | 3 | 4 | 43 | 0 | 0 | 19 | 2 | 6 | 21 | 0 | 2 | 9 | 1 | 5 | 12 | 0 | 4 | 18 | 17 | 1 | 39 | 115 |
| 12:45 PM | 0 | 13 | 39 | 3 | 1 | 55 | 0 | 1 | 32 | 1 | 2 | 34 | 0 | 3 | 15 | 4 | 1 | 22 | 0 | 9 | 21 | 9 | 3 | 39 | 150 |
| Hourly Total | 0 | 37 | 142 | 14 | 13 | 193 | 0 | 5 | 115 | 10 | 13 | 130 | 0 | 12 | 48 | 6 | 9 | 66 | 0 | 25 | 91 | 57 | 11 | 173 | 562 |
| 1:00 PM | 0 | 10 | 34 | 6 | 4 | 50 | 0 | 1 | 17 | 1 | 8 | 19 | 0 | 0 | 10 | 1 | 2 | 11 | 0 | 10 | 15 | 9 | 2 | 34 | 114 |
| 1:15 PM | 0 | 13 | 38 | 5 | 1 | 56 | 0 | 2 | 22 | 0 | 6 | 24 | 0 | 4 | 19 | 3 | 0 | 26 | 0 | 6 | 14 | 8 | 2 | 28 | 134 |
| 1:30 PM | 0 | 9 | 33 | 4 | 5 | 46 | 0 | 2 | 24 | 2 | 5 | 28 | 0 | 2 | 15 | 3 | 3 | 20 | 0 | 10 | 24 | 10 | 9 | 44 | 138 |
| 1:45 PM | 0 | 12 | 33 | 3 | 1 | 48 | 0 | 1 | 20 | 5 | 4 | 26 | 0 | 2 | 19 | 1 | 4 | 22 | 0 | 4 | 18 | 12 | 2 | 34 | 130 |
| Hourly Total | 0 | 44 | 138 | 18 | 11 | 200 | 0 | 6 | 83 | 8 | 23 | 97 | 0 | 8 | 63 | 8 | 9 | 79 | 0 | 30 | 71 | 39 | 15 | 140 | 516 |

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------|-----|------|------|------|-------|------|-----|------|------|------|-------|------|-------|------|------|-------|-------|------|-----|------|------|------|-------|------|------|
| Grand Total | 0 | 254 | 973 | 134 | 86 | 1361 | 0 | 30 | 652 | 75 | 135 | 757 | 1 | 93 | 323 | 38 | 78 | 455 | 0 | 131 | 479 | 289 | 91 | 899 | 3472 |
| Approach % | 0.0 | 18.7 | 71.5 | 9.8 | - | - | 0.0 | 4.0 | 86.1 | 9.9 | - | - | 0.2 | 20.4 | 71.0 | 8.4 | - | - | 0.0 | 14.6 | 53.3 | 32.1 | - | - | - |
| Total % | 0.0 | 7.3 | 28.0 | 3.9 | - | 39.2 | 0.0 | 0.9 | 18.8 | 2.2 | - | 21.8 | 0.0 | 2.7 | 9.3 | 1.1 | - | 13.1 | 0.0 | 3.8 | 13.8 | 8.3 | - | 25.9 | - |
| Lights | 0 | 253 | 961 | 132 | - | 1346 | 0 | 27 | 635 | 70 | - | 732 | 1 | 92 | 315 | 38 | - | 446 | 0 | 127 | 469 | 284 | - | 880 | 3404 |
| % Lights | - | 99.6 | 98.8 | 98.5 | - | 98.9 | - | 90.0 | 97.4 | 93.3 | - | 96.7 | 100.0 | 98.9 | 97.5 | 100.0 | - | 98.0 | - | 96.9 | 97.9 | 98.3 | - | 97.9 | 98.0 |
| Buses | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 2 | 0 | - | 2 | 0 | 0 | 1 | 0 | - | 1 | 3 |
| % Buses | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | 0.0 | 0.0 | 0.6 | 0.0 | - | 0.4 | - | 0.0 | 0.2 | 0.0 | - | 0.1 | 0.1 |
| Single-Unit Trucks | 0 | 0 | 3 | 1 | - | 4 | 0 | 1 | 3 | 0 | - | 4 | 0 | 0 | 3 | 0 | - | 3 | 0 | 3 | 1 | 2 | - | 6 | 17 |
| % Single-Unit Trucks | - | 0.0 | 0.3 | 0.7 | - | 0.3 | - | 3.3 | 0.5 | 0.0 | - | 0.5 | 0.0 | 0.0 | 0.9 | 0.0 | - | 0.7 | - | 2.3 | 0.2 | 0.7 | - | 0.7 | 0.5 |
| Articulated Trucks | 0 | 0 | 1 | 0 | - | 1 | 0 | 0 | 1 | 0 | - | 1 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 2 |
| % Articulated Trucks | - | 0.0 | 0.1 | 0.0 | - | 0.1 | - | 0.0 | 0.2 | 0.0 | - | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | 0.1 |
| Bicycles on Road | 0 | 1 | 8 | 1 | - | 10 | 0 | 2 | 13 | 5 | - | 20 | 0 | 1 | 3 | 0 | - | 4 | 0 | 1 | 8 | 3 | - | 12 | 46 |
| % Bicycles on Road | - | 0.4 | 0.8 | 0.7 | - | 0.7 | - | 6.7 | 2.0 | 6.7 | - | 2.6 | 0.0 | 1.1 | 0.9 | 0.0 | - | 0.9 | - | 0.8 | 1.7 | 1.0 | - | 1.3 | 1.3 |
| Pedestrians | - | - | - | - | 86 | - | - | - | - | - | 135 | - | - | - | - | - | 78 | - | - | - | - | - | 91 | - | - |
| % Pedestrians | - | - | - | - | 100.0 | - | - | - | - | - | 100.0 | - | - | - | - | - | 100.0 | - | - | - | - | - | 100.0 | - | - |



Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400

Rosemont, Illinois, United States 60018
(847)518-9990

Count Name: Marion Street with Randolph
Street
Site Code:
Start Date: 09/10/2020
Page No: 3

Turning Movement Peak Hour Data (7:15 AM)

| Start Time | Randolph Street Eastbound | | | | | | Randolph Street Westbound | | | | | | Marion Street Northbound | | | | | | Marion Street Southbound | | | | | | Int. Total |
|----------------------|---------------------------|-------|-------|-------|-------|------------|---------------------------|-------|-------|-------|-------|------------|--------------------------|-------|-------|-------|-------|------------|--------------------------|-------|-------|-------|-------|------------|------------|
| | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | |
| 7:15 AM | 0 | 3 | 25 | 2 | 1 | 30 | 0 | 1 | 22 | 0 | 5 | 23 | 0 | 2 | 2 | 0 | 4 | 4 | 0 | 1 | 7 | 8 | 2 | 16 | 73 |
| 7:30 AM | 0 | 3 | 20 | 5 | 4 | 28 | 0 | 2 | 26 | 2 | 3 | 30 | 0 | 3 | 5 | 3 | 7 | 11 | 0 | 0 | 12 | 5 | 2 | 17 | 86 |
| 7:45 AM | 0 | 7 | 29 | 6 | 4 | 42 | 0 | 2 | 21 | 4 | 10 | 27 | 0 | 4 | 11 | 0 | 6 | 15 | 0 | 2 | 7 | 3 | 3 | 12 | 96 |
| 8:00 AM | 0 | 5 | 26 | 3 | 5 | 34 | 0 | 0 | 21 | 3 | 11 | 24 | 0 | 4 | 12 | 0 | 4 | 16 | 0 | 1 | 6 | 11 | 4 | 18 | 92 |
| Total | 0 | 18 | 100 | 16 | 14 | 134 | 0 | 5 | 90 | 9 | 29 | 104 | 0 | 13 | 30 | 3 | 21 | 46 | 0 | 4 | 32 | 27 | 11 | 63 | 347 |
| Approach % | 0.0 | 13.4 | 74.6 | 11.9 | - | - | 0.0 | 4.8 | 86.5 | 8.7 | - | - | 0.0 | 28.3 | 65.2 | 6.5 | - | - | 0.0 | 6.3 | 50.8 | 42.9 | - | - | - |
| Total % | 0.0 | 5.2 | 28.8 | 4.6 | - | 38.6 | 0.0 | 1.4 | 25.9 | 2.6 | - | 30.0 | 0.0 | 3.7 | 8.6 | 0.9 | - | 13.3 | 0.0 | 1.2 | 9.2 | 7.8 | - | 18.2 | - |
| PHF | 0.000 | 0.643 | 0.862 | 0.667 | - | 0.798 | 0.000 | 0.625 | 0.865 | 0.563 | - | 0.867 | 0.000 | 0.813 | 0.625 | 0.250 | - | 0.719 | 0.000 | 0.500 | 0.667 | 0.614 | - | 0.875 | 0.904 |
| Lights | 0 | 17 | 97 | 16 | - | 130 | 0 | 4 | 84 | 8 | - | 96 | 0 | 13 | 30 | 3 | - | 46 | 0 | 4 | 30 | 27 | - | 61 | 333 |
| % Lights | - | 94.4 | 97.0 | 100.0 | - | 97.0 | - | 80.0 | 93.3 | 88.9 | - | 92.3 | - | 100.0 | 100.0 | 100.0 | - | 100.0 | - | 100.0 | 93.8 | 100.0 | - | 96.8 | 96.0 |
| Buses | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 |
| % Buses | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | 0.0 |
| Single-Unit Trucks | 0 | 0 | 1 | 0 | - | 1 | 0 | 0 | 1 | 0 | - | 1 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 2 |
| % Single-Unit Trucks | - | 0.0 | 1.0 | 0.0 | - | 0.7 | - | 0.0 | 1.1 | 0.0 | - | 1.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | 0.6 |
| Articulated Trucks | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 |
| % Articulated Trucks | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | 0.0 |
| Bicycles on Road | 0 | 1 | 2 | 0 | - | 3 | 0 | 1 | 5 | 1 | - | 7 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 2 | 0 | - | 2 | 12 |
| % Bicycles on Road | - | 5.6 | 2.0 | 0.0 | - | 2.2 | - | 20.0 | 5.6 | 11.1 | - | 6.7 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 6.3 | 0.0 | - | 3.2 | 3.5 |
| Pedestrians | - | - | - | - | 14 | - | - | - | - | - | 29 | - | - | - | - | - | 21 | - | - | - | - | - | 11 | - | - |
| % Pedestrians | - | - | - | - | 100.0 | - | - | - | - | - | 100.0 | - | - | - | - | - | 100.0 | - | - | - | - | - | 100.0 | - | - |



Kenig Lindgren O'Hara Aboona, Inc.
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Rosemont, Illinois, United States 60018
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Count Name: Marion Street with Randolph
Street
Site Code:
Start Date: 09/10/2020
Page No: 4

Turning Movement Peak Hour Data (4:15 PM)

| Start Time | Randolph Street Eastbound | | | | | | Randolph Street Westbound | | | | | | Marion Street Northbound | | | | | | Marion Street Southbound | | | | | | Int. Total |
|----------------------|---------------------------|-------|-------|-------|-------|------------|---------------------------|-------|-------|-------|-------|------------|--------------------------|-------|-------|-------|-------|------------|--------------------------|-------|-------|-------|-------|------------|------------|
| | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | |
| 4:15 PM | 0 | 14 | 49 | 9 | 2 | 72 | 0 | 5 | 31 | 5 | 6 | 41 | 0 | 5 | 14 | 1 | 3 | 20 | 0 | 8 | 21 | 5 | 7 | 34 | 167 |
| 4:30 PM | 0 | 18 | 51 | 10 | 4 | 79 | 0 | 0 | 33 | 3 | 5 | 36 | 0 | 8 | 14 | 2 | 3 | 24 | 0 | 8 | 30 | 10 | 4 | 48 | 187 |
| 4:45 PM | 0 | 14 | 70 | 10 | 3 | 94 | 0 | 1 | 41 | 4 | 8 | 46 | 1 | 7 | 20 | 3 | 1 | 31 | 0 | 5 | 20 | 20 | 0 | 45 | 216 |
| 5:00 PM | 0 | 16 | 58 | 8 | 2 | 82 | 0 | 3 | 34 | 4 | 4 | 41 | 0 | 4 | 17 | 1 | 4 | 22 | 0 | 11 | 31 | 21 | 3 | 63 | 208 |
| Total | 0 | 62 | 228 | 37 | 11 | 327 | 0 | 9 | 139 | 16 | 23 | 164 | 1 | 24 | 65 | 7 | 11 | 97 | 0 | 32 | 102 | 56 | 14 | 190 | 778 |
| Approach % | 0.0 | 19.0 | 69.7 | 11.3 | - | - | 0.0 | 5.5 | 84.8 | 9.8 | - | - | 1.0 | 24.7 | 67.0 | 7.2 | - | - | 0.0 | 16.8 | 53.7 | 29.5 | - | - | - |
| Total % | 0.0 | 8.0 | 29.3 | 4.8 | - | 42.0 | 0.0 | 1.2 | 17.9 | 2.1 | - | 21.1 | 0.1 | 3.1 | 8.4 | 0.9 | - | 12.5 | 0.0 | 4.1 | 13.1 | 7.2 | - | 24.4 | - |
| PHF | 0.000 | 0.861 | 0.814 | 0.925 | - | 0.870 | 0.000 | 0.450 | 0.848 | 0.800 | - | 0.891 | 0.250 | 0.750 | 0.813 | 0.583 | - | 0.782 | 0.000 | 0.727 | 0.823 | 0.667 | - | 0.754 | 0.900 |
| Lights | 0 | 62 | 227 | 36 | - | 325 | 0 | 8 | 136 | 13 | - | 157 | 1 | 23 | 62 | 7 | - | 93 | 0 | 31 | 99 | 55 | - | 185 | 760 |
| % Lights | - | 100.0 | 99.6 | 97.3 | - | 99.4 | - | 88.9 | 97.8 | 81.3 | - | 95.7 | 100.0 | 95.8 | 95.4 | 100.0 | - | 95.9 | - | 96.9 | 97.1 | 98.2 | - | 97.4 | 97.7 |
| Buses | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 1 | 0 | - | 1 | 1 |
| % Buses | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 1.0 | 0.0 | - | 0.5 | 0.1 |
| Single-Unit Trucks | 0 | 0 | 1 | 0 | - | 1 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 1 |
| % Single-Unit Trucks | - | 0.0 | 0.4 | 0.0 | - | 0.3 | - | 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 | 0.1 |
| Articulated Trucks | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 1 | 0 | - | 1 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 1 |
| % Articulated Trucks | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.7 | 0.0 | - | 0.6 | 0.0 | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | 0.1 |
| Bicycles on Road | 0 | 0 | 0 | 1 | - | 1 | 0 | 1 | 2 | 3 | - | 6 | 0 | 1 | 3 | 0 | - | 4 | 0 | 1 | 2 | 1 | - | 4 | 15 |
| % Bicycles on Road | - | 0.0 | 0.0 | 2.7 | - | 0.3 | - | 11.1 | 1.4 | 18.8 | - | 3.7 | 0.0 | 4.2 | 4.6 | 0.0 | - | 4.1 | - | 3.1 | 2.0 | 1.8 | - | 2.1 | 1.9 |
| Pedestrians | - | - | - | - | 11 | - | - | - | - | - | 23 | - | - | - | - | - | 11 | - | - | - | - | - | 14 | - | - |
| % Pedestrians | - | - | - | - | 100.0 | - | - | - | - | - | 100.0 | - | - | - | - | - | 100.0 | - | - | - | - | - | 100.0 | - | - |



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Count Name: Marion Street with Randolph
Street
Site Code:
Start Date: 09/10/2020
Page No: 5

Turning Movement Peak Hour Data (12:45 PM)

| Start Time | Randolph Street Eastbound | | | | | | Randolph Street Westbound | | | | | | Marion Street Northbound | | | | | | Marion Street Southbound | | | | | | Int. Total |
|----------------------|---------------------------|-------|-------|-------|-------|------------|---------------------------|-------|-------|-------|-------|------------|--------------------------|-------|-------|-------|-------|------------|--------------------------|-------|-------|-------|-------|------------|------------|
| | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | |
| 12:45 PM | 0 | 13 | 39 | 3 | 1 | 55 | 0 | 1 | 32 | 1 | 2 | 34 | 0 | 3 | 15 | 4 | 1 | 22 | 0 | 9 | 21 | 9 | 3 | 39 | 150 |
| 1:00 PM | 0 | 10 | 34 | 6 | 4 | 50 | 0 | 1 | 17 | 1 | 8 | 19 | 0 | 0 | 10 | 1 | 2 | 11 | 0 | 10 | 15 | 9 | 2 | 34 | 114 |
| 1:15 PM | 0 | 13 | 38 | 5 | 1 | 56 | 0 | 2 | 22 | 0 | 6 | 24 | 0 | 4 | 19 | 3 | 0 | 26 | 0 | 6 | 14 | 8 | 2 | 28 | 134 |
| 1:30 PM | 0 | 9 | 33 | 4 | 5 | 46 | 0 | 2 | 24 | 2 | 5 | 28 | 0 | 2 | 15 | 3 | 3 | 20 | 0 | 10 | 24 | 10 | 9 | 44 | 138 |
| Total | 0 | 45 | 144 | 18 | 11 | 207 | 0 | 6 | 95 | 4 | 21 | 105 | 0 | 9 | 59 | 11 | 6 | 79 | 0 | 35 | 74 | 36 | 16 | 145 | 536 |
| Approach % | 0.0 | 21.7 | 69.6 | 8.7 | - | - | 0.0 | 5.7 | 90.5 | 3.8 | - | - | 0.0 | 11.4 | 74.7 | 13.9 | - | - | 0.0 | 24.1 | 51.0 | 24.8 | - | - | - |
| Total % | 0.0 | 8.4 | 26.9 | 3.4 | - | 38.6 | 0.0 | 1.1 | 17.7 | 0.7 | - | 19.6 | 0.0 | 1.7 | 11.0 | 2.1 | - | 14.7 | 0.0 | 6.5 | 13.8 | 6.7 | - | 27.1 | - |
| PHF | 0.000 | 0.865 | 0.923 | 0.750 | - | 0.924 | 0.000 | 0.750 | 0.742 | 0.500 | - | 0.772 | 0.000 | 0.563 | 0.776 | 0.688 | - | 0.760 | 0.000 | 0.875 | 0.771 | 0.900 | - | 0.824 | 0.893 |
| Lights | 0 | 45 | 143 | 18 | - | 206 | 0 | 6 | 94 | 4 | - | 104 | 0 | 9 | 58 | 11 | - | 78 | 0 | 34 | 73 | 36 | - | 143 | 531 |
| % Lights | - | 100.0 | 99.3 | 100.0 | - | 99.5 | - | 100.0 | 98.9 | 100.0 | - | 99.0 | - | 100.0 | 98.3 | 100.0 | - | 98.7 | - | 97.1 | 98.6 | 100.0 | - | 98.6 | 99.1 |
| Buses | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 1 | 0 | - | 1 | 0 | 0 | 0 | 0 | - | 0 | 1 |
| % Buses | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 1.7 | 0.0 | - | 1.3 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | 0.2 |
| Single-Unit Trucks | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 1 | 0 | 0 | - | 1 | 1 |
| % Single-Unit Trucks | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 2.9 | 0.0 | 0.0 | - | 0.7 | 0.2 |
| Articulated Trucks | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 |
| % Articulated Trucks | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | 0.0 |
| Bicycles on Road | 0 | 0 | 1 | 0 | - | 1 | 0 | 0 | 1 | 0 | - | 1 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 1 | 0 | - | 1 | 3 |
| % Bicycles on Road | - | 0.0 | 0.7 | 0.0 | - | 0.5 | - | 0.0 | 1.1 | 0.0 | - | 1.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 1.4 | 0.0 | - | 0.7 | 0.6 |
| Pedestrians | - | - | - | - | 11 | - | - | - | - | - | 21 | - | - | - | - | - | 6 | - | - | - | - | - | 16 | - | - |
| % Pedestrians | - | - | - | - | 100.0 | - | - | - | - | - | 100.0 | - | - | - | - | - | 100.0 | - | - | - | - | - | 100.0 | - | - |



Kenig Lindgren O'Hara Aboona, Inc.
 9575 W. Higgins Rd., Suite 400
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 (847)518-9990

Count Name: Marion Street with South
 Boulevard
 Site Code:
 Start Date: 09/10/2020
 Page No: 1

Turning Movement Data

| Start Time | South Boulevard Eastbound | | | | | | South Boulevard Westbound | | | | | | Marion Street Northbound | | | | | | Marion Street Southbound | | | | | | Int. Total |
|---------------|---------------------------|------|------|-------|------|------------|---------------------------|------|------|-------|------|------------|--------------------------|------|------|-------|------|------------|--------------------------|------|------|-------|------|------------|------------|
| | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | |
| 7:00 AM | 0 | 2 | 0 | 2 | 6 | 4 | 0 | 2 | 24 | 1 | 3 | 27 | 0 | 1 | 8 | 2 | 1 | 11 | 0 | 1 | 7 | 3 | 1 | 11 | 53 |
| 7:15 AM | 0 | 0 | 0 | 0 | 8 | 0 | 0 | 1 | 30 | 4 | 9 | 35 | 0 | 2 | 9 | 0 | 2 | 11 | 0 | 1 | 12 | 6 | 1 | 19 | 65 |
| 7:30 AM | 0 | 0 | 0 | 2 | 4 | 2 | 0 | 8 | 37 | 3 | 3 | 48 | 0 | 2 | 13 | 4 | 1 | 19 | 0 | 2 | 10 | 3 | 1 | 15 | 84 |
| 7:45 AM | 0 | 0 | 0 | 2 | 11 | 2 | 0 | 3 | 32 | 10 | 8 | 45 | 0 | 1 | 23 | 2 | 5 | 26 | 0 | 1 | 11 | 5 | 1 | 17 | 90 |
| Hourly Total | 0 | 2 | 0 | 6 | 29 | 8 | 0 | 14 | 123 | 18 | 23 | 155 | 0 | 6 | 53 | 8 | 9 | 67 | 0 | 5 | 40 | 17 | 4 | 62 | 292 |
| 8:00 AM | 0 | 1 | 4 | 2 | 13 | 7 | 0 | 2 | 29 | 12 | 11 | 43 | 1 | 2 | 26 | 2 | 4 | 31 | 0 | 2 | 8 | 6 | 1 | 16 | 97 |
| 8:15 AM | 0 | 1 | 6 | 0 | 9 | 7 | 0 | 4 | 28 | 5 | 8 | 37 | 0 | 3 | 10 | 3 | 6 | 16 | 0 | 1 | 15 | 7 | 0 | 23 | 83 |
| 8:30 AM | 0 | 1 | 0 | 1 | 3 | 2 | 0 | 3 | 25 | 12 | 9 | 40 | 0 | 1 | 17 | 2 | 4 | 20 | 0 | 3 | 16 | 3 | 1 | 22 | 84 |
| 8:45 AM | 0 | 2 | 2 | 2 | 9 | 6 | 0 | 8 | 31 | 15 | 7 | 54 | 0 | 2 | 15 | 1 | 3 | 18 | 0 | 1 | 13 | 7 | 0 | 21 | 99 |
| Hourly Total | 0 | 5 | 12 | 5 | 34 | 22 | 0 | 17 | 113 | 44 | 35 | 174 | 1 | 8 | 68 | 8 | 17 | 85 | 0 | 7 | 52 | 23 | 2 | 82 | 363 |
| *** BREAK *** | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 4:00 PM | 0 | 0 | 6 | 2 | 9 | 8 | 0 | 12 | 58 | 19 | 5 | 89 | 0 | 4 | 31 | 2 | 12 | 37 | 0 | 4 | 41 | 5 | 3 | 50 | 184 |
| 4:15 PM | 0 | 0 | 3 | 1 | 12 | 4 | 0 | 8 | 65 | 15 | 7 | 88 | 0 | 2 | 29 | 4 | 7 | 35 | 0 | 6 | 24 | 12 | 0 | 42 | 169 |
| 4:30 PM | 0 | 4 | 3 | 3 | 11 | 10 | 0 | 13 | 46 | 13 | 7 | 72 | 0 | 9 | 34 | 6 | 4 | 49 | 0 | 3 | 38 | 11 | 0 | 52 | 183 |
| 4:45 PM | 0 | 4 | 4 | 1 | 11 | 9 | 0 | 8 | 64 | 21 | 12 | 93 | 0 | 10 | 33 | 10 | 10 | 53 | 0 | 5 | 36 | 15 | 2 | 56 | 211 |
| Hourly Total | 0 | 8 | 16 | 7 | 43 | 31 | 0 | 41 | 233 | 68 | 31 | 342 | 0 | 25 | 127 | 22 | 33 | 174 | 0 | 18 | 139 | 43 | 5 | 200 | 747 |
| 5:00 PM | 0 | 6 | 4 | 6 | 20 | 16 | 0 | 7 | 59 | 23 | 4 | 89 | 0 | 8 | 46 | 4 | 11 | 58 | 0 | 3 | 47 | 11 | 1 | 61 | 224 |
| 5:15 PM | 0 | 2 | 5 | 1 | 13 | 8 | 0 | 6 | 51 | 22 | 9 | 79 | 0 | 6 | 48 | 5 | 11 | 59 | 0 | 1 | 48 | 20 | 2 | 69 | 215 |
| 5:30 PM | 0 | 3 | 4 | 0 | 5 | 7 | 0 | 16 | 53 | 18 | 3 | 87 | 0 | 4 | 49 | 1 | 4 | 54 | 0 | 4 | 38 | 14 | 2 | 56 | 204 |
| 5:45 PM | 0 | 3 | 6 | 3 | 14 | 12 | 0 | 9 | 66 | 19 | 5 | 94 | 0 | 8 | 28 | 0 | 11 | 36 | 0 | 6 | 41 | 17 | 0 | 64 | 206 |
| Hourly Total | 0 | 14 | 19 | 10 | 52 | 43 | 0 | 38 | 229 | 82 | 21 | 349 | 0 | 26 | 171 | 10 | 37 | 207 | 0 | 14 | 174 | 62 | 5 | 250 | 849 |
| *** BREAK *** | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 11:30 AM | 0 | 2 | 3 | 1 | 7 | 6 | 0 | 7 | 50 | 18 | 4 | 75 | 0 | 5 | 36 | 3 | 7 | 44 | 0 | 2 | 31 | 9 | 0 | 42 | 167 |
| 11:45 AM | 0 | 3 | 3 | 0 | 9 | 6 | 0 | 9 | 50 | 16 | 10 | 75 | 0 | 8 | 40 | 8 | 8 | 56 | 0 | 2 | 29 | 9 | 1 | 40 | 177 |
| Hourly Total | 0 | 5 | 6 | 1 | 16 | 12 | 0 | 16 | 100 | 34 | 14 | 150 | 0 | 13 | 76 | 11 | 15 | 100 | 0 | 4 | 60 | 18 | 1 | 82 | 344 |
| 12:00 PM | 0 | 4 | 2 | 4 | 15 | 10 | 0 | 11 | 43 | 14 | 5 | 68 | 0 | 0 | 28 | 5 | 10 | 33 | 0 | 2 | 35 | 5 | 3 | 42 | 153 |
| 12:15 PM | 0 | 1 | 1 | 1 | 19 | 3 | 0 | 9 | 50 | 22 | 11 | 81 | 0 | 2 | 32 | 4 | 10 | 38 | 0 | 2 | 33 | 9 | 2 | 44 | 166 |
| 12:30 PM | 0 | 3 | 1 | 1 | 15 | 5 | 0 | 4 | 52 | 18 | 11 | 74 | 0 | 5 | 27 | 2 | 11 | 34 | 0 | 3 | 36 | 11 | 0 | 50 | 163 |
| 12:45 PM | 0 | 3 | 4 | 2 | 16 | 9 | 0 | 10 | 51 | 18 | 10 | 79 | 0 | 3 | 31 | 5 | 5 | 39 | 0 | 5 | 30 | 7 | 0 | 42 | 169 |
| Hourly Total | 0 | 11 | 8 | 8 | 65 | 27 | 0 | 34 | 196 | 72 | 37 | 302 | 0 | 10 | 118 | 16 | 36 | 144 | 0 | 12 | 134 | 32 | 5 | 178 | 651 |
| 1:00 PM | 0 | 4 | 4 | 2 | 9 | 10 | 0 | 5 | 48 | 17 | 12 | 70 | 0 | 7 | 35 | 2 | 5 | 44 | 0 | 4 | 24 | 9 | 0 | 37 | 161 |
| 1:15 PM | 0 | 2 | 1 | 1 | 16 | 4 | 0 | 8 | 40 | 17 | 4 | 65 | 0 | 9 | 28 | 7 | 8 | 44 | 0 | 2 | 26 | 12 | 0 | 40 | 153 |
| 1:30 PM | 0 | 3 | 4 | 6 | 18 | 13 | 0 | 7 | 61 | 10 | 10 | 78 | 0 | 3 | 22 | 2 | 9 | 27 | 0 | 2 | 32 | 5 | 1 | 39 | 157 |
| 1:45 PM | 0 | 1 | 3 | 4 | 9 | 8 | 0 | 6 | 43 | 19 | 13 | 68 | 0 | 1 | 30 | 6 | 8 | 37 | 0 | 1 | 29 | 8 | 0 | 38 | 151 |
| Hourly Total | 0 | 10 | 12 | 13 | 52 | 35 | 0 | 26 | 192 | 63 | 39 | 281 | 0 | 20 | 115 | 17 | 30 | 152 | 0 | 9 | 111 | 34 | 1 | 154 | 622 |

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------|-----|------|------|------|-------|------|-----|------|------|------|-------|------|-------|------|------|------|-------|------|-----|-------|------|------|-------|------|------|
| Grand Total | 0 | 55 | 73 | 50 | 291 | 178 | 0 | 186 | 1186 | 381 | 200 | 1753 | 1 | 108 | 728 | 92 | 177 | 929 | 0 | 69 | 710 | 229 | 23 | 1008 | 3868 |
| Approach % | 0.0 | 30.9 | 41.0 | 28.1 | - | - | 0.0 | 10.6 | 67.7 | 21.7 | - | - | 0.1 | 11.6 | 78.4 | 9.9 | - | - | 0.0 | 6.8 | 70.4 | 22.7 | - | - | - |
| Total % | 0.0 | 1.4 | 1.9 | 1.3 | - | 4.6 | 0.0 | 4.8 | 30.7 | 9.9 | - | 45.3 | 0.0 | 2.8 | 18.8 | 2.4 | - | 24.0 | 0.0 | 1.8 | 18.4 | 5.9 | - | 26.1 | - |
| Lights | 0 | 51 | 71 | 48 | - | 170 | 0 | 184 | 1122 | 375 | - | 1681 | 0 | 103 | 712 | 90 | - | 905 | 0 | 69 | 697 | 225 | - | 991 | 3747 |
| % Lights | - | 92.7 | 97.3 | 96.0 | - | 95.5 | - | 98.9 | 94.6 | 98.4 | - | 95.9 | 0.0 | 95.4 | 97.8 | 97.8 | - | 97.4 | - | 100.0 | 98.2 | 98.3 | - | 98.3 | 96.9 |
| Buses | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 46 | 0 | - | 46 | 1 | 0 | 1 | 0 | - | 2 | 0 | 0 | 0 | 0 | - | 0 | 48 |
| % Buses | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 3.9 | 0.0 | - | 2.6 | 100.0 | 0.0 | 0.1 | 0.0 | - | 0.2 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | 1.2 |
| Single-Unit Trucks | 0 | 0 | 1 | 2 | - | 3 | 0 | 2 | 11 | 1 | - | 14 | 0 | 3 | 3 | 2 | - | 8 | 0 | 0 | 2 | 1 | - | 3 | 28 |
| % Single-Unit Trucks | - | 0.0 | 1.4 | 4.0 | - | 1.7 | - | 1.1 | 0.9 | 0.3 | - | 0.8 | 0.0 | 2.8 | 0.4 | 2.2 | - | 0.9 | - | 0.0 | 0.3 | 0.4 | - | 0.3 | 0.7 |
| Articulated Trucks | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 |
| % Articulated Trucks | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | 0.0 | - | 0.0 | 0.0 |
| Bicycles on Road | 0 | 4 | 1 | 0 | - | 5 | 0 | 0 | 7 | 5 | - | 12 | 0 | 2 | 12 | 0 | - | 14 | 0 | 0 | 11 | 3 | - | 14 | 45 |
| % Bicycles on Road | - | 7.3 | 1.4 | 0.0 | - | 2.8 | - | 0.0 | 0.6 | 1.3 | - | 0.7 | 0.0 | 1.9 | 1.6 | 0.0 | - | 1.5 | - | 0.0 | 1.5 | 1.3 | - | 1.4 | 1.2 |
| Pedestrians | - | - | - | - | 291 | - | - | - | - | - | 200 | - | - | - | - | - | 177 | - | - | - | - | - | 23 | - | - |
| % Pedestrians | - | - | - | - | 100.0 | - | - | - | - | - | 100.0 | - | - | - | - | - | 100.0 | - | - | - | - | - | 100.0 | - | - |



Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400

Rosemont, Illinois, United States 60018
(847)518-9990

Count Name: Marion Street with South
Boulevard
Site Code:
Start Date: 09/10/2020
Page No: 3

Turning Movement Peak Hour Data (7:15 AM)

| Start Time | South Boulevard Eastbound | | | | | | South Boulevard Westbound | | | | | | Marion Street Northbound | | | | | | Marion Street Southbound | | | | | | Int. Total |
|----------------------|---------------------------|-------|-------|-------|-------|------------|---------------------------|-------|-------|-------|-------|------------|--------------------------|-------|-------|-------|-------|------------|--------------------------|-------|-------|-------|-------|------------|------------|
| | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | |
| 7:15 AM | 0 | 0 | 0 | 0 | 8 | 0 | 0 | 1 | 30 | 4 | 9 | 35 | 0 | 2 | 9 | 0 | 2 | 11 | 0 | 1 | 12 | 6 | 1 | 19 | 65 |
| 7:30 AM | 0 | 0 | 0 | 2 | 4 | 2 | 0 | 8 | 37 | 3 | 3 | 48 | 0 | 2 | 13 | 4 | 1 | 19 | 0 | 2 | 10 | 3 | 1 | 15 | 84 |
| 7:45 AM | 0 | 0 | 0 | 2 | 11 | 2 | 0 | 3 | 32 | 10 | 8 | 45 | 0 | 1 | 23 | 2 | 5 | 26 | 0 | 1 | 11 | 5 | 1 | 17 | 90 |
| 8:00 AM | 0 | 1 | 4 | 2 | 13 | 7 | 0 | 2 | 29 | 12 | 11 | 43 | 1 | 2 | 26 | 2 | 4 | 31 | 0 | 2 | 8 | 6 | 1 | 16 | 97 |
| Total | 0 | 1 | 4 | 6 | 36 | 11 | 0 | 14 | 128 | 29 | 31 | 171 | 1 | 7 | 71 | 8 | 12 | 87 | 0 | 6 | 41 | 20 | 4 | 67 | 336 |
| Approach % | 0.0 | 9.1 | 36.4 | 54.5 | - | - | 0.0 | 8.2 | 74.9 | 17.0 | - | - | 1.1 | 8.0 | 81.6 | 9.2 | - | - | 0.0 | 9.0 | 61.2 | 29.9 | - | - | - |
| Total % | 0.0 | 0.3 | 1.2 | 1.8 | - | 3.3 | 0.0 | 4.2 | 38.1 | 8.6 | - | 50.9 | 0.3 | 2.1 | 21.1 | 2.4 | - | 25.9 | 0.0 | 1.8 | 12.2 | 6.0 | - | 19.9 | - |
| PHF | 0.000 | 0.250 | 0.250 | 0.750 | - | 0.393 | 0.000 | 0.438 | 0.865 | 0.604 | - | 0.891 | 0.250 | 0.875 | 0.683 | 0.500 | - | 0.702 | 0.000 | 0.750 | 0.854 | 0.833 | - | 0.882 | 0.866 |
| Lights | 0 | 1 | 4 | 5 | - | 10 | 0 | 14 | 114 | 29 | - | 157 | 0 | 6 | 67 | 8 | - | 81 | 0 | 6 | 39 | 19 | - | 64 | 312 |
| % Lights | - | 100.0 | 100.0 | 83.3 | - | 90.9 | - | 100.0 | 89.1 | 100.0 | - | 91.8 | 0.0 | 85.7 | 94.4 | 100.0 | - | 93.1 | - | 100.0 | 95.1 | 95.0 | - | 95.5 | 92.9 |
| Buses | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 9 | 0 | - | 9 | 1 | 0 | 0 | 0 | - | 1 | 0 | 0 | 0 | 0 | - | 0 | 10 |
| % Buses | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 7.0 | 0.0 | - | 5.3 | 100.0 | 0.0 | 0.0 | 0.0 | - | 1.1 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | 3.0 |
| Single-Unit Trucks | 0 | 0 | 0 | 1 | - | 1 | 0 | 0 | 3 | 0 | - | 3 | 0 | 1 | 1 | 0 | - | 2 | 0 | 0 | 0 | 1 | - | 1 | 7 |
| % Single-Unit Trucks | - | 0.0 | 0.0 | 16.7 | - | 9.1 | - | 0.0 | 2.3 | 0.0 | - | 1.8 | 0.0 | 14.3 | 1.4 | 0.0 | - | 2.3 | - | 0.0 | 0.0 | 5.0 | - | 1.5 | 2.1 |
| Articulated Trucks | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 |
| % Articulated Trucks | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | 0.0 |
| Bicycles on Road | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 2 | 0 | - | 2 | 0 | 0 | 3 | 0 | - | 3 | 0 | 0 | 2 | 0 | - | 2 | 7 |
| % Bicycles on Road | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 1.6 | 0.0 | - | 1.2 | 0.0 | 0.0 | 4.2 | 0.0 | - | 3.4 | - | 0.0 | 4.9 | 0.0 | - | 3.0 | 2.1 |
| Pedestrians | - | - | - | - | 36 | - | - | - | - | - | 31 | - | - | - | - | - | 12 | - | - | - | - | - | 4 | - | - |
| % Pedestrians | - | - | - | - | 100.0 | - | - | - | - | - | 100.0 | - | - | - | - | - | 100.0 | - | - | - | - | - | 100.0 | - | - |



Kenig Lindgren O'Hara Aboona, Inc.
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Count Name: Marion Street with South
Boulevard
Site Code:
Start Date: 09/10/2020
Page No: 4

Turning Movement Peak Hour Data (4:15 PM)

| Start Time | South Boulevard Eastbound | | | | | | South Boulevard Westbound | | | | | | Marion Street Northbound | | | | | | Marion Street Southbound | | | | | | Int. Total |
|----------------------|---------------------------|-------|-------|-------|-------|------------|---------------------------|-------|-------|-------|-------|------------|--------------------------|-------|-------|-------|-------|------------|--------------------------|-------|-------|-------|-------|------------|------------|
| | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | |
| 4:15 PM | 0 | 0 | 3 | 1 | 12 | 4 | 0 | 8 | 65 | 15 | 7 | 88 | 0 | 2 | 29 | 4 | 7 | 35 | 0 | 6 | 24 | 12 | 0 | 42 | 169 |
| 4:30 PM | 0 | 4 | 3 | 3 | 11 | 10 | 0 | 13 | 46 | 13 | 7 | 72 | 0 | 9 | 34 | 6 | 4 | 49 | 0 | 3 | 38 | 11 | 0 | 52 | 183 |
| 4:45 PM | 0 | 4 | 4 | 1 | 11 | 9 | 0 | 8 | 64 | 21 | 12 | 93 | 0 | 10 | 33 | 10 | 10 | 53 | 0 | 5 | 36 | 15 | 2 | 56 | 211 |
| 5:00 PM | 0 | 6 | 4 | 6 | 20 | 16 | 0 | 7 | 59 | 23 | 4 | 89 | 0 | 8 | 46 | 4 | 11 | 58 | 0 | 3 | 47 | 11 | 1 | 61 | 224 |
| Total | 0 | 14 | 14 | 11 | 54 | 39 | 0 | 36 | 234 | 72 | 30 | 342 | 0 | 29 | 142 | 24 | 32 | 195 | 0 | 17 | 145 | 49 | 3 | 211 | 787 |
| Approach % | 0.0 | 35.9 | 35.9 | 28.2 | - | - | 0.0 | 10.5 | 68.4 | 21.1 | - | - | 0.0 | 14.9 | 72.8 | 12.3 | - | - | 0.0 | 8.1 | 68.7 | 23.2 | - | - | - |
| Total % | 0.0 | 1.8 | 1.8 | 1.4 | - | 5.0 | 0.0 | 4.6 | 29.7 | 9.1 | - | 43.5 | 0.0 | 3.7 | 18.0 | 3.0 | - | 24.8 | 0.0 | 2.2 | 18.4 | 6.2 | - | 26.8 | - |
| PHF | 0.000 | 0.583 | 0.875 | 0.458 | - | 0.609 | 0.000 | 0.692 | 0.900 | 0.783 | - | 0.919 | 0.000 | 0.725 | 0.772 | 0.600 | - | 0.841 | 0.000 | 0.708 | 0.771 | 0.817 | - | 0.865 | 0.878 |
| Lights | 0 | 14 | 14 | 11 | - | 39 | 0 | 36 | 224 | 71 | - | 331 | 0 | 29 | 139 | 24 | - | 192 | 0 | 17 | 143 | 49 | - | 209 | 771 |
| % Lights | - | 100.0 | 100.0 | 100.0 | - | 100.0 | - | 100.0 | 95.7 | 98.6 | - | 96.8 | - | 100.0 | 97.9 | 100.0 | - | 98.5 | - | 100.0 | 98.6 | 100.0 | - | 99.1 | 98.0 |
| Buses | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 8 | 0 | - | 8 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 8 |
| % Buses | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 3.4 | 0.0 | - | 2.3 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | 1.0 |
| Single-Unit Trucks | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 1 | 0 | - | 1 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 1 |
| % Single-Unit Trucks | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.4 | 0.0 | - | 0.3 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | 0.1 |
| Articulated Trucks | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 |
| % Articulated Trucks | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | 0.0 |
| Bicycles on Road | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 1 | 1 | - | 2 | 0 | 0 | 3 | 0 | - | 3 | 0 | 0 | 2 | 0 | - | 2 | 7 |
| % Bicycles on Road | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.4 | 1.4 | - | 0.6 | - | 0.0 | 2.1 | 0.0 | - | 1.5 | - | 0.0 | 1.4 | 0.0 | - | 0.9 | 0.9 |
| Pedestrians | - | - | - | - | 54 | - | - | - | - | - | 30 | - | - | - | - | - | 32 | - | - | - | - | - | 3 | - | - |
| % Pedestrians | - | - | - | - | 100.0 | - | - | - | - | - | 100.0 | - | - | - | - | - | 100.0 | - | - | - | - | - | 100.0 | - | - |



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Count Name: Marion Street with South
Boulevard
Site Code:
Start Date: 09/10/2020
Page No: 5

Turning Movement Peak Hour Data (12:45 PM)

| Start Time | South Boulevard Eastbound | | | | | | South Boulevard Westbound | | | | | | Marion Street Northbound | | | | | | Marion Street Southbound | | | | | | Int. Total |
|----------------------|---------------------------|-------|-------|-------|-------|------------|---------------------------|-------|-------|-------|-------|------------|--------------------------|-------|-------|-------|-------|------------|--------------------------|-------|-------|-------|-------|------------|------------|
| | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | |
| 12:45 PM | 0 | 3 | 4 | 2 | 16 | 9 | 0 | 10 | 51 | 18 | 10 | 79 | 0 | 3 | 31 | 5 | 5 | 39 | 0 | 5 | 30 | 7 | 0 | 42 | 169 |
| 1:00 PM | 0 | 4 | 4 | 2 | 9 | 10 | 0 | 5 | 48 | 17 | 12 | 70 | 0 | 7 | 35 | 2 | 5 | 44 | 0 | 4 | 24 | 9 | 0 | 37 | 161 |
| 1:15 PM | 0 | 2 | 1 | 1 | 16 | 4 | 0 | 8 | 40 | 17 | 4 | 65 | 0 | 9 | 28 | 7 | 8 | 44 | 0 | 2 | 26 | 12 | 0 | 40 | 153 |
| 1:30 PM | 0 | 3 | 4 | 6 | 18 | 13 | 0 | 7 | 61 | 10 | 10 | 78 | 0 | 3 | 22 | 2 | 9 | 27 | 0 | 2 | 32 | 5 | 1 | 39 | 157 |
| Total | 0 | 12 | 13 | 11 | 59 | 36 | 0 | 30 | 200 | 62 | 36 | 292 | 0 | 22 | 116 | 16 | 27 | 154 | 0 | 13 | 112 | 33 | 1 | 158 | 640 |
| Approach % | 0.0 | 33.3 | 36.1 | 30.6 | - | - | 0.0 | 10.3 | 68.5 | 21.2 | - | - | 0.0 | 14.3 | 75.3 | 10.4 | - | - | 0.0 | 8.2 | 70.9 | 20.9 | - | - | - |
| Total % | 0.0 | 1.9 | 2.0 | 1.7 | - | 5.6 | 0.0 | 4.7 | 31.3 | 9.7 | - | 45.6 | 0.0 | 3.4 | 18.1 | 2.5 | - | 24.1 | 0.0 | 2.0 | 17.5 | 5.2 | - | 24.7 | - |
| PHF | 0.000 | 0.750 | 0.813 | 0.458 | - | 0.692 | 0.000 | 0.750 | 0.820 | 0.861 | - | 0.924 | 0.000 | 0.611 | 0.829 | 0.571 | - | 0.875 | 0.000 | 0.650 | 0.875 | 0.688 | - | 0.940 | 0.947 |
| Lights | 0 | 12 | 13 | 11 | - | 36 | 0 | 29 | 191 | 61 | - | 281 | 0 | 22 | 116 | 15 | - | 153 | 0 | 13 | 111 | 32 | - | 156 | 626 |
| % Lights | - | 100.0 | 100.0 | 100.0 | - | 100.0 | - | 96.7 | 95.5 | 98.4 | - | 96.2 | - | 100.0 | 100.0 | 93.8 | - | 99.4 | - | 100.0 | 99.1 | 97.0 | - | 98.7 | 97.8 |
| Buses | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 6 | 0 | - | 6 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 6 |
| % Buses | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 3.0 | 0.0 | - | 2.1 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | 0.9 |
| Single-Unit Trucks | 0 | 0 | 0 | 0 | - | 0 | 0 | 1 | 2 | 0 | - | 3 | 0 | 0 | 0 | 1 | - | 1 | 0 | 0 | 0 | 0 | - | 0 | 4 |
| % Single-Unit Trucks | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 3.3 | 1.0 | 0.0 | - | 1.0 | - | 0.0 | 0.0 | 6.3 | - | 0.6 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | 0.6 |
| Articulated Trucks | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 |
| % Articulated Trucks | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | 0.0 |
| Bicycles on Road | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 1 | 1 | - | 2 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 1 | 1 | - | 2 | 4 |
| % Bicycles on Road | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.5 | 1.6 | - | 0.7 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.9 | 3.0 | - | 1.3 | 0.6 |
| Pedestrians | - | - | - | - | 59 | - | - | - | - | - | 36 | - | - | - | - | - | 27 | - | - | - | - | - | 1 | - | - |
| % Pedestrians | - | - | - | - | 100.0 | - | - | - | - | - | 100.0 | - | - | - | - | - | 100.0 | - | - | - | - | - | 100.0 | - | - |



Kenig Lindgren O'Hara Aboona, Inc.
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Count Name: NS Alley and Randolph with
Randolph Street
Site Code:
Start Date: 09/10/2020
Page No: 1

Turning Movement Data

| Start Time | Randolph Street Eastbound | | | | | | Randolph Street Westbound | | | | | | NS Alley Northbound | | | | | | NS Alley Southbound | | | | | | Int. Total |
|---------------|---------------------------|------|------|-------|------|------------|---------------------------|------|------|-------|------|------------|---------------------|------|------|-------|------|------------|---------------------|------|------|-------|------|------------|------------|
| | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | |
| 7:00 AM | 0 | 0 | 22 | 0 | 0 | 22 | 0 | 0 | 20 | 0 | 0 | 20 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 2 | 3 | 2 | 44 |
| 7:15 AM | 0 | 0 | 27 | 0 | 1 | 27 | 0 | 0 | 35 | 0 | 0 | 35 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 1 | 0 | 1 | 5 | 2 | 64 |
| 7:30 AM | 0 | 0 | 26 | 0 | 0 | 26 | 0 | 0 | 32 | 0 | 0 | 32 | 0 | 1 | 0 | 0 | 6 | 1 | 0 | 1 | 0 | 0 | 3 | 1 | 60 |
| 7:45 AM | 0 | 1 | 41 | 1 | 0 | 43 | 0 | 0 | 32 | 0 | 0 | 32 | 0 | 1 | 0 | 0 | 4 | 1 | 0 | 1 | 0 | 1 | 6 | 2 | 78 |
| Hourly Total | 0 | 1 | 116 | 1 | 1 | 118 | 0 | 0 | 119 | 0 | 0 | 119 | 0 | 2 | 0 | 0 | 17 | 2 | 0 | 3 | 0 | 4 | 17 | 7 | 246 |
| 8:00 AM | 0 | 1 | 35 | 1 | 0 | 37 | 0 | 0 | 34 | 0 | 0 | 34 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 2 | 0 | 1 | 4 | 3 | 74 |
| 8:15 AM | 0 | 1 | 27 | 0 | 0 | 28 | 0 | 0 | 26 | 2 | 1 | 28 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 9 | 0 | 57 |
| 8:30 AM | 0 | 1 | 30 | 0 | 1 | 31 | 0 | 0 | 22 | 0 | 1 | 22 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 53 |
| 8:45 AM | 0 | 2 | 39 | 1 | 1 | 42 | 0 | 0 | 24 | 0 | 1 | 24 | 0 | 3 | 0 | 1 | 0 | 4 | 0 | 1 | 0 | 0 | 4 | 1 | 71 |
| Hourly Total | 0 | 5 | 131 | 2 | 2 | 138 | 0 | 0 | 106 | 2 | 3 | 108 | 0 | 4 | 0 | 1 | 11 | 5 | 0 | 3 | 0 | 1 | 23 | 4 | 255 |
| *** BREAK *** | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 4:00 PM | 0 | 0 | 70 | 3 | 0 | 73 | 0 | 1 | 49 | 1 | 0 | 51 | 0 | 4 | 0 | 1 | 7 | 5 | 0 | 2 | 0 | 1 | 9 | 3 | 132 |
| 4:15 PM | 0 | 2 | 73 | 1 | 0 | 76 | 0 | 0 | 35 | 1 | 0 | 36 | 0 | 0 | 0 | 1 | 4 | 1 | 0 | 0 | 0 | 1 | 3 | 1 | 114 |
| 4:30 PM | 0 | 1 | 74 | 5 | 0 | 80 | 1 | 3 | 50 | 1 | 0 | 55 | 0 | 2 | 0 | 0 | 0 | 2 | 0 | 1 | 0 | 4 | 0 | 5 | 142 |
| 4:45 PM | 0 | 0 | 85 | 1 | 1 | 86 | 0 | 0 | 62 | 1 | 1 | 63 | 0 | 1 | 0 | 1 | 3 | 2 | 0 | 3 | 0 | 4 | 2 | 7 | 158 |
| Hourly Total | 0 | 3 | 302 | 10 | 1 | 315 | 1 | 4 | 196 | 4 | 1 | 205 | 0 | 7 | 0 | 3 | 14 | 10 | 0 | 6 | 0 | 10 | 14 | 16 | 546 |
| 5:00 PM | 0 | 1 | 86 | 0 | 0 | 87 | 0 | 1 | 61 | 2 | 2 | 64 | 0 | 3 | 0 | 1 | 0 | 4 | 0 | 1 | 0 | 1 | 1 | 2 | 157 |
| 5:15 PM | 0 | 1 | 81 | 1 | 2 | 83 | 0 | 1 | 46 | 1 | 0 | 48 | 0 | 1 | 0 | 1 | 1 | 2 | 0 | 0 | 0 | 1 | 1 | 1 | 134 |
| 5:30 PM | 0 | 2 | 70 | 1 | 0 | 73 | 0 | 2 | 57 | 2 | 0 | 61 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 2 | 1 | 136 |
| 5:45 PM | 1 | 3 | 61 | 2 | 0 | 67 | 0 | 0 | 41 | 1 | 0 | 42 | 0 | 1 | 0 | 3 | 0 | 4 | 0 | 1 | 0 | 1 | 0 | 2 | 115 |
| Hourly Total | 1 | 7 | 298 | 4 | 2 | 310 | 0 | 4 | 205 | 6 | 2 | 215 | 0 | 6 | 0 | 5 | 1 | 11 | 0 | 3 | 0 | 3 | 4 | 6 | 542 |
| *** BREAK *** | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 11:30 AM | 0 | 0 | 44 | 0 | 2 | 44 | 0 | 0 | 37 | 1 | 1 | 38 | 0 | 1 | 0 | 3 | 0 | 4 | 0 | 2 | 0 | 1 | 2 | 3 | 89 |
| 11:45 AM | 0 | 2 | 58 | 0 | 0 | 60 | 0 | 0 | 38 | 1 | 0 | 39 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 4 | 0 | 100 |
| Hourly Total | 0 | 2 | 102 | 0 | 2 | 104 | 0 | 0 | 75 | 2 | 1 | 77 | 0 | 1 | 0 | 4 | 1 | 5 | 0 | 2 | 0 | 1 | 6 | 3 | 189 |
| 12:00 PM | 0 | 1 | 41 | 1 | 0 | 43 | 0 | 0 | 58 | 0 | 3 | 58 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 7 | 2 | 103 |
| 12:15 PM | 0 | 2 | 52 | 0 | 1 | 54 | 0 | 0 | 41 | 1 | 0 | 42 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 4 | 3 | 4 | 101 |
| 12:30 PM | 0 | 1 | 48 | 1 | 0 | 50 | 0 | 0 | 36 | 0 | 1 | 36 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 86 |
| 12:45 PM | 0 | 0 | 54 | 1 | 2 | 55 | 0 | 0 | 48 | 1 | 0 | 49 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 3 | 2 | 4 | 108 |
| Hourly Total | 0 | 4 | 195 | 3 | 3 | 202 | 0 | 0 | 183 | 2 | 4 | 185 | 0 | 1 | 0 | 0 | 6 | 1 | 0 | 0 | 1 | 9 | 15 | 10 | 398 |
| 1:00 PM | 0 | 0 | 49 | 0 | 0 | 49 | 0 | 1 | 28 | 0 | 0 | 29 | 0 | 0 | 0 | 1 | 3 | 1 | 0 | 0 | 0 | 2 | 3 | 2 | 81 |
| 1:15 PM | 0 | 0 | 52 | 1 | 1 | 53 | 0 | 0 | 34 | 0 | 1 | 34 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 2 | 1 | 2 | 90 |
| 1:30 PM | 0 | 2 | 55 | 0 | 0 | 57 | 0 | 0 | 33 | 0 | 0 | 33 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 90 |
| 1:45 PM | 0 | 0 | 43 | 1 | 0 | 44 | 0 | 0 | 35 | 0 | 0 | 35 | 0 | 1 | 0 | 1 | 5 | 2 | 0 | 0 | 0 | 0 | 6 | 0 | 81 |
| Hourly Total | 0 | 2 | 199 | 2 | 1 | 203 | 0 | 1 | 130 | 0 | 1 | 131 | 0 | 2 | 0 | 2 | 13 | 4 | 0 | 0 | 0 | 4 | 20 | 4 | 342 |

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------|-------|------|------|-------|-------|------|-------|-------|------|-------|-------|------|-----|-------|-----|------|-------|------|-----|-------|-------|-------|-------|-------|------|
| Grand Total | 1 | 24 | 1343 | 22 | 12 | 1390 | 1 | 9 | 1014 | 16 | 12 | 1040 | 0 | 23 | 0 | 15 | 63 | 38 | 0 | 17 | 1 | 32 | 99 | 50 | 2518 |
| Approach % | 0.1 | 1.7 | 96.6 | 1.6 | - | - | 0.1 | 0.9 | 97.5 | 1.5 | - | - | 0.0 | 60.5 | 0.0 | 39.5 | - | - | 0.0 | 34.0 | 2.0 | 64.0 | - | - | - |
| Total % | 0.0 | 1.0 | 53.3 | 0.9 | - | 55.2 | 0.0 | 0.4 | 40.3 | 0.6 | - | 41.3 | 0.0 | 0.9 | 0.0 | 0.6 | - | 1.5 | 0.0 | 0.7 | 0.0 | 1.3 | - | 2.0 | - |
| Lights | 1 | 23 | 1325 | 22 | - | 1371 | 1 | 9 | 995 | 16 | - | 1021 | 0 | 23 | 0 | 14 | - | 37 | 0 | 17 | 1 | 32 | - | 50 | 2479 |
| % Lights | 100.0 | 95.8 | 98.7 | 100.0 | - | 98.6 | 100.0 | 100.0 | 98.1 | 100.0 | - | 98.2 | - | 100.0 | - | 93.3 | - | 97.4 | - | 100.0 | 100.0 | 100.0 | - | 100.0 | 98.5 |
| Buses | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 |
| % Buses | 0.0 | 0.0 | 0.0 | 0.0 | - | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | 0.0 |
| Single-Unit Trucks | 0 | 0 | 7 | 0 | - | 7 | 0 | 0 | 6 | 0 | - | 6 | 0 | 0 | 0 | 1 | - | 1 | 0 | 0 | 0 | 0 | - | 0 | 14 |
| % Single-Unit Trucks | 0.0 | 0.0 | 0.5 | 0.0 | - | 0.5 | 0.0 | 0.0 | 0.6 | 0.0 | - | 0.6 | - | 0.0 | - | 6.7 | - | 2.6 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | 0.6 |
| Articulated Trucks | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 |
| % Articulated Trucks | 0.0 | 0.0 | 0.0 | 0.0 | - | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | 0.0 |
| Bicycles on Road | 0 | 1 | 11 | 0 | - | 12 | 0 | 0 | 13 | 0 | - | 13 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 25 |
| % Bicycles on Road | 0.0 | 4.2 | 0.8 | 0.0 | - | 0.9 | 0.0 | 0.0 | 1.3 | 0.0 | - | 1.3 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | 1.0 |
| Pedestrians | - | - | - | - | 12 | - | - | - | - | - | 12 | - | - | - | - | - | 63 | - | - | - | - | - | 99 | - | - |
| % Pedestrians | - | - | - | - | 100.0 | - | - | - | - | - | 100.0 | - | - | - | - | - | 100.0 | - | - | - | - | - | 100.0 | - | - |



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Count Name: NS Alley and Randolph with
Randolph Street
Site Code:
Start Date: 09/10/2020
Page No: 3

Turning Movement Peak Hour Data (7:15 AM)

| Start Time | Randolph Street Eastbound | | | | | | Randolph Street Westbound | | | | | | NS Alley Northbound | | | | | | NS Alley Southbound | | | | | | Int. Total |
|----------------------|---------------------------|----------|------------|----------|----------|------------|---------------------------|----------|------------|----------|----------|------------|---------------------|----------|----------|----------|-----------|------------|---------------------|----------|----------|----------|-----------|------------|------------|
| | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | |
| 7:15 AM | 0 | 0 | 27 | 0 | 1 | 27 | 0 | 0 | 35 | 0 | 0 | 35 | 0 | 0 | 0 | 0 | 3 | 0 | 0 | 1 | 0 | 1 | 5 | 2 | 64 |
| 7:30 AM | 0 | 0 | 26 | 0 | 0 | 26 | 0 | 0 | 32 | 0 | 0 | 32 | 0 | 1 | 0 | 0 | 6 | 1 | 0 | 1 | 0 | 0 | 3 | 1 | 60 |
| 7:45 AM | 0 | 1 | 41 | 1 | 0 | 43 | 0 | 0 | 32 | 0 | 0 | 32 | 0 | 1 | 0 | 0 | 4 | 1 | 0 | 1 | 0 | 1 | 6 | 2 | 78 |
| 8:00 AM | 0 | 1 | 35 | 1 | 0 | 37 | 0 | 0 | 34 | 0 | 0 | 34 | 0 | 0 | 0 | 0 | 5 | 0 | 0 | 2 | 0 | 1 | 4 | 3 | 74 |
| Total | 0 | 2 | 129 | 2 | 1 | 133 | 0 | 0 | 133 | 0 | 0 | 133 | 0 | 2 | 0 | 0 | 18 | 2 | 0 | 5 | 0 | 3 | 18 | 8 | 276 |
| Approach % | 0.0 | 1.5 | 97.0 | 1.5 | - | - | 0.0 | 0.0 | 100.0 | 0.0 | - | - | 0.0 | 100.0 | 0.0 | 0.0 | - | - | 0.0 | 62.5 | 0.0 | 37.5 | - | - | - |
| Total % | 0.0 | 0.7 | 46.7 | 0.7 | - | 48.2 | 0.0 | 0.0 | 48.2 | 0.0 | - | 48.2 | 0.0 | 0.7 | 0.0 | 0.0 | - | 0.7 | 0.0 | 1.8 | 0.0 | 1.1 | - | 2.9 | - |
| PHF | 0.000 | 0.500 | 0.787 | 0.500 | - | 0.773 | 0.000 | 0.000 | 0.950 | 0.000 | - | 0.950 | 0.000 | 0.500 | 0.000 | 0.000 | - | 0.500 | 0.000 | 0.625 | 0.000 | 0.750 | - | 0.667 | 0.885 |
| Lights | 0 | 2 | 124 | 2 | - | 128 | 0 | 0 | 128 | 0 | - | 128 | 0 | 2 | 0 | 0 | - | 2 | 0 | 5 | 0 | 3 | - | 8 | 266 |
| % Lights | - | 100.0 | 96.1 | 100.0 | - | 96.2 | - | - | 96.2 | - | - | 96.2 | - | 100.0 | - | - | - | 100.0 | - | 100.0 | - | 100.0 | - | 100.0 | 96.4 |
| Buses | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 |
| % Buses | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | - | 0.0 | - | - | 0.0 | - | 0.0 | - | - | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | 0.0 |
| Single-Unit Trucks | 0 | 0 | 2 | 0 | - | 2 | 0 | 0 | 1 | 0 | - | 1 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 3 |
| % Single-Unit Trucks | - | 0.0 | 1.6 | 0.0 | - | 1.5 | - | - | 0.8 | - | - | 0.8 | - | 0.0 | - | - | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | 1.1 |
| Articulated Trucks | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 |
| % Articulated Trucks | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | - | 0.0 | - | - | 0.0 | - | 0.0 | - | - | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | 0.0 |
| Bicycles on Road | 0 | 0 | 3 | 0 | - | 3 | 0 | 0 | 4 | 0 | - | 4 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 7 |
| % Bicycles on Road | - | 0.0 | 2.3 | 0.0 | - | 2.3 | - | - | 3.0 | - | - | 3.0 | - | 0.0 | - | - | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | 2.5 |
| Pedestrians | - | - | - | - | 1 | - | - | - | - | - | 0 | - | - | - | - | - | 18 | - | - | - | - | - | 18 | - | - |
| % Pedestrians | - | - | - | - | 100.0 | - | - | - | - | - | - | - | - | - | - | - | 100.0 | - | - | - | - | - | 100.0 | - | - |



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Count Name: NS Alley and Randolph with
Randolph Street
Site Code:
Start Date: 09/10/2020
Page No: 4

Turning Movement Peak Hour Data (4:15 PM)

| Start Time | Randolph Street Eastbound | | | | | | Randolph Street Westbound | | | | | | NS Alley Northbound | | | | | | NS Alley Southbound | | | | | | Int. Total |
|----------------------|---------------------------|----------|------------|----------|----------|------------|---------------------------|----------|------------|----------|----------|------------|---------------------|----------|----------|----------|----------|------------|---------------------|----------|----------|-----------|----------|------------|------------|
| | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | |
| 4:15 PM | 0 | 2 | 73 | 1 | 0 | 76 | 0 | 0 | 35 | 1 | 0 | 36 | 0 | 0 | 0 | 1 | 4 | 1 | 0 | 0 | 0 | 1 | 3 | 1 | 114 |
| 4:30 PM | 0 | 1 | 74 | 5 | 0 | 80 | 1 | 3 | 50 | 1 | 0 | 55 | 0 | 2 | 0 | 0 | 0 | 2 | 0 | 1 | 0 | 4 | 0 | 5 | 142 |
| 4:45 PM | 0 | 0 | 85 | 1 | 1 | 86 | 0 | 0 | 62 | 1 | 1 | 63 | 0 | 1 | 0 | 1 | 3 | 2 | 0 | 3 | 0 | 4 | 2 | 7 | 158 |
| 5:00 PM | 0 | 1 | 86 | 0 | 0 | 87 | 0 | 1 | 61 | 2 | 2 | 64 | 0 | 3 | 0 | 1 | 0 | 4 | 0 | 1 | 0 | 1 | 1 | 2 | 157 |
| Total | 0 | 4 | 318 | 7 | 1 | 329 | 1 | 4 | 208 | 5 | 3 | 218 | 0 | 6 | 0 | 3 | 7 | 9 | 0 | 5 | 0 | 10 | 6 | 15 | 571 |
| Approach % | 0.0 | 1.2 | 96.7 | 2.1 | - | - | 0.5 | 1.8 | 95.4 | 2.3 | - | - | 0.0 | 66.7 | 0.0 | 33.3 | - | - | 0.0 | 33.3 | 0.0 | 66.7 | - | - | - |
| Total % | 0.0 | 0.7 | 55.7 | 1.2 | - | 57.6 | 0.2 | 0.7 | 36.4 | 0.9 | - | 38.2 | 0.0 | 1.1 | 0.0 | 0.5 | - | 1.6 | 0.0 | 0.9 | 0.0 | 1.8 | - | 2.6 | - |
| PHF | 0.000 | 0.500 | 0.924 | 0.350 | - | 0.945 | 0.250 | 0.333 | 0.839 | 0.625 | - | 0.852 | 0.000 | 0.500 | 0.000 | 0.750 | - | 0.563 | 0.000 | 0.417 | 0.000 | 0.625 | - | 0.536 | 0.903 |
| Lights | 0 | 3 | 314 | 7 | - | 324 | 1 | 4 | 203 | 5 | - | 213 | 0 | 6 | 0 | 3 | - | 9 | 0 | 5 | 0 | 10 | - | 15 | 561 |
| % Lights | - | 75.0 | 98.7 | 100.0 | - | 98.5 | 100.0 | 100.0 | 97.6 | 100.0 | - | 97.7 | - | 100.0 | - | 100.0 | - | 100.0 | - | 100.0 | - | 100.0 | - | 100.0 | 98.2 |
| Buses | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 |
| % Buses | - | 0.0 | 0.0 | 0.0 | - | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | 0.0 |
| Single-Unit Trucks | 0 | 0 | 1 | 0 | - | 1 | 0 | 0 | 2 | 0 | - | 2 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 3 |
| % Single-Unit Trucks | - | 0.0 | 0.3 | 0.0 | - | 0.3 | 0.0 | 0.0 | 1.0 | 0.0 | - | 0.9 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | 0.5 |
| Articulated Trucks | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 |
| % Articulated Trucks | - | 0.0 | 0.0 | 0.0 | - | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | 0.0 |
| Bicycles on Road | 0 | 1 | 3 | 0 | - | 4 | 0 | 0 | 3 | 0 | - | 3 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 7 |
| % Bicycles on Road | - | 25.0 | 0.9 | 0.0 | - | 1.2 | 0.0 | 0.0 | 1.4 | 0.0 | - | 1.4 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | 1.2 |
| Pedestrians | - | - | - | - | 1 | - | - | - | - | - | 3 | - | - | - | - | - | 7 | - | - | - | - | - | 6 | - | - |
| % Pedestrians | - | - | - | - | 100.0 | - | - | - | - | - | 100.0 | - | - | - | - | - | 100.0 | - | - | - | - | - | 100.0 | - | - |



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Count Name: NS Alley and Randolph with
Randolph Street
Site Code:
Start Date: 09/10/2020
Page No: 5

Turning Movement Peak Hour Data (12:45 PM)

| Start Time | Randolph Street Eastbound | | | | | | Randolph Street Westbound | | | | | | NS Alley Northbound | | | | | | NS Alley Southbound | | | | | | Int. Total |
|----------------------|---------------------------|----------|------------|----------|----------|------------|---------------------------|----------|------------|----------|----------|------------|---------------------|----------|----------|----------|----------|------------|---------------------|----------|----------|----------|-----------|------------|------------|
| | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | |
| 12:45 PM | 0 | 0 | 54 | 1 | 2 | 55 | 0 | 0 | 48 | 1 | 0 | 49 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 3 | 2 | 4 | 108 |
| 1:00 PM | 0 | 0 | 49 | 0 | 0 | 49 | 0 | 1 | 28 | 0 | 0 | 29 | 0 | 0 | 0 | 1 | 3 | 1 | 0 | 0 | 0 | 2 | 3 | 2 | 81 |
| 1:15 PM | 0 | 0 | 52 | 1 | 1 | 53 | 0 | 0 | 34 | 0 | 1 | 34 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 2 | 1 | 2 | 90 |
| 1:30 PM | 0 | 2 | 55 | 0 | 0 | 57 | 0 | 0 | 33 | 0 | 0 | 33 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 10 | 0 | 90 |
| Total | 0 | 2 | 210 | 2 | 3 | 214 | 0 | 1 | 143 | 1 | 1 | 145 | 0 | 1 | 0 | 1 | 8 | 2 | 0 | 0 | 1 | 7 | 16 | 8 | 369 |
| Approach % | 0.0 | 0.9 | 98.1 | 0.9 | - | - | 0.0 | 0.7 | 98.6 | 0.7 | - | - | 0.0 | 50.0 | 0.0 | 50.0 | - | - | 0.0 | 0.0 | 12.5 | 87.5 | - | - | - |
| Total % | 0.0 | 0.5 | 56.9 | 0.5 | - | 58.0 | 0.0 | 0.3 | 38.8 | 0.3 | - | 39.3 | 0.0 | 0.3 | 0.0 | 0.3 | - | 0.5 | 0.0 | 0.0 | 0.3 | 1.9 | - | 2.2 | - |
| PHF | 0.000 | 0.250 | 0.955 | 0.500 | - | 0.939 | 0.000 | 0.250 | 0.745 | 0.250 | - | 0.740 | 0.000 | 0.250 | 0.000 | 0.250 | - | 0.500 | 0.000 | 0.000 | 0.250 | 0.583 | - | 0.500 | 0.854 |
| Lights | 0 | 2 | 208 | 2 | - | 212 | 0 | 1 | 142 | 1 | - | 144 | 0 | 1 | 0 | 1 | - | 2 | 0 | 0 | 1 | 7 | - | 8 | 366 |
| % Lights | - | 100.0 | 99.0 | 100.0 | - | 99.1 | - | 100.0 | 99.3 | 100.0 | - | 99.3 | - | 100.0 | - | 100.0 | - | 100.0 | - | - | 100.0 | 100.0 | - | 100.0 | 99.2 |
| Buses | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 |
| % Buses | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | - | 0.0 | 0.0 | - | 0.0 | 0.0 |
| Single-Unit Trucks | 0 | 0 | 1 | 0 | - | 1 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 1 |
| % Single-Unit Trucks | - | 0.0 | 0.5 | 0.0 | - | 0.5 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | - | 0.0 | 0.0 | - | 0.0 | 0.3 |
| Articulated Trucks | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 |
| % Articulated Trucks | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | - | 0.0 | 0.0 | - | 0.0 | 0.0 |
| Bicycles on Road | 0 | 0 | 1 | 0 | - | 1 | 0 | 0 | 1 | 0 | - | 1 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 2 |
| % Bicycles on Road | - | 0.0 | 0.5 | 0.0 | - | 0.5 | - | 0.0 | 0.7 | 0.0 | - | 0.7 | - | 0.0 | - | 0.0 | - | 0.0 | - | - | 0.0 | 0.0 | - | 0.0 | 0.5 |
| Pedestrians | - | - | - | - | 3 | - | - | - | - | - | 1 | - | - | - | - | - | 8 | - | - | - | - | - | 16 | - | - |
| % Pedestrians | - | - | - | - | 100.0 | - | - | - | - | - | 100.0 | - | - | - | - | - | 100.0 | - | - | - | - | - | 100.0 | - | - |



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Count Name: NS Alley with Pleasant Street
Site Code:
Start Date: 09/10/2020
Page No: 1

