

Traffic Impact Study 4204 W. Lake Street Industrial Development

Chicago, Illinois



Prepared For:

KINGFISHER GROUP



September 6, 2023

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I. Executive Summary

This report summarizes the results of a traffic impact study conducted by Kenig, Lindgren, O'Hara, Aboona, Inc. (KLOA, Inc.) for a proposed industrial development to be located in the northwest corner of Lake Street with Keeler Avenue in Chicago, Illinois. The objectives of the traffic study are as follows:

- Determine the existing vehicular, pedestrian, bicycle, and public transportation conditions in the study area to establish a base condition.
- Assess the impact that the proposed development will have on transportation conditions in the area.
- Determine any street, access, bicycle, and pedestrian modifications and/or improvements that will be necessary to effectively accommodate and mitigate future conditions.

Vehicle, pedestrian, and bicycle counts were conducted during the weekday morning and weekday evening peak periods at the intersections of Lake Street with Keeler Avenue and Kildare Avenue and Keeler Avenue with Kinzie Street and Carroll Avenue in order to determine the general peak hour of traffic activity during these time periods.

As proposed, the site will be developed with an approximately 44,187 square-foot industrial building. The development will provide 30 parking spaces for employees on the west side of the building and three truck loading bays on the north side of the building. Access to the truck loading bays will be provided via the east-west alley.

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

- Area intersections have sufficient reserve capacity to accommodate the traffic estimated to be generated by the proposed development and no street improvements or traffic control modifications are required.
- The proposed access system will be adequate in accommodating the traffic estimated to be generated by the development.

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 industrial development to be located at 4204 W. Lake Street in Chicago, Illinois. The site, which is currently vacant, is located in the northwest corner of the intersection of Lake Street with Keeler Avenue. As proposed, the site will be developed with an approximately 44,187 square-foot industrial building. Access to the site is proposed to be provided via an inbound only access drive on Lake Street and via the east-west alley that borders the site to north.

The purpose of this study was to examine existing traffic conditions, assess the impact that the proposed development will have on traffic conditions in the area, and determine if any improvements to the transportation system are required to accommodate the proposed development. **Figure 1** shows the location of the site in relation to the area street system. **Figure 2** shows an aerial view of the site.

The sections of this report present the following:

- Existing street 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 and weekday evening peak hours
- Evaluation and recommendations with respect to adequacy of the site access, on-site circulation, and adjacent street system

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

1. Existing Conditions – Analyzes the capacity of the existing street system using peak hour traffic volumes from traffic counts conducted in 2023.
2. Year 2029 Total Projected Conditions – Analyzes the capacity of the future street system using the projected 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



Aerial View of Site

Figure 2

*Proposed Industrial Development
Chicago, Illinois*

2. Existing Conditions

Existing transportation conditions in the vicinity of the site were documented based on field visits conducted by KLOA, Inc. in order to obtain a database for projecting future conditions. The following provides a description of the geographical location of the site, physical characteristics of the area street system including lane usage and traffic control devices, and existing peak hour traffic volumes.

Site Location

The site is generally bounded by an east-west alley to the north, Keeler Avenue to the east, Lake Street to the south, and a residential building to the west. The area offers a mixture of residential and industrial uses.

Existing Street System Characteristics

The characteristics of the existing streets near the development are described below and illustrated in **Figure 3**. All streets are under the jurisdiction of the Chicago Department of Transportation (CDOT). Parking is generally permitted on both sides of all streets.









Lake Street is an east-west, major collector street that provides two vehicle lanes and one bike lane in each direction. Within the vicinity of the site, Lake Street runs below the CTA Green Line and the through lanes in both directions are divided by the viaduct support pillars. At its signalized intersection with Keeler Avenue and unsignalized intersection with Kildare Avenue, Lake Street provides two lanes on both approaches and no exclusive turn lanes. According to the Illinois Department of Transportation (IDOT), Lake Street carries an Annual Average Daily Traffic (AADT) volume of 16,000 vehicles (IDOT 2022).

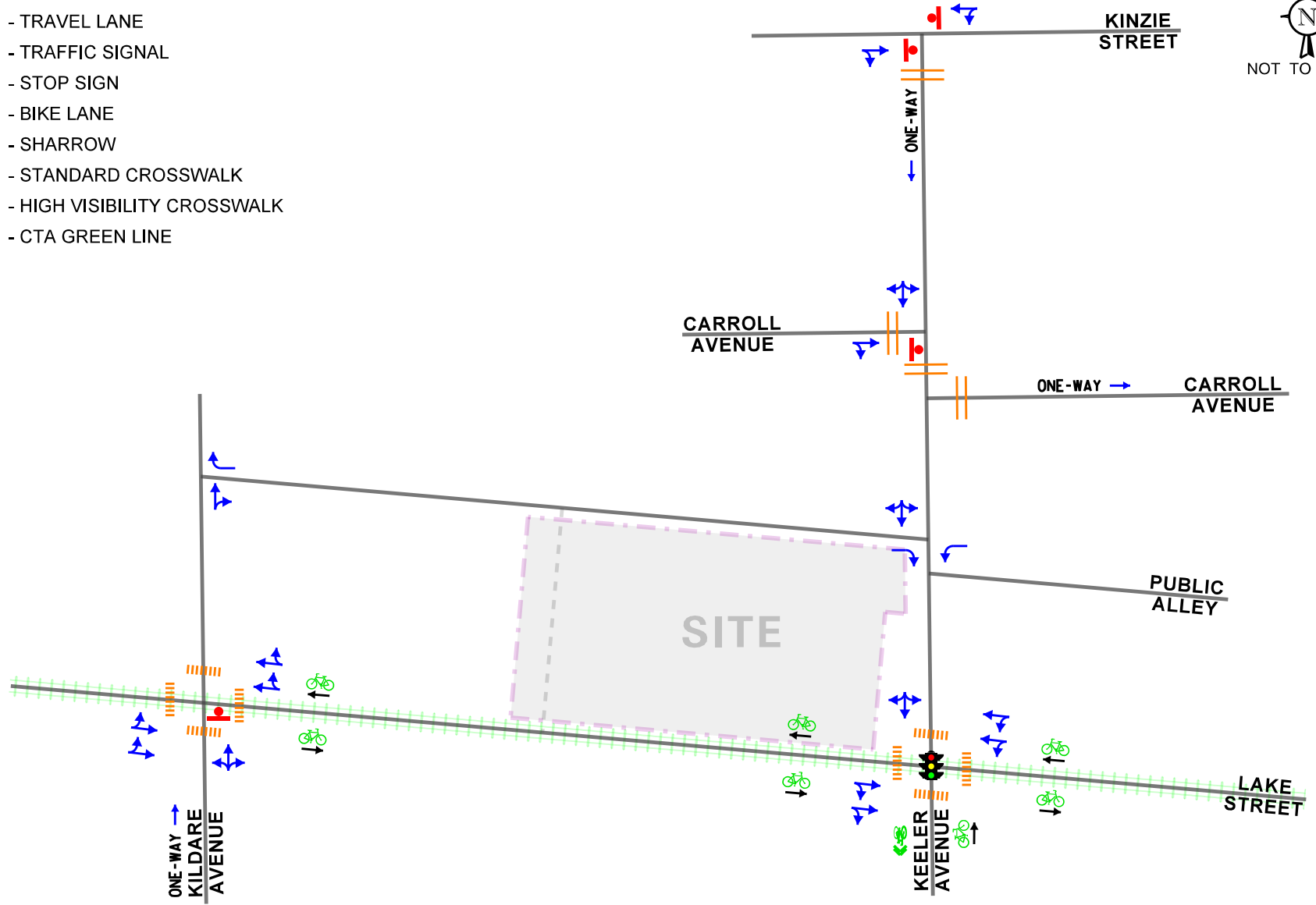
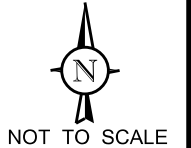
Keeler Avenue is a southbound local street that extends south from Kinzie Street and provides one southbound lane. South of Lake Street, Keeler Avenue provides a northbound bike lane, and the southbound vehicle lane has “sharrows” for shared vehicle and bike traffic. At its signalized intersection with Lake Street, Keeler Avenue provides a shared left-turn/through/right-turn lane on the southbound approach. At its unsignalized intersections with Kinzie Street, Carroll Avenue, and the east-west alley, Keeler Avenue provides one southbound lane.

Kildare Avenue is a north-south, local street that extends south from Kinzie Street and provides one lane in each direction between Kinzie Street and Carroll Avenue and one northbound lane south of Carroll Avenue. At its unsignalized intersection with Lake Street, Kildare Avenue provides a shared left-turn/through/right-turn lane on the northbound approach and is under stop sign control.

Kinzie Street is an east-west, local street that provides one lane in each direction. At its unsignalized intersection with Keeler Avenue, Kinzie Street provides a shared through/right-turn lane on the eastbound approach and a shared left-turn/through lane on the westbound approach. Both approaches are under stop sign control.

LEGEND

-  - TRAVEL LANE
-  - TRAFFIC SIGNAL
-  - STOP SIGN
-  - BIKE LANE
-  - SHARROW
-  - STANDARD CROSSWALK
-  - HIGH VISIBILITY CROSSWALK
-  - CTA GREEN LINE



4204 W Lake Street
Chicago, Illinois

Existing Roadway Characteristics



Job No: 23-176

Figure: 3

Carroll Avenue is an east-west, local street that provides one lane in each direction west of Keeler Avenue and one eastbound lane east of Keeler Avenue. At its unsignalized intersection with Keeler Avenue, Carroll Street provides a shared through/right-turn lane on the eastbound approach and is under stop sign control.

Alternative Modes of Transportation

Accessibility to and from the area is enhanced by the various alternative modes of transportation serving the area as summarized below.

Public Transportation. The area is served by the CTA Green Line via the Pulaski station located approximately one-quarter of a mile east of the site. The CTA Green Line operates daily along Lake Street between Harlem Avenue in Forest Park and the downtown loop and from the downtown loop to 63rd Street on Chicago's South Side. South of 59th Street, the line branches off to provide service between Cottage Grove Avenue and Ashland Avenue.

In addition, the following bus routes serve the immediate area and have stops near the facility:

Route 20 (Madison) generally runs along Madison Street and Randolph Street between Austin Boulevard and Michigan Avenue. Service is generally provided seven days a week and on holidays twenty-four hours a day. Notable stops include Marshall High School, United Center, and the Ogilvie Metra Station.

Route 53 (Pulaski) generally runs along Pulaski Road between Peterson Avenue and 31st Street serving destinations including the Irving Park Blue Line station and Pulaski Blue Line station. Twenty-four hour service is generally provided seven days a week and on holidays.

Route 54 (Cicero) provides service between Montrose Avenue and 24th Place via Cicero Avenue. This route provides daily service between approximately 3:30 A.M. and 2:00 A.M. daily, including Sunday and Holidays. Notable stops include the Cicero Green, Blue, and Pink Line stations and the Cicero/Grand Metra station.

Pedestrian Accommodations. Sidewalks and crosswalks are generally provided on the majority of the streets within the study area. High-visibility crosswalks are provided at the intersections of Lake Street with Keeler Avenue and Kildare Avenue.

Bike Facilities. Lake Street provides dedicated bike lanes in both directions and Keeler Avenue provides a northbound bike lane and southbound sharrows south of Lake Street.

According to the City of Chicago's *Streets for Cycling Plan 2020*, Lake Street is designated as a Spoke Bike Route, Keeler Avenue is designated as a Neighborhood Bike Route, and Kinzie Street is designated as a Crosstown Bike Route between Keeler Avenue and Pulaski Road.

Existing Traffic Volumes

In order to determine current traffic conditions in the vicinity of the site, KLOA, Inc. conducted peak period traffic counts using Miovision Scout Video Collection Units on Tuesday, July 18, 2023, during the weekday morning (7:00 A.M. to 9:00 A.M.) and weekday evening (4:00 P.M. to 6:00 P.M.) peak periods at the following intersections:

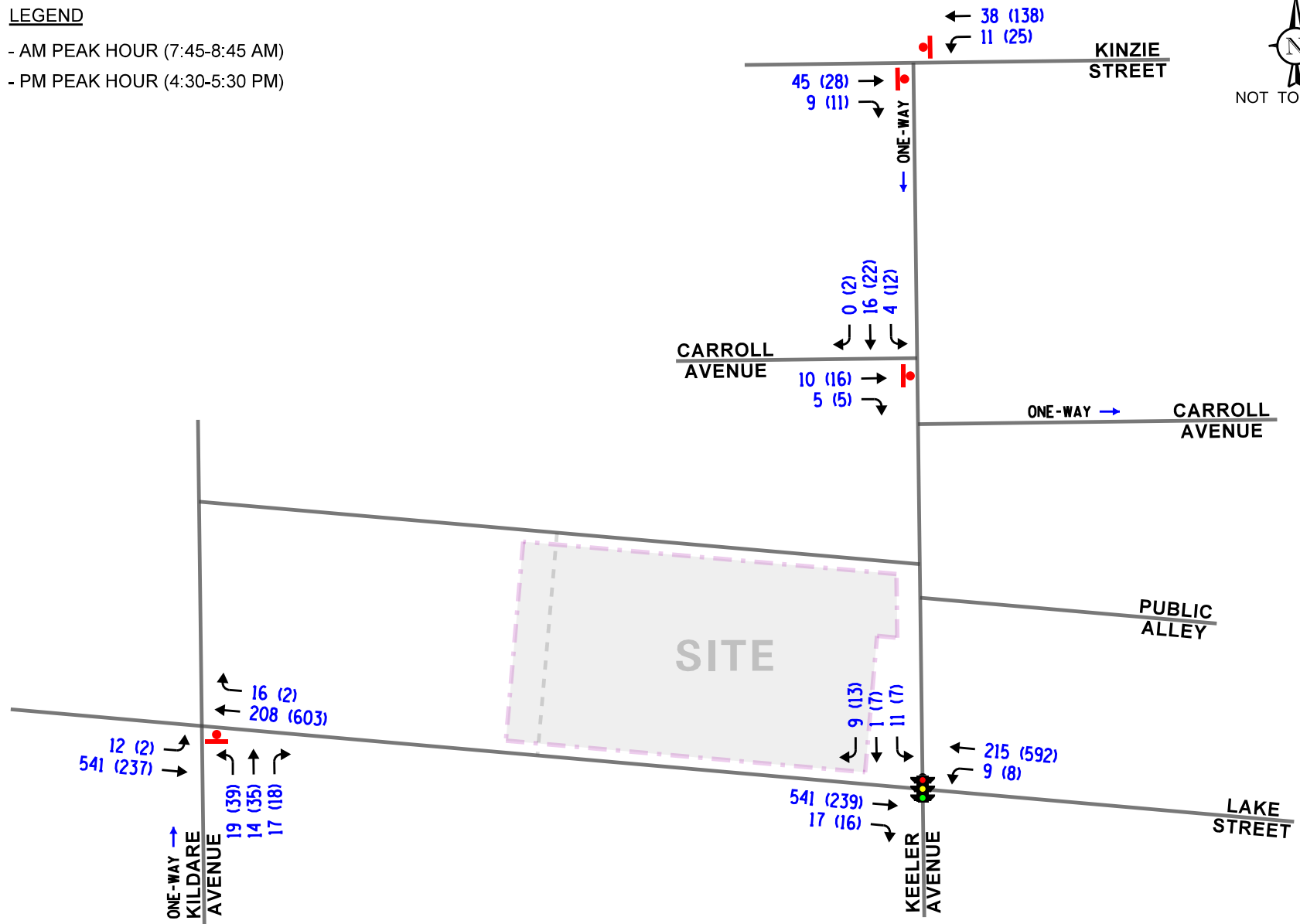
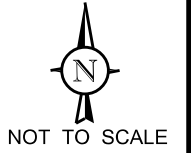
- Lake Street with Keeler Avenue
- Lake Street with Kildare Avenue
- Keeler Avenue with Kinzie Street
- Keeler Avenue with Carroll Avenue

The results of the traffic counts indicated that the weekday morning peak hour of traffic occurs from 7:45 A.M. to 8:45 A.M. and the weekday evening peak hour of traffic occurs from 4:30 P.M. to 5:30 P.M. Copies of the traffic count summary sheets are included in the Appendix.