Turning Movement Data

| Start Time | Pleasant Street Eastbound | | | | | | Pleasant Street Westbound | | | | | | NS Alley Northbound | | | | | | NS Alley Southbound | | | | | | Int. Total |
|---------------|---------------------------|------|------|-------|------|------------|---------------------------|------|------|-------|------|------------|---------------------|------|------|-------|------|------------|---------------------|------|------|-------|------|------------|------------|
| | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | |
| 7:00 AM | 0 | 0 | 4 | 0 | 3 | 4 | 0 | 0 | 4 | 0 | 0 | 4 | 0 | 1 | 0 | 0 | 3 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 9 |
| 7:15 AM | 0 | 0 | 6 | 1 | 1 | 7 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 4 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 9 |
| 7:30 AM | 0 | 0 | 15 | 0 | 0 | 15 | 0 | 0 | 4 | 0 | 0 | 4 | 0 | 0 | 0 | 2 | 4 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 21 |
| 7:45 AM | 0 | 0 | 11 | 0 | 1 | 11 | 0 | 0 | 3 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14 |
| Hourly Total | 0 | 0 | 36 | 1 | 5 | 37 | 0 | 0 | 12 | 0 | 0 | 12 | 0 | 2 | 0 | 2 | 15 | 4 | 0 | 0 | 0 | 0 | 2 | 0 | 53 |
| 8:00 AM | 0 | 1 | 15 | 0 | 0 | 16 | 0 | 0 | 2 | 0 | 0 | 2 | 0 | 2 | 0 | 0 | 5 | 2 | 0 | 0 | 0 | 1 | 0 | 1 | 21 |
| 8:15 AM | 0 | 1 | 9 | 0 | 0 | 10 | 0 | 0 | 3 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 2 | 3 | 2 | 15 |
| 8:30 AM | 0 | 1 | 14 | 0 | 3 | 15 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 3 | 0 | 2 | 6 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 20 |
| 8:45 AM | 0 | 2 | 9 | 0 | 0 | 11 | 0 | 0 | 4 | 0 | 2 | 4 | 0 | 1 | 0 | 0 | 3 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 17 |
| Hourly Total | 0 | 5 | 47 | 0 | 3 | 52 | 0 | 0 | 9 | 0 | 3 | 9 | 0 | 6 | 0 | 2 | 15 | 8 | 0 | 0 | 0 | 4 | 4 | 4 | 73 |
| *** BREAK *** | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 4:00 PM | 0 | 2 | 12 | 0 | 2 | 14 | 0 | 2 | 9 | 1 | 0 | 12 | 0 | 0 | 0 | 1 | 3 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 28 |
| 4:15 PM | 0 | 0 | 10 | 0 | 1 | 10 | 0 | 0 | 6 | 1 | 0 | 7 | 0 | 0 | 0 | 1 | 8 | 1 | 0 | 0 | 0 | 3 | 0 | 3 | 21 |
| 4:30 PM | 1 | 0 | 23 | 0 | 1 | 24 | 0 | 1 | 12 | 0 | 0 | 13 | 0 | 0 | 1 | 1 | 2 | 2 | 0 | 0 | 0 | 1 | 0 | 1 | 40 |
| 4:45 PM | 0 | 2 | 20 | 0 | 1 | 22 | 0 | 2 | 8 | 4 | 0 | 14 | 0 | 0 | 0 | 3 | 1 | 3 | 0 | 3 | 0 | 1 | 0 | 4 | 43 |
| Hourly Total | 1 | 4 | 65 | 0 | 5 | 70 | 0 | 5 | 35 | 6 | 0 | 46 | 0 | 0 | 1 | 6 | 14 | 7 | 0 | 4 | 0 | 5 | 0 | 9 | 132 |
| 5:00 PM | 0 | 1 | 21 | 1 | 3 | 23 | 1 | 2 | 12 | 0 | 0 | 15 | 0 | 2 | 0 | 2 | 2 | 4 | 0 | 2 | 0 | 2 | 0 | 4 | 46 |
| 5:15 PM | 1 | 4 | 26 | 1 | 3 | 32 | 0 | 0 | 6 | 1 | 1 | 7 | 0 | 0 | 0 | 2 | 9 | 2 | 0 | 1 | 0 | 1 | 3 | 2 | 43 |
| 5:30 PM | 2 | 0 | 15 | 1 | 2 | 18 | 1 | 0 | 6 | 0 | 1 | 7 | 0 | 1 | 0 | 0 | 4 | 1 | 0 | 0 | 1 | 4 | 0 | 5 | 31 |
| 5:45 PM | 0 | 2 | 15 | 0 | 0 | 17 | 0 | 0 | 3 | 0 | 2 | 3 | 0 | 0 | 0 | 1 | 2 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 22 |
| Hourly Total | 3 | 7 | 77 | 3 | 8 | 90 | 2 | 2 | 27 | 1 | 4 | 32 | 0 | 3 | 0 | 5 | 17 | 8 | 0 | 3 | 1 | 8 | 3 | 12 | 142 |
| *** BREAK *** | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 11:30 AM | 0 | 0 | 13 | 0 | 0 | 13 | 0 | 0 | 4 | 0 | 5 | 4 | 0 | 0 | 0 | 1 | 10 | 1 | 0 | 1 | 0 | 2 | 0 | 3 | 21 |
| 11:45 AM | 0 | 0 | 14 | 0 | 1 | 14 | 0 | 1 | 5 | 0 | 0 | 6 | 0 | 0 | 0 | 0 | 6 | 0 | 0 | 1 | 0 | 1 | 1 | 2 | 22 |
| Hourly Total | 0 | 0 | 27 | 0 | 1 | 27 | 0 | 1 | 9 | 0 | 5 | 10 | 0 | 0 | 0 | 1 | 16 | 1 | 0 | 2 | 0 | 3 | 1 | 5 | 43 |
| 12:00 PM | 0 | 1 | 12 | 1 | 1 | 14 | 0 | 0 | 8 | 1 | 4 | 9 | 0 | 2 | 1 | 1 | 4 | 4 | 0 | 0 | 0 | 0 | 1 | 0 | 27 |
| 12:15 PM | 1 | 0 | 20 | 0 | 0 | 21 | 0 | 0 | 3 | 2 | 0 | 5 | 0 | 0 | 0 | 3 | 2 | 3 | 0 | 2 | 0 | 0 | 0 | 2 | 31 |
| 12:30 PM | 0 | 0 | 18 | 0 | 3 | 18 | 0 | 1 | 9 | 0 | 3 | 10 | 0 | 0 | 0 | 1 | 3 | 1 | 0 | 1 | 0 | 1 | 0 | 2 | 31 |
| 12:45 PM | 0 | 0 | 23 | 0 | 0 | 23 | 0 | 0 | 11 | 0 | 2 | 11 | 0 | 0 | 0 | 1 | 3 | 1 | 0 | 1 | 0 | 1 | 1 | 2 | 37 |
| Hourly Total | 1 | 1 | 73 | 1 | 4 | 76 | 0 | 1 | 31 | 3 | 9 | 35 | 0 | 2 | 1 | 6 | 12 | 9 | 0 | 4 | 0 | 2 | 2 | 6 | 126 |
| 1:00 PM | 0 | 2 | 21 | 0 | 0 | 23 | 1 | 2 | 6 | 0 | 0 | 9 | 0 | 1 | 0 | 1 | 1 | 2 | 0 | 1 | 0 | 0 | 0 | 1 | 35 |
| 1:15 PM | 0 | 0 | 23 | 1 | 1 | 24 | 0 | 0 | 11 | 1 | 0 | 12 | 0 | 1 | 0 | 0 | 3 | 1 | 0 | 0 | 0 | 1 | 2 | 1 | 38 |
| 1:30 PM | 1 | 1 | 19 | 0 | 4 | 21 | 0 | 0 | 5 | 1 | 2 | 6 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 3 | 0 | 3 | 30 |
| 1:45 PM | 1 | 0 | 16 | 0 | 0 | 17 | 2 | 0 | 3 | 1 | 6 | 6 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 2 | 25 |
| Hourly Total | 2 | 3 | 79 | 1 | 5 | 85 | 3 | 2 | 25 | 3 | 8 | 33 | 0 | 2 | 0 | 1 | 7 | 3 | 0 | 2 | 0 | 5 | 2 | 7 | 128 |

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------|-------|------|------|-------|-------|------|-------|-------|------|------|-------|------|-----|-------|-------|-------|-------|-------|-----|------|-------|------|-------|------|------|
| Grand Total | 7 | 20 | 404 | 6 | 31 | 437 | 5 | 11 | 148 | 13 | 29 | 177 | 0 | 15 | 2 | 23 | 96 | 40 | 0 | 15 | 1 | 27 | 14 | 43 | 697 |
| Approach % | 1.6 | 4.6 | 92.4 | 1.4 | - | - | 2.8 | 6.2 | 83.6 | 7.3 | - | - | 0.0 | 37.5 | 5.0 | 57.5 | - | - | 0.0 | 34.9 | 2.3 | 62.8 | - | - | - |
| Total % | 1.0 | 2.9 | 58.0 | 0.9 | - | 62.7 | 0.7 | 1.6 | 21.2 | 1.9 | - | 25.4 | 0.0 | 2.2 | 0.3 | 3.3 | - | 5.7 | 0.0 | 2.2 | 0.1 | 3.9 | - | 6.2 | - |
| Lights | 7 | 18 | 392 | 6 | - | 423 | 5 | 11 | 143 | 9 | - | 168 | 0 | 15 | 2 | 23 | - | 40 | 0 | 14 | 0 | 26 | - | 40 | 671 |
| % Lights | 100.0 | 90.0 | 97.0 | 100.0 | - | 96.8 | 100.0 | 100.0 | 96.6 | 69.2 | - | 94.9 | - | 100.0 | 100.0 | 100.0 | - | 100.0 | - | 93.3 | 0.0 | 96.3 | - | 93.0 | 96.3 |
| Buses | 0 | 0 | 2 | 0 | - | 2 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 2 |
| % Buses | 0.0 | 0.0 | 0.5 | 0.0 | - | 0.5 | 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 | 0.3 |
| Single-Unit Trucks | 0 | 1 | 8 | 0 | - | 9 | 0 | 0 | 3 | 0 | - | 3 | 0 | 0 | 0 | 0 | - | 0 | 0 | 1 | 0 | 1 | - | 2 | 14 |
| % Single-Unit Trucks | 0.0 | 5.0 | 2.0 | 0.0 | - | 2.1 | 0.0 | 0.0 | 2.0 | 0.0 | - | 1.7 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 6.7 | 0.0 | 3.7 | - | 4.7 | 2.0 |
| Articulated Trucks | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 |
| % Articulated Trucks | 0.0 | 0.0 | 0.0 | 0.0 | - | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | 0.0 |
| Bicycles on Road | 0 | 1 | 2 | 0 | - | 3 | 0 | 0 | 2 | 4 | - | 6 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 1 | 0 | - | 1 | 10 |
| % Bicycles on Road | 0.0 | 5.0 | 0.5 | 0.0 | - | 0.7 | 0.0 | 0.0 | 1.4 | 30.8 | - | 3.4 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 100.0 | 0.0 | - | 2.3 | 1.4 |
| Pedestrians | - | - | - | - | 31 | - | - | - | - | - | 29 | - | - | - | - | - | 96 | - | - | - | - | - | 14 | - | - |
| % Pedestrians | - | - | - | - | 100.0 | - | - | - | - | - | 100.0 | - | - | - | - | - | 100.0 | - | - | - | - | - | 100.0 | - | - |



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Count Name: NS Alley with Pleasant Street
Site Code:
Start Date: 09/10/2020
Page No: 3

Turning Movement Peak Hour Data (7:15 AM)

| Start Time | Pleasant Street Eastbound | | | | | | Pleasant Street Westbound | | | | | | NS Alley Northbound | | | | | | NS Alley Southbound | | | | | | Int. Total |
|----------------------|---------------------------|-------|-------|-------|-------|------------|---------------------------|-------|-------|-------|------|------------|---------------------|-------|-------|-------|-------|------------|---------------------|-------|-------|-------|-------|------------|------------|
| | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | |
| 7:15 AM | 0 | 0 | 6 | 1 | 1 | 7 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 4 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 9 |
| 7:30 AM | 0 | 0 | 15 | 0 | 0 | 15 | 0 | 0 | 4 | 0 | 0 | 4 | 0 | 0 | 0 | 2 | 4 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 21 |
| 7:45 AM | 0 | 0 | 11 | 0 | 1 | 11 | 0 | 0 | 3 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14 |
| 8:00 AM | 0 | 1 | 15 | 0 | 0 | 16 | 0 | 0 | 2 | 0 | 0 | 2 | 0 | 2 | 0 | 0 | 5 | 2 | 0 | 0 | 0 | 1 | 0 | 1 | 21 |
| Total | 0 | 1 | 47 | 1 | 2 | 49 | 0 | 0 | 10 | 0 | 0 | 10 | 0 | 3 | 0 | 2 | 17 | 5 | 0 | 0 | 0 | 1 | 1 | 1 | 65 |
| Approach % | 0.0 | 2.0 | 95.9 | 2.0 | - | - | 0.0 | 0.0 | 100.0 | 0.0 | - | - | 0.0 | 60.0 | 0.0 | 40.0 | - | - | 0.0 | 0.0 | 0.0 | 100.0 | - | - | - |
| Total % | 0.0 | 1.5 | 72.3 | 1.5 | - | 75.4 | 0.0 | 0.0 | 15.4 | 0.0 | - | 15.4 | 0.0 | 4.6 | 0.0 | 3.1 | - | 7.7 | 0.0 | 0.0 | 0.0 | 1.5 | - | 1.5 | - |
| PHF | 0.000 | 0.250 | 0.783 | 0.250 | - | 0.766 | 0.000 | 0.000 | 0.625 | 0.000 | - | 0.625 | 0.000 | 0.375 | 0.000 | 0.250 | - | 0.625 | 0.000 | 0.000 | 0.000 | 0.250 | - | 0.250 | 0.774 |
| Lights | 0 | 1 | 46 | 1 | - | 48 | 0 | 0 | 10 | 0 | - | 10 | 0 | 3 | 0 | 2 | - | 5 | 0 | 0 | 0 | 1 | - | 1 | 64 |
| % Lights | - | 100.0 | 97.9 | 100.0 | - | 98.0 | - | - | 100.0 | - | - | 100.0 | - | 100.0 | - | 100.0 | - | 100.0 | - | - | - | 100.0 | - | 100.0 | 98.5 |
| Buses | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 |
| % Buses | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | - | 0.0 | - | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | - | - | 0.0 | - | 0.0 | 0.0 |
| Single-Unit Trucks | 0 | 0 | 1 | 0 | - | 1 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 1 |
| % Single-Unit Trucks | - | 0.0 | 2.1 | 0.0 | - | 2.0 | - | - | 0.0 | - | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | - | - | 0.0 | - | 0.0 | 1.5 |
| Articulated Trucks | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 |
| % Articulated Trucks | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | - | 0.0 | - | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | - | - | 0.0 | - | 0.0 | 0.0 |
| Bicycles on Road | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 |
| % Bicycles on Road | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | - | 0.0 | - | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | - | - | 0.0 | - | 0.0 | 0.0 |
| Pedestrians | - | - | - | - | 2 | - | - | - | - | - | 0 | - | - | - | - | - | 17 | - | - | - | - | - | 1 | - | - |
| % Pedestrians | - | - | - | - | 100.0 | - | - | - | - | - | - | - | - | - | - | - | 100.0 | - | - | - | - | - | 100.0 | - | - |



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Count Name: NS Alley with Pleasant Street
Site Code:
Start Date: 09/10/2020
Page No: 4

Turning Movement Peak Hour Data (4:15 PM)

| Start Time | Pleasant Street Eastbound | | | | | | Pleasant Street Westbound | | | | | | NS Alley Northbound | | | | | | NS Alley Southbound | | | | | | Int. Total |
|----------------------|---------------------------|----------|-----------|----------|----------|------------|---------------------------|----------|-----------|----------|----------|------------|---------------------|----------|----------|----------|-----------|------------|---------------------|----------|----------|----------|----------|------------|------------|
| | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | |
| 4:15 PM | 0 | 0 | 10 | 0 | 1 | 10 | 0 | 0 | 6 | 1 | 0 | 7 | 0 | 0 | 0 | 1 | 8 | 1 | 0 | 0 | 0 | 3 | 0 | 3 | 21 |
| 4:30 PM | 1 | 0 | 23 | 0 | 1 | 24 | 0 | 1 | 12 | 0 | 0 | 13 | 0 | 0 | 1 | 1 | 2 | 2 | 0 | 0 | 0 | 1 | 0 | 1 | 40 |
| 4:45 PM | 0 | 2 | 20 | 0 | 1 | 22 | 0 | 2 | 8 | 4 | 0 | 14 | 0 | 0 | 0 | 3 | 1 | 3 | 0 | 3 | 0 | 1 | 0 | 4 | 43 |
| 5:00 PM | 0 | 1 | 21 | 1 | 3 | 23 | 1 | 2 | 12 | 0 | 0 | 15 | 0 | 2 | 0 | 2 | 2 | 4 | 0 | 2 | 0 | 2 | 0 | 4 | 46 |
| Total | 1 | 3 | 74 | 1 | 6 | 79 | 1 | 5 | 38 | 5 | 0 | 49 | 0 | 2 | 1 | 7 | 13 | 10 | 0 | 5 | 0 | 7 | 0 | 12 | 150 |
| Approach % | 1.3 | 3.8 | 93.7 | 1.3 | - | - | 2.0 | 10.2 | 77.6 | 10.2 | - | - | 0.0 | 20.0 | 10.0 | 70.0 | - | - | 0.0 | 41.7 | 0.0 | 58.3 | - | - | - |
| Total % | 0.7 | 2.0 | 49.3 | 0.7 | - | 52.7 | 0.7 | 3.3 | 25.3 | 3.3 | - | 32.7 | 0.0 | 1.3 | 0.7 | 4.7 | - | 6.7 | 0.0 | 3.3 | 0.0 | 4.7 | - | 8.0 | - |
| PHF | 0.250 | 0.375 | 0.804 | 0.250 | - | 0.823 | 0.250 | 0.625 | 0.792 | 0.313 | - | 0.817 | 0.000 | 0.250 | 0.250 | 0.583 | - | 0.625 | 0.000 | 0.417 | 0.000 | 0.583 | - | 0.750 | 0.815 |
| Lights | 1 | 2 | 72 | 1 | - | 76 | 1 | 5 | 38 | 1 | - | 45 | 0 | 2 | 1 | 7 | - | 10 | 0 | 5 | 0 | 7 | - | 12 | 143 |
| % Lights | 100.0 | 66.7 | 97.3 | 100.0 | - | 96.2 | 100.0 | 100.0 | 100.0 | 20.0 | - | 91.8 | - | 100.0 | 100.0 | 100.0 | - | 100.0 | - | 100.0 | - | 100.0 | - | 100.0 | 95.3 |
| Buses | 0 | 0 | 1 | 0 | - | 1 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 1 |
| % Buses | 0.0 | 0.0 | 1.4 | 0.0 | - | 1.3 | 0.0 | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | 0.7 |
| Single-Unit Trucks | 0 | 0 | 1 | 0 | - | 1 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 1 |
| % Single-Unit Trucks | 0.0 | 0.0 | 1.4 | 0.0 | - | 1.3 | 0.0 | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | 0.7 |
| Articulated Trucks | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 |
| % Articulated Trucks | 0.0 | 0.0 | 0.0 | 0.0 | - | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | 0.0 |
| Bicycles on Road | 0 | 1 | 0 | 0 | - | 1 | 0 | 0 | 0 | 4 | - | 4 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 5 |
| % Bicycles on Road | 0.0 | 33.3 | 0.0 | 0.0 | - | 1.3 | 0.0 | 0.0 | 0.0 | 80.0 | - | 8.2 | - | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | 3.3 |
| Pedestrians | - | - | - | - | 6 | - | - | - | - | - | 0 | - | - | - | - | - | 13 | - | - | - | - | - | 0 | - | - |
| % Pedestrians | - | - | - | - | 100.0 | - | - | - | - | - | - | - | - | - | - | - | 100.0 | - | - | - | - | - | - | - | - |



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Count Name: NS Alley with Pleasant Street
Site Code:
Start Date: 09/10/2020
Page No: 5

Turning Movement Peak Hour Data (12:45 PM)

| Start Time | Pleasant Street Eastbound | | | | | | Pleasant Street Westbound | | | | | | NS Alley Northbound | | | | | | NS Alley Southbound | | | | | | Int. Total |
|----------------------|---------------------------|----------|-----------|----------|----------|------------|---------------------------|----------|-----------|----------|----------|------------|---------------------|----------|----------|----------|----------|------------|---------------------|----------|----------|----------|----------|------------|------------|
| | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Right | Peds | App. Total | |
| 12:45 PM | 0 | 0 | 23 | 0 | 0 | 23 | 0 | 0 | 11 | 0 | 2 | 11 | 0 | 0 | 0 | 1 | 3 | 1 | 0 | 1 | 0 | 1 | 1 | 2 | 37 |
| 1:00 PM | 0 | 2 | 21 | 0 | 0 | 23 | 1 | 2 | 6 | 0 | 0 | 9 | 0 | 1 | 0 | 1 | 1 | 2 | 0 | 1 | 0 | 0 | 0 | 1 | 35 |
| 1:15 PM | 0 | 0 | 23 | 1 | 1 | 24 | 0 | 0 | 11 | 1 | 0 | 12 | 0 | 1 | 0 | 0 | 3 | 1 | 0 | 0 | 0 | 1 | 2 | 1 | 38 |
| 1:30 PM | 1 | 1 | 19 | 0 | 4 | 21 | 0 | 0 | 5 | 1 | 2 | 6 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 3 | 0 | 3 | 30 |
| Total | 1 | 3 | 86 | 1 | 5 | 91 | 1 | 2 | 33 | 2 | 4 | 38 | 0 | 2 | 0 | 2 | 9 | 4 | 0 | 2 | 0 | 5 | 3 | 7 | 140 |
| Approach % | 1.1 | 3.3 | 94.5 | 1.1 | - | - | 2.6 | 5.3 | 86.8 | 5.3 | - | - | 0.0 | 50.0 | 0.0 | 50.0 | - | - | 0.0 | 28.6 | 0.0 | 71.4 | - | - | - |
| Total % | 0.7 | 2.1 | 61.4 | 0.7 | - | 65.0 | 0.7 | 1.4 | 23.6 | 1.4 | - | 27.1 | 0.0 | 1.4 | 0.0 | 1.4 | - | 2.9 | 0.0 | 1.4 | 0.0 | 3.6 | - | 5.0 | - |
| PHF | 0.250 | 0.375 | 0.935 | 0.250 | - | 0.948 | 0.250 | 0.250 | 0.750 | 0.500 | - | 0.792 | 0.000 | 0.500 | 0.000 | 0.500 | - | 0.500 | 0.000 | 0.500 | 0.000 | 0.417 | - | 0.583 | 0.921 |
| Lights | 1 | 3 | 84 | 1 | - | 89 | 1 | 2 | 32 | 2 | - | 37 | 0 | 2 | 0 | 2 | - | 4 | 0 | 2 | 0 | 4 | - | 6 | 136 |
| % Lights | 100.0 | 100.0 | 97.7 | 100.0 | - | 97.8 | 100.0 | 100.0 | 97.0 | 100.0 | - | 97.4 | - | 100.0 | - | 100.0 | - | 100.0 | - | 100.0 | - | 80.0 | - | 85.7 | 97.1 |
| Buses | 0 | 0 | 1 | 0 | - | 1 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 1 |
| % Buses | 0.0 | 0.0 | 1.2 | 0.0 | - | 1.1 | 0.0 | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | 0.7 |
| Single-Unit Trucks | 0 | 0 | 1 | 0 | - | 1 | 0 | 0 | 1 | 0 | - | 1 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 1 | - | 1 | 3 |
| % Single-Unit Trucks | 0.0 | 0.0 | 1.2 | 0.0 | - | 1.1 | 0.0 | 0.0 | 3.0 | 0.0 | - | 2.6 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 20.0 | - | 14.3 | 2.1 |
| Articulated Trucks | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 |
| % Articulated Trucks | 0.0 | 0.0 | 0.0 | 0.0 | - | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | 0.0 |
| Bicycles on Road | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | 0 | - | 0 | 0 |
| % Bicycles on Road | 0.0 | 0.0 | 0.0 | 0.0 | - | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | - | 0.0 | 0.0 |
| Pedestrians | - | - | - | - | 5 | - | - | - | - | - | 4 | - | - | - | - | - | 9 | - | - | - | - | - | 3 | - | - |
| % Pedestrians | - | - | - | - | 100.0 | - | - | - | - | - | 100.0 | - | - | - | - | - | 100.0 | - | - | - | - | - | 100.0 | - | - |



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Count Name: NS Alley with South Boulevard
 Site Code:
 Start Date: 09/10/2020
 Page No: 1

Turning Movement Data

| Start Time | South Boulevard Eastbound | | | | | South Boulevard Westbound | | | | | NS Alley Northbound | | | | | Int. Total |
|---------------|---------------------------|------|-------|------|------------|---------------------------|------|------|------|------------|---------------------|------|-------|------|------------|------------|
| | U-Turn | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Peds | App. Total | U-Turn | Left | Right | Peds | App. Total | |
| 7:00 AM | 0 | 4 | 0 | 3 | 4 | 0 | 0 | 30 | 0 | 30 | 0 | 0 | 0 | 2 | 0 | 34 |
| 7:15 AM | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 38 | 0 | 38 | 0 | 0 | 0 | 4 | 0 | 38 |
| 7:30 AM | 0 | 4 | 0 | 0 | 4 | 0 | 0 | 39 | 0 | 39 | 0 | 0 | 0 | 4 | 0 | 43 |
| 7:45 AM | 0 | 3 | 0 | 0 | 3 | 0 | 0 | 41 | 0 | 41 | 0 | 0 | 0 | 6 | 0 | 44 |
| Hourly Total | 0 | 11 | 0 | 4 | 11 | 0 | 0 | 148 | 0 | 148 | 0 | 0 | 0 | 16 | 0 | 159 |
| 8:00 AM | 0 | 5 | 0 | 0 | 5 | 0 | 0 | 37 | 0 | 37 | 0 | 0 | 2 | 3 | 2 | 44 |
| 8:15 AM | 0 | 7 | 0 | 3 | 7 | 0 | 0 | 38 | 2 | 38 | 0 | 1 | 0 | 5 | 1 | 46 |
| 8:30 AM | 0 | 2 | 0 | 2 | 2 | 0 | 0 | 28 | 1 | 28 | 0 | 0 | 0 | 0 | 0 | 30 |
| 8:45 AM | 0 | 5 | 0 | 0 | 5 | 2 | 1 | 38 | 0 | 41 | 0 | 0 | 0 | 1 | 0 | 46 |
| Hourly Total | 0 | 19 | 0 | 5 | 19 | 2 | 1 | 141 | 3 | 144 | 0 | 1 | 2 | 9 | 3 | 166 |
| *** BREAK *** | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 4:00 PM | 0 | 6 | 0 | 8 | 6 | 0 | 0 | 68 | 0 | 68 | 0 | 2 | 0 | 18 | 2 | 76 |
| 4:15 PM | 0 | 6 | 0 | 5 | 6 | 0 | 0 | 79 | 0 | 79 | 0 | 2 | 1 | 11 | 3 | 88 |
| 4:30 PM | 0 | 7 | 0 | 5 | 7 | 1 | 2 | 66 | 0 | 69 | 0 | 0 | 1 | 13 | 1 | 77 |
| 4:45 PM | 0 | 9 | 0 | 2 | 9 | 0 | 2 | 88 | 2 | 90 | 0 | 5 | 1 | 4 | 6 | 105 |
| Hourly Total | 0 | 28 | 0 | 20 | 28 | 1 | 4 | 301 | 2 | 306 | 0 | 9 | 3 | 46 | 12 | 346 |
| 5:00 PM | 0 | 13 | 0 | 1 | 13 | 0 | 0 | 80 | 2 | 80 | 0 | 1 | 0 | 11 | 1 | 94 |
| 5:15 PM | 1 | 10 | 1 | 7 | 12 | 0 | 1 | 77 | 0 | 78 | 0 | 1 | 0 | 13 | 1 | 91 |
| 5:30 PM | 0 | 7 | 1 | 4 | 8 | 1 | 1 | 71 | 1 | 73 | 0 | 0 | 1 | 20 | 1 | 82 |
| 5:45 PM | 0 | 8 | 0 | 2 | 8 | 1 | 0 | 85 | 2 | 86 | 0 | 1 | 1 | 15 | 2 | 96 |
| Hourly Total | 1 | 38 | 2 | 14 | 41 | 2 | 2 | 313 | 5 | 317 | 0 | 3 | 2 | 59 | 5 | 363 |
| *** BREAK *** | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 11:30 AM | 0 | 6 | 0 | 1 | 6 | 0 | 2 | 61 | 0 | 63 | 0 | 0 | 0 | 10 | 0 | 69 |
| 11:45 AM | 0 | 6 | 1 | 0 | 7 | 0 | 1 | 66 | 0 | 67 | 0 | 2 | 4 | 11 | 6 | 80 |
| Hourly Total | 0 | 12 | 1 | 1 | 13 | 0 | 3 | 127 | 0 | 130 | 0 | 2 | 4 | 21 | 6 | 149 |
| 12:00 PM | 0 | 9 | 0 | 3 | 9 | 0 | 0 | 50 | 0 | 50 | 0 | 0 | 1 | 8 | 1 | 60 |
| 12:15 PM | 0 | 3 | 0 | 1 | 3 | 0 | 3 | 57 | 0 | 60 | 0 | 2 | 1 | 2 | 3 | 66 |
| 12:30 PM | 0 | 4 | 0 | 1 | 4 | 0 | 0 | 71 | 1 | 71 | 0 | 0 | 0 | 9 | 0 | 75 |
| 12:45 PM | 0 | 10 | 0 | 1 | 10 | 0 | 1 | 57 | 1 | 58 | 0 | 0 | 0 | 19 | 0 | 68 |
| Hourly Total | 0 | 26 | 0 | 6 | 26 | 0 | 4 | 235 | 2 | 239 | 0 | 2 | 2 | 38 | 4 | 269 |
| 1:00 PM | 0 | 10 | 0 | 0 | 10 | 0 | 0 | 63 | 0 | 63 | 0 | 1 | 0 | 18 | 1 | 74 |
| 1:15 PM | 0 | 6 | 0 | 6 | 6 | 0 | 0 | 61 | 0 | 61 | 0 | 0 | 0 | 21 | 0 | 67 |
| 1:30 PM | 0 | 12 | 0 | 2 | 12 | 0 | 1 | 69 | 1 | 70 | 0 | 0 | 1 | 13 | 1 | 83 |
| 1:45 PM | 0 | 5 | 0 | 5 | 5 | 0 | 0 | 58 | 1 | 58 | 0 | 1 | 2 | 18 | 3 | 66 |
| Hourly Total | 0 | 33 | 0 | 13 | 33 | 0 | 1 | 251 | 2 | 252 | 0 | 2 | 3 | 70 | 5 | 290 |
| Grand Total | 1 | 167 | 3 | 63 | 171 | 5 | 15 | 1516 | 14 | 1536 | 0 | 19 | 16 | 259 | 35 | 1742 |

| | | | | | | | | | | | | | | | | |
|----------------------|-------|------|------|-------|------|-------|------|------|-------|------|-----|------|------|-------|------|------|
| Approach % | 0.6 | 97.7 | 1.8 | - | - | 0.3 | 1.0 | 98.7 | - | - | 0.0 | 54.3 | 45.7 | - | - | - |
| Total % | 0.1 | 9.6 | 0.2 | - | 9.8 | 0.3 | 0.9 | 87.0 | - | 88.2 | 0.0 | 1.1 | 0.9 | - | 2.0 | - |
| Lights | 1 | 157 | 2 | - | 160 | 5 | 13 | 1441 | - | 1459 | 0 | 14 | 15 | - | 29 | 1648 |
| % Lights | 100.0 | 94.0 | 66.7 | - | 93.6 | 100.0 | 86.7 | 95.1 | - | 95.0 | - | 73.7 | 93.8 | - | 82.9 | 94.6 |
| Buses | 0 | 0 | 0 | - | 0 | 0 | 0 | 48 | - | 48 | 0 | 0 | 0 | - | 0 | 48 |
| % Buses | 0.0 | 0.0 | 0.0 | - | 0.0 | 0.0 | 0.0 | 3.2 | - | 3.1 | - | 0.0 | 0.0 | - | 0.0 | 2.8 |
| Single-Unit Trucks | 0 | 2 | 0 | - | 2 | 0 | 1 | 16 | - | 17 | 0 | 0 | 1 | - | 1 | 20 |
| % Single-Unit Trucks | 0.0 | 1.2 | 0.0 | - | 1.2 | 0.0 | 6.7 | 1.1 | - | 1.1 | - | 0.0 | 6.3 | - | 2.9 | 1.1 |
| Articulated Trucks | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | - | 0 | 0 |
| % Articulated Trucks | 0.0 | 0.0 | 0.0 | - | 0.0 | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | - | 0.0 | 0.0 |
| Bicycles on Road | 0 | 8 | 1 | - | 9 | 0 | 1 | 11 | - | 12 | 0 | 5 | 0 | - | 5 | 26 |
| % Bicycles on Road | 0.0 | 4.8 | 33.3 | - | 5.3 | 0.0 | 6.7 | 0.7 | - | 0.8 | - | 26.3 | 0.0 | - | 14.3 | 1.5 |
| Pedestrians | - | - | - | 63 | - | - | - | - | 14 | - | - | - | - | 259 | - | - |
| % Pedestrians | - | - | - | 100.0 | - | - | - | - | 100.0 | - | - | - | - | 100.0 | - | - |



Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400

Rosemont, Illinois, United States 60018
(847)518-9990

Count Name: NS Alley with South Boulevard
Site Code:
Start Date: 09/10/2020
Page No: 3

Turning Movement Peak Hour Data (7:15 AM)

| Start Time | South Boulevard Eastbound | | | | | South Boulevard Westbound | | | | | NS Alley Northbound | | | | | Int. Total |
|----------------------|---------------------------|-------|-------|-------|------------|---------------------------|-------|-------|------|------------|---------------------|-------|-------|-------|------------|------------|
| | U-Turn | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Peds | App. Total | U-Turn | Left | Right | Peds | App. Total | |
| 7:15 AM | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 38 | 0 | 38 | 0 | 0 | 0 | 4 | 0 | 38 |
| 7:30 AM | 0 | 4 | 0 | 0 | 4 | 0 | 0 | 39 | 0 | 39 | 0 | 0 | 0 | 4 | 0 | 43 |
| 7:45 AM | 0 | 3 | 0 | 0 | 3 | 0 | 0 | 41 | 0 | 41 | 0 | 0 | 0 | 6 | 0 | 44 |
| 8:00 AM | 0 | 5 | 0 | 0 | 5 | 0 | 0 | 37 | 0 | 37 | 0 | 0 | 2 | 3 | 2 | 44 |
| Total | 0 | 12 | 0 | 1 | 12 | 0 | 0 | 155 | 0 | 155 | 0 | 0 | 2 | 17 | 2 | 169 |
| Approach % | 0.0 | 100.0 | 0.0 | - | - | 0.0 | 0.0 | 100.0 | - | - | 0.0 | 0.0 | 100.0 | - | - | - |
| Total % | 0.0 | 7.1 | 0.0 | - | 7.1 | 0.0 | 0.0 | 91.7 | - | 91.7 | 0.0 | 0.0 | 1.2 | - | 1.2 | - |
| PHF | 0.000 | 0.600 | 0.000 | - | 0.600 | 0.000 | 0.000 | 0.945 | - | 0.945 | 0.000 | 0.000 | 0.250 | - | 0.250 | 0.960 |
| Lights | 0 | 11 | 0 | - | 11 | 0 | 0 | 139 | - | 139 | 0 | 0 | 2 | - | 2 | 152 |
| % Lights | - | 91.7 | - | - | 91.7 | - | - | 89.7 | - | 89.7 | - | - | 100.0 | - | 100.0 | 89.9 |
| Buses | 0 | 0 | 0 | - | 0 | 0 | 0 | 9 | - | 9 | 0 | 0 | 0 | - | 0 | 9 |
| % Buses | - | 0.0 | - | - | 0.0 | - | - | 5.8 | - | 5.8 | - | - | 0.0 | - | 0.0 | 5.3 |
| Single-Unit Trucks | 0 | 1 | 0 | - | 1 | 0 | 0 | 5 | - | 5 | 0 | 0 | 0 | - | 0 | 6 |
| % Single-Unit Trucks | - | 8.3 | - | - | 8.3 | - | - | 3.2 | - | 3.2 | - | - | 0.0 | - | 0.0 | 3.6 |
| Articulated Trucks | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | - | 0 | 0 |
| % Articulated Trucks | - | 0.0 | - | - | 0.0 | - | - | 0.0 | - | 0.0 | - | - | 0.0 | - | 0.0 | 0.0 |
| Bicycles on Road | 0 | 0 | 0 | - | 0 | 0 | 0 | 2 | - | 2 | 0 | 0 | 0 | - | 0 | 2 |
| % Bicycles on Road | - | 0.0 | - | - | 0.0 | - | - | 1.3 | - | 1.3 | - | - | 0.0 | - | 0.0 | 1.2 |
| Pedestrians | - | - | - | 1 | - | - | - | - | 0 | - | - | - | - | 17 | - | - |
| % Pedestrians | - | - | - | 100.0 | - | - | - | - | - | - | - | - | - | 100.0 | - | - |



Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400

Rosemont, Illinois, United States 60018
(847)518-9990

Count Name: NS Alley with South Boulevard
Site Code:
Start Date: 09/10/2020
Page No: 4

Turning Movement Peak Hour Data (4:15 PM)

| Start Time | South Boulevard Eastbound | | | | | South Boulevard Westbound | | | | | NS Alley Northbound | | | | | Int. Total |
|----------------------|---------------------------|-------|-------|-------|------------|---------------------------|-------|-------|-------|------------|---------------------|-------|-------|-------|------------|------------|
| | U-Turn | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Peds | App. Total | U-Turn | Left | Right | Peds | App. Total | |
| 4:15 PM | 0 | 6 | 0 | 5 | 6 | 0 | 0 | 79 | 0 | 79 | 0 | 2 | 1 | 11 | 3 | 88 |
| 4:30 PM | 0 | 7 | 0 | 5 | 7 | 1 | 2 | 66 | 0 | 69 | 0 | 0 | 1 | 13 | 1 | 77 |
| 4:45 PM | 0 | 9 | 0 | 2 | 9 | 0 | 2 | 88 | 2 | 90 | 0 | 5 | 1 | 4 | 6 | 105 |
| 5:00 PM | 0 | 13 | 0 | 1 | 13 | 0 | 0 | 80 | 2 | 80 | 0 | 1 | 0 | 11 | 1 | 94 |
| Total | 0 | 35 | 0 | 13 | 35 | 1 | 4 | 313 | 4 | 318 | 0 | 8 | 3 | 39 | 11 | 364 |
| Approach % | 0.0 | 100.0 | 0.0 | - | - | 0.3 | 1.3 | 98.4 | - | - | 0.0 | 72.7 | 27.3 | - | - | - |
| Total % | 0.0 | 9.6 | 0.0 | - | 9.6 | 0.3 | 1.1 | 86.0 | - | 87.4 | 0.0 | 2.2 | 0.8 | - | 3.0 | - |
| PHF | 0.000 | 0.673 | 0.000 | - | 0.673 | 0.250 | 0.500 | 0.889 | - | 0.883 | 0.000 | 0.400 | 0.750 | - | 0.458 | 0.867 |
| Lights | 0 | 33 | 0 | - | 33 | 1 | 4 | 303 | - | 308 | 0 | 4 | 3 | - | 7 | 348 |
| % Lights | - | 94.3 | - | - | 94.3 | 100.0 | 100.0 | 96.8 | - | 96.9 | - | 50.0 | 100.0 | - | 63.6 | 95.6 |
| Buses | 0 | 0 | 0 | - | 0 | 0 | 0 | 8 | - | 8 | 0 | 0 | 0 | - | 0 | 8 |
| % Buses | - | 0.0 | - | - | 0.0 | 0.0 | 0.0 | 2.6 | - | 2.5 | - | 0.0 | 0.0 | - | 0.0 | 2.2 |
| Single-Unit Trucks | 0 | 0 | 0 | - | 0 | 0 | 0 | 1 | - | 1 | 0 | 0 | 0 | - | 0 | 1 |
| % Single-Unit Trucks | - | 0.0 | - | - | 0.0 | 0.0 | 0.0 | 0.3 | - | 0.3 | - | 0.0 | 0.0 | - | 0.0 | 0.3 |
| Articulated Trucks | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | - | 0 | 0 |
| % Articulated Trucks | - | 0.0 | - | - | 0.0 | 0.0 | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | - | 0.0 | 0.0 |
| Bicycles on Road | 0 | 2 | 0 | - | 2 | 0 | 0 | 1 | - | 1 | 0 | 4 | 0 | - | 4 | 7 |
| % Bicycles on Road | - | 5.7 | - | - | 5.7 | 0.0 | 0.0 | 0.3 | - | 0.3 | - | 50.0 | 0.0 | - | 36.4 | 1.9 |
| Pedestrians | - | - | - | 13 | - | - | - | - | 4 | - | - | - | - | 39 | - | - |
| % Pedestrians | - | - | - | 100.0 | - | - | - | - | 100.0 | - | - | - | - | 100.0 | - | - |



Kenig Lindgren O'Hara Aboona, Inc.
 9575 W. Higgins Rd., Suite 400
 Rosemont, Illinois, United States 60018
 (847)518-9990

Count Name: NS Alley with South Boulevard
 Site Code:
 Start Date: 09/10/2020
 Page No: 5

Turning Movement Peak Hour Data (12:45 PM)

| Start Time | South Boulevard Eastbound | | | | | South Boulevard Westbound | | | | | NS Alley Northbound | | | | | Int. Total |
|----------------------|---------------------------|-------|-------|-------|------------|---------------------------|-------|-------|-------|------------|---------------------|-------|-------|-------|------------|------------|
| | U-Turn | Thru | Right | Peds | App. Total | U-Turn | Left | Thru | Peds | App. Total | U-Turn | Left | Right | Peds | App. Total | |
| 12:45 PM | 0 | 10 | 0 | 1 | 10 | 0 | 1 | 57 | 1 | 58 | 0 | 0 | 0 | 19 | 0 | 68 |
| 1:00 PM | 0 | 10 | 0 | 0 | 10 | 0 | 0 | 63 | 0 | 63 | 0 | 1 | 0 | 18 | 1 | 74 |
| 1:15 PM | 0 | 6 | 0 | 6 | 6 | 0 | 0 | 61 | 0 | 61 | 0 | 0 | 0 | 21 | 0 | 67 |
| 1:30 PM | 0 | 12 | 0 | 2 | 12 | 0 | 1 | 69 | 1 | 70 | 0 | 0 | 1 | 13 | 1 | 83 |
| Total | 0 | 38 | 0 | 9 | 38 | 0 | 2 | 250 | 2 | 252 | 0 | 1 | 1 | 71 | 2 | 292 |
| Approach % | 0.0 | 100.0 | 0.0 | - | - | 0.0 | 0.8 | 99.2 | - | - | 0.0 | 50.0 | 50.0 | - | - | - |
| Total % | 0.0 | 13.0 | 0.0 | - | 13.0 | 0.0 | 0.7 | 85.6 | - | 86.3 | 0.0 | 0.3 | 0.3 | - | 0.7 | - |
| PHF | 0.000 | 0.792 | 0.000 | - | 0.792 | 0.000 | 0.500 | 0.906 | - | 0.900 | 0.000 | 0.250 | 0.250 | - | 0.500 | 0.880 |
| Lights | 0 | 38 | 0 | - | 38 | 0 | 2 | 241 | - | 243 | 0 | 1 | 1 | - | 2 | 283 |
| % Lights | - | 100.0 | - | - | 100.0 | - | 100.0 | 96.4 | - | 96.4 | - | 100.0 | 100.0 | - | 100.0 | 96.9 |
| Buses | 0 | 0 | 0 | - | 0 | 0 | 0 | 5 | - | 5 | 0 | 0 | 0 | - | 0 | 5 |
| % Buses | - | 0.0 | - | - | 0.0 | - | 0.0 | 2.0 | - | 2.0 | - | 0.0 | 0.0 | - | 0.0 | 1.7 |
| Single-Unit Trucks | 0 | 0 | 0 | - | 0 | 0 | 0 | 2 | - | 2 | 0 | 0 | 0 | - | 0 | 2 |
| % Single-Unit Trucks | - | 0.0 | - | - | 0.0 | - | 0.0 | 0.8 | - | 0.8 | - | 0.0 | 0.0 | - | 0.0 | 0.7 |
| Articulated Trucks | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | - | 0 | 0 | 0 | 0 | - | 0 | 0 |
| % Articulated Trucks | - | 0.0 | - | - | 0.0 | - | 0.0 | 0.0 | - | 0.0 | - | 0.0 | 0.0 | - | 0.0 | 0.0 |
| Bicycles on Road | 0 | 0 | 0 | - | 0 | 0 | 0 | 2 | - | 2 | 0 | 0 | 0 | - | 0 | 2 |
| % Bicycles on Road | - | 0.0 | - | - | 0.0 | - | 0.0 | 0.8 | - | 0.8 | - | 0.0 | 0.0 | - | 0.0 | 0.7 |
| Pedestrians | - | - | - | 9 | - | - | - | - | 2 | - | - | - | - | 71 | - | - |
| % Pedestrians | - | - | - | 100.0 | - | - | - | - | 100.0 | - | - | - | - | 100.0 | - | - |

Oak Park, IL Weather: Cool and Afternoon Rain
 Randolph St and Maple Ave Cars and Vans Only
 Thursday September 10, 2020

09/11/20
 14:35:36

URNS/TEAPAC[Ver 3.61.12] - 15-Minute Counts: All Vehicles - by Mvmt

Intersection # 8 randolph/maple/carsvans

| Begin Time | N-Approach | | | E-Approach | | | S-Approach | | | W-Approach | | | Int Total |
|------------|------------|----|----|------------|-----|----|------------|----|----|------------|-----|----|-----------|
| | RT | TH | LT | RT | TH | LT | RT | TH | LT | RT | TH | LT | |
| 700 | 5 | 1 | 0 | 0 | 22 | 0 | 2 | 1 | 1 | 4 | 20 | 2 | 58 |
| 715 | 6 | 0 | 0 | 0 | 31 | 2 | 1 | 1 | 0 | 1 | 24 | 1 | 67 |
| 730 | 3 | 2 | 0 | 0 | 27 | 5 | 2 | 0 | 0 | 6 | 21 | 1 | 67 |
| 745 | 2 | 0 | 1 | 1 | 30 | 3 | 6 | 4 | 2 | 3 | 34 | 3 | 89 |
| 800 | 4 | 2 | 1 | 1 | 31 | 1 | 0 | 2 | 2 | 2 | 33 | 1 | 80 |
| 815 | 4 | 1 | 1 | 0 | 28 | 1 | 2 | 2 | 1 | 1 | 26 | 1 | 68 |
| 830 | 3 | 3 | 0 | 2 | 19 | 0 | 1 | 0 | 1 | 3 | 29 | 1 | 62 |
| 845 | 2 | 1 | 0 | 3 | 23 | 1 | 1 | 1 | 5 | 2 | 39 | 1 | 79 |
| 1600 | 4 | 1 | 4 | 4 | 50 | 1 | 2 | 2 | 1 | 5 | 67 | 1 | 142 |
| 1615 | 6 | 1 | 0 | 0 | 32 | 2 | 3 | 1 | 2 | 3 | 69 | 4 | 123 |
| 1630 | 4 | 1 | 2 | 2 | 49 | 3 | 7 | 4 | 4 | 7 | 69 | 3 | 155 |
| 1645 | 3 | 0 | 4 | 1 | 60 | 3 | 5 | 0 | 5 | 6 | 76 | 5 | 168 |
| 1700 | 6 | 1 | 1 | 4 | 60 | 2 | 3 | 4 | 3 | 4 | 83 | 6 | 177 |
| 1715 | 6 | 2 | 3 | 0 | 45 | 0 | 3 | 2 | 1 | 5 | 70 | 8 | 145 |
| 1730 | 4 | 1 | 0 | 2 | 52 | 3 | 4 | 1 | 2 | 3 | 73 | 7 | 152 |
| 1745 | 5 | 0 | 0 | 1 | 44 | 1 | 3 | 5 | 2 | 3 | 67 | 4 | 135 |
| Total | 67 | 17 | 17 | 21 | 603 | 28 | 45 | 30 | 32 | 58 | 800 | 49 | 1767 |

URNS/TEAPAC[Ver 3.61.12] - 15-Minute Counts: All Vehicles - Totals

Intersection # 8 randolph/maple/carsvans

| Begin Time | Approach Totals | | | | Exit Totals | | | | Int Total |
|------------|-----------------|-----|-----|-----|-------------|-----|-----|-----|-----------|
| | N | E | S | W | N | E | S | W | |
| 700 | 6 | 22 | 4 | 26 | 3 | 22 | 5 | 28 | 58 |
| 715 | 6 | 33 | 2 | 26 | 2 | 25 | 3 | 37 | 67 |
| 730 | 5 | 32 | 2 | 28 | 1 | 23 | 13 | 30 | 67 |
| 745 | 3 | 34 | 12 | 40 | 8 | 41 | 6 | 34 | 89 |
| 800 | 7 | 33 | 4 | 36 | 4 | 34 | 5 | 37 | 80 |
| 815 | 6 | 29 | 5 | 28 | 3 | 29 | 3 | 33 | 68 |
| 830 | 6 | 21 | 2 | 33 | 3 | 30 | 6 | 23 | 62 |
| 845 | 3 | 27 | 7 | 42 | 5 | 40 | 4 | 30 | 79 |
| 1600 | 9 | 55 | 5 | 73 | 7 | 73 | 7 | 55 | 142 |
| 1615 | 7 | 34 | 6 | 76 | 5 | 72 | 6 | 40 | 123 |
| 1630 | 7 | 54 | 15 | 79 | 9 | 78 | 11 | 57 | 155 |
| 1645 | 7 | 64 | 10 | 87 | 6 | 85 | 9 | 68 | 168 |
| 1700 | 8 | 66 | 10 | 93 | 14 | 87 | 7 | 69 | 177 |
| 1715 | 11 | 45 | 6 | 83 | 10 | 76 | 7 | 52 | 145 |
| 1730 | 5 | 57 | 7 | 83 | 10 | 77 | 7 | 58 | 152 |
| 1745 | 5 | 46 | 10 | 74 | 10 | 70 | 4 | 51 | 135 |
| Total | 101 | 652 | 107 | 907 | 100 | 862 | 103 | 702 | 1767 |

Oak Park, IL Weather: Cool and Afternoon Rain
 Randolph St and Maple Ave Cars and Vans Only
 Thursday September 10, 2020

09/11/20
 14:35:36

URNS/TEAPAC[Ver 3.61.12] - 15-Minute Flow Rates: by Movement

Intersection # 8 randolph/maple/carsvans

| Begin Time | N-Approach | | | E-Approach | | | S-Approach | | | W-Approach | | | Int Total |
|------------|------------|----|----|------------|-----|----|------------|----|----|------------|-----|----|-----------|
| | RT | TH | LT | RT | TH | LT | RT | TH | LT | RT | TH | LT | |
| 700 | 20 | 4 | 0 | 0 | 88 | 0 | 8 | 4 | 4 | 16 | 80 | 8 | 232 |
| 715 | 24 | 0 | 0 | 0 | 124 | 8 | 4 | 4 | 0 | 4 | 96 | 4 | 268 |
| 730 | 12 | 8 | 0 | 0 | 108 | 20 | 8 | 0 | 0 | 24 | 84 | 4 | 268 |
| 745 | 8 | 0 | 4 | 4 | 120 | 12 | 24 | 16 | 8 | 12 | 136 | 12 | 356 |
| 800 | 16 | 8 | 4 | 4 | 124 | 4 | 0 | 8 | 8 | 8 | 132 | 4 | 320 |
| 815 | 16 | 4 | 4 | 0 | 112 | 4 | 8 | 8 | 4 | 4 | 104 | 4 | 272 |
| 830 | 12 | 12 | 0 | 8 | 76 | 0 | 4 | 0 | 4 | 12 | 116 | 4 | 248 |
| 845 | 8 | 4 | 0 | 12 | 92 | 4 | 4 | 4 | 20 | 8 | 156 | 4 | 316 |
| 1600 | 16 | 4 | 16 | 16 | 200 | 4 | 8 | 8 | 4 | 20 | 268 | 4 | 568 |
| 1615 | 24 | 4 | 0 | 0 | 128 | 8 | 12 | 4 | 8 | 12 | 276 | 16 | 492 |
| 1630 | 16 | 4 | 8 | 8 | 196 | 12 | 28 | 16 | 16 | 28 | 276 | 12 | 620 |
| 1645 | 12 | 0 | 16 | 4 | 240 | 12 | 20 | 0 | 20 | 24 | 304 | 20 | 672 |
| 1700 | 24 | 4 | 4 | 16 | 240 | 8 | 12 | 16 | 12 | 16 | 332 | 24 | 708 |
| 1715 | 24 | 8 | 12 | 0 | 180 | 0 | 12 | 8 | 4 | 20 | 280 | 32 | 580 |
| 1730 | 16 | 4 | 0 | 8 | 208 | 12 | 16 | 4 | 8 | 12 | 292 | 28 | 608 |
| 1745 | 20 | 0 | 0 | 4 | 176 | 4 | 12 | 20 | 8 | 12 | 268 | 16 | 540 |

URNS/TEAPAC[Ver 3.61.12] - 15-Minute Flow Rates: Appr/Exit Totals

Intersection # 8 randolph/maple/carsvans

| Begin Time | Approach Totals | | | | Exit Totals | | | | Int Total |
|------------|-----------------|-----|----|-----|-------------|-----|----|-----|-----------|
| | N | E | S | W | N | E | S | W | |
| 700 | 24 | 88 | 16 | 104 | 12 | 88 | 20 | 112 | 232 |
| 715 | 24 | 132 | 8 | 104 | 8 | 100 | 12 | 148 | 268 |
| 730 | 20 | 128 | 8 | 112 | 4 | 92 | 52 | 120 | 268 |
| 745 | 12 | 136 | 48 | 160 | 32 | 164 | 24 | 136 | 356 |
| 800 | 28 | 132 | 16 | 144 | 16 | 136 | 20 | 148 | 320 |
| 815 | 24 | 116 | 20 | 112 | 12 | 116 | 12 | 132 | 272 |
| 830 | 24 | 84 | 8 | 132 | 12 | 120 | 24 | 92 | 248 |
| 845 | 12 | 108 | 28 | 168 | 20 | 160 | 16 | 120 | 316 |
| 1600 | 36 | 220 | 20 | 292 | 28 | 292 | 28 | 220 | 568 |
| 1615 | 28 | 136 | 24 | 304 | 20 | 288 | 24 | 160 | 492 |
| 1630 | 28 | 216 | 60 | 316 | 36 | 312 | 44 | 228 | 620 |
| 1645 | 28 | 256 | 40 | 348 | 24 | 340 | 36 | 272 | 672 |
| 1700 | 32 | 264 | 40 | 372 | 56 | 348 | 28 | 276 | 708 |
| 1715 | 44 | 180 | 24 | 332 | 40 | 304 | 28 | 208 | 580 |
| 1730 | 20 | 228 | 28 | 332 | 40 | 308 | 28 | 232 | 608 |
| 1745 | 20 | 184 | 40 | 296 | 40 | 280 | 16 | 204 | 540 |

Oak Park, IL Weather: Cool and Afternoon Rain
 Randolph St and Maple Ave Cars and Vans Only
 Thursday September 10, 2020

09/11/20
 14:35:36

URNS/TEAPAC[Ver 3.61.12] - 60-Minute Volumes: by Movement

Intersection # 8 randolph/maple/carsvans

| Begin Time | N-Approach | | | E-Approach | | | S-Approach | | | W-Approach | | | Int Total |
|------------|------------|----|----|------------|-----|----|------------|----|----|------------|-----|----|-----------|
| | RT | TH | LT | RT | TH | LT | RT | TH | LT | RT | TH | LT | |
| 700 | 16 | 3 | 1 | 1 | 110 | 10 | 11 | 6 | 3 | 14 | 99 | 7 | 281 |
| 715 | 15 | 4 | 2 | 2 | 119 | 11 | 9 | 7 | 4 | 12 | 112 | 6 | 303 |
| 730 | 13 | 5 | 3 | 2 | 116 | 10 | 10 | 8 | 5 | 12 | 114 | 6 | 304 |
| 745 | 13 | 6 | 3 | 4 | 108 | 5 | 9 | 8 | 6 | 9 | 122 | 6 | 299 |
| 800 | 13 | 7 | 2 | 6 | 101 | 3 | 4 | 5 | 9 | 8 | 127 | 4 | 289 |
| 815 | 9 | 5 | 1 | 5 | 70 | 2 | 4 | 3 | 7 | 6 | 94 | 3 | 209* |
| 830 | 5 | 4 | 0 | 5 | 42 | 1 | 2 | 1 | 6 | 5 | 68 | 2 | 141* |
| 845 | 2 | 1 | 0 | 3 | 23 | 1 | 1 | 1 | 5 | 2 | 39 | 1 | 79* |
| 1600 | 17 | 3 | 10 | 7 | 191 | 9 | 17 | 7 | 12 | 21 | 281 | 13 | 588 |
| 1615 | 19 | 3 | 7 | 7 | 201 | 10 | 18 | 9 | 14 | 20 | 297 | 18 | 623 |
| 1630 | 19 | 4 | 10 | 7 | 214 | 8 | 18 | 10 | 13 | 22 | 298 | 22 | 645 |
| 1645 | 19 | 4 | 8 | 7 | 217 | 8 | 15 | 7 | 11 | 18 | 302 | 26 | 642 |
| 1700 | 21 | 4 | 4 | 7 | 201 | 6 | 13 | 12 | 8 | 15 | 293 | 25 | 609 |
| 1715 | 15 | 3 | 3 | 3 | 141 | 4 | 10 | 8 | 5 | 11 | 210 | 19 | 432* |
| 1730 | 9 | 1 | 0 | 3 | 96 | 4 | 7 | 6 | 4 | 6 | 140 | 11 | 287* |
| 1745 | 5 | 0 | 0 | 1 | 44 | 1 | 3 | 5 | 2 | 3 | 67 | 4 | 135* |

URNS/TEAPAC[Ver 3.61.12] - 60-Minute Volumes: Appr/Exit Totals

Intersection # 8 randolph/maple/carsvans

| Begin Time | Approach Totals | | | | Exit Totals | | | | Int Total |
|------------|-----------------|-----|----|-----|-------------|-----|----|-----|-----------|
| | N | E | S | W | N | E | S | W | |
| 700 | 20 | 121 | 20 | 120 | 14 | 111 | 27 | 129 | 281 |
| 715 | 21 | 132 | 20 | 130 | 15 | 123 | 27 | 138 | 303 |
| 730 | 21 | 128 | 23 | 132 | 16 | 127 | 27 | 134 | 304 |
| 745 | 22 | 117 | 23 | 137 | 18 | 134 | 20 | 127 | 299 |
| 800 | 22 | 110 | 18 | 139 | 15 | 133 | 18 | 123 | 289 |
| 815 | 15 | 77 | 14 | 103 | 11 | 99 | 13 | 86 | 209* |
| 830 | 9 | 48 | 9 | 75 | 8 | 70 | 10 | 53 | 141* |
| 845 | 3 | 27 | 7 | 42 | 5 | 40 | 4 | 30 | 79* |
| 1600 | 30 | 207 | 36 | 315 | 27 | 308 | 33 | 220 | 588 |
| 1615 | 29 | 218 | 41 | 335 | 34 | 322 | 33 | 234 | 623 |
| 1630 | 33 | 229 | 41 | 342 | 39 | 326 | 34 | 246 | 645 |
| 1645 | 31 | 232 | 33 | 346 | 40 | 325 | 30 | 247 | 642 |
| 1700 | 29 | 214 | 33 | 333 | 44 | 310 | 25 | 230 | 609 |
| 1715 | 21 | 148 | 23 | 240 | 30 | 223 | 18 | 161 | 432* |
| 1730 | 10 | 103 | 17 | 157 | 20 | 147 | 11 | 109 | 287* |
| 1745 | 5 | 46 | 10 | 74 | 10 | 70 | 4 | 51 | 135* |

Oak Park, IL Weather: Cool and Afternoon Rain
 Randolph St and Maple Ave Heavy Vehicles Only
 Thursday September 10, 2020

09/11/20
 09:59:03

URNS/TEAPAC[Ver 3.61.12] - 15-Minute Counts: All Vehicles - by Mvmt

Intersection # 7 randolph/maple/heavyveh

| Begin Time | N-Approach | | | E-Approach | | | S-Approach | | | W-Approach | | | Int Total |
|--------------|------------|----------|----------|------------|----------|----------|------------|----------|----------|------------|----------|----------|-----------|
| | RT | TH | LT | RT | TH | LT | RT | TH | LT | RT | TH | LT | |
| 700 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| 715 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 730 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 3 |
| 745 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| 800 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 2 |
| 815 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 830 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 845 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 2 |
| 1600 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 1615 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 3 |
| 1630 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 3 |
| 1645 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 2 |
| 1700 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 1715 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| 1730 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 2 |
| 1745 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| Total | 1 | 0 | 1 | 2 | 5 | 0 | 0 | 2 | 1 | 0 | 8 | 4 | 24 |

URNS/TEAPAC[Ver 3.61.12] - 15-Minute Counts: All Vehicles - Totals

Intersection # 7 randolph/maple/heavyveh

| Begin Time | Approach Totals | | | | Exit Totals | | | | Int Total |
|--------------|-----------------|----------|----------|-----------|-------------|----------|----------|----------|-----------|
| | N | E | S | W | N | E | S | W | |
| 700 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 1 |
| 715 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 730 | 0 | 1 | 1 | 1 | 2 | 1 | 0 | 0 | 3 |
| 745 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 1 |
| 800 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 1 | 2 |
| 815 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 830 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| 845 | 0 | 0 | 1 | 1 | 2 | 0 | 0 | 0 | 2 |
| 1600 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| 1615 | 0 | 1 | 0 | 2 | 2 | 0 | 0 | 1 | 3 |
| 1630 | 0 | 2 | 0 | 1 | 1 | 1 | 0 | 1 | 3 |
| 1645 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 2 |
| 1700 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| 1715 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 1 |
| 1730 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 2 |
| 1745 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 1 |
| Total | 2 | 7 | 3 | 12 | 8 | 9 | 0 | 7 | 24 |

Oak Park, IL Weather: Cool and Afternoon Rain
 Randolph St and Maple Ave Heavy Vehicles Only
 Thursday September 10, 2020

09/11/20
 09:59:03

URNS/TEAPAC[Ver 3.61.12] - 15-Minute Flow Rates: by Movement

Intersection # 7 randolph/maple/heavyveh

| Begin Time | N-Approach | | | E-Approach | | | S-Approach | | | W-Approach | | | Int Total |
|------------|------------|----|----|------------|----|----|------------|----|----|------------|----|----|-----------|
| | RT | TH | LT | RT | TH | LT | RT | TH | LT | RT | TH | LT | |
| 700 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 4 |
| 715 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 730 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 4 | 0 | 0 | 4 | 0 | 12 |
| 745 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 4 |
| 800 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 4 | 0 | 8 |
| 815 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 830 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 845 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 4 | 8 |
| 1600 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 1615 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 12 |
| 1630 | 0 | 0 | 0 | 4 | 4 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 12 |
| 1645 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 8 |
| 1700 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 1715 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 4 |
| 1730 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 8 |
| 1745 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 4 |

URNS/TEAPAC[Ver 3.61.12] - 15-Minute Flow Rates: Appr/Exit Totals

Intersection # 7 randolph/maple/heavyveh

| Begin Time | Approach Totals | | | | Exit Totals | | | | Int Total |
|------------|-----------------|---|---|---|-------------|---|---|---|-----------|
| | N | E | S | W | N | E | S | W | |
| 700 | 0 | 0 | 0 | 4 | 4 | 0 | 0 | 0 | 4 |
| 715 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 730 | 0 | 4 | 4 | 4 | 8 | 4 | 0 | 0 | 12 |
| 745 | 0 | 0 | 0 | 4 | 0 | 4 | 0 | 0 | 4 |
| 800 | 0 | 0 | 4 | 4 | 0 | 4 | 0 | 4 | 8 |
| 815 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 830 | 4 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 4 |
| 845 | 0 | 0 | 4 | 4 | 8 | 0 | 0 | 0 | 8 |
| 1600 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 4 | 4 |
| 1615 | 0 | 4 | 0 | 8 | 8 | 0 | 0 | 4 | 12 |
| 1630 | 0 | 8 | 0 | 4 | 4 | 4 | 0 | 4 | 12 |
| 1645 | 4 | 0 | 0 | 4 | 0 | 4 | 0 | 4 | 8 |
| 1700 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 4 | 4 |
| 1715 | 0 | 0 | 0 | 4 | 0 | 4 | 0 | 0 | 4 |
| 1730 | 0 | 4 | 0 | 4 | 0 | 4 | 0 | 4 | 8 |
| 1745 | 0 | 0 | 0 | 4 | 0 | 4 | 0 | 0 | 4 |

Oak Park, IL Weather: Cool and Afternoon Rain
 Randolph St and Maple Ave Heavy Vehicles Only
 Thursday September 10, 2020

09/11/20
 09:59:03

URNS/TEAPAC[Ver 3.61.12] - 60-Minute Volumes: by Movement

Intersection # 7 randolph/maple/heavyveh

| Begin Time | N-Approach | | | E-Approach | | | S-Approach | | | W-Approach | | | Int Total |
|------------|------------|----|----|------------|----|----|------------|----|----|------------|----|----|-----------|
| | RT | TH | LT | RT | TH | LT | RT | TH | LT | RT | TH | LT | |
| 700 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 2 | 1 | 5 |
| 715 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 3 | 0 | 6 |
| 730 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 0 | 3 | 0 | 6 |
| 745 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 0 | 4 |
| 800 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 5 |
| 815 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 3* |
| 830 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 3* |
| 845 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 2* |
| 1600 | 1 | 0 | 0 | 1 | 3 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 9 |
| 1615 | 1 | 0 | 0 | 1 | 3 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 9 |
| 1630 | 1 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 7 |
| 1645 | 1 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 6 |
| 1700 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 5 |
| 1715 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 4* |
| 1730 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 3* |
| 1745 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1* |

URNS/TEAPAC[Ver 3.61.12] - 60-Minute Volumes: Appr/Exit Totals

Intersection # 7 randolph/maple/heavyveh

| Begin Time | Approach Totals | | | | Exit Totals | | | | Int Total |
|------------|-----------------|---|---|---|-------------|---|---|---|-----------|
| | N | E | S | W | N | E | S | W | |
| 700 | 0 | 1 | 1 | 3 | 3 | 2 | 0 | 0 | 5 |
| 715 | 0 | 1 | 2 | 3 | 2 | 3 | 0 | 1 | 6 |
| 730 | 0 | 1 | 2 | 3 | 2 | 3 | 0 | 1 | 6 |
| 745 | 1 | 0 | 1 | 2 | 0 | 3 | 0 | 1 | 4 |
| 800 | 1 | 0 | 2 | 2 | 2 | 2 | 0 | 1 | 5 |
| 815 | 1 | 0 | 1 | 1 | 2 | 1 | 0 | 0 | 3* |
| 830 | 1 | 0 | 1 | 1 | 2 | 1 | 0 | 0 | 3* |
| 845 | 0 | 0 | 1 | 1 | 2 | 0 | 0 | 0 | 2* |
| 1600 | 1 | 4 | 0 | 4 | 3 | 2 | 0 | 4 | 9 |
| 1615 | 1 | 4 | 0 | 4 | 3 | 2 | 0 | 4 | 9 |
| 1630 | 1 | 3 | 0 | 3 | 1 | 3 | 0 | 3 | 7 |
| 1645 | 1 | 2 | 0 | 3 | 0 | 3 | 0 | 3 | 6 |
| 1700 | 0 | 2 | 0 | 3 | 0 | 3 | 0 | 2 | 5 |
| 1715 | 0 | 1 | 0 | 3 | 0 | 3 | 0 | 1 | 4* |
| 1730 | 0 | 1 | 0 | 2 | 0 | 2 | 0 | 1 | 3* |
| 1745 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 1* |

City: Oak Park

Count Location: Randolph St. and Maple Ave

Study Date: – September 10th, 2020 (On-Street Biker Counts)

| Time | East Approach | West Approach | North Approach | South Approach | Total Bikers |
|-------------------------|---------------|---------------|----------------|----------------|--------------|
| 7:00-7:15 a.m. | 0 | 1 | 0 | 1 | 2 |
| 7:15-7:30 a.m. | 2 | 0 | 0 | 0 | 2 |
| 7:30-7:45 a.m. | 0 | 1 | 0 | 0 | 1 |
| 7:45-8:00 a.m. | 0 | 1 | 0 | 0 | 1 |
| 8:00-8:15 a.m. | 1 | 1 | 1 | 1 | 4 |
| 8:15-8:30 a.m. | 0 | 1 | 0 | 0 | 1 |
| 8:30-8:45 a.m. | 1 | 1 | 0 | 0 | 2 |
| 8:45-9:00 a.m. | 1 | 1 | 1 | 0 | 3 |
| Morning Totals | 5 | 7 | 2 | 2 | 16 |
| 4:00-4:15 p.m. | 0 | 1 | 0 | 1 | 2 |
| 4:15-4:30 p.m. | 1 | 0 | 0 | 1 | 2 |
| 4:30-4:45 p.m. | 1 | 2 | 0 | 0 | 3 |
| 4:45-5:00 p.m. | 0 | 0 | 0 | 1 | 1 |
| 5:00-5:15 p.m. | 0 | 3 | 0 | 0 | 3 |
| 5:15-5:30 p.m. | 1 | 0 | 0 | 0 | 1 |
| 5:30-5:45 p.m. | 0 | 0 | 0 | 0 | 0 |
| 5:45-6:00 p.m. | 0 | 0 | 0 | 0 | 0 |
| Afternoon Totals | 3 | 6 | 0 | 3 | 12 |

City: Oak Park

Count Location: Randolph St. and Maple Ave

Study Date: – September 10th, 2020 (Pedestrian Crosswalk Counts)

| Time | East Crosswalk | West Crosswalk | North Crosswalk | South Crosswalk | Total Pedestrians |
|-------------------------|----------------|----------------|-----------------|-----------------|-------------------|
| 7:00-7:15 a.m. | 0 | 1 | 1 | 1 | 3 |
| 7:15-7:30 a.m. | 2 | 1 | 5 | 4 | 12 |
| 7:30-7:45 a.m. | 1 | 1 | 1 | 1 | 4 |
| 7:45-8:00 a.m. | 2 | 3 | 6 | 9 | 20 |
| 8:00-8:15 a.m. | 1 | 2 | 3 | 9 | 15 |
| 8:15-8:30 a.m. | 3 | 1 | 4 | 3 | 11 |
| 8:30-8:45 a.m. | 1 | 1 | 5 | 5 | 12 |
| 8:45-9:00 a.m. | 2 | 2 | 1 | 4 | 9 |
| Morning Totals | 12 | 12 | 26 | 36 | 86 |
| 4:00-4:15 p.m. | 6 | 2 | 6 | 5 | 19 |
| 4:15-4:30 p.m. | 0 | 6 | 5 | 3 | 14 |
| 4:30-4:45 p.m. | 0 | 1 | 4 | 12 | 17 |
| 4:45-5:00 p.m. | 2 | 3 | 3 | 15 | 23 |
| 5:00-5:15 p.m. | 3 | 2 | 3 | 4 | 12 |
| 5:15-5:30 p.m. | 5 | 1 | 3 | 1 | 10 |
| 5:30-5:45 p.m. | 2 | 1 | 3 | 0 | 6 |
| 5:45-6:00 p.m. | 1 | 0 | 1 | 0 | 2 |
| Afternoon Totals | 19 | 16 | 28 | 40 | 103 |

Westbound Queue Observation Notes:

- During the morning count there were no observed westbound backups on Randolph St. extending back to/beyond Maple Ave.
- During the morning count there were multiple observed westbound backups on Randolph St. extending back to/beyond Maple Ave. These backups were brief (about 20-60 seconds in duration) and each backup cleared quickly with every green light cycle phase. The times of these backups were at 4:45 p.m. (backup just up to west crosswalk) , 4:53 p.m. (backup beyond Maple of 4 vehicles to the east of the intersection), 5:01 p.m. (backup beyond Maple of 1 vehicle to the east of the intersection), 5:06 p.m. (backup just up to west crosswalk), 5:08 p.m. (backup just past west crosswalk but not blocking intersection), 5:25 p.m. (backup extends partially into the intersection but not beyond), 5:37 p.m. (backup beyond Maple of 2 vehicles to the east of the intersection), 5:39 p.m., (backup just up to west crosswalk), 5:46 p.m. (backup just up to west crosswalk), and 5:59 p.m. (backup extends partially into the intersection).
- Please note that none of the observed backups were completely blocking the intersection as north and south thru movements at the intersection could easily be made.
- There were a few observations when these backups on Randolph occurred that vehicles on Maple Ave had to temporarily wait to turn westbound onto Randolph St. until the green light at Harlem Ave. cleared the westbound backups on Randolph. These backups on Maple were few and only 1 maybe 2 vehicles at most waiting.