Figure 4 illustrates the existing peak hour vehicle traffic volumes, inclusive of heavy vehicles. **Figure 5** illustrates the existing heavy vehicle peak hour traffic volumes.

LEGEND

- 00 - AM PEAK HOUR (7:45-8:45 AM)
- (00) - PM PEAK HOUR (4:30-5:30 PM)



4204 W Lake Street
Chicago, Illinois

Existing Traffic Volumes

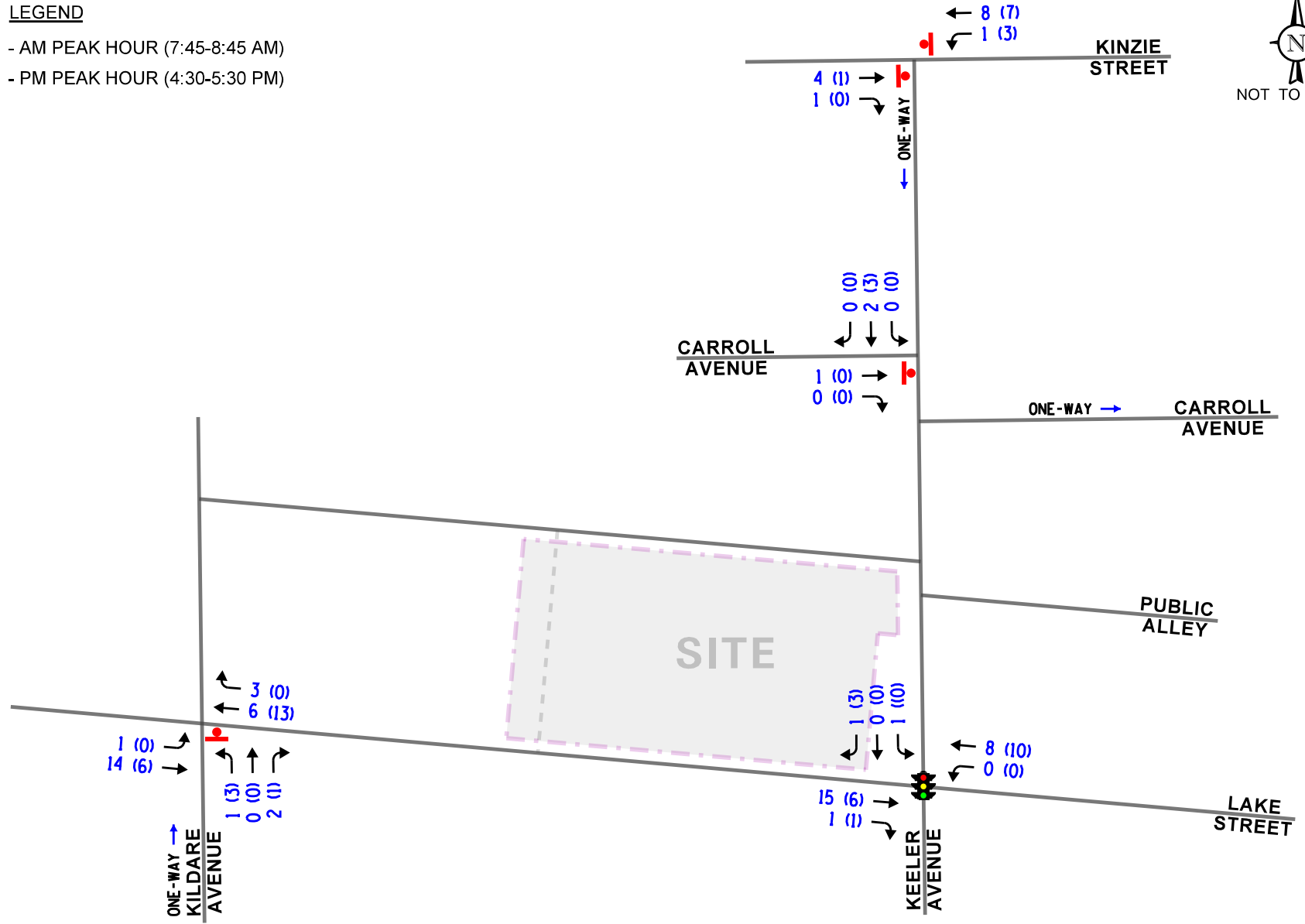
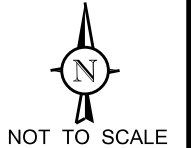


Job No: 23-176

Figure: 4

LEGEND

- 00** - AM PEAK HOUR (7:45-8:45 AM)
- (00)** - PM PEAK HOUR (4:30-5:30 PM)



4204 W Lake Street
Chicago, Illinois

Existing Traffic Volumes
Trucks



Job No: 23-176 Figure: 5

3. Traffic Characteristics of the 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 Development Plan

As proposed, the site will be developed with an approximately 44,187 square-foot industrial building. The development will provide a surface parking lot with 30 parking spaces for employees on the west side of the building. The parking lot will operate with a one-way northbound only central drive aisle. The building will have three truck loading docks on the north side of the building. Access to the development is proposed to be provided as follows:

- An inbound only access drive on Lake Street approximately 300 feet east of Kildare Avenue. This access drive will provide one inbound lane and will serve the employee parking lot.
- An outbound only access drive on the east-west alley approximately 320 feet east of Kildare Avenue. This access drive will provide one outbound lane and will serve the employee parking lot.
- Access to the truck loading bays will be provided via a direct connection to the east-west alley in the northeast corner of the site.

A copy of the preliminary site plan is included in the Appendix.

Directional Distribution

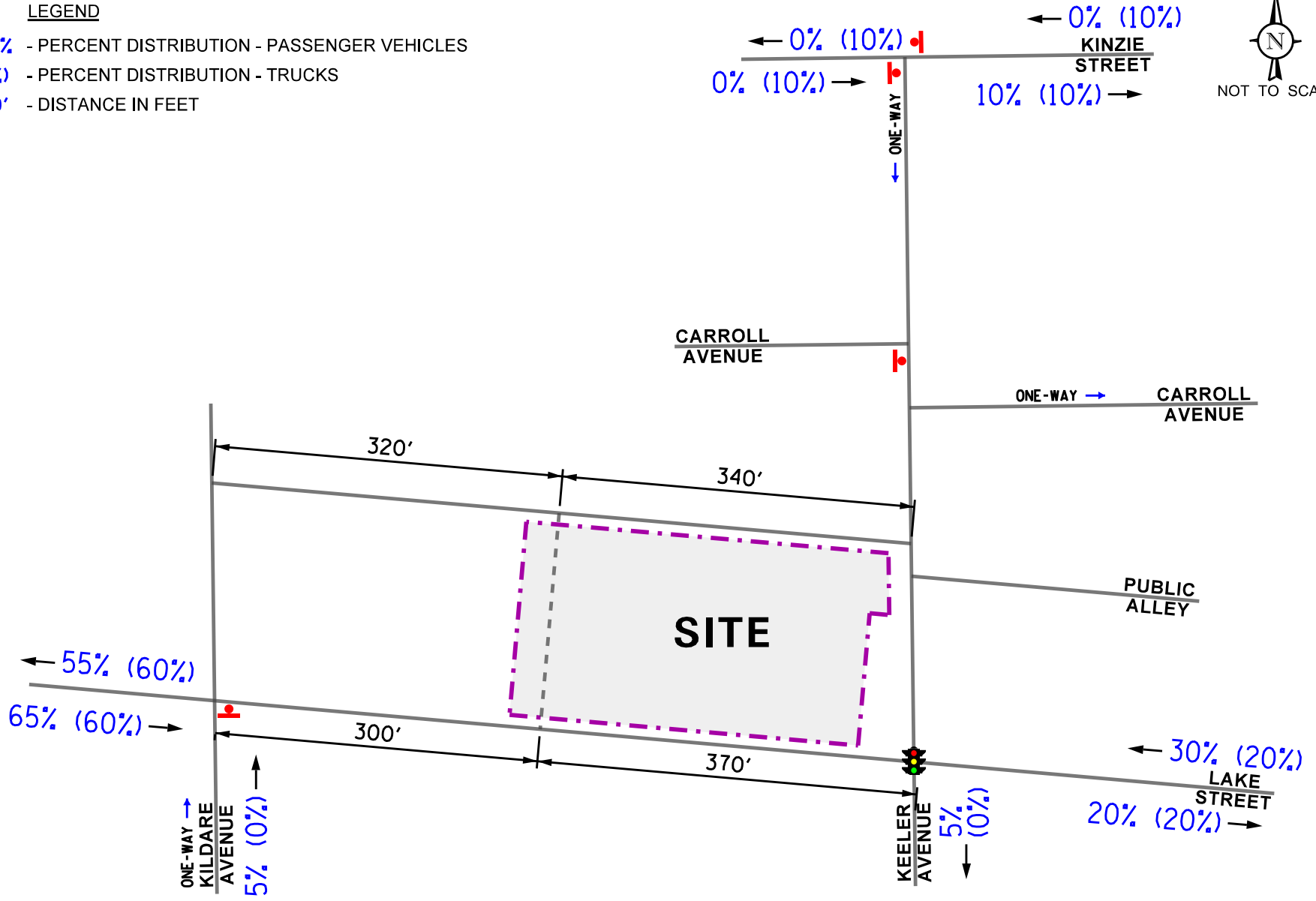
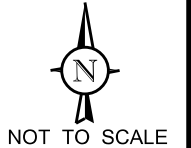
The directions from which traffic will approach and depart the site was estimated based on existing travel patterns, as determined from the traffic counts and the proposed access system of the development. **Figure 6** illustrates the directional distribution of traffic.

Development-Generated Traffic Volumes

The total number of peak hour vehicle trips estimated to be generated by the proposed development was based on General Light Industrial (Land-Use Code 110) vehicle trip generation rates contained in *Trip Generation Manual*, 11th Edition, published by the Institute of Transportation Engineers (ITE). **Table 1** summarizes the trips projected to be generated by the development during the peak hours and on a daily basis. **Table 2** summarizes the trips projected to be generated by the development throughout the day. Copies of the ITE trip generation rates are included in the Appendix. It should be noted that given the location of the site within an urban area and the proximity of the site to public transportation and alternative modes of transportation, the number of passenger vehicle trips will be reduced. However, to provide a conservative analysis, no reduction was applied.

LEGEND

- 00% - PERCENT DISTRIBUTION - PASSENGER VEHICLES
- (00%) - PERCENT DISTRIBUTION - TRUCKS
- 00' - DISTANCE IN FEET



4204 W Lake Street
Chicago, Illinois

Directional Distribution



Job No: 23-176

Figure: 6

Table 1

ESTIMATED PEAK HOUR AND DAILY TRIP GENERATION

ITE Land-Use Code	Type/Size	Weekday Morning Peak Hour			Weekday Evening Peak Hour			Daily Trips		
		In	Out	Total	In	Out	Total	In	Out	Total
110	Light Industrial (44,187 s.f.)	30	4	34	3	19	22	109	109	218
	Truck Trips	0	1	1	0	0	0	6	6	12
	Passenger Vehicle Trips	30	3	33	3	19	22	103	103	206

Table 2
ESTIMATED 24-HOUR SITE-GENERATED TRAFFIC

Hour	Light Industrial (ITE LUC 110) – 44,187 s.f.								
	Trucks			Passenger Vehicles			Total		
	In	Out	Total	In	Out	Total	In	Out	Total
0:00	0	0	0	0	0	0	0	0	0
1:00	0	0	0	0	0	0	0	0	0
2:00	0	0	0	0	0	0	0	0	0
3:00	0	0	0	0	0	0	0	0	0
4:00	0	0	0	1	0	1	1	0	1
5:00	0	0	0	5	0	5	5	0	5
6:00	0	0	0	6	1	7	6	1	7
7:00	1	0	1	15	2	17	16	2	18
8:00	0	1	1	30	3	33	30	4	34
9:00	1	1	2	5	6	11	6	7	13
10:00	1	1	2	6	7	13	7	8	15
11:00	0	0	0	6	9	15	6	9	15
12:00	0	0	0	8	11	19	8	11	19
13:00	1	1	2	7	7	14	8	8	16
14:00	1	1	2	6	8	14	7	9	16
15:00	1	1	2	4	11	15	5	12	17
16:00	0	0	0	3	19	22	3	19	22
17:00	0	0	0	1	17	18	1	17	18
18:00	0	0	0	0	2	2	0	2	2
19:00	0	0	0	0	0	0	0	0	0
20:00	0	0	0	0	0	0	0	0	0
21:00	0	0	0	0	0	0	0	0	0
22:00	0	0	0	0	0	0	0	0	0
23:00	0	0	0	0	0	0	0	0	0
Total	6	6	12	103	103	206	109	109	218

Based on daily trips (Table 1) and ITE's Hourly Distribution of Entering and Exiting Truck Trips and Vehicle Trips tables.

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 development.

Development Traffic Assignment

The estimated weekday morning and weekday evening peak hour traffic volumes that will be generated by the proposed development were assigned to the street system in accordance with the previously described directional distribution (Figure 6).

Figure 7 illustrates the traffic assignment of the new passenger vehicle trips for the development. **Figure 8** illustrates the traffic assignment of the new truck trips for the development.

Ambient Traffic Growth

To account for any additional increase in traffic due to other factors or developments not previously discussed, an ambient growth factor of 0.5 percent per year was applied to the study area over a six-year period to represent Year 2029 conditions. Furthermore, in order to account for the increase in population in the study area, bicycle and pedestrian volumes were increased by 10 percent at each intersection.

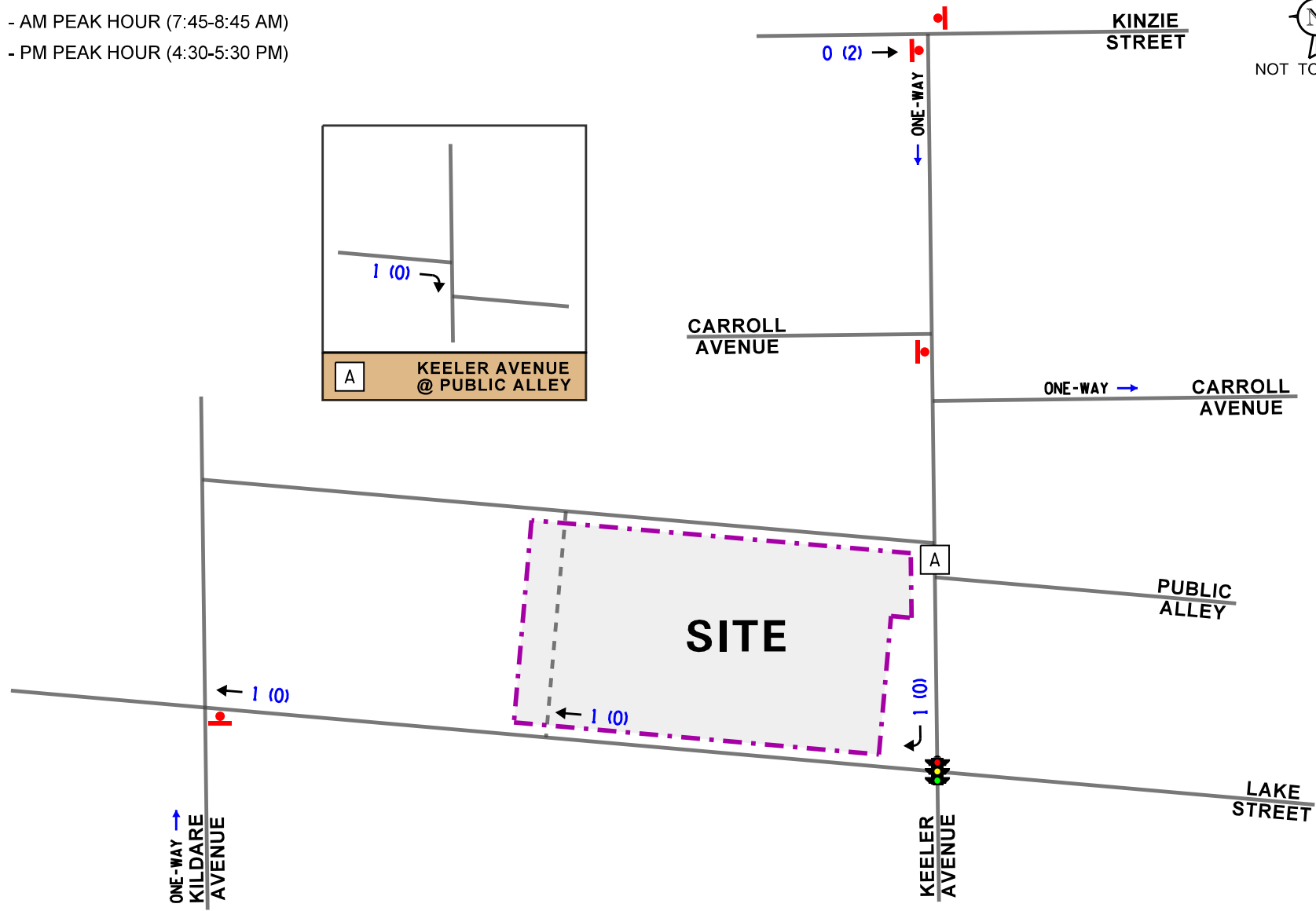
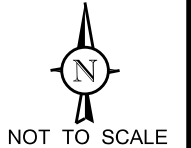
Figure 9 illustrates the Year 2029 no build volumes which include the existing traffic volumes increased by the ambient growth factor.

Total Projected Traffic Volumes

The Year 2029 no build volumes were combined with the new peak hour traffic volumes generated by the proposed development to determine the Year 2029 total traffic volumes, shown in **Figure 10**.

LEGEND

- 00 - AM PEAK HOUR (7:45-8:45 AM)
- (00) - PM PEAK HOUR (4:30-5:30 PM)



4204 W Lake Street
Chicago, Illinois

Site-Generated Traffic Volumes
Trucks

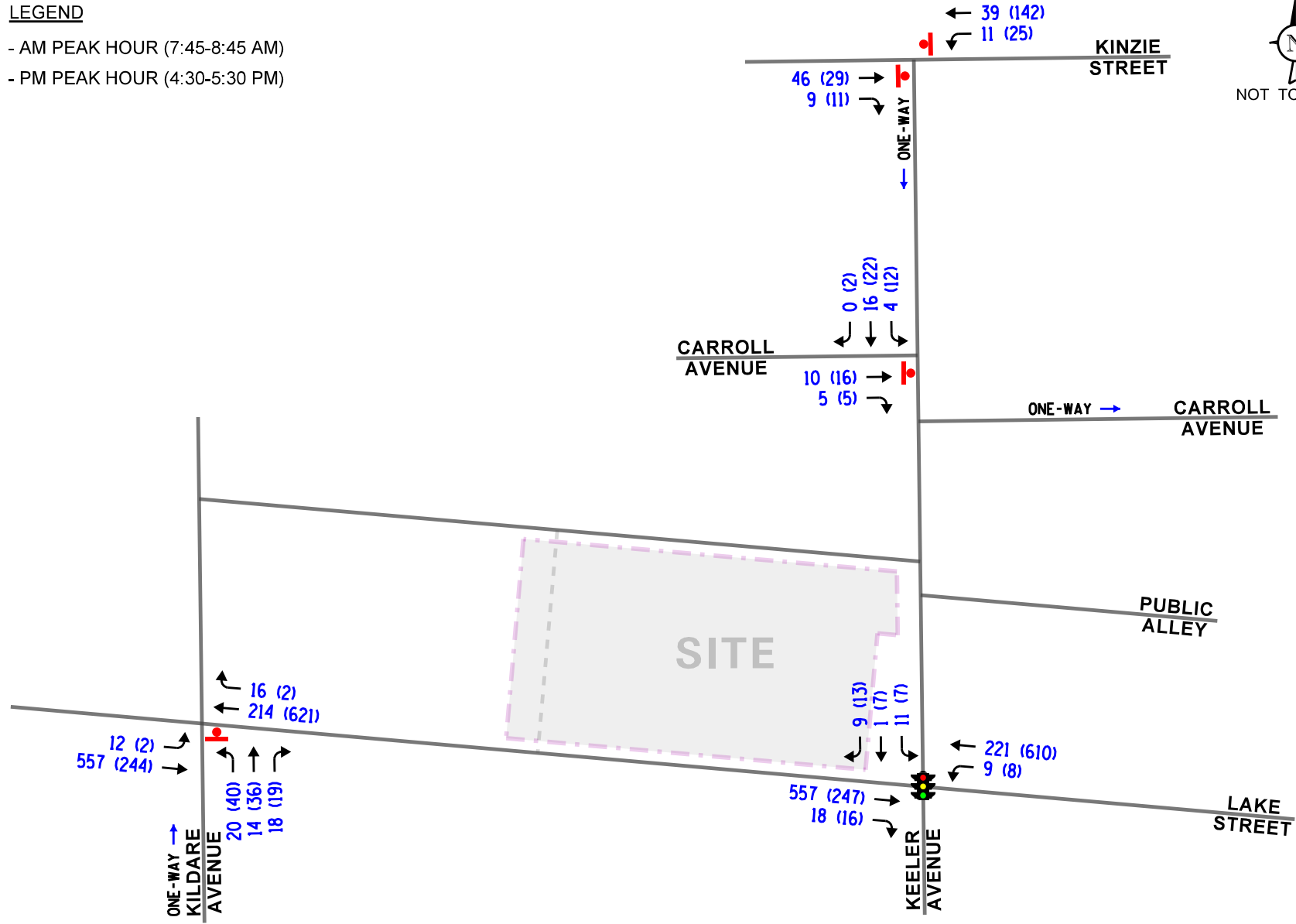
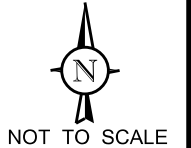


Job No: 23-176

Figure: 8

LEGEND

- 00** - AM PEAK HOUR (7:45-8:45 AM)
- (00)** - PM PEAK HOUR (4:30-5:30 PM)



4204 W Lake Street
Chicago, Illinois

Year 2029 No-Build Traffic Volumes

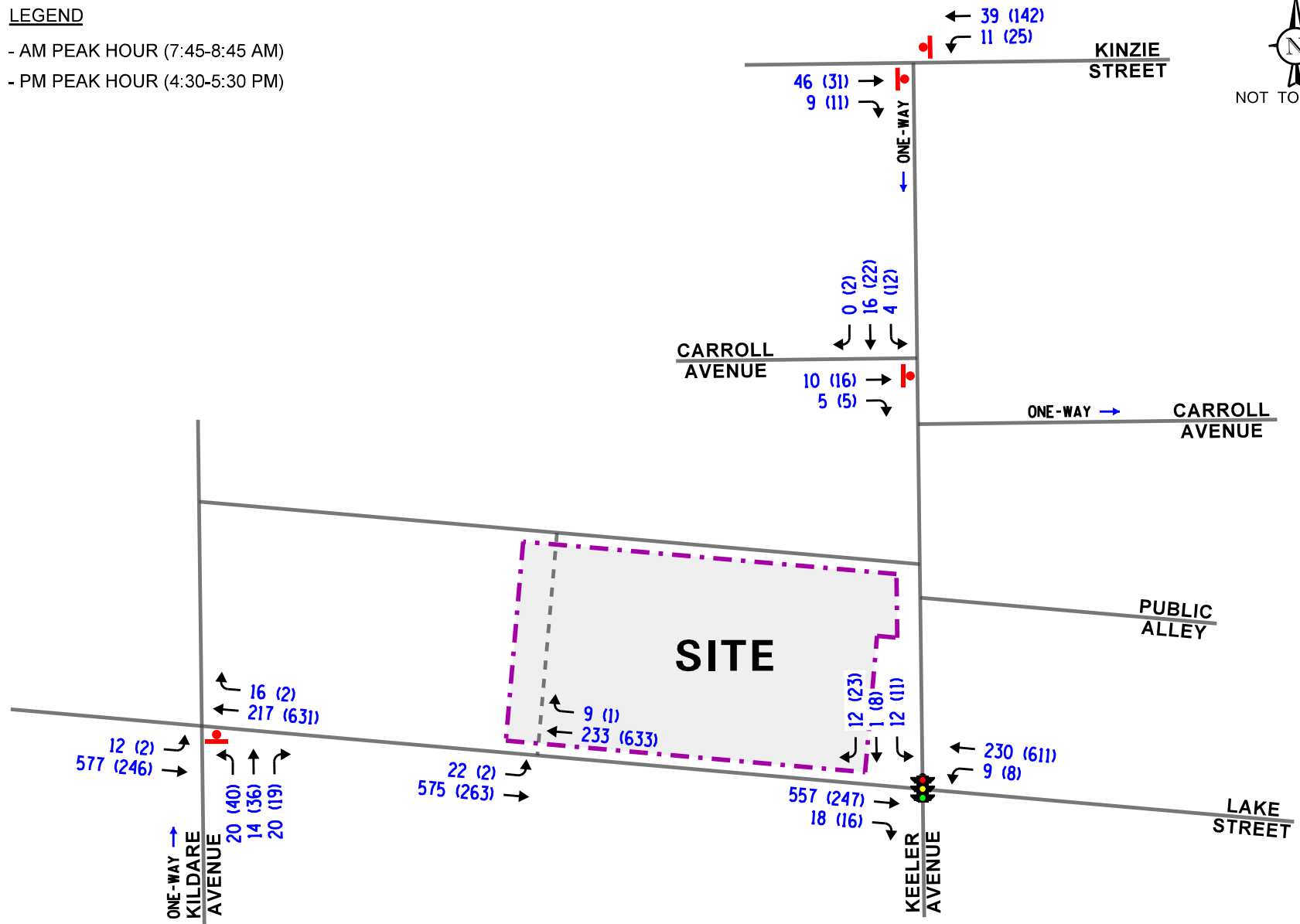
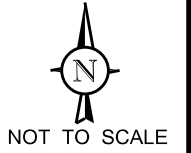


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Figure: 9

LEGEND

- 00 - AM PEAK HOUR (7:45-8:45 AM)
- (00) - PM PEAK HOUR (4:30-5:30 PM)



4204 W Lake Street
Chicago, Illinois

Year 2029 Total Traffic Volumes



Job No: 23-176 Figure: 10

5. Traffic Analysis and Recommendations

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

Traffic Analyses

Intersection analyses were performed for the weekday morning and weekday evening peak hours for the existing and Year 2029 total projected 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 11 software. The analysis for the signalized intersections were conducted utilizing actual cycle lengths, phasings, and offsets.

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 and Year 2029 total projected conditions are presented in **Tables 3** and **4**. A discussion of the intersections follows. Summary sheets for the capacity analyses are included in the Appendix. Additional tables summarizing the existing and projected volume to capacity (v/c) ratios and 95th percentile queues are also included in the Appendix.

Table 3
CAPACITY ANALYSIS RESULTS – EXISTING CONDITIONS

Intersection	Weekday Morning Peak Hour		Weekday Evening Peak Hour	
	LOS	Delay	LOS	Delay
Lake Street with Keeler Avenue¹				
• Overall	B	17.1	B	17.2
• Eastbound Approach	B	18.2	B	14.2
• Westbound Approach	B	15.0	B	18.9
• Southbound Approach	A	9.2	A	8.6
Lake Street with Kildare Avenue²				
• Eastbound Left Turn	A	7.9	A	8.7
• Northbound Approach	B	14.2	B	13.3
Keeler Avenue with Kinzie Street³				
• Eastbound Approach	A	7.3	A	7.3
• Westbound Approach	A	7.4	A	8.6
Keeler Avenue with Carroll Avenue²				
• Eastbound Approach	A	8.4	A	8.5
1 – Signalized	LOS = Level of Service			
2 – Two-Way Stop Control	Delay is measured in seconds.			
3 – All-Way Stop Control				

Table 4
CAPACITY ANALYSIS RESULTS – YEAR 2029 PROJECTED CONDITIONS

Intersection	Weekday Morning Peak Hour		Weekday Evening Peak Hour	
	LOS	Delay	LOS	Delay
Lake Street with Keeler Avenue¹				
• Overall	B	17.2	B	17.2
• Eastbound Approach	B	18.4	B	14.2
• Westbound Approach	B	15.1	B	19.1
• Southbound Approach	A	9.2	A	7.8
Lake Street with Kildare Avenue²				
• Eastbound Left Turn	A	7.9	A	8.8
• Northbound Approach	B	14.7	B	13.6
Lake Street with the Proposed Access Drive²				
• Eastbound Left Turn	A	7.8	A	8.9
Keeler Avenue with Kinzie Street³				
• Eastbound Approach	A	7.3	A	7.3
• Westbound Approach	A	7.4	A	8.7
Keeler Avenue with Carroll Avenue²				
• Eastbound Approach	A	8.4	A	8.5
Keeler Avenue with the East-West Alley²				
• Eastbound Approach	A	8.6	A	8.5
1 – Signalized		LOS = Level of Service		
2 – Two-Way Stop Control		Delay is measured in seconds.		
3 – All-Way Stop Control				

Discussion and Recommendations

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

Lake Street with Keeler Avenue

The results of the capacity analysis indicate that overall, this intersection currently operates at LOS B during the weekday morning and weekday evening peak hours. Further, all movements operate at LOS B or better. Under Year 2029 total projected conditions, this intersection is projected to continue to operate at LOS B during both peak hours with increases in delay of less than one second. As such, this intersection has sufficient reserve capacity to accommodate the traffic estimated to be generated by the proposed development and no street improvements or traffic signal modifications will be required.

Lake Street with Kildare Avenue, Keeler Avenue with Kinzie Street, and Keeler Avenue with Carroll Avenue

The results of the capacity analysis indicate that all critical movements at these intersections currently operate at LOS B or better during the weekday morning and weekday evening peak hours. Under Year 2029 total projected conditions, all critical movements are projected to continue to operate at the same LOS during both peak hours. As such, these intersections have sufficient reserve capacity to accommodate the traffic estimated to be generated by the proposed development and no street improvements or traffic control modifications will be required.