Oak Park, IL Weather: Cool and Light Rain
 Randolph St and Maple Ave Cars and Vans Only
 Saturday September 12, 2020

09/14/20
 13:37:59

URNS/TEAPAC[Ver 3.61.12] - 15-Minute Counts: All Vehicles - by Mvmt

Intersection # 9 randolph/maple/cars/vans/sat

| Begin Time | N-Approach | | | E-Approach | | | S-Approach | | | W-Approach | | | Int Total |
|------------|------------|----|----|------------|-----|----|------------|----|----|------------|-----|----|-----------|
| | RT | TH | LT | RT | TH | LT | RT | TH | LT | RT | TH | LT | |
| 1130 | 6 | 2 | 1 | 0 | 34 | 2 | 1 | 0 | 1 | 2 | 39 | 2 | 90 |
| 1145 | 4 | 1 | 1 | 2 | 33 | 2 | 3 | 2 | 1 | 3 | 57 | 4 | 113 |
| 1200 | 4 | 2 | 2 | 1 | 62 | 1 | 0 | 1 | 3 | 1 | 44 | 7 | 128 |
| 1215 | 4 | 1 | 0 | 2 | 39 | 1 | 2 | 7 | 1 | 1 | 49 | 2 | 109 |
| 1230 | 1 | 3 | 2 | 1 | 33 | 2 | 3 | 5 | 2 | 3 | 43 | 1 | 99 |
| 1245 | 4 | 2 | 1 | 0 | 48 | 0 | 4 | 3 | 2 | 3 | 50 | 6 | 123 |
| 1300 | 9 | 1 | 0 | 1 | 26 | 2 | 3 | 0 | 0 | 5 | 44 | 2 | 93 |
| 1315 | 4 | 3 | 0 | 1 | 36 | 1 | 2 | 1 | 5 | 1 | 52 | 7 | 113 |
| Total | 36 | 15 | 7 | 8 | 311 | 11 | 18 | 19 | 15 | 19 | 378 | 31 | 868 |

URNS/TEAPAC[Ver 3.61.12] - 15-Minute Counts: All Vehicles - Totals

Intersection # 9 randolph/maple/cars/vans/sat

| Begin Time | Approach Totals | | | | Exit Totals | | | | Int Total |
|------------|-----------------|-----|----|-----|-------------|-----|----|-----|-----------|
| | N | E | S | W | N | E | S | W | |
| 1130 | 9 | 36 | 2 | 43 | 2 | 41 | 6 | 41 | 90 |
| 1145 | 6 | 37 | 6 | 64 | 8 | 61 | 6 | 38 | 113 |
| 1200 | 8 | 64 | 4 | 52 | 9 | 46 | 4 | 69 | 128 |
| 1215 | 5 | 42 | 10 | 52 | 11 | 51 | 3 | 44 | 109 |
| 1230 | 6 | 36 | 10 | 47 | 7 | 48 | 8 | 36 | 99 |
| 1245 | 7 | 48 | 9 | 59 | 9 | 55 | 5 | 54 | 123 |
| 1300 | 10 | 29 | 3 | 51 | 3 | 47 | 8 | 35 | 93 |
| 1315 | 7 | 38 | 8 | 60 | 9 | 54 | 5 | 45 | 113 |
| Total | 58 | 330 | 52 | 428 | 58 | 403 | 45 | 362 | 868 |

URNS/TEAPAC[Ver 3.61.12] - 15-Minute Flow Rates: by Movement

Intersection # 9 randolph/maple/cars/vans/sat

| Begin Time | N-Approach | | | E-Approach | | | S-Approach | | | W-Approach | | | Int Total |
|------------|------------|----|----|------------|-----|----|------------|----|----|------------|-----|----|-----------|
| | RT | TH | LT | RT | TH | LT | RT | TH | LT | RT | TH | LT | |
| 1130 | 24 | 8 | 4 | 0 | 136 | 8 | 4 | 0 | 4 | 8 | 156 | 8 | 360 |
| 1145 | 16 | 4 | 4 | 8 | 132 | 8 | 12 | 8 | 4 | 12 | 228 | 16 | 452 |
| 1200 | 16 | 8 | 8 | 4 | 248 | 4 | 0 | 4 | 12 | 4 | 176 | 28 | 512 |
| 1215 | 16 | 4 | 0 | 8 | 156 | 4 | 8 | 28 | 4 | 4 | 196 | 8 | 436 |
| 1230 | 4 | 12 | 8 | 4 | 132 | 8 | 12 | 20 | 8 | 12 | 172 | 4 | 396 |
| 1245 | 16 | 8 | 4 | 0 | 192 | 0 | 16 | 12 | 8 | 12 | 200 | 24 | 492 |
| 1300 | 36 | 4 | 0 | 4 | 104 | 8 | 12 | 0 | 0 | 20 | 176 | 8 | 372 |
| 1315 | 16 | 12 | 0 | 4 | 144 | 4 | 8 | 4 | 20 | 4 | 208 | 28 | 452 |

Oak Park, IL Weather: Cool and Light Rain
 Randolph St and Maple Ave Cars and Vans Only
 Saturday September 12, 2020

09/14/20
 13:37:59

URNS/TEAPAC[Ver 3.61.12] - 15-Minute Flow Rates: Appr/Exit Totals

Intersection # 9 randolph/maple/cars/vans/sat

| Begin Time | Approach Totals | | | | Exit Totals | | | | Int Total |
|------------|-----------------|-----|----|-----|-------------|-----|----|-----|-----------|
| | N | E | S | W | N | E | S | W | |
| 1130 | 36 | 144 | 8 | 172 | 8 | 164 | 24 | 164 | 360 |
| 1145 | 24 | 148 | 24 | 256 | 32 | 244 | 24 | 152 | 452 |
| 1200 | 32 | 256 | 16 | 208 | 36 | 184 | 16 | 276 | 512 |
| 1215 | 20 | 168 | 40 | 208 | 44 | 204 | 12 | 176 | 436 |
| 1230 | 24 | 144 | 40 | 188 | 28 | 192 | 32 | 144 | 396 |
| 1245 | 28 | 192 | 36 | 236 | 36 | 220 | 20 | 216 | 492 |
| 1300 | 40 | 116 | 12 | 204 | 12 | 188 | 32 | 140 | 372 |
| 1315 | 28 | 152 | 32 | 240 | 36 | 216 | 20 | 180 | 452 |

URNS/TEAPAC[Ver 3.61.12] - 60-Minute Volumes: by Movement

Intersection # 9 randolph/maple/cars/vans/sat

| Begin Time | N-Approach | | | E-Approach | | | S-Approach | | | W-Approach | | | Int Total |
|------------|------------|----|----|------------|-----|----|------------|----|----|------------|-----|----|-----------|
| | RT | TH | LT | RT | TH | LT | RT | TH | LT | RT | TH | LT | |
| 1130 | 18 | 6 | 4 | 5 | 168 | 6 | 6 | 10 | 6 | 7 | 189 | 15 | 440 |
| 1145 | 13 | 7 | 5 | 6 | 167 | 6 | 8 | 15 | 7 | 8 | 193 | 14 | 449 |
| 1200 | 13 | 8 | 5 | 4 | 182 | 4 | 9 | 16 | 8 | 8 | 186 | 16 | 459 |
| 1215 | 18 | 7 | 3 | 4 | 146 | 5 | 12 | 15 | 5 | 12 | 186 | 11 | 424 |
| 1230 | 18 | 9 | 3 | 3 | 143 | 5 | 12 | 9 | 9 | 12 | 189 | 16 | 428 |
| 1245 | 17 | 6 | 1 | 2 | 110 | 3 | 9 | 4 | 7 | 9 | 146 | 15 | 329* |
| 1300 | 13 | 4 | 0 | 2 | 62 | 3 | 5 | 1 | 5 | 6 | 96 | 9 | 206* |
| 1315 | 4 | 3 | 0 | 1 | 36 | 1 | 2 | 1 | 5 | 1 | 52 | 7 | 113* |

URNS/TEAPAC[Ver 3.61.12] - 60-Minute Volumes: Appr/Exit Totals

Intersection # 9 randolph/maple/cars/vans/sat

| Begin Time | Approach Totals | | | | Exit Totals | | | | Int Total |
|------------|-----------------|-----|----|-----|-------------|-----|----|-----|-----------|
| | N | E | S | W | N | E | S | W | |
| 1130 | 28 | 179 | 22 | 211 | 30 | 199 | 19 | 192 | 440 |
| 1145 | 25 | 179 | 30 | 215 | 35 | 206 | 21 | 187 | 449 |
| 1200 | 26 | 190 | 33 | 210 | 36 | 200 | 20 | 203 | 459 |
| 1215 | 28 | 155 | 32 | 209 | 30 | 201 | 24 | 169 | 424 |
| 1230 | 30 | 151 | 30 | 217 | 28 | 204 | 26 | 170 | 428 |
| 1245 | 24 | 115 | 20 | 170 | 21 | 156 | 18 | 134 | 329* |
| 1300 | 17 | 67 | 11 | 111 | 12 | 101 | 13 | 80 | 206* |
| 1315 | 7 | 38 | 8 | 60 | 9 | 54 | 5 | 45 | 113* |

Oak Park, IL Weather: Cool and Light Rain
 Randolph St and Maple Ave Heavy Vehicles Only
 Saturday September 12, 2020

09/14/20
 13:44:35

URNS/TEAPAC[Ver 3.61.12] - 15-Minute Counts: All Vehicles - by Mvmt

Intersection # 10 Randolph/maple/heavy/sat

| Begin Time | N-Approach | | | E-Approach | | | S-Approach | | | W-Approach | | | Int Total |
|------------|------------|----|----|------------|----|----|------------|----|----|------------|----|----|-----------|
| | RT | TH | LT | RT | TH | LT | RT | TH | LT | RT | TH | LT | |
| 1130 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 2 |
| 1145 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| 1200 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 |
| 1215 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 2 |
| 1230 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1245 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| 1300 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 2 |
| 1315 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 2 |
| Total | 0 | 2 | 0 | 0 | 3 | 0 | 0 | 1 | 1 | 1 | 2 | 1 | 11 |

URNS/TEAPAC[Ver 3.61.12] - 15-Minute Counts: All Vehicles - Totals

Intersection # 10 Randolph/maple/heavy/sat

| Begin Time | Approach Totals | | | | Exit Totals | | | | Int Total |
|------------|-----------------|---|---|---|-------------|---|---|---|-----------|
| | N | E | S | W | N | E | S | W | |
| 1130 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 2 | 2 |
| 1145 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 1 |
| 1200 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 1 |
| 1215 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 2 |
| 1230 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1245 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| 1300 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 2 |
| 1315 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 2 |
| Total | 2 | 3 | 2 | 4 | 2 | 2 | 3 | 4 | 11 |

URNS/TEAPAC[Ver 3.61.12] - 15-Minute Flow Rates: by Movement

Intersection # 10 Randolph/maple/heavy/sat

| Begin Time | N-Approach | | | E-Approach | | | S-Approach | | | W-Approach | | | Int Total |
|------------|------------|----|----|------------|----|----|------------|----|----|------------|----|----|-----------|
| | RT | TH | LT | RT | TH | LT | RT | TH | LT | RT | TH | LT | |
| 1130 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 8 |
| 1145 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 4 |
| 1200 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 4 |
| 1215 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 8 |
| 1230 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1245 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 |
| 1300 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 8 |
| 1315 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 8 |

Oak Park, IL Weather: Cool and Light Rain
 Randolph St and Maple Ave Heavy Vehicles Only
 Saturday September 12, 2020

09/14/20
 13:44:35

URNS/TEAPAC[Ver 3.61.12] - 15-Minute Flow Rates: Appr/Exit Totals

Intersection # 10 Randolph/maple/heavy/sat

| Begin Time | Approach Totals | | | | Exit Totals | | | | Int Total |
|------------|-----------------|---|---|---|-------------|---|---|---|-----------|
| | N | E | S | W | N | E | S | W | |
| 1130 | 0 | 4 | 4 | 0 | 0 | 0 | 0 | 8 | 8 |
| 1145 | 0 | 0 | 0 | 4 | 4 | 0 | 0 | 0 | 4 |
| 1200 | 0 | 0 | 0 | 4 | 0 | 0 | 4 | 0 | 4 |
| 1215 | 0 | 4 | 4 | 0 | 4 | 0 | 0 | 4 | 8 |
| 1230 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 1245 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 4 | 4 |
| 1300 | 4 | 0 | 0 | 4 | 0 | 4 | 4 | 0 | 8 |
| 1315 | 4 | 0 | 0 | 4 | 0 | 4 | 4 | 0 | 8 |

URNS/TEAPAC[Ver 3.61.12] - 60-Minute Volumes: by Movement

Intersection # 10 Randolph/maple/heavy/sat

| Begin Time | N-Approach | | | E-Approach | | | S-Approach | | | W-Approach | | | Int Total |
|------------|------------|----|----|------------|----|----|------------|----|----|------------|----|----|-----------|
| | RT | TH | LT | RT | TH | LT | RT | TH | LT | RT | TH | LT | |
| 1130 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 6 |
| 1145 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 4 |
| 1200 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 4 |
| 1215 | 0 | 1 | 0 | 0 | 2 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 5 |
| 1230 | 0 | 2 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 5 |
| 1245 | 0 | 2 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 5* |
| 1300 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 4* |
| 1315 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 2* |

URNS/TEAPAC[Ver 3.61.12] - 60-Minute Volumes: Appr/Exit Totals

Intersection # 10 Randolph/maple/heavy/sat

| Begin Time | Approach Totals | | | | Exit Totals | | | | Int Total |
|------------|-----------------|---|---|---|-------------|---|---|---|-----------|
| | N | E | S | W | N | E | S | W | |
| 1130 | 0 | 2 | 2 | 2 | 2 | 0 | 1 | 3 | 6 |
| 1145 | 0 | 1 | 1 | 2 | 2 | 0 | 1 | 1 | 4 |
| 1200 | 0 | 2 | 1 | 1 | 1 | 0 | 1 | 2 | 4 |
| 1215 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 2 | 5 |
| 1230 | 2 | 1 | 0 | 2 | 0 | 2 | 2 | 1 | 5 |
| 1245 | 2 | 1 | 0 | 2 | 0 | 2 | 2 | 1 | 5* |
| 1300 | 2 | 0 | 0 | 2 | 0 | 2 | 2 | 0 | 4* |
| 1315 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 2* |

City: Oak Park

Count Location: Randolph St. and Maple Ave

Study Date: – September 12th, 2020 (On-Street Biker Counts)

| Time | East Approach | West Approach | North Approach | South Approach | Total Bikers |
|-------------------------|---------------|---------------|----------------|----------------|--------------|
| 11:30-11:45 a.m. | 2 | 0 | 0 | 0 | 2 |
| 11:45-12:00 p.m. | 0 | 0 | 0 | 0 | 0 |
| 12:00-12:15 p.m. | 0 | 0 | 0 | 0 | 0 |
| 12:15-12:30 p.m. | 0 | 0 | 0 | 0 | 0 |
| 12:30-12:45 p.m. | 0 | 1 | 0 | 1 | 2 |
| 12:45-1:00 p.m. | 0 | 0 | 0 | 0 | 0 |
| 1:00-1:15 p.m. | 1 | 0 | 0 | 0 | 1 |
| 1:15-1:30 p.m. | 0 | 0 | 0 | 0 | 0 |
| Afternoon Totals | 3 | 1 | 0 | 1 | 5 |

City: Oak Park

Count Location: Randolph St. and Maple Ave

Study Date: – September 12th, 2020 (Pedestrian Crosswalk Counts)

| Time | East Crosswalk | West Crosswalk | North Crosswalk | South Crosswalk | Total Pedestrians |
|-------------------------|----------------|----------------|-----------------|-----------------|-------------------|
| 11:30-11:45 a.m. | 0 | 4 | 1 | 2 | 7 |
| 11:45-12:00 p.m. | 2 | 1 | 1 | 1 | 5 |
| 12:00-12:15 p.m. | 3 | 4 | 7 | 2 | 16 |
| 12:15-12:30 p.m. | 1 | 1 | 4 | 1 | 7 |
| 12:30-12:45 p.m. | 1 | 0 | 2 | 2 | 5 |
| 12:45-1:00 p.m. | 1 | 0 | 1 | 0 | 2 |
| 1:00-1:15 p.m. | 5 | 3 | 4 | 2 | 14 |
| 1:15-1:30 p.m. | 2 | 3 | 0 | 0 | 5 |
| Afternoon Totals | 15 | 16 | 20 | 10 | 61 |

Westbound Queue Observation Notes:

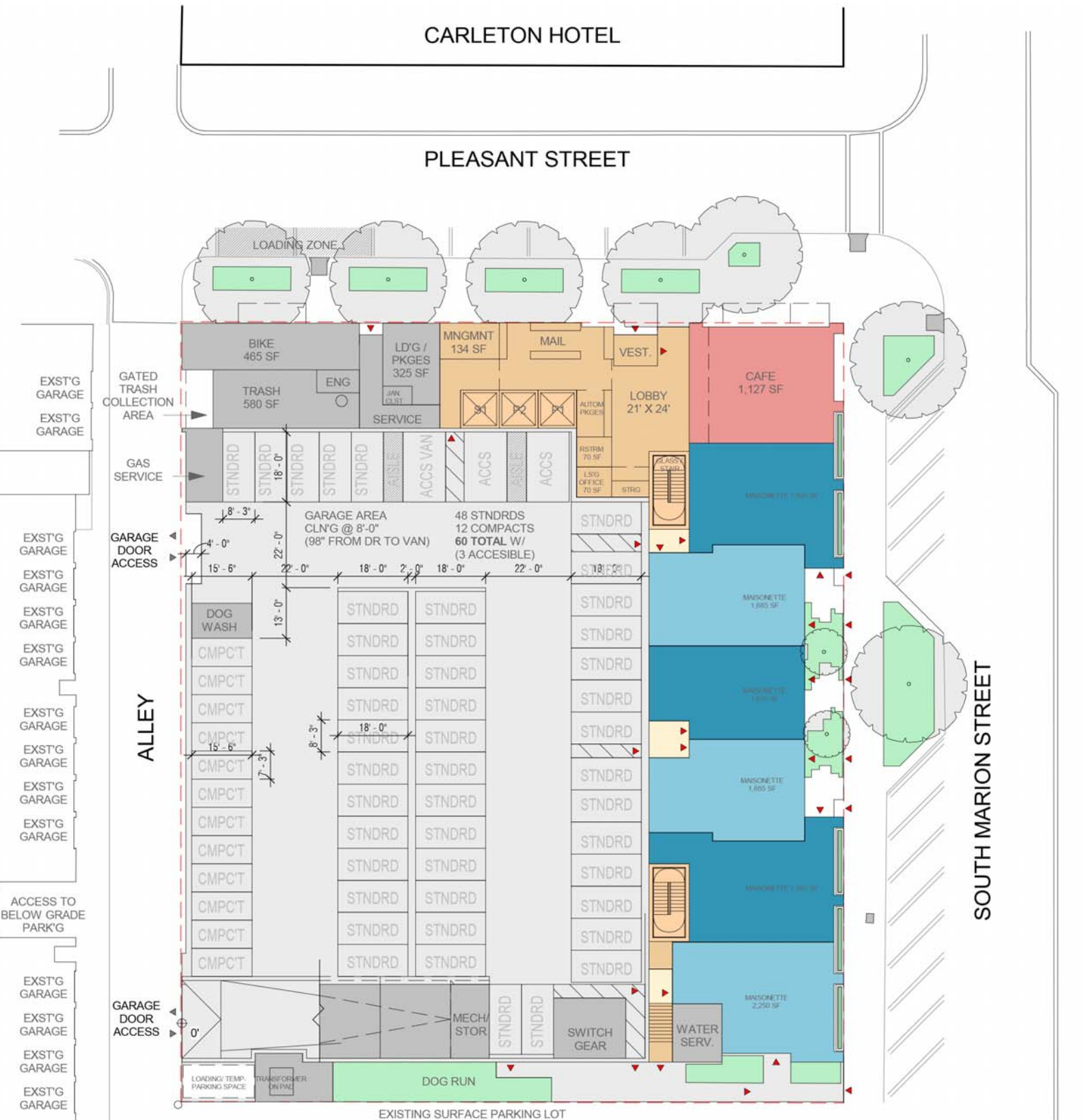
- During the count there were a few observed westbound backups on Randolph St. extending back to/beyond Maple Ave. These backups were brief (about 20-60 seconds in duration) and each backup cleared quickly with every green light cycle phase. The times of these backups were at 12:57 p.m. (backup beyond Maple of 4 vehicles to the east of the intersection), 12:59 p.m. (backup just past west crosswalk but not blocking intersection), and 1:25 p.m. (backup just up to west crosswalk).
- Please note that none of the observed backups were completely blocking the intersection as north and south thru movements at the intersection could easily be made.

Site Plan

CARLETON HOTEL

PLEASANT STREET

SOUTH MARION STREET



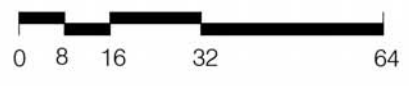
LEVEL 1 PLAN -

1/32" = 1'-0"

1

FLOOR PLANS

BOOTH HANSEN



203 S. MARION ST.
2021 01 19
2000.00

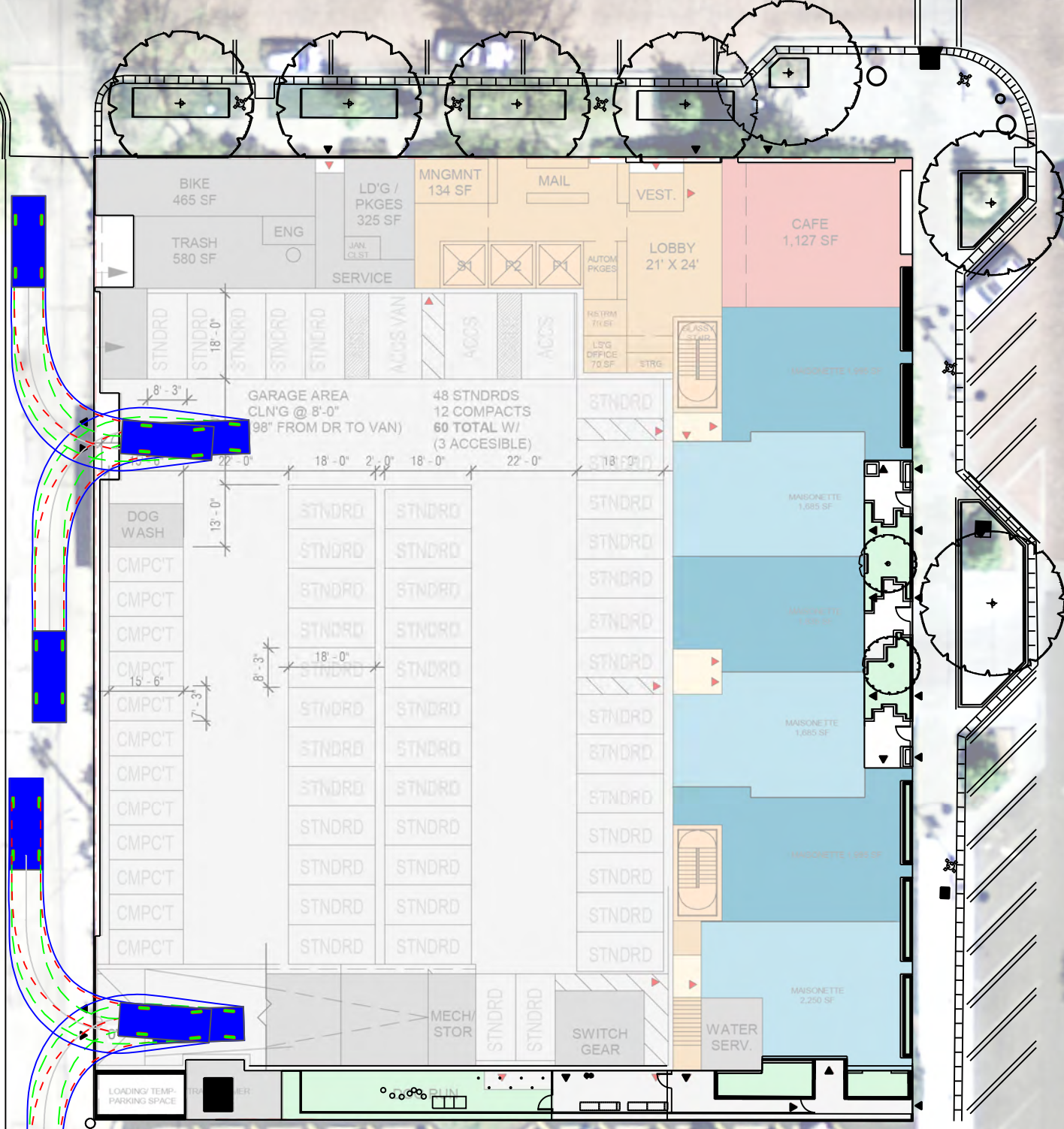
AutoTurn Exhibits



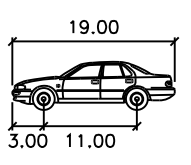
SCALE: 1" = 30'

PLEASANT STREET

MARION STREET



DESIGN VEHICLE



| Passenger Vehicle | Feet |
|-------------------|--------|
| Width | : 7.00 |
| Track | : 6.00 |
| Lock to Lock Time | : 6.00 |
| Steering Angle | : 31.5 |

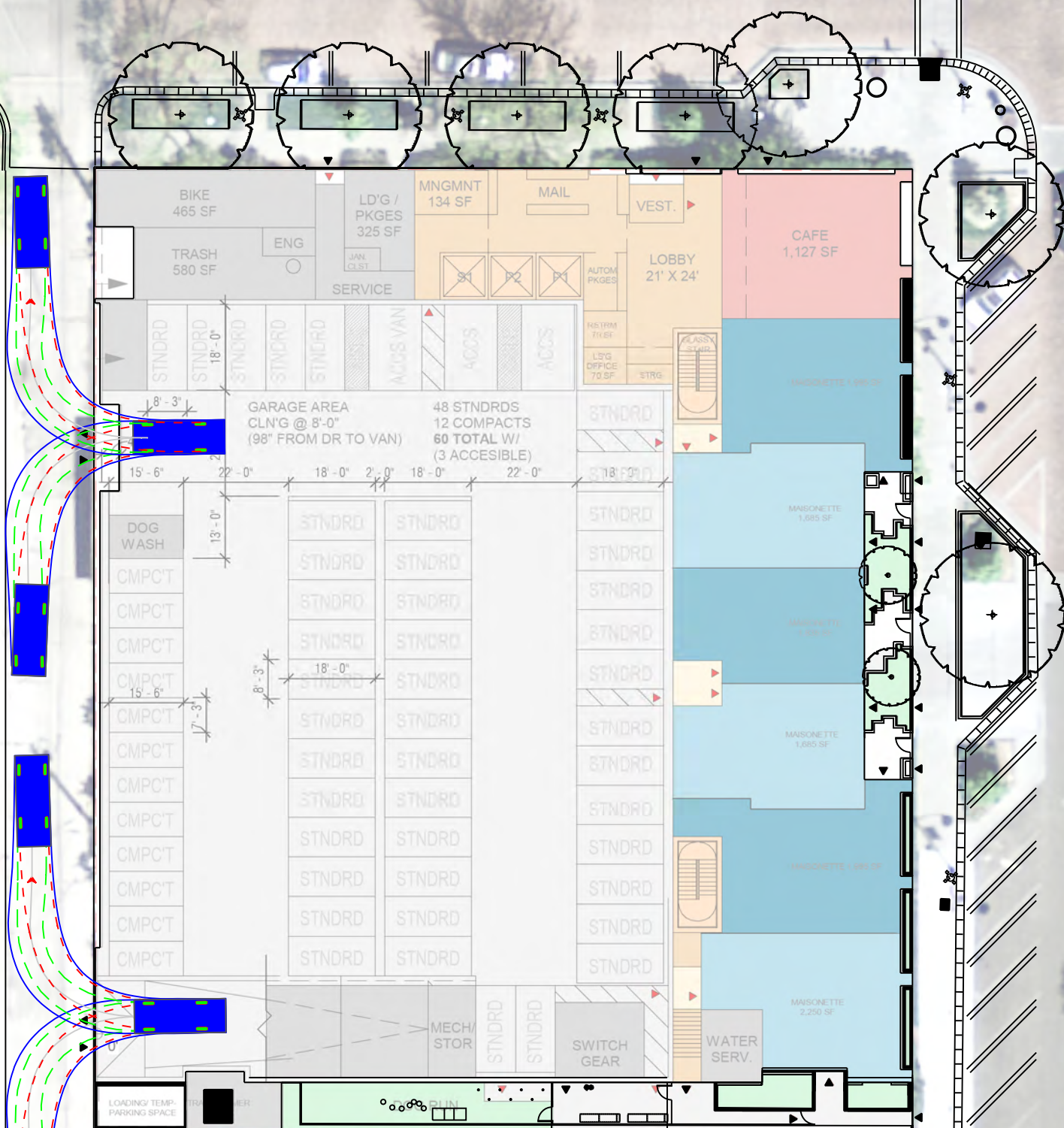
- Body of Vehicle - —
- Front Tires Path - —
- Rear Tires Path - —



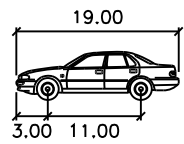
SCALE: 1" = 30'

PLEASANT STREET

MARION STREET



DESIGN VEHICLE



| Passenger Vehicle | Feet |
|-------------------|--------|
| Width | : 7.00 |
| Track | : 6.00 |
| Lock to Lock Time | : 6.00 |
| Steering Angle | : 31.5 |

| | |
|--------------------|--------------------------------------|
| Body of Vehicle - | — |
| Front Tires Path - | — |
| Rear Tires Path - | — |

Census Data

Chicago

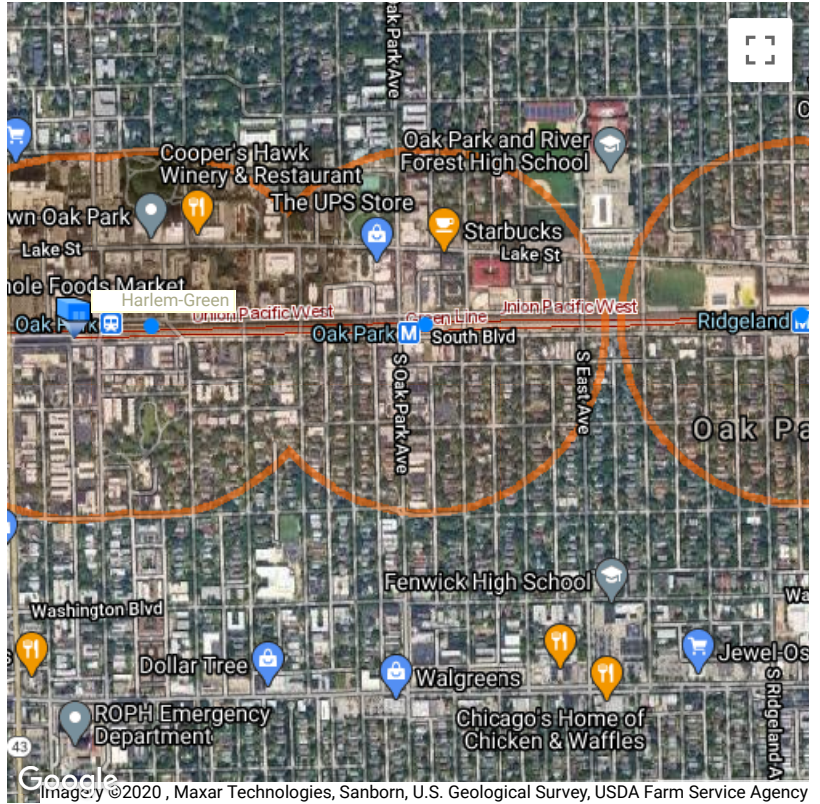
Transit Zone: .25 mile .5 mile Smart Zoom

Selected Station Station Existing Transit Potential Transit Transit Region

TOD Report

View as: [Table](#) | [List](#) Download as: [Word](#) | [Excel](#) | [CSV](#)

| Chicago Transit Region: | |
|---|------------|
| Average Travel Time to Work: ⁽³⁾ | 31.34 |
| Median Household Income 2009: ⁽⁴⁾ | 61,502 |
| Percent who take public transportation 2009: ⁽⁵⁾ | 12.40 |
| Percent who bicycle 2009: ⁽⁶⁾ | 0.55 |
| Percent who walk 2009: ⁽⁷⁾ | 3.16 |
| Percent who take public transportation, bicycle or walk 2009: ⁽⁸⁾ | 16.10 |
| Average number of vehicles available per household 2009: ⁽⁹⁾ | 1.62 |
| Average number of vehicles available per household 2009: Owner Occupied: ⁽¹⁰⁾ | 1.91 |
| Average number of vehicles available per household 2009: Renter Occupied: ⁽¹¹⁾ | 1.02 |
| Percent of households with 0 or 1 vehicle available 2009: ⁽¹²⁾ | 47.62 |
| Median Year Structure Built 2009: ⁽¹³⁾ | 1,965 |
| Station .25 Mile Transit Zone: CTA Green Line; Harlem-Green | |
| Year Opened: ⁽¹⁾ | Pre-2000 |
| Latitude: ⁽²⁾ | 41.886848 |
| Longitude: ⁽²⁾ | -87.803176 |
| Average Travel Time to Work: ⁽³⁾ | 30.62 |
| Median Household Income 2009: ⁽⁴⁾ | 50,046 |
| Percent who take public transportation 2009: ⁽⁵⁾ | 31.17 |
| Percent who bicycle 2009: ⁽⁶⁾ | 0.71 |
| Percent who walk 2009: ⁽⁷⁾ | 9.30 |
| Percent who take public transportation, bicycle or walk 2009: ⁽⁸⁾ | 41.18 |
| Average number of vehicles available per household 2009: ⁽⁹⁾ | 0.94 |
| Average number of vehicles available per household 2009: Owner Occupied: ⁽¹⁰⁾ | 1.36 |
| Average number of vehicles available per household 2009: Renter Occupied: ⁽¹¹⁾ | 0.70 |
| Percent of households with 0 or 1 vehicle available 2009: ⁽¹²⁾ | 79.12 |
| Median Year Structure Built 2009: ⁽¹³⁾ | 1,958 |



¹ The year in which this station opened. This value is intended to inform the analysis of available statistics, and therefore all stations open prior to 2000 report as "Pre-2000", the year of the earliest available statistic.

² Station location, current as of October 1, 2020. Station locations are updated (as necessary) on a quarterly basis which may result in changes in aggregated data.

³ American Community Survey 2005-2009 5-Year Estimates b08013_001 / b08132_001 aggregated from Census 2009 Tracts

⁴ American Community Survey 2005-2009 5-Year Estimates b19013_001 aggregated from Census 2009 Block Groups

⁵ American Community Survey 2005-2009 5-Year Estimates (b08301_010) / (b08301_001) aggregated from Census 2009 Block Groups

⁶ American Community Survey 2005-2009 5-Year Estimates (b08301_018) / (b08301_001) aggregated from Census 2009 Block Groups

⁷ American Community Survey 2005-2009 5-Year Estimates (b08301_019) / (b08301_001) aggregated from Census 2009 Block Groups

⁸ American Community Survey 2005-2009 5-Year Estimates (b08301_010 + b08301_018 + b08301_019) / (b08301_001) aggregated from Census 2009 Block Groups

⁹ American Community Survey 2005-2009 5-Year Estimates b25046_001 / b25044_001 aggregated from Census 2009 Block Groups

¹⁰ American Community Survey 2005-2009 5-Year Estimates b25046_002 / b25044_002 aggregated from Census 2009 Block Groups

¹¹ American Community Survey 2005-2009 5-Year Estimates b25046_003 / b25044_009 aggregated from Census 2009 Block Groups

¹² American Community Survey 2005-2009 5-Year Estimates (b25044_003+b25044_004+b25044_010+b25044_011) / b25044_001 aggregated from Census 2009 Block Groups

¹³ American Community Survey 2005-2009 5-Year Estimates b25035_001 aggregated from Census 2009 Block Groups

ITE Trip Generation Sheets

Multifamily Housing (Low-Rise) (220)

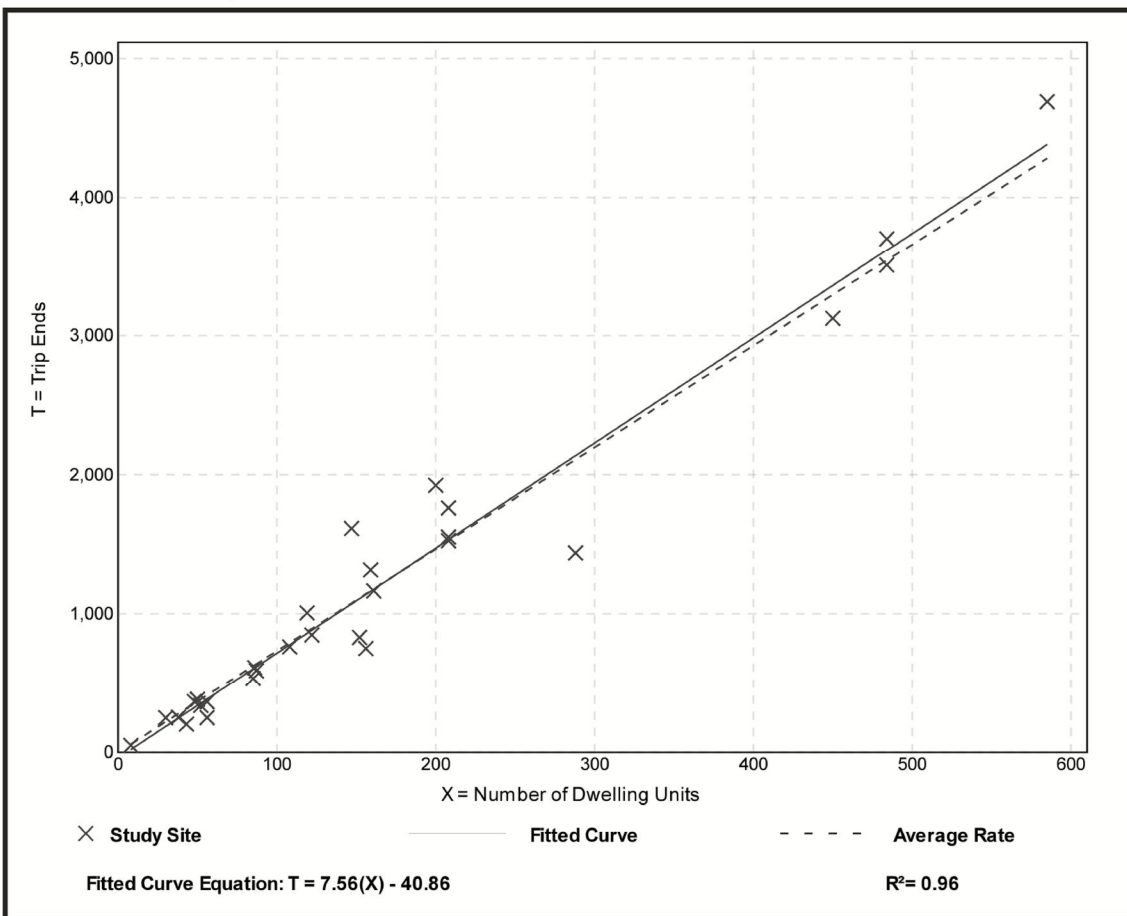
Vehicle Trip Ends vs: Dwelling Units
On a: Weekday

Setting/Location: General Urban/Suburban
 Number of Studies: 29
 Avg. Num. of Dwelling Units: 168
 Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Dwelling Unit

| Average Rate | Range of Rates | Standard Deviation |
|--------------|----------------|--------------------|
| 7.32 | 4.45 - 10.97 | 1.31 |

Data Plot and Equation



Multifamily Housing (Low-Rise)

(220)

Vehicle Trip Ends vs: Dwelling Units
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.

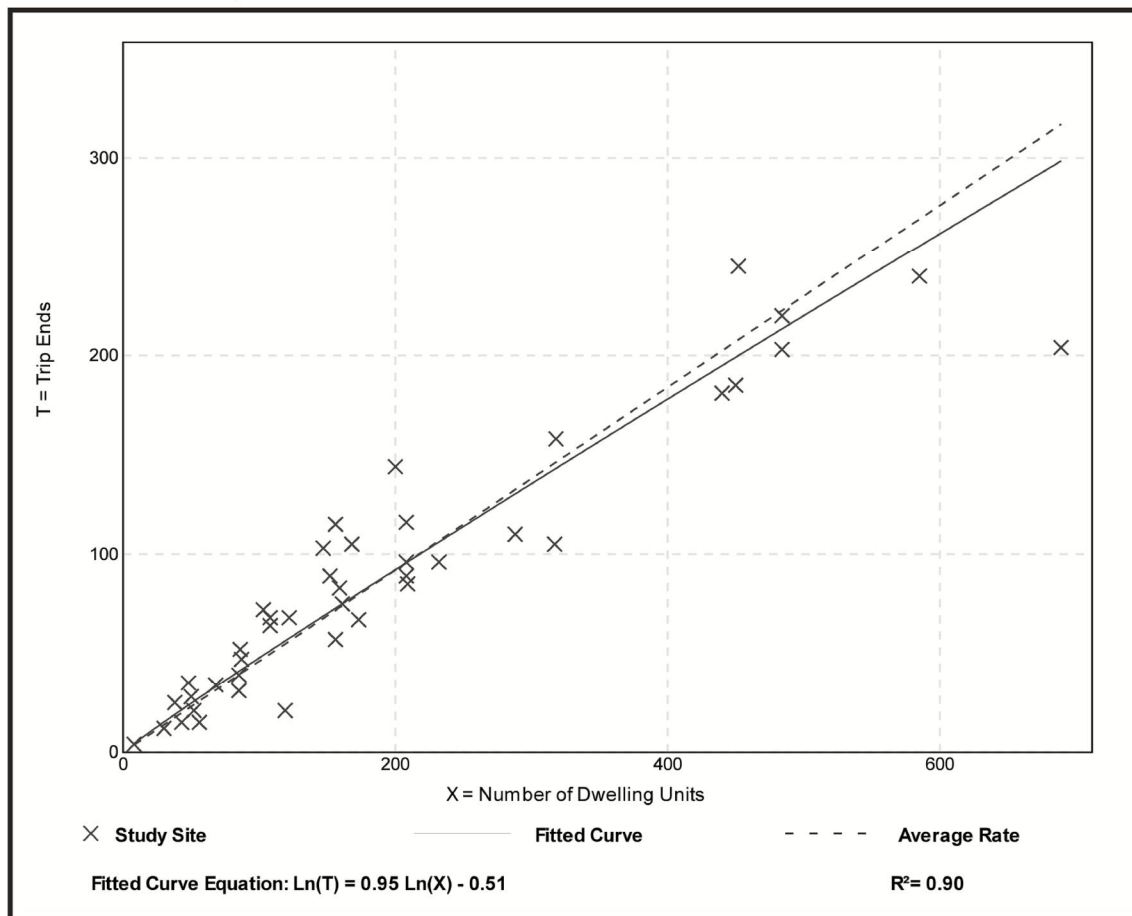
Setting/Location: General Urban/Suburban

Number of Studies: 42
 Avg. Num. of Dwelling Units: 199
 Directional Distribution: 23% entering, 77% exiting

Vehicle Trip Generation per Dwelling Unit

| Average Rate | Range of Rates | Standard Deviation |
|--------------|----------------|--------------------|
| 0.46 | 0.18 - 0.74 | 0.12 |

Data Plot and Equation



Multifamily Housing (Low-Rise) (220)

Vehicle Trip Ends vs: Dwelling Units
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.

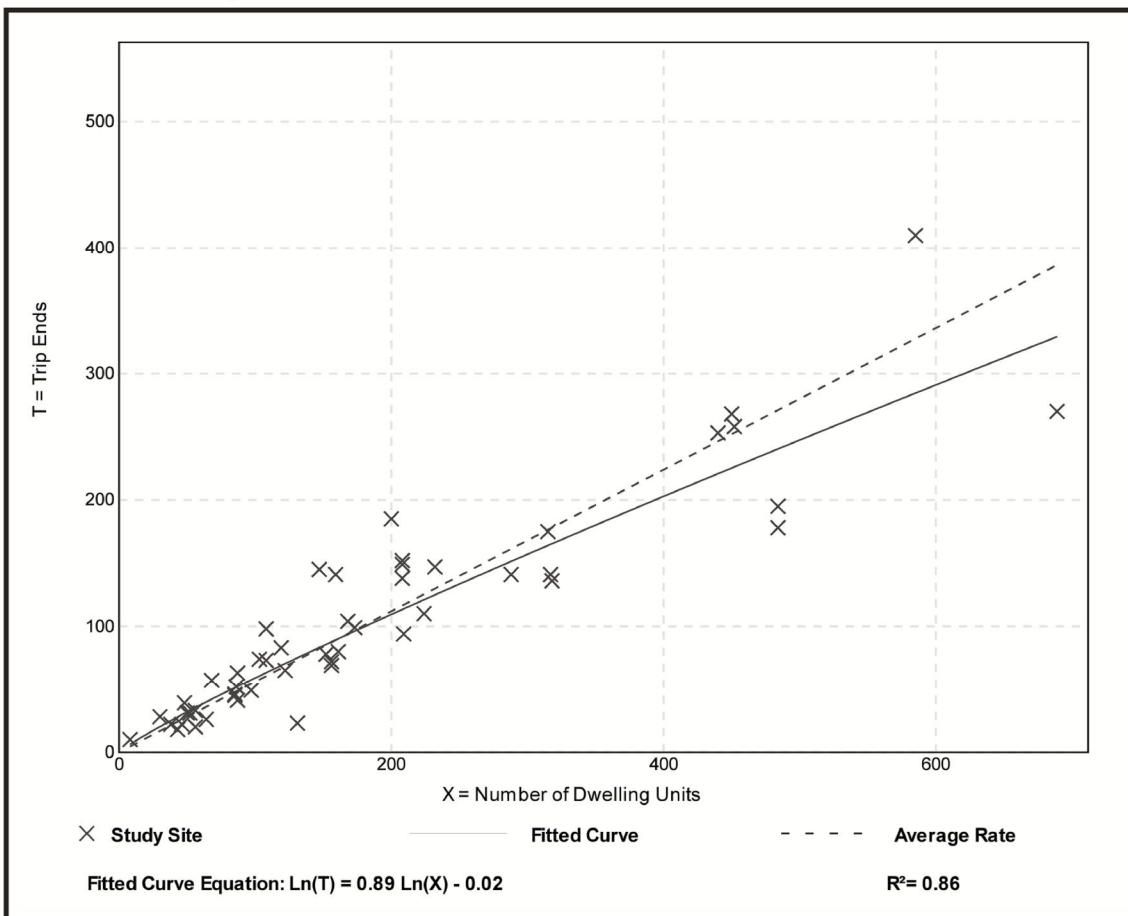
Setting/Location: General Urban/Suburban

Number of Studies: 50
 Avg. Num. of Dwelling Units: 187
 Directional Distribution: 63% entering, 37% exiting

Vehicle Trip Generation per Dwelling Unit

| Average Rate | Range of Rates | Standard Deviation |
|--------------|----------------|--------------------|
| 0.56 | 0.18 - 1.25 | 0.16 |

Data Plot and Equation



Multifamily Housing (Low-Rise) (220)

Vehicle Trip Ends vs: Dwelling Units
On a: **Saturday, Peak Hour of Generator**

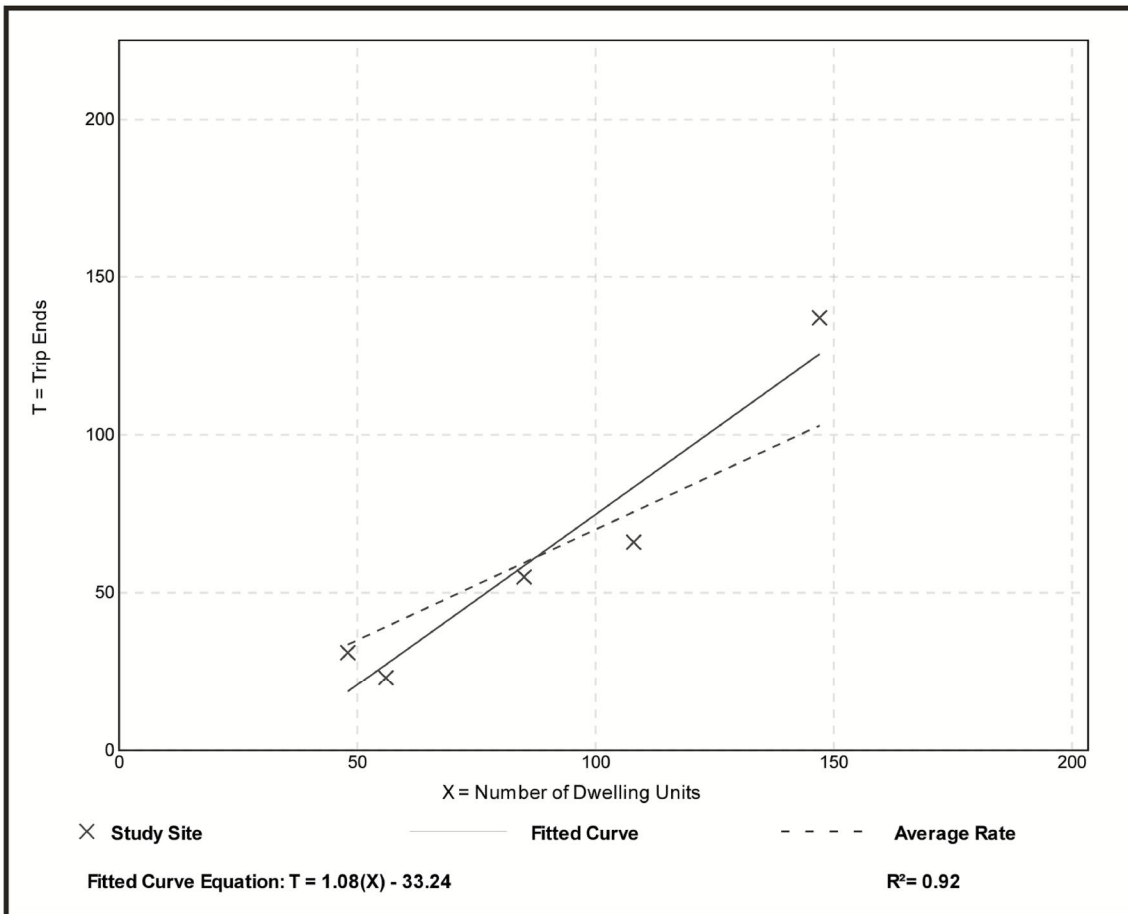
Setting/Location: General Urban/Suburban
Number of Studies: 5
Avg. Num. of Dwelling Units: 89
Directional Distribution: Not Available

Vehicle Trip Generation per Dwelling Unit

| Average Rate | Range of Rates | Standard Deviation |
|--------------|----------------|--------------------|
| 0.70 | 0.41 - 0.93 | 0.20 |

Data Plot and Equation

Caution – Small Sample Size



Multifamily Housing (Mid-Rise) (221)

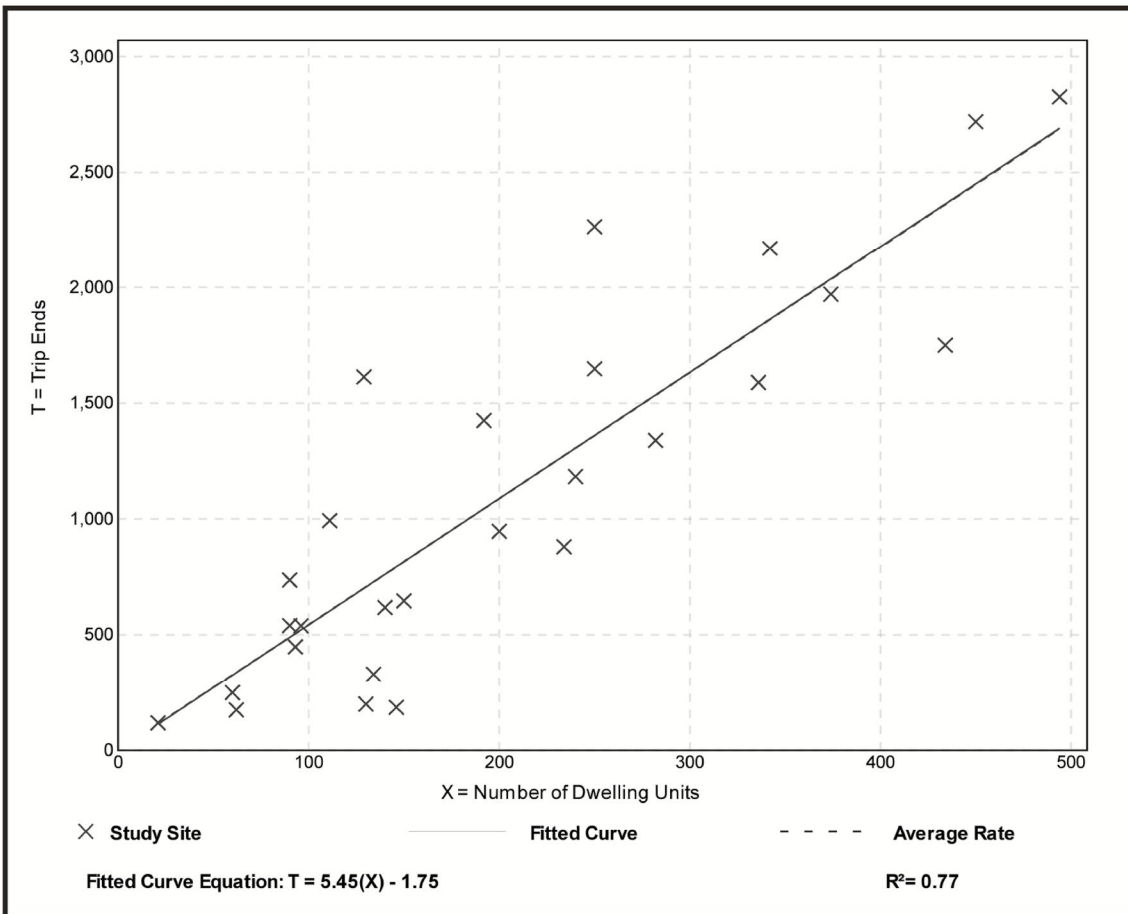
Vehicle Trip Ends vs: Dwelling Units
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 27
Avg. Num. of Dwelling Units: 205
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Dwelling Unit

| Average Rate | Range of Rates | Standard Deviation |
|--------------|----------------|--------------------|
| 5.44 | 1.27 - 12.50 | 2.03 |

Data Plot and Equation



Multifamily Housing (Mid-Rise) (221)

Vehicle Trip Ends vs: Dwelling Units
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.

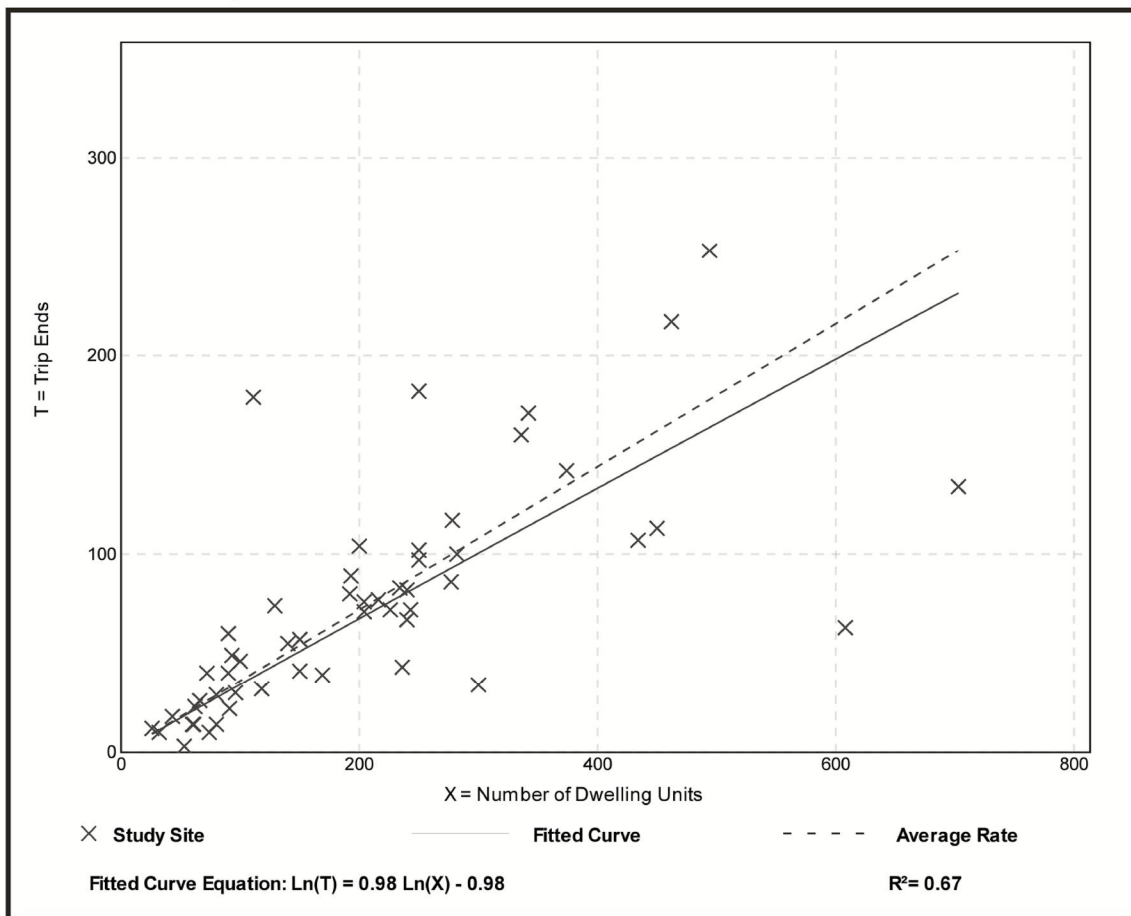
Setting/Location: General Urban/Suburban

Number of Studies: 53
 Avg. Num. of Dwelling Units: 207
 Directional Distribution: 26% entering, 74% exiting

Vehicle Trip Generation per Dwelling Unit

| Average Rate | Range of Rates | Standard Deviation |
|--------------|----------------|--------------------|
| 0.36 | 0.06 - 1.61 | 0.19 |

Data Plot and Equation



Multifamily Housing (Mid-Rise) (221)

Vehicle Trip Ends vs: Dwelling Units
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.

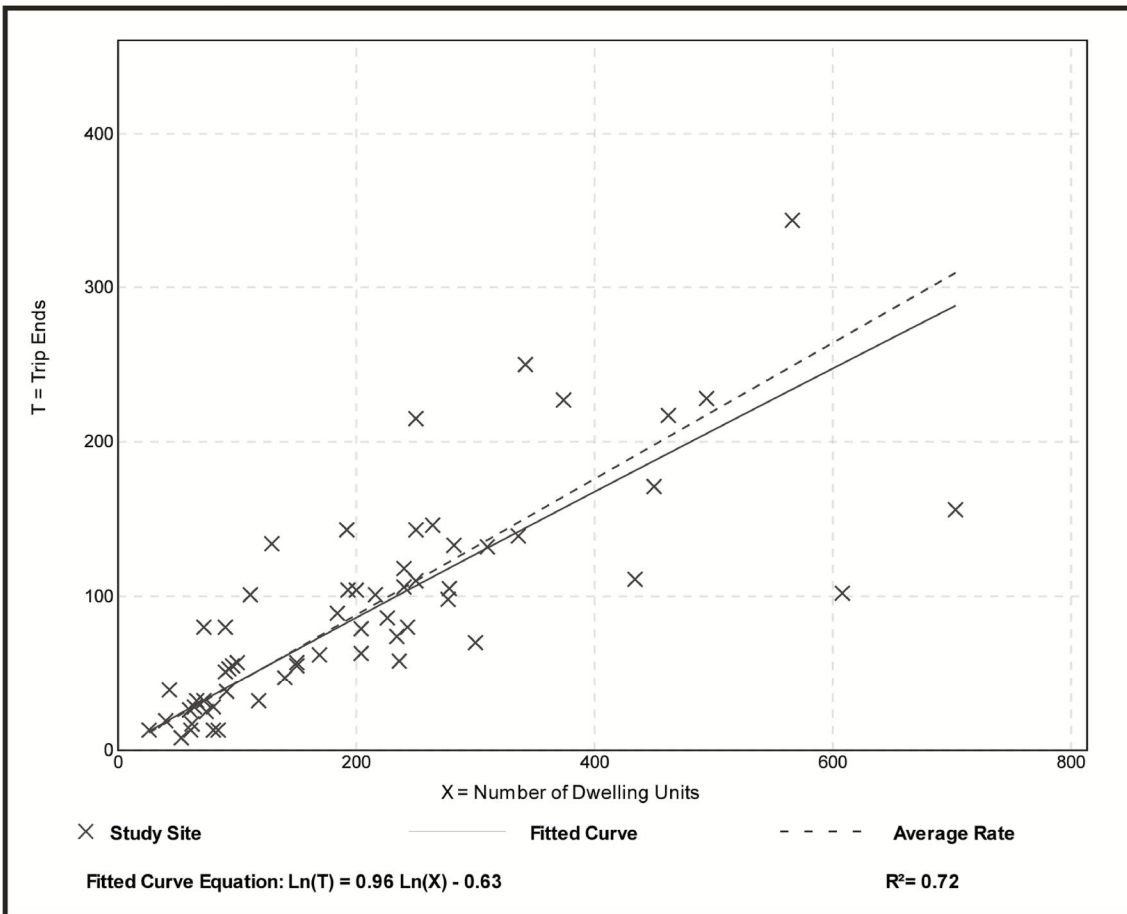
Setting/Location: General Urban/Suburban

Number of Studies: 60
 Avg. Num. of Dwelling Units: 208
 Directional Distribution: 61% entering, 39% exiting

Vehicle Trip Generation per Dwelling Unit

| Average Rate | Range of Rates | Standard Deviation |
|--------------|----------------|--------------------|
| 0.44 | 0.15 - 1.11 | 0.19 |

Data Plot and Equation



Multifamily Housing (Mid-Rise) (221)

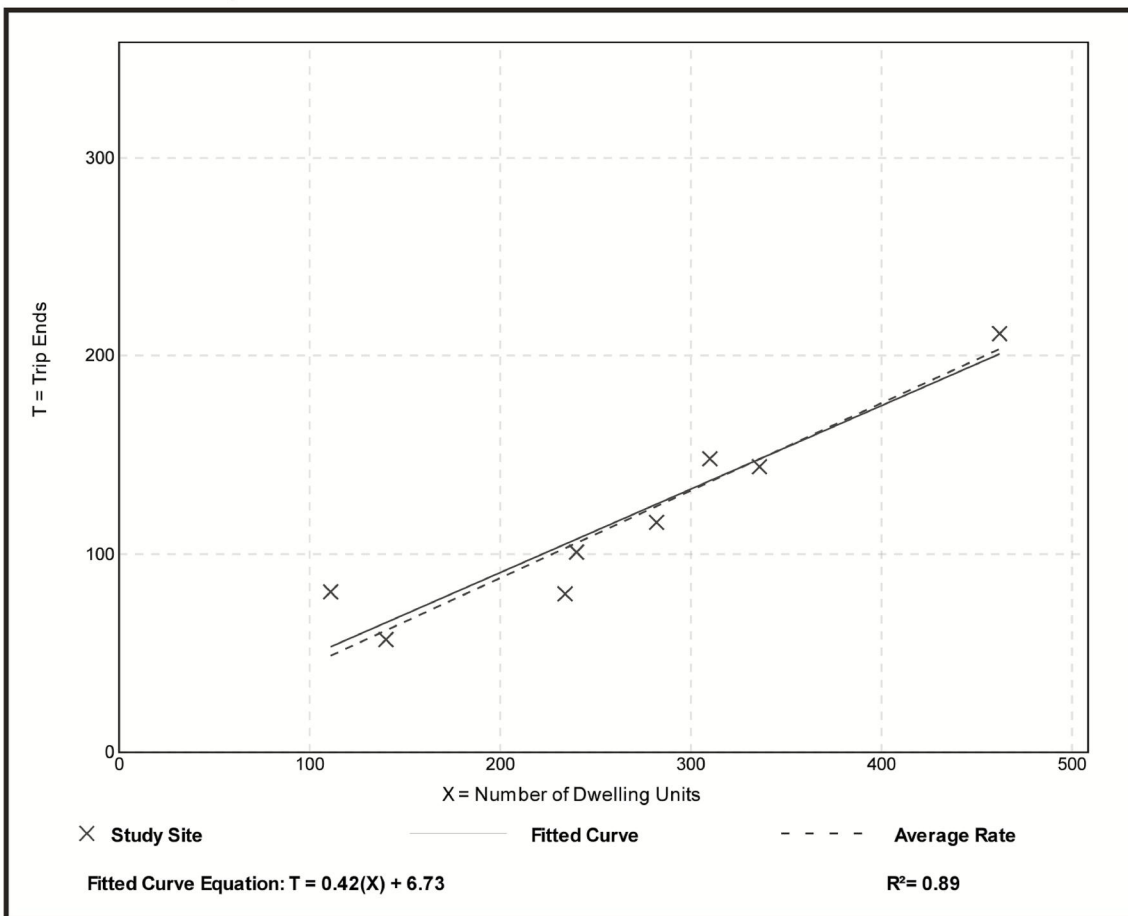
Vehicle Trip Ends vs: Dwelling Units
On a: **Saturday, Peak Hour of Generator**

Setting/Location: General Urban/Suburban
Number of Studies: 8
Avg. Num. of Dwelling Units: 264
Directional Distribution: 49% entering, 51% exiting

Vehicle Trip Generation per Dwelling Unit

| Average Rate | Range of Rates | Standard Deviation |
|--------------|----------------|--------------------|
| 0.44 | 0.34 - 0.73 | 0.08 |

Data Plot and Equation



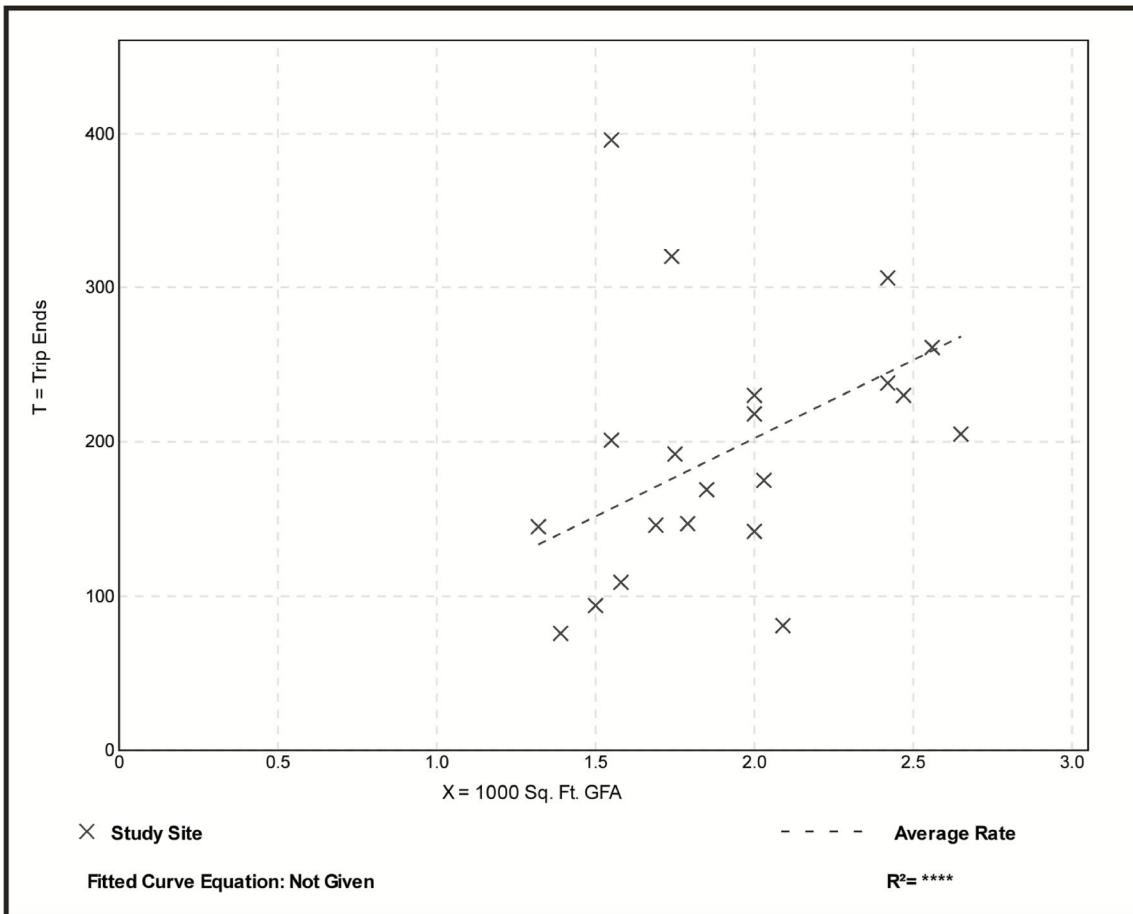
Coffee/Donut Shop without Drive-Through Window (936)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: General Urban/Suburban
 Number of Studies: 21
 1000 Sq. Ft. GFA: 2
 Directional Distribution: 51% entering, 49% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

| Average Rate | Range of Rates | Standard Deviation |
|--------------|----------------|--------------------|
| 101.14 | 38.76 - 255.48 | 43.44 |

Data Plot and Equation



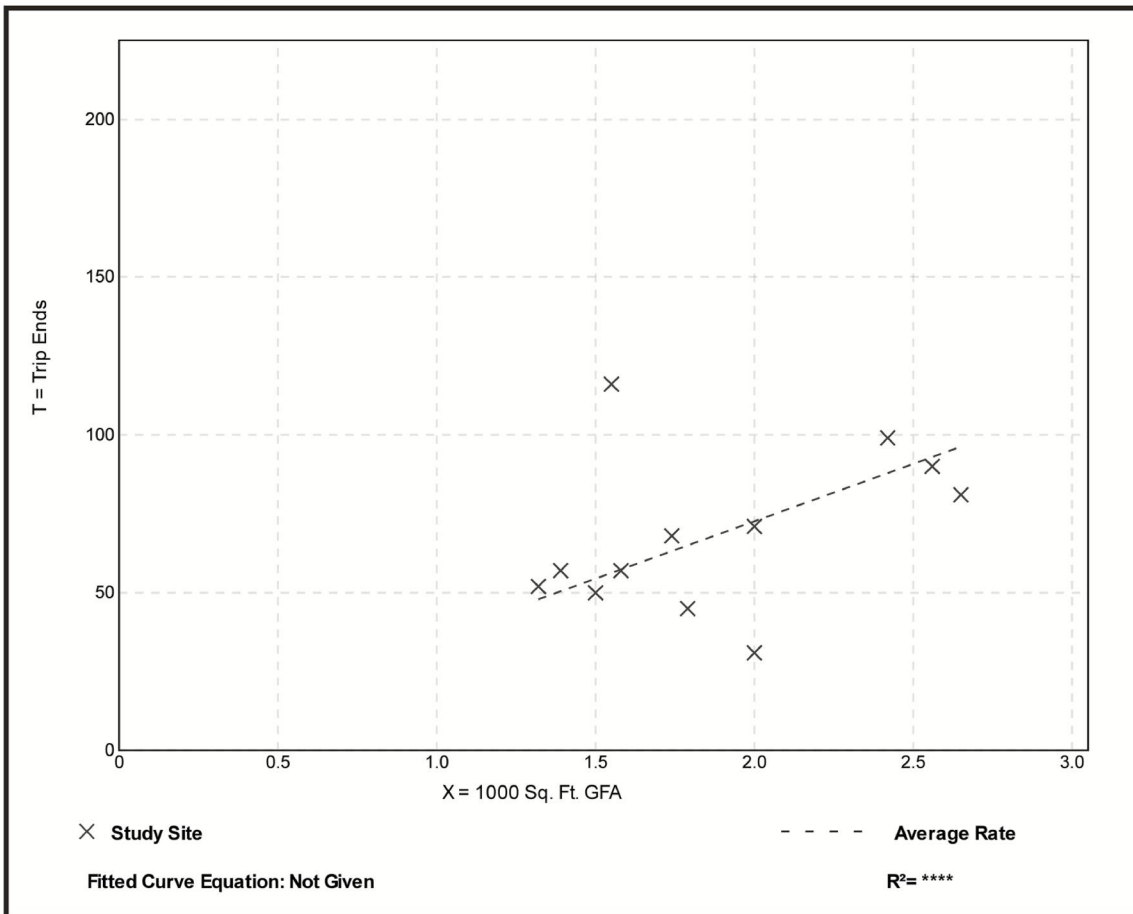
Coffee/Donut Shop without Drive-Through Window (936)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: General Urban/Suburban
 Number of Studies: 12
 1000 Sq. Ft. GFA: 2
 Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

| Average Rate | Range of Rates | Standard Deviation |
|--------------|----------------|--------------------|
| 36.31 | 15.50 - 74.84 | 13.22 |

Data Plot and Equation



Coffee/Donut Shop without Drive-Through Window (936)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Saturday, Peak Hour of Generator

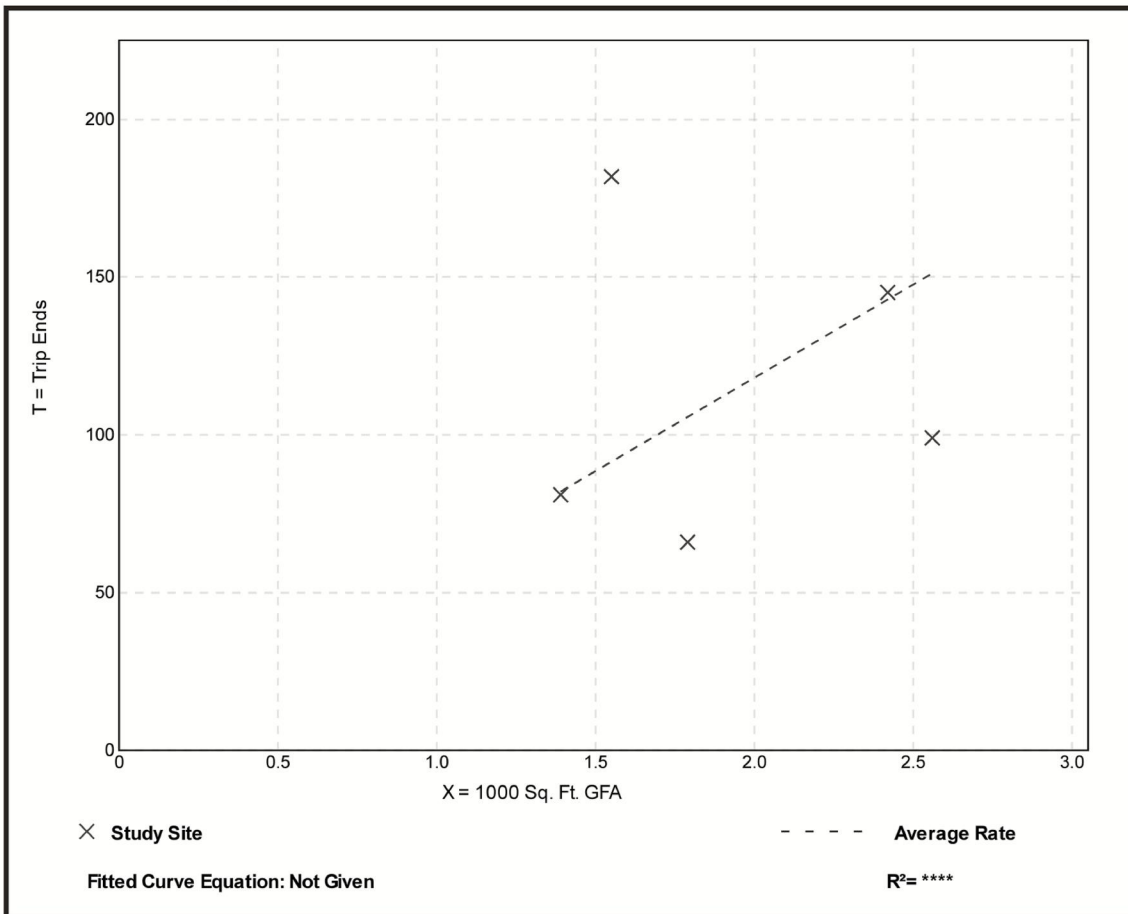
Setting/Location: General Urban/Suburban
Number of Studies: 5
1000 Sq. Ft. GFA: 2
Directional Distribution: 49% entering, 51% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

| Average Rate | Range of Rates | Standard Deviation |
|--------------|----------------|--------------------|
| 59.01 | 36.87 - 117.42 | 30.50 |

Data Plot and Equation

Caution – Small Sample Size



CMAP Projections Letter



Chicago Metropolitan Agency for Planning

233 South Wacker Drive
Suite 800
Chicago, Illinois 60606

312 454 0400
www.cmap.illinois.gov

October 1, 2020

Elise Purguette
Traffic Engineer
Kenig, Lindgren, O'Hara and Aboona, Inc.
9575 West Higgins Road
Suite 400
Rosemont IL, 60018

Subject: *Harlem Avenue - Randolph Street - Marion Street*
IDOT

Dear Ms. Purguette:

In response to a request made on your behalf and dated September 30, 2020, we have developed year 2050 average daily traffic (ADT) projections for the subject location.

| ROAD SEGMENT | Current Volumes | Year 2050 ADT |
|--|-----------------|---------------|
| Harlem Ave from South Ave to Randolph St | 35,300 | 38,800 |
| Harlem Ave south of Randolph St | 35,400 | 38,900 |
| Harlem Ave north of South Blvd | 35,200 | 38,700 |
| Circle Ave (@ Harlem Ave) | 4,550 | 5,000 |
| Randolph St (@ Harlem Ave) | 8,550 | 9,400 |
| Marion Street | 2,200 | 2,420 |

Traffic projections are developed using existing ADT data provided in the request letter and the results from the March 2020 CMAP Travel Demand Analysis. The regional travel model uses CMAP 2050 socioeconomic projections and assumes the implementation of the ON TO 2050 Comprehensive Regional Plan for the Northeastern Illinois area. The provision of this data in support of your request does not constitute a CMAP endorsement of the proposed development or any subsequent developments.