Proposed Access System

As proposed, access to the employee parking lot will be provided via an inbound only access on Lake Street and an outbound only access drive on the east-west alley. Access to the truck loading bays will be provided via the east-west alley. The following summarizes how the access system is projected to operate:

- Employees turning into the employee parking lot from Lake Street will be able to do so with minimal delay.
- All outbound traffic from the development will depart via the east-west alley. Vehicles will be able to turn to/from the east-west alley with minimal delay.
- Truck loading will occur off the east-west alley which will reduce the impact of truck traffic on area streets.

As such, the proposed access system will be adequate in accommodating the traffic generated by the development.

6. Conclusion

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

- As proposed, the site will be developed with an approximately 44,187 square-foot industrial building.
- Access to the development is proposed to be provided as follows:
 - An inbound only access drive on Lake Street approximately 300 feet east of Kildare Avenue. This access drive will provide one inbound lane and will serve the employee parking lot.
 - An outbound only access drive on the east-west alley approximately 320 feet east of Kildare Avenue. This access drive will provide one outbound lane and will serve the employee parking lot.
 - Access to the truck loading bays will be provided via a direct connection to the east-west alley in the northeast corner of the site.
- Area intersections have sufficient reserve capacity to accommodate the traffic estimated to be generated by the proposed development and no street improvements or traffic control modifications are required.
- The proposed access system will be adequate in accommodating the traffic estimated to be generated by the development.

Appendix

Traffic Count Summary Sheets
Preliminary Site Plan
ITE Trip Generation Sheets
Level of Service Criteria
Capacity Analysis Summary Sheets
Additional Capacity Analysis Tables

Traffic Count Summary Sheets

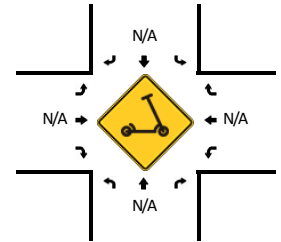
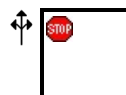
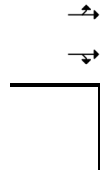
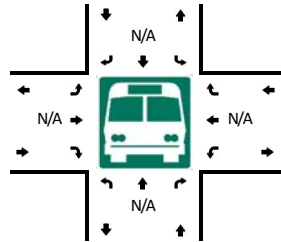
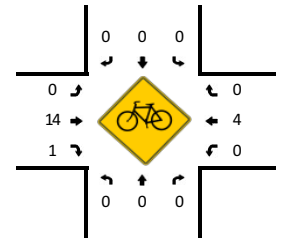
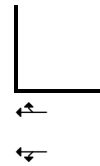
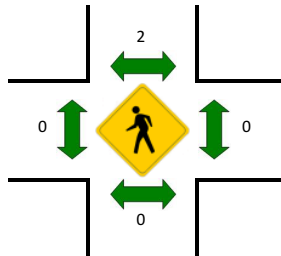
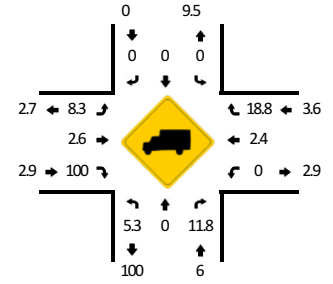
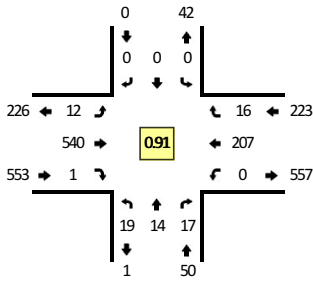
LOCATION: N Kildare Ave -- W Lake St
CITY/STATE: Chicago, IL

QC JOB #: 16273101
DATE: Tue, Jul 18 2023

Peak-Hour: 7:45 AM -- 8:45 AM
Peak 15-Min: 8:30 AM -- 8:45 AM



TRUE DATA TO IMPROVE MOBILITY

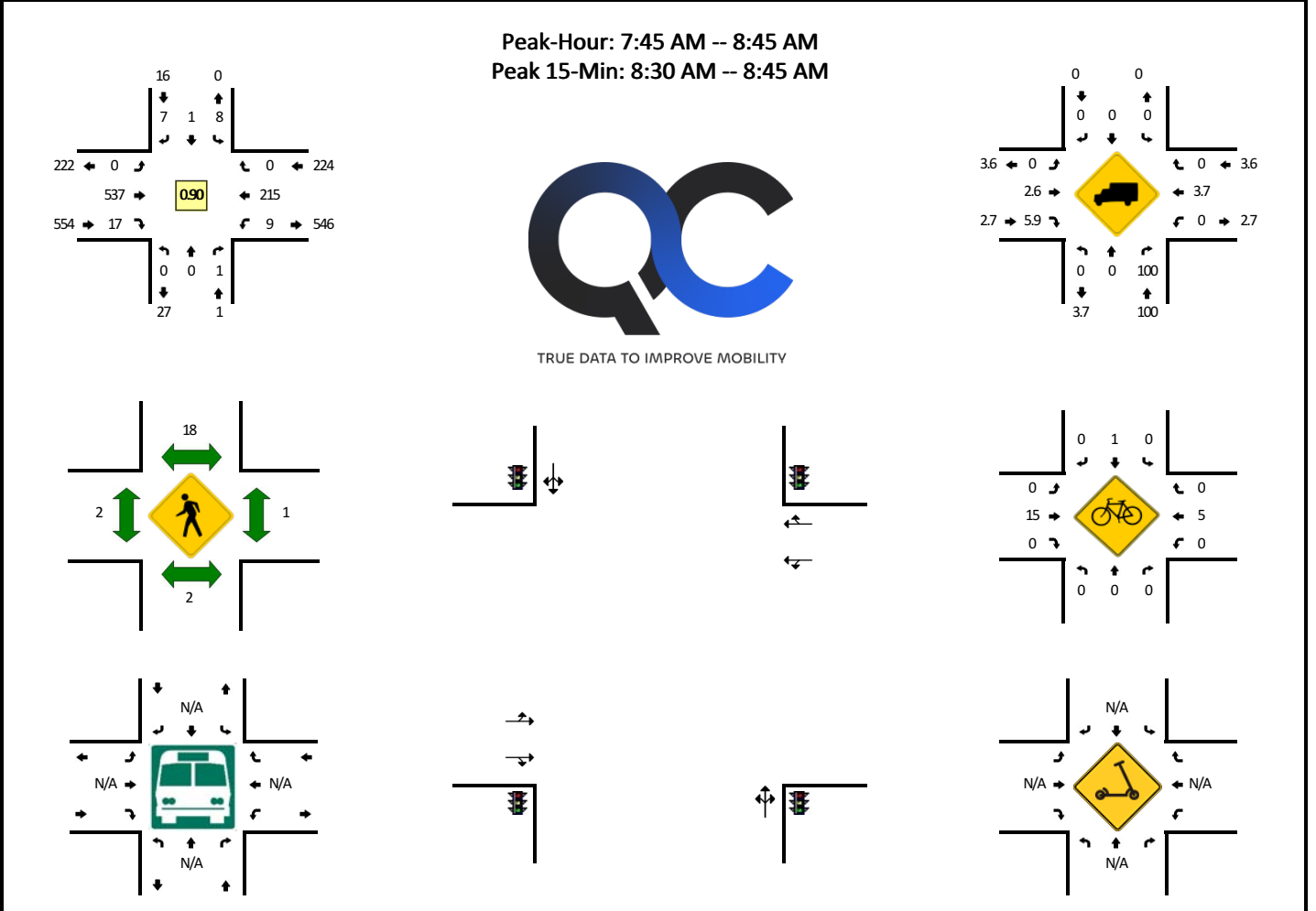


15-Min Count Period Beginning At	N Kildare Ave (Northbound)				N Kildare Ave (Southbound)				W Lake St (Eastbound)				W Lake St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	3	1	3	0	0	0	0	0	4	106	0	0	0	31	2	0	150	
7:15 AM	5	2	2	0	3	0	0	0	7	116	0	0	0	38	2	0	175	
7:30 AM	1	5	0	0	0	0	0	0	0	132	0	0	0	41	2	0	181	
7:45 AM	5	1	4	0	0	0	0	0	2	121	0	0	0	75	7	0	215	721
8:00 AM	7	4	5	0	0	0	0	0	3	125	0	0	0	44	5	0	193	764
8:15 AM	3	4	4	0	0	0	0	0	7	129	0	0	0	42	1	0	190	779
8:30 AM	4	5	4	0	0	0	0	0	0	165	1	0	0	46	3	0	228	826
8:45 AM	3	6	3	0	0	0	0	0	4	115	0	0	0	42	2	0	175	786
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	16	20	16	0	0	0	0	0	0	660	4	0	0	184	12	0	912	
Heavy Trucks	0	0	4		0	0	0		0	12	4		0	4	4		28	
Buses																		
Pedestrians		0				0				0				0			0	
Bicycles	0	0	0		0	0	0		0	12	0		0	0	0		12	
Scoters																		

Comments:

LOCATION: N Keeler Ave -- W Lake St
CITY/STATE: Chicago, IL

QC JOB #: 16273103
DATE: Tue, Jul 18 2023

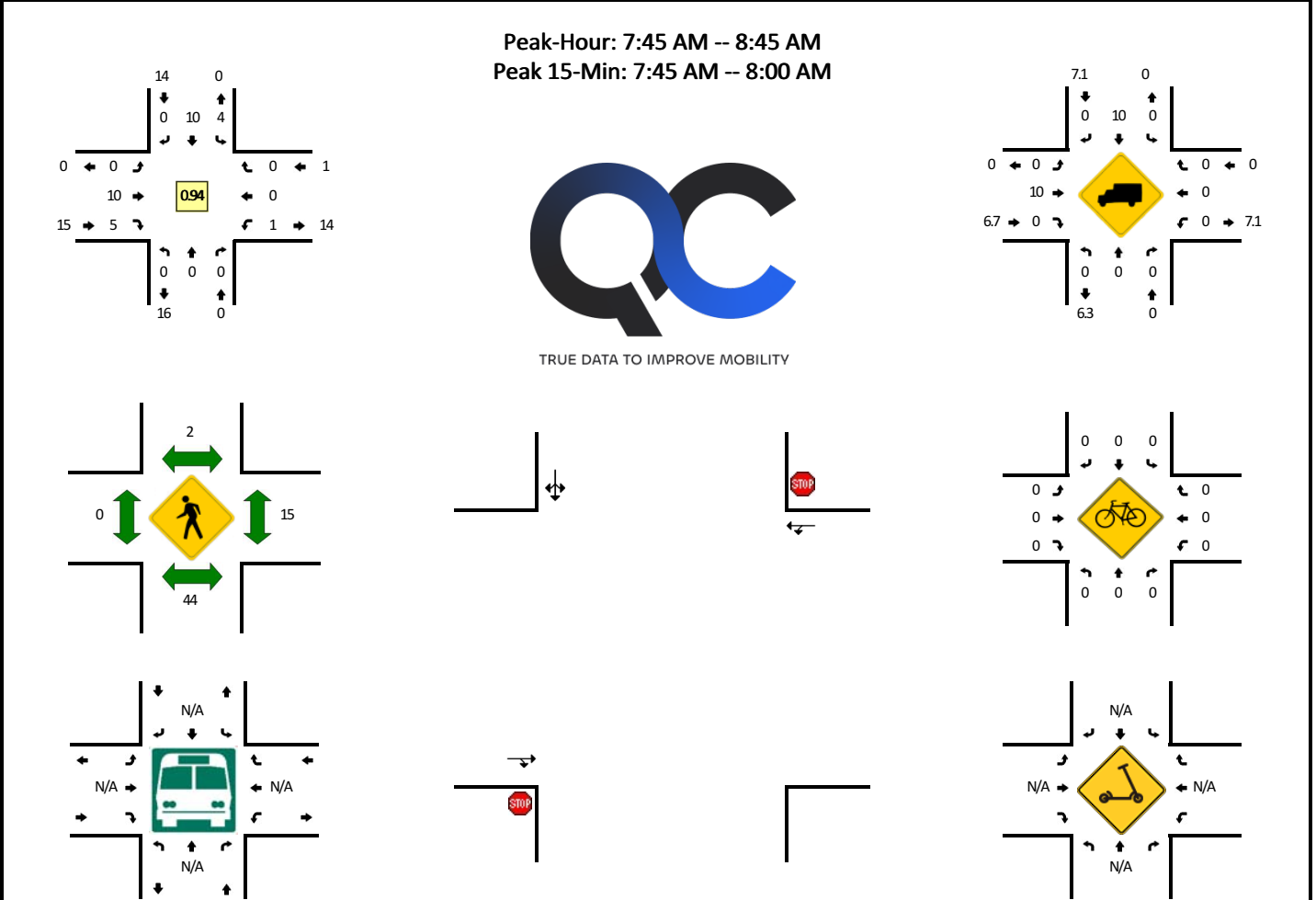


15-Min Count Period Beginning At	N Keeler Ave (Northbound)				N Keeler Ave (Southbound)				W Lake St (Eastbound)				W Lake St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	0	0	0	0	0	1	0	0	104	1	0	1	32	0	0	139	
7:15 AM	0	0	0	0	1	0	4	0	0	126	0	0	0	37	0	0	168	
7:30 AM	0	0	0	0	3	1	3	0	0	124	4	0	2	40	0	0	177	
7:45 AM	0	0	0	0	2	0	3	0	0	111	5	0	5	77	0	0	203	687
8:00 AM	0	0	1	0	3	1	1	0	0	124	5	0	0	48	0	0	183	731
8:15 AM	0	0	0	0	1	0	1	0	0	137	3	0	2	44	0	0	188	751
8:30 AM	0	0	0	0	2	0	2	0	0	165	4	0	2	46	0	0	221	795
8:45 AM	0	0	0	0	1	1	3	0	0	116	5	0	1	43	0	0	170	762
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	0	0	0	0	8	0	8	0	0	660	16	0	8	184	0	0	884	
Heavy Trucks	0	0	0	0	0	0	0	0	0	8	0	0	0	8	0	0	16	
Buses																		
Pedestrians		4				20				8				0			32	
Bicycles	0	0	0		0	0	0		0	16	0		0	0	0		16	
Scooters																		

Comments:

LOCATION: N Keeler Ave -- W Carroll Ave
CITY/STATE: Chicago, IL

QC JOB #: 16273105
DATE: Tue, Jul 18 2023



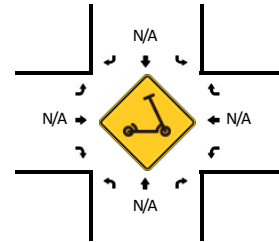
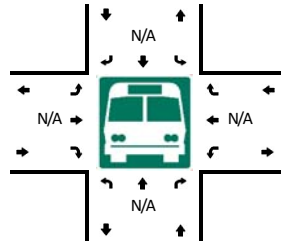
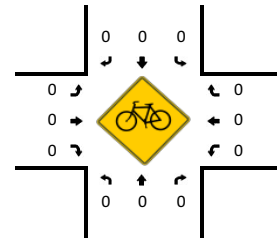
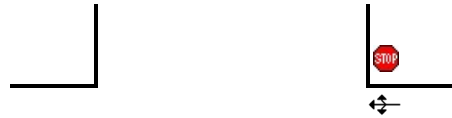
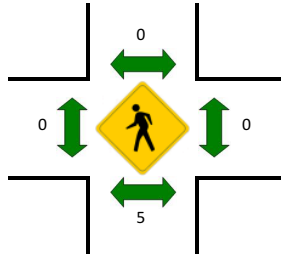
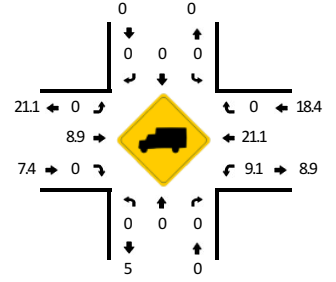
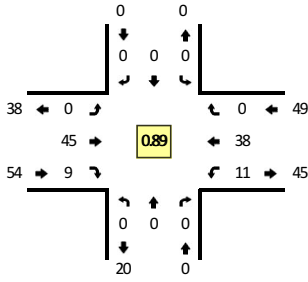
15-Min Count Period Beginning At	N Keeler Ave (Northbound)				N Keeler Ave (Southbound)				W Carroll Ave (Eastbound)				W Carroll Ave (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	0	0	0	1	1	0	0	0	1	1	0	0	0	0	0	4	
7:15 AM	0	0	0	0	0	4	0	0	0	0	2	0	0	0	0	0	6	
7:30 AM	0	0	0	0	0	5	0	0	0	0	2	0	0	0	0	0	7	
7:45 AM	0	0	0	0	1	5	0	0	0	1	1	0	0	0	0	0	8	25
8:00 AM	0	0	0	0	0	2	0	0	0	4	2	0	0	0	0	0	8	29
8:15 AM	0	0	0	0	1	1	0	0	0	3	1	0	0	0	0	0	6	29
8:30 AM	0	0	0	0	2	2	0	0	0	2	1	0	1	0	0	0	8	30
8:45 AM	0	0	0	0	0	2	1	0	1	1	0	0	0	0	0	0	5	27
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	0	0	0	0	4	20	0	0	0	4	4	0	0	0	0	0	32	
Heavy Trucks	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	4	
Buses																		
Pedestrians		32				0				0				4			36	
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0	
Scoters																		

Comments:

LOCATION: N Keeler Ave -- W Kinzie St
CITY/STATE: Chicago, IL

QC JOB #: 16273107
DATE: Tue, Jul 18 2023

Peak-Hour: 7:45 AM -- 8:45 AM
Peak 15-Min: 8:00 AM -- 8:15 AM



15-Min Count Period Beginning At	N Keeler Ave (Northbound)				N Keeler Ave (Southbound)				W Kinzie St (Eastbound)				W Kinzie St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	0	0	0	0	0	0	0	0	6	1	0	1	8	0	0	16	
7:15 AM	0	0	0	0	0	0	0	0	0	12	1	0	1	9	0	0	23	
7:30 AM	0	0	0	0	0	0	0	0	0	8	3	0	2	9	0	0	22	
7:45 AM	0	0	0	0	0	0	0	0	0	11	2	0	4	11	0	0	28	89
8:00 AM	0	0	0	0	0	0	0	0	0	15	2	0	0	12	0	0	29	102
8:15 AM	0	0	0	0	0	0	0	0	0	8	4	0	1	8	0	0	21	100
8:30 AM	0	0	0	0	0	0	0	0	0	11	1	0	6	7	0	0	25	103
8:45 AM	1	0	0	0	0	0	0	0	0	13	1	0	3	12	0	1	31	106
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	0	0	0	0	0	0	0	0	0	60	8	0	0	48	0	0	116	
Heavy Trucks	0	0	0	0	0	0	0	0	0	4	0	0	0	8	0	0	12	
Buses																		
Pedestrians		0				0				0				0			0	
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0	
Scoters																		

Comments:

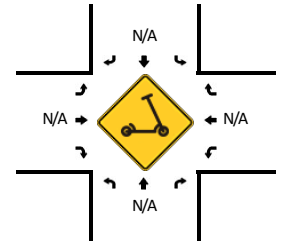
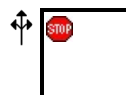
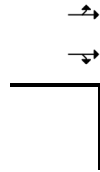
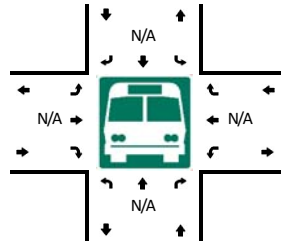
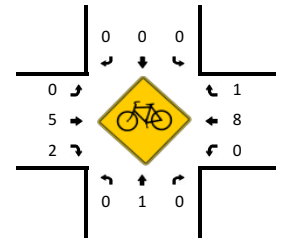
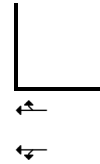
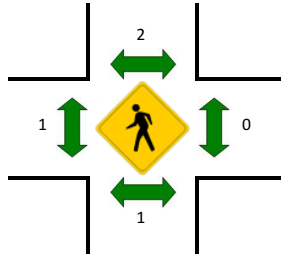
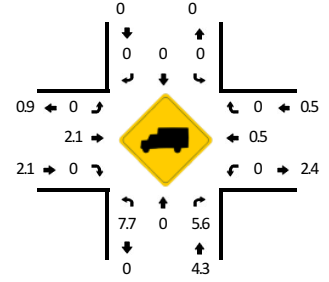
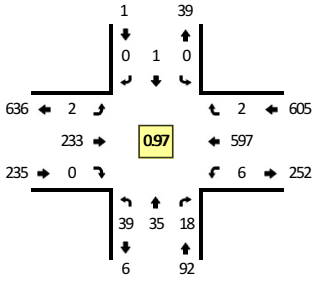
LOCATION: N Kildare Ave -- W Lake St
CITY/STATE: Chicago, IL

QC JOB #: 16273102
DATE: Tue, Jul 18 2023

Peak-Hour: 4:30 PM -- 5:30 PM
Peak 15-Min: 5:15 PM -- 5:30 PM



TRUE DATA TO IMPROVE MOBILITY



15-Min Count Period Beginning At	N Kildare Ave (Northbound)				N Kildare Ave (Southbound)				W Lake St (Eastbound)				W Lake St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	5	9	4	0	0	0	1	0	5	56	0	0	0	134	1	0	215	
4:15 PM	10	6	4	0	1	0	0	0	2	44	0	0	0	146	2	1	216	
4:30 PM	14	9	5	0	0	0	0	0	0	55	0	0	1	149	2	0	235	
4:45 PM	6	6	5	0	0	1	0	0	2	57	0	0	1	154	0	0	232	898
5:00 PM	10	11	4	0	0	0	0	0	0	59	0	0	0	140	0	1	225	908
5:15 PM	9	9	4	0	0	0	0	0	0	62	0	0	3	154	0	0	241	933
5:30 PM	11	5	5	0	0	2	0	0	0	52	0	0	1	140	4	0	220	918
5:45 PM	6	9	5	0	1	0	0	0	0	45	0	0	0	114	1	2	183	869
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	36	36	16	0	0	0	0	0	0	248	0	0	12	616	0	0	964	
Heavy Trucks	0	0	0	0	0	0	0	0	0	4	0	0	0	8	0	0	12	
Buses																		
Pedestrians		4				0				4				0			8	
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0	
Scoters																		

Comments:

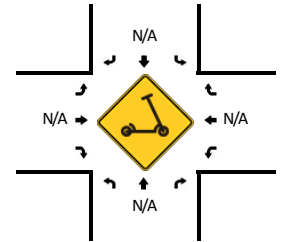
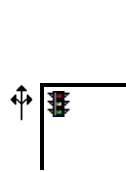
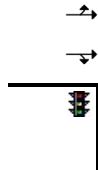
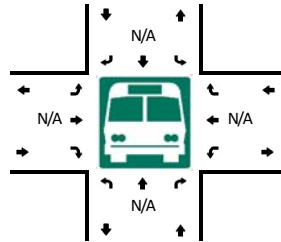
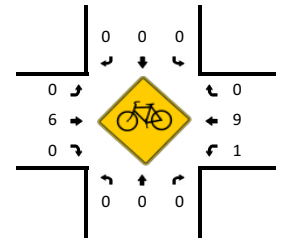
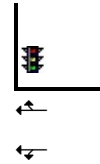
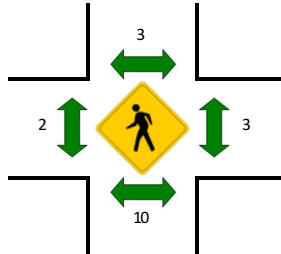
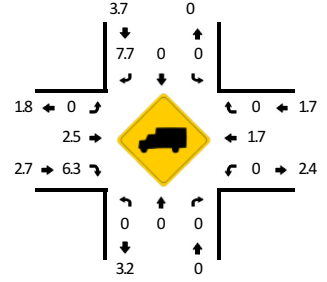
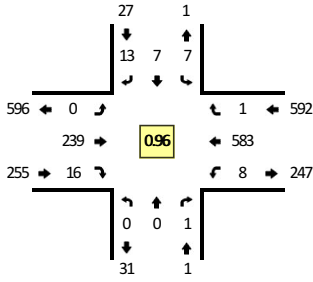
LOCATION: N Keeler Ave -- W Lake St
CITY/STATE: Chicago, IL

QC JOB #: 16273104
DATE: Tue, Jul 18 2023

Peak-Hour: 4:30 PM -- 5:30 PM
Peak 15-Min: 4:45 PM -- 5:00 PM



TRUE DATA TO IMPROVE MOBILITY

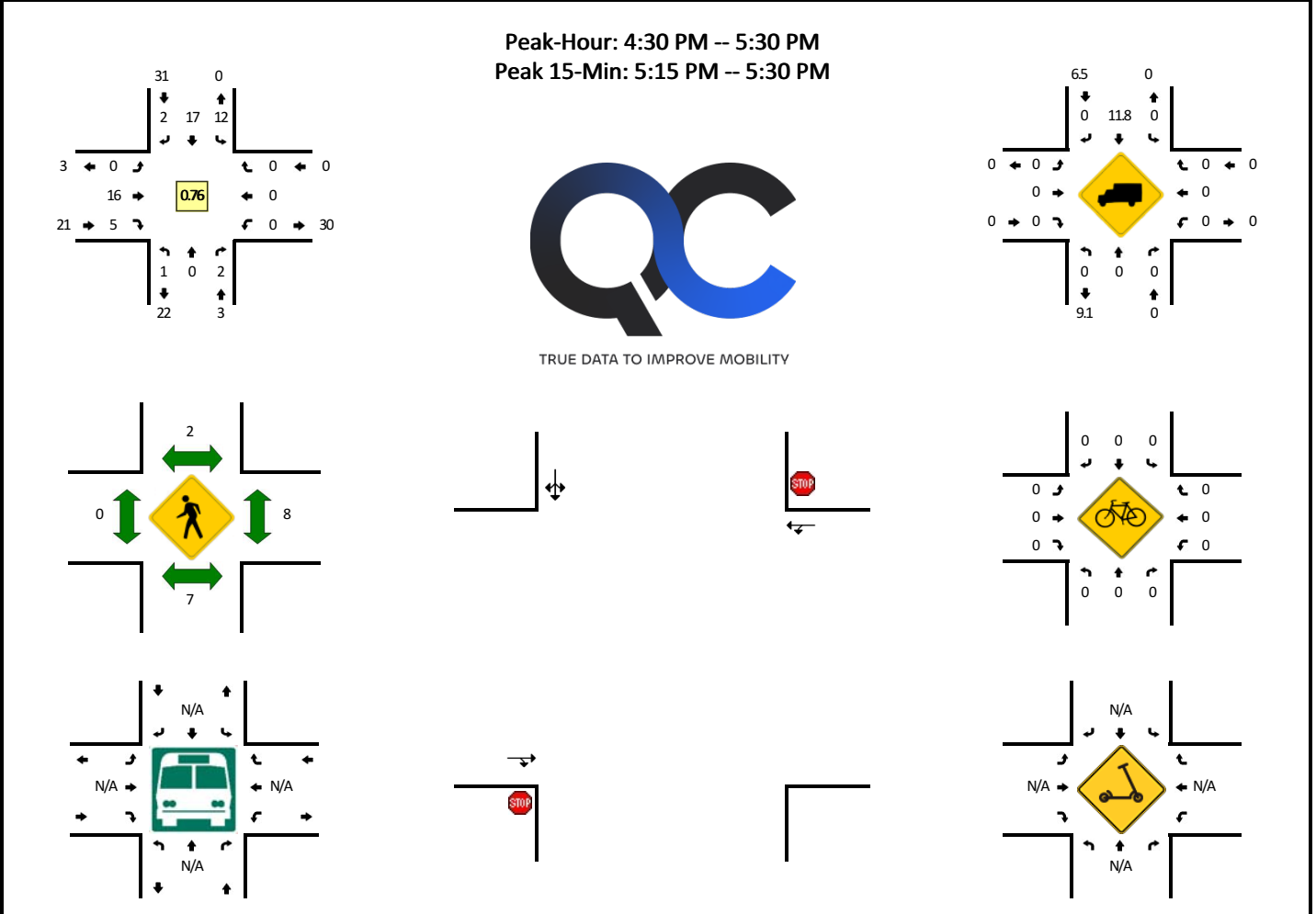


15-Min Count Period Beginning At	N Keeler Ave (Northbound)				N Keeler Ave (Southbound)				W Lake St (Eastbound)				W Lake St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	0	0	0	0	2	4	3	0	0	58	5	0	3	140	0	0	215	
4:15 PM	0	0	0	0	0	1	3	0	0	44	1	0	3	146	0	1	199	
4:30 PM	0	0	1	0	2	3	4	0	0	52	4	0	3	142	1	0	212	
4:45 PM	0	0	0	0	2	1	5	0	0	65	4	0	2	150	0	0	229	855
5:00 PM	0	0	0	0	1	0	1	0	0	60	3	0	2	141	0	0	208	848
5:15 PM	0	0	0	0	2	3	3	0	0	62	5	0	1	150	0	0	226	875
5:30 PM	0	0	0	0	0	3	1	0	0	54	5	0	0	147	0	0	210	873
5:45 PM	0	0	0	0	0	1	0	0	0	51	1	0	2	115	1	0	171	815
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	0	0	0	0	8	4	20	0	0	260	16	0	8	600	0	0	916	
Heavy Trucks	0	0	0	0	0	0	4	0	0	8	0	0	0	4	0	0	16	
Buses																		
Pedestrians		8				8				0				0			16	
Bicycles	0	0	0		0	0	0		0	8	0		4	24	0		36	
Scooters																		

Comments:

LOCATION: N Keeler Ave -- W Carroll Ave
CITY/STATE: Chicago, IL

QC JOB #: 16273106
DATE: Tue, Jul 18 2023

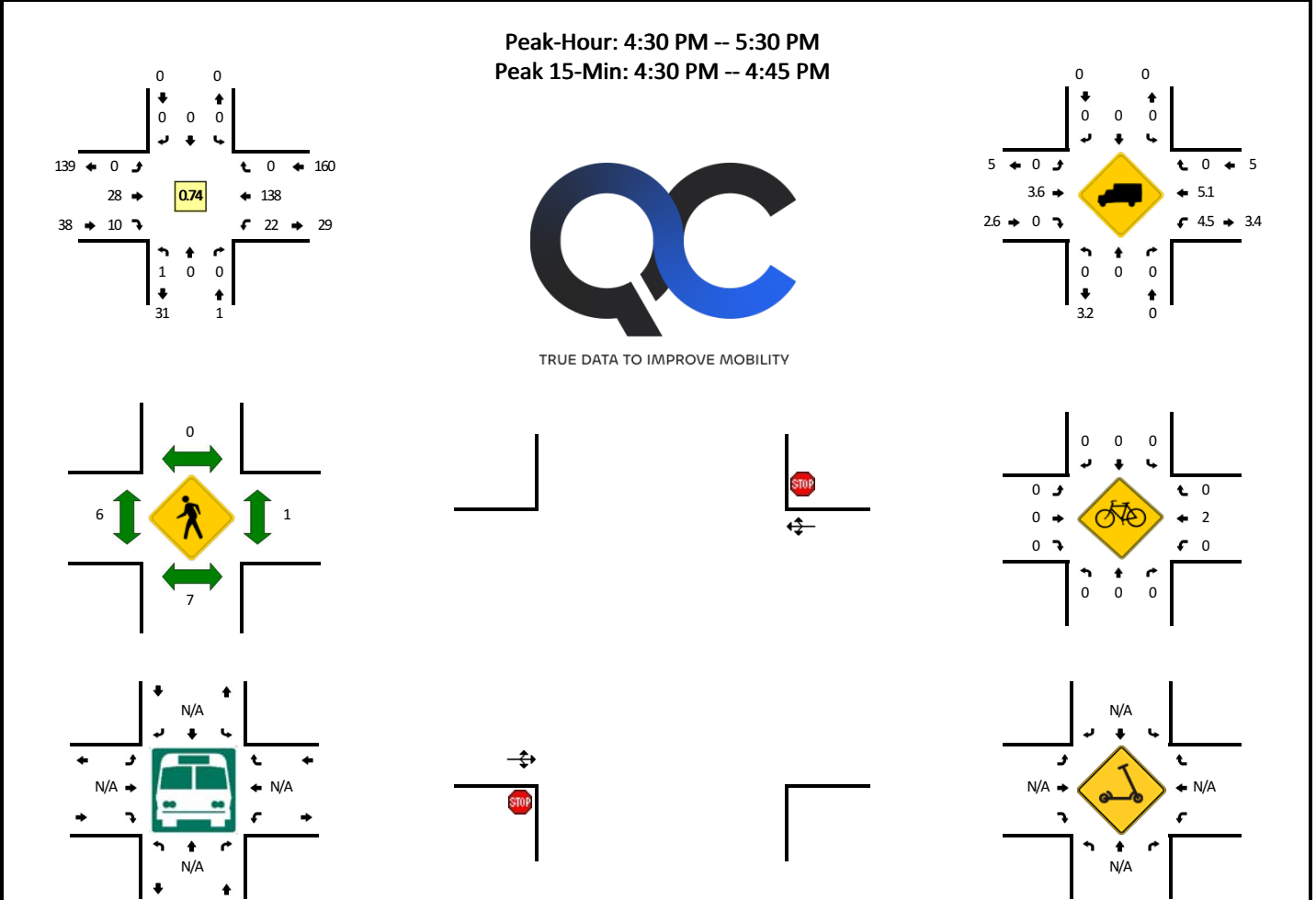


15-Min Count Period Beginning At	N Keeler Ave (Northbound)				N Keeler Ave (Southbound)				W Carroll Ave (Eastbound)				W Carroll Ave (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	0	0	0	0	0	5	1	0	0	7	0	0	0	0	0	0	13	
4:15 PM	0	0	1	0	2	1	1	0	0	3	3	0	0	0	0	0	11	
4:30 PM	1	0	0	0	2	4	1	0	0	3	2	0	0	0	0	0	13	
4:45 PM	0	0	1	0	2	9	0	0	0	3	0	0	0	0	0	0	15	52
5:00 PM	0	0	0	0	3	0	0	0	0	5	1	0	0	0	0	0	9	48
5:15 PM	0	0	1	0	5	4	1	0	0	5	2	0	0	0	0	0	18	55
5:30 PM	0	0	1	0	0	2	0	0	0	6	1	0	0	0	0	0	10	52
5:45 PM	0	0	0	0	0	1	0	0	0	2	1	0	0	0	0	0	4	41
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	0	0	4	0	20	16	4	0	0	20	8	0	0	0	0	0	72	
Heavy Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Buses																		
Pedestrians		8				8				0				8			24	
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0	
Scoters																		

Comments:

LOCATION: N Keeler Ave -- W Kinzie St
CITY/STATE: Chicago, IL

QC JOB #: 16273108
DATE: Tue, Jul 18 2023



15-Min Count Period Beginning At	N Keeler Ave (Northbound)				N Keeler Ave (Southbound)				W Kinzie St (Eastbound)				W Kinzie St (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	0	0	0	0	0	0	0	0	0	9	4	0	3	47	0	0	63	
4:15 PM	0	0	0	0	0	0	0	0	0	7	2	0	2	30	0	2	43	
4:30 PM	1	0	0	0	0	0	0	0	0	7	3	0	4	51	0	1	67	
4:45 PM	0	0	0	0	0	0	0	0	0	4	3	0	7	34	0	0	48	221
5:00 PM	0	0	0	0	0	0	0	0	0	11	0	0	3	20	0	0	34	192
5:15 PM	0	0	0	0	0	0	0	0	0	6	4	0	7	33	0	0	50	199
5:30 PM	0	0	0	0	0	0	0	0	0	4	0	0	1	28	0	0	33	165
5:45 PM	0	0	0	0	0	0	0	0	0	4	1	0	0	16	0	0	21	138
Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total	
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
All Vehicles	4	0	0	0	0	0	0	0	0	28	12	0	16	204	0	4	268	
Heavy Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	8	
Buses																		
Pedestrians		4				0				8				0			12	
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0	
Scoters																		

Comments:
 Report generated on 8/23/2023 9:39 AM SOURCE: Quality Counts, LLC (<http://www.qualitycounts.net>) 1-877-580-2212

Preliminary Site Plan

ITE Trip Generation Sheets

General Light Industrial (110)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday

Setting/Location: General Urban/Suburban

Number of Studies: 37

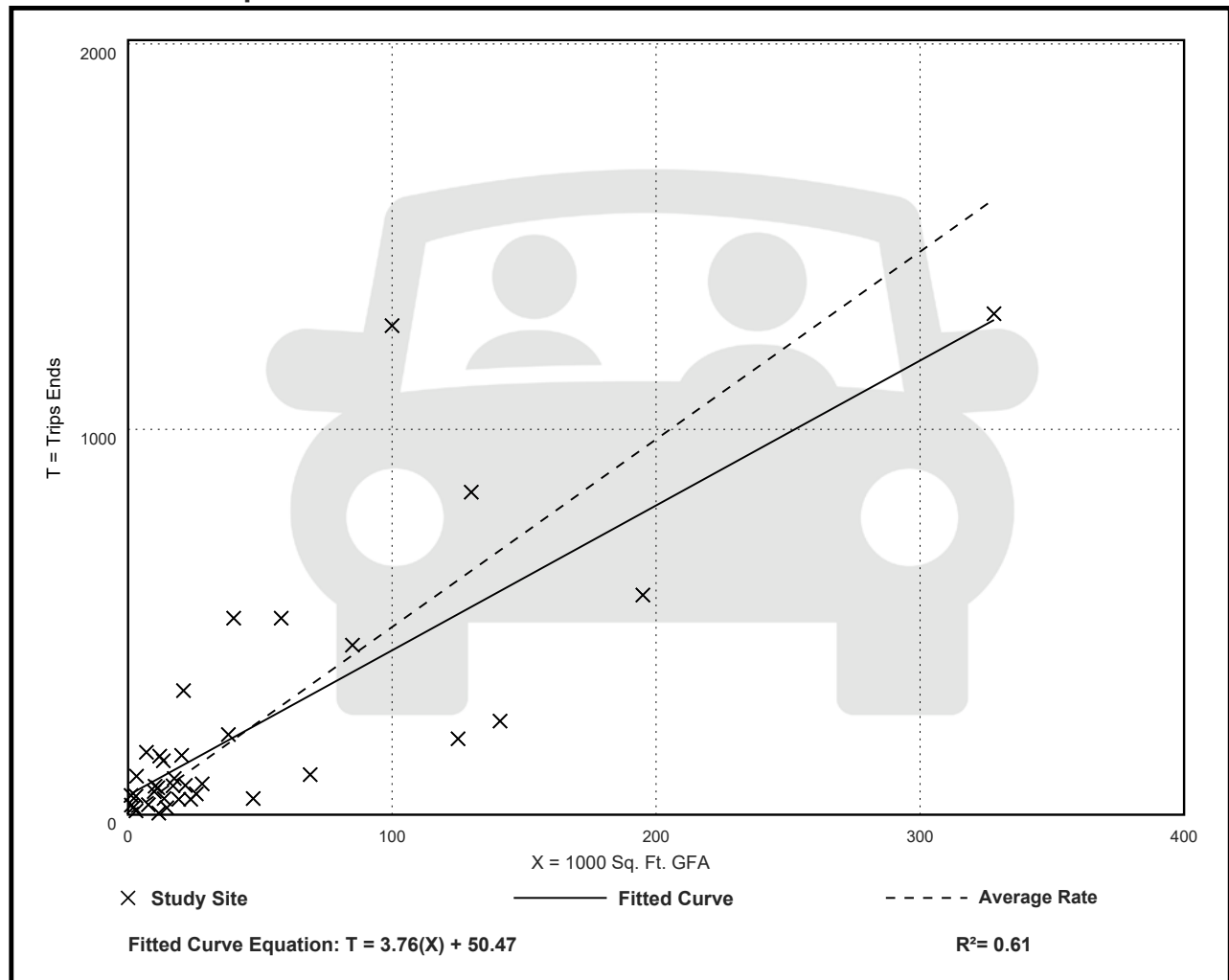
Avg. 1000 Sq. Ft. GFA: 45

Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
4.87	0.34 - 43.86	4.08

Data Plot and Equation



General Light Industrial (110)

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: 41

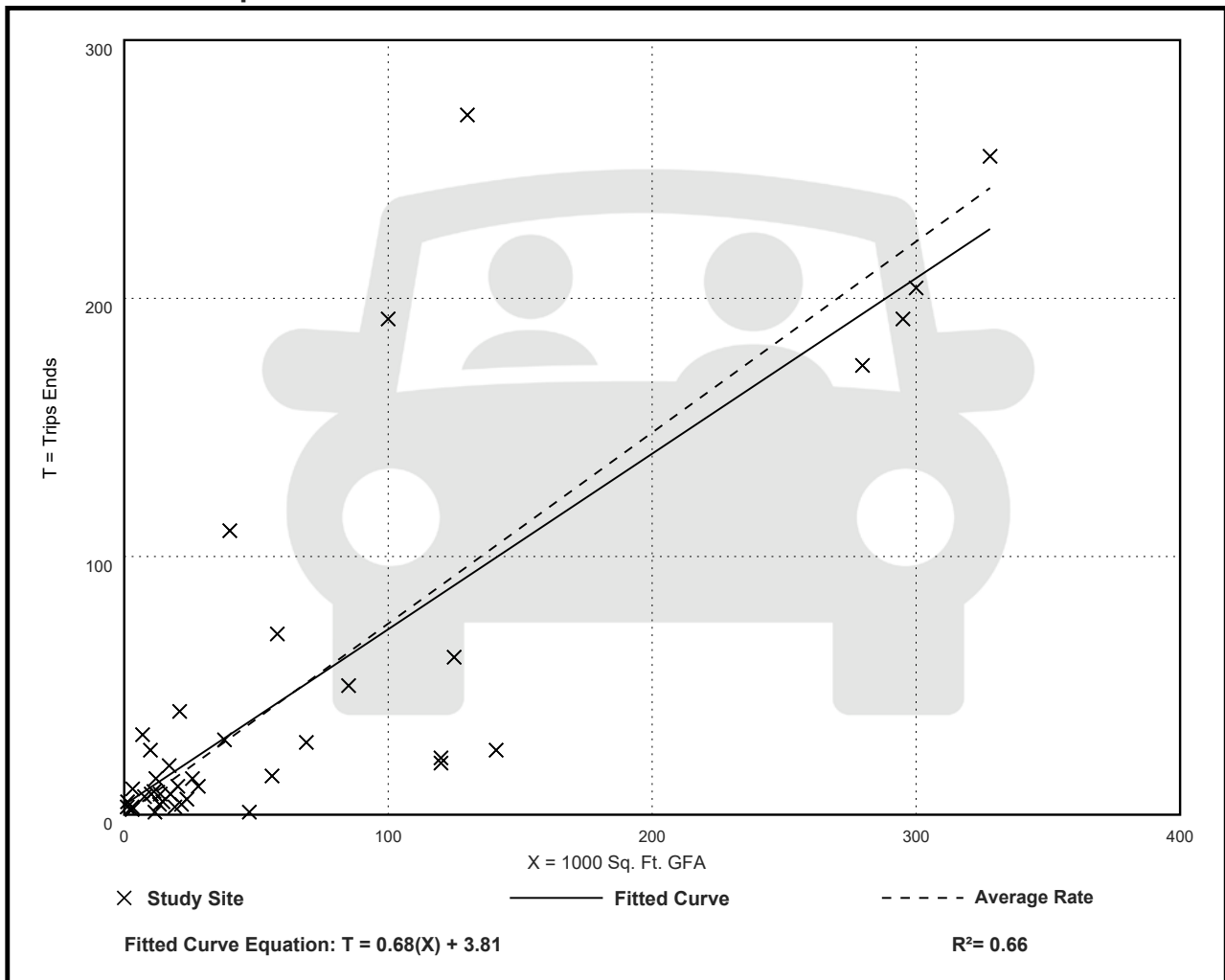
Avg. 1000 Sq. Ft. GFA: 65

Directional Distribution: 88% entering, 12% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.74	0.02 - 4.46	0.61

Data Plot and Equation



General Light Industrial (110)

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: 40

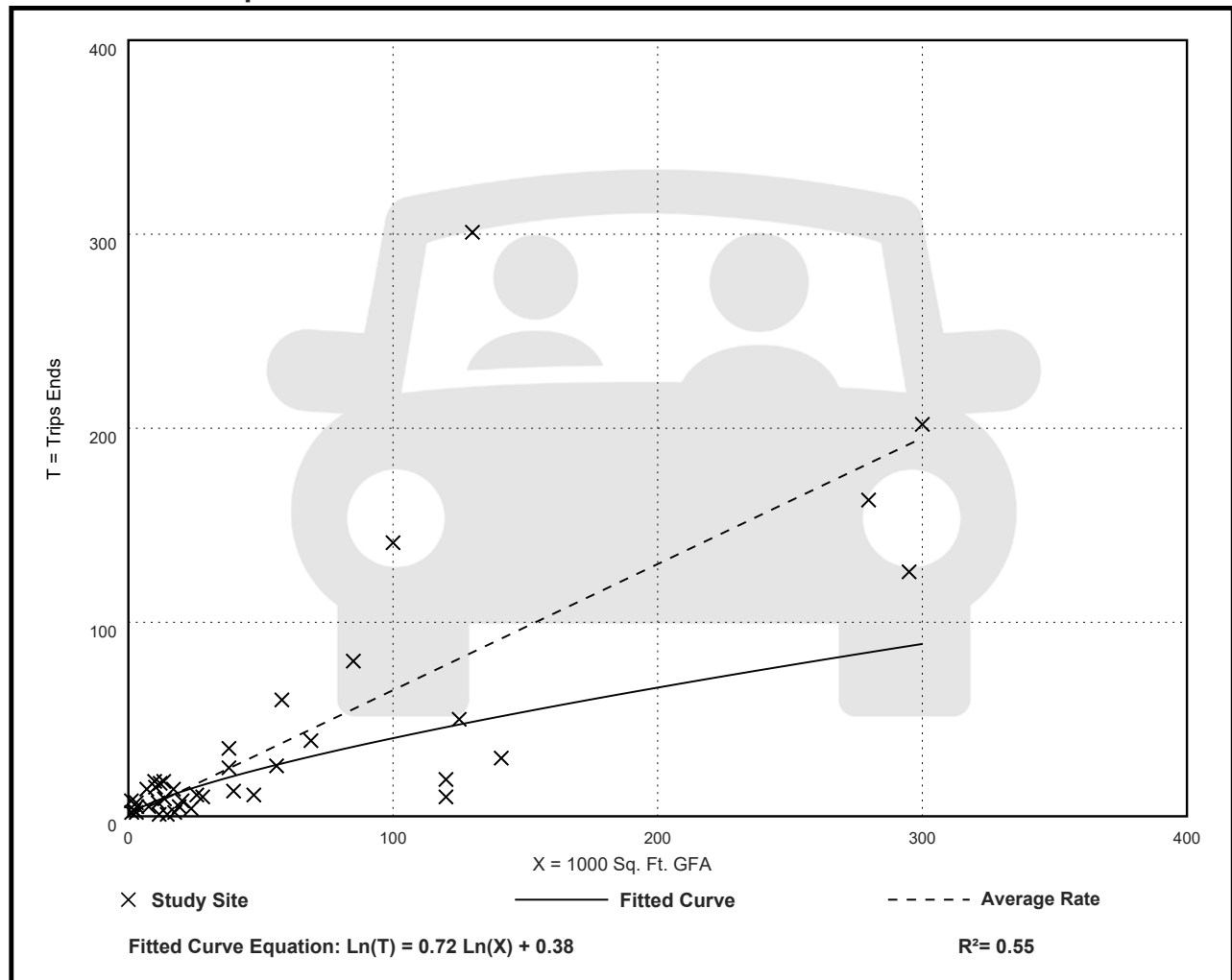
Avg. 1000 Sq. Ft. GFA: 58

Directional Distribution: 14% entering, 86% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
0.65	0.07 - 7.02	0.56

Data Plot and Equation



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*, 6th Edition.