If you have any questions, please call me at (312) 386-8806.

Sincerely,

Jose Rodriguez, PTP, AICP
Senior Planner, Research & Analysis

cc: Quigley (IDOT)
2020_TrafficForecast(OakPark)\ck-100-20\ck-100-20.docx

Level of Service Criteria

LEVEL OF SERVICE CRITERIA











| Signalized Intersections | | |
|-----------------------------------|--|--|
| Level of Service | Interpretation | Average Control Delay (seconds per vehicle) |
| A | Favorable progression. Most vehicles arrive during the green indication and travel through the intersection without stopping. | ≤10 |
| B | Good progression, with more vehicles stopping than for Level of Service A. | >10 - 20 |
| C | Individual cycle failures (i.e., one or more queued vehicles are not able to depart as a result of insufficient capacity during the cycle) may begin to appear. Number of vehicles stopping is significant, although many vehicles still pass through the intersection without stopping. | >20 - 35 |
| D | The volume-to-capacity ratio is high and either progression is ineffective or the cycle length is too long. Many vehicles stop and individual cycle failures are noticeable. | >35 - 55 |
| E | Progression is unfavorable. The volume-to-capacity ratio is high and the cycle length is long. Individual cycle failures are frequent. | >55 - 80 |
| F | The volume-to-capacity ratio is very high, progression is very poor, and the cycle length is long. Most cycles fail to clear the queue. | >80.0 |
| Unsignalized Intersections | | |
| Level of Service | Average Total Delay (SEC/VEH) | |
| A | 0 - 10 | |
| B | > 10 - 15 | |
| C | > 15 - 25 | |
| D | > 25 - 35 | |
| E | > 35 - 50 | |
| F | > 50 | |

Source: *Highway Capacity Manual*, 2010.

Capacity Analysis Summary Sheets

Lanes, Volumes, Timings
 1: Harlem Avenue & South Boulevard

01/28/2021

| |  |  |  |  |  |  |
|-------------------------|---|---|---|---|---|---|
| Lane Group | WBL | WBR | NBT | NBR | SBL | SBT |
| Lane Configurations |  |  |  | | |  |
| Traffic Volume (vph) | 138 | 76 | 1223 | 16 | 0 | 1383 |
| Future Volume (vph) | 138 | 76 | 1223 | 16 | 0 | 1383 |
| Ideal Flow (vphp) | 1900 | 1900 | 1900 | 1900 | 1900 | 2000 |
| Storage Length (ft) | 110 | 0 | | 0 | 0 | |
| Storage Lanes | 1 | 1 | | 0 | 0 | |
| Taper Length (ft) | 145 | | | | 25 | |
| Lane Util. Factor | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 |
| Ped Bike Factor | 0.93 | 0.97 | 1.00 | | | |
| Frt | | 0.850 | 0.998 | | | |
| Flt Protected | 0.950 | | | | | |
| Satd. Flow (prot) | 1752 | 1225 | 3363 | 0 | 0 | 3623 |
| Flt Permitted | 0.950 | | | | | |
| Satd. Flow (perm) | 1629 | 1189 | 3363 | 0 | 0 | 3623 |
| Right Turn on Red | | No | | No | | |
| Satd. Flow (RTOR) | | | | | | |
| Link Speed (mph) | 30 | | 30 | | | 30 |
| Link Distance (ft) | 465 | | 176 | | | 249 |
| Travel Time (s) | 10.6 | | 4.0 | | | 5.7 |
| Confl. Peds. (#/hr) | 47 | 11 | | 24 | 24 | |
| Confl. Bikes (#/hr) | | 2 | | | | |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Heavy Vehicles (%) | 3% | 14% | 7% | 7% | 0% | 3% |
| Bus Blockages (#/hr) | 0 | 0 | 0 | 0 | 0 | 9 |
| Parking (#/hr) | | 7 | | | | |
| Shared Lane Traffic (%) | | | | | | |
| Lane Group Flow (vph) | 150 | 83 | 1346 | 0 | 0 | 1503 |
| Turn Type | Prot | Perm | NA | | | NA |
| Protected Phases | 8 | | 2 | | | 6 |
| Permitted Phases | | 8 | | | | |
| Detector Phase | 8 | 8 | 2 | | | 6 |
| Switch Phase | | | | | | |
| Minimum Initial (s) | 8.0 | 8.0 | 15.0 | | | 15.0 |
| Minimum Split (s) | 31.0 | 31.0 | 28.0 | | | 29.0 |
| Total Split (s) | 38.0 | 38.0 | 87.0 | | | 87.0 |
| Total Split (%) | 30.4% | 30.4% | 69.6% | | | 69.6% |
| Yellow Time (s) | 4.0 | 4.0 | 4.0 | | | 4.0 |
| All-Red Time (s) | 2.0 | 2.0 | 2.0 | | | 2.0 |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | | | 0.0 |
| Total Lost Time (s) | 6.0 | 6.0 | 6.0 | | | 6.0 |
| Lead/Lag | | | | | | |
| Lead-Lag Optimize? | | | | | | |
| Recall Mode | None | None | C-Min | | | C-Min |
| Act Effect Green (s) | 16.9 | 16.9 | 96.1 | | | 96.1 |
| Actuated g/C Ratio | 0.14 | 0.14 | 0.77 | | | 0.77 |
| v/c Ratio | 0.63 | 0.52 | 0.52 | | | 0.54 |
| Control Delay | 62.6 | 60.8 | 12.8 | | | 7.0 |
| Queue Delay | 0.0 | 0.0 | 0.0 | | | 0.0 |
| Total Delay | 62.6 | 60.8 | 12.8 | | | 7.0 |

Lanes, Volumes, Timings
 1: Harlem Avenue & South Boulevard

01/28/2021

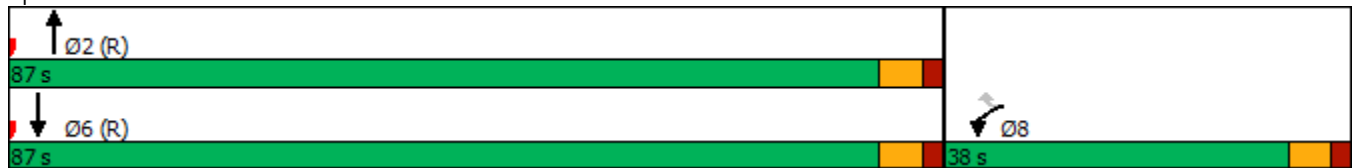


| Lane Group | WBL | WBR | NBT | NBR | SBL | SBT |
|-------------------------|------|------|------|-----|-----|------|
| LOS | E | E | B | | | A |
| Approach Delay | 61.9 | | 12.8 | | | 7.0 |
| Approach LOS | E | | B | | | A |
| Queue Length 50th (ft) | 116 | 63 | 445 | | | 215 |
| Queue Length 95th (ft) | 179 | 112 | 578 | | | 323 |
| Internal Link Dist (ft) | 385 | | 96 | | | 169 |
| Turn Bay Length (ft) | 110 | | | | | |
| Base Capacity (vph) | 448 | 304 | 2585 | | | 2784 |
| Starvation Cap Reductn | 0 | 0 | 0 | | | 0 |
| Spillback Cap Reductn | 0 | 0 | 0 | | | 0 |
| Storage Cap Reductn | 0 | 0 | 0 | | | 0 |
| Reduced v/c Ratio | 0.33 | 0.27 | 0.52 | | | 0.54 |

Intersection Summary

| | |
|-----------------------------------|--|
| Area Type: | Other |
| Cycle Length: | 125 |
| Actuated Cycle Length: | 125 |
| Offset: | 103 (82%), Referenced to phase 2:NBT and 6:SBT, Start of Green |
| Natural Cycle: | 65 |
| Control Type: | Actuated-Coordinated |
| Maximum v/c Ratio: | 0.63 |
| Intersection Signal Delay: | 13.7 |
| Intersection LOS: | B |
| Intersection Capacity Utilization | 58.0% |
| ICU Level of Service | B |
| Analysis Period (min) | 15 |

Splits and Phases: 1: Harlem Avenue & South Boulevard



Lanes, Volumes, Timings
2: Harlem Avenue & Randolph Street

10/06/2020



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---------------------------|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 128 | 146 | 117 | 74 | 108 | 24 | 82 | 1136 | 24 | 31 | 1301 | 81 |
| Future Volume (vph) | 128 | 146 | 117 | 74 | 108 | 24 | 82 | 1136 | 24 | 31 | 1301 | 81 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 2000 | 1900 | 1900 | 2000 | 1900 |
| Lane Width (ft) | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 |
| Grade (%) | | 0% | | | 0% | | | 0% | | | 0% | |
| Storage Length (ft) | 40 | | 0 | 50 | | 0 | 165 | | 0 | 85 | | 0 |
| Storage Lanes | 1 | | 0 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 90 | | | 75 | | | 120 | | | 90 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 |
| Ped Bike Factor | 0.99 | 0.99 | | 0.99 | 0.99 | | | 1.00 | | | 1.00 | |
| Fr _t | | 0.933 | | | 0.973 | | | 0.997 | | | 0.991 | |
| Fl _t Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1787 | 1724 | 0 | 1805 | 1807 | 0 | 1736 | 3539 | 0 | 1736 | 3577 | 0 |
| Fl _t Permitted | 0.526 | | | 0.324 | | | 0.079 | | | 0.163 | | |
| Satd. Flow (perm) | 976 | 1724 | 0 | 611 | 1807 | 0 | 144 | 3539 | 0 | 298 | 3577 | 0 |
| Right Turn on Red | | | No | | | No | | | No | | | No |
| Satd. Flow (RTOR) | | | | | | | | | | | | |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 454 | | | 257 | | | 242 | | | 813 | |
| Travel Time (s) | | 10.3 | | | 5.8 | | | 5.5 | | | 18.5 | |
| Confl. Peds. (#/hr) | 12 | | 10 | 10 | | 12 | 6 | | 6 | 6 | | 6 |
| Confl. Bikes (#/hr) | | | | | | 6 | | | | | | |
| Peak Hour Factor | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| Growth Factor | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| Heavy Vehicles (%) | 1% | 2% | 1% | 0% | 2% | 0% | 4% | 7% | 5% | 4% | 3% | 6% |
| Bus Blockages (#/hr) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 0 |
| Parking (#/hr) | | | | | | | | | | | | |
| Mid-Block Traffic (%) | | 0% | | | 0% | | | 0% | | | 0% | |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 133 | 274 | 0 | 77 | 138 | 0 | 85 | 1208 | 0 | 32 | 1439 | 0 |
| Turn Type | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | | 8 | | | 2 | | | 6 | | |
| Detector Phase | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 3.0 | 8.0 | | 3.0 | 8.0 | | 3.0 | 15.0 | | 3.0 | 15.0 | |
| Minimum Split (s) | 9.5 | 30.0 | | 9.5 | 32.0 | | 9.5 | 29.0 | | 10.5 | 33.0 | |
| Total Split (s) | 14.0 | 30.0 | | 14.0 | 30.0 | | 17.0 | 67.0 | | 14.0 | 64.0 | |
| Total Split (%) | 11.2% | 24.0% | | 11.2% | 24.0% | | 13.6% | 53.6% | | 11.2% | 51.2% | |
| Yellow Time (s) | 3.5 | 4.0 | | 3.5 | 4.0 | | 3.5 | 4.0 | | 3.5 | 4.0 | |
| All-Red Time (s) | 0.0 | 2.0 | | 0.0 | 2.0 | | 0.0 | 2.0 | | 0.0 | 2.0 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | 3.5 | 6.0 | | 3.5 | 6.0 | | 3.5 | 6.0 | | 3.5 | 6.0 | |
| Lead/Lag | Lead | Lag | | Lead | Lag | | Lead | Lag | | Lead | Lag | |
| Lead-Lag Optimize? | Yes | Yes | | Yes | Yes | | Yes | Yes | | Yes | Yes | |
| Recall Mode | None | None | | None | None | | None | C-Min | | None | C-Min | |
| Act Effect Green (s) | 34.8 | 23.9 | | 32.1 | 20.7 | | 80.5 | 72.5 | | 76.0 | 67.1 | |
| Actuated g/C Ratio | 0.28 | 0.19 | | 0.26 | 0.17 | | 0.64 | 0.58 | | 0.61 | 0.54 | |

Lanes, Volumes, Timings
 2: Harlem Avenue & Randolph Street

10/06/2020

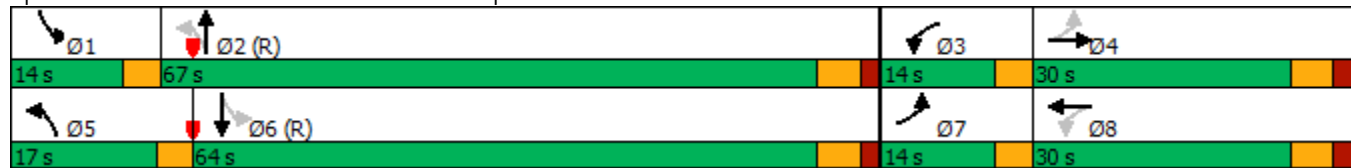


| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|------|------|-----|------|------|-----|------|------|-----|------|------|-----|
| v/c Ratio | 0.39 | 0.83 | | 0.32 | 0.46 | | 0.43 | 0.59 | | 0.13 | 0.75 | |
| Control Delay | 36.1 | 70.5 | | 34.5 | 51.3 | | 16.5 | 20.0 | | 12.5 | 33.6 | |
| Queue Delay | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | 36.1 | 70.5 | | 34.5 | 51.3 | | 16.5 | 20.0 | | 12.5 | 33.6 | |
| LOS | D | E | | C | D | | B | C | | B | C | |
| Approach Delay | | 59.2 | | | 45.3 | | | 19.8 | | | 33.1 | |
| Approach LOS | | E | | | D | | | B | | | C | |
| Queue Length 50th (ft) | 78 | 212 | | 44 | 99 | | 26 | 360 | | 13 | 571 | |
| Queue Length 95th (ft) | 131 | #357 | | 82 | 164 | | 49 | 446 | | m23 | 670 | |
| Internal Link Dist (ft) | | 374 | | | 177 | | | 162 | | | 733 | |
| Turn Bay Length (ft) | 40 | | | 50 | | | 165 | | | 85 | | |
| Base Capacity (vph) | 339 | 334 | | 265 | 346 | | 265 | 2051 | | 311 | 1918 | |
| Starvation Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Spillback Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Storage Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Reduced v/c Ratio | 0.39 | 0.82 | | 0.29 | 0.40 | | 0.32 | 0.59 | | 0.10 | 0.75 | |

Intersection Summary

Area Type: Other
 Cycle Length: 125
 Actuated Cycle Length: 125
 Offset: 51 (41%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
 Natural Cycle: 85
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.83
 Intersection Signal Delay: 31.9 Intersection LOS: C
 Intersection Capacity Utilization 78.6% ICU Level of Service D
 Analysis Period (min) 15
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Harlem Avenue & Randolph Street



HCM 6th AWSC
11: Maple Avenue & Pleasant Street

10/05/2020

| Intersection | |
|---------------------------|-----|
| Intersection Delay, s/veh | 7.6 |
| Intersection LOS | A |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 9 | 63 | 14 | 8 | 19 | 0 | 16 | 7 | 18 | 2 | 2 | 2 |
| Future Vol, veh/h | 9 | 63 | 14 | 8 | 19 | 0 | 16 | 7 | 18 | 2 | 2 | 2 |
| Peak Hour Factor | 0.67 | 0.67 | 0.67 | 0.67 | 0.67 | 0.67 | 0.67 | 0.67 | 0.67 | 0.67 | 0.67 | 0.67 |
| Heavy Vehicles, % | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 25 | 12 | 0 | 0 | 14 |
| Mvmt Flow | 13 | 94 | 21 | 12 | 28 | 0 | 24 | 10 | 27 | 3 | 3 | 3 |
| Number of Lanes | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |

| Approach | EB | WB | NB | SB |
|----------------------------|-----|-----|-----|-----|
| Opposing Approach | WB | EB | SB | NB |
| Opposing Lanes | 1 | 1 | 1 | 1 |
| Conflicting Approach Left | SB | NB | EB | WB |
| Conflicting Lanes Left | 1 | 1 | 1 | 1 |
| Conflicting Approach Right | NB | SB | WB | EB |
| Conflicting Lanes Right | 1 | 1 | 1 | 1 |
| HCM Control Delay | 7.7 | 7.4 | 7.4 | 7.2 |
| HCM LOS | A | A | A | A |

| Lane | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|------------------------|-------|-------|-------|-------|
| Vol Left, % | 39% | 10% | 30% | 33% |
| Vol Thru, % | 17% | 73% | 70% | 33% |
| Vol Right, % | 44% | 16% | 0% | 33% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 41 | 86 | 27 | 6 |
| LT Vol | 16 | 9 | 8 | 2 |
| Through Vol | 7 | 63 | 19 | 2 |
| RT Vol | 18 | 14 | 0 | 2 |
| Lane Flow Rate | 61 | 128 | 40 | 9 |
| Geometry Grp | 1 | 1 | 1 | 1 |
| Degree of Util (X) | 0.068 | 0.142 | 0.047 | 0.01 |
| Departure Headway (Hd) | 4.013 | 3.975 | 4.179 | 4.106 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 881 | 899 | 851 | 858 |
| Service Time | 2.089 | 2.016 | 2.235 | 2.195 |
| HCM Lane V/C Ratio | 0.069 | 0.142 | 0.047 | 0.01 |
| HCM Control Delay | 7.4 | 7.7 | 7.4 | 7.2 |
| HCM Lane LOS | A | A | A | A |
| HCM 95th-tile Q | 0.2 | 0.5 | 0.1 | 0 |

HCM 6th AWSC
12: Randolph Street & Marion Street

10/05/2020

| Intersection | |
|---------------------------|---|
| Intersection Delay, s/veh | 9 |
| Intersection LOS | A |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 26 | 156 | 24 | 6 | 164 | 12 | 17 | 39 | 4 | 5 | 49 | 35 |
| Future Vol, veh/h | 26 | 156 | 24 | 6 | 164 | 12 | 17 | 39 | 4 | 5 | 49 | 35 |
| Peak Hour Factor | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| Heavy Vehicles, % | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 29 | 173 | 27 | 7 | 182 | 13 | 19 | 43 | 4 | 6 | 54 | 39 |
| Number of Lanes | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |

| Approach | EB | WB | NB | SB |
|----------------------------|-----|-----|-----|-----|
| Opposing Approach | WB | EB | SB | NB |
| Opposing Lanes | 1 | 1 | 1 | 1 |
| Conflicting Approach Left | SB | NB | EB | WB |
| Conflicting Lanes Left | 1 | 1 | 1 | 1 |
| Conflicting Approach Right | NB | SB | WB | EB |
| Conflicting Lanes Right | 1 | 1 | 1 | 1 |
| HCM Control Delay | 9.3 | 9.1 | 8.6 | 8.5 |
| HCM LOS | A | A | A | A |

| Lane | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|------------------------|-------|-------|-------|-------|
| Vol Left, % | 28% | 13% | 3% | 6% |
| Vol Thru, % | 65% | 76% | 90% | 55% |
| Vol Right, % | 7% | 12% | 7% | 39% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 60 | 206 | 182 | 89 |
| LT Vol | 17 | 26 | 6 | 5 |
| Through Vol | 39 | 156 | 164 | 49 |
| RT Vol | 4 | 24 | 12 | 35 |
| Lane Flow Rate | 67 | 229 | 202 | 99 |
| Geometry Grp | 1 | 1 | 1 | 1 |
| Degree of Util (X) | 0.093 | 0.285 | 0.254 | 0.13 |
| Departure Headway (Hd) | 5.022 | 4.488 | 4.529 | 4.739 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 711 | 799 | 793 | 754 |
| Service Time | 3.071 | 2.523 | 2.564 | 2.785 |
| HCM Lane V/C Ratio | 0.094 | 0.287 | 0.255 | 0.131 |
| HCM Control Delay | 8.6 | 9.3 | 9.1 | 8.5 |
| HCM Lane LOS | A | A | A | A |
| HCM 95th-tile Q | 0.3 | 1.2 | 1 | 0.4 |

HCM 6th TWSC
3: Harlem Avenue & Circle Avenue

10/06/2020

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 0.2 | | | | | |
| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
| Lane Configurations | | ↗ | | ↑↑ | ↑↑ | |
| Traffic Vol, veh/h | 0 | 18 | 0 | 1239 | 1399 | 161 |
| Future Vol, veh/h | 0 | 18 | 0 | 1239 | 1399 | 161 |
| Conflicting Peds, #/hr | 11 | 47 | 76 | 0 | 0 | 76 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | 0 | - | - | - | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 0 | 14 | 0 | 7 | 3 | 2 |
| Mvmt Flow | 0 | 20 | 0 | 1347 | 1521 | 175 |

| Major/Minor | Minor2 | Major1 | Major2 |
|----------------------|--------|--------|--------|
| Conflicting Flow All | - | 971 | 0 |
| Stage 1 | - | - | - |
| Stage 2 | - | - | - |
| Critical Hdwy | - | 7.18 | - |
| Critical Hdwy Stg 1 | - | - | - |
| Critical Hdwy Stg 2 | - | - | - |
| Follow-up Hdwy | - | 3.44 | - |
| Pot Cap-1 Maneuver | 0 | 232 | 0 |
| Stage 1 | 0 | - | 0 |
| Stage 2 | 0 | - | 0 |
| Platoon blocked, % | | | - |
| Mov Cap-1 Maneuver | - | 206 | - |
| Mov Cap-2 Maneuver | - | - | - |
| Stage 1 | - | - | - |
| Stage 2 | - | - | - |

| Approach | EB | NB | SB |
|----------------------|------|----|----|
| HCM Control Delay, s | 24.3 | 0 | 0 |
| HCM LOS | C | | |

| Minor Lane/Major Mvmt | NBT EBLn1 | SBT | SBR |
|-----------------------|-----------|-----|-----|
| Capacity (veh/h) | - 206 | - | - |
| HCM Lane V/C Ratio | - 0.095 | - | - |
| HCM Control Delay (s) | - 24.3 | - | - |
| HCM Lane LOS | - C | - | - |
| HCM 95th %tile Q(veh) | - 0.3 | - | - |

HCM 6th TWSC
4: North-South Alley & South Boulevard

10/06/2020

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 0.1 | | | | | |
| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 17 | 0 | 1 | 214 | 0 | 2 |
| Future Vol, veh/h | 17 | 0 | 1 | 214 | 0 | 2 |
| Conflicting Peds, #/hr | 0 | 20 | 20 | 0 | 1 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 96 | 96 | 96 | 96 | 96 | 96 |
| Heavy Vehicles, % | 8 | 0 | 0 | 9 | 0 | 0 |
| Mvmt Flow | 18 | 0 | 1 | 223 | 0 | 2 |

| Major/Minor | Major1 | Major2 | Minor1 | | |
|----------------------|--------|--------|--------|---|----------|
| Conflicting Flow All | 0 | 0 | 38 | 0 | 264 38 |
| Stage 1 | - | - | - | - | 38 - |
| Stage 2 | - | - | - | - | 226 - |
| Critical Hdwy | - | - | 4.1 | - | 6.4 6.2 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.4 - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.4 - |
| Follow-up Hdwy | - | - | 2.2 | - | 3.5 3.3 |
| Pot Cap-1 Maneuver | - | - | 1585 | - | 729 1040 |
| Stage 1 | - | - | - | - | 990 - |
| Stage 2 | - | - | - | - | 816 - |
| Platoon blocked, % | - | - | - | - | - |
| Mov Cap-1 Maneuver | - | - | 1555 | - | 714 1020 |
| Mov Cap-2 Maneuver | - | - | - | - | 714 - |
| Stage 1 | - | - | - | - | 970 - |
| Stage 2 | - | - | - | - | 815 - |

| Approach | EB | WB | NB |
|----------------------|----|----|-----|
| HCM Control Delay, s | 0 | 0 | 8.5 |
| HCM LOS | | | A |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBL | WBT |
|-----------------------|-------|-----|-----|-------|-----|
| Capacity (veh/h) | 1020 | - | - | 1555 | - |
| HCM Lane V/C Ratio | 0.002 | - | - | 0.001 | - |
| HCM Control Delay (s) | 8.5 | - | - | 7.3 | 0 |
| HCM Lane LOS | A | - | - | A | A |
| HCM 95th %tile Q(veh) | 0 | - | - | 0 | - |

HCM 6th TWSC
6: Harlem Avenue & Frankin Street/Pleasant Street

10/06/2020

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 10.4 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | | ↗ | | ↕ | | | ↔ | | | ↔ | |
| Traffic Vol, veh/h | 0 | 0 | 48 | 6 | 5 | 26 | 33 | 1213 | 42 | 44 | 1359 | 14 |
| Future Vol, veh/h | 0 | 0 | 48 | 6 | 5 | 26 | 33 | 1213 | 42 | 44 | 1359 | 14 |
| Conflicting Peds, #/hr | 1 | 0 | 0 | 0 | 0 | 1 | 18 | 0 | 5 | 5 | 0 | 18 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | 0 | - | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 95 | 95 | 95 | 95 | 95 | 95 | 95 | 95 | 95 | 95 | 95 | 95 |
| Heavy Vehicles, % | 0 | 0 | 3 | 0 | 0 | 6 | 0 | 7 | 0 | 0 | 4 | 0 |
| Mvmt Flow | 0 | 0 | 51 | 6 | 5 | 27 | 35 | 1277 | 44 | 46 | 1431 | 15 |

| Major/Minor | Minor2 | | Minor1 | | Major1 | | Major2 | | | | | |
|----------------------|--------|---|--------|------|--------|------|--------|---|---|------|---|---|
| Conflicting Flow All | - | - | 741 | 2182 | 2930 | 667 | 1464 | 0 | 0 | 1326 | 0 | 0 |
| Stage 1 | - | - | - | 1374 | 1374 | - | - | - | - | - | - | - |
| Stage 2 | - | - | - | 808 | 1556 | - | - | - | - | - | - | - |
| Critical Hdwy | - | - | 6.96 | 7.5 | 6.5 | 7.02 | 4.1 | - | - | 4.1 | - | - |
| Critical Hdwy Stg 1 | - | - | - | 6.5 | 5.5 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | 6.5 | 5.5 | - | - | - | - | - | - | - |
| Follow-up Hdwy | - | - | 3.33 | 3.5 | 4 | 3.36 | 2.2 | - | - | 2.2 | - | - |
| Pot Cap-1 Maneuver | 0 | 0 | 356 | 26 | 15 | 392 | 467 | - | - | 527 | - | - |
| Stage 1 | 0 | 0 | - | 156 | 215 | - | - | - | - | - | - | - |
| Stage 2 | 0 | 0 | - | 345 | 176 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | - | - | - |
| Mov Cap-1 Maneuver | - | - | 350 | 11 | 6 | 390 | 459 | - | - | 524 | - | - |
| Mov Cap-2 Maneuver | - | - | - | 11 | 6 | - | - | - | - | - | - | - |
| Stage 1 | - | - | - | 110 | 151 | - | - | - | - | - | - | - |
| Stage 2 | - | - | - | 163 | 95 | - | - | - | - | - | - | - |

| Approach | EB | WB | NB | SB |
|----------------------|----|----------|-----|-----|
| HCM Control Delay, s | 17 | \$ 580.9 | 2.1 | 2.9 |
| HCM LOS | C | F | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1WBLn1 | SBL | SBT | SBR |
|-----------------------|-------|-----|-----|------------|-------|-------|-----|
| Capacity (veh/h) | 459 | - | - | 350 | 26 | 524 | - |
| HCM Lane V/C Ratio | 0.076 | - | - | 0.144 | 1.498 | 0.088 | - |
| HCM Control Delay (s) | 13.5 | 1.9 | - | 17\$ 580.9 | 12.5 | 2.6 | - |
| HCM Lane LOS | B | A | - | C | F | B | A |
| HCM 95th %tile Q(veh) | 0.2 | - | - | 0.5 | 4.7 | 0.3 | - |

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

HCM 6th TWSC
7: North-South Alley & Pleasant Street

10/06/2020

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 1.1 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 2 | 79 | 2 | 8 | 23 | 0 | 3 | 0 | 2 | 0 | 0 | 1 |
| Future Vol, veh/h | 2 | 79 | 2 | 8 | 23 | 0 | 3 | 0 | 2 | 0 | 0 | 1 |
| Conflicting Peds, #/hr | 1 | 0 | 20 | 20 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 2 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 77 | 77 | 77 | 77 | 77 | 77 | 77 | 77 | 77 | 77 | 77 | 77 |
| Heavy Vehicles, % | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 3 | 103 | 3 | 10 | 30 | 0 | 4 | 0 | 3 | 0 | 0 | 1 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|----------------------|--------|---|---|--------|---|---|--------|-----|-----|--------|-----|------|
| Conflicting Flow All | 31 | 0 | 0 | 126 | 0 | 0 | 184 | 182 | 125 | 163 | 183 | 33 |
| Stage 1 | - | - | - | - | - | - | 131 | 131 | - | 51 | 51 | - |
| Stage 2 | - | - | - | - | - | - | 53 | 51 | - | 112 | 132 | - |
| Critical Hdwy | 4.1 | - | - | 4.1 | - | - | 7.1 | 6.5 | 6.2 | 7.1 | 6.5 | 6.2 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.1 | 5.5 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.1 | 5.5 | - |
| Follow-up Hdwy | 2.2 | - | - | 2.2 | - | - | 3.5 | 4 | 3.3 | 3.5 | 4 | 3.3 |
| Pot Cap-1 Maneuver | 1595 | - | - | 1473 | - | - | 781 | 716 | 931 | 806 | 715 | 1046 |
| Stage 1 | - | - | - | - | - | - | 877 | 792 | - | 967 | 856 | - |
| Stage 2 | - | - | - | - | - | - | 965 | 856 | - | 898 | 791 | - |
| Platoon blocked, % | - | - | - | - | - | - | - | - | - | - | - | - |
| Mov Cap-1 Maneuver | 1593 | - | - | 1445 | - | - | 758 | 695 | 913 | 797 | 694 | 1043 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 758 | 695 | - | 797 | 694 | - |
| Stage 1 | - | - | - | - | - | - | 859 | 775 | - | 964 | 849 | - |
| Stage 2 | - | - | - | - | - | - | 955 | 849 | - | 894 | 774 | - |

| Approach | EB | | | WB | | | NB | | | SB | | |
|----------------------|-----|--|--|-----|--|--|-----|--|--|-----|--|--|
| HCM Control Delay, s | 0.2 | | | 1.9 | | | 9.5 | | | 8.5 | | |
| HCM LOS | | | | | | | A | | | A | | |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|-----------------------|-------|-------|-----|-----|-------|-----|-----|-------|
| Capacity (veh/h) | 813 | 1593 | - | - | 1445 | - | - | 1043 |
| HCM Lane V/C Ratio | 0.008 | 0.002 | - | - | 0.007 | - | - | 0.001 |
| HCM Control Delay (s) | 9.5 | 7.3 | 0 | - | 7.5 | 0 | - | 8.5 |
| HCM Lane LOS | A | A | A | - | A | A | - | A |
| HCM 95th %tile Q(veh) | 0 | 0 | - | - | 0 | - | - | 0 |

HCM 6th TWSC
8: Marion Street & Pleasant Street

10/06/2020

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 4.6 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 54 | 13 | 14 | 2 | 23 | 3 | 1 | 69 | 7 | 4 | 73 | 7 |
| Future Vol, veh/h | 54 | 13 | 14 | 2 | 23 | 3 | 1 | 69 | 7 | 4 | 73 | 7 |
| Conflicting Peds, #/hr | 0 | 0 | 25 | 25 | 0 | 0 | 25 | 0 | 50 | 50 | 0 | 25 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 86 | 86 | 86 | 86 | 86 | 86 | 86 | 86 | 86 | 86 | 86 | 86 |
| Heavy Vehicles, % | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 67 | 0 | 0 |
| Mvmt Flow | 63 | 15 | 16 | 2 | 27 | 3 | 1 | 80 | 8 | 5 | 85 | 8 |

| Major/Minor | Minor2 | | Minor1 | | Major1 | | Major2 | | | | | |
|----------------------|--------|-----|--------|-----|--------|-----|--------|---|---|-------|---|---|
| Conflicting Flow All | 225 | 264 | 139 | 276 | 264 | 134 | 118 | 0 | 0 | 138 | 0 | 0 |
| Stage 1 | 124 | 124 | - | 136 | 136 | - | - | - | - | - | - | - |
| Stage 2 | 101 | 140 | - | 140 | 128 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.13 | 6.5 | 6.2 | 7.1 | 6.5 | 6.2 | 4.1 | - | - | 4.77 | - | - |
| Critical Hdwy Stg 1 | 6.13 | 5.5 | - | 6.1 | 5.5 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.13 | 5.5 | - | 6.1 | 5.5 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.527 | 4 | 3.3 | 3.5 | 4 | 3.3 | 2.2 | - | - | 2.803 | - | - |
| Pot Cap-1 Maneuver | 728 | 645 | 915 | 680 | 645 | 920 | 1483 | - | - | 1128 | - | - |
| Stage 1 | 878 | 797 | - | 872 | 788 | - | - | - | - | - | - | - |
| Stage 2 | 903 | 785 | - | 868 | 794 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | - | - | - |
| Mov Cap-1 Maneuver | 681 | 596 | 872 | 606 | 596 | 876 | 1448 | - | - | 1074 | - | - |
| Mov Cap-2 Maneuver | 681 | 596 | - | 606 | 596 | - | - | - | - | - | - | - |
| Stage 1 | 856 | 774 | - | 829 | 749 | - | - | - | - | - | - | - |
| Stage 2 | 866 | 747 | - | 811 | 771 | - | - | - | - | - | - | - |

| Approach | EB | | WB | | NB | | SB | | | |
|----------------------|----|--|------|--|-----|--|-----|--|--|--|
| HCM Control Delay, s | 11 | | 11.1 | | 0.1 | | 0.4 | | | |
| HCM LOS | B | | B | | | | | | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | WBLn1 | SBL | SBT | SBR |
|-----------------------|-------|-----|-----|-------|-------|-------|-----|-----|
| Capacity (veh/h) | 1448 | - | - | 691 | 618 | 1074 | - | - |
| HCM Lane V/C Ratio | 0.001 | - | - | 0.136 | 0.053 | 0.004 | - | - |
| HCM Control Delay (s) | 7.5 | 0 | - | 11 | 11.1 | 8.4 | 0 | - |
| HCM Lane LOS | A | A | - | B | B | A | A | - |
| HCM 95th %tile Q(veh) | 0 | - | - | 0.5 | 0.2 | 0 | - | - |

HCM 6th TWSC
 9: Randolph Street & Maple Avenue

10/06/2020

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 1.8 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 17 | 179 | 5 | 9 | 194 | 18 | 3 | 6 | 23 | 5 | 10 | 9 |
| Future Vol, veh/h | 17 | 179 | 5 | 9 | 194 | 18 | 3 | 6 | 23 | 5 | 10 | 9 |
| Conflicting Peds, #/hr | 18 | 0 | 28 | 28 | 0 | 18 | 8 | 0 | 7 | 7 | 0 | 8 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 86 | 86 | 86 | 86 | 86 | 86 | 86 | 86 | 86 | 86 | 86 | 86 |
| Heavy Vehicles, % | 0 | 0 | 33 | 0 | 3 | 0 | 0 | 0 | 0 | 20 | 12 | 0 |
| Mvmt Flow | 20 | 208 | 6 | 10 | 226 | 21 | 3 | 7 | 27 | 6 | 12 | 10 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|----------------------|--------|---|---|--------|---|---|--------|-----|-----|--------|-------|-----|
| Conflicting Flow All | 265 | 0 | 0 | 242 | 0 | 0 | 555 | 564 | 246 | 550 | 557 | 263 |
| Stage 1 | - | - | - | - | - | - | 279 | 279 | - | 275 | 275 | - |
| Stage 2 | - | - | - | - | - | - | 276 | 285 | - | 275 | 282 | - |
| Critical Hdwy | 4.1 | - | - | 4.1 | - | - | 7.1 | 6.5 | 6.2 | 7.3 | 6.62 | 6.2 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.3 | 5.62 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.3 | 5.62 | - |
| Follow-up Hdwy | 2.2 | - | - | 2.2 | - | - | 3.5 | 4 | 3.3 | 3.68 | 4.108 | 3.3 |
| Pot Cap-1 Maneuver | 1311 | - | - | 1336 | - | - | 445 | 438 | 798 | 419 | 425 | 781 |
| Stage 1 | - | - | - | - | - | - | 732 | 683 | - | 694 | 665 | - |
| Stage 2 | - | - | - | - | - | - | 735 | 679 | - | 694 | 660 | - |
| Platoon blocked, % | | - | - | | - | - | | | | | | |
| Mov Cap-1 Maneuver | 1289 | - | - | 1300 | - | - | 406 | 408 | 772 | 382 | 396 | 762 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 406 | 408 | - | 382 | 396 | - |
| Stage 1 | - | - | - | - | - | - | 700 | 652 | - | 670 | 648 | - |
| Stage 2 | - | - | - | - | - | - | 700 | 661 | - | 647 | 630 | - |

| Approach | EB | | | WB | | | NB | | | SB | | |
|----------------------|-----|--|--|-----|--|--|------|--|--|----|--|--|
| HCM Control Delay, s | 0.7 | | | 0.3 | | | 11.2 | | | 13 | | |
| HCM LOS | | | | | | | B | | | B | | |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|-----------------------|-------|-------|-----|-----|-------|-----|-----|-------|
| Capacity (veh/h) | 617 | 1289 | - | - | 1300 | - | - | 479 |
| HCM Lane V/C Ratio | 0.06 | 0.015 | - | - | 0.008 | - | - | 0.058 |
| HCM Control Delay (s) | 11.2 | 7.8 | 0 | - | 7.8 | 0 | - | 13 |
| HCM Lane LOS | B | A | A | - | A | A | - | B |
| HCM 95th %tile Q(veh) | 0.2 | 0 | - | - | 0 | - | - | 0.2 |

HCM 6th TWSC
10: North-South Alley & Randolph Street

10/06/2020

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 0.4 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 3 | 201 | 3 | 0 | 216 | 0 | 2 | 2 | 0 | 5 | 2 | 3 |
| Future Vol, veh/h | 3 | 201 | 3 | 0 | 216 | 0 | 2 | 2 | 0 | 5 | 2 | 3 |
| Conflicting Peds, #/hr | 22 | 0 | 22 | 22 | 0 | 22 | 1 | 0 | 0 | 0 | 0 | 1 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 |
| Heavy Vehicles, % | 0 | 2 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 3 | 226 | 3 | 0 | 243 | 0 | 2 | 2 | 0 | 6 | 2 | 3 |











| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|----------------------|--------|---|---|--------|---|---|--------|-----|-----|--------|-----|-----|
| Conflicting Flow All | 265 | 0 | 0 | 251 | 0 | 0 | 503 | 521 | 250 | 500 | 522 | 266 |
| Stage 1 | - | - | - | - | - | - | 256 | 256 | - | 265 | 265 | - |
| Stage 2 | - | - | - | - | - | - | 247 | 265 | - | 235 | 257 | - |
| Critical Hdwy | 4.1 | - | - | 4.1 | - | - | 7.1 | 6.5 | 6.2 | 7.1 | 6.5 | 6.2 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.1 | 5.5 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.1 | 5.5 | - |
| Follow-up Hdwy | 2.2 | - | - | 2.2 | - | - | 3.5 | 4 | 3.3 | 3.5 | 4 | 3.3 |
| Pot Cap-1 Maneuver | 1311 | - | - | 1326 | - | - | 482 | 463 | 794 | 484 | 462 | 778 |
| Stage 1 | - | - | - | - | - | - | 753 | 699 | - | 745 | 693 | - |
| Stage 2 | - | - | - | - | - | - | 761 | 693 | - | 773 | 699 | - |
| Platoon blocked, % | - | - | - | - | - | - | - | - | - | - | - | - |
| Mov Cap-1 Maneuver | 1284 | - | - | 1298 | - | - | 467 | 443 | 777 | 471 | 442 | 761 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 467 | 443 | - | 471 | 442 | - |
| Stage 1 | - | - | - | - | - | - | 735 | 682 | - | 727 | 678 | - |
| Stage 2 | - | - | - | - | - | - | 754 | 678 | - | 768 | 682 | - |

| Approach | EB | | | WB | | | NB | | | SB | | |
|----------------------|-----|--|--|----|--|--|----|--|--|----|--|--|
| HCM Control Delay, s | 0.1 | | | 0 | | | 13 | | | 12 | | |
| HCM LOS | | | | | | | B | | | B | | |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|-----------------------|-------|-------|-----|-----|------|-----|-----|-------|
| Capacity (veh/h) | 455 | 1284 | - | - | 1298 | - | - | 524 |
| HCM Lane V/C Ratio | 0.01 | 0.003 | - | - | - | - | - | 0.021 |
| HCM Control Delay (s) | 13 | 7.8 | 0 | - | 0 | - | - | 12 |
| HCM Lane LOS | B | A | A | - | A | - | - | B |
| HCM 95th %tile Q(veh) | 0 | 0 | - | - | 0 | - | - | 0.1 |

Lanes, Volumes, Timings
1: Harlem Avenue & South Boulevard

01/28/2021

| |  |  |  |  |  |  |
|-------------------------|---|---|---|---|---|---|
| Lane Group | WBL | WBR | NBT | NBR | SBL | SBT |
| Lane Configurations |  |  |  | | |  |
| Traffic Volume (vph) | 201 | 146 | 1307 | 40 | 0 | 1457 |
| Future Volume (vph) | 201 | 146 | 1307 | 40 | 0 | 1457 |
| Ideal Flow (vphp) | 1900 | 1900 | 1900 | 1900 | 1900 | 2000 |
| Storage Length (ft) | 110 | 0 | | 0 | 0 | |
| Storage Lanes | 1 | 1 | | 0 | 0 | |
| Taper Length (ft) | 145 | | | | 25 | |
| Lane Util. Factor | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 |
| Ped Bike Factor | 0.94 | 0.98 | 1.00 | | | |
| Frt | | 0.850 | 0.996 | | | |
| Flt Protected | 0.950 | | | | | |
| Satd. Flow (prot) | 1787 | 1318 | 3488 | 0 | 0 | 3623 |
| Flt Permitted | 0.950 | | | | | |
| Satd. Flow (perm) | 1672 | 1292 | 3488 | 0 | 0 | 3623 |
| Right Turn on Red | | No | | No | | |
| Satd. Flow (RTOR) | | | | | | |
| Link Speed (mph) | 30 | | 30 | | | 30 |
| Link Distance (ft) | 465 | | 176 | | | 249 |
| Travel Time (s) | 10.6 | | 4.0 | | | 5.7 |
| Confl. Peds. (#/hr) | 43 | 5 | | 12 | 12 | |
| Peak Hour Factor | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 |
| Heavy Vehicles (%) | 1% | 6% | 3% | 0% | 0% | 3% |
| Bus Blockages (#/hr) | 0 | 0 | 0 | 0 | 0 | 9 |
| Parking (#/hr) | | 7 | | | | |
| Shared Lane Traffic (%) | | | | | | |
| Lane Group Flow (vph) | 207 | 151 | 1388 | 0 | 0 | 1502 |
| Turn Type | Prot | Perm | NA | | | NA |
| Protected Phases | 8 | | 2 | | | 6 |
| Permitted Phases | | 8 | | | | |
| Detector Phase | 8 | 8 | 2 | | | 6 |
| Switch Phase | | | | | | |
| Minimum Initial (s) | 8.0 | 8.0 | 15.0 | | | 15.0 |
| Minimum Split (s) | 31.0 | 31.0 | 28.0 | | | 29.0 |
| Total Split (s) | 38.0 | 38.0 | 87.0 | | | 87.0 |
| Total Split (%) | 30.4% | 30.4% | 69.6% | | | 69.6% |
| Yellow Time (s) | 4.0 | 4.0 | 4.0 | | | 4.0 |
| All-Red Time (s) | 2.0 | 2.0 | 2.0 | | | 2.0 |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | | | 0.0 |
| Total Lost Time (s) | 6.0 | 6.0 | 6.0 | | | 6.0 |
| Lead/Lag | | | | | | |
| Lead-Lag Optimize? | | | | | | |
| Recall Mode | None | None | C-Min | | | C-Min |
| Act Effect Green (s) | 21.2 | 21.2 | 91.8 | | | 91.8 |
| Actuated g/C Ratio | 0.17 | 0.17 | 0.73 | | | 0.73 |
| v/c Ratio | 0.68 | 0.69 | 0.54 | | | 0.56 |
| Control Delay | 59.7 | 64.3 | 8.9 | | | 9.3 |
| Queue Delay | 0.0 | 0.0 | 0.0 | | | 0.0 |
| Total Delay | 59.7 | 64.3 | 8.9 | | | 9.3 |
| LOS | E | E | A | | | A |

Lanes, Volumes, Timings
 1: Harlem Avenue & South Boulevard

01/28/2021



| Lane Group | WBL | WBR | NBT | NBR | SBL | SBT |
|-------------------------|------|------|------|-----|-----|------|
| Approach Delay | 61.6 | | 8.9 | | | 9.3 |
| Approach LOS | E | | A | | | A |
| Queue Length 50th (ft) | 160 | 117 | 427 | | | 251 |
| Queue Length 95th (ft) | 225 | 177 | 576 | | | 397 |
| Internal Link Dist (ft) | 385 | | 96 | | | 169 |
| Turn Bay Length (ft) | 110 | | | | | |
| Base Capacity (vph) | 457 | 330 | 2561 | | | 2660 |
| Starvation Cap Reductn | 0 | 0 | 0 | | | 0 |
| Spillback Cap Reductn | 0 | 0 | 0 | | | 0 |
| Storage Cap Reductn | 0 | 0 | 0 | | | 0 |
| Reduced v/c Ratio | 0.45 | 0.46 | 0.54 | | | 0.56 |

Intersection Summary

| | |
|-----------------------------------|--|
| Area Type: | Other |
| Cycle Length: | 125 |
| Actuated Cycle Length: | 125 |
| Offset: | 104 (83%), Referenced to phase 2:NBT and 6:SBT, Start of Green |
| Natural Cycle: | 65 |
| Control Type: | Actuated-Coordinated |
| Maximum v/c Ratio: | 0.69 |
| Intersection Signal Delay: | 14.9 |
| Intersection LOS: | B |
| Intersection Capacity Utilization | 60.9% |
| ICU Level of Service | B |
| Analysis Period (min) | 15 |

Splits and Phases: 1: Harlem Avenue & South Boulevard



Lanes, Volumes, Timings

2: Harlem Avenue & Randolph Street

10/06/2020



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---------------------------|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 170 | 261 | 120 | 80 | 180 | 38 | 124 | 1158 | 61 | 84 | 1254 | 83 |
| Future Volume (vph) | 170 | 261 | 120 | 80 | 180 | 38 | 124 | 1158 | 61 | 84 | 1254 | 83 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 2000 | 1900 | 1900 | 2000 | 1900 |
| Lane Width (ft) | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 |
| Grade (%) | | 0% | | | 0% | | | 0% | | | 0% | |
| Storage Length (ft) | 40 | | 0 | 50 | | 0 | 165 | | 0 | 85 | | 0 |
| Storage Lanes | 1 | | 0 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 90 | | | 75 | | | 120 | | | 90 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 |
| Ped Bike Factor | 0.98 | 0.99 | | 1.00 | 0.99 | | | 1.00 | | | 0.99 | |
| Fr _t | | 0.953 | | | 0.974 | | | 0.992 | | | 0.991 | |
| Fl _t Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1805 | 1799 | 0 | 1805 | 1828 | 0 | 1703 | 3659 | 0 | 1805 | 3578 | 0 |
| Fl _t Permitted | 0.367 | | | 0.161 | | | 0.074 | | | 0.114 | | |
| Satd. Flow (perm) | 686 | 1799 | 0 | 305 | 1828 | 0 | 133 | 3659 | 0 | 217 | 3578 | 0 |
| Right Turn on Red | | | No | | | No | | | No | | | No |
| Satd. Flow (RTOR) | | | | | | | | | | | | |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 454 | | | 257 | | | 242 | | | 813 | |
| Travel Time (s) | | 10.3 | | | 5.8 | | | 5.5 | | | 18.5 | |
| Confl. Peds. (#/hr) | 17 | | 5 | 5 | | 17 | 29 | | 6 | 6 | | 29 |
| Confl. Bikes (#/hr) | | | 1 | | | 2 | | | | | | |
| Peak Hour Factor | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| Growth Factor | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| Heavy Vehicles (%) | 0% | 0% | 0% | 0% | 0% | 3% | 6% | 3% | 0% | 0% | 3% | 0% |
| Bus Blockages (#/hr) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 0 |
| Parking (#/hr) | | | | | | | | | | | | |
| Mid-Block Traffic (%) | | 0% | | | 0% | | | 0% | | | 0% | |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 177 | 397 | 0 | 83 | 228 | 0 | 129 | 1270 | 0 | 88 | 1392 | 0 |
| Turn Type | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | | 8 | | | 2 | | | 6 | | |
| Detector Phase | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 3.0 | 8.0 | | 3.0 | 8.0 | | 3.0 | 15.0 | | 3.0 | 15.0 | |
| Minimum Split (s) | 9.5 | 30.0 | | 9.5 | 30.0 | | 9.5 | 29.0 | | 10.5 | 33.0 | |
| Total Split (s) | 14.0 | 30.0 | | 14.0 | 30.0 | | 14.0 | 67.0 | | 14.0 | 67.0 | |
| Total Split (%) | 11.2% | 24.0% | | 11.2% | 24.0% | | 11.2% | 53.6% | | 11.2% | 53.6% | |
| Yellow Time (s) | 3.5 | 4.0 | | 3.5 | 4.0 | | 3.5 | 4.0 | | 3.5 | 4.0 | |
| All-Red Time (s) | 0.0 | 2.0 | | 0.0 | 2.0 | | 0.0 | 2.0 | | 0.0 | 2.0 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | 3.5 | 6.0 | | 3.5 | 6.0 | | 3.5 | 6.0 | | 3.5 | 6.0 | |
| Lead/Lag | Lead | Lag | | Lead | Lag | | Lead | Lag | | Lead | Lag | |
| Lead-Lag Optimize? | Yes | Yes | | Yes | Yes | | Yes | Yes | | Yes | Yes | |
| Recall Mode | None | None | | None | None | | None | C-Min | | None | C-Min | |
| Act Effect Green (s) | 38.4 | 27.5 | | 35.7 | 24.2 | | 75.2 | 63.6 | | 72.8 | 62.3 | |
| Actuated g/C Ratio | 0.31 | 0.22 | | 0.29 | 0.19 | | 0.60 | 0.51 | | 0.58 | 0.50 | |

Lanes, Volumes, Timings

2: Harlem Avenue & Randolph Street

10/06/2020



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|------|------|-----|------|------|-----|------|------|-----|------|------|-----|
| v/c Ratio | 0.58 | 1.01 | | 0.43 | 0.65 | | 0.66 | 0.68 | | 0.39 | 0.78 | |
| Control Delay | 41.0 | 96.1 | | 37.1 | 56.1 | | 34.8 | 25.7 | | 18.1 | 38.5 | |
| Queue Delay | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | 41.0 | 96.1 | | 37.1 | 56.1 | | 34.8 | 25.7 | | 18.1 | 38.5 | |
| LOS | D | F | | D | E | | C | C | | B | D | |
| Approach Delay | | 79.1 | | | 51.0 | | | 26.5 | | | 37.3 | |
| Approach LOS | | E | | | D | | | C | | | D | |
| Queue Length 50th (ft) | 107 | -365 | | 47 | 172 | | 40 | 393 | | 39 | 555 | |
| Queue Length 95th (ft) | 169 | #577 | | 87 | 261 | | 109 | 490 | | 67 | 639 | |
| Internal Link Dist (ft) | | 374 | | | 177 | | | 162 | | | 733 | |
| Turn Bay Length (ft) | 40 | | | 50 | | | 165 | | | 85 | | |
| Base Capacity (vph) | 304 | 395 | | 216 | 353 | | 213 | 1861 | | 263 | 1784 | |
| Starvation Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Spillback Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Storage Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Reduced v/c Ratio | 0.58 | 1.01 | | 0.38 | 0.65 | | 0.61 | 0.68 | | 0.33 | 0.78 | |

Intersection Summary

Area Type: Other
 Cycle Length: 125
 Actuated Cycle Length: 125
 Offset: 56 (45%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
 Natural Cycle: 85
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.01
 Intersection Signal Delay: 40.8 Intersection LOS: D
 Intersection Capacity Utilization 84.8% ICU Level of Service E
 Analysis Period (min) 15
 ~ Volume exceeds capacity, queue is theoretically infinite.
 Queue shown is maximum after two cycles.
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Splits and Phases: 2: Harlem Avenue & Randolph Street



HCM 6th AWSC
11: Maple Avenue & Pleasant Street

10/06/2020

| Intersection | |
|---------------------------|-----|
| Intersection Delay, s/veh | 7.6 |
| Intersection LOS | A |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 5 | 77 | 6 | 31 | 29 | 9 | 12 | 5 | 26 | 3 | 4 | 8 |
| Future Vol, veh/h | 5 | 77 | 6 | 31 | 29 | 9 | 12 | 5 | 26 | 3 | 4 | 8 |
| Peak Hour Factor | 0.77 | 0.77 | 0.77 | 0.77 | 0.77 | 0.77 | 0.77 | 0.77 | 0.77 | 0.77 | 0.77 | 0.77 |
| Heavy Vehicles, % | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 0 | 0 | 12 |
| Mvmt Flow | 6 | 100 | 8 | 40 | 38 | 12 | 16 | 6 | 34 | 4 | 5 | 10 |
| Number of Lanes | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |

| Approach | EB | WB | NB | SB |
|----------------------------|-----|-----|-----|-----|
| Opposing Approach | WB | EB | SB | NB |
| Opposing Lanes | 1 | 1 | 1 | 1 |
| Conflicting Approach Left | SB | NB | EB | WB |
| Conflicting Lanes Left | 1 | 1 | 1 | 1 |
| Conflicting Approach Right | NB | SB | WB | EB |
| Conflicting Lanes Right | 1 | 1 | 1 | 1 |
| HCM Control Delay | 7.7 | 7.7 | 7.3 | 7.2 |
| HCM LOS | A | A | A | A |

| Lane | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|------------------------|-------|-------|-------|-------|
| Vol Left, % | 28% | 6% | 45% | 20% |
| Vol Thru, % | 12% | 88% | 42% | 27% |
| Vol Right, % | 60% | 7% | 13% | 53% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 43 | 88 | 69 | 15 |
| LT Vol | 12 | 5 | 31 | 3 |
| Through Vol | 5 | 77 | 29 | 4 |
| RT Vol | 26 | 6 | 9 | 8 |
| Lane Flow Rate | 56 | 114 | 90 | 19 |
| Geometry Grp | 1 | 1 | 1 | 1 |
| Degree of Util (X) | 0.061 | 0.129 | 0.103 | 0.022 |
| Departure Headway (Hd) | 3.959 | 4.07 | 4.13 | 4.122 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 888 | 875 | 861 | 874 |
| Service Time | 2.058 | 2.122 | 2.186 | 2.122 |
| HCM Lane V/C Ratio | 0.063 | 0.13 | 0.105 | 0.022 |
| HCM Control Delay | 7.3 | 7.7 | 7.7 | 7.2 |
| HCM Lane LOS | A | A | A | A |
| HCM 95th-tile Q | 0.2 | 0.4 | 0.3 | 0.1 |

HCM 6th AWSC
12: Randolph Street & Marion Street

10/06/2020

| Intersection | |
|---------------------------|------|
| Intersection Delay, s/veh | 17.9 |
| Intersection LOS | C |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 78 | 299 | 45 | 10 | 228 | 16 | 26 | 68 | 8 | 34 | 147 | 61 |
| Future Vol, veh/h | 78 | 299 | 45 | 10 | 228 | 16 | 26 | 68 | 8 | 34 | 147 | 61 |
| Peak Hour Factor | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| Heavy Vehicles, % | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| Mvmt Flow | 87 | 332 | 50 | 11 | 253 | 18 | 29 | 76 | 9 | 38 | 163 | 68 |
| Number of Lanes | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |

| Approach | EB | WB | NB | SB |
|----------------------------|------|------|------|------|
| Opposing Approach | WB | EB | SB | NB |
| Opposing Lanes | 1 | 1 | 1 | 1 |
| Conflicting Approach Left | SB | NB | EB | WB |
| Conflicting Lanes Left | 1 | 1 | 1 | 1 |
| Conflicting Approach Right | NB | SB | WB | EB |
| Conflicting Lanes Right | 1 | 1 | 1 | 1 |
| HCM Control Delay | 23.4 | 14.3 | 11.7 | 14.6 |
| HCM LOS | C | B | B | B |

| Lane | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|------------------------|-------|-------|-------|-------|
| Vol Left, % | 25% | 18% | 4% | 14% |
| Vol Thru, % | 67% | 71% | 90% | 61% |
| Vol Right, % | 8% | 11% | 6% | 25% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 102 | 422 | 254 | 242 |
| LT Vol | 26 | 78 | 10 | 34 |
| Through Vol | 68 | 299 | 228 | 147 |
| RT Vol | 8 | 45 | 16 | 61 |
| Lane Flow Rate | 113 | 469 | 282 | 269 |
| Geometry Grp | 1 | 1 | 1 | 1 |
| Degree of Util (X) | 0.213 | 0.743 | 0.47 | 0.465 |
| Departure Headway (Hd) | 6.765 | 5.708 | 5.992 | 6.221 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 529 | 638 | 601 | 578 |
| Service Time | 4.829 | 3.708 | 4.039 | 4.272 |
| HCM Lane V/C Ratio | 0.214 | 0.735 | 0.469 | 0.465 |
| HCM Control Delay | 11.7 | 23.4 | 14.3 | 14.6 |
| HCM Lane LOS | B | C | B | B |
| HCM 95th-tile Q | 0.8 | 6.6 | 2.5 | 2.5 |

HCM 6th TWSC
 3: Harlem Avenue & Circle Avenue

10/06/2020

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 0.2 | | | | | |
| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
| Lane Configurations | | ↗ | | ↑↑ | ↑↑ | |
| Traffic Vol, veh/h | 0 | 29 | 0 | 1347 | 1404 | 254 |
| Future Vol, veh/h | 0 | 29 | 0 | 1347 | 1404 | 254 |
| Conflicting Peds, #/hr | 5 | 43 | 43 | 0 | 0 | 43 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | 0 | - | - | - | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 97 | 97 | 97 | 97 | 97 | 97 |
| Heavy Vehicles, % | 0 | 0 | 0 | 3 | 3 | 1 |
| Mvmt Flow | 0 | 30 | 0 | 1389 | 1447 | 262 |

| Major/Minor | Minor2 | Major1 | Major2 |
|----------------------|--------|--------|--------|
| Conflicting Flow All | - | 941 | 0 |
| Stage 1 | - | - | - |
| Stage 2 | - | - | - |
| Critical Hdwy | - | 6.9 | - |
| Critical Hdwy Stg 1 | - | - | - |
| Critical Hdwy Stg 2 | - | - | - |
| Follow-up Hdwy | - | 3.3 | - |
| Pot Cap-1 Maneuver | 0 | 268 | 0 |
| Stage 1 | 0 | - | 0 |
| Stage 2 | 0 | - | 0 |
| Platoon blocked, % | | | - |
| Mov Cap-1 Maneuver | - | 246 | - |
| Mov Cap-2 Maneuver | - | - | - |
| Stage 1 | - | - | - |
| Stage 2 | - | - | - |

| Approach | EB | NB | SB |
|----------------------|------|----|----|
| HCM Control Delay, s | 21.6 | 0 | 0 |
| HCM LOS | C | | |

| Minor Lane/Major Mvmt | NBT EBLn1 | SBT | SBR |
|-----------------------|-----------|-------|-----|
| Capacity (veh/h) | - | 246 | - |
| HCM Lane V/C Ratio | - | 0.122 | - |
| HCM Control Delay (s) | - | 21.6 | - |
| HCM Lane LOS | - | C | - |
| HCM 95th %tile Q(veh) | - | 0.4 | - |

HCM 6th TWSC
4: North-South Alley & South Boulevard

10/06/2020

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 0.6 | | | | | |
| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 39 | 1 | 17 | 343 | 4 | 4 |
| Future Vol, veh/h | 39 | 1 | 17 | 343 | 4 | 4 |
| Conflicting Peds, #/hr | 0 | 47 | 47 | 0 | 16 | 5 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 87 | 87 | 87 | 87 | 87 | 87 |
| Heavy Vehicles, % | 0 | 0 | 0 | 3 | 0 | 0 |
| Mvmt Flow | 45 | 1 | 20 | 394 | 5 | 5 |

| Major/Minor | Major1 | Major2 | Minor1 | Minor2 | Minor3 |
|----------------------|--------|--------|--------|--------|--------|
| Conflicting Flow All | 0 | 0 | 93 | 0 | 543 |
| Stage 1 | - | - | - | - | 93 |
| Stage 2 | - | - | - | - | 450 |
| Critical Hdwy | - | - | 4.1 | - | 6.4 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.4 |
| Critical Hdwy Stg 2 | - | - | - | - | 5.4 |
| Follow-up Hdwy | - | - | 2.2 | - | 3.5 |
| Pot Cap-1 Maneuver | - | - | 1514 | - | 504 |
| Stage 1 | - | - | - | - | 936 |
| Stage 2 | - | - | - | - | 647 |
| Platoon blocked, % | - | - | - | - | - |
| Mov Cap-1 Maneuver | - | - | 1446 | - | 466 |
| Mov Cap-2 Maneuver | - | - | - | - | 466 |
| Stage 1 | - | - | - | - | 878 |
| Stage 2 | - | - | - | - | 637 |

| Approach | EB | WB | NB |
|----------------------|----|-----|------|
| HCM Control Delay, s | 0 | 0.4 | 10.9 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBL | WBT |
|-----------------------|-------|-----|-----|-------|-----|
| Capacity (veh/h) | 618 | - | - | 1446 | - |
| HCM Lane V/C Ratio | 0.015 | - | - | 0.014 | - |
| HCM Control Delay (s) | 10.9 | - | - | 7.5 | 0 |
| HCM Lane LOS | B | - | - | A | A |
| HCM 95th %tile Q(veh) | 0 | - | - | 0 | - |

HCM 6th TWSC
6: Harlem Avenue & Frankin Street/Pleasant Street

10/06/2020

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 5 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | | ↖ | | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 0 | 0 | 50 | 4 | 1 | 44 | 18 | 1303 | 45 | 43 | 1367 | 23 |
| Future Vol, veh/h | 0 | 0 | 50 | 4 | 1 | 44 | 18 | 1303 | 45 | 43 | 1367 | 23 |
| Conflicting Peds, #/hr | 2 | 0 | 1 | 1 | 0 | 2 | 20 | 0 | 18 | 18 | 0 | 20 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | 0 | - | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 96 | 96 | 96 | 96 | 96 | 96 | 96 | 96 | 96 | 96 | 96 | 96 |
| Heavy Vehicles, % | 0 | 0 | 0 | 0 | 0 | 3 | 6 | 3 | 0 | 0 | 3 | 0 |
| Mvmt Flow | 0 | 0 | 52 | 4 | 1 | 46 | 19 | 1357 | 47 | 45 | 1424 | 24 |

| Major/Minor | Minor2 | Minor1 | | Major1 | | Major2 | | | | | | |
|----------------------|--------|--------|-----|--------|------|--------|------|---|---|------|---|---|
| Conflicting Flow All | - | - | 745 | 2240 | 2995 | 722 | 1468 | 0 | 0 | 1422 | 0 | 0 |
| Stage 1 | - | - | - | 1437 | 1437 | - | - | - | - | - | - | - |
| Stage 2 | - | - | - | 803 | 1558 | - | - | - | - | - | - | - |
| Critical Hdwy | - | - | 6.9 | 7.5 | 6.5 | 6.96 | 4.22 | - | - | 4.1 | - | - |
| Critical Hdwy Stg 1 | - | - | - | 6.5 | 5.5 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | 6.5 | 5.5 | - | - | - | - | - | - | - |
| Follow-up Hdwy | - | - | 3.3 | 3.5 | 4 | 3.33 | 2.26 | - | - | 2.2 | - | - |
| Pot Cap-1 Maneuver | 0 | 0 | 361 | 24 | 14 | 367 | 436 | - | - | 485 | - | - |
| Stage 1 | 0 | 0 | - | 143 | 201 | - | - | - | - | - | - | - |
| Stage 2 | 0 | 0 | - | 348 | 175 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | - | - | - |
| Mov Cap-1 Maneuver | - | - | 354 | 11 | 5 | 360 | 428 | - | - | 477 | - | - |
| Mov Cap-2 Maneuver | - | - | - | 11 | 5 | - | - | - | - | - | - | - |
| Stage 1 | - | - | - | 111 | 157 | - | - | - | - | - | - | - |
| Stage 2 | - | - | - | 152 | 88 | - | - | - | - | - | - | - |

| Approach | EB | WB | NB | SB |
|----------------------|------|-------|-----|-----|
| HCM Control Delay, s | 16.9 | 135.3 | 1.5 | 3.4 |
| HCM LOS | C | F | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1WBLn1 | SBL | SBT | SBR |
|-----------------------|-------|-----|-----|------------|-------|-------|-----|
| Capacity (veh/h) | 428 | - | - | 354 | 71 | 477 | - |
| HCM Lane V/C Ratio | 0.044 | - | - | 0.147 | 0.719 | 0.094 | - |
| HCM Control Delay (s) | 13.8 | 1.4 | - | 16.9 | 135.3 | 13.3 | 3.1 |
| HCM Lane LOS | B | A | - | C | F | B | A |
| HCM 95th %tile Q(veh) | 0.1 | - | - | 0.5 | 3.3 | 0.3 | - |

HCM 6th TWSC
7: North-South Alley & Pleasant Street

10/06/2020

| 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 | 4 | 101 | 1 | 8 | 60 | 1 | 2 | 3 | 7 | 5 | 6 | 7 |
| Future Vol, veh/h | 4 | 101 | 1 | 8 | 60 | 1 | 2 | 3 | 7 | 5 | 6 | 7 |
| Conflicting Peds, #/hr | 0 | 0 | 16 | 16 | 0 | 0 | 7 | 0 | 0 | 0 | 0 | 7 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 81 | 81 | 81 | 81 | 81 | 81 | 81 | 81 | 81 | 81 | 81 | 81 |
| Heavy Vehicles, % | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 5 | 125 | 1 | 10 | 74 | 1 | 2 | 4 | 9 | 6 | 7 | 9 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|----------------------|--------|---|---|--------|---|---|--------|-----|-----|--------|-----|-----|
| Conflicting Flow All | 75 | 0 | 0 | 142 | 0 | 0 | 262 | 247 | 142 | 237 | 247 | 82 |
| Stage 1 | - | - | - | - | - | - | 152 | 152 | - | 95 | 95 | - |
| Stage 2 | - | - | - | - | - | - | 110 | 95 | - | 142 | 152 | - |
| Critical Hdwy | 4.1 | - | - | 4.1 | - | - | 7.1 | 6.5 | 6.2 | 7.1 | 6.5 | 6.2 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.1 | 5.5 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.1 | 5.5 | - |
| Follow-up Hdwy | 2.2 | - | - | 2.2 | - | - | 3.5 | 4 | 3.3 | 3.5 | 4 | 3.3 |
| Pot Cap-1 Maneuver | 1537 | - | - | 1453 | - | - | 695 | 659 | 911 | 722 | 659 | 983 |
| Stage 1 | - | - | - | - | - | - | 855 | 775 | - | 917 | 820 | - |
| Stage 2 | - | - | - | - | - | - | 900 | 820 | - | 866 | 775 | - |
| Platoon blocked, % | - | - | - | - | - | - | - | - | - | - | - | - |
| Mov Cap-1 Maneuver | 1537 | - | - | 1431 | - | - | 663 | 643 | 897 | 707 | 643 | 976 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 663 | 643 | - | 707 | 643 | - |
| Stage 1 | - | - | - | - | - | - | 840 | 761 | - | 914 | 814 | - |
| Stage 2 | - | - | - | - | - | - | 872 | 814 | - | 851 | 761 | - |

| Approach | EB | | | WB | | | NB | | | SB | | |
|----------------------|-----|--|--|-----|--|--|-----|--|--|-----|--|--|
| HCM Control Delay, s | 0.3 | | | 0.9 | | | 9.7 | | | 9.9 | | |
| HCM LOS | | | | | | | A | | | A | | |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|-----------------------|-------|-------|-----|-----|-------|-----|-----|-------|
| Capacity (veh/h) | 775 | 1537 | - | - | 1431 | - | - | 764 |
| HCM Lane V/C Ratio | 0.019 | 0.003 | - | - | 0.007 | - | - | 0.029 |
| HCM Control Delay (s) | 9.7 | 7.3 | 0 | - | 7.5 | 0 | - | 9.9 |
| HCM Lane LOS | A | A | A | - | A | A | - | A |
| HCM 95th %tile Q(veh) | 0.1 | 0 | - | - | 0 | - | - | 0.1 |

HCM 6th TWSC
8: Marion Street & Pleasant Street

10/06/2020

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 5.9 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 69 | 11 | 33 | 10 | 32 | 25 | 15 | 138 | 9 | 17 | 199 | 22 |
| Future Vol, veh/h | 69 | 11 | 33 | 10 | 32 | 25 | 15 | 138 | 9 | 17 | 199 | 22 |
| Conflicting Peds, #/hr | 0 | 0 | 16 | 16 | 0 | 0 | 44 | 0 | 55 | 55 | 0 | 44 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 |
| Heavy Vehicles, % | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 86 | 14 | 41 | 13 | 40 | 31 | 19 | 173 | 11 | 21 | 249 | 28 |

| Major/Minor | Minor2 | | Minor1 | | Major1 | | Major2 | | | | | |
|----------------------|--------|-----|--------|-----|--------|-----|--------|---|---|------|---|---|
| Conflicting Flow All | 601 | 626 | 323 | 621 | 635 | 234 | 321 | 0 | 0 | 239 | 0 | 0 |
| Stage 1 | 349 | 349 | - | 272 | 272 | - | - | - | - | - | - | - |
| Stage 2 | 252 | 277 | - | 349 | 363 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.1 | 6.5 | 6.28 | 7.1 | 6.5 | 6.2 | 4.1 | - | - | 4.1 | - | - |
| Critical Hdwy Stg 1 | 6.1 | 5.5 | - | 6.1 | 5.5 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.1 | 5.5 | - | 6.1 | 5.5 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.5 | 4 | 3.372 | 3.5 | 4 | 3.3 | 2.2 | - | - | 2.2 | - | - |
| Pot Cap-1 Maneuver | 415 | 403 | 704 | 403 | 399 | 810 | 1250 | - | - | 1340 | - | - |
| Stage 1 | 671 | 637 | - | 738 | 688 | - | - | - | - | - | - | - |
| Stage 2 | 757 | 685 | - | 671 | 628 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | - | - | - |
| Mov Cap-1 Maneuver | 338 | 352 | 664 | 332 | 349 | 768 | 1198 | - | - | 1270 | - | - |
| Mov Cap-2 Maneuver | 338 | 352 | - | 332 | 349 | - | - | - | - | - | - | - |
| Stage 1 | 631 | 598 | - | 687 | 641 | - | - | - | - | - | - | - |
| Stage 2 | 669 | 638 | - | 593 | 590 | - | - | - | - | - | - | - |

| Approach | EB | | WB | | NB | | SB | |
|----------------------|----|--|------|--|-----|--|-----|--|
| HCM Control Delay, s | 19 | | 15.3 | | 0.7 | | 0.6 | |
| HCM LOS | C | | C | | | | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1WBLn1 | SBL | SBT | SBR |
|-----------------------|-------|-----|-----|------------|-------|-------|-----|
| Capacity (veh/h) | 1198 | - | - | 396 | 434 | 1270 | - |
| HCM Lane V/C Ratio | 0.016 | - | - | 0.357 | 0.193 | 0.017 | - |
| HCM Control Delay (s) | 8.1 | 0 | - | 19 | 15.3 | 7.9 | 0 |
| HCM Lane LOS | A | A | - | C | C | A | A |
| HCM 95th %tile Q(veh) | 0 | - | - | 1.6 | 0.7 | 0.1 | - |

HCM 6th TWSC
 9: Randolph Street & Maple Avenue

10/06/2020

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 2.5 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 13 | 383 | 10 | 25 | 269 | 25 | 11 | 5 | 30 | 14 | 9 | 18 |
| Future Vol, veh/h | 13 | 383 | 10 | 25 | 269 | 25 | 11 | 5 | 30 | 14 | 9 | 18 |
| Conflicting Peds, #/hr | 18 | 0 | 41 | 41 | 0 | 18 | 14 | 0 | 6 | 6 | 0 | 14 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 79 | 79 | 79 | 79 | 79 | 79 | 79 | 79 | 79 | 79 | 79 | 79 |
| Heavy Vehicles, % | 5 | 0 | 0 | 12 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 10 |
| Mvmt Flow | 16 | 485 | 13 | 32 | 341 | 32 | 14 | 6 | 38 | 18 | 11 | 23 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|----------------------|--------|---|---|--------|---|---|--------|------|-----|--------|-------|------|
| Conflicting Flow All | 391 | 0 | 0 | 539 | 0 | 0 | 1017 | 1020 | 539 | 991 | 1010 | 389 |
| Stage 1 | - | - | - | - | - | - | 565 | 565 | - | 439 | 439 | - |
| Stage 2 | - | - | - | - | - | - | 452 | 455 | - | 552 | 571 | - |
| Critical Hdwy | 4.15 | - | - | 4.22 | - | - | 7.1 | 6.5 | 6.2 | 7.1 | 6.51 | 6.3 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.1 | 5.51 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.1 | 5.51 | - |
| Follow-up Hdwy | 2.245 | - | - | 2.308 | - | - | 3.5 | 4 | 3.3 | 3.5 | 4.009 | 3.39 |
| Pot Cap-1 Maneuver | 1151 | - | - | 981 | - | - | 218 | 239 | 546 | 227 | 241 | 642 |
| Stage 1 | - | - | - | - | - | - | 513 | 511 | - | 601 | 580 | - |
| Stage 2 | - | - | - | - | - | - | 591 | 572 | - | 522 | 506 | - |
| Platoon blocked, % | - | - | - | - | - | - | - | - | - | - | - | - |
| Mov Cap-1 Maneuver | 1131 | - | - | 943 | - | - | 182 | 212 | 522 | 192 | 214 | 623 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 182 | 212 | - | 192 | 214 | - |
| Stage 1 | - | - | - | - | - | - | 483 | 481 | - | 579 | 546 | - |
| Stage 2 | - | - | - | - | - | - | 526 | 538 | - | 465 | 477 | - |

| Approach | EB | | | WB | | | NB | | | SB | | |
|----------------------|-----|--|--|-----|--|--|------|--|--|------|--|--|
| HCM Control Delay, s | 0.3 | | | 0.7 | | | 18.5 | | | 20.4 | | |
| HCM LOS | | | | | | | C | | | C | | |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|-----------------------|-------|-------|-----|-----|-------|-----|-----|-------|
| Capacity (veh/h) | 325 | 1131 | - | - | 943 | - | - | 285 |
| HCM Lane V/C Ratio | 0.179 | 0.015 | - | - | 0.034 | - | - | 0.182 |
| HCM Control Delay (s) | 18.5 | 8.2 | 0 | - | 8.9 | 0 | - | 20.4 |
| HCM Lane LOS | C | A | A | - | A | A | - | C |
| HCM 95th %tile Q(veh) | 0.6 | 0 | - | - | 0.1 | - | - | 0.7 |

HCM 6th TWSC
 10: North-South Alley & Randolph Street

10/06/2020

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 0.6 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 4 | 414 | 9 | 6 | 303 | 6 | 6 | 2 | 3 | 5 | 0 | 10 |
| Future Vol, veh/h | 4 | 414 | 9 | 6 | 303 | 6 | 6 | 2 | 3 | 5 | 0 | 10 |
| Conflicting Peds, #/hr | 7 | 0 | 8 | 8 | 0 | 7 | 1 | 0 | 4 | 4 | 0 | 1 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 |
| Heavy Vehicles, % | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 4 | 460 | 10 | 7 | 337 | 7 | 7 | 2 | 3 | 6 | 0 | 11 |













| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|----------------------|--------|---|---|--------|---|---|--------|-----|-----|--------|-----|-----|
| Conflicting Flow All | 351 | 0 | 0 | 478 | 0 | 0 | 842 | 846 | 477 | 842 | 848 | 349 |
| Stage 1 | - | - | - | - | - | - | 481 | 481 | - | 362 | 362 | - |
| Stage 2 | - | - | - | - | - | - | 361 | 365 | - | 480 | 486 | - |
| Critical Hdwy | 4.1 | - | - | 4.1 | - | - | 7.1 | 6.5 | 6.2 | 7.1 | 6.5 | 6.2 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.1 | 5.5 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.1 | 5.5 | - |
| Follow-up Hdwy | 2.2 | - | - | 2.2 | - | - | 3.5 | 4 | 3.3 | 3.5 | 4 | 3.3 |
| Pot Cap-1 Maneuver | 1219 | - | - | 1095 | - | - | 286 | 301 | 592 | 286 | 301 | 699 |
| Stage 1 | - | - | - | - | - | - | 570 | 557 | - | 661 | 629 | - |
| Stage 2 | - | - | - | - | - | - | 662 | 627 | - | 571 | 554 | - |
| Platoon blocked, % | - | - | - | - | - | - | - | - | - | - | - | - |
| Mov Cap-1 Maneuver | 1211 | - | - | 1087 | - | - | 277 | 293 | 585 | 277 | 293 | 694 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 277 | 293 | - | 277 | 293 | - |
| Stage 1 | - | - | - | - | - | - | 563 | 550 | - | 654 | 620 | - |
| Stage 2 | - | - | - | - | - | - | 646 | 618 | - | 561 | 547 | - |

| Approach | EB | | | WB | | | NB | | | SB | | |
|----------------------|-----|--|--|-----|--|--|------|--|--|------|--|--|
| HCM Control Delay, s | 0.1 | | | 0.2 | | | 16.4 | | | 13.1 | | |
| HCM LOS | | | | | | | C | | | B | | |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|-----------------------|-------|-------|-----|-----|-------|-----|-----|-------|
| Capacity (veh/h) | 327 | 1211 | - | - | 1087 | - | - | 462 |
| HCM Lane V/C Ratio | 0.037 | 0.004 | - | - | 0.006 | - | - | 0.036 |
| HCM Control Delay (s) | 16.4 | 8 | 0 | - | 8.3 | 0 | - | 13.1 |
| HCM Lane LOS | C | A | A | - | A | A | - | B |
| HCM 95th %tile Q(veh) | 0.1 | 0 | - | - | 0 | - | - | 0.1 |

Lanes, Volumes, Timings
1: Harlem Avenue & South Boulevard

01/28/2021

| |  |  |  |  |  |  |
|-------------------------|---|---|--|---|---|--|
| Lane Group | WBL | WBR | NBT | NBR | SBL | SBT |
| Lane Configurations |  |  |   | | |   |
| Traffic Volume (vph) | 136 | 145 | 1160 | 45 | 0 | 1247 |
| Future Volume (vph) | 136 | 145 | 1160 | 45 | 0 | 1247 |
| Ideal Flow (vphp) | 1900 | 1900 | 1900 | 1900 | 1900 | 2000 |
| Storage Length (ft) | 110 | 0 | | 0 | 0 | |
| Storage Lanes | 1 | 1 | | 0 | 0 | |
| Taper Length (ft) | 145 | | | | 25 | |
| Lane Util. Factor | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 |
| Ped Bike Factor | 0.90 | 0.98 | 1.00 | | | |
| Frt | | 0.850 | 0.994 | | | |
| Flt Protected | 0.950 | | | | | |
| Satd. Flow (prot) | 1752 | 1356 | 3508 | 0 | 0 | 3695 |
| Flt Permitted | 0.950 | | | | | |
| Satd. Flow (perm) | 1583 | 1329 | 3508 | 0 | 0 | 3695 |
| Right Turn on Red | | No | | No | | |
| Satd. Flow (RTOR) | | | | | | |
| Link Speed (mph) | 30 | | 30 | | | 30 |
| Link Distance (ft) | 465 | | 176 | | | 249 |
| Travel Time (s) | 10.6 | | 4.0 | | | 5.7 |
| Confl. Peds. (#/hr) | 67 | 6 | | 29 | 29 | |
| Peak Hour Factor | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 |
| Heavy Vehicles (%) | 3% | 3% | 2% | 0% | 0% | 1% |
| Bus Blockages (#/hr) | 0 | 0 | 0 | 0 | 0 | 9 |
| Parking (#/hr) | | 7 | | | | |
| Shared Lane Traffic (%) | | | | | | |
| Lane Group Flow (vph) | 140 | 149 | 1242 | 0 | 0 | 1286 |
| Turn Type | Prot | Perm | NA | | | NA |
| Protected Phases | 8 | | 2 | | | 6 |
| Permitted Phases | | 8 | | | | |
| Detector Phase | 8 | 8 | 2 | | | 6 |
| Switch Phase | | | | | | |
| Minimum Initial (s) | 8.0 | 8.0 | 15.0 | | | 15.0 |
| Minimum Split (s) | 31.0 | 31.0 | 28.0 | | | 29.0 |
| Total Split (s) | 36.0 | 36.0 | 84.0 | | | 84.0 |
| Total Split (%) | 30.0% | 30.0% | 70.0% | | | 70.0% |
| Yellow Time (s) | 4.0 | 4.0 | 4.0 | | | 4.0 |
| All-Red Time (s) | 2.0 | 2.0 | 2.0 | | | 2.0 |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | | | 0.0 |
| Total Lost Time (s) | 6.0 | 6.0 | 6.0 | | | 6.0 |
| Lead/Lag | | | | | | |
| Lead-Lag Optimize? | | | | | | |
| Recall Mode | None | None | C-Min | | | C-Min |
| Act Effect Green (s) | 19.6 | 19.6 | 88.4 | | | 88.4 |
| Actuated g/C Ratio | 0.16 | 0.16 | 0.74 | | | 0.74 |
| v/c Ratio | 0.49 | 0.69 | 0.48 | | | 0.47 |
| Control Delay | 50.3 | 62.8 | 8.6 | | | 7.7 |
| Queue Delay | 0.0 | 0.0 | 0.0 | | | 0.0 |
| Total Delay | 50.3 | 62.8 | 8.6 | | | 7.7 |
| LOS | D | E | A | | | A |

Lanes, Volumes, Timings
 1: Harlem Avenue & South Boulevard

01/28/2021



| Lane Group | WBL | WBR | NBT | NBR | SBL | SBT |
|-------------------------|------|------|------|-----|-----|------|
| Approach Delay | 56.7 | | 8.6 | | | 7.7 |
| Approach LOS | E | | A | | | A |
| Queue Length 50th (ft) | 100 | 110 | 338 | | | 184 |
| Queue Length 95th (ft) | 153 | 171 | 457 | | | 288 |
| Internal Link Dist (ft) | 385 | | 96 | | | 169 |
| Turn Bay Length (ft) | 110 | | | | | |
| Base Capacity (vph) | 438 | 332 | 2584 | | | 2722 |
| Starvation Cap Reductn | 0 | 0 | 0 | | | 0 |
| Spillback Cap Reductn | 0 | 0 | 0 | | | 0 |
| Storage Cap Reductn | 0 | 0 | 0 | | | 0 |
| Reduced v/c Ratio | 0.32 | 0.45 | 0.48 | | | 0.47 |

Intersection Summary

| | |
|-----------------------------------|--|
| Area Type: | Other |
| Cycle Length: | 120 |
| Actuated Cycle Length: | 120 |
| Offset: | 101 (84%), Referenced to phase 2:NBT and 6:SBT, Start of Green |
| Natural Cycle: | 60 |
| Control Type: | Actuated-Coordinated |
| Maximum v/c Ratio: | 0.69 |
| Intersection Signal Delay: | 13.1 |
| Intersection LOS: | B |
| Intersection Capacity Utilization | 55.2% |
| ICU Level of Service | B |
| Analysis Period (min) | 15 |

Splits and Phases: 1: Harlem Avenue & South Boulevard



Lanes, Volumes, Timings
2: Harlem Avenue & Randolph Street

10/06/2020



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 152 | 155 | 73 | 64 | 135 | 33 | 84 | 1077 | 34 | 67 | 1066 | 87 |
| Future Volume (vph) | 152 | 155 | 73 | 64 | 135 | 33 | 84 | 1077 | 34 | 67 | 1066 | 87 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 2000 | 1900 | 1900 | 2000 | 1900 |
| Lane Width (ft) | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 |
| Grade (%) | | 0% | | | 0% | | | 0% | | | 0% | |
| Storage Length (ft) | 40 | | 0 | 50 | | 0 | 165 | | 0 | 85 | | 0 |
| Storage Lanes | 1 | | 0 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 90 | | | 75 | | | 120 | | | 90 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 |
| Ped Bike Factor | 0.99 | 0.99 | | 0.99 | 0.99 | | | 1.00 | | | 1.00 | |
| Frt | | 0.952 | | | 0.970 | | | 0.995 | | | 0.989 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1787 | 1772 | 0 | 1805 | 1832 | 0 | 1805 | 3705 | 0 | 1805 | 3646 | 0 |
| Flt Permitted | 0.441 | | | 0.415 | | | 0.136 | | | 0.161 | | |
| Satd. Flow (perm) | 819 | 1772 | 0 | 783 | 1832 | 0 | 258 | 3705 | 0 | 306 | 3646 | 0 |
| Right Turn on Red | | | No | | | No | | | No | | | No |
| Satd. Flow (RTOR) | | | | | | | | | | | | |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 454 | | | 257 | | | 242 | | | 813 | |
| Travel Time (s) | | 10.3 | | | 5.8 | | | 5.5 | | | 18.5 | |
| Confl. Peds. (#/hr) | 12 | | 8 | 8 | | 12 | 8 | | 5 | 5 | | 8 |
| Confl. Bikes (#/hr) | | | | | | 1 | | | | | | |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Growth Factor | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| Heavy Vehicles (%) | 1% | 0% | 4% | 0% | 0% | 0% | 0% | 2% | 0% | 0% | 1% | 0% |
| Bus Blockages (#/hr) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 0 |
| Parking (#/hr) | | | | | | | | | | | | |
| Mid-Block Traffic (%) | | 0% | | | 0% | | | 0% | | | 0% | |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 160 | 240 | 0 | 67 | 177 | 0 | 88 | 1170 | 0 | 71 | 1214 | 0 |
| Turn Type | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | | 8 | | | 2 | | | 6 | | |
| Detector Phase | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 3.0 | 8.0 | | 3.0 | 8.0 | | 3.0 | 15.0 | | 3.0 | 15.0 | |
| Minimum Split (s) | 9.5 | 30.0 | | 9.5 | 30.0 | | 9.5 | 29.0 | | 10.5 | 33.0 | |
| Total Split (s) | 13.0 | 30.0 | | 13.0 | 30.0 | | 13.0 | 64.0 | | 13.0 | 64.0 | |
| Total Split (%) | 10.8% | 25.0% | | 10.8% | 25.0% | | 10.8% | 53.3% | | 10.8% | 53.3% | |
| Yellow Time (s) | 3.5 | 4.0 | | 3.5 | 4.0 | | 3.5 | 4.0 | | 3.5 | 4.0 | |
| All-Red Time (s) | 0.0 | 2.0 | | 0.0 | 2.0 | | 0.0 | 2.0 | | 0.0 | 2.0 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | 3.5 | 6.0 | | 3.5 | 6.0 | | 3.5 | 6.0 | | 3.5 | 6.0 | |
| Lead/Lag | Lead | Lag | | Lead | Lag | | Lead | Lag | | Lead | Lag | |
| Lead-Lag Optimize? | Yes | Yes | | Yes | Yes | | Yes | Yes | | Yes | Yes | |
| Recall Mode | None | None | | None | None | | None | C-Min | | None | C-Min | |
| Act Effect Green (s) | 33.0 | 22.9 | | 30.5 | 19.7 | | 75.3 | 66.3 | | 73.9 | 64.1 | |
| Actuated g/C Ratio | 0.28 | 0.19 | | 0.25 | 0.16 | | 0.63 | 0.55 | | 0.62 | 0.53 | |

Lanes, Volumes, Timings
 2: Harlem Avenue & Randolph Street

10/06/2020



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|------|------|-----|------|------|-----|------|------|-----|------|------|-----|
| v/c Ratio | 0.53 | 0.71 | | 0.25 | 0.59 | | 0.34 | 0.57 | | 0.25 | 0.62 | |
| Control Delay | 39.2 | 58.2 | | 31.9 | 53.8 | | 12.4 | 20.4 | | 15.0 | 30.7 | |
| Queue Delay | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | 39.2 | 58.2 | | 31.9 | 53.8 | | 12.4 | 20.4 | | 15.0 | 30.7 | |
| LOS | D | E | | C | D | | B | C | | B | C | |
| Approach Delay | | 50.6 | | | 47.8 | | | 19.9 | | | 29.8 | |
| Approach LOS | | D | | | D | | | B | | | C | |
| Queue Length 50th (ft) | 94 | 177 | | 37 | 126 | | 24 | 319 | | 29 | 432 | |
| Queue Length 95th (ft) | 148 | 265 | | 71 | 195 | | 48 | 421 | | 59 | 541 | |
| Internal Link Dist (ft) | | 374 | | | 177 | | | 162 | | | 733 | |
| Turn Bay Length (ft) | 40 | | | 50 | | | 165 | | | 85 | | |
| Base Capacity (vph) | 301 | 356 | | 287 | 366 | | 286 | 2047 | | 312 | 1946 | |
| Starvation Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Spillback Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Storage Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Reduced v/c Ratio | 0.53 | 0.67 | | 0.23 | 0.48 | | 0.31 | 0.57 | | 0.23 | 0.62 | |

Intersection Summary

| | |
|------------------------------------|---|
| Area Type: | Other |
| Cycle Length: | 120 |
| Actuated Cycle Length: | 120 |
| Offset: | 56 (47%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green |
| Natural Cycle: | 85 |
| Control Type: | Actuated-Coordinated |
| Maximum v/c Ratio: | 0.71 |
| Intersection Signal Delay: | 29.9 |
| Intersection LOS: | C |
| Intersection Capacity Utilization: | 73.3% |
| ICU Level of Service: | D |
| Analysis Period (min): | 15 |

Splits and Phases: 2: Harlem Avenue & Randolph Street



HCM 6th AWSC
 11: Maple Avenue & Pleasant Street

10/06/2020

| Intersection | |
|---------------------------|-----|
| Intersection Delay, s/veh | 7.6 |
| Intersection LOS | A |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 9 | 86 | 7 | 22 | 18 | 16 | 11 | 5 | 26 | 6 | 6 | 8 |
| Future Vol, veh/h | 9 | 86 | 7 | 22 | 18 | 16 | 11 | 5 | 26 | 6 | 6 | 8 |
| Peak Hour Factor | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 |
| Heavy Vehicles, % | 0 | 2 | 0 | 0 | 7 | 17 | 0 | 0 | 0 | 17 | 17 | 0 |
| Mvmt Flow | 11 | 109 | 9 | 28 | 23 | 20 | 14 | 6 | 33 | 8 | 8 | 10 |
| Number of Lanes | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |

| Approach | EB | WB | NB | SB |
|----------------------------|-----|-----|-----|-----|
| Opposing Approach | WB | EB | SB | NB |
| Opposing Lanes | 1 | 1 | 1 | 1 |
| Conflicting Approach Left | SB | NB | EB | WB |
| Conflicting Lanes Left | 1 | 1 | 1 | 1 |
| Conflicting Approach Right | NB | SB | WB | EB |
| Conflicting Lanes Right | 1 | 1 | 1 | 1 |
| HCM Control Delay | 7.8 | 7.5 | 7.3 | 7.6 |
| HCM LOS | A | A | A | A |

| Lane | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|------------------------|-------|-------|-------|-------|
| Vol Left, % | 26% | 9% | 39% | 30% |
| Vol Thru, % | 12% | 84% | 32% | 30% |
| Vol Right, % | 62% | 7% | 29% | 40% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 42 | 102 | 56 | 20 |
| LT Vol | 11 | 9 | 22 | 6 |
| Through Vol | 5 | 86 | 18 | 6 |
| RT Vol | 26 | 7 | 16 | 8 |
| Lane Flow Rate | 53 | 129 | 71 | 25 |
| Geometry Grp | 1 | 1 | 1 | 1 |
| Degree of Util (X) | 0.06 | 0.146 | 0.08 | 0.032 |
| Departure Headway (Hd) | 4.045 | 4.067 | 4.043 | 4.499 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 891 | 874 | 876 | 800 |
| Service Time | 2.045 | 2.125 | 2.114 | 2.501 |
| HCM Lane V/C Ratio | 0.059 | 0.148 | 0.081 | 0.031 |
| HCM Control Delay | 7.3 | 7.8 | 7.5 | 7.6 |
| HCM Lane LOS | A | A | A | A |
| HCM 95th-tile Q | 0.2 | 0.5 | 0.3 | 0.1 |

HCM 6th AWSC
12: Randolph Street & Marion Street

10/06/2020

| Intersection | |
|---------------------------|------|
| Intersection Delay, s/veh | 11.3 |
| Intersection LOS | B |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 59 | 194 | 23 | 8 | 195 | 5 | 11 | 71 | 13 | 42 | 98 | 43 |
| Future Vol, veh/h | 59 | 194 | 23 | 8 | 195 | 5 | 11 | 71 | 13 | 42 | 98 | 43 |
| Peak Hour Factor | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 |
| Heavy Vehicles, % | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 3 | 0 | 0 |
| Mvmt Flow | 66 | 218 | 26 | 9 | 219 | 6 | 12 | 80 | 15 | 47 | 110 | 48 |
| Number of Lanes | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |

| Approach | EB | WB | NB | SB |
|----------------------------|------|----|-----|----|
| Opposing Approach | WB | EB | SB | NB |
| Opposing Lanes | 1 | 1 | 1 | 1 |
| Conflicting Approach Left | SB | NB | EB | WB |
| Conflicting Lanes Left | 1 | 1 | 1 | 1 |
| Conflicting Approach Right | NB | SB | WB | EB |
| Conflicting Lanes Right | 1 | 1 | 1 | 1 |
| HCM Control Delay | 12.2 | 11 | 9.8 | 11 |
| HCM LOS | B | B | A | B |

| Lane | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|------------------------|-------|-------|-------|-------|
| Vol Left, % | 12% | 21% | 4% | 23% |
| Vol Thru, % | 75% | 70% | 94% | 54% |
| Vol Right, % | 14% | 8% | 2% | 23% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 95 | 276 | 208 | 183 |
| LT Vol | 11 | 59 | 8 | 42 |
| Through Vol | 71 | 194 | 195 | 98 |
| RT Vol | 13 | 23 | 5 | 43 |
| Lane Flow Rate | 107 | 310 | 234 | 206 |
| Geometry Grp | 1 | 1 | 1 | 1 |
| Degree of Util (X) | 0.167 | 0.442 | 0.34 | 0.312 |
| Departure Headway (Hd) | 5.636 | 5.136 | 5.245 | 5.466 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 635 | 701 | 685 | 658 |
| Service Time | 3.68 | 3.167 | 3.279 | 3.504 |
| HCM Lane V/C Ratio | 0.169 | 0.442 | 0.342 | 0.313 |
| HCM Control Delay | 9.8 | 12.2 | 11 | 11 |
| HCM Lane LOS | A | B | B | B |
| HCM 95th-tile Q | 0.6 | 2.3 | 1.5 | 1.3 |

HCM 6th TWSC
3: Harlem Avenue & Circle Avenue

10/06/2020

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 0.2 | | | | | |
| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
| Lane Configurations | | ↗ | | ↑↑ | ↑↑ | |
| Traffic Vol, veh/h | 0 | 30 | 0 | 1205 | 1226 | 157 |
| Future Vol, veh/h | 0 | 30 | 0 | 1205 | 1226 | 157 |
| Conflicting Peds, #/hr | 6 | 67 | 48 | 0 | 0 | 48 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | 0 | - | - | - | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 97 | 97 | 97 | 97 | 97 | 97 |
| Heavy Vehicles, % | 0 | 0 | 0 | 2 | 1 | 0 |
| Mvmt Flow | 0 | 31 | 0 | 1242 | 1264 | 162 |

| Major/Minor | Minor2 | Major1 | Major2 | | |
|----------------------|--------|--------|--------|---|---|
| Conflicting Flow All | - | 828 | - | 0 | 0 |
| Stage 1 | - | - | - | - | - |
| Stage 2 | - | - | - | - | - |
| Critical Hdwy | - | 6.9 | - | - | - |
| Critical Hdwy Stg 1 | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - |
| Follow-up Hdwy | - | 3.3 | - | - | - |
| Pot Cap-1 Maneuver | 0 | 318 | 0 | - | - |
| Stage 1 | 0 | - | 0 | - | - |
| Stage 2 | 0 | - | 0 | - | - |
| Platoon blocked, % | | | | - | - |
| Mov Cap-1 Maneuver | - | 284 | - | - | - |
| Mov Cap-2 Maneuver | - | - | - | - | - |
| Stage 1 | - | - | - | - | - |
| Stage 2 | - | - | - | - | - |

| Approach | EB | NB | SB |
|----------------------|------|----|----|
| HCM Control Delay, s | 19.2 | 0 | 0 |
| HCM LOS | C | | |

| Minor Lane/Major Mvmt | NBT | EBLn1 | SBT | SBR |
|-----------------------|-----|-------|-----|-----|
| Capacity (veh/h) | - | 284 | - | - |
| HCM Lane V/C Ratio | - | 0.109 | - | - |
| HCM Control Delay (s) | - | 19.2 | - | - |
| HCM Lane LOS | - | C | - | - |
| HCM 95th %tile Q(veh) | - | 0.4 | - | - |

HCM 6th TWSC
4: North-South Alley & South Boulevard

10/06/2020

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 0.4 | | | | | |
| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 42 | 4 | 6 | 277 | 4 | 4 |
| Future Vol, veh/h | 42 | 4 | 6 | 277 | 4 | 4 |
| Conflicting Peds, #/hr | 0 | 85 | 85 | 0 | 11 | 2 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 88 | 88 | 88 | 88 | 88 | 88 |
| Heavy Vehicles, % | 0 | 0 | 0 | 3 | 0 | 0 |
| Mvmt Flow | 48 | 5 | 7 | 315 | 5 | 5 |

| Major/Minor | Major1 | Major2 | Minor1 | Minor2 | Minor3 |
|----------------------|--------|--------|--------|--------|--------|
| Conflicting Flow All | 0 | 0 | 138 | 0 | 476 |
| Stage 1 | - | - | - | - | 136 |
| Stage 2 | - | - | - | - | 340 |
| Critical Hdwy | - | - | 4.1 | - | 6.4 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.4 |
| Critical Hdwy Stg 2 | - | - | - | - | 5.4 |
| Follow-up Hdwy | - | - | 2.2 | - | 3.5 |
| Pot Cap-1 Maneuver | - | - | 1458 | - | 551 |
| Stage 1 | - | - | - | - | 895 |
| Stage 2 | - | - | - | - | 725 |
| Platoon blocked, % | - | - | - | - | - |
| Mov Cap-1 Maneuver | - | - | 1340 | - | 498 |
| Mov Cap-2 Maneuver | - | - | - | - | 498 |
| Stage 1 | - | - | - | - | 817 |
| Stage 2 | - | - | - | - | 718 |

| Approach | EB | WB | NB |
|----------------------|----|-----|------|
| HCM Control Delay, s | 0 | 0.2 | 10.8 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBL | WBT |
|-----------------------|-------|-----|-----|-------|-----|
| Capacity (veh/h) | 625 | - | - | 1340 | - |
| HCM Lane V/C Ratio | 0.015 | - | - | 0.005 | - |
| HCM Control Delay (s) | 10.8 | - | - | 7.7 | 0 |
| HCM Lane LOS | B | - | - | A | A |
| HCM 95th %tile Q(veh) | 0 | - | - | 0 | - |

HCM 6th TWSC
6: Harlem Avenue & Frankin Street/Pleasant Street

10/06/2020

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 3.3 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 0 | 0 | 36 | 1 | 5 | 31 | 19 | 1174 | 69 | 33 | 1183 | 40 |
| Future Vol, veh/h | 0 | 0 | 36 | 1 | 5 | 31 | 19 | 1174 | 69 | 33 | 1183 | 40 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 0 | 8 | 8 | 0 | 3 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | 0 | - | - | - | - | - | - | - | - | - |
| 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, % | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 1 | 2 | 0 | 1 | 0 |
| Mvmt Flow | 0 | 0 | 39 | 1 | 5 | 34 | 21 | 1276 | 75 | 36 | 1286 | 43 |

| Major/Minor | Minor2 | | Minor1 | | Major1 | | Major2 | | | | | |
|----------------------|--------|---|--------|------|--------|------|--------|---|---|------|---|---|
| Conflicting Flow All | - | - | 668 | 2079 | 2768 | 684 | 1332 | 0 | 0 | 1359 | 0 | 0 |
| Stage 1 | - | - | - | 1364 | 1364 | - | - | - | - | - | - | - |
| Stage 2 | - | - | - | 715 | 1404 | - | - | - | - | - | - | - |
| Critical Hdwy | - | - | 6.9 | 7.5 | 6.5 | 7 | 4.1 | - | - | 4.1 | - | - |
| Critical Hdwy Stg 1 | - | - | - | 6.5 | 5.5 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | 6.5 | 5.5 | - | - | - | - | - | - | - |
| Follow-up Hdwy | - | - | 3.3 | 3.5 | 4 | 3.35 | 2.2 | - | - | 2.2 | - | - |
| Pot Cap-1 Maneuver | 0 | 0 | 405 | 32 | 20 | 384 | 525 | - | - | 512 | - | - |
| Stage 1 | 0 | 0 | - | 158 | 218 | - | - | - | - | - | - | - |
| Stage 2 | 0 | 0 | - | 392 | 208 | - | - | - | - | - | - | - |
| Platoon blocked, % | - | - | - | - | - | - | - | - | - | - | - | - |
| Mov Cap-1 Maneuver | - | - | 404 | 20 | 12 | 381 | 524 | - | - | 508 | - | - |
| Mov Cap-2 Maneuver | - | - | - | 20 | 12 | - | - | - | - | - | - | - |
| Stage 1 | - | - | - | 131 | 180 | - | - | - | - | - | - | - |
| Stage 2 | - | - | - | 256 | 150 | - | - | - | - | - | - | - |

| Approach | EB | | WB | | NB | | SB | |
|----------------------|------|--|-------|--|-----|--|-----|--|
| HCM Control Delay, s | 14.9 | | 116.1 | | 1.1 | | 1.9 | |
| HCM LOS | B | | F | | | | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1WBLn1 | SBL | SBT | SBR |
|-----------------------|-------|-----|-----|------------|-------|-------|-----|
| Capacity (veh/h) | 524 | - | - | 404 | 68 | 508 | - |
| HCM Lane V/C Ratio | 0.039 | - | - | 0.097 | 0.591 | 0.071 | - |
| HCM Control Delay (s) | 12.2 | 1 | - | 14.9 | 116.1 | 12.6 | 1.7 |
| HCM Lane LOS | B | A | - | B | F | B | A |
| HCM 95th %tile Q(veh) | 0.1 | - | - | 0.3 | 2.5 | 0.2 | - |

HCM 6th TWSC
7: North-South Alley & Pleasant Street

10/06/2020

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 1 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 5 | 112 | 1 | 4 | 49 | 3 | 2 | 0 | 2 | 2 | 3 | 5 |
| Future Vol, veh/h | 5 | 112 | 1 | 4 | 49 | 3 | 2 | 0 | 2 | 2 | 3 | 5 |
| Conflicting Peds, #/hr | 4 | 0 | 11 | 11 | 0 | 4 | 6 | 0 | 5 | 5 | 0 | 6 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
| 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, % | 0 | 2 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 20 |
| Mvmt Flow | 5 | 122 | 1 | 4 | 53 | 3 | 2 | 0 | 2 | 2 | 3 | 5 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|----------------------|--------|---|---|--------|---|---|--------|-----|-----|--------|-----|------|
| Conflicting Flow All | 60 | 0 | 0 | 134 | 0 | 0 | 217 | 212 | 139 | 206 | 211 | 65 |
| Stage 1 | - | - | - | - | - | - | 144 | 144 | - | 67 | 67 | - |
| Stage 2 | - | - | - | - | - | - | 73 | 68 | - | 139 | 144 | - |
| Critical Hdwy | 4.1 | - | - | 4.1 | - | - | 7.1 | 6.5 | 6.2 | 7.1 | 6.5 | 6.4 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.1 | 5.5 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.1 | 5.5 | - |
| Follow-up Hdwy | 2.2 | - | - | 2.2 | - | - | 3.5 | 4 | 3.3 | 3.5 | 4 | 3.48 |
| Pot Cap-1 Maneuver | 1556 | - | - | 1463 | - | - | 744 | 689 | 915 | 756 | 690 | 951 |
| Stage 1 | - | - | - | - | - | - | 864 | 782 | - | 948 | 843 | - |
| Stage 2 | - | - | - | - | - | - | 942 | 842 | - | 869 | 782 | - |
| Platoon blocked, % | - | - | - | - | - | - | - | - | - | - | - | - |
| Mov Cap-1 Maneuver | 1550 | - | - | 1448 | - | - | 722 | 675 | 901 | 745 | 676 | 942 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 722 | 675 | - | 745 | 676 | - |
| Stage 1 | - | - | - | - | - | - | 853 | 772 | - | 941 | 837 | - |
| Stage 2 | - | - | - | - | - | - | 925 | 836 | - | 860 | 772 | - |

| Approach | EB | | | WB | | | NB | | | SB | | |
|----------------------|-----|--|--|-----|--|--|-----|--|--|-----|--|--|
| HCM Control Delay, s | 0.3 | | | 0.5 | | | 9.5 | | | 9.5 | | |
| HCM LOS | | | | | | | A | | | A | | |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|-----------------------|-------|-------|-----|-----|-------|-----|-----|-------|
| Capacity (veh/h) | 802 | 1550 | - | - | 1448 | - | - | 804 |
| HCM Lane V/C Ratio | 0.005 | 0.004 | - | - | 0.003 | - | - | 0.014 |
| HCM Control Delay (s) | 9.5 | 7.3 | 0 | - | 7.5 | 0 | - | 9.5 |
| HCM Lane LOS | A | A | A | - | A | A | - | A |
| HCM 95th %tile Q(veh) | 0 | 0 | - | - | 0 | - | - | 0 |

HCM 6th TWSC
8: Marion Street & Pleasant Street

10/06/2020

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 5.6 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 75 | 19 | 22 | 17 | 22 | 22 | 8 | 120 | 7 | 16 | 144 | 26 |
| Future Vol, veh/h | 75 | 19 | 22 | 17 | 22 | 22 | 8 | 120 | 7 | 16 | 144 | 26 |
| Conflicting Peds, #/hr | 0 | 0 | 20 | 20 | 0 | 0 | 59 | 0 | 44 | 44 | 0 | 59 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 |
| Heavy Vehicles, % | 0 | 0 | 2 | 0 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 84 | 21 | 25 | 19 | 25 | 25 | 9 | 135 | 8 | 18 | 162 | 29 |

| Major/Minor | Minor2 | | Minor1 | | Major1 | | Major2 | | | | | |
|----------------------|--------|-----|--------|-----|--------|-----|--------|---|---|------|---|---|
| Conflicting Flow All | 454 | 477 | 256 | 457 | 487 | 183 | 250 | 0 | 0 | 187 | 0 | 0 |
| Stage 1 | 272 | 272 | - | 201 | 201 | - | - | - | - | - | - | - |
| Stage 2 | 182 | 205 | - | 256 | 286 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.1 | 6.5 | 6.22 | 7.1 | 6.62 | 6.2 | 4.1 | - | - | 4.1 | - | - |
| Critical Hdwy Stg 1 | 6.1 | 5.5 | - | 6.1 | 5.62 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.1 | 5.5 | - | 6.1 | 5.62 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.5 | 4 | 3.318 | 3.5 | 4.108 | 3.3 | 2.2 | - | - | 2.2 | - | - |
| Pot Cap-1 Maneuver | 520 | 490 | 783 | 517 | 466 | 865 | 1327 | - | - | 1399 | - | - |
| Stage 1 | 738 | 688 | - | 805 | 717 | - | - | - | - | - | - | - |
| Stage 2 | 824 | 736 | - | 753 | 657 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | - | - | - |
| Mov Cap-1 Maneuver | 447 | 433 | 725 | 444 | 412 | 829 | 1252 | - | - | 1340 | - | - |
| Mov Cap-2 Maneuver | 447 | 433 | - | 444 | 412 | - | - | - | - | - | - | - |
| Stage 1 | 691 | 640 | - | 765 | 681 | - | - | - | - | - | - | - |
| Stage 2 | 764 | 699 | - | 679 | 611 | - | - | - | - | - | - | - |

| Approach | EB | | WB | | NB | | SB | | | |
|----------------------|------|--|----|--|-----|--|-----|--|--|--|
| HCM Control Delay, s | 15.3 | | 13 | | 0.5 | | 0.7 | | | |
| HCM LOS | C | | B | | | | | | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1WBLn1 | SBL | SBT | SBR |
|-----------------------|-------|-----|-----|------------|-------|-------|-----|
| Capacity (veh/h) | 1252 | - | - | 479 | 516 | 1340 | - |
| HCM Lane V/C Ratio | 0.007 | - | - | 0.272 | 0.133 | 0.013 | - |
| HCM Control Delay (s) | 7.9 | 0 | - | 15.3 | 13 | 7.7 | 0 |
| HCM Lane LOS | A | A | - | C | B | A | A |
| HCM 95th %tile Q(veh) | 0 | - | - | 1.1 | 0.5 | 0 | - |

HCM 6th TWSC
9: Randolph Street & Maple Avenue

10/06/2020

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 2.3 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 7 | 245 | 4 | 21 | 218 | 16 | 5 | 19 | 27 | 9 | 17 | 9 |
| Future Vol, veh/h | 7 | 245 | 4 | 21 | 218 | 16 | 5 | 19 | 27 | 9 | 17 | 9 |
| Conflicting Peds, #/hr | 18 | 0 | 5 | 5 | 0 | 18 | 7 | 0 | 11 | 11 | 0 | 7 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 87 | 87 | 87 | 87 | 87 | 87 | 87 | 87 | 87 | 87 | 87 | 87 |
| Heavy Vehicles, % | 0 | 18 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| Mvmt Flow | 8 | 282 | 5 | 24 | 251 | 18 | 6 | 22 | 31 | 10 | 20 | 10 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|----------------------|--------|---|---|--------|---|---|--------|-----|-----|--------|-------|-----|
| Conflicting Flow All | 287 | 0 | 0 | 292 | 0 | 0 | 636 | 641 | 301 | 664 | 634 | 285 |
| Stage 1 | - | - | - | - | - | - | 306 | 306 | - | 326 | 326 | - |
| Stage 2 | - | - | - | - | - | - | 330 | 335 | - | 338 | 308 | - |
| Critical Hdwy | 4.1 | - | - | 4.1 | - | - | 7.1 | 6.5 | 6.2 | 7.1 | 6.51 | 6.2 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.1 | 5.51 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.1 | 5.51 | - |
| Follow-up Hdwy | 2.2 | - | - | 2.2 | - | - | 3.5 | 4 | 3.3 | 3.5 | 4.009 | 3.3 |
| Pot Cap-1 Maneuver | 1287 | - | - | 1281 | - | - | 393 | 395 | 743 | 377 | 398 | 759 |
| Stage 1 | - | - | - | - | - | - | 708 | 665 | - | 691 | 650 | - |
| Stage 2 | - | - | - | - | - | - | 687 | 646 | - | 681 | 662 | - |
| Platoon blocked, % | - | - | - | - | - | - | - | - | - | - | - | - |
| Mov Cap-1 Maneuver | 1265 | - | - | 1275 | - | - | 360 | 375 | 732 | 328 | 378 | 741 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 360 | 375 | - | 328 | 378 | - |
| Stage 1 | - | - | - | - | - | - | 699 | 656 | - | 674 | 625 | - |
| Stage 2 | - | - | - | - | - | - | 638 | 621 | - | 619 | 653 | - |

| Approach | EB | | | WB | | | NB | | | SB | | |
|----------------------|-----|--|--|-----|--|--|------|--|--|------|--|--|
| HCM Control Delay, s | 0.2 | | | 0.6 | | | 13.1 | | | 14.6 | | |
| HCM LOS | | | | | | | B | | | B | | |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|-----------------------|-------|-------|-----|-----|-------|-----|-----|-------|
| Capacity (veh/h) | 503 | 1265 | - | - | 1275 | - | - | 414 |
| HCM Lane V/C Ratio | 0.117 | 0.006 | - | - | 0.019 | - | - | 0.097 |
| HCM Control Delay (s) | 13.1 | 7.9 | 0 | - | 7.9 | 0 | - | 14.6 |
| HCM Lane LOS | B | A | A | - | A | A | - | B |
| HCM 95th %tile Q(veh) | 0.4 | 0 | - | - | 0.1 | - | - | 0.3 |

HCM 6th TWSC
10: North-South Alley & Randolph Street

10/06/2020

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 0.3 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 3 | 275 | 3 | 1 | 247 | 1 | 1 | 0 | 1 | 0 | 1 | 7 |
| Future Vol, veh/h | 3 | 275 | 3 | 1 | 247 | 1 | 1 | 0 | 1 | 0 | 1 | 7 |
| Conflicting Peds, #/hr | 19 | 0 | 10 | 10 | 0 | 19 | 4 | 0 | 1 | 1 | 0 | 4 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 85 | 85 | 85 | 85 | 85 | 85 | 85 | 85 | 85 | 85 | 85 | 85 |
| Heavy Vehicles, % | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 4 | 324 | 4 | 1 | 291 | 1 | 1 | 0 | 1 | 0 | 1 | 8 |











| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|----------------------|--------|---|---|--------|---|---|--------|-----|-----|--------|-----|-----|
| Conflicting Flow All | 311 | 0 | 0 | 338 | 0 | 0 | 646 | 657 | 337 | 649 | 659 | 315 |
| Stage 1 | - | - | - | - | - | - | 344 | 344 | - | 313 | 313 | - |
| Stage 2 | - | - | - | - | - | - | 302 | 313 | - | 336 | 346 | - |
| Critical Hdwy | 4.1 | - | - | 4.1 | - | - | 7.1 | 6.5 | 6.2 | 7.1 | 6.5 | 6.2 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.1 | 5.5 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.1 | 5.5 | - |
| Follow-up Hdwy | 2.2 | - | - | 2.2 | - | - | 3.5 | 4 | 3.3 | 3.5 | 4 | 3.3 |
| Pot Cap-1 Maneuver | 1261 | - | - | 1232 | - | - | 387 | 387 | 710 | 386 | 386 | 730 |
| Stage 1 | - | - | - | - | - | - | 676 | 640 | - | 702 | 661 | - |
| Stage 2 | - | - | - | - | - | - | 712 | 661 | - | 682 | 639 | - |
| Platoon blocked, % | - | - | - | - | - | - | - | - | - | - | - | - |
| Mov Cap-1 Maneuver | 1238 | - | - | 1220 | - | - | 375 | 374 | 703 | 377 | 373 | 714 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 375 | 374 | - | 377 | 373 | - |
| Stage 1 | - | - | - | - | - | - | 667 | 631 | - | 687 | 648 | - |
| Stage 2 | - | - | - | - | - | - | 699 | 648 | - | 677 | 630 | - |

| Approach | EB | | | WB | | | NB | | | SB | | |
|----------------------|-----|--|--|----|--|--|------|--|--|------|--|--|
| HCM Control Delay, s | 0.1 | | | 0 | | | 12.4 | | | 10.7 | | |
| HCM LOS | | | | | | | B | | | B | | |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|-----------------------|-------|-------|-----|-----|-------|-----|-----|-------|
| Capacity (veh/h) | 489 | 1238 | - | - | 1220 | - | - | 641 |
| HCM Lane V/C Ratio | 0.005 | 0.003 | - | - | 0.001 | - | - | 0.015 |
| HCM Control Delay (s) | 12.4 | 7.9 | 0 | - | 8 | 0 | - | 10.7 |
| HCM Lane LOS | B | A | A | - | A | A | - | B |
| HCM 95th %tile Q(veh) | 0 | 0 | - | - | 0 | - | - | 0 |

Lanes, Volumes, Timings
1: Harlem Avenue & South Boulevard

01/28/2021

| |  |  |  |  |  |  |
|-------------------------|---|---|---|---|---|---|
| Lane Group | WBL | WBR | NBT | NBR | SBL | SBT |
| Lane Configurations |  |  |  | | |  |
| Traffic Volume (vph) | 147 | 83 | 1252 | 19 | 0 | 1446 |
| Future Volume (vph) | 147 | 83 | 1252 | 19 | 0 | 1446 |
| Ideal Flow (vphp) | 1900 | 1900 | 1900 | 1900 | 1900 | 2000 |
| Storage Length (ft) | 110 | 0 | | 0 | 0 | |
| Storage Lanes | 1 | 1 | | 0 | 0 | |
| Taper Length (ft) | 145 | | | | 25 | |
| Lane Util. Factor | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 |
| Ped Bike Factor | 0.92 | 0.97 | 1.00 | | | |
| Frt | | 0.850 | 0.998 | | | |
| Flt Protected | 0.950 | | | | | |
| Satd. Flow (prot) | 1752 | 1225 | 3362 | 0 | 0 | 3623 |
| Flt Permitted | 0.950 | | | | | |
| Satd. Flow (perm) | 1605 | 1185 | 3362 | 0 | 0 | 3623 |
| Right Turn on Red | | No | | No | | |
| Satd. Flow (RTOR) | | | | | | |
| Link Speed (mph) | 30 | | 30 | | | 30 |
| Link Distance (ft) | 465 | | 176 | | | 249 |
| Travel Time (s) | 10.6 | | 4.0 | | | 5.7 |
| Confl. Peds. (#/hr) | 56 | 13 | | 29 | 29 | |
| Confl. Bikes (#/hr) | | 2 | | | | |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Heavy Vehicles (%) | 3% | 14% | 7% | 7% | 0% | 3% |
| Bus Blockages (#/hr) | 0 | 0 | 0 | 0 | 0 | 9 |
| Parking (#/hr) | | 7 | | | | |
| Shared Lane Traffic (%) | | | | | | |
| Lane Group Flow (vph) | 160 | 90 | 1382 | 0 | 0 | 1572 |
| Turn Type | Prot | Perm | NA | | | NA |
| Protected Phases | 8 | | 2 | | | 6 |
| Permitted Phases | | 8 | | | | |
| Detector Phase | 8 | 8 | 2 | | | 6 |
| Switch Phase | | | | | | |
| Minimum Initial (s) | 8.0 | 8.0 | 15.0 | | | 15.0 |
| Minimum Split (s) | 31.0 | 31.0 | 28.0 | | | 29.0 |
| Total Split (s) | 38.0 | 38.0 | 87.0 | | | 87.0 |
| Total Split (%) | 30.4% | 30.4% | 69.6% | | | 69.6% |
| Yellow Time (s) | 4.0 | 4.0 | 4.0 | | | 4.0 |
| All-Red Time (s) | 2.0 | 2.0 | 2.0 | | | 2.0 |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | | | 0.0 |
| Total Lost Time (s) | 6.0 | 6.0 | 6.0 | | | 6.0 |
| Lead/Lag | | | | | | |
| Lead-Lag Optimize? | | | | | | |
| Recall Mode | None | None | C-Min | | | C-Min |
| Act Effect Green (s) | 17.6 | 17.6 | 95.4 | | | 95.4 |
| Actuated g/C Ratio | 0.14 | 0.14 | 0.76 | | | 0.76 |
| v/c Ratio | 0.65 | 0.54 | 0.54 | | | 0.57 |
| Control Delay | 62.4 | 60.9 | 13.7 | | | 7.7 |
| Queue Delay | 0.0 | 0.0 | 0.0 | | | 0.0 |
| Total Delay | 62.4 | 60.9 | 13.7 | | | 7.7 |

Lanes, Volumes, Timings
 1: Harlem Avenue & South Boulevard

01/28/2021

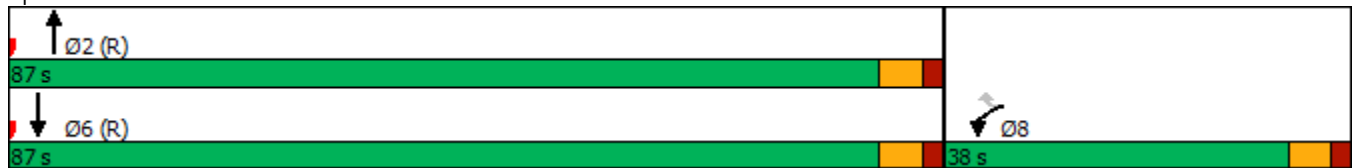


| Lane Group | WBL | WBR | NBT | NBR | SBL | SBT |
|-------------------------|------|------|------|-----|-----|------|
| LOS | E | E | B | | | A |
| Approach Delay | 61.8 | | 13.7 | | | 7.7 |
| Approach LOS | E | | B | | | A |
| Queue Length 50th (ft) | 124 | 69 | 471 | | | 241 |
| Queue Length 95th (ft) | 188 | 120 | 611 | | | 359 |
| Internal Link Dist (ft) | 385 | | 96 | | | 169 |
| Turn Bay Length (ft) | 110 | | | | | |
| Base Capacity (vph) | 448 | 303 | 2564 | | | 2763 |
| Starvation Cap Reductn | 0 | 0 | 0 | | | 0 |
| Spillback Cap Reductn | 0 | 0 | 0 | | | 0 |
| Storage Cap Reductn | 0 | 0 | 0 | | | 0 |
| Reduced v/c Ratio | 0.36 | 0.30 | 0.54 | | | 0.57 |

Intersection Summary

| | |
|-----------------------------------|--|
| Area Type: | Other |
| Cycle Length: | 125 |
| Actuated Cycle Length: | 125 |
| Offset: | 103 (82%), Referenced to phase 2:NBT and 6:SBT, Start of Green |
| Natural Cycle: | 65 |
| Control Type: | Actuated-Coordinated |
| Maximum v/c Ratio: | 0.65 |
| Intersection Signal Delay: | 14.5 |
| Intersection LOS: | B |
| Intersection Capacity Utilization | 60.6% |
| ICU Level of Service | B |
| Analysis Period (min) | 15 |

Splits and Phases: 1: Harlem Avenue & South Boulevard



Lanes, Volumes, Timings
2: Harlem Avenue & Randolph Street

10/07/2020



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---------------------------|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 130 | 149 | 119 | 75 | 111 | 24 | 83 | 1168 | 24 | 32 | 1369 | 82 |
| Future Volume (vph) | 130 | 149 | 119 | 75 | 111 | 24 | 83 | 1168 | 24 | 32 | 1369 | 82 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 2000 | 1900 | 1900 | 2000 | 1900 |
| Lane Width (ft) | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 |
| Grade (%) | | 0% | | | 0% | | | 0% | | | 0% | |
| Storage Length (ft) | 40 | | 0 | 50 | | 0 | 165 | | 0 | 85 | | 0 |
| Storage Lanes | 1 | | 0 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 90 | | | 75 | | | 120 | | | 90 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 |
| Ped Bike Factor | 0.98 | 0.99 | | 0.99 | 0.99 | | | 1.00 | | | 1.00 | |
| Fr _t | | 0.933 | | | 0.973 | | | 0.997 | | | 0.992 | |
| Fl _t Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1787 | 1722 | 0 | 1805 | 1806 | 0 | 1736 | 3539 | 0 | 1736 | 3581 | 0 |
| Fl _t Permitted | 0.523 | | | 0.312 | | | 0.063 | | | 0.153 | | |
| Satd. Flow (perm) | 968 | 1722 | 0 | 587 | 1806 | 0 | 115 | 3539 | 0 | 280 | 3581 | 0 |
| Right Turn on Red | | | No | | | No | | | No | | | No |
| Satd. Flow (RTOR) | | | | | | | | | | | | |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 454 | | | 257 | | | 242 | | | 813 | |
| Travel Time (s) | | 10.3 | | | 5.8 | | | 5.5 | | | 18.5 | |
| Confl. Peds. (#/hr) | 14 | | 12 | 12 | | 14 | 7 | | 7 | 7 | | 7 |
| Confl. Bikes (#/hr) | | | | | | 7 | | | | | | |
| Peak Hour Factor | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| Growth Factor | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| Heavy Vehicles (%) | 1% | 2% | 1% | 0% | 2% | 0% | 4% | 7% | 5% | 4% | 3% | 6% |
| Bus Blockages (#/hr) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 0 |
| Parking (#/hr) | | | | | | | | | | | | |
| Mid-Block Traffic (%) | | 0% | | | 0% | | | 0% | | | 0% | |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 135 | 279 | 0 | 78 | 141 | 0 | 86 | 1242 | 0 | 33 | 1511 | 0 |
| Turn Type | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | | 8 | | | 2 | | | 6 | | |
| Detector Phase | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 3.0 | 8.0 | | 3.0 | 8.0 | | 3.0 | 15.0 | | 3.0 | 15.0 | |
| Minimum Split (s) | 9.5 | 30.0 | | 9.5 | 32.0 | | 9.5 | 29.0 | | 10.5 | 33.0 | |
| Total Split (s) | 14.0 | 30.0 | | 14.0 | 30.0 | | 17.0 | 67.0 | | 14.0 | 64.0 | |
| Total Split (%) | 11.2% | 24.0% | | 11.2% | 24.0% | | 13.6% | 53.6% | | 11.2% | 51.2% | |
| Yellow Time (s) | 3.5 | 4.0 | | 3.5 | 4.0 | | 3.5 | 4.0 | | 3.5 | 4.0 | |
| All-Red Time (s) | 0.0 | 2.0 | | 0.0 | 2.0 | | 0.0 | 2.0 | | 0.0 | 2.0 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | 3.5 | 6.0 | | 3.5 | 6.0 | | 3.5 | 6.0 | | 3.5 | 6.0 | |
| Lead/Lag | Lead | Lag | | Lead | Lag | | Lead | Lag | | Lead | Lag | |
| Lead-Lag Optimize? | Yes | Yes | | Yes | Yes | | Yes | Yes | | Yes | Yes | |
| Recall Mode | None | None | | None | None | | None | C-Min | | None | C-Min | |
| Act Effect Green (s) | 34.9 | 24.0 | | 32.3 | 20.8 | | 80.3 | 72.3 | | 75.7 | 66.8 | |
| Actuated g/C Ratio | 0.28 | 0.19 | | 0.26 | 0.17 | | 0.64 | 0.58 | | 0.61 | 0.53 | |

Lanes, Volumes, Timings
 2: Harlem Avenue & Randolph Street

10/07/2020

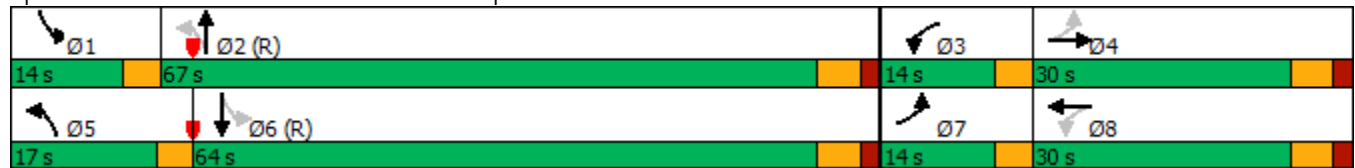


| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|------|------|-----|------|------|-----|------|------|-----|------|------|-----|
| v/c Ratio | 0.40 | 0.85 | | 0.33 | 0.47 | | 0.48 | 0.61 | | 0.14 | 0.79 | |
| Control Delay | 36.2 | 71.7 | | 34.7 | 51.4 | | 21.9 | 20.5 | | 11.9 | 34.7 | |
| Queue Delay | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | 36.2 | 71.7 | | 34.7 | 51.4 | | 21.9 | 20.5 | | 11.9 | 34.7 | |
| LOS | D | E | | C | D | | C | C | | B | C | |
| Approach Delay | | 60.1 | | | 45.4 | | | 20.6 | | | 34.2 | |
| Approach LOS | | E | | | D | | | C | | | C | |
| Queue Length 50th (ft) | 80 | 217 | | 44 | 101 | | 26 | 376 | | 14 | 617 | |
| Queue Length 95th (ft) | 133 | #366 | | 83 | 166 | | 66 | 464 | | m21 | 717 | |
| Internal Link Dist (ft) | | 374 | | | 177 | | | 162 | | | 733 | |
| Turn Bay Length (ft) | 40 | | | 50 | | | 165 | | | 85 | | |
| Base Capacity (vph) | 339 | 334 | | 261 | 346 | | 249 | 2046 | | 300 | 1914 | |
| Starvation Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Spillback Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Storage Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Reduced v/c Ratio | 0.40 | 0.84 | | 0.30 | 0.41 | | 0.35 | 0.61 | | 0.11 | 0.79 | |

Intersection Summary

Area Type: Other
 Cycle Length: 125
 Actuated Cycle Length: 125
 Offset: 51 (41%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
 Natural Cycle: 95
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.85
 Intersection Signal Delay: 32.8 Intersection LOS: C
 Intersection Capacity Utilization 81.0% ICU Level of Service D
 Analysis Period (min) 15
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Harlem Avenue & Randolph Street



HCM 6th AWSC
 11: Maple Avenue & Pleasant Street

10/07/2020

| Intersection | |
|---------------------------|-----|
| Intersection Delay, s/veh | 7.6 |
| Intersection LOS | A |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 9 | 65 | 14 | 8 | 19 | 0 | 16 | 7 | 18 | 2 | 2 | 2 |
| Future Vol, veh/h | 9 | 65 | 14 | 8 | 19 | 0 | 16 | 7 | 18 | 2 | 2 | 2 |
| Peak Hour Factor | 0.67 | 0.67 | 0.67 | 0.67 | 0.67 | 0.67 | 0.67 | 0.67 | 0.67 | 0.67 | 0.67 | 0.67 |
| Heavy Vehicles, % | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 25 | 12 | 0 | 0 | 14 |
| Mvmt Flow | 13 | 97 | 21 | 12 | 28 | 0 | 24 | 10 | 27 | 3 | 3 | 3 |
| Number of Lanes | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |

| Approach | EB | WB | NB | SB |
|----------------------------|-----|-----|-----|-----|
| Opposing Approach | WB | EB | SB | NB |
| Opposing Lanes | 1 | 1 | 1 | 1 |
| Conflicting Approach Left | SB | NB | EB | WB |
| Conflicting Lanes Left | 1 | 1 | 1 | 1 |
| Conflicting Approach Right | NB | SB | WB | EB |
| Conflicting Lanes Right | 1 | 1 | 1 | 1 |
| HCM Control Delay | 7.7 | 7.4 | 7.4 | 7.2 |
| HCM LOS | A | A | A | A |

| Lane | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|------------------------|-------|-------|-------|-------|
| Vol Left, % | 39% | 10% | 30% | 33% |
| Vol Thru, % | 17% | 74% | 70% | 33% |
| Vol Right, % | 44% | 16% | 0% | 33% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 41 | 88 | 27 | 6 |
| LT Vol | 16 | 9 | 8 | 2 |
| Through Vol | 7 | 65 | 19 | 2 |
| RT Vol | 18 | 14 | 0 | 2 |
| Lane Flow Rate | 61 | 131 | 40 | 9 |
| Geometry Grp | 1 | 1 | 1 | 1 |
| Degree of Util (X) | 0.068 | 0.145 | 0.047 | 0.01 |
| Departure Headway (Hd) | 4.018 | 3.977 | 4.181 | 4.112 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 880 | 898 | 850 | 857 |
| Service Time | 2.095 | 2.018 | 2.238 | 2.2 |
| HCM Lane V/C Ratio | 0.069 | 0.146 | 0.047 | 0.011 |
| HCM Control Delay | 7.4 | 7.7 | 7.4 | 7.2 |
| HCM Lane LOS | A | A | A | A |
| HCM 95th-tile Q | 0.2 | 0.5 | 0.1 | 0 |

HCM 6th AWSC
12: Randolph Street & Marion Street

10/07/2020

| Intersection | |
|---------------------------|-----|
| Intersection Delay, s/veh | 9.2 |
| Intersection LOS | A |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 26 | 160 | 24 | 6 | 167 | 12 | 17 | 43 | 4 | 5 | 63 | 36 |
| Future Vol, veh/h | 26 | 160 | 24 | 6 | 167 | 12 | 17 | 43 | 4 | 5 | 63 | 36 |
| Peak Hour Factor | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| Heavy Vehicles, % | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 29 | 178 | 27 | 7 | 186 | 13 | 19 | 48 | 4 | 6 | 70 | 40 |
| Number of Lanes | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |

| Approach | EB | WB | NB | SB |
|----------------------------|-----|-----|-----|-----|
| Opposing Approach | WB | EB | SB | NB |
| Opposing Lanes | 1 | 1 | 1 | 1 |
| Conflicting Approach Left | SB | NB | EB | WB |
| Conflicting Lanes Left | 1 | 1 | 1 | 1 |
| Conflicting Approach Right | NB | SB | WB | EB |
| Conflicting Lanes Right | 1 | 1 | 1 | 1 |
| HCM Control Delay | 9.5 | 9.3 | 8.7 | 8.7 |
| HCM LOS | A | A | A | A |

| Lane | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|------------------------|-------|-------|-------|-------|
| Vol Left, % | 27% | 12% | 3% | 5% |
| Vol Thru, % | 67% | 76% | 90% | 61% |
| Vol Right, % | 6% | 11% | 6% | 35% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 64 | 210 | 185 | 104 |
| LT Vol | 17 | 26 | 6 | 5 |
| Through Vol | 43 | 160 | 167 | 63 |
| RT Vol | 4 | 24 | 12 | 36 |
| Lane Flow Rate | 71 | 233 | 206 | 116 |
| Geometry Grp | 1 | 1 | 1 | 1 |
| Degree of Util (X) | 0.1 | 0.295 | 0.262 | 0.154 |
| Departure Headway (Hd) | 5.074 | 4.552 | 4.594 | 4.8 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 703 | 786 | 779 | 743 |
| Service Time | 3.131 | 2.594 | 2.637 | 2.853 |
| HCM Lane V/C Ratio | 0.101 | 0.296 | 0.264 | 0.156 |
| HCM Control Delay | 8.7 | 9.5 | 9.3 | 8.7 |
| HCM Lane LOS | A | A | A | A |
| HCM 95th-tile Q | 0.3 | 1.2 | 1 | 0.5 |

HCM 6th TWSC
3: Harlem Avenue & Circle Avenue

10/07/2020

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 0.2 | | | | | |
| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
| Lane Configurations | | ↗ | | ↑↑ | ↑↑ | |
| Traffic Vol, veh/h | 0 | 18 | 0 | 1271 | 1469 | 124 |
| Future Vol, veh/h | 0 | 18 | 0 | 1271 | 1469 | 124 |
| Conflicting Peds, #/hr | 13 | 56 | 91 | 0 | 0 | 91 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | 0 | - | - | - | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 0 | 14 | 0 | 7 | 3 | 2 |
| Mvmt Flow | 0 | 20 | 0 | 1382 | 1597 | 135 |

| Major/Minor | Minor2 | Major1 | Major2 | | | |
|----------------------|--------|--------|--------|---|---|---|
| Conflicting Flow All | - | 1013 | - | 0 | - | 0 |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |
| Critical Hdwy | - | 7.18 | - | - | - | - |
| Critical Hdwy Stg 1 | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - |
| Follow-up Hdwy | - | 3.44 | - | - | - | - |
| Pot Cap-1 Maneuver | 0 | 217 | 0 | - | - | - |
| Stage 1 | 0 | - | 0 | - | - | - |
| Stage 2 | 0 | - | 0 | - | - | - |
| Platoon blocked, % | | | | - | - | - |
| Mov Cap-1 Maneuver | - | 188 | - | - | - | - |
| Mov Cap-2 Maneuver | - | - | - | - | - | - |
| Stage 1 | - | - | - | - | - | - |
| Stage 2 | - | - | - | - | - | - |

| Approach | EB | NB | SB |
|----------------------|------|----|----|
| HCM Control Delay, s | 26.4 | 0 | 0 |
| HCM LOS | D | | |

| Minor Lane/Major Mvmt | NBT | EBLn1 | SBT | SBR |
|-----------------------|-----|-------|-----|-----|
| Capacity (veh/h) | - | 188 | - | - |
| HCM Lane V/C Ratio | - | 0.104 | - | - |
| HCM Control Delay (s) | - | 26.4 | - | - |
| HCM Lane LOS | - | D | - | - |
| HCM 95th %tile Q(veh) | - | 0.3 | - | - |

HCM 6th TWSC
4: North-South Alley & South Boulevard

10/07/2020

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 0.1 | | | | | |
| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 25 | 0 | 1 | 222 | 0 | 2 |
| Future Vol, veh/h | 25 | 0 | 1 | 222 | 0 | 2 |
| Conflicting Peds, #/hr | 0 | 24 | 24 | 0 | 1 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 96 | 96 | 96 | 96 | 96 | 96 |
| Heavy Vehicles, % | 8 | 0 | 0 | 9 | 0 | 0 |
| Mvmt Flow | 26 | 0 | 1 | 231 | 0 | 2 |

| Major/Minor | Major1 | Major2 | Minor1 | Minor2 |
|----------------------|--------|--------|--------|--------|
| Conflicting Flow All | 0 | 0 | 50 | 284 |
| Stage 1 | - | - | - | 50 |
| Stage 2 | - | - | - | 234 |
| Critical Hdwy | - | - | 4.1 | 6.4 |
| Critical Hdwy Stg 1 | - | - | - | 5.4 |
| Critical Hdwy Stg 2 | - | - | - | 5.4 |
| Follow-up Hdwy | - | - | 2.2 | 3.5 |
| Pot Cap-1 Maneuver | - | - | 1570 | 710 |
| Stage 1 | - | - | - | 978 |
| Stage 2 | - | - | - | 810 |
| Platoon blocked, % | - | - | - | - |
| Mov Cap-1 Maneuver | - | - | 1534 | 692 |
| Mov Cap-2 Maneuver | - | - | - | 692 |
| Stage 1 | - | - | - | 955 |
| Stage 2 | - | - | - | 809 |

| Approach | EB | WB | NB |
|----------------------|----|----|-----|
| HCM Control Delay, s | 0 | 0 | 8.6 |
| HCM LOS | | | A |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBL | WBT |
|-----------------------|-------|-----|-----|-------|-----|
| Capacity (veh/h) | 1001 | - | - | 1534 | - |
| HCM Lane V/C Ratio | 0.002 | - | - | 0.001 | - |
| HCM Control Delay (s) | 8.6 | - | - | 7.3 | 0 |
| HCM Lane LOS | A | - | - | A | A |
| HCM 95th %tile Q(veh) | 0 | - | - | 0 | - |