Capacity Analysis Summary Sheets
Existing Weekday Morning Peak Hour Conditions

Lanes, Volumes, Timings
1: Keeler Avenue & Lake Street

09/05/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑						↑↓	
Traffic Volume (vph)	0	541	17	9	215	0	0	0	0	11	1	9
Future Volume (vph)	0	541	17	9	215	0	0	0	0	11	1	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	10	10	10	10	10	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.995										0.941
Flt Protected					0.998							0.975
Satd. Flow (prot)	0	3089	0	0	3076	0	0	0	0	0	1433	0
Flt Permitted					0.922							0.975
Satd. Flow (perm)	0	3089	0	0	2842	0	0	0	0	0	1433	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		5										10
Link Speed (mph)		30			30			30				30
Link Distance (ft)		674			1838			511				439
Travel Time (s)		15.3			41.8			11.6				10.0
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	3%	6%	0%	4%	0%	0%	0%	0%	9%	0%	11%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Mid-Block Traffic (%)		0%			0%			0%				0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	620	0	0	249	0	0	0	0	0	23	0
Turn Type		NA		Perm	NA					Perm	NA	
Protected Phases		4			8							6
Permitted Phases				8						6		
Detector Phase		4		8	8					6		6
Switch Phase												
Minimum Initial (s)		24.0		24.0	24.0					26.0	26.0	
Minimum Split (s)		31.0		31.0	31.0					34.0	34.0	
Total Split (s)		31.0		31.0	31.0					34.0	34.0	
Total Split (%)		47.7%		47.7%	47.7%					52.3%	52.3%	
Yellow Time (s)		3.0		3.0	3.0					3.0	3.0	
All-Red Time (s)		4.0		4.0	4.0					5.0	5.0	
Lost Time Adjust (s)		0.0			0.0							0.0
Total Lost Time (s)		7.0			7.0							8.0
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode		Max		Max	Max					Max	Max	
Act Effct Green (s)		24.0			24.0							26.0
Actuated g/C Ratio		0.37			0.37							0.40

Lanes, Volumes, Timings
 1: Keeler Avenue & Lake Street

09/05/2023

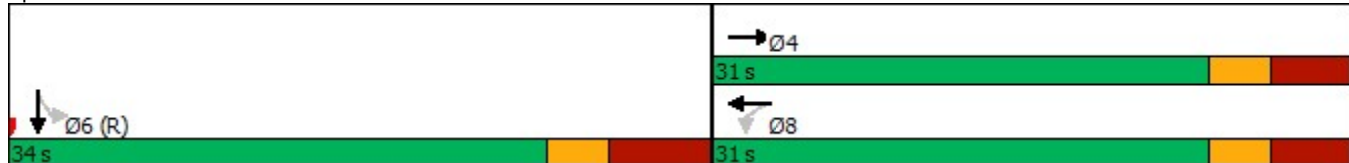


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio		0.54			0.24							0.04
Control Delay		18.2			15.0							9.2
Queue Delay		0.0			0.0							0.0
Total Delay		18.2			15.0							9.2
LOS		B			B							A
Approach Delay		18.2			15.0							9.2
Approach LOS		B			B							A
Queue Length 50th (ft)		98			34							3
Queue Length 95th (ft)		144			58							15
Internal Link Dist (ft)		594			1758			431				359
Turn Bay Length (ft)												
Base Capacity (vph)		1143			1049							579
Starvation Cap Reductn		0			0							0
Spillback Cap Reductn		0			0							0
Storage Cap Reductn		0			0							0
Reduced v/c Ratio		0.54			0.24							0.04

Intersection Summary

Area Type:	Other
Cycle Length:	65
Actuated Cycle Length:	65
Offset:	13 (20%), Referenced to phase 2: and 6:SBTL, Start of Green
Natural Cycle:	65
Control Type:	Pretimed
Maximum v/c Ratio:	0.54
Intersection Signal Delay:	17.1
Intersection LOS:	B
Intersection Capacity Utilization	54.2%
ICU Level of Service	A
Analysis Period (min)	15

Splits and Phases: 1: Keeler Avenue & Lake Street



HCM 6th TWSC
2: Kildare Avenue & Lake Street

09/05/2023

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	12	541	0	0	208	16	19	14	17	0	0	0
Future Vol, veh/h	12	541	0	0	208	16	19	14	17	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	8	3	0	0	3	19	5	0	12	0	0	0
Mvmt Flow	13	595	0	0	229	18	21	15	19	0	0	0

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	247	0	- - - 0 736 868 298
Stage 1	-	-	- - - 621 621 -
Stage 2	-	-	- - - 115 247 -
Critical Hdwy	4.26	-	- - - 6.9 6.5 7.14
Critical Hdwy Stg 1	-	-	- - - 5.9 5.5 -
Critical Hdwy Stg 2	-	-	- - - 5.9 5.5 -
Follow-up Hdwy	2.28	-	- - - 3.55 4 3.42
Pot Cap-1 Maneuver	1273	- 0 0	- - 348 293 669
Stage 1	-	- 0 0	- - 490 482 -
Stage 2	-	- 0 0	- - 888 706 -
Platoon blocked, %	-	-	- -
Mov Cap-1 Maneuver	1273	- - -	- 343 0 669
Mov Cap-2 Maneuver	-	- - -	- 343 0 -
Stage 1	-	- - -	- 483 0 -
Stage 2	-	- - -	- 888 0 -

Approach	EB	WB	NB
HCM Control Delay, s	0.3	0	14.2
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR
Capacity (veh/h)	446	1273	-	-	-
HCM Lane V/C Ratio	0.123	0.01	-	-	-
HCM Control Delay (s)	14.2	7.9	0.1	-	-
HCM Lane LOS	B	A	A	-	-
HCM 95th %tile Q(veh)	0.4	0	-	-	-

Intersection	
Intersection Delay, s/veh	7.3
Intersection LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↻			↻	↻	
Traffic Vol, veh/h	45	9	11	38	0	0
Future Vol, veh/h	45	9	11	38	0	0
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles, %	9	11	9	21	0	0
Mvmt Flow	51	10	12	43	0	0
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay	7.3	7.4	0
HCM LOS	A	A	-

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	0%	0%	22%
Vol Thru, %	100%	83%	78%
Vol Right, %	0%	17%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	0	54	49
LT Vol	0	0	11
Through Vol	0	45	38
RT Vol	0	9	0
Lane Flow Rate	0	61	55
Geometry Grp	1	1	1
Degree of Util (X)	0	0.067	0.063
Departure Headway (Hd)	4.099	3.994	4.143
Convergence, Y/N	Yes	Yes	Yes
Cap	0	900	868
Service Time	2.151	2.005	2.154
HCM Lane V/C Ratio	0	0.068	0.063
HCM Control Delay	7.2	7.3	7.4
HCM Lane LOS	N	A	A
HCM 95th-tile Q	0	0.2	0.2

HCM 6th TWSC
5: Keeler Avenue

09/05/2023

Intersection												
Int Delay, s/veh	3.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↶									↷	
Traffic Vol, veh/h	0	10	5	0	0	0	0	0	0	4	16	0
Future Vol, veh/h	0	10	5	0	0	0	0	0	0	4	16	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	0	10	0	0	0	0	0	0	0	0	13	0
Mvmt Flow	0	11	5	0	0	0	0	0	0	4	17	0

Major/Minor	Minor2			Major2			
Conflicting Flow All	-	25	17		0	0	0
Stage 1	-	25	-		-	-	-
Stage 2	-	0	-		-	-	-
Critical Hdwy	-	6.6	6.2		4.1	-	-
Critical Hdwy Stg 1	-	5.6	-		-	-	-
Critical Hdwy Stg 2	-	-	-		-	-	-
Follow-up Hdwy	-	4.09	3.3		2.2	-	-
Pot Cap-1 Maneuver	0	853	1068		-	-	-
Stage 1	0	859	-		-	-	-
Stage 2	0	-	-		-	-	-
Platoon blocked, %					-	-	
Mov Cap-1 Maneuver	-	0	1068		-	-	-
Mov Cap-2 Maneuver	-	0	-		-	-	-
Stage 1	-	0	-		-	-	-
Stage 2	-	0	-		-	-	-

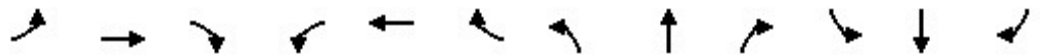
Approach	EB	SB
HCM Control Delay, s	8.4	
HCM LOS	A	

Minor Lane/Major Mvmt	EBLn1	SBL	SBT	SBR
Capacity (veh/h)	1068	-	-	-
HCM Lane V/C Ratio	0.015	-	-	-
HCM Control Delay (s)	8.4	-	-	-
HCM Lane LOS	A	-	-	-
HCM 95th %tile Q(veh)	0	-	-	-

Capacity Analysis Summary Sheets
Existing Weekday Evening Peak Hour Conditions

Lanes, Volumes, Timings
1: Keeler Avenue & Lake Street

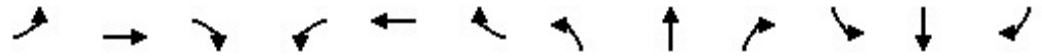
09/05/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑						↑↓	
Traffic Volume (vph)	0	239	16	8	592	0	0	0	0	7	7	13
Future Volume (vph)	0	239	16	8	592	0	0	0	0	7	7	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	10	10	10	10	10	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Flt		0.990									0.932	
Flt Protected					0.999						0.988	
Satd. Flow (prot)	0	3071	0	0	3136	0	0	0	0	0	1412	0
Flt Permitted					0.950						0.988	
Satd. Flow (perm)	0	3071	0	0	2982	0	0	0	0	0	1412	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		12									14	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		674			1838			511			439	
Travel Time (s)		15.3			41.8			11.6			10.0	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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%	3%	6%	0%	2%	0%	0%	0%	0%	0%	0%	23%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	266	0	0	625	0	0	0	0	0	28	0
Turn Type		NA		Perm	NA					Perm	NA	
Protected Phases		4			8						6	
Permitted Phases				8						6		
Detector Phase		4		8	8					6	6	
Switch Phase												
Minimum Initial (s)		24.0		24.0	24.0					26.0	26.0	
Minimum Split (s)		31.0		31.0	31.0					34.0	34.0	
Total Split (s)		31.0		31.0	31.0					34.0	34.0	
Total Split (%)		47.7%		47.7%	47.7%					52.3%	52.3%	
Yellow Time (s)		3.0		3.0	3.0					3.0	3.0	
All-Red Time (s)		4.0		4.0	4.0					5.0	5.0	
Lost Time Adjust (s)		0.0			0.0						0.0	
Total Lost Time (s)		7.0			7.0						8.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode		Max		Max	Max					Max	Max	
Act Effct Green (s)		24.0			24.0						26.0	
Actuated g/C Ratio		0.37			0.37						0.40	

Lanes, Volumes, Timings
 1: Keeler Avenue & Lake Street

09/05/2023

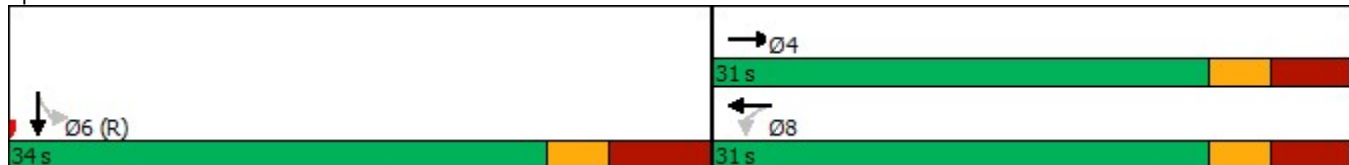


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio		0.23			0.57							0.05
Control Delay		14.2			18.9							8.6
Queue Delay		0.0			0.0							0.0
Total Delay		14.2			18.9							8.6
LOS		B			B							A
Approach Delay		14.2			18.9							8.6
Approach LOS		B			B							A
Queue Length 50th (ft)		35			101							3
Queue Length 95th (ft)		60			149							17
Internal Link Dist (ft)		594			1758			431				359
Turn Bay Length (ft)												
Base Capacity (vph)		1141			1101							573
Starvation Cap Reductn		0			0							0
Spillback Cap Reductn		0			0							0
Storage Cap Reductn		0			0							0
Reduced v/c Ratio		0.23			0.57							0.05

Intersection Summary

Area Type:	Other
Cycle Length:	65
Actuated Cycle Length:	65
Offset:	51 (78%), Referenced to phase 2: and 6:SBTL, Start of Green
Natural Cycle:	65
Control Type:	Pretimed
Maximum v/c Ratio:	0.57
Intersection Signal Delay:	17.2
Intersection LOS:	B
Intersection Capacity Utilization:	56.2%
ICU Level of Service:	B
Analysis Period (min):	15

Splits and Phases: 1: Keeler Avenue & Lake Street



HCM 6th TWSC
2: Kildare Avenue & Lake Street

09/05/2023

Intersection												
Int Delay, s/veh	1.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕↕			↕↕			↕↕				
Traffic Vol, veh/h	2	237	0	0	603	2	39	35	18	0	0	0
Future Vol, veh/h	2	237	0	0	603	2	39	35	18	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	0	3	0	0	2	0	8	0	6	0	0	0
Mvmt Flow	2	244	0	0	622	2	40	36	19	0	0	0