HCM 6th TWSC
 6: Harlem Avenue & Frankin Street/Pleasant Street

10/07/2020

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 19.3 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | | ↗ | | ↕ | | | ↔ | | | ↔ | |
| Traffic Vol, veh/h | 0 | 0 | 49 | 6 | 5 | 26 | 34 | 1245 | 43 | 45 | 1428 | 14 |
| Future Vol, veh/h | 0 | 0 | 49 | 6 | 5 | 26 | 34 | 1245 | 43 | 45 | 1428 | 14 |
| Conflicting Peds, #/hr | 1 | 0 | 0 | 0 | 0 | 1 | 22 | 0 | 6 | 6 | 0 | 22 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | 0 | - | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 95 | 95 | 95 | 95 | 95 | 95 | 95 | 95 | 95 | 95 | 95 | 95 |
| Heavy Vehicles, % | 0 | 0 | 3 | 0 | 0 | 6 | 0 | 7 | 0 | 0 | 4 | 0 |
| Mvmt Flow | 0 | 0 | 52 | 6 | 5 | 27 | 36 | 1311 | 45 | 47 | 1503 | 15 |

| Major/Minor | Minor2 | | Minor1 | | Major1 | | Major2 | | | | | |
|----------------------|--------|---|--------|------|--------|------|--------|---|---|------|---|---|
| Conflicting Flow All | - | - | 781 | 2258 | 3046 | 685 | 1540 | 0 | 0 | 1362 | 0 | 0 |
| Stage 1 | - | - | - | 1412 | 1412 | - | - | - | - | - | - | - |
| Stage 2 | - | - | - | 846 | 1634 | - | - | - | - | - | - | - |
| Critical Hdwy | - | - | 6.96 | 7.5 | 6.5 | 7.02 | 4.1 | - | - | 4.1 | - | - |
| Critical Hdwy Stg 1 | - | - | - | 6.5 | 5.5 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | 6.5 | 5.5 | - | - | - | - | - | - | - |
| Follow-up Hdwy | - | - | 3.33 | 3.5 | 4 | 3.36 | 2.2 | - | - | 2.2 | - | - |
| Pot Cap-1 Maneuver | 0 | 0 | 335 | 23 | 13 | 381 | 437 | - | - | 511 | - | - |
| Stage 1 | 0 | 0 | - | 148 | 206 | - | - | - | - | - | - | - |
| Stage 2 | 0 | 0 | - | 328 | 161 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | - | - | - |
| Mov Cap-1 Maneuver | - | - | 328 | 8 | ~ 3 | 378 | 428 | - | - | 508 | - | - |
| Mov Cap-2 Maneuver | - | - | - | 8 | ~ 3 | - | - | - | - | - | - | - |
| Stage 1 | - | - | - | 96 | 133 | - | - | - | - | - | - | - |
| Stage 2 | - | - | - | 111 | 64 | - | - | - | - | - | - | - |

| Approach | EB | WB | NB | SB |
|----------------------|----|-----------|-----|-----|
| HCM Control Delay, s | 18 | \$ 1244.1 | 2.5 | 3.8 |
| HCM LOS | C | F | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1WBLn1 | SBL | SBT | SBR |
|-----------------------|-------|-----|-----|------------|--------|-------|-----|
| Capacity (veh/h) | 428 | - | - | 328 | 15 | 508 | - |
| HCM Lane V/C Ratio | 0.084 | - | - | 0.157 | 2.596 | 0.093 | - |
| HCM Control Delay (s) | 14.2 | 2.3 | - | 18 | 1244.1 | 12.8 | 3.6 |
| HCM Lane LOS | B | A | - | C | F | B | A |
| HCM 95th %tile Q(veh) | 0.3 | - | - | 0.6 | 5.6 | 0.3 | - |

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

HCM 6th TWSC
7: North-South Alley & Pleasant Street

10/07/2020

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 1.1 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 2 | 81 | 2 | 8 | 23 | 0 | 3 | 0 | 2 | 0 | 0 | 1 |
| Future Vol, veh/h | 2 | 81 | 2 | 8 | 23 | 0 | 3 | 0 | 2 | 0 | 0 | 1 |
| Conflicting Peds, #/hr | 1 | 0 | 24 | 24 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 2 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 77 | 77 | 77 | 77 | 77 | 77 | 77 | 77 | 77 | 77 | 77 | 77 |
| Heavy Vehicles, % | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 3 | 105 | 3 | 10 | 30 | 0 | 4 | 0 | 3 | 0 | 0 | 1 |

| Major/Minor | Major1 | | Major2 | | Minor1 | | | Minor2 | | | | |
|----------------------|--------|---|--------|------|--------|---|-----|--------|-----|-----|-----|------|
| Conflicting Flow All | 31 | 0 | 0 | 132 | 0 | 0 | 190 | 188 | 131 | 165 | 189 | 33 |
| Stage 1 | - | - | - | - | - | - | 137 | 137 | - | 51 | 51 | - |
| Stage 2 | - | - | - | - | - | - | 53 | 51 | - | 114 | 138 | - |
| Critical Hdwy | 4.1 | - | - | 4.1 | - | - | 7.1 | 6.5 | 6.2 | 7.1 | 6.5 | 6.2 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.1 | 5.5 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.1 | 5.5 | - |
| Follow-up Hdwy | 2.2 | - | - | 2.2 | - | - | 3.5 | 4 | 3.3 | 3.5 | 4 | 3.3 |
| Pot Cap-1 Maneuver | 1595 | - | - | 1466 | - | - | 774 | 710 | 924 | 804 | 709 | 1046 |
| Stage 1 | - | - | - | - | - | - | 871 | 787 | - | 967 | 856 | - |
| Stage 2 | - | - | - | - | - | - | 965 | 856 | - | 896 | 786 | - |
| Platoon blocked, % | - | - | - | - | - | - | - | - | - | - | - | - |
| Mov Cap-1 Maneuver | 1593 | - | - | 1432 | - | - | 748 | 687 | 903 | 795 | 686 | 1043 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 748 | 687 | - | 795 | 686 | - |
| Stage 1 | - | - | - | - | - | - | 849 | 767 | - | 964 | 849 | - |
| Stage 2 | - | - | - | - | - | - | 955 | 849 | - | 892 | 766 | - |

| Approach | EB | | WB | | NB | | SB | |
|----------------------|-----|--|-----|--|-----|--|-----|--|
| HCM Control Delay, s | 0.2 | | 1.9 | | 9.5 | | 8.5 | |
| HCM LOS | | | | | A | | A | |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|-----------------------|-------|-------|-----|-----|-------|-----|-----|-------|
| Capacity (veh/h) | 803 | 1593 | - | - | 1432 | - | - | 1043 |
| HCM Lane V/C Ratio | 0.008 | 0.002 | - | - | 0.007 | - | - | 0.001 |
| HCM Control Delay (s) | 9.5 | 7.3 | 0 | - | 7.5 | 0 | - | 8.5 |
| HCM Lane LOS | A | A | A | - | A | A | - | A |
| HCM 95th %tile Q(veh) | 0 | 0 | - | - | 0 | - | - | 0 |

HCM 6th TWSC
8: Marion Street & Pleasant Street

10/07/2020

| 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 | 55 | 14 | 14 | 2 | 23 | 3 | 1 | 73 | 7 | 4 | 88 | 7 |
| Future Vol, veh/h | 55 | 14 | 14 | 2 | 23 | 3 | 1 | 73 | 7 | 4 | 88 | 7 |
| Conflicting Peds, #/hr | 0 | 0 | 30 | 30 | 0 | 0 | 30 | 0 | 60 | 60 | 0 | 30 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 86 | 86 | 86 | 86 | 86 | 86 | 86 | 86 | 86 | 86 | 86 | 86 |
| Heavy Vehicles, % | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 67 | 0 | 0 |
| Mvmt Flow | 64 | 16 | 16 | 2 | 27 | 3 | 1 | 85 | 8 | 5 | 102 | 8 |

| Major/Minor | Minor2 | | Minor1 | | Major1 | | Major2 | | | | | |
|----------------------|--------|-----|--------|-----|--------|-----|--------|---|---|-------|---|---|
| Conflicting Flow All | 252 | 301 | 166 | 313 | 301 | 149 | 140 | 0 | 0 | 153 | 0 | 0 |
| Stage 1 | 146 | 146 | - | 151 | 151 | - | - | - | - | - | - | - |
| Stage 2 | 106 | 155 | - | 162 | 150 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.13 | 6.5 | 6.2 | 7.1 | 6.5 | 6.2 | 4.1 | - | - | 4.77 | - | - |
| Critical Hdwy Stg 1 | 6.13 | 5.5 | - | 6.1 | 5.5 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.13 | 5.5 | - | 6.1 | 5.5 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.527 | 4 | 3.3 | 3.5 | 4 | 3.3 | 2.2 | - | - | 2.803 | - | - |
| Pot Cap-1 Maneuver | 699 | 615 | 884 | 643 | 615 | 903 | 1456 | - | - | 1112 | - | - |
| Stage 1 | 854 | 780 | - | 856 | 776 | - | - | - | - | - | - | - |
| Stage 2 | 897 | 773 | - | 845 | 777 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | - | - | - |
| Mov Cap-1 Maneuver | 649 | 560 | 834 | 562 | 560 | 851 | 1414 | - | - | 1048 | - | - |
| Mov Cap-2 Maneuver | 649 | 560 | - | 562 | 560 | - | - | - | - | - | - | - |
| Stage 1 | 828 | 753 | - | 806 | 731 | - | - | - | - | - | - | - |
| Stage 2 | 860 | 728 | - | 783 | 751 | - | - | - | - | - | - | - |

| Approach | EB | | WB | | NB | | SB | | | |
|----------------------|------|--|------|--|-----|--|-----|--|--|--|
| HCM Control Delay, s | 11.4 | | 11.6 | | 0.1 | | 0.3 | | | |
| HCM LOS | B | | B | | | | | | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1WBLn1 | SBL | SBT | SBR |
|-----------------------|-------|-----|-----|------------|-------|-------|-----|
| Capacity (veh/h) | 1414 | - | - | 656 | 581 | 1048 | - |
| HCM Lane V/C Ratio | 0.001 | - | - | 0.147 | 0.056 | 0.004 | - |
| HCM Control Delay (s) | 7.5 | 0 | - | 11.4 | 11.6 | 8.4 | 0 |
| HCM Lane LOS | A | A | - | B | B | A | A |
| HCM 95th %tile Q(veh) | 0 | - | - | 0.5 | 0.2 | 0 | - |

HCM 6th TWSC
9: Randolph Street & Maple Avenue

10/07/2020

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 1.8 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 17 | 183 | 5 | 9 | 198 | 18 | 3 | 6 | 23 | 5 | 10 | 9 |
| Future Vol, veh/h | 17 | 183 | 5 | 9 | 198 | 18 | 3 | 6 | 23 | 5 | 10 | 9 |
| Conflicting Peds, #/hr | 22 | 0 | 34 | 34 | 0 | 22 | 9 | 0 | 8 | 8 | 0 | 9 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 86 | 86 | 86 | 86 | 86 | 86 | 86 | 86 | 86 | 86 | 86 | 86 |
| Heavy Vehicles, % | 0 | 0 | 33 | 0 | 3 | 0 | 0 | 0 | 0 | 20 | 12 | 0 |
| Mvmt Flow | 20 | 213 | 6 | 10 | 230 | 21 | 3 | 7 | 27 | 6 | 12 | 10 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|----------------------|--------|---|---|--------|---|---|--------|-----|-----|--------|-------|-----|
| Conflicting Flow All | 273 | 0 | 0 | 253 | 0 | 0 | 571 | 583 | 258 | 564 | 576 | 272 |
| Stage 1 | - | - | - | - | - | - | 290 | 290 | - | 283 | 283 | - |
| Stage 2 | - | - | - | - | - | - | 281 | 293 | - | 281 | 293 | - |
| Critical Hdwy | 4.1 | - | - | 4.1 | - | - | 7.1 | 6.5 | 6.2 | 7.3 | 6.62 | 6.2 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.3 | 5.62 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.3 | 5.62 | - |
| Follow-up Hdwy | 2.2 | - | - | 2.2 | - | - | 3.5 | 4 | 3.3 | 3.68 | 4.108 | 3.3 |
| Pot Cap-1 Maneuver | 1302 | - | - | 1324 | - | - | 435 | 427 | 786 | 410 | 415 | 772 |
| Stage 1 | - | - | - | - | - | - | 722 | 676 | - | 687 | 659 | - |
| Stage 2 | - | - | - | - | - | - | 730 | 674 | - | 688 | 653 | - |
| Platoon blocked, % | - | - | - | - | - | - | - | - | - | - | - | - |
| Mov Cap-1 Maneuver | 1275 | - | - | 1281 | - | - | 394 | 394 | 755 | 371 | 383 | 749 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 394 | 394 | - | 371 | 383 | - |
| Stage 1 | - | - | - | - | - | - | 686 | 643 | - | 660 | 639 | - |
| Stage 2 | - | - | - | - | - | - | 694 | 654 | - | 640 | 621 | - |

| Approach | EB | | | WB | | | NB | | | SB | | |
|----------------------|-----|--|--|-----|--|--|------|--|--|------|--|--|
| HCM Control Delay, s | 0.7 | | | 0.3 | | | 11.4 | | | 13.2 | | |
| HCM LOS | | | | | | | B | | | B | | |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|-----------------------|-------|-------|-----|-----|-------|-----|-----|-------|
| Capacity (veh/h) | 600 | 1275 | - | - | 1281 | - | - | 465 |
| HCM Lane V/C Ratio | 0.062 | 0.016 | - | - | 0.008 | - | - | 0.06 |
| HCM Control Delay (s) | 11.4 | 7.9 | 0 | - | 7.8 | 0 | - | 13.2 |
| HCM Lane LOS | B | A | A | - | A | A | - | B |
| HCM 95th %tile Q(veh) | 0.2 | 0 | - | - | 0 | - | - | 0.2 |

HCM 6th TWSC
10: North-South Alley & Randolph Street

10/07/2020

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 0.4 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 3 | 205 | 3 | 0 | 220 | 0 | 2 | 2 | 0 | 5 | 2 | 3 |
| Future Vol, veh/h | 3 | 205 | 3 | 0 | 220 | 0 | 2 | 2 | 0 | 5 | 2 | 3 |
| Conflicting Peds, #/hr | 26 | 0 | 26 | 26 | 0 | 26 | 1 | 0 | 0 | 0 | 0 | 1 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 |
| Heavy Vehicles, % | 0 | 2 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 3 | 230 | 3 | 0 | 247 | 0 | 2 | 2 | 0 | 6 | 2 | 3 |












| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|----------------------|--------|---|---|--------|---|---|--------|-----|-----|--------|-----|-----|
| Conflicting Flow All | 273 | 0 | 0 | 259 | 0 | 0 | 515 | 537 | 258 | 512 | 538 | 274 |
| Stage 1 | - | - | - | - | - | - | 264 | 264 | - | 273 | 273 | - |
| Stage 2 | - | - | - | - | - | - | 251 | 273 | - | 239 | 265 | - |
| Critical Hdwy | 4.1 | - | - | 4.1 | - | - | 7.1 | 6.5 | 6.2 | 7.1 | 6.5 | 6.2 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.1 | 5.5 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.1 | 5.5 | - |
| Follow-up Hdwy | 2.2 | - | - | 2.2 | - | - | 3.5 | 4 | 3.3 | 3.5 | 4 | 3.3 |
| Pot Cap-1 Maneuver | 1302 | - | - | 1317 | - | - | 474 | 453 | 786 | 476 | 453 | 770 |
| Stage 1 | - | - | - | - | - | - | 746 | 694 | - | 737 | 688 | - |
| Stage 2 | - | - | - | - | - | - | 758 | 688 | - | 769 | 693 | - |
| Platoon blocked, % | - | - | - | - | - | - | - | - | - | - | - | - |
| Mov Cap-1 Maneuver | 1270 | - | - | 1284 | - | - | 457 | 429 | 767 | 461 | 429 | 750 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 457 | 429 | - | 461 | 429 | - |
| Stage 1 | - | - | - | - | - | - | 725 | 675 | - | 716 | 671 | - |
| Stage 2 | - | - | - | - | - | - | 751 | 671 | - | 764 | 674 | - |

| Approach | EB | | | WB | | | NB | | | SB | | |
|----------------------|-----|--|--|----|--|--|------|--|--|------|--|--|
| HCM Control Delay, s | 0.1 | | | 0 | | | 13.2 | | | 12.2 | | |
| HCM LOS | | | | | | | B | | | B | | |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|-----------------------|-------|-------|-----|-----|------|-----|-----|-------|
| Capacity (veh/h) | 443 | 1270 | - | - | 1284 | - | - | 513 |
| HCM Lane V/C Ratio | 0.01 | 0.003 | - | - | - | - | - | 0.022 |
| HCM Control Delay (s) | 13.2 | 7.8 | 0 | - | 0 | - | - | 12.2 |
| HCM Lane LOS | B | A | A | - | A | - | - | B |
| HCM 95th %tile Q(veh) | 0 | 0 | - | - | 0 | - | - | 0.1 |

Lanes, Volumes, Timings
1: Harlem Avenue & South Boulevard

01/28/2021

| |  |  |  |  |  |  |
|-------------------------|---|---|---|---|---|---|
| Lane Group | WBL | WBR | NBT | NBR | SBL | SBT |
| Lane Configurations |  |  |  |  | |  |
| Traffic Volume (vph) | 210 | 154 | 1358 | 48 | 0 | 1486 |
| Future Volume (vph) | 210 | 154 | 1358 | 48 | 0 | 1486 |
| Ideal Flow (vphp) | 1900 | 1900 | 1900 | 1900 | 1900 | 2000 |
| Storage Length (ft) | 110 | 0 | | 0 | 0 | |
| Storage Lanes | 1 | 1 | | 0 | 0 | |
| Taper Length (ft) | 145 | | | | 25 | |
| Lane Util. Factor | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 |
| Ped Bike Factor | 0.92 | 0.98 | 1.00 | | | |
| Frt | | 0.850 | 0.995 | | | |
| Flt Protected | 0.950 | | | | | |
| Satd. Flow (prot) | 1787 | 1318 | 3484 | 0 | 0 | 3623 |
| Flt Permitted | 0.950 | | | | | |
| Satd. Flow (perm) | 1648 | 1290 | 3484 | 0 | 0 | 3623 |
| Right Turn on Red | | No | | No | | |
| Satd. Flow (RTOR) | | | | | | |
| Link Speed (mph) | 30 | | 30 | | | 30 |
| Link Distance (ft) | 465 | | 176 | | | 249 |
| Travel Time (s) | 10.6 | | 4.0 | | | 5.7 |
| Confl. Peds. (#/hr) | 52 | 6 | | 14 | 14 | |
| Peak Hour Factor | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 |
| Heavy Vehicles (%) | 1% | 6% | 3% | 0% | 0% | 3% |
| Bus Blockages (#/hr) | 0 | 0 | 0 | 0 | 0 | 9 |
| Parking (#/hr) | | 7 | | | | |
| Shared Lane Traffic (%) | | | | | | |
| Lane Group Flow (vph) | 216 | 159 | 1449 | 0 | 0 | 1532 |
| Turn Type | Prot | Perm | NA | | | NA |
| Protected Phases | 8 | | 2 | | | 6 |
| Permitted Phases | | 8 | | | | |
| Detector Phase | 8 | 8 | 2 | | | 6 |
| Switch Phase | | | | | | |
| Minimum Initial (s) | 8.0 | 8.0 | 15.0 | | | 15.0 |
| Minimum Split (s) | 31.0 | 31.0 | 28.0 | | | 29.0 |
| Total Split (s) | 38.0 | 38.0 | 87.0 | | | 87.0 |
| Total Split (%) | 30.4% | 30.4% | 69.6% | | | 69.6% |
| Yellow Time (s) | 4.0 | 4.0 | 4.0 | | | 4.0 |
| All-Red Time (s) | 2.0 | 2.0 | 2.0 | | | 2.0 |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | | | 0.0 |
| Total Lost Time (s) | 6.0 | 6.0 | 6.0 | | | 6.0 |
| Lead/Lag | | | | | | |
| Lead-Lag Optimize? | | | | | | |
| Recall Mode | None | None | C-Min | | | C-Min |
| Act Effct Green (s) | 22.0 | 22.0 | 91.0 | | | 91.0 |
| Actuated g/C Ratio | 0.18 | 0.18 | 0.73 | | | 0.73 |
| v/c Ratio | 0.69 | 0.70 | 0.57 | | | 0.58 |
| Control Delay | 59.1 | 64.2 | 9.8 | | | 9.8 |
| Queue Delay | 0.0 | 0.0 | 0.0 | | | 0.0 |
| Total Delay | 59.1 | 64.2 | 9.8 | | | 9.8 |
| LOS | E | E | A | | | A |

Lanes, Volumes, Timings
 1: Harlem Avenue & South Boulevard

01/28/2021



| Lane Group | WBL | WBR | NBT | NBR | SBL | SBT |
|-------------------------|------|------|------|-----|-----|------|
| Approach Delay | 61.3 | | 9.8 | | | 9.8 |
| Approach LOS | E | | A | | | A |
| Queue Length 50th (ft) | 166 | 123 | 465 | | | 267 |
| Queue Length 95th (ft) | 232 | 184 | 628 | | | 421 |
| Internal Link Dist (ft) | 385 | | 96 | | | 169 |
| Turn Bay Length (ft) | 110 | | | | | |
| Base Capacity (vph) | 457 | 330 | 2537 | | | 2638 |
| Starvation Cap Reductn | 0 | 0 | 0 | | | 0 |
| Spillback Cap Reductn | 0 | 0 | 0 | | | 0 |
| Storage Cap Reductn | 0 | 0 | 0 | | | 0 |
| Reduced v/c Ratio | 0.47 | 0.48 | 0.57 | | | 0.58 |

Intersection Summary

| | |
|-----------------------------------|--|
| Area Type: | Other |
| Cycle Length: | 125 |
| Actuated Cycle Length: | 125 |
| Offset: | 104 (83%), Referenced to phase 2:NBT and 6:SBT, Start of Green |
| Natural Cycle: | 65 |
| Control Type: | Actuated-Coordinated |
| Maximum v/c Ratio: | 0.70 |
| Intersection Signal Delay: | 15.6 |
| Intersection LOS: | B |
| Intersection Capacity Utilization | 62.4% |
| ICU Level of Service | B |
| Analysis Period (min) | 15 |

Splits and Phases: 1: Harlem Avenue & South Boulevard



Lanes, Volumes, Timings

2: Harlem Avenue & Randolph Street

10/07/2020



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---------------------------|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 173 | 266 | 122 | 81 | 183 | 39 | 126 | 1213 | 62 | 86 | 1285 | 84 |
| Future Volume (vph) | 173 | 266 | 122 | 81 | 183 | 39 | 126 | 1213 | 62 | 86 | 1285 | 84 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 2000 | 1900 | 1900 | 2000 | 1900 |
| Lane Width (ft) | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 |
| Grade (%) | | 0% | | | 0% | | | 0% | | | 0% | |
| Storage Length (ft) | 40 | | 0 | 50 | | 0 | 165 | | 0 | 85 | | 0 |
| Storage Lanes | 1 | | 0 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 90 | | | 75 | | | 120 | | | 90 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 |
| Ped Bike Factor | 0.98 | 0.99 | | 1.00 | 0.99 | | | 1.00 | | | 0.99 | |
| Fr _t | | 0.953 | | | 0.973 | | | 0.993 | | | 0.991 | |
| Fl _t Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1805 | 1798 | 0 | 1805 | 1824 | 0 | 1703 | 3662 | 0 | 1805 | 3575 | 0 |
| Fl _t Permitted | 0.367 | | | 0.166 | | | 0.068 | | | 0.101 | | |
| Satd. Flow (perm) | 684 | 1798 | 0 | 315 | 1824 | 0 | 122 | 3662 | 0 | 192 | 3575 | 0 |
| Right Turn on Red | | | No | | | No | | | No | | | No |
| Satd. Flow (RTOR) | | | | | | | | | | | | |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 454 | | | 257 | | | 242 | | | 813 | |
| Travel Time (s) | | 10.3 | | | 5.8 | | | 5.5 | | | 18.5 | |
| Confl. Peds. (#/hr) | 20 | | 6 | 6 | | 20 | 35 | | 7 | 7 | | 35 |
| Confl. Bikes (#/hr) | | | 1 | | | 2 | | | | | | |
| Peak Hour Factor | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| Growth Factor | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| Heavy Vehicles (%) | 0% | 0% | 0% | 0% | 0% | 3% | 6% | 3% | 0% | 0% | 3% | 0% |
| Bus Blockages (#/hr) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 0 |
| Parking (#/hr) | | | | | | | | | | | | |
| Mid-Block Traffic (%) | | 0% | | | 0% | | | 0% | | | 0% | |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 180 | 404 | 0 | 84 | 232 | 0 | 131 | 1329 | 0 | 90 | 1427 | 0 |
| Turn Type | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | | 8 | | | 2 | | | 6 | | |
| Detector Phase | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 3.0 | 8.0 | | 3.0 | 8.0 | | 3.0 | 15.0 | | 3.0 | 15.0 | |
| Minimum Split (s) | 9.5 | 30.0 | | 9.5 | 30.0 | | 9.5 | 29.0 | | 10.5 | 33.0 | |
| Total Split (s) | 14.0 | 30.0 | | 14.0 | 30.0 | | 14.0 | 67.0 | | 14.0 | 67.0 | |
| Total Split (%) | 11.2% | 24.0% | | 11.2% | 24.0% | | 11.2% | 53.6% | | 11.2% | 53.6% | |
| Yellow Time (s) | 3.5 | 4.0 | | 3.5 | 4.0 | | 3.5 | 4.0 | | 3.5 | 4.0 | |
| All-Red Time (s) | 0.0 | 2.0 | | 0.0 | 2.0 | | 0.0 | 2.0 | | 0.0 | 2.0 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | 3.5 | 6.0 | | 3.5 | 6.0 | | 3.5 | 6.0 | | 3.5 | 6.0 | |
| Lead/Lag | Lead | Lag | | Lead | Lag | | Lead | Lag | | Lead | Lag | |
| Lead-Lag Optimize? | Yes | Yes | | Yes | Yes | | Yes | Yes | | Yes | Yes | |
| Recall Mode | None | None | | None | None | | None | C-Min | | None | C-Min | |
| Act Effect Green (s) | 38.3 | 25.4 | | 35.7 | 24.1 | | 75.4 | 63.5 | | 72.6 | 62.1 | |
| Actuated g/C Ratio | 0.31 | 0.20 | | 0.29 | 0.19 | | 0.60 | 0.51 | | 0.58 | 0.50 | |

Lanes, Volumes, Timings

2: Harlem Avenue & Randolph Street

10/07/2020



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|------|-------|-----|------|------|-----|------|------|-----|------|------|-----|
| v/c Ratio | 0.60 | 1.10 | | 0.43 | 0.66 | | 0.68 | 0.71 | | 0.42 | 0.80 | |
| Control Delay | 41.5 | 124.5 | | 37.0 | 56.7 | | 38.8 | 26.7 | | 18.0 | 38.8 | |
| Queue Delay | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | 41.5 | 124.5 | | 37.0 | 56.7 | | 38.8 | 26.7 | | 18.0 | 38.8 | |
| LOS | D | F | | D | E | | D | C | | B | D | |
| Approach Delay | | 98.9 | | | 51.5 | | | 27.8 | | | 37.6 | |
| Approach LOS | | F | | | D | | | C | | | D | |
| Queue Length 50th (ft) | 109 | ~378 | | 48 | 175 | | 46 | 422 | | 40 | 568 | |
| Queue Length 95th (ft) | 172 | #589 | | 89 | 265 | | #121 | 525 | | m58 | 658 | |
| Internal Link Dist (ft) | | 374 | | | 177 | | | 162 | | | 733 | |
| Turn Bay Length (ft) | 40 | | | 50 | | | 165 | | | 85 | | |
| Base Capacity (vph) | 303 | 366 | | 218 | 352 | | 207 | 1860 | | 251 | 1775 | |
| Starvation Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Spillback Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Storage Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Reduced v/c Ratio | 0.59 | 1.10 | | 0.39 | 0.66 | | 0.63 | 0.71 | | 0.36 | 0.80 | |

Intersection Summary

Area Type: Other
 Cycle Length: 125
 Actuated Cycle Length: 125
 Offset: 56 (45%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
 Natural Cycle: 85
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.10
 Intersection Signal Delay: 44.3 Intersection LOS: D
 Intersection Capacity Utilization 86.2% ICU Level of Service E
 Analysis Period (min) 15
 ~ Volume exceeds capacity, queue is theoretically infinite.
 Queue shown is maximum after two cycles.
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Harlem Avenue & Randolph Street



HCM 6th AWSC
11: Maple Avenue & Pleasant Street

10/07/2020

| Intersection | |
|---------------------------|-----|
| Intersection Delay, s/veh | 7.6 |
| Intersection LOS | A |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 5 | 79 | 6 | 31 | 30 | 9 | 12 | 5 | 26 | 3 | 4 | 8 |
| Future Vol, veh/h | 5 | 79 | 6 | 31 | 30 | 9 | 12 | 5 | 26 | 3 | 4 | 8 |
| Peak Hour Factor | 0.77 | 0.77 | 0.77 | 0.77 | 0.77 | 0.77 | 0.77 | 0.77 | 0.77 | 0.77 | 0.77 | 0.77 |
| Heavy Vehicles, % | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 0 | 0 | 12 |
| Mvmt Flow | 6 | 103 | 8 | 40 | 39 | 12 | 16 | 6 | 34 | 4 | 5 | 10 |
| Number of Lanes | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |

| Approach | EB | WB | NB | SB |
|----------------------------|-----|-----|-----|-----|
| Opposing Approach | WB | EB | SB | NB |
| Opposing Lanes | 1 | 1 | 1 | 1 |
| Conflicting Approach Left | SB | NB | EB | WB |
| Conflicting Lanes Left | 1 | 1 | 1 | 1 |
| Conflicting Approach Right | NB | SB | WB | EB |
| Conflicting Lanes Right | 1 | 1 | 1 | 1 |
| HCM Control Delay | 7.8 | 7.7 | 7.3 | 7.2 |
| HCM LOS | A | A | A | A |

| Lane | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|------------------------|-------|-------|-------|-------|
| Vol Left, % | 28% | 6% | 44% | 20% |
| Vol Thru, % | 12% | 88% | 43% | 27% |
| Vol Right, % | 60% | 7% | 13% | 53% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 43 | 90 | 70 | 15 |
| LT Vol | 12 | 5 | 31 | 3 |
| Through Vol | 5 | 79 | 30 | 4 |
| RT Vol | 26 | 6 | 9 | 8 |
| Lane Flow Rate | 56 | 117 | 91 | 19 |
| Geometry Grp | 1 | 1 | 1 | 1 |
| Degree of Util (X) | 0.063 | 0.132 | 0.104 | 0.022 |
| Departure Headway (Hd) | 4.066 | 4.072 | 4.132 | 4.13 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 886 | 874 | 860 | 872 |
| Service Time | 2.066 | 2.127 | 2.192 | 2.132 |
| HCM Lane V/C Ratio | 0.063 | 0.134 | 0.106 | 0.022 |
| HCM Control Delay | 7.3 | 7.8 | 7.7 | 7.2 |
| HCM Lane LOS | A | A | A | A |
| HCM 95th-tile Q | 0.2 | 0.5 | 0.3 | 0.1 |

HCM 6th AWSC
 12: Randolph Street & Marion Street

10/07/2020

| Intersection | |
|---------------------------|------|
| Intersection Delay, s/veh | 19.3 |
| Intersection LOS | C |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 79 | 305 | 46 | 10 | 232 | 16 | 26 | 81 | 8 | 35 | 154 | 62 |
| Future Vol, veh/h | 79 | 305 | 46 | 10 | 232 | 16 | 26 | 81 | 8 | 35 | 154 | 62 |
| Peak Hour Factor | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| Heavy Vehicles, % | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| Mvmt Flow | 88 | 339 | 51 | 11 | 258 | 18 | 29 | 90 | 9 | 39 | 171 | 69 |
| Number of Lanes | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |

| Approach | EB | WB | NB | SB |
|----------------------------|------|------|------|------|
| Opposing Approach | WB | EB | SB | NB |
| Opposing Lanes | 1 | 1 | 1 | 1 |
| Conflicting Approach Left | SB | NB | EB | WB |
| Conflicting Lanes Left | 1 | 1 | 1 | 1 |
| Conflicting Approach Right | NB | SB | WB | EB |
| Conflicting Lanes Right | 1 | 1 | 1 | 1 |
| HCM Control Delay | 25.9 | 15.1 | 12.2 | 15.5 |
| HCM LOS | D | C | B | C |

| Lane | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|------------------------|-------|-------|-------|-------|
| Vol Left, % | 23% | 18% | 4% | 14% |
| Vol Thru, % | 70% | 71% | 90% | 61% |
| Vol Right, % | 7% | 11% | 6% | 25% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 115 | 430 | 258 | 251 |
| LT Vol | 26 | 79 | 10 | 35 |
| Through Vol | 81 | 305 | 232 | 154 |
| RT Vol | 8 | 46 | 16 | 62 |
| Lane Flow Rate | 128 | 478 | 287 | 279 |
| Geometry Grp | 1 | 1 | 1 | 1 |
| Degree of Util (X) | 0.245 | 0.772 | 0.491 | 0.493 |
| Departure Headway (Hd) | 6.908 | 5.814 | 6.16 | 6.363 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 517 | 621 | 585 | 566 |
| Service Time | 4.979 | 3.859 | 4.214 | 4.419 |
| HCM Lane V/C Ratio | 0.248 | 0.77 | 0.491 | 0.493 |
| HCM Control Delay | 12.2 | 25.9 | 15.1 | 15.5 |
| HCM Lane LOS | B | D | C | C |
| HCM 95th-tile Q | 1 | 7.2 | 2.7 | 2.7 |

HCM 6th TWSC
3: Harlem Avenue & Circle Avenue

10/07/2020

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 0.2 | | | | | |
| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
| Lane Configurations | | ↗ | | ↑↑ | ↑↑ | |
| Traffic Vol, veh/h | 0 | 30 | 0 | 1406 | 1437 | 259 |
| Future Vol, veh/h | 0 | 30 | 0 | 1406 | 1437 | 259 |
| Conflicting Peds, #/hr | 6 | 52 | 52 | 0 | 0 | 52 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | 0 | - | - | - | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 97 | 97 | 97 | 97 | 97 | 97 |
| Heavy Vehicles, % | 0 | 0 | 0 | 3 | 3 | 1 |
| Mvmt Flow | 0 | 31 | 0 | 1449 | 1481 | 267 |

| Major/Minor | Minor2 | Major1 | Major2 |
|----------------------|--------|--------|--------|
| Conflicting Flow All | - | 978 | 0 |
| Stage 1 | - | - | - |
| Stage 2 | - | - | - |
| Critical Hdwy | - | 6.9 | - |
| Critical Hdwy Stg 1 | - | - | - |
| Critical Hdwy Stg 2 | - | - | - |
| Follow-up Hdwy | - | 3.3 | - |
| Pot Cap-1 Maneuver | 0 | 253 | 0 |
| Stage 1 | 0 | - | 0 |
| Stage 2 | 0 | - | 0 |
| Platoon blocked, % | | | - |
| Mov Cap-1 Maneuver | - | 229 | - |
| Mov Cap-2 Maneuver | - | - | - |
| Stage 1 | - | - | - |
| Stage 2 | - | - | - |

| Approach | EB | NB | SB |
|----------------------|------|----|----|
| HCM Control Delay, s | 23.2 | 0 | 0 |
| HCM LOS | C | | |

| Minor Lane/Major Mvmt | NBT EBLn1 | SBT | SBR |
|-----------------------|-----------|-------|-----|
| Capacity (veh/h) | - | 229 | - |
| HCM Lane V/C Ratio | - | 0.135 | - |
| HCM Control Delay (s) | - | 23.2 | - |
| HCM Lane LOS | - | C | - |
| HCM 95th %tile Q(veh) | - | 0.5 | - |

HCM 6th TWSC
4: North-South Alley & South Boulevard

10/07/2020

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 0.5 | | | | | |
| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 48 | 1 | 17 | 358 | 4 | 4 |
| Future Vol, veh/h | 48 | 1 | 17 | 358 | 4 | 4 |
| Conflicting Peds, #/hr | 0 | 56 | 56 | 0 | 19 | 6 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 87 | 87 | 87 | 87 | 87 | 87 |
| Heavy Vehicles, % | 0 | 0 | 0 | 3 | 0 | 0 |
| Mvmt Flow | 55 | 1 | 20 | 411 | 5 | 5 |

| Major/Minor | Major1 | Major2 | Minor1 | Minor2 | Minor3 |
|----------------------|--------|--------|--------|--------|--------|
| Conflicting Flow All | 0 | 0 | 112 | 0 | 582 |
| Stage 1 | - | - | - | - | 112 |
| Stage 2 | - | - | - | - | 470 |
| Critical Hdwy | - | - | 4.1 | - | 6.4 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.4 |
| Critical Hdwy Stg 2 | - | - | - | - | 5.4 |
| Follow-up Hdwy | - | - | 2.2 | - | 3.5 |
| Pot Cap-1 Maneuver | - | - | 1490 | - | 479 |
| Stage 1 | - | - | - | - | 918 |
| Stage 2 | - | - | - | - | 633 |
| Platoon blocked, % | - | - | - | - | - |
| Mov Cap-1 Maneuver | - | - | 1411 | - | 437 |
| Mov Cap-2 Maneuver | - | - | - | - | 437 |
| Stage 1 | - | - | - | - | 854 |
| Stage 2 | - | - | - | - | 622 |

| Approach | EB | WB | NB |
|----------------------|----|-----|------|
| HCM Control Delay, s | 0 | 0.3 | 11.3 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBL | WBT |
|-----------------------|-------|-----|-----|-------|-----|
| Capacity (veh/h) | 585 | - | - | 1411 | - |
| HCM Lane V/C Ratio | 0.016 | - | - | 0.014 | - |
| HCM Control Delay (s) | 11.3 | - | - | 7.6 | 0 |
| HCM Lane LOS | B | - | - | A | A |
| HCM 95th %tile Q(veh) | 0 | - | - | 0 | - |

HCM 6th TWSC
6: Harlem Avenue & Frankin Street/Pleasant Street

10/07/2020

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 8.1 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | | | | | | | | | | | |
| Traffic Vol, veh/h | 0 | 0 | 51 | 4 | 1 | 45 | 18 | 1361 | 46 | 44 | 1400 | 23 |
| Future Vol, veh/h | 0 | 0 | 51 | 4 | 1 | 45 | 18 | 1361 | 46 | 44 | 1400 | 23 |
| Conflicting Peds, #/hr | 2 | 0 | 1 | 1 | 0 | 2 | 24 | 0 | 22 | 22 | 0 | 24 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | 0 | - | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 96 | 96 | 96 | 96 | 96 | 96 | 96 | 96 | 96 | 96 | 96 | 96 |
| Heavy Vehicles, % | 0 | 0 | 0 | 0 | 0 | 3 | 6 | 3 | 0 | 0 | 3 | 0 |
| Mvmt Flow | 0 | 0 | 53 | 4 | 1 | 47 | 19 | 1418 | 48 | 46 | 1458 | 24 |

| Major/Minor | Minor2 | | Minor1 | | Major1 | | Major2 | | | | | |
|----------------------|--------|---|--------|------|--------|------|--------|---|---|------|---|---|
| Conflicting Flow All | - | - | 766 | 2324 | 3100 | 757 | 1506 | 0 | 0 | 1488 | 0 | 0 |
| Stage 1 | - | - | - | 1502 | 1502 | - | - | - | - | - | - | - |
| Stage 2 | - | - | - | 822 | 1598 | - | - | - | - | - | - | - |
| Critical Hdwy | - | - | 6.9 | 7.5 | 6.5 | 6.96 | 4.22 | - | - | 4.1 | - | - |
| Critical Hdwy Stg 1 | - | - | - | 6.5 | 5.5 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | 6.5 | 5.5 | - | - | - | - | - | - | - |
| Follow-up Hdwy | - | - | 3.3 | 3.5 | 4 | 3.33 | 2.26 | - | - | 2.2 | - | - |
| Pot Cap-1 Maneuver | 0 | 0 | 350 | 20 | 12 | 348 | 421 | - | - | 458 | - | - |
| Stage 1 | 0 | 0 | - | 130 | 187 | - | - | - | - | - | - | - |
| Stage 2 | 0 | 0 | - | 339 | 167 | - | - | - | - | - | - | - |
| Platoon blocked, % | - | - | - | - | - | - | - | - | - | - | - | - |
| Mov Cap-1 Maneuver | - | - | 342 | 7 | 3 | 340 | 411 | - | - | 448 | - | - |
| Mov Cap-2 Maneuver | - | - | - | 7 | 3 | - | - | - | - | - | - | - |
| Stage 1 | - | - | - | 95 | 136 | - | - | - | - | - | - | - |
| Stage 2 | - | - | - | 117 | 67 | - | - | - | - | - | - | - |

| Approach | EB | | WB | | NB | | SB | |
|----------------------|------|--|-------|--|-----|--|-----|--|
| HCM Control Delay, s | 17.5 | | 291.5 | | 1.9 | | 4.1 | |
| HCM LOS | C | | F | | | | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1WBLn1 | SBL | SBT | SBR |
|-----------------------|-------|-----|-----|------------|-------|-------|-----|
| Capacity (veh/h) | 411 | - | - | 342 | 48 | 448 | - |
| HCM Lane V/C Ratio | 0.046 | - | - | 0.155 | 1.085 | 0.102 | - |
| HCM Control Delay (s) | 14.2 | 1.8 | - | 17.5 | 291.5 | 13.9 | 3.9 |
| HCM Lane LOS | B | A | - | C | F | B | A |
| HCM 95th %tile Q(veh) | 0.1 | - | - | 0.5 | 4.7 | 0.3 | - |

HCM 6th TWSC
7: North-South Alley & Pleasant Street

10/07/2020

| 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 | 4 | 103 | 1 | 8 | 61 | 1 | 2 | 3 | 7 | 5 | 6 | 7 |
| Future Vol, veh/h | 4 | 103 | 1 | 8 | 61 | 1 | 2 | 3 | 7 | 5 | 6 | 7 |
| Conflicting Peds, #/hr | 0 | 0 | 19 | 19 | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 8 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 81 | 81 | 81 | 81 | 81 | 81 | 81 | 81 | 81 | 81 | 81 | 81 |
| Heavy Vehicles, % | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 5 | 127 | 1 | 10 | 75 | 1 | 2 | 4 | 9 | 6 | 7 | 9 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|----------------------|--------|---|---|--------|---|---|--------|-----|-----|--------|-----|-----|
| Conflicting Flow All | 76 | 0 | 0 | 147 | 0 | 0 | 269 | 253 | 147 | 240 | 253 | 84 |
| Stage 1 | - | - | - | - | - | - | 157 | 157 | - | 96 | 96 | - |
| Stage 2 | - | - | - | - | - | - | 112 | 96 | - | 144 | 157 | - |
| Critical Hdwy | 4.1 | - | - | 4.1 | - | - | 7.1 | 6.5 | 6.2 | 7.1 | 6.5 | 6.2 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.1 | 5.5 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.1 | 5.5 | - |
| Follow-up Hdwy | 2.2 | - | - | 2.2 | - | - | 3.5 | 4 | 3.3 | 3.5 | 4 | 3.3 |
| Pot Cap-1 Maneuver | 1536 | - | - | 1447 | - | - | 688 | 654 | 905 | 718 | 654 | 981 |
| Stage 1 | - | - | - | - | - | - | 850 | 772 | - | 916 | 819 | - |
| Stage 2 | - | - | - | - | - | - | 898 | 819 | - | 864 | 772 | - |
| Platoon blocked, % | - | - | - | - | - | - | - | - | - | - | - | - |
| Mov Cap-1 Maneuver | 1536 | - | - | 1421 | - | - | 653 | 635 | 889 | 702 | 635 | 974 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 653 | 635 | - | 702 | 635 | - |
| Stage 1 | - | - | - | - | - | - | 831 | 755 | - | 912 | 813 | - |
| Stage 2 | - | - | - | - | - | - | 869 | 813 | - | 848 | 755 | - |

| Approach | EB | | | WB | | | NB | | | SB | | |
|----------------------|-----|--|--|-----|--|--|-----|--|--|-----|--|--|
| HCM Control Delay, s | 0.3 | | | 0.9 | | | 9.8 | | | 9.9 | | |
| HCM LOS | | | | | | | A | | | A | | |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|-----------------------|-------|-------|-----|-----|-------|-----|-----|-------|
| Capacity (veh/h) | 766 | 1536 | - | - | 1421 | - | - | 758 |
| HCM Lane V/C Ratio | 0.019 | 0.003 | - | - | 0.007 | - | - | 0.029 |
| HCM Control Delay (s) | 9.8 | 7.4 | 0 | - | 7.6 | 0 | - | 9.9 |
| HCM Lane LOS | A | A | A | - | A | A | - | A |
| HCM 95th %tile Q(veh) | 0.1 | 0 | - | - | 0 | - | - | 0.1 |

HCM 6th TWSC
8: Marion Street & Pleasant Street

10/07/2020

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 6.2 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 70 | 11 | 34 | 10 | 33 | 25 | 15 | 152 | 9 | 17 | 207 | 22 |
| Future Vol, veh/h | 70 | 11 | 34 | 10 | 33 | 25 | 15 | 152 | 9 | 17 | 207 | 22 |
| Conflicting Peds, #/hr | 0 | 0 | 19 | 19 | 0 | 0 | 53 | 0 | 66 | 66 | 0 | 53 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 |
| Heavy Vehicles, % | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 88 | 14 | 43 | 13 | 41 | 31 | 19 | 190 | 11 | 21 | 259 | 28 |

| Major/Minor | Minor2 | | Minor1 | | Major1 | | Major2 | | | | | |
|----------------------|--------|-----|--------|-----|--------|-----|--------|---|---|------|---|---|
| Conflicting Flow All | 638 | 673 | 345 | 663 | 682 | 262 | 340 | 0 | 0 | 267 | 0 | 0 |
| Stage 1 | 368 | 368 | - | 300 | 300 | - | - | - | - | - | - | - |
| Stage 2 | 270 | 305 | - | 363 | 382 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.1 | 6.5 | 6.28 | 7.1 | 6.5 | 6.2 | 4.1 | - | - | 4.1 | - | - |
| Critical Hdwy Stg 1 | 6.1 | 5.5 | - | 6.1 | 5.5 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.1 | 5.5 | - | 6.1 | 5.5 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.5 | 4 | 3.372 | 3.5 | 4 | 3.3 | 2.2 | - | - | 2.2 | - | - |
| Pot Cap-1 Maneuver | 392 | 379 | 684 | 377 | 375 | 782 | 1230 | - | - | 1308 | - | - |
| Stage 1 | 656 | 625 | - | 713 | 669 | - | - | - | - | - | - | - |
| Stage 2 | 740 | 666 | - | 660 | 616 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | - | - | - |
| Mov Cap-1 Maneuver | 312 | 325 | 638 | 304 | 321 | 733 | 1168 | - | - | 1226 | - | - |
| Mov Cap-2 Maneuver | 312 | 325 | - | 304 | 321 | - | - | - | - | - | - | - |
| Stage 1 | 611 | 582 | - | 656 | 615 | - | - | - | - | - | - | - |
| Stage 2 | 649 | 613 | - | 579 | 573 | - | - | - | - | - | - | - |

| Approach | EB | | WB | | NB | | SB | |
|----------------------|------|--|------|--|-----|--|-----|--|
| HCM Control Delay, s | 20.8 | | 16.4 | | 0.7 | | 0.6 | |
| HCM LOS | C | | C | | | | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1WBLn1 | SBL | SBT | SBR |
|-----------------------|-------|-----|-----|------------|-------|-------|-----|
| Capacity (veh/h) | 1168 | - | - | 369 | 400 | 1226 | - |
| HCM Lane V/C Ratio | 0.016 | - | - | 0.39 | 0.213 | 0.017 | - |
| HCM Control Delay (s) | 8.1 | 0 | - | 20.8 | 16.4 | 8 | 0 |
| HCM Lane LOS | A | A | - | C | C | A | A |
| HCM 95th %tile Q(veh) | 0 | - | - | 1.8 | 0.8 | 0.1 | - |

HCM 6th TWSC
9: Randolph Street & Maple Avenue

10/07/2020

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 2.6 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 13 | 391 | 10 | 25 | 274 | 25 | 11 | 5 | 30 | 14 | 9 | 18 |
| Future Vol, veh/h | 13 | 391 | 10 | 25 | 274 | 25 | 11 | 5 | 30 | 14 | 9 | 18 |
| Conflicting Peds, #/hr | 22 | 0 | 49 | 49 | 0 | 22 | 17 | 0 | 7 | 7 | 0 | 17 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 79 | 79 | 79 | 79 | 79 | 79 | 79 | 79 | 79 | 79 | 79 | 79 |
| Heavy Vehicles, % | 5 | 0 | 0 | 12 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 10 |
| Mvmt Flow | 16 | 495 | 13 | 32 | 347 | 32 | 14 | 6 | 38 | 18 | 11 | 23 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|----------------------|--------|---|---|--------|---|---|--------|------|-----|--------|-------|------|
| Conflicting Flow All | 401 | 0 | 0 | 557 | 0 | 0 | 1044 | 1048 | 558 | 1012 | 1038 | 402 |
| Stage 1 | - | - | - | - | - | - | 583 | 583 | - | 449 | 449 | - |
| Stage 2 | - | - | - | - | - | - | 461 | 465 | - | 563 | 589 | - |
| Critical Hdwy | 4.15 | - | - | 4.22 | - | - | 7.1 | 6.5 | 6.2 | 7.1 | 6.51 | 6.3 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.1 | 5.51 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.1 | 5.51 | - |
| Follow-up Hdwy | 2.245 | - | - | 2.308 | - | - | 3.5 | 4 | 3.3 | 3.5 | 4.009 | 3.39 |
| Pot Cap-1 Maneuver | 1142 | - | - | 965 | - | - | 209 | 230 | 533 | 220 | 232 | 631 |
| Stage 1 | - | - | - | - | - | - | 502 | 502 | - | 593 | 574 | - |
| Stage 2 | - | - | - | - | - | - | 584 | 566 | - | 514 | 497 | - |
| Platoon blocked, % | - | - | - | - | - | - | - | - | - | - | - | - |
| Mov Cap-1 Maneuver | 1118 | - | - | 920 | - | - | 172 | 201 | 505 | 184 | 203 | 608 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 172 | 201 | - | 184 | 203 | - |
| Stage 1 | - | - | - | - | - | - | 469 | 469 | - | 569 | 537 | - |
| Stage 2 | - | - | - | - | - | - | 517 | 530 | - | 456 | 464 | - |

| Approach | EB | | | WB | | | NB | | | SB | | |
|----------------------|-----|--|--|-----|--|--|------|--|--|------|--|--|
| HCM Control Delay, s | 0.3 | | | 0.7 | | | 19.3 | | | 21.3 | | |
| HCM LOS | | | | | | | C | | | C | | |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|-----------------------|-------|-------|-----|-----|-------|-----|-----|-------|
| Capacity (veh/h) | 310 | 1118 | - | - | 920 | - | - | 273 |
| HCM Lane V/C Ratio | 0.188 | 0.015 | - | - | 0.034 | - | - | 0.19 |
| HCM Control Delay (s) | 19.3 | 8.3 | 0 | - | 9.1 | 0 | - | 21.3 |
| HCM Lane LOS | C | A | A | - | A | A | - | C |
| HCM 95th %tile Q(veh) | 0.7 | 0 | - | - | 0.1 | - | - | 0.7 |

HCM 6th TWSC
 10: North-South Alley & Randolph Street

10/07/2020

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 0.6 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 4 | 422 | 9 | 6 | 308 | 6 | 6 | 2 | 3 | 5 | 0 | 10 |
| Future Vol, veh/h | 4 | 422 | 9 | 6 | 308 | 6 | 6 | 2 | 3 | 5 | 0 | 10 |
| Conflicting Peds, #/hr | 8 | 0 | 10 | 10 | 0 | 8 | 1 | 0 | 5 | 5 | 0 | 1 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 |
| Heavy Vehicles, % | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 4 | 469 | 10 | 7 | 342 | 7 | 7 | 2 | 3 | 6 | 0 | 11 |

| Major/Minor | Major1 | | Major2 | | Minor1 | | Minor2 | | | | | |
|----------------------|--------|---|--------|------|--------|---|--------|-----|-----|-----|-----|-----|
| Conflicting Flow All | 357 | 0 | 0 | 489 | 0 | 0 | 858 | 863 | 489 | 858 | 865 | 355 |
| Stage 1 | - | - | - | - | - | - | 492 | 492 | - | 368 | 368 | - |
| Stage 2 | - | - | - | - | - | - | 366 | 371 | - | 490 | 497 | - |
| Critical Hdwy | 4.1 | - | - | 4.1 | - | - | 7.1 | 6.5 | 6.2 | 7.1 | 6.5 | 6.2 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.1 | 5.5 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.1 | 5.5 | - |
| Follow-up Hdwy | 2.2 | - | - | 2.2 | - | - | 3.5 | 4 | 3.3 | 3.5 | 4 | 3.3 |
| Pot Cap-1 Maneuver | 1213 | - | - | 1085 | - | - | 279 | 295 | 583 | 279 | 294 | 693 |
| Stage 1 | - | - | - | - | - | - | 562 | 551 | - | 656 | 625 | - |
| Stage 2 | - | - | - | - | - | - | 657 | 623 | - | 564 | 548 | - |
| Platoon blocked, % | - | - | - | - | - | - | - | - | - | - | - | - |
| Mov Cap-1 Maneuver | 1204 | - | - | 1075 | - | - | 269 | 286 | 575 | 270 | 285 | 687 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 269 | 286 | - | 270 | 285 | - |
| Stage 1 | - | - | - | - | - | - | 554 | 543 | - | 647 | 615 | - |
| Stage 2 | - | - | - | - | - | - | 641 | 613 | - | 553 | 540 | - |

| Approach | EB | | WB | | NB | | SB | |
|----------------------|-----|--|-----|--|------|--|------|--|
| HCM Control Delay, s | 0.1 | | 0.2 | | 16.7 | | 13.2 | |
| HCM LOS | | | | | C | | B | |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|-----------------------|-------|-------|-----|-----|-------|-----|-----|-------|
| Capacity (veh/h) | 319 | 1204 | - | - | 1075 | - | - | 454 |
| HCM Lane V/C Ratio | 0.038 | 0.004 | - | - | 0.006 | - | - | 0.037 |
| HCM Control Delay (s) | 16.7 | 8 | 0 | - | 8.4 | 0 | - | 13.2 |
| HCM Lane LOS | C | A | A | - | A | A | - | B |
| HCM 95th %tile Q(veh) | 0.1 | 0 | - | - | 0 | - | - | 0.1 |

Lanes, Volumes, Timings

1: Harlem Avenue & South Boulevard

01/28/2021



| Lane Group | WBL | WBR | NBT | NBR | SBL | SBT |
|-------------------------|-------|-------|-------|------|------|-------|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 143 | 153 | 1182 | 52 | 0 | 1270 |
| Future Volume (vph) | 143 | 153 | 1182 | 52 | 0 | 1270 |
| Ideal Flow (vphp) | 1900 | 1900 | 1900 | 1900 | 1900 | 2000 |
| Storage Length (ft) | 110 | 0 | | 0 | 0 | |
| Storage Lanes | 1 | 1 | | 0 | 0 | |
| Taper Length (ft) | 145 | | | | 25 | |
| Lane Util. Factor | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 |
| Ped Bike Factor | 0.88 | 0.98 | 1.00 | | | |
| Frt | | 0.850 | 0.994 | | | |
| Flt Protected | 0.950 | | | | | |
| Satd. Flow (prot) | 1752 | 1356 | 3504 | 0 | 0 | 3695 |
| Flt Permitted | 0.950 | | | | | |
| Satd. Flow (perm) | 1551 | 1327 | 3504 | 0 | 0 | 3695 |
| Right Turn on Red | | No | | No | | |
| Satd. Flow (RTOR) | | | | | | |
| Link Speed (mph) | 30 | | 30 | | | 30 |
| Link Distance (ft) | 465 | | 176 | | | 249 |
| Travel Time (s) | 10.6 | | 4.0 | | | 5.7 |
| Confl. Peds. (#/hr) | 80 | 7 | | 35 | 35 | |
| Peak Hour Factor | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 |
| Heavy Vehicles (%) | 3% | 3% | 2% | 0% | 0% | 1% |
| Bus Blockages (#/hr) | 0 | 0 | 0 | 0 | 0 | 9 |
| Parking (#/hr) | | 7 | | | | |
| Shared Lane Traffic (%) | | | | | | |
| Lane Group Flow (vph) | 147 | 158 | 1273 | 0 | 0 | 1309 |
| Turn Type | Prot | Perm | NA | | | NA |
| Protected Phases | 8 | | 2 | | | 6 |
| Permitted Phases | | 8 | | | | |
| Detector Phase | 8 | 8 | 2 | | | 6 |
| Switch Phase | | | | | | |
| Minimum Initial (s) | 8.0 | 8.0 | 15.0 | | | 15.0 |
| Minimum Split (s) | 31.0 | 31.0 | 28.0 | | | 29.0 |
| Total Split (s) | 36.0 | 36.0 | 84.0 | | | 84.0 |
| Total Split (%) | 30.0% | 30.0% | 70.0% | | | 70.0% |
| Yellow Time (s) | 4.0 | 4.0 | 4.0 | | | 4.0 |
| All-Red Time (s) | 2.0 | 2.0 | 2.0 | | | 2.0 |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | | | 0.0 |
| Total Lost Time (s) | 6.0 | 6.0 | 6.0 | | | 6.0 |
| Lead/Lag | | | | | | |
| Lead-Lag Optimize? | | | | | | |
| Recall Mode | None | None | C-Min | | | C-Min |
| Act Effect Green (s) | 20.4 | 20.4 | 87.6 | | | 87.6 |
| Actuated g/C Ratio | 0.17 | 0.17 | 0.73 | | | 0.73 |
| v/c Ratio | 0.49 | 0.70 | 0.50 | | | 0.49 |
| Control Delay | 49.7 | 62.7 | 9.3 | | | 8.1 |
| Queue Delay | 0.0 | 0.0 | 0.0 | | | 0.0 |
| Total Delay | 49.7 | 62.7 | 9.3 | | | 8.1 |
| LOS | D | E | A | | | A |

Lanes, Volumes, Timings
 1: Harlem Avenue & South Boulevard

01/28/2021



| Lane Group | WBL | WBR | NBT | NBR | SBL | SBT |
|-------------------------|------|------|------|-----|-----|------|
| Approach Delay | 56.4 | | 9.3 | | | 8.1 |
| Approach LOS | E | | A | | | A |
| Queue Length 50th (ft) | 104 | 117 | 355 | | | 195 |
| Queue Length 95th (ft) | 158 | 179 | 482 | | | 305 |
| Internal Link Dist (ft) | 385 | | 96 | | | 169 |
| Turn Bay Length (ft) | 110 | | | | | |
| Base Capacity (vph) | 438 | 331 | 2557 | | | 2697 |
| Starvation Cap Reductn | 0 | 0 | 0 | | | 0 |
| Spillback Cap Reductn | 0 | 0 | 0 | | | 0 |
| Storage Cap Reductn | 0 | 0 | 0 | | | 0 |
| Reduced v/c Ratio | 0.34 | 0.48 | 0.50 | | | 0.49 |

Intersection Summary

| | |
|-----------------------------------|--|
| Area Type: | Other |
| Cycle Length: | 120 |
| Actuated Cycle Length: | 120 |
| Offset: | 101 (84%), Referenced to phase 2:NBT and 6:SBT, Start of Green |
| Natural Cycle: | 60 |
| Control Type: | Actuated-Coordinated |
| Maximum v/c Ratio: | 0.70 |
| Intersection Signal Delay: | 13.8 |
| Intersection LOS: | B |
| Intersection Capacity Utilization | 56.9% |
| ICU Level of Service | B |
| Analysis Period (min) | 15 |

Splits and Phases: 1: Harlem Avenue & South Boulevard



Lanes, Volumes, Timings

2: Harlem Avenue & Randolph Street

10/07/2020



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---------------------------|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 155 | 158 | 74 | 65 | 138 | 34 | 86 | 1102 | 35 | 68 | 1090 | 89 |
| Future Volume (vph) | 155 | 158 | 74 | 65 | 138 | 34 | 86 | 1102 | 35 | 68 | 1090 | 89 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 2000 | 1900 | 1900 | 2000 | 1900 |
| Lane Width (ft) | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 | 12 |
| Grade (%) | | 0% | | | 0% | | | 0% | | | 0% | |
| Storage Length (ft) | 40 | | 0 | 50 | | 0 | 165 | | 0 | 85 | | 0 |
| Storage Lanes | 1 | | 0 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 90 | | | 75 | | | 120 | | | 90 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 |
| Ped Bike Factor | 0.99 | 0.99 | | 0.99 | 0.99 | | | 1.00 | | | 1.00 | |
| Fr _t | | 0.952 | | | 0.970 | | | 0.995 | | | 0.989 | |
| Fl _t Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1787 | 1771 | 0 | 1805 | 1831 | 0 | 1805 | 3705 | 0 | 1805 | 3645 | 0 |
| Fl _t Permitted | 0.433 | | | 0.407 | | | 0.128 | | | 0.153 | | |
| Satd. Flow (perm) | 803 | 1771 | 0 | 767 | 1831 | 0 | 243 | 3705 | 0 | 291 | 3645 | 0 |
| Right Turn on Red | | | No | | | No | | | No | | | No |
| Satd. Flow (RTOR) | | | | | | | | | | | | |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 454 | | | 257 | | | 242 | | | 813 | |
| Travel Time (s) | | 10.3 | | | 5.8 | | | 5.5 | | | 18.5 | |
| Confl. Peds. (#/hr) | 14 | | 10 | 10 | | 14 | 10 | | 6 | 6 | | 10 |
| Confl. Bikes (#/hr) | | | | | | 1 | | | | | | |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Growth Factor | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| Heavy Vehicles (%) | 1% | 0% | 4% | 0% | 0% | 0% | 0% | 2% | 0% | 0% | 1% | 0% |
| Bus Blockages (#/hr) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 0 |
| Parking (#/hr) | | | | | | | | | | | | |
| Mid-Block Traffic (%) | | 0% | | | 0% | | | 0% | | | 0% | |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 163 | 244 | 0 | 68 | 181 | 0 | 91 | 1197 | 0 | 72 | 1241 | 0 |
| Turn Type | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | | 8 | | | 2 | | | 6 | | |
| Detector Phase | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 3.0 | 8.0 | | 3.0 | 8.0 | | 3.0 | 15.0 | | 3.0 | 15.0 | |
| Minimum Split (s) | 9.5 | 30.0 | | 9.5 | 30.0 | | 9.5 | 29.0 | | 10.5 | 33.0 | |
| Total Split (s) | 13.0 | 30.0 | | 13.0 | 30.0 | | 13.0 | 64.0 | | 13.0 | 64.0 | |
| Total Split (%) | 10.8% | 25.0% | | 10.8% | 25.0% | | 10.8% | 53.3% | | 10.8% | 53.3% | |
| Yellow Time (s) | 3.5 | 4.0 | | 3.5 | 4.0 | | 3.5 | 4.0 | | 3.5 | 4.0 | |
| All-Red Time (s) | 0.0 | 2.0 | | 0.0 | 2.0 | | 0.0 | 2.0 | | 0.0 | 2.0 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | 3.5 | 6.0 | | 3.5 | 6.0 | | 3.5 | 6.0 | | 3.5 | 6.0 | |
| Lead/Lag | Lead | Lag | | Lead | Lag | | Lead | Lag | | Lead | Lag | |
| Lead-Lag Optimize? | Yes | Yes | | Yes | Yes | | Yes | Yes | | Yes | Yes | |
| Recall Mode | None | None | | None | None | | None | C-Min | | None | C-Min | |
| Act Effect Green (s) | 33.1 | 23.0 | | 30.6 | 19.9 | | 75.2 | 66.1 | | 73.7 | 63.9 | |
| Actuated g/C Ratio | 0.28 | 0.19 | | 0.26 | 0.17 | | 0.63 | 0.55 | | 0.61 | 0.53 | |

Lanes, Volumes, Timings
 2: Harlem Avenue & Randolph Street

10/07/2020



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|------|------|-----|------|------|-----|------|------|-----|------|------|-----|
| v/c Ratio | 0.55 | 0.72 | | 0.25 | 0.60 | | 0.36 | 0.59 | | 0.27 | 0.64 | |
| Control Delay | 39.7 | 58.5 | | 32.0 | 54.0 | | 12.9 | 20.9 | | 14.8 | 30.9 | |
| Queue Delay | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | 39.7 | 58.5 | | 32.0 | 54.0 | | 12.9 | 20.9 | | 14.8 | 30.9 | |
| LOS | D | E | | C | D | | B | C | | B | C | |
| Approach Delay | | 51.0 | | | 48.0 | | | 20.3 | | | 30.0 | |
| Approach LOS | | D | | | D | | | C | | | C | |
| Queue Length 50th (ft) | 96 | 180 | | 38 | 129 | | 25 | 333 | | 30 | 447 | |
| Queue Length 95th (ft) | 150 | 270 | | 71 | 200 | | 49 | 435 | | 60 | 551 | |
| Internal Link Dist (ft) | | 374 | | | 177 | | | 162 | | | 733 | |
| Turn Bay Length (ft) | 40 | | | 50 | | | 165 | | | 85 | | |
| Base Capacity (vph) | 299 | 357 | | 286 | 366 | | 278 | 2041 | | 303 | 1939 | |
| Starvation Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Spillback Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Storage Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | 0 | |
| Reduced v/c Ratio | 0.55 | 0.68 | | 0.24 | 0.49 | | 0.33 | 0.59 | | 0.24 | 0.64 | |

Intersection Summary

| | |
|-----------------------------------|---|
| Area Type: | Other |
| Cycle Length: | 120 |
| Actuated Cycle Length: | 120 |
| Offset: | 56 (47%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green |
| Natural Cycle: | 85 |
| Control Type: | Actuated-Coordinated |
| Maximum v/c Ratio: | 0.72 |
| Intersection Signal Delay: | 30.2 |
| Intersection LOS: | C |
| Intersection Capacity Utilization | 74.9% |
| ICU Level of Service | D |
| Analysis Period (min) | 15 |

Splits and Phases: 2: Harlem Avenue & Randolph Street



HCM 6th AWSC
 11: Maple Avenue & Pleasant Street

10/07/2020

| Intersection | |
|---------------------------|-----|
| Intersection Delay, s/veh | 7.6 |
| Intersection LOS | A |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 9 | 88 | 7 | 22 | 19 | 16 | 11 | 5 | 26 | 6 | 6 | 8 |
| Future Vol, veh/h | 9 | 88 | 7 | 22 | 19 | 16 | 11 | 5 | 26 | 6 | 6 | 8 |
| Peak Hour Factor | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 |
| Heavy Vehicles, % | 0 | 2 | 0 | 0 | 7 | 17 | 0 | 0 | 0 | 17 | 17 | 0 |
| Mvmt Flow | 11 | 111 | 9 | 28 | 24 | 20 | 14 | 6 | 33 | 8 | 8 | 10 |
| Number of Lanes | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |

| Approach | EB | WB | NB | SB |
|----------------------------|-----|-----|-----|-----|
| Opposing Approach | WB | EB | SB | NB |
| Opposing Lanes | 1 | 1 | 1 | 1 |
| Conflicting Approach Left | SB | NB | EB | WB |
| Conflicting Lanes Left | 1 | 1 | 1 | 1 |
| Conflicting Approach Right | NB | SB | WB | EB |
| Conflicting Lanes Right | 1 | 1 | 1 | 1 |
| HCM Control Delay | 7.8 | 7.5 | 7.3 | 7.7 |
| HCM LOS | A | A | A | A |

| Lane | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|------------------------|-------|-------|-------|-------|
| Vol Left, % | 26% | 9% | 39% | 30% |
| Vol Thru, % | 12% | 85% | 33% | 30% |
| Vol Right, % | 62% | 7% | 28% | 40% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 42 | 104 | 57 | 20 |
| LT Vol | 11 | 9 | 22 | 6 |
| Through Vol | 5 | 88 | 19 | 6 |
| RT Vol | 26 | 7 | 16 | 8 |
| Lane Flow Rate | 53 | 132 | 72 | 25 |
| Geometry Grp | 1 | 1 | 1 | 1 |
| Degree of Util (X) | 0.06 | 0.149 | 0.081 | 0.032 |
| Departure Headway (Hd) | 4.051 | 4.069 | 4.046 | 4.507 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 889 | 874 | 875 | 799 |
| Service Time | 2.052 | 2.127 | 2.118 | 2.509 |
| HCM Lane V/C Ratio | 0.06 | 0.151 | 0.082 | 0.031 |
| HCM Control Delay | 7.3 | 7.8 | 7.5 | 7.7 |
| HCM Lane LOS | A | A | A | A |
| HCM 95th-tile Q | 0.2 | 0.5 | 0.3 | 0.1 |

HCM 6th AWSC
12: Randolph Street & Marion Street

10/07/2020

| Intersection | |
|---------------------------|------|
| Intersection Delay, s/veh | 11.6 |
| Intersection LOS | B |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 60 | 198 | 23 | 8 | 199 | 5 | 11 | 76 | 13 | 43 | 105 | 44 |
| Future Vol, veh/h | 60 | 198 | 23 | 8 | 199 | 5 | 11 | 76 | 13 | 43 | 105 | 44 |
| Peak Hour Factor | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 |
| Heavy Vehicles, % | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 3 | 0 | 0 |
| Mvmt Flow | 67 | 222 | 26 | 9 | 224 | 6 | 12 | 85 | 15 | 48 | 118 | 49 |
| Number of Lanes | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |

| Approach | EB | WB | NB | SB |
|----------------------------|------|------|----|------|
| Opposing Approach | WB | EB | SB | NB |
| Opposing Lanes | 1 | 1 | 1 | 1 |
| Conflicting Approach Left | SB | NB | EB | WB |
| Conflicting Lanes Left | 1 | 1 | 1 | 1 |
| Conflicting Approach Right | NB | SB | WB | EB |
| Conflicting Lanes Right | 1 | 1 | 1 | 1 |
| HCM Control Delay | 12.6 | 11.2 | 10 | 11.3 |
| HCM LOS | B | B | A | B |

| Lane | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|------------------------|-------|-------|-------|-------|
| Vol Left, % | 11% | 21% | 4% | 22% |
| Vol Thru, % | 76% | 70% | 94% | 55% |
| Vol Right, % | 13% | 8% | 2% | 23% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 100 | 281 | 212 | 192 |
| LT Vol | 11 | 60 | 8 | 43 |
| Through Vol | 76 | 198 | 199 | 105 |
| RT Vol | 13 | 23 | 5 | 44 |
| Lane Flow Rate | 112 | 316 | 238 | 216 |
| Geometry Grp | 1 | 1 | 1 | 1 |
| Degree of Util (X) | 0.178 | 0.456 | 0.352 | 0.331 |
| Departure Headway (Hd) | 5.708 | 5.203 | 5.315 | 5.526 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 627 | 691 | 676 | 649 |
| Service Time | 3.759 | 3.242 | 3.357 | 3.569 |
| HCM Lane V/C Ratio | 0.179 | 0.457 | 0.352 | 0.333 |
| HCM Control Delay | 10 | 12.6 | 11.2 | 11.3 |
| HCM Lane LOS | A | B | B | B |
| HCM 95th-tile Q | 0.6 | 2.4 | 1.6 | 1.4 |

HCM 6th TWSC
3: Harlem Avenue & Circle Avenue

10/07/2020

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 0.2 | | | | | |
| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
| Lane Configurations | | ↗ | | ↑↑ | ↑↑ | |
| Traffic Vol, veh/h | 0 | 31 | 0 | 1234 | 1253 | 160 |
| Future Vol, veh/h | 0 | 31 | 0 | 1234 | 1253 | 160 |
| Conflicting Peds, #/hr | 7 | 80 | 58 | 0 | 0 | 58 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | 0 | - | - | - | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 97 | 97 | 97 | 97 | 97 | 97 |
| Heavy Vehicles, % | 0 | 0 | 0 | 2 | 1 | 0 |
| Mvmt Flow | 0 | 32 | 0 | 1272 | 1292 | 165 |

| Major/Minor | Minor2 | Major1 | Major2 |
|----------------------|--------|--------|--------|
| Conflicting Flow All | - | 867 | 0 |
| Stage 1 | - | - | - |
| Stage 2 | - | - | - |
| Critical Hdwy | - | 6.9 | - |
| Critical Hdwy Stg 1 | - | - | - |
| Critical Hdwy Stg 2 | - | - | - |
| Follow-up Hdwy | - | 3.3 | - |
| Pot Cap-1 Maneuver | 0 | 300 | 0 |
| Stage 1 | 0 | - | 0 |
| Stage 2 | 0 | - | 0 |
| Platoon blocked, % | | | - |
| Mov Cap-1 Maneuver | - | 262 | - |
| Mov Cap-2 Maneuver | - | - | - |
| Stage 1 | - | - | - |
| Stage 2 | - | - | - |

| Approach | EB | NB | SB |
|----------------------|------|----|----|
| HCM Control Delay, s | 20.6 | 0 | 0 |
| HCM LOS | C | | |

| Minor Lane/Major Mvmt | NBT EBLn1 | SBT | SBR |
|-----------------------|-----------|-----|-----|
| Capacity (veh/h) | - 262 | - | - |
| HCM Lane V/C Ratio | - 0.122 | - | - |
| HCM Control Delay (s) | - 20.6 | - | - |
| HCM Lane LOS | - C | - | - |
| HCM 95th %tile Q(veh) | - 0.4 | - | - |

HCM 6th TWSC
 4: North-South Alley & South Boulevard

10/07/2020

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 0.4 | | | | | |
| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 51 | 4 | 6 | 289 | 4 | 4 |
| Future Vol, veh/h | 51 | 4 | 6 | 289 | 4 | 4 |
| Conflicting Peds, #/hr | 0 | 102 | 102 | 0 | 13 | 2 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 88 | 88 | 88 | 88 | 88 | 88 |
| Heavy Vehicles, % | 0 | 0 | 0 | 3 | 0 | 0 |
| Mvmt Flow | 58 | 5 | 7 | 328 | 5 | 5 |

| Major/Minor | Major1 | Major2 | Minor1 | Minor2 | Minor3 |
|----------------------|--------|--------|--------|--------|--------|
| Conflicting Flow All | 0 | 0 | 165 | 0 | 518 |
| Stage 1 | - | - | - | - | 163 |
| Stage 2 | - | - | - | - | 355 |
| Critical Hdwy | - | - | 4.1 | - | 6.4 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.4 |
| Critical Hdwy Stg 2 | - | - | - | - | 5.4 |
| Follow-up Hdwy | - | - | 2.2 | - | 3.5 |
| Pot Cap-1 Maneuver | - | - | 1426 | - | 521 |
| Stage 1 | - | - | - | - | 871 |
| Stage 2 | - | - | - | - | 714 |
| Platoon blocked, % | - | - | - | - | - |
| Mov Cap-1 Maneuver | - | - | 1287 | - | 462 |
| Mov Cap-2 Maneuver | - | - | - | - | 462 |
| Stage 1 | - | - | - | - | 781 |
| Stage 2 | - | - | - | - | 705 |

| Approach | EB | WB | NB |
|----------------------|----|-----|------|
| HCM Control Delay, s | 0 | 0.2 | 11.3 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBL | WBT |
|-----------------------|-------|-----|-----|-------|-----|
| Capacity (veh/h) | 585 | - | - | 1287 | - |
| HCM Lane V/C Ratio | 0.016 | - | - | 0.005 | - |
| HCM Control Delay (s) | 11.3 | - | - | 7.8 | 0 |
| HCM Lane LOS | B | - | - | A | A |
| HCM 95th %tile Q(veh) | 0 | - | - | 0 | - |

HCM 6th TWSC
6: Harlem Avenue & Frankin Street/Pleasant Street

10/07/2020

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 4 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | | ↗ | | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 0 | 0 | 37 | 1 | 5 | 32 | 19 | 1202 | 70 | 34 | 1209 | 41 |
| Future Vol, veh/h | 0 | 0 | 37 | 1 | 5 | 32 | 19 | 1202 | 70 | 34 | 1209 | 41 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 10 | 10 | 0 | 4 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | 0 | - | - | - | - | - | - | - | - | - |
| 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, % | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 1 | 2 | 0 | 1 | 0 |
| Mvmt Flow | 0 | 0 | 40 | 1 | 5 | 35 | 21 | 1307 | 76 | 37 | 1314 | 45 |

| Major/Minor | Minor2 | Minor1 | | Major1 | | Major2 | | | | | | |
|----------------------|--------|--------|-----|--------|------|--------|------|---|---|------|---|---|
| Conflicting Flow All | - | - | 684 | 2128 | 2834 | 702 | 1363 | 0 | 0 | 1393 | 0 | 0 |
| Stage 1 | - | - | - | 1397 | 1397 | - | - | - | - | - | - | - |
| Stage 2 | - | - | - | 731 | 1437 | - | - | - | - | - | - | - |
| Critical Hdwy | - | - | 6.9 | 7.5 | 6.5 | 7 | 4.1 | - | - | 4.1 | - | - |
| Critical Hdwy Stg 1 | - | - | - | 6.5 | 5.5 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | 6.5 | 5.5 | - | - | - | - | - | - | - |
| Follow-up Hdwy | - | - | 3.3 | 3.5 | 4 | 3.35 | 2.2 | - | - | 2.2 | - | - |
| Pot Cap-1 Maneuver | 0 | 0 | 396 | 29 | 18 | 374 | 511 | - | - | 497 | - | - |
| Stage 1 | 0 | 0 | - | 151 | 210 | - | - | - | - | - | - | - |
| Stage 2 | 0 | 0 | - | 384 | 201 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | - | - | - |
| Mov Cap-1 Maneuver | - | - | 394 | 17 | 10 | 370 | 509 | - | - | 492 | - | - |
| Mov Cap-2 Maneuver | - | - | - | 17 | 10 | - | - | - | - | - | - | - |
| Stage 1 | - | - | - | 122 | 169 | - | - | - | - | - | - | - |
| Stage 2 | - | - | - | 237 | 137 | - | - | - | - | - | - | - |

| Approach | EB | WB | NB | SB |
|----------------------|------|-------|-----|-----|
| HCM Control Delay, s | 15.2 | 152.7 | 1.2 | 2.1 |
| HCM LOS | C | F | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1WBLn1 | SBL | SBT | SBR |
|-----------------------|-------|-----|-----|------------|-------|-------|-----|
| Capacity (veh/h) | 509 | - | - | 394 | 59 | 492 | - |
| HCM Lane V/C Ratio | 0.041 | - | - | 0.102 | 0.7 | 0.075 | - |
| HCM Control Delay (s) | 12.4 | 1.1 | - | 15.2 | 152.7 | 12.9 | 1.9 |
| HCM Lane LOS | B | A | - | C | F | B | A |
| HCM 95th %tile Q(veh) | 0.1 | - | - | 0.3 | 3 | 0.2 | - |

HCM 6th TWSC
7: North-South Alley & Pleasant Street

10/07/2020

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 1 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 5 | 114 | 1 | 4 | 50 | 3 | 2 | 0 | 2 | 2 | 3 | 5 |
| Future Vol, veh/h | 5 | 114 | 1 | 4 | 50 | 3 | 2 | 0 | 2 | 2 | 3 | 5 |
| Conflicting Peds, #/hr | 5 | 0 | 13 | 13 | 0 | 5 | 7 | 0 | 6 | 6 | 0 | 7 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
| 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, % | 0 | 2 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 20 |
| Mvmt Flow | 5 | 124 | 1 | 4 | 54 | 3 | 2 | 0 | 2 | 2 | 3 | 5 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|----------------------|--------|---|---|--------|---|---|--------|-----|-----|--------|-----|------|
| Conflicting Flow All | 62 | 0 | 0 | 138 | 0 | 0 | 223 | 218 | 144 | 211 | 217 | 68 |
| Stage 1 | - | - | - | - | - | - | 148 | 148 | - | 69 | 69 | - |
| Stage 2 | - | - | - | - | - | - | 75 | 70 | - | 142 | 148 | - |
| Critical Hdwy | 4.1 | - | - | 4.1 | - | - | 7.1 | 6.5 | 6.2 | 7.1 | 6.5 | 6.4 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.1 | 5.5 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.1 | 5.5 | - |
| Follow-up Hdwy | 2.2 | - | - | 2.2 | - | - | 3.5 | 4 | 3.3 | 3.5 | 4 | 3.48 |
| Pot Cap-1 Maneuver | 1554 | - | - | 1458 | - | - | 737 | 684 | 909 | 750 | 685 | 947 |
| Stage 1 | - | - | - | - | - | - | 859 | 779 | - | 946 | 841 | - |
| Stage 2 | - | - | - | - | - | - | 939 | 841 | - | 866 | 779 | - |
| Platoon blocked, % | - | - | - | - | - | - | - | - | - | - | - | - |
| Mov Cap-1 Maneuver | 1547 | - | - | 1440 | - | - | 713 | 668 | 893 | 737 | 669 | 936 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 713 | 668 | - | 737 | 669 | - |
| Stage 1 | - | - | - | - | - | - | 846 | 767 | - | 938 | 834 | - |
| Stage 2 | - | - | - | - | - | - | 921 | 834 | - | 856 | 767 | - |

| Approach | EB | | | WB | | | NB | | | SB | | |
|----------------------|-----|--|--|-----|--|--|-----|--|--|-----|--|--|
| HCM Control Delay, s | 0.3 | | | 0.5 | | | 9.6 | | | 9.6 | | |
| HCM LOS | | | | | | | A | | | A | | |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|-----------------------|-------|-------|-----|-----|-------|-----|-----|-------|
| Capacity (veh/h) | 793 | 1547 | - | - | 1440 | - | - | 797 |
| HCM Lane V/C Ratio | 0.005 | 0.004 | - | - | 0.003 | - | - | 0.014 |
| HCM Control Delay (s) | 9.6 | 7.3 | 0 | - | 7.5 | 0 | - | 9.6 |
| HCM Lane LOS | A | A | A | - | A | A | - | A |
| HCM 95th %tile Q(veh) | 0 | 0 | - | - | 0 | - | - | 0 |

HCM 6th TWSC
8: Marion Street & Pleasant Street

10/07/2020

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 5.8 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 76 | 20 | 22 | 17 | 23 | 22 | 8 | 126 | 7 | 16 | 153 | 26 |
| Future Vol, veh/h | 76 | 20 | 22 | 17 | 23 | 22 | 8 | 126 | 7 | 16 | 153 | 26 |
| Conflicting Peds, #/hr | 0 | 0 | 24 | 24 | 0 | 0 | 71 | 0 | 53 | 53 | 0 | 71 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 |
| Heavy Vehicles, % | 0 | 0 | 2 | 0 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 85 | 22 | 25 | 19 | 26 | 25 | 9 | 142 | 8 | 18 | 172 | 29 |

| Major/Minor | Minor2 | | Minor1 | | Major1 | | Major2 | | | | | |
|----------------------|--------|-----|--------|-----|--------|-----|--------|---|---|------|---|---|
| Conflicting Flow All | 484 | 515 | 282 | 487 | 525 | 199 | 272 | 0 | 0 | 203 | 0 | 0 |
| Stage 1 | 294 | 294 | - | 217 | 217 | - | - | - | - | - | - | - |
| Stage 2 | 190 | 221 | - | 270 | 308 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.1 | 6.5 | 6.22 | 7.1 | 6.62 | 6.2 | 4.1 | - | - | 4.1 | - | - |
| Critical Hdwy Stg 1 | 6.1 | 5.5 | - | 6.1 | 5.62 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.1 | 5.5 | - | 6.1 | 5.62 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.5 | 4 | 3.318 | 3.5 | 4.108 | 3.3 | 2.2 | - | - | 2.2 | - | - |
| Pot Cap-1 Maneuver | 496 | 466 | 757 | 494 | 444 | 847 | 1303 | - | - | 1381 | - | - |
| Stage 1 | 719 | 673 | - | 790 | 705 | - | - | - | - | - | - | - |
| Stage 2 | 816 | 724 | - | 740 | 643 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | - | - | - |
| Mov Cap-1 Maneuver | 418 | 403 | 690 | 415 | 384 | 804 | 1215 | - | - | 1311 | - | - |
| Mov Cap-2 Maneuver | 418 | 403 | - | 415 | 384 | - | - | - | - | - | - | - |
| Stage 1 | 665 | 617 | - | 744 | 664 | - | - | - | - | - | - | - |
| Stage 2 | 754 | 682 | - | 661 | 590 | - | - | - | - | - | - | - |

| Approach | EB | | WB | | NB | | SB | |
|----------------------|------|--|------|--|-----|--|-----|--|
| HCM Control Delay, s | 16.4 | | 13.7 | | 0.5 | | 0.6 | |
| HCM LOS | C | | B | | | | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1WBLn1 | SBL | SBT | SBR |
|-----------------------|-------|-----|-----|------------|-------|-------|-----|
| Capacity (veh/h) | 1215 | - | - | 448 | 484 | 1311 | - |
| HCM Lane V/C Ratio | 0.007 | - | - | 0.296 | 0.144 | 0.014 | - |
| HCM Control Delay (s) | 8 | 0 | - | 16.4 | 13.7 | 7.8 | 0 |
| HCM Lane LOS | A | A | - | C | B | A | A |
| HCM 95th %tile Q(veh) | 0 | - | - | 1.2 | 0.5 | 0 | - |

HCM 6th TWSC
9: Randolph Street & Maple Avenue

10/07/2020

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 2.3 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 7 | 250 | 4 | 21 | 223 | 16 | 5 | 19 | 27 | 9 | 17 | 9 |
| Future Vol, veh/h | 7 | 250 | 4 | 21 | 223 | 16 | 5 | 19 | 27 | 9 | 17 | 9 |
| Conflicting Peds, #/hr | 10 | 0 | 6 | 6 | 0 | 10 | 8 | 0 | 13 | 13 | 0 | 8 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 87 | 87 | 87 | 87 | 87 | 87 | 87 | 87 | 87 | 87 | 87 | 87 |
| Heavy Vehicles, % | 0 | 18 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| Mvmt Flow | 8 | 287 | 5 | 24 | 256 | 18 | 6 | 22 | 31 | 10 | 20 | 10 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|----------------------|--------|---|---|--------|---|---|--------|-----|-----|--------|-------|-----|
| Conflicting Flow All | 284 | 0 | 0 | 298 | 0 | 0 | 648 | 644 | 309 | 668 | 637 | 283 |
| Stage 1 | - | - | - | - | - | - | 312 | 312 | - | 323 | 323 | - |
| Stage 2 | - | - | - | - | - | - | 336 | 332 | - | 345 | 314 | - |
| Critical Hdwy | 4.1 | - | - | 4.1 | - | - | 7.1 | 6.5 | 6.2 | 7.1 | 6.51 | 6.2 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.1 | 5.51 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.1 | 5.51 | - |
| Follow-up Hdwy | 2.2 | - | - | 2.2 | - | - | 3.5 | 4 | 3.3 | 3.5 | 4.009 | 3.3 |
| Pot Cap-1 Maneuver | 1290 | - | - | 1275 | - | - | 386 | 394 | 736 | 375 | 396 | 761 |
| Stage 1 | - | - | - | - | - | - | 703 | 661 | - | 693 | 652 | - |
| Stage 2 | - | - | - | - | - | - | 682 | 648 | - | 675 | 658 | - |
| Platoon blocked, % | - | - | - | - | - | - | - | - | - | - | - | - |
| Mov Cap-1 Maneuver | 1278 | - | - | 1268 | - | - | 353 | 377 | 723 | 328 | 379 | 748 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 353 | 377 | - | 328 | 379 | - |
| Stage 1 | - | - | - | - | - | - | 694 | 652 | - | 682 | 631 | - |
| Stage 2 | - | - | - | - | - | - | 633 | 627 | - | 612 | 649 | - |

| Approach | EB | | | WB | | | NB | | | SB | | |
|----------------------|-----|--|--|-----|--|--|------|--|--|------|--|--|
| HCM Control Delay, s | 0.2 | | | 0.6 | | | 13.2 | | | 14.6 | | |
| HCM LOS | | | | | | | B | | | B | | |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|-----------------------|-------|-------|-----|-----|-------|-----|-----|-------|
| Capacity (veh/h) | 500 | 1278 | - | - | 1268 | - | - | 415 |
| HCM Lane V/C Ratio | 0.117 | 0.006 | - | - | 0.019 | - | - | 0.097 |
| HCM Control Delay (s) | 13.2 | 7.8 | 0 | - | 7.9 | 0 | - | 14.6 |
| HCM Lane LOS | B | A | A | - | A | A | - | B |
| HCM 95th %tile Q(veh) | 0.4 | 0 | - | - | 0.1 | - | - | 0.3 |

HCM 6th TWSC
10: North-South Alley & Randolph Street

10/07/2020

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 0.3 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 3 | 280 | 3 | 1 | 252 | 1 | 1 | 0 | 1 | 0 | 1 | 7 |
| Future Vol, veh/h | 3 | 280 | 3 | 1 | 252 | 1 | 1 | 0 | 1 | 0 | 1 | 7 |
| Conflicting Peds, #/hr | 23 | 0 | 12 | 12 | 0 | 23 | 5 | 0 | 1 | 1 | 0 | 5 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 85 | 85 | 85 | 85 | 85 | 85 | 85 | 85 | 85 | 85 | 85 | 85 |
| Heavy Vehicles, % | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 4 | 329 | 4 | 1 | 296 | 1 | 1 | 0 | 1 | 0 | 1 | 8 |












| Major/Minor | Major1 | | Major2 | | Minor1 | | Minor2 | | | | | |
|----------------------|--------|---|--------|------|--------|---|--------|-----|-----|-----|-----|-----|
| Conflicting Flow All | 320 | 0 | 0 | 345 | 0 | 0 | 659 | 673 | 344 | 663 | 675 | 325 |
| Stage 1 | - | - | - | - | - | - | 351 | 351 | - | 322 | 322 | - |
| Stage 2 | - | - | - | - | - | - | 308 | 322 | - | 341 | 353 | - |
| Critical Hdwy | 4.1 | - | - | 4.1 | - | - | 7.1 | 6.5 | 6.2 | 7.1 | 6.5 | 6.2 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.1 | 5.5 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.1 | 5.5 | - |
| Follow-up Hdwy | 2.2 | - | - | 2.2 | - | - | 3.5 | 4 | 3.3 | 3.5 | 4 | 3.3 |
| Pot Cap-1 Maneuver | 1251 | - | - | 1225 | - | - | 380 | 379 | 703 | 377 | 378 | 721 |
| Stage 1 | - | - | - | - | - | - | 670 | 636 | - | 694 | 655 | - |
| Stage 2 | - | - | - | - | - | - | 706 | 655 | - | 678 | 634 | - |
| Platoon blocked, % | - | - | - | - | - | - | - | - | - | - | - | - |
| Mov Cap-1 Maneuver | 1224 | - | - | 1211 | - | - | 367 | 365 | 694 | 366 | 364 | 702 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 367 | 365 | - | 366 | 364 | - |
| Stage 1 | - | - | - | - | - | - | 660 | 626 | - | 676 | 640 | - |
| Stage 2 | - | - | - | - | - | - | 692 | 640 | - | 674 | 624 | - |

| Approach | EB | WB | NB | SB |
|----------------------|-----|----|------|------|
| HCM Control Delay, s | 0.1 | 0 | 12.5 | 10.8 |
| HCM LOS | | | B | B |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|-----------------------|-------|-------|-----|-----|-------|-----|-----|-------|
| Capacity (veh/h) | 480 | 1224 | - | - | 1211 | - | - | 629 |
| HCM Lane V/C Ratio | 0.005 | 0.003 | - | - | 0.001 | - | - | 0.015 |
| HCM Control Delay (s) | 12.5 | 8 | 0 | - | 8 | 0 | - | 10.8 |
| HCM Lane LOS | B | A | A | - | A | A | - | B |
| HCM 95th %tile Q(veh) | 0 | 0 | - | - | 0 | - | - | 0 |

Lanes, Volumes, Timings
1: Harlem Avenue & South Boulevard

01/28/2021

| |  |  |  |  |  |  |
|-------------------------|---|---|---|---|---|---|
| Lane Group | WBL | WBR | NBT | NBR | SBL | SBT |
| Lane Configurations |  |  |  |  | |  |
| Traffic Volume (vph) | 147 | 83 | 1260 | 19 | 0 | 1463 |
| Future Volume (vph) | 147 | 83 | 1260 | 19 | 0 | 1463 |
| Ideal Flow (vphp) | 1900 | 1900 | 1900 | 1900 | 1900 | 2000 |
| Storage Length (ft) | 110 | 0 | | 0 | 0 | |
| Storage Lanes | 1 | 1 | | 0 | 0 | |
| Taper Length (ft) | 145 | | | | 25 | |
| Lane Util. Factor | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 |
| Ped Bike Factor | 0.92 | 0.97 | 1.00 | | | |
| Frt | | 0.850 | 0.998 | | | |
| Flt Protected | 0.950 | | | | | |
| Satd. Flow (prot) | 1752 | 1225 | 3361 | 0 | 0 | 3623 |
| Flt Permitted | 0.950 | | | | | |
| Satd. Flow (perm) | 1605 | 1185 | 3361 | 0 | 0 | 3623 |
| Right Turn on Red | | No | | No | | |
| Satd. Flow (RTOR) | | | | | | |
| Link Speed (mph) | 30 | | 30 | | | 30 |
| Link Distance (ft) | 465 | | 176 | | | 249 |
| Travel Time (s) | 10.6 | | 4.0 | | | 5.7 |
| Confl. Peds. (#/hr) | 56 | 13 | | 39 | 39 | |
| Confl. Bikes (#/hr) | | 2 | | | | |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Heavy Vehicles (%) | 3% | 14% | 7% | 7% | 0% | 3% |
| Bus Blockages (#/hr) | 0 | 0 | 0 | 0 | 0 | 9 |
| Parking (#/hr) | | 7 | | | | |
| Shared Lane Traffic (%) | | | | | | |
| Lane Group Flow (vph) | 160 | 90 | 1391 | 0 | 0 | 1590 |
| Turn Type | Prot | Perm | NA | | | NA |
| Protected Phases | 8 | | 2 | | | 6 |
| Permitted Phases | | 8 | | | | |
| Detector Phase | 8 | 8 | 2 | | | 6 |
| Switch Phase | | | | | | |
| Minimum Initial (s) | 8.0 | 8.0 | 15.0 | | | 15.0 |
| Minimum Split (s) | 31.0 | 31.0 | 28.0 | | | 29.0 |
| Total Split (s) | 38.0 | 38.0 | 87.0 | | | 87.0 |
| Total Split (%) | 30.4% | 30.4% | 69.6% | | | 69.6% |
| Yellow Time (s) | 4.0 | 4.0 | 4.0 | | | 4.0 |
| All-Red Time (s) | 2.0 | 2.0 | 2.0 | | | 2.0 |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | | | 0.0 |
| Total Lost Time (s) | 6.0 | 6.0 | 6.0 | | | 6.0 |
| Lead/Lag | | | | | | |
| Lead-Lag Optimize? | | | | | | |
| Recall Mode | None | None | C-Min | | | C-Min |
| Act Effect Green (s) | 17.6 | 17.6 | 95.4 | | | 95.4 |
| Actuated g/C Ratio | 0.14 | 0.14 | 0.76 | | | 0.76 |
| v/c Ratio | 0.65 | 0.54 | 0.54 | | | 0.58 |
| Control Delay | 62.4 | 60.9 | 14.5 | | | 7.8 |
| Queue Delay | 0.0 | 0.0 | 0.0 | | | 0.0 |
| Total Delay | 62.4 | 60.9 | 14.5 | | | 7.8 |

Lanes, Volumes, Timings
 1: Harlem Avenue & South Boulevard

01/28/2021

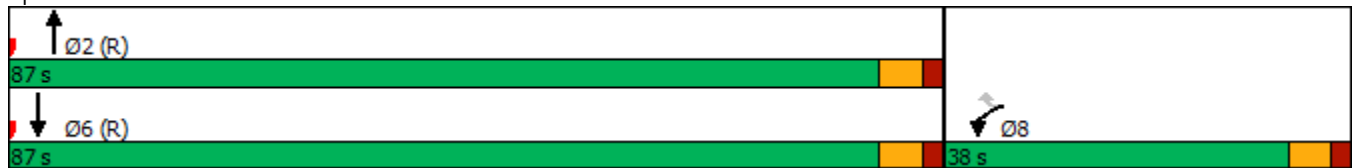


| Lane Group | WBL | WBR | NBT | NBR | SBL | SBT |
|-------------------------|------|------|------|-----|-----|------|
| LOS | E | E | B | | | A |
| Approach Delay | 61.8 | | 14.5 | | | 7.8 |
| Approach LOS | E | | B | | | A |
| Queue Length 50th (ft) | 124 | 69 | 474 | | | 246 |
| Queue Length 95th (ft) | 188 | 120 | 613 | | | 366 |
| Internal Link Dist (ft) | 385 | | 96 | | | 169 |
| Turn Bay Length (ft) | 110 | | | | | |
| Base Capacity (vph) | 448 | 303 | 2564 | | | 2763 |
| Starvation Cap Reductn | 0 | 0 | 0 | | | 0 |
| Spillback Cap Reductn | 0 | 0 | 0 | | | 0 |
| Storage Cap Reductn | 0 | 0 | 0 | | | 0 |
| Reduced v/c Ratio | 0.36 | 0.30 | 0.54 | | | 0.58 |

Intersection Summary

| | |
|-----------------------------------|--|
| Area Type: | Other |
| Cycle Length: | 125 |
| Actuated Cycle Length: | 125 |
| Offset: | 103 (82%), Referenced to phase 2:NBT and 6:SBT, Start of Green |
| Natural Cycle: | 70 |
| Control Type: | Actuated-Coordinated |
| Maximum v/c Ratio: | 0.65 |
| Intersection Signal Delay: | 14.8 |
| Intersection LOS: | B |
| Intersection Capacity Utilization | 61.0% |
| ICU Level of Service | B |
| Analysis Period (min) | 15 |

Splits and Phases: 1: Harlem Avenue & South Boulevard



Lanes, Volumes, Timings

2: Harlem Avenue & Randolph Street

01/28/2021



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 130 | 151 | 119 | 94 | 114 | 24 | 83 | 1169 | 38 | 32 | 1369 | 82 |
| Future Volume (vph) | 130 | 151 | 119 | 94 | 114 | 24 | 83 | 1169 | 38 | 32 | 1369 | 82 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 2000 | 1900 | 1900 | 2000 | 1900 |
| Storage Length (ft) | 40 | | 0 | 50 | | 0 | 165 | | 0 | 85 | | 0 |
| Storage Lanes | 1 | | 0 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 90 | | | 75 | | | 120 | | | 90 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 |
| Ped Bike Factor | 0.98 | 0.99 | | 0.99 | 0.99 | | | 1.00 | | | 1.00 | |
| Frt | | 0.934 | | | 0.974 | | | 0.995 | | | 0.992 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1787 | 1724 | 0 | 1805 | 1808 | 0 | 1736 | 3531 | 0 | 1736 | 3581 | 0 |
| Flt Permitted | 0.562 | | | 0.272 | | | 0.059 | | | 0.145 | | |
| Satd. Flow (perm) | 1041 | 1724 | 0 | 512 | 1808 | 0 | 108 | 3531 | 0 | 265 | 3581 | 0 |
| Right Turn on Red | | | No | | | No | | | No | | | No |
| Satd. Flow (RTOR) | | | | | | | | | | | | |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 454 | | | 257 | | | 242 | | | 813 | |
| Travel Time (s) | | 10.3 | | | 5.8 | | | 5.5 | | | 18.5 | |
| Confl. Peds. (#/hr) | 14 | | 12 | 12 | | 14 | 7 | | 7 | 7 | | 7 |
| Confl. Bikes (#/hr) | | | | | | 7 | | | | | | |
| Peak Hour Factor | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| Heavy Vehicles (%) | 1% | 2% | 1% | 0% | 2% | 0% | 4% | 7% | 5% | 4% | 3% | 6% |
| Bus Blockages (#/hr) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 0 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 135 | 281 | 0 | 98 | 144 | 0 | 86 | 1258 | 0 | 33 | 1511 | 0 |
| Turn Type | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | | 8 | | | 2 | | | 6 | | |
| Detector Phase | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 3.0 | 8.0 | | 3.0 | 8.0 | | 3.0 | 15.0 | | 3.0 | 15.0 | |
| Minimum Split (s) | 9.5 | 30.0 | | 9.5 | 32.0 | | 9.5 | 29.0 | | 10.5 | 33.0 | |
| Total Split (s) | 14.0 | 30.0 | | 14.0 | 30.0 | | 17.0 | 67.0 | | 14.0 | 64.0 | |
| Total Split (%) | 11.2% | 24.0% | | 11.2% | 24.0% | | 13.6% | 53.6% | | 11.2% | 51.2% | |
| Yellow Time (s) | 3.5 | 4.0 | | 3.5 | 4.0 | | 3.5 | 4.0 | | 3.5 | 4.0 | |
| All-Red Time (s) | 0.0 | 2.0 | | 0.0 | 2.0 | | 0.0 | 2.0 | | 0.0 | 2.0 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | 3.5 | 6.0 | | 3.5 | 6.0 | | 3.5 | 6.0 | | 3.5 | 6.0 | |
| Lead/Lag | Lead | Lag | | Lead | Lag | | Lead | Lag | | Lead | Lag | |
| Lead-Lag Optimize? | Yes | Yes | | Yes | Yes | | Yes | Yes | | Yes | Yes | |
| Recall Mode | None | None | | None | None | | None | C-Min | | None | C-Min | |
| Act Effect Green (s) | 35.8 | 23.3 | | 34.6 | 22.6 | | 78.6 | 70.6 | | 74.0 | 65.1 | |
| Actuated g/C Ratio | 0.29 | 0.19 | | 0.28 | 0.18 | | 0.63 | 0.56 | | 0.59 | 0.52 | |
| v/c Ratio | 0.38 | 0.88 | | 0.41 | 0.44 | | 0.49 | 0.63 | | 0.14 | 0.81 | |
| Control Delay | 35.1 | 76.7 | | 36.3 | 49.8 | | 24.3 | 21.5 | | 12.4 | 36.6 | |
| Queue Delay | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | 35.1 | 76.7 | | 36.3 | 49.8 | | 24.3 | 21.5 | | 12.4 | 36.6 | |
| LOS | D | E | | D | D | | C | C | | B | D | |

Lanes, Volumes, Timings

2: Harlem Avenue & Randolph Street

01/28/2021

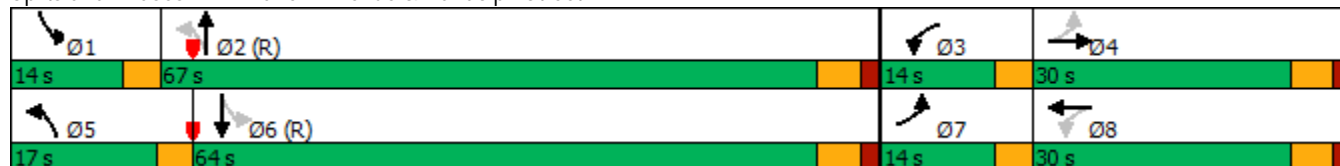


| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|------|------|-----|------|------|-----|------|------|-----|------|-----|------|
| Approach Delay | | 63.2 | | | 44.3 | | | 21.7 | | | | 36.1 |
| Approach LOS | | E | | | D | | | C | | | | D |
| Queue Length 50th (ft) | 80 | 221 | | 57 | 103 | | 26 | 385 | | 14 | | 617 |
| Queue Length 95th (ft) | 133 | #371 | | 100 | 170 | | 69 | 474 | | m23 | | 716 |
| Internal Link Dist (ft) | | 374 | | | 177 | | | 162 | | | | 733 |
| Turn Bay Length (ft) | 40 | | | 50 | | | 165 | | | 85 | | |
| Base Capacity (vph) | 364 | 332 | | 254 | 347 | | 244 | 1992 | | 288 | | 1864 |
| Starvation Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | | 0 |
| Spillback Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | | 0 |
| Storage Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | | 0 |
| Reduced v/c Ratio | 0.37 | 0.85 | | 0.39 | 0.41 | | 0.35 | 0.63 | | 0.11 | | 0.81 |

Intersection Summary

Area Type: Other
 Cycle Length: 125
 Actuated Cycle Length: 125
 Offset: 51 (41%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
 Natural Cycle: 95
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.88
 Intersection Signal Delay: 34.4 Intersection LOS: C
 Intersection Capacity Utilization 82.1% ICU Level of Service E
 Analysis Period (min) 15
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.
 m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Harlem Avenue & Randolph Street



HCM 6th AWSC
 11: Maple Avenue & Pleasant Street

01/28/2021

| Intersection | |
|---------------------------|-----|
| Intersection Delay, s/veh | 7.7 |
| Intersection LOS | A |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 9 | 83 | 14 | 8 | 27 | 0 | 16 | 7 | 18 | 2 | 2 | 2 |
| Future Vol, veh/h | 9 | 83 | 14 | 8 | 27 | 0 | 16 | 7 | 18 | 2 | 2 | 2 |
| Peak Hour Factor | 0.67 | 0.67 | 0.67 | 0.67 | 0.67 | 0.67 | 0.67 | 0.67 | 0.67 | 0.67 | 0.67 | 0.67 |
| Heavy Vehicles, % | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 25 | 12 | 0 | 0 | 14 |
| Mvmt Flow | 13 | 124 | 21 | 12 | 40 | 0 | 24 | 10 | 27 | 3 | 3 | 3 |
| Number of Lanes | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |

| Approach | EB | WB | NB | SB |
|----------------------------|-----|-----|-----|-----|
| Opposing Approach | WB | EB | SB | NB |
| Opposing Lanes | 1 | 1 | 1 | 1 |
| Conflicting Approach Left | SB | NB | EB | WB |
| Conflicting Lanes Left | 1 | 1 | 1 | 1 |
| Conflicting Approach Right | NB | SB | WB | EB |
| Conflicting Lanes Right | 1 | 1 | 1 | 1 |
| HCM Control Delay | 7.9 | 7.5 | 7.5 | 7.3 |
| HCM LOS | A | A | A | A |

| Lane | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|------------------------|-------|-------|-------|-------|
| Vol Left, % | 39% | 8% | 23% | 33% |
| Vol Thru, % | 17% | 78% | 77% | 33% |
| Vol Right, % | 44% | 13% | 0% | 33% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 41 | 106 | 35 | 6 |
| LT Vol | 16 | 9 | 8 | 2 |
| Through Vol | 7 | 83 | 27 | 2 |
| RT Vol | 18 | 14 | 0 | 2 |
| Lane Flow Rate | 61 | 158 | 52 | 9 |
| Geometry Grp | 1 | 1 | 1 | 1 |
| Degree of Util (X) | 0.069 | 0.176 | 0.061 | 0.011 |
| Departure Headway (Hd) | 4.083 | 3.998 | 4.188 | 4.288 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 862 | 892 | 847 | 840 |
| Service Time | 2.181 | 2.047 | 2.255 | 2.288 |
| HCM Lane V/C Ratio | 0.071 | 0.177 | 0.061 | 0.011 |
| HCM Control Delay | 7.5 | 7.9 | 7.5 | 7.3 |
| HCM Lane LOS | A | A | A | A |
| HCM 95th-tile Q | 0.2 | 0.6 | 0.2 | 0 |

HCM 6th AWSC
12: Randolph Street & Marion Street

01/28/2021

| Intersection | |
|---------------------------|-----|
| Intersection Delay, s/veh | 9.6 |
| Intersection LOS | A |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 40 | 160 | 27 | 6 | 167 | 14 | 18 | 51 | 4 | 8 | 71 | 50 |
| Future Vol, veh/h | 40 | 160 | 27 | 6 | 167 | 14 | 18 | 51 | 4 | 8 | 71 | 50 |
| Peak Hour Factor | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| Heavy Vehicles, % | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 44 | 178 | 30 | 7 | 186 | 16 | 20 | 57 | 4 | 9 | 79 | 56 |
| Number of Lanes | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |

| Approach | EB | WB | NB | SB |
|----------------------------|----|-----|----|-----|
| Opposing Approach | WB | EB | SB | NB |
| Opposing Lanes | 1 | 1 | 1 | 1 |
| Conflicting Approach Left | SB | NB | EB | WB |
| Conflicting Lanes Left | 1 | 1 | 1 | 1 |
| Conflicting Approach Right | NB | SB | WB | EB |
| Conflicting Lanes Right | 1 | 1 | 1 | 1 |
| HCM Control Delay | 10 | 9.6 | 9 | 9.1 |
| HCM LOS | A | A | A | A |

| Lane | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|------------------------|-------|-------|-------|-------|
| Vol Left, % | 25% | 18% | 3% | 6% |
| Vol Thru, % | 70% | 70% | 89% | 55% |
| Vol Right, % | 5% | 12% | 7% | 39% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 73 | 227 | 187 | 129 |
| LT Vol | 18 | 40 | 6 | 8 |
| Through Vol | 51 | 160 | 167 | 71 |
| RT Vol | 4 | 27 | 14 | 50 |
| Lane Flow Rate | 81 | 252 | 208 | 143 |
| Geometry Grp | 1 | 1 | 1 | 1 |
| Degree of Util (X) | 0.117 | 0.327 | 0.272 | 0.193 |
| Departure Headway (Hd) | 5.181 | 4.668 | 4.717 | 4.86 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 686 | 767 | 756 | 732 |
| Service Time | 3.257 | 2.725 | 2.777 | 2.928 |
| HCM Lane V/C Ratio | 0.118 | 0.329 | 0.275 | 0.195 |
| HCM Control Delay | 9 | 10 | 9.6 | 9.1 |
| HCM Lane LOS | A | A | A | A |
| HCM 95th-tile Q | 0.4 | 1.4 | 1.1 | 0.7 |

HCM 6th TWSC
3: Harlem Avenue & Circle Avenue

01/28/2021

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 0.2 | | | | | |
| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
| Lane Configurations | | ↗ | | ↑↑ | ↑↑ | |
| Traffic Vol, veh/h | 0 | 18 | 0 | 1279 | 1486 | 124 |
| Future Vol, veh/h | 0 | 18 | 0 | 1279 | 1486 | 124 |
| Conflicting Peds, #/hr | 13 | 56 | 91 | 0 | 0 | 91 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | 0 | - | - | - | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 0 | 14 | 0 | 7 | 3 | 2 |
| Mvmt Flow | 0 | 20 | 0 | 1390 | 1615 | 135 |

| Major/Minor | Minor2 | Major1 | Major2 | | |
|----------------------|--------|--------|--------|---|---|
| Conflicting Flow All | - | 1022 | - | 0 | - |
| Stage 1 | - | - | - | - | - |
| Stage 2 | - | - | - | - | - |
| Critical Hdwy | - | 7.18 | - | - | - |
| Critical Hdwy Stg 1 | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | - | - |
| Follow-up Hdwy | - | 3.44 | - | - | - |
| Pot Cap-1 Maneuver | 0 | 214 | 0 | - | - |
| Stage 1 | 0 | - | 0 | - | - |
| Stage 2 | 0 | - | 0 | - | - |
| Platoon blocked, % | | | | - | - |
| Mov Cap-1 Maneuver | - | 185 | - | - | - |
| Mov Cap-2 Maneuver | - | - | - | - | - |
| Stage 1 | - | - | - | - | - |
| Stage 2 | - | - | - | - | - |

| Approach | EB | NB | SB |
|----------------------|------|----|----|
| HCM Control Delay, s | 26.7 | 0 | 0 |
| HCM LOS | D | | |

| Minor Lane/Major Mvmt | NBT | EBLn1 | SBT | SBR |
|-----------------------|-----|-------|-----|-----|
| Capacity (veh/h) | - | 185 | - | - |
| HCM Lane V/C Ratio | - | 0.106 | - | - |
| HCM Control Delay (s) | - | 26.7 | - | - |
| HCM Lane LOS | - | D | - | - |
| HCM 95th %tile Q(veh) | - | 0.3 | - | - |

HCM 6th TWSC
4: North-South Alley & South Boulevard

01/28/2021

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 0.1 | | | | | |
| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 25 | 0 | 1 | 222 | 0 | 2 |
| Future Vol, veh/h | 25 | 0 | 1 | 222 | 0 | 2 |
| Conflicting Peds, #/hr | 0 | 24 | 24 | 0 | 1 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 96 | 96 | 96 | 96 | 96 | 96 |
| Heavy Vehicles, % | 8 | 0 | 0 | 9 | 0 | 0 |
| Mvmt Flow | 26 | 0 | 1 | 231 | 0 | 2 |

| Major/Minor | Major1 | Major2 | Minor1 | Minor2 |
|----------------------|--------|--------|--------|--------|
| Conflicting Flow All | 0 | 0 | 50 | 284 |
| Stage 1 | - | - | - | 50 |
| Stage 2 | - | - | - | 234 |
| Critical Hdwy | - | - | 4.1 | 6.4 |
| Critical Hdwy Stg 1 | - | - | - | 5.4 |
| Critical Hdwy Stg 2 | - | - | - | 5.4 |
| Follow-up Hdwy | - | - | 2.2 | 3.5 |
| Pot Cap-1 Maneuver | - | - | 1570 | 710 |
| Stage 1 | - | - | - | 978 |
| Stage 2 | - | - | - | 810 |
| Platoon blocked, % | - | - | - | - |
| Mov Cap-1 Maneuver | - | - | 1534 | 692 |
| Mov Cap-2 Maneuver | - | - | - | 692 |
| Stage 1 | - | - | - | 956 |
| Stage 2 | - | - | - | 808 |

| Approach | EB | WB | NB |
|----------------------|----|----|-----|
| HCM Control Delay, s | 0 | 0 | 8.6 |
| HCM LOS | | | A |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBL | WBT |
|-----------------------|-------|-----|-----|-------|-----|
| Capacity (veh/h) | 1001 | - | - | 1534 | - |
| HCM Lane V/C Ratio | 0.002 | - | - | 0.001 | - |
| HCM Control Delay (s) | 8.6 | - | - | 7.3 | 0 |
| HCM Lane LOS | A | - | - | A | A |
| HCM 95th %tile Q(veh) | 0 | - | - | 0 | - |

HCM 6th TWSC
6: Harlem Avenue & Frankin Street/Pleasant Street

01/28/2021

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 59.9 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | | ↗ | | ↕ | | | ↔ | | | ↔ | |
| Traffic Vol, veh/h | 0 | 0 | 49 | 6 | 5 | 34 | 34 | 1245 | 44 | 62 | 1428 | 14 |
| Future Vol, veh/h | 0 | 0 | 49 | 6 | 5 | 34 | 34 | 1245 | 44 | 62 | 1428 | 14 |
| Conflicting Peds, #/hr | 1 | 0 | 0 | 0 | 0 | 1 | 22 | 0 | 6 | 6 | 0 | 22 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | 0 | - | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 95 | 95 | 95 | 95 | 95 | 95 | 95 | 95 | 95 | 95 | 95 | 95 |
| Heavy Vehicles, % | 0 | 0 | 3 | 0 | 0 | 6 | 0 | 7 | 0 | 0 | 4 | 0 |
| Mvmt Flow | 0 | 0 | 52 | 6 | 5 | 36 | 36 | 1311 | 46 | 65 | 1503 | 15 |

| Major/Minor | Minor2 | | Minor1 | | Major1 | | Major2 | | | | | |
|----------------------|--------|---|--------|------|--------|------|--------|---|---|------|---|---|
| Conflicting Flow All | - | - | 781 | 2294 | 3082 | 686 | 1540 | 0 | 0 | 1363 | 0 | 0 |
| Stage 1 | - | - | - | 1412 | 1412 | - | - | - | - | - | - | - |
| Stage 2 | - | - | - | 882 | 1670 | - | - | - | - | - | - | - |
| Critical Hdwy | - | - | 6.96 | 7.5 | 6.5 | 7.02 | 4.1 | - | - | 4.1 | - | - |
| Critical Hdwy Stg 1 | - | - | - | 6.5 | 5.5 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | 6.5 | 5.5 | - | - | - | - | - | - | - |
| Follow-up Hdwy | - | - | 3.33 | 3.5 | 4 | 3.36 | 2.2 | - | - | 2.2 | - | - |
| Pot Cap-1 Maneuver | 0 | 0 | 335 | 22 | 12 | 381 | 437 | - | - | 511 | - | - |
| Stage 1 | 0 | 0 | - | 148 | 206 | - | - | - | - | - | - | - |
| Stage 2 | 0 | 0 | - | 312 | 154 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | - | - | - |
| Mov Cap-1 Maneuver | - | - | 328 | ~ 4 | ~ 1 | 378 | 428 | - | - | 508 | - | - |
| Mov Cap-2 Maneuver | - | - | - | ~ 4 | ~ 1 | - | - | - | - | - | - | - |
| Stage 1 | - | - | - | 96 | 133 | - | - | - | - | - | - | - |
| Stage 2 | - | - | - | 46 | 26 | - | - | - | - | - | - | - |

| Approach | EB | WB | NB | SB |
|----------------------|----|-----------|-----|-----|
| HCM Control Delay, s | 18 | \$ 3619.5 | 2.5 | 5.3 |
| HCM LOS | C | F | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1WBLn1 | SBL | SBT | SBR |
|-----------------------|-------|-----|-----|------------|-------|-------|-----|
| Capacity (veh/h) | 428 | - | - | 328 | 7 | 508 | - |
| HCM Lane V/C Ratio | 0.084 | - | - | 0.157 | 6.767 | 0.128 | - |
| HCM Control Delay (s) | 14.2 | 2.3 | - | 18 3619.5 | 13.1 | 5 | - |
| HCM Lane LOS | B | A | - | C | F | B | A |
| HCM 95th %tile Q(veh) | 0.3 | - | - | 0.6 | 7.4 | 0.4 | - |

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

HCM 6th TWSC
7: North-South Alley & Pleasant Street

01/28/2021

| 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 | 2 | 95 | 6 | 10 | 23 | 0 | 11 | 0 | 9 | 0 | 0 | 1 |
| Future Vol, veh/h | 2 | 95 | 6 | 10 | 23 | 0 | 11 | 0 | 9 | 0 | 0 | 1 |
| Conflicting Peds, #/hr | 6 | 0 | 26 | 26 | 0 | 6 | 2 | 0 | 0 | 0 | 0 | 2 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 77 | 77 | 77 | 77 | 77 | 77 | 77 | 77 | 77 | 77 | 77 | 77 |
| Heavy Vehicles, % | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 3 | 123 | 8 | 13 | 30 | 0 | 14 | 0 | 12 | 0 | 0 | 1 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|----------------------|--------|---|---|--------|---|---|--------|-----|-----|--------|-----|------|
| Conflicting Flow All | 36 | 0 | 0 | 157 | 0 | 0 | 218 | 221 | 153 | 201 | 225 | 38 |
| Stage 1 | - | - | - | - | - | - | 159 | 159 | - | 62 | 62 | - |
| Stage 2 | - | - | - | - | - | - | 59 | 62 | - | 139 | 163 | - |
| Critical Hdwy | 4.1 | - | - | 4.1 | - | - | 7.1 | 6.5 | 6.2 | 7.1 | 6.5 | 6.2 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.1 | 5.5 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.1 | 5.5 | - |
| Follow-up Hdwy | 2.2 | - | - | 2.2 | - | - | 3.5 | 4 | 3.3 | 3.5 | 4 | 3.3 |
| Pot Cap-1 Maneuver | 1588 | - | - | 1435 | - | - | 743 | 681 | 898 | 762 | 678 | 1040 |
| Stage 1 | - | - | - | - | - | - | 848 | 770 | - | 954 | 847 | - |
| Stage 2 | - | - | - | - | - | - | 958 | 847 | - | 869 | 767 | - |
| Platoon blocked, % | - | - | - | - | - | - | - | - | - | - | - | - |
| Mov Cap-1 Maneuver | 1579 | - | - | 1399 | - | - | 716 | 653 | 876 | 741 | 650 | 1032 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 716 | 653 | - | 741 | 650 | - |
| Stage 1 | - | - | - | - | - | - | 825 | 749 | - | 946 | 834 | - |
| Stage 2 | - | - | - | - | - | - | 946 | 834 | - | 856 | 746 | - |

| Approach | EB | | | WB | | | NB | | | SB | | |
|----------------------|-----|--|--|-----|--|--|-----|--|--|-----|--|--|
| HCM Control Delay, s | 0.1 | | | 2.3 | | | 9.8 | | | 8.5 | | |
| HCM LOS | | | | | | | A | | | A | | |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|-----------------------|-------|-------|-----|-----|-------|-----|-----|-------|
| Capacity (veh/h) | 780 | 1579 | - | - | 1399 | - | - | 1032 |
| HCM Lane V/C Ratio | 0.033 | 0.002 | - | - | 0.009 | - | - | 0.001 |
| HCM Control Delay (s) | 9.8 | 7.3 | 0 | - | 7.6 | 0 | - | 8.5 |
| HCM Lane LOS | A | A | A | - | A | A | - | A |
| HCM 95th %tile Q(veh) | 0.1 | 0 | - | - | 0 | - | - | 0 |

HCM 6th TWSC
8: Marion Street & Pleasant Street

01/28/2021

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 5.1 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 59 | 15 | 30 | 4 | 23 | 3 | 2 | 94 | 9 | 4 | 95 | 8 |
| Future Vol, veh/h | 59 | 15 | 30 | 4 | 23 | 3 | 2 | 94 | 9 | 4 | 95 | 8 |
| Conflicting Peds, #/hr | 0 | 0 | 92 | 30 | 0 | 0 | 46 | 0 | 117 | 117 | 0 | 46 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 86 | 86 | 86 | 86 | 86 | 86 | 86 | 86 | 86 | 86 | 86 | 86 |
| Heavy Vehicles, % | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 67 | 0 | 0 |
| Mvmt Flow | 69 | 17 | 35 | 5 | 27 | 3 | 2 | 109 | 10 | 5 | 110 | 9 |

| Major/Minor | Minor2 | | Minor1 | | | Major1 | | Major2 | | | | |
|----------------------|--------|-----|--------|-----|-----|--------|------|--------|---|-------|---|---|
| Conflicting Flow All | 304 | 411 | 253 | 478 | 410 | 231 | 165 | 0 | 0 | 236 | 0 | 0 |
| Stage 1 | 171 | 171 | - | 235 | 235 | - | - | - | - | - | - | - |
| Stage 2 | 133 | 240 | - | 243 | 175 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.13 | 6.5 | 6.2 | 7.1 | 6.5 | 6.2 | 4.1 | - | - | 4.77 | - | - |
| Critical Hdwy Stg 1 | 6.13 | 5.5 | - | 6.1 | 5.5 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.13 | 5.5 | - | 6.1 | 5.5 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.527 | 4 | 3.3 | 3.5 | 4 | 3.3 | 2.2 | - | - | 2.803 | - | - |
| Pot Cap-1 Maneuver | 646 | 534 | 791 | 501 | 534 | 813 | 1426 | - | - | 1028 | - | - |
| Stage 1 | 829 | 761 | - | 773 | 714 | - | - | - | - | - | - | - |
| Stage 2 | 868 | 711 | - | 765 | 758 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | - | - | - |
| Mov Cap-1 Maneuver | 583 | 450 | 690 | 372 | 450 | 722 | 1364 | - | - | 913 | - | - |
| Mov Cap-2 Maneuver | 583 | 450 | - | 372 | 450 | - | - | - | - | - | - | - |
| Stage 1 | 791 | 723 | - | 686 | 633 | - | - | - | - | - | - | - |
| Stage 2 | 826 | 631 | - | 643 | 720 | - | - | - | - | - | - | - |

| Approach | EB | | WB | | | NB | | SB | | |
|----------------------|------|--|------|--|--|-----|--|-----|--|--|
| HCM Control Delay, s | 12.8 | | 13.6 | | | 0.1 | | 0.3 | | |
| HCM LOS | B | | B | | | | | | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1WBLn1 | SBL | SBT | SBR |
|-----------------------|-------|-----|-----|------------|-------|-------|-----|
| Capacity (veh/h) | 1364 | - | - | 584 | 454 | 913 | - |
| HCM Lane V/C Ratio | 0.002 | - | - | 0.207 | 0.077 | 0.005 | - |
| HCM Control Delay (s) | 7.6 | 0 | - | 12.8 | 13.6 | 9 | 0 |
| HCM Lane LOS | A | A | - | B | B | A | A |
| HCM 95th %tile Q(veh) | 0 | - | - | 0.8 | 0.2 | 0 | - |

HCM 6th TWSC
9: Randolph Street & Maple Avenue

01/28/2021

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 1.7 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 17 | 199 | 5 | 9 | 220 | 18 | 3 | 6 | 23 | 5 | 10 | 9 |
| Future Vol, veh/h | 17 | 199 | 5 | 9 | 220 | 18 | 3 | 6 | 23 | 5 | 10 | 9 |
| Conflicting Peds, #/hr | 22 | 0 | 34 | 34 | 0 | 22 | 9 | 0 | 8 | 8 | 0 | 9 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 86 | 86 | 86 | 86 | 86 | 86 | 86 | 86 | 86 | 86 | 86 | 86 |
| Heavy Vehicles, % | 0 | 0 | 33 | 0 | 3 | 0 | 0 | 0 | 0 | 20 | 12 | 0 |
| Mvmt Flow | 20 | 231 | 6 | 10 | 256 | 21 | 3 | 7 | 27 | 6 | 12 | 10 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|----------------------|--------|---|---|--------|---|---|--------|-----|-----|--------|-------|-----|
| Conflicting Flow All | 299 | 0 | 0 | 271 | 0 | 0 | 615 | 627 | 276 | 608 | 620 | 298 |
| Stage 1 | - | - | - | - | - | - | 308 | 308 | - | 309 | 309 | - |
| Stage 2 | - | - | - | - | - | - | 307 | 319 | - | 299 | 311 | - |
| Critical Hdwy | 4.1 | - | - | 4.1 | - | - | 7.1 | 6.5 | 6.2 | 7.3 | 6.62 | 6.2 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.3 | 5.62 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.3 | 5.62 | - |
| Follow-up Hdwy | 2.2 | - | - | 2.2 | - | - | 3.5 | 4 | 3.3 | 3.68 | 4.108 | 3.3 |
| Pot Cap-1 Maneuver | 1274 | - | - | 1304 | - | - | 406 | 403 | 768 | 383 | 391 | 746 |
| Stage 1 | - | - | - | - | - | - | 706 | 664 | - | 664 | 642 | - |
| Stage 2 | - | - | - | - | - | - | 707 | 657 | - | 673 | 641 | - |
| Platoon blocked, % | - | - | - | - | - | - | - | - | - | - | - | - |
| Mov Cap-1 Maneuver | 1247 | - | - | 1262 | - | - | 367 | 372 | 737 | 346 | 361 | 724 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 367 | 372 | - | 346 | 361 | - |
| Stage 1 | - | - | - | - | - | - | 671 | 631 | - | 638 | 623 | - |
| Stage 2 | - | - | - | - | - | - | 672 | 637 | - | 625 | 610 | - |

| Approach | EB | | | WB | | | NB | | | SB | | |
|----------------------|-----|--|--|-----|--|--|------|--|--|------|--|--|
| HCM Control Delay, s | 0.6 | | | 0.3 | | | 11.7 | | | 13.7 | | |
| HCM LOS | | | | | | | B | | | B | | |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|-----------------------|-------|-------|-----|-----|-------|-----|-----|-------|
| Capacity (veh/h) | 576 | 1247 | - | - | 1262 | - | - | 440 |
| HCM Lane V/C Ratio | 0.065 | 0.016 | - | - | 0.008 | - | - | 0.063 |
| HCM Control Delay (s) | 11.7 | 7.9 | 0 | - | 7.9 | 0 | - | 13.7 |
| HCM Lane LOS | B | A | A | - | A | A | - | B |
| HCM 95th %tile Q(veh) | 0.2 | 0 | - | - | 0 | - | - | 0.2 |

HCM 6th TWSC
10: North-South Alley & Randolph Street

01/28/2021

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 0.7 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 5 | 219 | 3 | 0 | 234 | 1 | 2 | 2 | 0 | 8 | 2 | 11 |
| Future Vol, veh/h | 5 | 219 | 3 | 0 | 234 | 1 | 2 | 2 | 0 | 8 | 2 | 11 |
| Conflicting Peds, #/hr | 26 | 0 | 26 | 26 | 0 | 26 | 1 | 0 | 0 | 0 | 0 | 1 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 |
| Heavy Vehicles, % | 0 | 2 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 6 | 246 | 3 | 0 | 263 | 1 | 2 | 2 | 0 | 9 | 2 | 12 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|----------------------|--------|---|---|--------|---|---|--------|-----|-----|--------|-----|-----|
| Conflicting Flow All | 290 | 0 | 0 | 275 | 0 | 0 | 558 | 576 | 274 | 551 | 577 | 291 |
| Stage 1 | - | - | - | - | - | - | 286 | 286 | - | 290 | 290 | - |
| Stage 2 | - | - | - | - | - | - | 272 | 290 | - | 261 | 287 | - |
| Critical Hdwy | 4.1 | - | - | 4.1 | - | - | 7.1 | 6.5 | 6.2 | 7.1 | 6.5 | 6.2 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.1 | 5.5 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.1 | 5.5 | - |
| Follow-up Hdwy | 2.2 | - | - | 2.2 | - | - | 3.5 | 4 | 3.3 | 3.5 | 4 | 3.3 |
| Pot Cap-1 Maneuver | 1283 | - | - | 1300 | - | - | 443 | 431 | 770 | 448 | 430 | 753 |
| Stage 1 | - | - | - | - | - | - | 726 | 679 | - | 722 | 676 | - |
| Stage 2 | - | - | - | - | - | - | 738 | 676 | - | 748 | 678 | - |
| Platoon blocked, % | | - | - | | - | - | | | | | | |
| Mov Cap-1 Maneuver | 1251 | - | - | 1268 | - | - | 420 | 407 | 751 | 433 | 406 | 734 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 420 | 407 | - | 433 | 406 | - |
| Stage 1 | - | - | - | - | - | - | 703 | 658 | - | 700 | 659 | - |
| Stage 2 | - | - | - | - | - | - | 722 | 659 | - | 741 | 657 | - |

| Approach | EB | | | WB | | | NB | | | SB | | |
|----------------------|-----|--|--|----|--|--|------|--|--|------|--|--|
| HCM Control Delay, s | 0.2 | | | 0 | | | 13.8 | | | 11.9 | | |
| HCM LOS | | | | | | | B | | | B | | |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|-----------------------|-------|-------|-----|-----|------|-----|-----|-------|
| Capacity (veh/h) | 413 | 1251 | - | - | 1268 | - | - | 547 |
| HCM Lane V/C Ratio | 0.011 | 0.004 | - | - | - | - | - | 0.043 |
| HCM Control Delay (s) | 13.8 | 7.9 | 0 | - | 0 | - | - | 11.9 |
| HCM Lane LOS | B | A | A | - | A | - | - | B |
| HCM 95th %tile Q(veh) | 0 | 0 | - | - | 0 | - | - | 0.1 |

HCM 6th TWSC
 13: North-South Alley & Proposed Garage Access

01/28/2021

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 5.3 | | | | | |
| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
| Lane Configurations | W | | T | | | T |
| Traffic Vol, veh/h | 11 | 15 | 5 | 3 | 6 | 10 |
| Future Vol, veh/h | 11 | 15 | 5 | 3 | 6 | 10 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | - | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 95 | 95 | 95 | 95 | 95 | 95 |
| Heavy Vehicles, % | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 12 | 16 | 5 | 3 | 6 | 11 |













| Major/Minor | Minor1 | Major1 | Major2 | | |
|----------------------|--------|--------|--------|---|------|
| Conflicting Flow All | 30 | 7 | 0 | 0 | 8 |
| Stage 1 | 7 | - | - | - | - |
| Stage 2 | 23 | - | - | - | - |
| Critical Hdwy | 6.4 | 6.2 | - | - | 4.1 |
| Critical Hdwy Stg 1 | 5.4 | - | - | - | - |
| Critical Hdwy Stg 2 | 5.4 | - | - | - | - |
| Follow-up Hdwy | 3.5 | 3.3 | - | - | 2.2 |
| Pot Cap-1 Maneuver | 989 | 1081 | - | - | 1625 |
| Stage 1 | 1021 | - | - | - | - |
| Stage 2 | 1005 | - | - | - | - |
| Platoon blocked, % | | | - | - | - |
| Mov Cap-1 Maneuver | 985 | 1081 | - | - | 1625 |
| Mov Cap-2 Maneuver | 985 | - | - | - | - |
| Stage 1 | 1021 | - | - | - | - |
| Stage 2 | 1001 | - | - | - | - |

| Approach | WB | NB | SB |
|----------------------|-----|----|-----|
| HCM Control Delay, s | 8.6 | 0 | 2.7 |
| HCM LOS | A | | |

| Minor Lane/Major Mvmt | NBT | NBRWBLn1 | SBL | SBT |
|-----------------------|-----|----------|-------|-------|
| Capacity (veh/h) | - | - | 1038 | 1625 |
| HCM Lane V/C Ratio | - | - | 0.026 | 0.004 |
| HCM Control Delay (s) | - | - | 8.6 | 7.2 |
| HCM Lane LOS | - | - | A | A |
| HCM 95th %tile Q(veh) | - | - | 0.1 | 0 |

Lanes, Volumes, Timings
1: Harlem Avenue & South Boulevard

01/28/2021

| |  |  |  |  |  |  |
|-------------------------|---|---|--|---|---|--|
| Lane Group | WBL | WBR | NBT | NBR | SBL | SBT |
| Lane Configurations |  |  |   | | |   |
| Traffic Volume (vph) | 210 | 154 | 1363 | 48 | 0 | 1498 |
| Future Volume (vph) | 210 | 154 | 1363 | 48 | 0 | 1498 |
| Ideal Flow (vphp) | 1900 | 1900 | 1900 | 1900 | 1900 | 2000 |
| Storage Length (ft) | 110 | 0 | | 0 | 0 | |
| Storage Lanes | 1 | 1 | | 0 | 0 | |
| Taper Length (ft) | 145 | | | | 25 | |
| Lane Util. Factor | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 |
| Ped Bike Factor | 0.92 | 0.98 | 1.00 | | | |
| Frt | | 0.850 | 0.995 | | | |
| Flt Protected | 0.950 | | | | | |
| Satd. Flow (prot) | 1787 | 1318 | 3482 | 0 | 0 | 3623 |
| Flt Permitted | 0.950 | | | | | |
| Satd. Flow (perm) | 1648 | 1290 | 3482 | 0 | 0 | 3623 |
| Right Turn on Red | | No | | No | | |
| Satd. Flow (RTOR) | | | | | | |
| Link Speed (mph) | 30 | | 30 | | | 30 |
| Link Distance (ft) | 465 | | 176 | | | 249 |
| Travel Time (s) | 10.6 | | 4.0 | | | 5.7 |
| Confl. Peds. (#/hr) | 52 | 6 | | 21 | 21 | |
| Peak Hour Factor | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 |
| Heavy Vehicles (%) | 1% | 6% | 3% | 0% | 0% | 3% |
| Bus Blockages (#/hr) | 0 | 0 | 0 | 0 | 0 | 9 |
| Parking (#/hr) | | 7 | | | | |
| Shared Lane Traffic (%) | | | | | | |
| Lane Group Flow (vph) | 216 | 159 | 1454 | 0 | 0 | 1544 |
| Turn Type | Prot | Perm | NA | | | NA |
| Protected Phases | 8 | | 2 | | | 6 |
| Permitted Phases | | 8 | | | | |
| Detector Phase | 8 | 8 | 2 | | | 6 |
| Switch Phase | | | | | | |
| Minimum Initial (s) | 8.0 | 8.0 | 15.0 | | | 15.0 |
| Minimum Split (s) | 31.0 | 31.0 | 28.0 | | | 29.0 |
| Total Split (s) | 38.0 | 38.0 | 87.0 | | | 87.0 |
| Total Split (%) | 30.4% | 30.4% | 69.6% | | | 69.6% |
| Yellow Time (s) | 4.0 | 4.0 | 4.0 | | | 4.0 |
| All-Red Time (s) | 2.0 | 2.0 | 2.0 | | | 2.0 |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | | | 0.0 |
| Total Lost Time (s) | 6.0 | 6.0 | 6.0 | | | 6.0 |
| Lead/Lag | | | | | | |
| Lead-Lag Optimize? | | | | | | |
| Recall Mode | None | None | C-Min | | | C-Min |
| Act Effct Green (s) | 22.0 | 22.0 | 91.0 | | | 91.0 |
| Actuated g/C Ratio | 0.18 | 0.18 | 0.73 | | | 0.73 |
| v/c Ratio | 0.69 | 0.70 | 0.57 | | | 0.59 |
| Control Delay | 59.1 | 64.2 | 9.7 | | | 9.9 |
| Queue Delay | 0.0 | 0.0 | 0.0 | | | 0.0 |
| Total Delay | 59.1 | 64.2 | 9.7 | | | 9.9 |
| LOS | E | E | A | | | A |

Lanes, Volumes, Timings
 1: Harlem Avenue & South Boulevard

01/28/2021



| Lane Group | WBL | WBR | NBT | NBR | SBL | SBT |
|-------------------------|------|------|------|-----|-----|------|
| Approach Delay | 61.3 | | 9.7 | | | 9.9 |
| Approach LOS | E | | A | | | A |
| Queue Length 50th (ft) | 166 | 123 | 467 | | | 271 |
| Queue Length 95th (ft) | 232 | 184 | 631 | | | 427 |
| Internal Link Dist (ft) | 385 | | 96 | | | 169 |
| Turn Bay Length (ft) | 110 | | | | | |
| Base Capacity (vph) | 457 | 330 | 2536 | | | 2638 |
| Starvation Cap Reductn | 0 | 0 | 0 | | | 0 |
| Spillback Cap Reductn | 0 | 0 | 0 | | | 0 |
| Storage Cap Reductn | 0 | 0 | 0 | | | 0 |
| Reduced v/c Ratio | 0.47 | 0.48 | 0.57 | | | 0.59 |

Intersection Summary

| | |
|-----------------------------------|--|
| Area Type: | Other |
| Cycle Length: | 125 |
| Actuated Cycle Length: | 125 |
| Offset: | 104 (83%), Referenced to phase 2:NBT and 6:SBT, Start of Green |
| Natural Cycle: | 65 |
| Control Type: | Actuated-Coordinated |
| Maximum v/c Ratio: | 0.70 |
| Intersection Signal Delay: | 15.5 |
| Intersection LOS: | B |
| Intersection Capacity Utilization | 62.6% |
| ICU Level of Service | B |
| Analysis Period (min) | 15 |

Splits and Phases: 1: Harlem Avenue & South Boulevard



Lanes, Volumes, Timings
2: Harlem Avenue & Randolph Street

01/28/2021



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 173 | 268 | 122 | 88 | 185 | 39 | 126 | 1216 | 69 | 86 | 1285 | 84 |
| Future Volume (vph) | 173 | 268 | 122 | 88 | 185 | 39 | 126 | 1216 | 69 | 86 | 1285 | 84 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 2000 | 1900 | 1900 | 2000 | 1900 |
| Storage Length (ft) | 40 | | 0 | 50 | | 0 | 165 | | 0 | 85 | | 0 |
| Storage Lanes | 1 | | 0 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 90 | | | 75 | | | 120 | | | 90 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 |
| Ped Bike Factor | 0.98 | 0.99 | | 1.00 | 0.99 | | | 1.00 | | | 0.99 | |
| Frt | | 0.953 | | | 0.974 | | | 0.992 | | | 0.991 | |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1805 | 1798 | 0 | 1805 | 1826 | 0 | 1703 | 3658 | 0 | 1805 | 3575 | 0 |
| Flt Permitted | 0.365 | | | 0.166 | | | 0.068 | | | 0.098 | | |
| Satd. Flow (perm) | 681 | 1798 | 0 | 315 | 1826 | 0 | 122 | 3658 | 0 | 186 | 3575 | 0 |
| Right Turn on Red | | | No | | | No | | | No | | | No |
| Satd. Flow (RTOR) | | | | | | | | | | | | |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 454 | | | 257 | | | 242 | | | 813 | |
| Travel Time (s) | | 10.3 | | | 5.8 | | | 5.5 | | | 18.5 | |
| Confl. Peds. (#/hr) | 20 | | 6 | 6 | | 20 | 35 | | 7 | 7 | | 35 |
| Confl. Bikes (#/hr) | | | 1 | | | 2 | | | | | | |
| Peak Hour Factor | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 | 0.96 |
| Heavy Vehicles (%) | 0% | 0% | 0% | 0% | 0% | 3% | 6% | 3% | 0% | 0% | 3% | 0% |
| Bus Blockages (#/hr) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 0 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 180 | 406 | 0 | 92 | 234 | 0 | 131 | 1339 | 0 | 90 | 1427 | 0 |
| Turn Type | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | | 8 | | | 2 | | | 6 | | |
| Detector Phase | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 3.0 | 8.0 | | 3.0 | 8.0 | | 3.0 | 15.0 | | 3.0 | 15.0 | |
| Minimum Split (s) | 9.5 | 30.0 | | 9.5 | 30.0 | | 9.5 | 29.0 | | 10.5 | 33.0 | |
| Total Split (s) | 14.0 | 30.0 | | 14.0 | 30.0 | | 14.0 | 67.0 | | 14.0 | 67.0 | |
| Total Split (%) | 11.2% | 24.0% | | 11.2% | 24.0% | | 11.2% | 53.6% | | 11.2% | 53.6% | |
| Yellow Time (s) | 3.5 | 4.0 | | 3.5 | 4.0 | | 3.5 | 4.0 | | 3.5 | 4.0 | |
| All-Red Time (s) | 0.0 | 2.0 | | 0.0 | 2.0 | | 0.0 | 2.0 | | 0.0 | 2.0 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | 3.5 | 6.0 | | 3.5 | 6.0 | | 3.5 | 6.0 | | 3.5 | 6.0 | |
| Lead/Lag | Lead | Lag | | Lead | Lag | | Lead | Lag | | Lead | Lag | |
| Lead-Lag Optimize? | Yes | Yes | | Yes | Yes | | Yes | Yes | | Yes | Yes | |
| Recall Mode | None | None | | None | None | | None | C-Min | | None | C-Min | |
| Act Effect Green (s) | 38.1 | 25.2 | | 35.9 | 24.1 | | 75.4 | 63.5 | | 72.6 | 62.1 | |
| Actuated g/C Ratio | 0.30 | 0.20 | | 0.29 | 0.19 | | 0.60 | 0.51 | | 0.58 | 0.50 | |
| v/c Ratio | 0.60 | 1.12 | | 0.46 | 0.66 | | 0.68 | 0.72 | | 0.43 | 0.80 | |
| Control Delay | 41.7 | 129.3 | | 38.0 | 57.0 | | 38.8 | 26.9 | | 18.6 | 39.3 | |
| Queue Delay | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | 41.7 | 129.3 | | 38.0 | 57.0 | | 38.8 | 26.9 | | 18.6 | 39.3 | |
| LOS | D | F | | D | E | | D | C | | B | D | |

Lanes, Volumes, Timings

2: Harlem Avenue & Randolph Street

01/28/2021

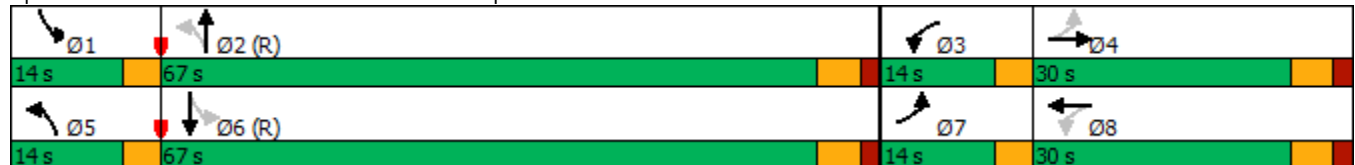


| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|------|-------|-----|------|------|-----|------|------|-----|------|-----|------|
| Approach Delay | | 102.4 | | | 51.6 | | | 28.0 | | | | 38.1 |
| Approach LOS | | F | | | D | | | C | | | | D |
| Queue Length 50th (ft) | 109 | -386 | | 53 | 177 | | 46 | 427 | | 40 | | 568 |
| Queue Length 95th (ft) | 172 | #594 | | 95 | 268 | | #122 | 534 | | m65 | | 660 |
| Internal Link Dist (ft) | | 374 | | | 177 | | | 162 | | | | 733 |
| Turn Bay Length (ft) | 40 | | | 50 | | | 165 | | | 85 | | |
| Base Capacity (vph) | 302 | 363 | | 218 | 352 | | 207 | 1857 | | 248 | | 1775 |
| Starvation Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | | 0 |
| Spillback Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | | 0 |
| Storage Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | | 0 |
| Reduced v/c Ratio | 0.60 | 1.12 | | 0.42 | 0.66 | | 0.63 | 0.72 | | 0.36 | | 0.80 |

Intersection Summary

| | |
|------------------------------------|---|
| Area Type: | Other |
| Cycle Length: | 125 |
| Actuated Cycle Length: | 125 |
| Offset: | 56 (45%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green |
| Natural Cycle: | 85 |
| Control Type: | Actuated-Coordinated |
| Maximum v/c Ratio: | 1.12 |
| Intersection Signal Delay: | 45.1 |
| Intersection LOS: | D |
| Intersection Capacity Utilization: | 86.7% |
| ICU Level of Service: | E |
| Analysis Period (min): | 15 |
| ~ | Volume exceeds capacity, queue is theoretically infinite. Queue shown is maximum after two cycles. |
| # | 95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles. |
| m | Volume for 95th percentile queue is metered by upstream signal. |

Splits and Phases: 2: Harlem Avenue & Randolph Street



HCM 6th AWSC
 11: Maple Avenue & Pleasant Street

01/28/2021

| Intersection | |
|---------------------------|-----|
| Intersection Delay, s/veh | 7.7 |
| Intersection LOS | A |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 5 | 94 | 6 | 31 | 35 | 9 | 12 | 5 | 26 | 3 | 4 | 8 |
| Future Vol, veh/h | 5 | 94 | 6 | 31 | 35 | 9 | 12 | 5 | 26 | 3 | 4 | 8 |
| Peak Hour Factor | 0.77 | 0.77 | 0.77 | 0.77 | 0.77 | 0.77 | 0.77 | 0.77 | 0.77 | 0.77 | 0.77 | 0.77 |
| Heavy Vehicles, % | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 0 | 0 | 12 |
| Mvmt Flow | 6 | 122 | 8 | 40 | 45 | 12 | 16 | 6 | 34 | 4 | 5 | 10 |
| Number of Lanes | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |

| Approach | EB | WB | NB | SB |
|----------------------------|-----|-----|-----|-----|
| Opposing Approach | WB | EB | SB | NB |
| Opposing Lanes | 1 | 1 | 1 | 1 |
| Conflicting Approach Left | SB | NB | EB | WB |
| Conflicting Lanes Left | 1 | 1 | 1 | 1 |
| Conflicting Approach Right | NB | SB | WB | EB |
| Conflicting Lanes Right | 1 | 1 | 1 | 1 |
| HCM Control Delay | 7.9 | 7.7 | 7.4 | 7.3 |
| HCM LOS | A | A | A | A |

| Lane | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|------------------------|-------|-------|-------|-------|
| Vol Left, % | 28% | 5% | 41% | 20% |
| Vol Thru, % | 12% | 90% | 47% | 27% |
| Vol Right, % | 60% | 6% | 12% | 53% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 43 | 105 | 75 | 15 |
| LT Vol | 12 | 5 | 31 | 3 |
| Through Vol | 5 | 94 | 35 | 4 |
| RT Vol | 26 | 6 | 9 | 8 |
| Lane Flow Rate | 56 | 136 | 97 | 19 |
| Geometry Grp | 1 | 1 | 1 | 1 |
| Degree of Util (X) | 0.064 | 0.155 | 0.112 | 0.023 |
| Departure Headway (Hd) | 4.124 | 4.081 | 4.146 | 4.19 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 873 | 871 | 855 | 859 |
| Service Time | 2.125 | 2.142 | 2.215 | 2.192 |
| HCM Lane V/C Ratio | 0.064 | 0.156 | 0.113 | 0.022 |
| HCM Control Delay | 7.4 | 7.9 | 7.7 | 7.3 |
| HCM Lane LOS | A | A | A | A |
| HCM 95th-tile Q | 0.2 | 0.5 | 0.4 | 0.1 |

HCM 6th AWSC
12: Randolph Street & Marion Street

01/28/2021

| Intersection | |
|---------------------------|------|
| Intersection Delay, s/veh | 20.5 |
| Intersection LOS | C |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 83 | 305 | 48 | 10 | 232 | 18 | 27 | 87 | 8 | 37 | 156 | 66 |
| Future Vol, veh/h | 83 | 305 | 48 | 10 | 232 | 18 | 27 | 87 | 8 | 37 | 156 | 66 |
| Peak Hour Factor | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 | 0.90 |
| Heavy Vehicles, % | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| Mvmt Flow | 92 | 339 | 53 | 11 | 258 | 20 | 30 | 97 | 9 | 41 | 173 | 73 |
| Number of Lanes | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |

| Approach | EB | WB | NB | SB |
|----------------------------|------|------|------|------|
| Opposing Approach | WB | EB | SB | NB |
| Opposing Lanes | 1 | 1 | 1 | 1 |
| Conflicting Approach Left | SB | NB | EB | WB |
| Conflicting Lanes Left | 1 | 1 | 1 | 1 |
| Conflicting Approach Right | NB | SB | WB | EB |
| Conflicting Lanes Right | 1 | 1 | 1 | 1 |
| HCM Control Delay | 28.1 | 15.6 | 12.6 | 16.2 |
| HCM LOS | D | C | B | C |

| Lane | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|------------------------|-------|-------|-------|-------|
| Vol Left, % | 22% | 19% | 4% | 14% |
| Vol Thru, % | 71% | 70% | 89% | 60% |
| Vol Right, % | 7% | 11% | 7% | 25% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 122 | 436 | 260 | 259 |
| LT Vol | 27 | 83 | 10 | 37 |
| Through Vol | 87 | 305 | 232 | 156 |
| RT Vol | 8 | 48 | 18 | 66 |
| Lane Flow Rate | 136 | 484 | 289 | 288 |
| Geometry Grp | 1 | 1 | 1 | 1 |
| Degree of Util (X) | 0.264 | 0.795 | 0.503 | 0.516 |
| Departure Headway (Hd) | 7.016 | 5.908 | 6.272 | 6.45 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 510 | 610 | 572 | 558 |
| Service Time | 5.093 | 3.962 | 4.337 | 4.511 |
| HCM Lane V/C Ratio | 0.267 | 0.793 | 0.505 | 0.516 |
| HCM Control Delay | 12.6 | 28.1 | 15.6 | 16.2 |
| HCM Lane LOS | B | D | C | C |
| HCM 95th-tile Q | 1.1 | 7.8 | 2.8 | 2.9 |

HCM 6th TWSC
 3: Harlem Avenue & Circle Avenue

01/28/2021

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 0.2 | | | | | |
| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
| Lane Configurations | | ↗ | | ↑↑ | ↑↑ | |
| Traffic Vol, veh/h | 0 | 30 | 0 | 1411 | 1449 | 259 |
| Future Vol, veh/h | 0 | 30 | 0 | 1411 | 1449 | 259 |
| Conflicting Peds, #/hr | 6 | 52 | 52 | 0 | 0 | 52 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | 0 | - | - | - | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 97 | 97 | 97 | 97 | 97 | 97 |
| Heavy Vehicles, % | 0 | 0 | 0 | 3 | 3 | 1 |
| Mvmt Flow | 0 | 31 | 0 | 1455 | 1494 | 267 |

| Major/Minor | Minor2 | Major1 | Major2 |
|----------------------|--------|--------|--------|
| Conflicting Flow All | - | 985 | 0 |
| Stage 1 | - | - | - |
| Stage 2 | - | - | - |
| Critical Hdwy | - | 6.9 | - |
| Critical Hdwy Stg 1 | - | - | - |
| Critical Hdwy Stg 2 | - | - | - |
| Follow-up Hdwy | - | 3.3 | - |
| Pot Cap-1 Maneuver | 0 | 251 | 0 |
| Stage 1 | 0 | - | 0 |
| Stage 2 | 0 | - | 0 |
| Platoon blocked, % | | | - |
| Mov Cap-1 Maneuver | - | 227 | - |
| Mov Cap-2 Maneuver | - | - | - |
| Stage 1 | - | - | - |
| Stage 2 | - | - | - |

| Approach | EB | NB | SB |
|----------------------|------|----|----|
| HCM Control Delay, s | 23.3 | 0 | 0 |
| HCM LOS | C | | |

| Minor Lane/Major Mvmt | NBT EBLn1 | SBT | SBR |
|-----------------------|-----------|-------|-----|
| Capacity (veh/h) | - | 227 | - |
| HCM Lane V/C Ratio | - | 0.136 | - |
| HCM Control Delay (s) | - | 23.3 | - |
| HCM Lane LOS | - | C | - |
| HCM 95th %tile Q(veh) | - | 0.5 | - |

HCM 6th TWSC
4: North-South Alley & South Boulevard

01/28/2021

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 0.5 | | | | | |
| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 48 | 1 | 17 | 358 | 4 | 4 |
| Future Vol, veh/h | 48 | 1 | 17 | 358 | 4 | 4 |
| Conflicting Peds, #/hr | 0 | 56 | 56 | 0 | 19 | 6 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 87 | 87 | 87 | 87 | 87 | 87 |
| Heavy Vehicles, % | 0 | 0 | 0 | 3 | 0 | 0 |
| Mvmt Flow | 55 | 1 | 20 | 411 | 5 | 5 |

| Major/Minor | Major1 | Major2 | Minor1 | | |
|----------------------|--------|--------|--------|---|---------|
| Conflicting Flow All | 0 | 0 | 112 | 0 | 582 118 |
| Stage 1 | - | - | - | - | 112 - |
| Stage 2 | - | - | - | - | 470 - |
| Critical Hdwy | - | - | 4.1 | - | 6.4 6.2 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.4 - |
| Critical Hdwy Stg 2 | - | - | - | - | 5.4 - |
| Follow-up Hdwy | - | - | 2.2 | - | 3.5 3.3 |
| Pot Cap-1 Maneuver | - | - | 1490 | - | 479 939 |
| Stage 1 | - | - | - | - | 918 - |
| Stage 2 | - | - | - | - | 633 - |
| Platoon blocked, % | - | - | - | - | - |
| Mov Cap-1 Maneuver | - | - | 1411 | - | 437 884 |
| Mov Cap-2 Maneuver | - | - | - | - | 437 - |
| Stage 1 | - | - | - | - | 869 - |
| Stage 2 | - | - | - | - | 610 - |

| Approach | EB | WB | NB |
|----------------------|----|-----|------|
| HCM Control Delay, s | 0 | 0.3 | 11.3 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBL | WBT |
|-----------------------|-------|-----|-----|-------|-----|
| Capacity (veh/h) | 585 | - | - | 1411 | - |
| HCM Lane V/C Ratio | 0.016 | - | - | 0.014 | - |
| HCM Control Delay (s) | 11.3 | - | - | 7.6 | 0 |
| HCM Lane LOS | B | - | - | A | A |
| HCM 95th %tile Q(veh) | 0 | - | - | 0 | - |

HCM 6th TWSC
6: Harlem Avenue & Frankin Street/Pleasant Street

01/28/2021

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 12.7 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | | ↗ | | ↕ | | | ↔ | | | ↔ | |
| Traffic Vol, veh/h | 0 | 0 | 51 | 4 | 1 | 50 | 18 | 1361 | 49 | 56 | 1400 | 23 |
| Future Vol, veh/h | 0 | 0 | 51 | 4 | 1 | 50 | 18 | 1361 | 49 | 56 | 1400 | 23 |
| Conflicting Peds, #/hr | 2 | 0 | 1 | 1 | 0 | 2 | 24 | 0 | 22 | 22 | 0 | 24 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | 0 | - | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 96 | 96 | 96 | 96 | 96 | 96 | 96 | 96 | 96 | 96 | 96 | 96 |
| Heavy Vehicles, % | 0 | 0 | 0 | 0 | 0 | 3 | 6 | 3 | 0 | 0 | 3 | 0 |
| Mvmt Flow | 0 | 0 | 53 | 4 | 1 | 52 | 19 | 1418 | 51 | 58 | 1458 | 24 |

| Major/Minor | Minor2 | Minor1 | Major1 | Major2 |
|----------------------|--------|--------|--------|--------|
| Conflicting Flow All | - | - | 766 | 2350 |
| Stage 1 | - | - | 1504 | 1504 |
| Stage 2 | - | - | 846 | 1622 |
| Critical Hdwy | - | - | 6.9 | 7.5 |
| Critical Hdwy Stg 1 | - | - | 6.5 | 5.5 |
| Critical Hdwy Stg 2 | - | - | 6.5 | 5.5 |
| Follow-up Hdwy | - | - | 3.3 | 3.5 |
| Pot Cap-1 Maneuver | 0 | 0 | 350 | 20 |
| Stage 1 | 0 | 0 | 130 | 186 |
| Stage 2 | 0 | 0 | 328 | 163 |
| Platoon blocked, % | - | - | - | - |
| Mov Cap-1 Maneuver | - | - | 342 | 5 |
| Mov Cap-2 Maneuver | - | - | - | 5 |
| Stage 1 | - | - | - | 94 |
| Stage 2 | - | - | - | 70 |

| Approach | EB | WB | NB | SB |
|----------------------|------|--------|-----|-----|
| HCM Control Delay, s | 17.5 | \$ 492 | 1.9 | 5.2 |
| HCM LOS | C | F | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1WBLn1 | SBL | SBT | SBR |
|-----------------------|-------|-----|-----|------------|--------|-------|-----|
| Capacity (veh/h) | 411 | - | - | 342 | 38 | 446 | - |
| HCM Lane V/C Ratio | 0.046 | - | - | 0.155 | 1.508 | 0.131 | - |
| HCM Control Delay (s) | 14.2 | 1.8 | - | 17.5 | \$ 492 | 14.3 | 4.9 |
| HCM Lane LOS | B | A | - | C | F | B | A |
| HCM 95th %tile Q(veh) | 0.1 | - | - | 0.5 | 6 | 0.4 | - |

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

HCM 6th TWSC
7: North-South Alley & Pleasant Street

01/28/2021

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 2.3 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 4 | 107 | 12 | 17 | 61 | 1 | 7 | 3 | 12 | 5 | 6 | 7 |
| Future Vol, veh/h | 4 | 107 | 12 | 17 | 61 | 1 | 7 | 3 | 12 | 5 | 6 | 7 |
| Conflicting Peds, #/hr | 3 | 0 | 23 | 23 | 0 | 3 | 8 | 0 | 0 | 0 | 0 | 8 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 81 | 81 | 81 | 81 | 81 | 81 | 81 | 81 | 81 | 81 | 81 | 81 |
| Heavy Vehicles, % | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 5 | 132 | 15 | 21 | 75 | 1 | 9 | 4 | 15 | 6 | 7 | 9 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|----------------------|--------|---|---|--------|---|---|--------|-----|-----|--------|-----|-----|
| Conflicting Flow All | 79 | 0 | 0 | 170 | 0 | 0 | 307 | 294 | 163 | 280 | 301 | 87 |
| Stage 1 | - | - | - | - | - | - | 173 | 173 | - | 121 | 121 | - |
| Stage 2 | - | - | - | - | - | - | 134 | 121 | - | 159 | 180 | - |
| Critical Hdwy | 4.1 | - | - | 4.1 | - | - | 7.1 | 6.5 | 6.2 | 7.1 | 6.5 | 6.2 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.1 | 5.5 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.1 | 5.5 | - |
| Follow-up Hdwy | 2.2 | - | - | 2.2 | - | - | 3.5 | 4 | 3.3 | 3.5 | 4 | 3.3 |
| Pot Cap-1 Maneuver | 1532 | - | - | 1420 | - | - | 649 | 620 | 887 | 676 | 615 | 977 |
| Stage 1 | - | - | - | - | - | - | 834 | 760 | - | 888 | 800 | - |
| Stage 2 | - | - | - | - | - | - | 874 | 800 | - | 848 | 754 | - |
| Platoon blocked, % | - | - | - | - | - | - | - | - | - | - | - | - |
| Mov Cap-1 Maneuver | 1528 | - | - | 1389 | - | - | 609 | 593 | 868 | 650 | 588 | 967 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 609 | 593 | - | 650 | 588 | - |
| Stage 1 | - | - | - | - | - | - | 812 | 740 | - | 882 | 785 | - |
| Stage 2 | - | - | - | - | - | - | 838 | 785 | - | 826 | 734 | - |

| Approach | EB | | | WB | | | NB | | | SB | | |
|----------------------|-----|--|--|-----|--|--|------|--|--|------|--|--|
| HCM Control Delay, s | 0.2 | | | 1.6 | | | 10.2 | | | 10.2 | | |
| HCM LOS | | | | | | | B | | | B | | |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|-----------------------|-------|-------|-----|-----|-------|-----|-----|-------|
| Capacity (veh/h) | 724 | 1528 | - | - | 1389 | - | - | 716 |
| HCM Lane V/C Ratio | 0.038 | 0.003 | - | - | 0.015 | - | - | 0.031 |
| HCM Control Delay (s) | 10.2 | 7.4 | 0 | - | 7.6 | 0 | - | 10.2 |
| HCM Lane LOS | B | A | A | - | A | A | - | B |
| HCM 95th %tile Q(veh) | 0.1 | 0 | - | - | 0 | - | - | 0.1 |

HCM 6th TWSC
8: Marion Street & Pleasant Street

01/28/2021

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 8.9 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 73 | 12 | 39 | 11 | 34 | 25 | 19 | 159 | 10 | 17 | 209 | 26 |
| Future Vol, veh/h | 73 | 12 | 39 | 11 | 34 | 25 | 19 | 159 | 10 | 17 | 209 | 26 |
| Conflicting Peds, #/hr | 0 | 0 | 52 | 19 | 0 | 0 | 118 | 0 | 99 | 99 | 0 | 118 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 | 80 |
| Heavy Vehicles, % | 0 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 91 | 15 | 49 | 14 | 43 | 31 | 24 | 199 | 13 | 21 | 261 | 33 |

| Major/Minor | Minor2 | | Minor1 | | Major1 | | Major2 | | | | | |
|----------------------|--------|-----|--------|-----|--------|-----|--------|---|---|------|---|---|
| Conflicting Flow All | 729 | 797 | 448 | 757 | 807 | 305 | 412 | 0 | 0 | 311 | 0 | 0 |
| Stage 1 | 438 | 438 | - | 353 | 353 | - | - | - | - | - | - | - |
| Stage 2 | 291 | 359 | - | 404 | 454 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.1 | 6.5 | 6.28 | 7.1 | 6.5 | 6.2 | 4.1 | - | - | 4.1 | - | - |
| Critical Hdwy Stg 1 | 6.1 | 5.5 | - | 6.1 | 5.5 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.1 | 5.5 | - | 6.1 | 5.5 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.5 | 4 | 3.372 | 3.5 | 4 | 3.3 | 2.2 | - | - | 2.2 | - | - |
| Pot Cap-1 Maneuver | 341 | 322 | 598 | 327 | 317 | 740 | 1158 | - | - | 1261 | - | - |
| Stage 1 | 601 | 582 | - | 668 | 634 | - | - | - | - | - | - | - |
| Stage 2 | 721 | 631 | - | 627 | 573 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | - | - | - |
| Mov Cap-1 Maneuver | 241 | 247 | 505 | 234 | 243 | 670 | 1028 | - | - | 1142 | - | - |
| Mov Cap-2 Maneuver | 241 | 247 | - | 234 | 243 | - | - | - | - | - | - | - |
| Stage 1 | 520 | 505 | - | 589 | 559 | - | - | - | - | - | - | - |
| Stage 2 | 619 | 557 | - | 511 | 497 | - | - | - | - | - | - | - |

| Approach | EB | | WB | | NB | | SB | |
|----------------------|----|--|----|--|-----|--|-----|--|
| HCM Control Delay, s | 31 | | 21 | | 0.9 | | 0.6 | |
| HCM LOS | D | | C | | | | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1WBLn1 | SBL | SBT | SBR |
|-----------------------|-------|-----|-----|------------|------|-------|-----|
| Capacity (veh/h) | 1028 | - | - | 289 | 312 | 1142 | - |
| HCM Lane V/C Ratio | 0.023 | - | - | 0.536 | 0.28 | 0.019 | - |
| HCM Control Delay (s) | 8.6 | 0 | - | 31 | 21 | 8.2 | 0 |
| HCM Lane LOS | A | A | - | D | C | A | A |
| HCM 95th %tile Q(veh) | 0.1 | - | - | 3 | 1.1 | 0.1 | - |

HCM 6th TWSC
 9: Randolph Street & Maple Avenue

01/28/2021

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 2.6 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 13 | 400 | 10 | 25 | 283 | 25 | 11 | 5 | 30 | 14 | 9 | 18 |
| Future Vol, veh/h | 13 | 400 | 10 | 25 | 283 | 25 | 11 | 5 | 30 | 14 | 9 | 18 |
| Conflicting Peds, #/hr | 22 | 0 | 49 | 49 | 0 | 22 | 17 | 0 | 7 | 7 | 0 | 17 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 79 | 79 | 79 | 79 | 79 | 79 | 79 | 79 | 79 | 79 | 79 | 79 |
| Heavy Vehicles, % | 5 | 0 | 0 | 12 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 10 |
| Mvmt Flow | 16 | 506 | 13 | 32 | 358 | 32 | 14 | 6 | 38 | 18 | 11 | 23 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|----------------------|--------|---|---|--------|---|---|--------|------|-----|--------|-------|------|
| Conflicting Flow All | 412 | 0 | 0 | 568 | 0 | 0 | 1066 | 1070 | 569 | 1034 | 1060 | 413 |
| Stage 1 | - | - | - | - | - | - | 594 | 594 | - | 460 | 460 | - |
| Stage 2 | - | - | - | - | - | - | 472 | 476 | - | 574 | 600 | - |
| Critical Hdwy | 4.15 | - | - | 4.22 | - | - | 7.1 | 6.5 | 6.2 | 7.1 | 6.51 | 6.3 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.1 | 5.51 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.1 | 5.51 | - |
| Follow-up Hdwy | 2.245 | - | - | 2.308 | - | - | 3.5 | 4 | 3.3 | 3.5 | 4.009 | 3.39 |
| Pot Cap-1 Maneuver | 1131 | - | - | 956 | - | - | 202 | 223 | 525 | 212 | 225 | 622 |
| Stage 1 | - | - | - | - | - | - | 495 | 496 | - | 585 | 568 | - |
| Stage 2 | - | - | - | - | - | - | 576 | 560 | - | 507 | 491 | - |
| Platoon blocked, % | - | - | - | - | - | - | - | - | - | - | - | - |
| Mov Cap-1 Maneuver | 1107 | - | - | 911 | - | - | 166 | 195 | 497 | 177 | 196 | 599 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 166 | 195 | - | 177 | 196 | - |
| Stage 1 | - | - | - | - | - | - | 462 | 463 | - | 561 | 531 | - |
| Stage 2 | - | - | - | - | - | - | 509 | 524 | - | 450 | 459 | - |

| Approach | EB | | | WB | | | NB | | | SB | | |
|----------------------|-----|--|--|-----|--|--|------|--|--|------|--|--|
| HCM Control Delay, s | 0.3 | | | 0.7 | | | 19.7 | | | 21.9 | | |
| HCM LOS | | | | | | | C | | | C | | |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|-----------------------|-------|-------|-----|-----|-------|-----|-----|-------|
| Capacity (veh/h) | 302 | 1107 | - | - | 911 | - | - | 264 |
| HCM Lane V/C Ratio | 0.193 | 0.015 | - | - | 0.035 | - | - | 0.197 |
| HCM Control Delay (s) | 19.7 | 8.3 | 0 | - | 9.1 | 0 | - | 21.9 |
| HCM Lane LOS | C | A | A | - | A | A | - | C |
| HCM 95th %tile Q(veh) | 0.7 | 0 | - | - | 0.1 | - | - | 0.7 |

HCM 6th TWSC
10: North-South Alley & Randolph Street

01/28/2021

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 0.8 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 9 | 426 | 9 | 6 | 312 | 7 | 6 | 2 | 3 | 7 | 0 | 15 |
| Future Vol, veh/h | 9 | 426 | 9 | 6 | 312 | 7 | 6 | 2 | 3 | 7 | 0 | 15 |
| Conflicting Peds, #/hr | 8 | 0 | 10 | 10 | 0 | 8 | 1 | 0 | 5 | 5 | 0 | 1 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 | 90 |
| Heavy Vehicles, % | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 10 | 473 | 10 | 7 | 347 | 8 | 7 | 2 | 3 | 8 | 0 | 17 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|----------------------|--------|---|---|--------|---|---|--------|-----|-----|--------|-----|-----|
| Conflicting Flow All | 363 | 0 | 0 | 493 | 0 | 0 | 883 | 885 | 493 | 879 | 886 | 360 |
| Stage 1 | - | - | - | - | - | - | 508 | 508 | - | 373 | 373 | - |
| Stage 2 | - | - | - | - | - | - | 375 | 377 | - | 506 | 513 | - |
| Critical Hdwy | 4.1 | - | - | 4.1 | - | - | 7.1 | 6.5 | 6.2 | 7.1 | 6.5 | 6.2 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.1 | 5.5 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.1 | 5.5 | - |
| Follow-up Hdwy | 2.2 | - | - | 2.2 | - | - | 3.5 | 4 | 3.3 | 3.5 | 4 | 3.3 |
| Pot Cap-1 Maneuver | 1207 | - | - | 1081 | - | - | 269 | 286 | 580 | 270 | 286 | 689 |
| Stage 1 | - | - | - | - | - | - | 551 | 542 | - | 652 | 622 | - |
| Stage 2 | - | - | - | - | - | - | 650 | 619 | - | 552 | 539 | - |
| Platoon blocked, % | - | - | - | - | - | - | - | - | - | - | - | - |
| Mov Cap-1 Maneuver | 1198 | - | - | 1071 | - | - | 256 | 276 | 572 | 260 | 276 | 683 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 256 | 276 | - | 260 | 276 | - |
| Stage 1 | - | - | - | - | - | - | 540 | 531 | - | 640 | 612 | - |
| Stage 2 | - | - | - | - | - | - | 628 | 609 | - | 538 | 528 | - |

| Approach | EB | | | WB | | | NB | | | SB | | |
|----------------------|-----|--|--|-----|--|--|------|--|--|------|--|--|
| HCM Control Delay, s | 0.2 | | | 0.2 | | | 17.3 | | | 13.5 | | |
| HCM LOS | | | | | | | C | | | B | | |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|-----------------------|-------|-------|-----|-----|-------|-----|-----|-------|
| Capacity (veh/h) | 306 | 1198 | - | - | 1071 | - | - | 450 |
| HCM Lane V/C Ratio | 0.04 | 0.008 | - | - | 0.006 | - | - | 0.054 |
| HCM Control Delay (s) | 17.3 | 8 | 0 | - | 8.4 | 0 | - | 13.5 |
| HCM Lane LOS | C | A | A | - | A | A | - | B |
| HCM 95th %tile Q(veh) | 0.1 | 0 | - | - | 0 | - | - | 0.2 |

HCM 6th TWSC
 19: North-South Alley & Proposed Garage Access

01/28/2021

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 4.2 | | | | | |
| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 7 | 10 | 12 | 6 | 20 | 15 |
| Future Vol, veh/h | 7 | 10 | 12 | 6 | 20 | 15 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | - | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 95 | 95 | 95 | 95 | 95 | 95 |
| Heavy Vehicles, % | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 7 | 11 | 13 | 6 | 21 | 16 |













| Major/Minor | Minor1 | Major1 | Major2 | | | |
|----------------------|--------|--------|--------|---|------|---|
| Conflicting Flow All | 74 | 16 | 0 | 0 | 19 | 0 |
| Stage 1 | 16 | - | - | - | - | - |
| Stage 2 | 58 | - | - | - | - | - |
| Critical Hdwy | 6.4 | 6.2 | - | - | 4.1 | - |
| Critical Hdwy Stg 1 | 5.4 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.4 | - | - | - | - | - |
| Follow-up Hdwy | 3.5 | 3.3 | - | - | 2.2 | - |
| Pot Cap-1 Maneuver | 935 | 1069 | - | - | 1611 | - |
| Stage 1 | 1012 | - | - | - | - | - |
| Stage 2 | 970 | - | - | - | - | - |
| Platoon blocked, % | | | - | - | | - |
| Mov Cap-1 Maneuver | 923 | 1069 | - | - | 1611 | - |
| Mov Cap-2 Maneuver | 923 | - | - | - | - | - |
| Stage 1 | 1012 | - | - | - | - | - |
| Stage 2 | 957 | - | - | - | - | - |

| Approach | WB | NB | SB |
|----------------------|-----|----|-----|
| HCM Control Delay, s | 8.7 | 0 | 4.2 |
| HCM LOS | A | | |

| Minor Lane/Major Mvmt | NBT | NBRWBLn1 | SBL | SBT |
|-----------------------|-----|----------|-------|-------|
| Capacity (veh/h) | - | - | 1004 | 1611 |
| HCM Lane V/C Ratio | - | - | 0.018 | 0.013 |
| HCM Control Delay (s) | - | - | 8.7 | 7.3 |
| HCM Lane LOS | - | - | A | A |
| HCM 95th %tile Q(veh) | - | - | 0.1 | 0 |

Lanes, Volumes, Timings
1: Harlem Avenue & South Boulevard

01/28/2021

| |  |  |  |  |  |  |
|-------------------------|---|---|--|---|---|--|
| Lane Group | WBL | WBR | NBT | NBR | SBL | SBT |
| Lane Configurations |  |  |   | | |   |
| Traffic Volume (vph) | 143 | 153 | 1189 | 52 | 0 | 1285 |
| Future Volume (vph) | 143 | 153 | 1189 | 52 | 0 | 1285 |
| Ideal Flow (vphp) | 1900 | 1900 | 1900 | 1900 | 1900 | 2000 |
| Storage Length (ft) | 110 | 0 | | 0 | 0 | |
| Storage Lanes | 1 | 1 | | 0 | 0 | |
| Taper Length (ft) | 145 | | | | 25 | |
| Lane Util. Factor | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 |
| Ped Bike Factor | 0.88 | 0.98 | 0.99 | | | |
| Frt | | 0.850 | 0.994 | | | |
| Flt Protected | 0.950 | | | | | |
| Satd. Flow (prot) | 1752 | 1356 | 3501 | 0 | 0 | 3695 |
| Flt Permitted | 0.950 | | | | | |
| Satd. Flow (perm) | 1551 | 1327 | 3501 | 0 | 0 | 3695 |
| Right Turn on Red | | No | | No | | |
| Satd. Flow (RTOR) | | | | | | |
| Link Speed (mph) | 30 | | 30 | | | 30 |
| Link Distance (ft) | 465 | | 176 | | | 249 |
| Travel Time (s) | 10.6 | | 4.0 | | | 5.7 |
| Confl. Peds. (#/hr) | 80 | 7 | | 42 | 42 | |
| Peak Hour Factor | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 | 0.97 |
| Heavy Vehicles (%) | 3% | 3% | 2% | 0% | 0% | 1% |
| Bus Blockages (#/hr) | 0 | 0 | 0 | 0 | 0 | 9 |
| Parking (#/hr) | | 7 | | | | |
| Shared Lane Traffic (%) | | | | | | |
| Lane Group Flow (vph) | 147 | 158 | 1280 | 0 | 0 | 1325 |
| Turn Type | Prot | Perm | NA | | | NA |
| Protected Phases | 8 | | 2 | | | 6 |
| Permitted Phases | | 8 | | | | |
| Detector Phase | 8 | 8 | 2 | | | 6 |
| Switch Phase | | | | | | |
| Minimum Initial (s) | 8.0 | 8.0 | 15.0 | | | 15.0 |
| Minimum Split (s) | 31.0 | 31.0 | 28.0 | | | 29.0 |
| Total Split (s) | 36.0 | 36.0 | 84.0 | | | 84.0 |
| Total Split (%) | 30.0% | 30.0% | 70.0% | | | 70.0% |
| Yellow Time (s) | 4.0 | 4.0 | 4.0 | | | 4.0 |
| All-Red Time (s) | 2.0 | 2.0 | 2.0 | | | 2.0 |
| Lost Time Adjust (s) | 0.0 | 0.0 | 0.0 | | | 0.0 |
| Total Lost Time (s) | 6.0 | 6.0 | 6.0 | | | 6.0 |
| Lead/Lag | | | | | | |
| Lead-Lag Optimize? | | | | | | |
| Recall Mode | None | None | C-Min | | | C-Min |
| Act Effct Green (s) | 20.4 | 20.4 | 87.6 | | | 87.6 |
| Actuated g/C Ratio | 0.17 | 0.17 | 0.73 | | | 0.73 |
| v/c Ratio | 0.49 | 0.70 | 0.50 | | | 0.49 |
| Control Delay | 49.7 | 62.7 | 9.2 | | | 8.2 |
| Queue Delay | 0.0 | 0.0 | 0.0 | | | 0.0 |
| Total Delay | 49.7 | 62.7 | 9.2 | | | 8.2 |
| LOS | D | E | A | | | A |

Lanes, Volumes, Timings
 1: Harlem Avenue & South Boulevard

01/28/2021



| Lane Group | WBL | WBR | NBT | NBR | SBL | SBT |
|-------------------------|------|------|------|-----|-----|------|
| Approach Delay | 56.4 | | 9.2 | | | 8.2 |
| Approach LOS | E | | A | | | A |
| Queue Length 50th (ft) | 104 | 117 | 358 | | | 200 |
| Queue Length 95th (ft) | 158 | 179 | 486 | | | 311 |
| Internal Link Dist (ft) | 385 | | 96 | | | 169 |
| Turn Bay Length (ft) | 110 | | | | | |
| Base Capacity (vph) | 438 | 331 | 2555 | | | 2697 |
| Starvation Cap Reductn | 0 | 0 | 0 | | | 0 |
| Spillback Cap Reductn | 0 | 0 | 0 | | | 0 |
| Storage Cap Reductn | 0 | 0 | 0 | | | 0 |
| Reduced v/c Ratio | 0.34 | 0.48 | 0.50 | | | 0.49 |

Intersection Summary

| | |
|-----------------------------------|--|
| Area Type: | Other |
| Cycle Length: | 120 |
| Actuated Cycle Length: | 120 |
| Offset: | 101 (84%), Referenced to phase 2:NBT and 6:SBT, Start of Green |
| Natural Cycle: | 60 |
| Control Type: | Actuated-Coordinated |
| Maximum v/c Ratio: | 0.70 |
| Intersection Signal Delay: | 13.7 |
| Intersection LOS: | B |
| Intersection Capacity Utilization | 57.1% |
| ICU Level of Service | B |
| Analysis Period (min) | 15 |

Splits and Phases: 1: Harlem Avenue & South Boulevard



Lanes, Volumes, Timings

2: Harlem Avenue & Randolph Street

01/28/2021



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|-------|-------|------|-------|-------|------|-------|-------|------|-------|-------|-------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 155 | 160 | 74 | 78 | 140 | 34 | 86 | 1104 | 46 | 68 | 1090 | 89 |
| Future Volume (vph) | 155 | 160 | 74 | 78 | 140 | 34 | 86 | 1104 | 46 | 68 | 1090 | 89 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 2000 | 1900 | 1900 | 2000 | 1900 |
| Storage Length (ft) | 40 | | 0 | 50 | | 0 | 165 | | 0 | 85 | | 0 |
| Storage Lanes | 1 | | 0 | 1 | | 0 | 1 | | 0 | 1 | | 0 |
| Taper Length (ft) | 90 | | | 75 | | | 120 | | | 90 | | |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.95 | 0.95 | 1.00 | 0.95 | 0.95 |
| Ped Bike Factor | 0.99 | 0.99 | | 0.99 | 0.99 | | | 1.00 | | | 1.00 | |
| Frt | | 0.952 | | | 0.970 | | | 0.994 | | | | 0.989 |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1787 | 1771 | 0 | 1805 | 1831 | 0 | 1805 | 3701 | 0 | 1805 | 3645 | 0 |
| Flt Permitted | 0.436 | | | 0.399 | | | 0.127 | | | 0.148 | | |
| Satd. Flow (perm) | 808 | 1771 | 0 | 752 | 1831 | 0 | 241 | 3701 | 0 | 281 | 3645 | 0 |
| Right Turn on Red | | | No | | | No | | | No | | | No |
| Satd. Flow (RTOR) | | | | | | | | | | | | |
| Link Speed (mph) | | 30 | | | 30 | | | 30 | | | 30 | |
| Link Distance (ft) | | 454 | | | 257 | | | 242 | | | 813 | |
| Travel Time (s) | | 10.3 | | | 5.8 | | | 5.5 | | | 18.5 | |
| Confl. Peds. (#/hr) | 14 | | 10 | 10 | | 14 | 10 | | 6 | 6 | | 10 |
| Confl. Bikes (#/hr) | | | | | | 1 | | | | | | |
| Peak Hour Factor | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 | 0.95 |
| Heavy Vehicles (%) | 1% | 0% | 4% | 0% | 0% | 0% | 0% | 2% | 0% | 0% | 1% | 0% |
| Bus Blockages (#/hr) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 0 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 163 | 246 | 0 | 82 | 183 | 0 | 91 | 1210 | 0 | 72 | 1241 | 0 |
| Turn Type | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | | pm+pt | NA | |
| Protected Phases | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Permitted Phases | 4 | | | 8 | | | 2 | | | 6 | | |
| Detector Phase | 7 | 4 | | 3 | 8 | | 5 | 2 | | 1 | 6 | |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 3.0 | 8.0 | | 3.0 | 8.0 | | 3.0 | 15.0 | | 3.0 | 15.0 | |
| Minimum Split (s) | 9.5 | 30.0 | | 9.5 | 30.0 | | 9.5 | 29.0 | | 10.5 | 33.0 | |
| Total Split (s) | 13.0 | 30.0 | | 13.0 | 30.0 | | 13.0 | 64.0 | | 13.0 | 64.0 | |
| Total Split (%) | 10.8% | 25.0% | | 10.8% | 25.0% | | 10.8% | 53.3% | | 10.8% | 53.3% | |
| Yellow Time (s) | 3.5 | 4.0 | | 3.5 | 4.0 | | 3.5 | 4.0 | | 3.5 | 4.0 | |
| All-Red Time (s) | 0.0 | 2.0 | | 0.0 | 2.0 | | 0.0 | 2.0 | | 0.0 | 2.0 | |
| Lost Time Adjust (s) | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Lost Time (s) | 3.5 | 6.0 | | 3.5 | 6.0 | | 3.5 | 6.0 | | 3.5 | 6.0 | |
| Lead/Lag | Lead | Lag | | Lead | Lag | | Lead | Lag | | Lead | Lag | |
| Lead-Lag Optimize? | Yes | Yes | | Yes | Yes | | Yes | Yes | | Yes | Yes | |
| Recall Mode | None | None | | None | None | | None | C-Min | | None | C-Min | |
| Act Effect Green (s) | 33.2 | 23.1 | | 31.3 | 20.2 | | 74.9 | 65.8 | | 73.4 | 63.5 | |
| Actuated g/C Ratio | 0.28 | 0.19 | | 0.26 | 0.17 | | 0.62 | 0.55 | | 0.61 | 0.53 | |
| v/c Ratio | 0.54 | 0.72 | | 0.30 | 0.59 | | 0.36 | 0.60 | | 0.27 | 0.64 | |
| Control Delay | 39.3 | 58.7 | | 32.7 | 53.6 | | 13.1 | 21.3 | | 15.3 | 31.5 | |
| Queue Delay | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | |
| Total Delay | 39.3 | 58.7 | | 32.7 | 53.6 | | 13.1 | 21.3 | | 15.3 | 31.5 | |
| LOS | D | E | | C | D | | B | C | | B | C | |

Lanes, Volumes, Timings

2: Harlem Avenue & Randolph Street

01/28/2021

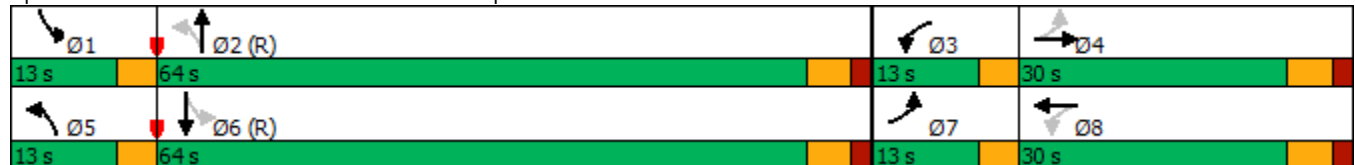


| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|------|------|-----|------|------|-----|------|------|-----|------|-----|------|
| Approach Delay | | 51.0 | | | 47.1 | | | 20.7 | | | | 30.6 |
| Approach LOS | | D | | | D | | | C | | | | C |
| Queue Length 50th (ft) | 95 | 181 | | 45 | 129 | | 26 | 343 | | 30 | | 452 |
| Queue Length 95th (ft) | 150 | 271 | | 83 | 202 | | 49 | 442 | | 60 | | 551 |
| Internal Link Dist (ft) | | 374 | | | 177 | | | 162 | | | | 733 |
| Turn Bay Length (ft) | 40 | | | 50 | | | 165 | | | 85 | | |
| Base Capacity (vph) | 300 | 357 | | 284 | 366 | | 276 | 2028 | | 297 | | 1929 |
| Starvation Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | | 0 |
| Spillback Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | | 0 |
| Storage Cap Reductn | 0 | 0 | | 0 | 0 | | 0 | 0 | | 0 | | 0 |
| Reduced v/c Ratio | 0.54 | 0.69 | | 0.29 | 0.50 | | 0.33 | 0.60 | | 0.24 | | 0.64 |

Intersection Summary

| | |
|-----------------------------------|---|
| Area Type: | Other |
| Cycle Length: | 120 |
| Actuated Cycle Length: | 120 |
| Offset: | 56 (47%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green |
| Natural Cycle: | 85 |
| Control Type: | Actuated-Coordinated |
| Maximum v/c Ratio: | 0.72 |
| Intersection Signal Delay: | 30.5 |
| Intersection LOS: | C |
| Intersection Capacity Utilization | 75.0% |
| ICU Level of Service | D |
| Analysis Period (min) | 15 |

Splits and Phases: 2: Harlem Avenue & Randolph Street



HCM 6th AWSC
 11: Maple Avenue & Pleasant Street

01/28/2021

| Intersection | |
|---------------------------|-----|
| Intersection Delay, s/veh | 7.8 |
| Intersection LOS | A |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|---------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 9 | 105 | 7 | 22 | 26 | 16 | 11 | 5 | 26 | 6 | 6 | 8 |
| Future Vol, veh/h | 9 | 105 | 7 | 22 | 26 | 16 | 11 | 5 | 26 | 6 | 6 | 8 |
| Peak Hour Factor | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 | 0.79 |
| Heavy Vehicles, % | 0 | 2 | 0 | 0 | 7 | 17 | 0 | 0 | 0 | 17 | 17 | 0 |
| Mvmt Flow | 11 | 133 | 9 | 28 | 33 | 20 | 14 | 6 | 33 | 8 | 8 | 10 |
| Number of Lanes | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |

| Approach | EB | WB | NB | SB |
|----------------------------|----|-----|-----|-----|
| Opposing Approach | WB | EB | SB | NB |
| Opposing Lanes | 1 | 1 | 1 | 1 |
| Conflicting Approach Left | SB | NB | EB | WB |
| Conflicting Lanes Left | 1 | 1 | 1 | 1 |
| Conflicting Approach Right | NB | SB | WB | EB |
| Conflicting Lanes Right | 1 | 1 | 1 | 1 |
| HCM Control Delay | 8 | 7.6 | 7.4 | 7.7 |
| HCM LOS | A | A | A | A |

| Lane | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|------------------------|-------|-------|-------|-------|
| Vol Left, % | 26% | 7% | 34% | 30% |
| Vol Thru, % | 12% | 87% | 41% | 30% |
| Vol Right, % | 62% | 6% | 25% | 40% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 42 | 121 | 64 | 20 |
| LT Vol | 11 | 9 | 22 | 6 |
| Through Vol | 5 | 105 | 26 | 6 |
| RT Vol | 26 | 7 | 16 | 8 |
| Lane Flow Rate | 53 | 153 | 81 | 25 |
| Geometry Grp | 1 | 1 | 1 | 1 |
| Degree of Util (X) | 0.061 | 0.174 | 0.092 | 0.032 |
| Departure Headway (Hd) | 4.12 | 4.079 | 4.072 | 4.577 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 875 | 872 | 868 | 787 |
| Service Time | 2.121 | 2.142 | 2.152 | 2.579 |
| HCM Lane V/C Ratio | 0.061 | 0.175 | 0.093 | 0.032 |
| HCM Control Delay | 7.4 | 8 | 7.6 | 7.7 |
| HCM Lane LOS | A | A | A | A |
| HCM 95th-tile Q | 0.2 | 0.6 | 0.3 | 0.1 |

HCM 6th AWSC
12: Randolph Street & Marion Street

01/28/2021

| Intersection | |
|---------------------------|------|
| Intersection Delay, s/veh | 12.1 |
| Intersection LOS | B |

| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|----------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 68 | 198 | 26 | 8 | 199 | 7 | 12 | 82 | 13 | 45 | 111 | 52 |
| Future Vol, veh/h | 68 | 198 | 26 | 8 | 199 | 7 | 12 | 82 | 13 | 45 | 111 | 52 |
| Peak Hour Factor | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 | 0.89 |
| Heavy Vehicles, % | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 3 | 0 | 0 |
| Mvmt Flow | 76 | 222 | 29 | 9 | 224 | 8 | 13 | 92 | 15 | 51 | 125 | 58 |
| Number of Lanes | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |
| Approach | EB | | | WB | | | NB | | | SB | | |
| Opposing Approach | WB | | | EB | | | SB | | | NB | | |
| Opposing Lanes | 1 | | | 1 | | | 1 | | | 1 | | |
| Conflicting Approach Left | SB | | | NB | | | EB | | | WB | | |
| Conflicting Lanes Left | 1 | | | 1 | | | 1 | | | 1 | | |
| Conflicting Approach Right | NB | | | SB | | | WB | | | EB | | |
| Conflicting Lanes Right | 1 | | | 1 | | | 1 | | | 1 | | |
| HCM Control Delay | 13.3 | | | 11.6 | | | 10.3 | | | 11.8 | | |
| HCM LOS | B | | | B | | | B | | | B | | |

| Lane | NBLn1 | EBLn1 | WBLn1 | SBLn1 |
|------------------------|-------|-------|-------|-------|
| Vol Left, % | 11% | 23% | 4% | 22% |
| Vol Thru, % | 77% | 68% | 93% | 53% |
| Vol Right, % | 12% | 9% | 3% | 25% |
| Sign Control | Stop | Stop | Stop | Stop |
| Traffic Vol by Lane | 107 | 292 | 214 | 208 |
| LT Vol | 12 | 68 | 8 | 45 |
| Through Vol | 82 | 198 | 199 | 111 |
| RT Vol | 13 | 26 | 7 | 52 |
| Lane Flow Rate | 120 | 328 | 240 | 234 |
| Geometry Grp | 1 | 1 | 1 | 1 |
| Degree of Util (X) | 0.194 | 0.484 | 0.363 | 0.363 |
| Departure Headway (Hd) | 5.822 | 5.306 | 5.434 | 5.594 |
| Convergence, Y/N | Yes | Yes | Yes | Yes |
| Cap | 613 | 679 | 661 | 640 |
| Service Time | 3.885 | 3.351 | 3.484 | 3.648 |
| HCM Lane V/C Ratio | 0.196 | 0.483 | 0.363 | 0.366 |
| HCM Control Delay | 10.3 | 13.3 | 11.6 | 11.8 |
| HCM Lane LOS | B | B | B | B |
| HCM 95th-tile Q | 0.7 | 2.7 | 1.7 | 1.7 |

HCM 6th TWSC
 3: Harlem Avenue & Circle Avenue

01/28/2021

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 0.2 | | | | | |
| Movement | EBL | EBR | NBL | NBT | SBT | SBR |
| Lane Configurations | | ↗ | | ↑↑ | ↑↑ | |
| Traffic Vol, veh/h | 0 | 31 | 0 | 1241 | 1268 | 160 |
| Future Vol, veh/h | 0 | 31 | 0 | 1241 | 1268 | 160 |
| Conflicting Peds, #/hr | 7 | 80 | 58 | 0 | 0 | 58 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | 0 | - | - | - | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 97 | 97 | 97 | 97 | 97 | 97 |
| Heavy Vehicles, % | 0 | 0 | 0 | 2 | 1 | 0 |
| Mvmt Flow | 0 | 32 | 0 | 1279 | 1307 | 165 |

| Major/Minor | Minor2 | Major1 | Major2 |
|----------------------|--------|--------|--------|
| Conflicting Flow All | - | 874 | 0 |
| Stage 1 | - | - | - |
| Stage 2 | - | - | - |
| Critical Hdwy | - | 6.9 | - |
| Critical Hdwy Stg 1 | - | - | - |
| Critical Hdwy Stg 2 | - | - | - |
| Follow-up Hdwy | - | 3.3 | - |
| Pot Cap-1 Maneuver | 0 | 297 | 0 |
| Stage 1 | 0 | - | 0 |
| Stage 2 | 0 | - | 0 |
| Platoon blocked, % | | | - |
| Mov Cap-1 Maneuver | - | 259 | - |
| Mov Cap-2 Maneuver | - | - | - |
| Stage 1 | - | - | - |
| Stage 2 | - | - | - |

| Approach | EB | NB | SB |
|----------------------|------|----|----|
| HCM Control Delay, s | 20.8 | 0 | 0 |
| HCM LOS | C | | |

| Minor Lane/Major Mvmt | NBT EBLn1 | SBT | SBR |
|-----------------------|-----------|-------|-----|
| Capacity (veh/h) | - | 259 | - |
| HCM Lane V/C Ratio | - | 0.123 | - |
| HCM Control Delay (s) | - | 20.8 | - |
| HCM Lane LOS | - | C | - |
| HCM 95th %tile Q(veh) | - | 0.4 | - |

HCM 6th TWSC
4: North-South Alley & South Boulevard

01/28/2021

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 0.4 | | | | | |
| Movement | EBT | EBR | WBL | WBT | NBL | NBR |
| Lane Configurations | | | | | | |
| Traffic Vol, veh/h | 51 | 4 | 6 | 289 | 4 | 4 |
| Future Vol, veh/h | 51 | 4 | 6 | 289 | 4 | 4 |
| Conflicting Peds, #/hr | 0 | 102 | 102 | 0 | 13 | 2 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | 0 | - | - | 0 | 0 | - |
| Grade, % | 0 | - | - | 0 | 0 | - |
| Peak Hour Factor | 88 | 88 | 88 | 88 | 88 | 88 |
| Heavy Vehicles, % | 0 | 0 | 0 | 3 | 0 | 0 |
| Mvmt Flow | 58 | 5 | 7 | 328 | 5 | 5 |

| Major/Minor | Major1 | Major2 | Minor1 | Minor2 | Minor3 |
|----------------------|--------|--------|--------|--------|--------|
| Conflicting Flow All | 0 | 0 | 165 | 0 | 518 |
| Stage 1 | - | - | - | - | 163 |
| Stage 2 | - | - | - | - | 355 |
| Critical Hdwy | - | - | 4.1 | - | 6.4 |
| Critical Hdwy Stg 1 | - | - | - | - | 5.4 |
| Critical Hdwy Stg 2 | - | - | - | - | 5.4 |
| Follow-up Hdwy | - | - | 2.2 | - | 3.5 |
| Pot Cap-1 Maneuver | - | - | 1426 | - | 521 |
| Stage 1 | - | - | - | - | 871 |
| Stage 2 | - | - | - | - | 714 |
| Platoon blocked, % | - | - | - | - | - |
| Mov Cap-1 Maneuver | - | - | 1287 | - | 462 |
| Mov Cap-2 Maneuver | - | - | - | - | 462 |
| Stage 1 | - | - | - | - | 787 |
| Stage 2 | - | - | - | - | 700 |

| Approach | EB | WB | NB |
|----------------------|----|-----|------|
| HCM Control Delay, s | 0 | 0.2 | 11.3 |
| HCM LOS | | | B |

| Minor Lane/Major Mvmt | NBLn1 | EBT | EBR | WBL | WBT |
|-----------------------|-------|-----|-----|-------|-----|
| Capacity (veh/h) | 585 | - | - | 1287 | - |
| HCM Lane V/C Ratio | 0.016 | - | - | 0.005 | - |
| HCM Control Delay (s) | 11.3 | - | - | 7.8 | 0 |
| HCM Lane LOS | B | - | - | A | A |
| HCM 95th %tile Q(veh) | 0 | - | - | 0 | - |

HCM 6th TWSC
6: Harlem Avenue & Frankin Street/Pleasant Street

01/28/2021

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 5.7 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | | ↗ | | ↕ | | | ↔ | | | ↔ | |
| Traffic Vol, veh/h | 0 | 0 | 37 | 1 | 5 | 39 | 19 | 1202 | 72 | 49 | 1209 | 41 |
| Future Vol, veh/h | 0 | 0 | 37 | 1 | 5 | 39 | 19 | 1202 | 72 | 49 | 1209 | 41 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 10 | 10 | 0 | 4 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | 0 | - | - | - | - | - | - | - | - | - |
| 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, % | 0 | 0 | 0 | 0 | 0 | 5 | 0 | 1 | 2 | 0 | 1 | 0 |
| Mvmt Flow | 0 | 0 | 40 | 1 | 5 | 42 | 21 | 1307 | 78 | 53 | 1314 | 45 |

| Major/Minor | Minor2 | Minor1 | Major1 | Major2 | | | | | | | | |
|----------------------|--------|--------|--------|--------|------|------|------|---|---|------|---|---|
| Conflicting Flow All | - | - | 684 | 2161 | 2867 | 703 | 1363 | 0 | 0 | 1395 | 0 | 0 |
| Stage 1 | - | - | - | 1398 | 1398 | - | - | - | - | - | - | - |
| Stage 2 | - | - | - | 763 | 1469 | - | - | - | - | - | - | - |
| Critical Hdwy | - | - | 6.9 | 7.5 | 6.5 | 7 | 4.1 | - | - | 4.1 | - | - |
| Critical Hdwy Stg 1 | - | - | - | 6.5 | 5.5 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | - | - | - | 6.5 | 5.5 | - | - | - | - | - | - | - |
| Follow-up Hdwy | - | - | 3.3 | 3.5 | 4 | 3.35 | 2.2 | - | - | 2.2 | - | - |
| Pot Cap-1 Maneuver | 0 | 0 | 396 | 27 | 17 | 373 | 511 | - | - | 497 | - | - |
| Stage 1 | 0 | 0 | - | 151 | 209 | - | - | - | - | - | - | - |
| Stage 2 | 0 | 0 | - | 367 | 194 | - | - | - | - | - | - | - |
| Platoon blocked, % | - | - | - | - | - | - | - | - | - | - | - | - |
| Mov Cap-1 Maneuver | - | - | 394 | 14 | 8 | 369 | 509 | - | - | 492 | - | - |
| Mov Cap-2 Maneuver | - | - | - | 14 | 8 | - | - | - | - | - | - | - |
| Stage 1 | - | - | - | 122 | 168 | - | - | - | - | - | - | - |
| Stage 2 | - | - | - | 182 | 107 | - | - | - | - | - | - | - |

| Approach | EB | WB | NB | SB |
|----------------------|------|-------|-----|----|
| HCM Control Delay, s | 15.2 | 202.3 | 1.2 | 3 |
| HCM LOS | C | F | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1WBLn1 | SBL | SBT | SBR |
|-----------------------|-------|-----|-----|------------|-------|-------|-----|
| Capacity (veh/h) | 509 | - | - | 394 | 56 | 492 | - |
| HCM Lane V/C Ratio | 0.041 | - | - | 0.102 | 0.873 | 0.108 | - |
| HCM Control Delay (s) | 12.4 | 1.1 | - | 15.2 | 202.3 | 13.2 | 2.7 |
| HCM Lane LOS | B | A | - | C | F | B | A |
| HCM 95th %tile Q(veh) | 0.1 | - | - | 0.3 | 3.9 | 0.4 | - |

HCM 6th TWSC
7: North-South Alley & Pleasant Street

01/28/2021

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 1.7 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 5 | 122 | 10 | 11 | 50 | 3 | 9 | 0 | 8 | 2 | 3 | 5 |
| Future Vol, veh/h | 5 | 122 | 10 | 11 | 50 | 3 | 9 | 0 | 8 | 2 | 3 | 5 |
| Conflicting Peds, #/hr | 8 | 0 | 17 | 17 | 0 | 8 | 7 | 0 | 6 | 6 | 0 | 7 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
| 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, % | 0 | 2 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 20 |
| Mvmt Flow | 5 | 133 | 11 | 12 | 54 | 3 | 10 | 0 | 9 | 2 | 3 | 5 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|----------------------|--------|---|---|--------|---|---|--------|-----|-----|--------|-----|------|
| Conflicting Flow All | 65 | 0 | 0 | 161 | 0 | 0 | 257 | 255 | 162 | 247 | 259 | 71 |
| Stage 1 | - | - | - | - | - | - | 166 | 166 | - | 88 | 88 | - |
| Stage 2 | - | - | - | - | - | - | 91 | 89 | - | 159 | 171 | - |
| Critical Hdwy | 4.1 | - | - | 4.1 | - | - | 7.1 | 6.5 | 6.2 | 7.1 | 6.5 | 6.4 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.1 | 5.5 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.1 | 5.5 | - |
| Follow-up Hdwy | 2.2 | - | - | 2.2 | - | - | 3.5 | 4 | 3.3 | 3.5 | 4 | 3.48 |
| Pot Cap-1 Maneuver | 1550 | - | - | 1430 | - | - | 700 | 652 | 888 | 711 | 649 | 943 |
| Stage 1 | - | - | - | - | - | - | 841 | 765 | - | 925 | 826 | - |
| Stage 2 | - | - | - | - | - | - | 921 | 825 | - | 848 | 761 | - |
| Platoon blocked, % | - | - | - | - | - | - | - | - | - | - | - | - |
| Mov Cap-1 Maneuver | 1538 | - | - | 1407 | - | - | 671 | 628 | 869 | 688 | 625 | 930 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 671 | 628 | - | 688 | 625 | - |
| Stage 1 | - | - | - | - | - | - | 824 | 750 | - | 914 | 812 | - |
| Stage 2 | - | - | - | - | - | - | 898 | 811 | - | 831 | 746 | - |

| Approach | EB | | | WB | | | NB | | | SB | | |
|----------------------|-----|--|--|-----|--|--|-----|--|--|-----|--|--|
| HCM Control Delay, s | 0.3 | | | 1.3 | | | 9.9 | | | 9.8 | | |
| HCM LOS | | | | | | | A | | | A | | |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|-----------------------|-------|-------|-----|-----|-------|-----|-----|-------|
| Capacity (veh/h) | 752 | 1538 | - | - | 1407 | - | - | 764 |
| HCM Lane V/C Ratio | 0.025 | 0.004 | - | - | 0.008 | - | - | 0.014 |
| HCM Control Delay (s) | 9.9 | 7.3 | 0 | - | 7.6 | 0 | - | 9.8 |
| HCM Lane LOS | A | A | A | - | A | A | - | A |
| HCM 95th %tile Q(veh) | 0.1 | 0 | - | - | 0 | - | - | 0 |

HCM 6th TWSC
8: Marion Street & Pleasant Street

01/28/2021

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 7.5 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 79 | 21 | 32 | 18 | 24 | 22 | 11 | 138 | 8 | 16 | 158 | 29 |
| Future Vol, veh/h | 79 | 21 | 32 | 18 | 24 | 22 | 11 | 138 | 8 | 16 | 158 | 29 |
| Conflicting Peds, #/hr | 0 | 0 | 57 | 57 | 0 | 0 | 136 | 0 | 86 | 86 | 0 | 136 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 | 89 |
| Heavy Vehicles, % | 0 | 0 | 2 | 0 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 89 | 24 | 36 | 20 | 27 | 25 | 12 | 155 | 9 | 18 | 178 | 33 |

| Major/Minor | Minor2 | | Minor1 | | Major1 | | Major2 | | | | | |
|----------------------|--------|-----|--------|-----|--------|-----|--------|---|---|------|---|---|
| Conflicting Flow All | 577 | 641 | 388 | 588 | 653 | 246 | 347 | 0 | 0 | 250 | 0 | 0 |
| Stage 1 | 367 | 367 | - | 270 | 270 | - | - | - | - | - | - | - |
| Stage 2 | 210 | 274 | - | 318 | 383 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.1 | 6.5 | 6.22 | 7.1 | 6.62 | 6.2 | 4.1 | - | - | 4.1 | - | - |
| Critical Hdwy Stg 1 | 6.1 | 5.5 | - | 6.1 | 5.62 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.1 | 5.5 | - | 6.1 | 5.62 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.5 | 4 | 3.318 | 3.5 | 4.108 | 3.3 | 2.2 | - | - | 2.2 | - | - |
| Pot Cap-1 Maneuver | 431 | 395 | 660 | 423 | 374 | 798 | 1223 | - | - | 1327 | - | - |
| Stage 1 | 657 | 626 | - | 740 | 668 | - | - | - | - | - | - | - |
| Stage 2 | 797 | 687 | - | 698 | 595 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | - | - | - |
| Mov Cap-1 Maneuver | 329 | 307 | 543 | 316 | 290 | 733 | 1065 | - | - | 1218 | - | - |
| Mov Cap-2 Maneuver | 329 | 307 | - | 316 | 290 | - | - | - | - | - | - | - |
| Stage 1 | 565 | 535 | - | 671 | 606 | - | - | - | - | - | - | - |
| Stage 2 | 727 | 623 | - | 579 | 509 | - | - | - | - | - | - | - |

| Approach | EB | | WB | | NB | | SB | | | |
|----------------------|------|--|------|--|-----|--|-----|--|--|--|
| HCM Control Delay, s | 21.9 | | 16.8 | | 0.6 | | 0.6 | | | |
| HCM LOS | C | | C | | | | | | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1WBLn1 | SBL | SBT | SBR |
|-----------------------|-------|-----|-----|------------|-------|-------|-----|
| Capacity (veh/h) | 1065 | - | - | 359 | 377 | 1218 | - |
| HCM Lane V/C Ratio | 0.012 | - | - | 0.413 | 0.191 | 0.015 | - |
| HCM Control Delay (s) | 8.4 | 0 | - | 21.9 | 16.8 | 8 | 0 |
| HCM Lane LOS | A | A | - | C | C | A | A |
| HCM 95th %tile Q(veh) | 0 | - | - | 2 | 0.7 | 0 | - |

HCM 6th TWSC
9: Randolph Street & Maple Avenue

01/28/2021

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 2.3 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 7 | 263 | 4 | 21 | 238 | 16 | 5 | 19 | 27 | 9 | 17 | 9 |
| Future Vol, veh/h | 7 | 263 | 4 | 21 | 238 | 16 | 5 | 19 | 27 | 9 | 17 | 9 |
| Conflicting Peds, #/hr | 10 | 0 | 6 | 6 | 0 | 10 | 8 | 0 | 13 | 13 | 0 | 8 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 87 | 87 | 87 | 87 | 87 | 87 | 87 | 87 | 87 | 87 | 87 | 87 |
| Heavy Vehicles, % | 0 | 18 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 |
| Mvmt Flow | 8 | 302 | 5 | 24 | 274 | 18 | 6 | 22 | 31 | 10 | 20 | 10 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|----------------------|--------|---|---|--------|---|---|--------|-----|-----|--------|-------|-----|
| Conflicting Flow All | 302 | 0 | 0 | 313 | 0 | 0 | 681 | 677 | 324 | 701 | 670 | 301 |
| Stage 1 | - | - | - | - | - | - | 327 | 327 | - | 341 | 341 | - |
| Stage 2 | - | - | - | - | - | - | 354 | 350 | - | 360 | 329 | - |
| Critical Hdwy | 4.1 | - | - | 4.1 | - | - | 7.1 | 6.5 | 6.2 | 7.1 | 6.51 | 6.2 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.1 | 5.51 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.1 | 5.51 | - |
| Follow-up Hdwy | 2.2 | - | - | 2.2 | - | - | 3.5 | 4 | 3.3 | 3.5 | 4.009 | 3.3 |
| Pot Cap-1 Maneuver | 1270 | - | - | 1259 | - | - | 367 | 377 | 722 | 356 | 379 | 743 |
| Stage 1 | - | - | - | - | - | - | 690 | 651 | - | 678 | 640 | - |
| Stage 2 | - | - | - | - | - | - | 667 | 636 | - | 662 | 648 | - |
| Platoon blocked, % | - | - | - | - | - | - | - | - | - | - | - | - |
| Mov Cap-1 Maneuver | 1258 | - | - | 1252 | - | - | 334 | 360 | 709 | 310 | 362 | 730 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 334 | 360 | - | 310 | 362 | - |
| Stage 1 | - | - | - | - | - | - | 680 | 642 | - | 666 | 619 | - |
| Stage 2 | - | - | - | - | - | - | 617 | 615 | - | 599 | 639 | - |

| Approach | EB | | | WB | | | NB | | | SB | | |
|----------------------|-----|--|--|-----|--|--|------|--|--|------|--|--|
| HCM Control Delay, s | 0.2 | | | 0.6 | | | 13.5 | | | 15.1 | | |
| HCM LOS | | | | | | | B | | | C | | |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|-----------------------|-------|-------|-----|-----|-------|-----|-----|-------|
| Capacity (veh/h) | 482 | 1258 | - | - | 1252 | - | - | 396 |
| HCM Lane V/C Ratio | 0.122 | 0.006 | - | - | 0.019 | - | - | 0.102 |
| HCM Control Delay (s) | 13.5 | 7.9 | 0 | - | 7.9 | 0 | - | 15.1 |
| HCM Lane LOS | B | A | A | - | A | A | - | C |
| HCM 95th %tile Q(veh) | 0.4 | 0 | - | - | 0.1 | - | - | 0.3 |

HCM 6th TWSC
10: North-South Alley & Randolph Street

01/28/2021

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 0.5 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 8 | 288 | 3 | 1 | 260 | 2 | 1 | 0 | 1 | 3 | 1 | 14 |
| Future Vol, veh/h | 8 | 288 | 3 | 1 | 260 | 2 | 1 | 0 | 1 | 3 | 1 | 14 |
| Conflicting Peds, #/hr | 23 | 0 | 12 | 12 | 0 | 23 | 5 | 0 | 1 | 1 | 0 | 5 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 85 | 85 | 85 | 85 | 85 | 85 | 85 | 85 | 85 | 85 | 85 | 85 |
| Heavy Vehicles, % | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 9 | 339 | 4 | 1 | 306 | 2 | 1 | 0 | 1 | 4 | 1 | 16 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|----------------------|--------|---|---|--------|---|---|--------|-----|-----|--------|-----|-----|
| Conflicting Flow All | 331 | 0 | 0 | 355 | 0 | 0 | 694 | 704 | 354 | 693 | 705 | 335 |
| Stage 1 | - | - | - | - | - | - | 371 | 371 | - | 332 | 332 | - |
| Stage 2 | - | - | - | - | - | - | 323 | 333 | - | 361 | 373 | - |
| Critical Hdwy | 4.1 | - | - | 4.1 | - | - | 7.1 | 6.5 | 6.2 | 7.1 | 6.5 | 6.2 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.1 | 5.5 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.1 | 5.5 | - | 6.1 | 5.5 | - |
| Follow-up Hdwy | 2.2 | - | - | 2.2 | - | - | 3.5 | 4 | 3.3 | 3.5 | 4 | 3.3 |
| Pot Cap-1 Maneuver | 1240 | - | - | 1215 | - | - | 360 | 364 | 694 | 360 | 363 | 712 |
| Stage 1 | - | - | - | - | - | - | 653 | 623 | - | 686 | 648 | - |
| Stage 2 | - | - | - | - | - | - | 693 | 647 | - | 662 | 622 | - |
| Platoon blocked, % | - | - | - | - | - | - | - | - | - | - | - | - |
| Mov Cap-1 Maneuver | 1213 | - | - | 1201 | - | - | 342 | 349 | 685 | 348 | 348 | 693 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 342 | 349 | - | 348 | 348 | - |
| Stage 1 | - | - | - | - | - | - | 640 | 611 | - | 665 | 633 | - |
| Stage 2 | - | - | - | - | - | - | 671 | 632 | - | 654 | 610 | - |

| Approach | EB | WB | NB | SB |
|----------------------|-----|----|------|------|
| HCM Control Delay, s | 0.2 | 0 | 12.9 | 11.6 |
| HCM LOS | | | B | B |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|-----------------------|-------|-------|-----|-----|-------|-----|-----|-------|
| Capacity (veh/h) | 456 | 1213 | - | - | 1201 | - | - | 568 |
| HCM Lane V/C Ratio | 0.005 | 0.008 | - | - | 0.001 | - | - | 0.037 |
| HCM Control Delay (s) | 12.9 | 8 | 0 | - | 8 | 0 | - | 11.6 |
| HCM Lane LOS | B | A | A | - | A | A | - | B |
| HCM 95th %tile Q(veh) | 0 | 0 | - | - | 0 | - | - | 0.1 |

HCM 6th TWSC
 13: North-South Alley & Proposed Garage Access

01/28/2021

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 5.5 | | | | | |
| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
| Lane Configurations | W | | T | | | T |
| Traffic Vol, veh/h | 10 | 13 | 4 | 6 | 16 | 8 |
| Future Vol, veh/h | 10 | 13 | 4 | 6 | 16 | 8 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | - | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 95 | 95 | 95 | 95 | 95 | 95 |
| Heavy Vehicles, % | 0 | 0 | 0 | 0 | 0 | 0 |
| Mvmt Flow | 11 | 14 | 4 | 6 | 17 | 8 |

| Major/Minor | Minor1 | Major1 | Major2 | | | |
|----------------------|--------|--------|--------|---|------|---|
| Conflicting Flow All | 49 | 7 | 0 | 0 | 10 | 0 |
| Stage 1 | 7 | - | - | - | - | - |
| Stage 2 | 42 | - | - | - | - | - |
| Critical Hdwy | 6.4 | 6.2 | - | - | 4.1 | - |
| Critical Hdwy Stg 1 | 5.4 | - | - | - | - | - |
| Critical Hdwy Stg 2 | 5.4 | - | - | - | - | - |
| Follow-up Hdwy | 3.5 | 3.3 | - | - | 2.2 | - |
| Pot Cap-1 Maneuver | 965 | 1081 | - | - | 1623 | - |
| Stage 1 | 1021 | - | - | - | - | - |
| Stage 2 | 986 | - | - | - | - | - |
| Platoon blocked, % | | | - | - | - | - |
| Mov Cap-1 Maneuver | 954 | 1081 | - | - | 1623 | - |
| Mov Cap-2 Maneuver | 954 | - | - | - | - | - |
| Stage 1 | 1021 | - | - | - | - | - |
| Stage 2 | 975 | - | - | - | - | - |

| Approach | WB | NB | SB |
|----------------------|-----|----|-----|
| HCM Control Delay, s | 8.6 | 0 | 4.8 |
| HCM LOS | A | | |

| Minor Lane/Major Mvmt | NBT | NBRWBLn1 | SBL | SBT |
|-----------------------|-----|----------|-------|------|
| Capacity (veh/h) | - | - | 1022 | 1623 |
| HCM Lane V/C Ratio | - | - | 0.024 | 0.01 |
| HCM Control Delay (s) | - | - | 8.6 | 7.2 |
| HCM Lane LOS | - | - | A | A |
| HCM 95th %tile Q(veh) | - | - | 0.1 | 0 |

Sight Distance Analyses

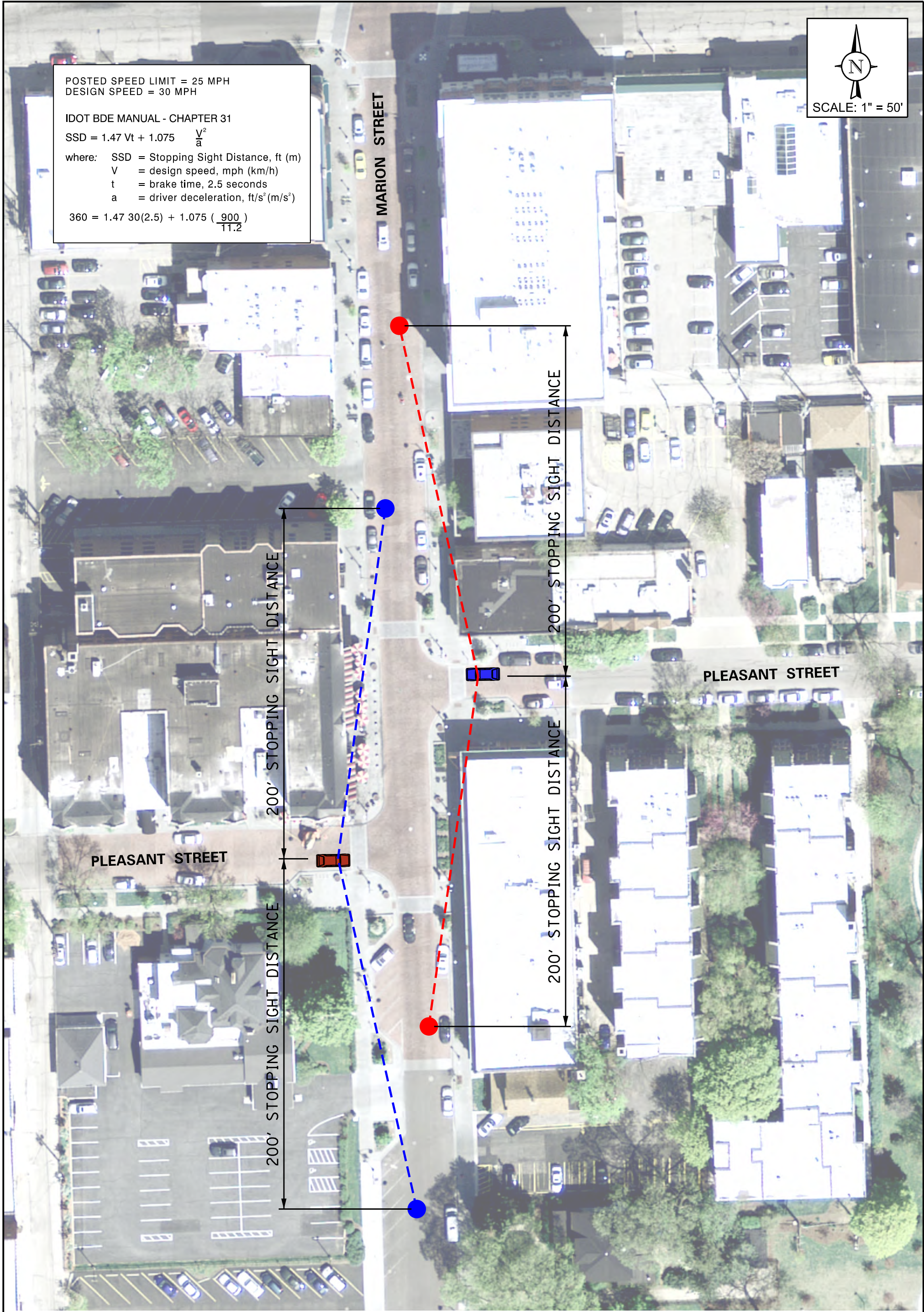
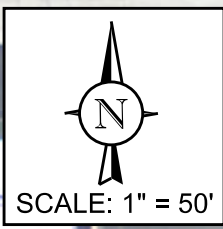
POSTED SPEED LIMIT = 25 MPH
 DESIGN SPEED = 30 MPH

IDOT BDE MANUAL - CHAPTER 31

$$SSD = 1.47 Vt + 1.075 \frac{V^2}{a}$$

where: SSD = Stopping Sight Distance, ft (m)
 V = design speed, mph (km/h)
 t = brake time, 2.5 seconds
 a = driver deceleration, ft/s² (m/s²)

$$360 = 1.47 \cdot 30(2.5) + 1.075 \left(\frac{900}{11.2} \right)$$



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IDOT BDE MANUAL - CHAPTER 31

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