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	624	0	- - - 0 559 872 122
Stage 1	-	-	- - - 248 248 -
Stage 2	-	-	- - - 311 624 -
Critical Hdwy	4.1	-	- - - 6.96 6.5 7.02
Critical Hdwy Stg 1	-	-	- - - 5.96 5.5 -
Critical Hdwy Stg 2	-	-	- - - 5.96 5.5 -
Follow-up Hdwy	2.2	-	- - - 3.58 4 3.36
Pot Cap-1 Maneuver	967	- 0 0	- - - 445 291 894
Stage 1	-	- 0 0	- - - 753 705 -
Stage 2	-	- 0 0	- - - 699 481 -
Platoon blocked, %	-	-	- -
Mov Cap-1 Maneuver	967	- - -	- - - 444 0 894
Mov Cap-2 Maneuver	-	- - -	- - - 444 0 -
Stage 1	-	- - -	- - - 751 0 -
Stage 2	-	- - -	- - - 699 0 -

Approach	EB	WB	NB
HCM Control Delay, s	0.1	0	13.3
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR
Capacity (veh/h)	528	967	-	-	-
HCM Lane V/C Ratio	0.18	0.002	-	-	-
HCM Control Delay (s)	13.3	8.7	0	-	-
HCM Lane LOS	B	A	A	-	-
HCM 95th %tile Q(veh)	0.6	0	-	-	-

Intersection	
Intersection Delay, s/veh	8.3
Intersection LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↻			↻	↻	
Traffic Vol, veh/h	28	11	25	138	0	0
Future Vol, veh/h	28	11	25	138	0	0
Peak Hour Factor	0.74	0.74	0.74	0.74	0.74	0.74
Heavy Vehicles, %	4	0	12	5	0	0
Mvmt Flow	38	15	34	186	0	0
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay	7.3	8.6	0
HCM LOS	A	A	-

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	0%	0%	15%
Vol Thru, %	100%	72%	85%
Vol Right, %	0%	28%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	0	39	163
LT Vol	0	0	25
Through Vol	0	28	138
RT Vol	0	11	0
Lane Flow Rate	0	53	220
Geometry Grp	1	1	1
Degree of Util (X)	0	0.058	0.255
Departure Headway (Hd)	4.501	3.962	4.174
Convergence, Y/N	Yes	Yes	Yes
Cap	0	899	863
Service Time	2.501	2.011	2.183
HCM Lane V/C Ratio	0	0.059	0.255
HCM Control Delay	7.5	7.3	8.6
HCM Lane LOS	N	A	A
HCM 95th-tile Q	0	0.2	1

HCM 6th TWSC
5: Keeler Avenue

09/05/2023

Intersection												
Int Delay, s/veh	3.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔									↔	
Traffic Vol, veh/h	0	16	5	0	0	0	0	0	0	12	22	2
Future Vol, veh/h	0	16	5	0	0	0	0	0	0	12	22	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	76	76	76	76	76	76	76	76	76	76	76	76
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	14	0
Mvmt Flow	0	21	7	0	0	0	0	0	0	16	29	3

Major/Minor	Minor2			Major2			
Conflicting Flow All	-	63	31		0	0	0
Stage 1	-	63	-		-	-	-
Stage 2	-	0	-		-	-	-
Critical Hdwy	-	6.5	6.2		4.1	-	-
Critical Hdwy Stg 1	-	5.5	-		-	-	-
Critical Hdwy Stg 2	-	-	-		-	-	-
Follow-up Hdwy	-	4	3.3		2.2	-	-
Pot Cap-1 Maneuver	0	832	1049		-	-	-
Stage 1	0	846	-		-	-	-
Stage 2	0	-	-		-	-	-
Platoon blocked, %					-	-	-
Mov Cap-1 Maneuver	-	0	1049		-	-	-
Mov Cap-2 Maneuver	-	0	-		-	-	-
Stage 1	-	0	-		-	-	-
Stage 2	-	0	-		-	-	-

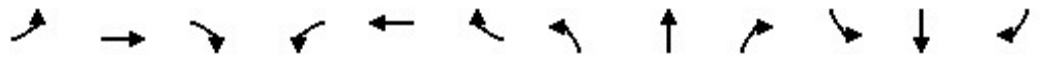
Approach	EB	SB
HCM Control Delay, s	8.5	
HCM LOS	A	

Minor Lane/Major Mvmt	EBLn1	SBL	SBT	SBR
Capacity (veh/h)	1049	-	-	-
HCM Lane V/C Ratio	0.026	-	-	-
HCM Control Delay (s)	8.5	-	-	-
HCM Lane LOS	A	-	-	-
HCM 95th %tile Q(veh)	0.1	-	-	-

Capacity Analysis Summary Sheets
2029 Projected Weekday Morning Peak Hour Conditions

Lanes, Volumes, Timings
1: Keeler Avenue & Lake Street

09/05/2023



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑			↑↑						↑↓	
Traffic Volume (vph)	0	557	18	9	230	0	0	0	0	12	1	12
Future Volume (vph)	0	557	18	9	230	0	0	0	0	12	1	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	10	10	10	10	10	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Frt		0.995									0.935	
Flt Protected					0.998						0.976	
Satd. Flow (prot)	0	3089	0	0	3105	0	0	0	0	0	1393	0
Flt Permitted					0.923						0.976	
Satd. Flow (perm)	0	3089	0	0	2871	0	0	0	0	0	1393	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		6										13
Link Speed (mph)		30			30			30				30
Link Distance (ft)		379			1838			511				235
Travel Time (s)		8.6			41.8			11.6				5.3
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	3%	6%	0%	3%	0%	0%	0%	0%	8%	0%	17%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	639	0	0	266	0	0	0	0	0	27	0
Turn Type		NA		Perm	NA					Perm	NA	
Protected Phases		4			8							6
Permitted Phases				8						6		
Detector Phase		4		8	8					6		6
Switch Phase												
Minimum Initial (s)		24.0		24.0	24.0					26.0	26.0	
Minimum Split (s)		31.0		31.0	31.0					34.0	34.0	
Total Split (s)		31.0		31.0	31.0					34.0	34.0	
Total Split (%)		47.7%		47.7%	47.7%					52.3%	52.3%	
Yellow Time (s)		3.0		3.0	3.0					3.0	3.0	
All-Red Time (s)		4.0		4.0	4.0					5.0	5.0	
Lost Time Adjust (s)		0.0			0.0						0.0	
Total Lost Time (s)		7.0			7.0						8.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode		Max		Max	Max					Max	Max	
Act Effct Green (s)		24.0			24.0							26.0
Actuated g/C Ratio		0.37			0.37							0.40

Lanes, Volumes, Timings
 1: Keeler Avenue & Lake Street

09/05/2023

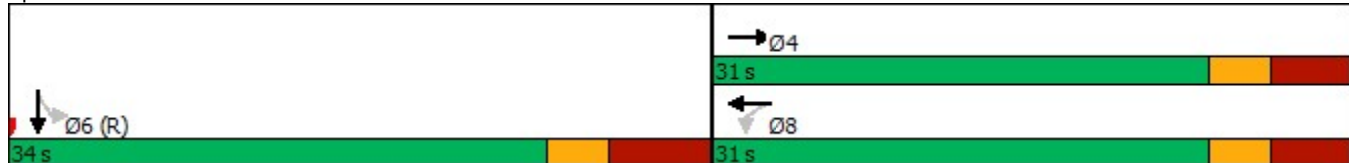


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio		0.56			0.25							0.05
Control Delay		18.4			15.1							8.8
Queue Delay		0.0			0.0							0.0
Total Delay		18.4			15.1							8.8
LOS		B			B							A
Approach Delay		18.4			15.1							8.8
Approach LOS		B			B							A
Queue Length 50th (ft)		102			37							3
Queue Length 95th (ft)		149			62							17
Internal Link Dist (ft)		299			1758			431				155
Turn Bay Length (ft)												
Base Capacity (vph)		1144			1060							565
Starvation Cap Reductn		0			0							0
Spillback Cap Reductn		0			0							0
Storage Cap Reductn		0			0							0
Reduced v/c Ratio		0.56			0.25							0.05

Intersection Summary

Area Type:	Other
Cycle Length:	65
Actuated Cycle Length:	65
Offset:	13 (20%), Referenced to phase 2: and 6:SBTL, Start of Green
Natural Cycle:	65
Control Type:	Pretimed
Maximum v/c Ratio:	0.56
Intersection Signal Delay:	17.2
Intersection LOS:	B
Intersection Capacity Utilization	54.2%
ICU Level of Service	A
Analysis Period (min)	15

Splits and Phases: 1: Keeler Avenue & Lake Street



HCM 6th TWSC
2: Kildare Avenue & Lake Street

09/06/2023

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	12	577	0	0	217	16	20	14	20	0	0	0
Future Vol, veh/h	12	577	0	0	217	16	20	14	20	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	8	2	0	0	3	19	5	0	10	0	0	0
Mvmt Flow	13	634	0	0	238	18	22	15	22	0	0	0

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	256	0	- - - 0 779 916 317
Stage 1	-	-	- - - 660 660 -
Stage 2	-	-	- - - 119 256 -
Critical Hdwy	4.26	-	- - - 6.9 6.5 7.1
Critical Hdwy Stg 1	-	-	- - - 5.9 5.5 -
Critical Hdwy Stg 2	-	-	- - - 5.9 5.5 -
Follow-up Hdwy	2.28	-	- - - 3.55 4 3.4
Pot Cap-1 Maneuver	1263	- 0 0	- - - 326 274 656
Stage 1	-	- 0 0	- - - 468 463 -
Stage 2	-	- 0 0	- - - 884 699 -
Platoon blocked, %	-	-	- -
Mov Cap-1 Maneuver	1263	- - -	- - - 321 0 656
Mov Cap-2 Maneuver	-	- - -	- - - 321 0 -
Stage 1	-	- - -	- - - 461 0 -
Stage 2	-	- - -	- - - 884 0 -

Approach	EB	WB	NB
HCM Control Delay, s	0.3	0	14.7
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR
Capacity (veh/h)	431	1263	-	-	-
HCM Lane V/C Ratio	0.138	0.01	-	-	-
HCM Control Delay (s)	14.7	7.9	0.1	-	-
HCM Lane LOS	B	A	A	-	-
HCM 95th %tile Q(veh)	0.5	0	-	-	-

Intersection	
Intersection Delay, s/veh	7.3
Intersection LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↻			↻	↻	
Traffic Vol, veh/h	46	9	11	39	0	0
Future Vol, veh/h	46	9	11	39	0	0
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Heavy Vehicles, %	9	11	9	21	0	0
Mvmt Flow	52	10	12	44	0	0
Number of Lanes	1	0	0	1	1	0

Approach	EB	WB	NB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left		NB	EB
Conflicting Lanes Left	0	1	1
Conflicting Approach Right	NB		WB
Conflicting Lanes Right	1	0	1
HCM Control Delay	7.3	7.4	0
HCM LOS	A	A	-

Lane	NBLn1	EBLn1	WBLn1
Vol Left, %	0%	0%	22%
Vol Thru, %	100%	84%	78%
Vol Right, %	0%	16%	0%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	0	55	50
LT Vol	0	0	11
Through Vol	0	46	39
RT Vol	0	9	0
Lane Flow Rate	0	62	56
Geometry Grp	1	1	1
Degree of Util (X)	0	0.069	0.065
Departure Headway (Hd)	4.103	3.996	4.143
Convergence, Y/N	Yes	Yes	Yes
Cap	0	899	867
Service Time	2.159	2.009	2.155
HCM Lane V/C Ratio	0	0.069	0.065
HCM Control Delay	7.2	7.3	7.4
HCM Lane LOS	N	A	A
HCM 95th-tile Q	0	0.2	0.2

Intersection												
Int Delay, s/veh	3.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↶									↷	
Traffic Vol, veh/h	0	10	5	0	0	0	0	0	0	4	16	0
Future Vol, veh/h	0	10	5	0	0	0	0	0	0	4	16	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	0	10	0	0	0	0	0	0	0	0	13	0
Mvmt Flow	0	11	5	0	0	0	0	0	0	4	17	0

Major/Minor	Minor2			Major2			
Conflicting Flow All	-	25	17		0	0	0
Stage 1	-	25	-		-	-	-
Stage 2	-	0	-		-	-	-
Critical Hdwy	-	6.6	6.2		4.1	-	-
Critical Hdwy Stg 1	-	5.6	-		-	-	-
Critical Hdwy Stg 2	-	-	-		-	-	-
Follow-up Hdwy	-	4.09	3.3		2.2	-	-
Pot Cap-1 Maneuver	0	853	1068		-	-	-
Stage 1	0	859	-		-	-	-
Stage 2	0	-	-		-	-	-
Platoon blocked, %					-	-	-
Mov Cap-1 Maneuver	-	0	1068		-	-	-
Mov Cap-2 Maneuver	-	0	-		-	-	-
Stage 1	-	0	-		-	-	-
Stage 2	-	0	-		-	-	-

Approach	EB	SB
HCM Control Delay, s	8.4	
HCM LOS	A	

Minor Lane/Major Mvmt	EBLn1	SBL	SBT	SBR
Capacity (veh/h)	1068	-	-	-
HCM Lane V/C Ratio	0.015	-	-	-
HCM Control Delay (s)	8.4	-	-	-
HCM Lane LOS	A	-	-	-
HCM 95th %tile Q(veh)	0	-	-	-

Intersection						
Int Delay, s/veh	1.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗			↘	
Traffic Vol, veh/h	0	4	0	0	21	0
Future Vol, veh/h	0	4	0	0	21	0
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	25	0	0	10	0
Mvmt Flow	0	4	0	0	22	0

Major/Minor	Minor2		Major2	
Conflicting Flow All	-	22	-	0
Stage 1	-	-	-	-
Stage 2	-	-	-	-
Critical Hdwy	-	6.45	-	-
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	-	3.525	-	-
Pot Cap-1 Maneuver	0	992	-	-
Stage 1	0	-	-	-
Stage 2	0	-	-	-
Platoon blocked, %			-	-
Mov Cap-1 Maneuver	-	992	-	-
Mov Cap-2 Maneuver	-	-	-	-
Stage 1	-	-	-	-
Stage 2	-	-	-	-



















Approach	EB	SB
HCM Control Delay, s	8.6	0
HCM LOS	A	

Minor Lane/Major Mvmt	EBLn1	SBT	SBR
Capacity (veh/h)	992	-	-
HCM Lane V/C Ratio	0.004	-	-
HCM Control Delay (s)	8.6	-	-
HCM Lane LOS	A	-	-
HCM 95th %tile Q(veh)	0	-	-

Capacity Analysis Summary Sheets
2029 Projected Weekday Evening Peak Hour Conditions

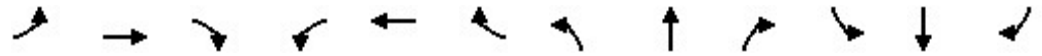
Lanes, Volumes, Timings
1: Keeler Avenue & Lake Street

09/05/2023

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	247	16	8	611	0	0	0	0	11	8	23
Future Volume (vph)	0	247	16	8	611	0	0	0	0	11	8	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	10	10	10	10	10	10	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor												
Flt		0.991									0.925	
Flt Protected					0.999						0.987	
Satd. Flow (prot)	0	3102	0	0	3136	0	0	0	0	0	1456	0
Flt Permitted					0.950						0.987	
Satd. Flow (perm)	0	3102	0	0	2982	0	0	0	0	0	1456	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		12									24	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		379			1838			511			235	
Travel Time (s)		8.6			41.8			11.6			5.3	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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%	2%	6%	0%	2%	0%	0%	0%	0%	0%	0%	13%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	274	0	0	644	0	0	0	0	0	43	0
Turn Type		NA		Perm	NA					Perm	NA	
Protected Phases		4			8						6	
Permitted Phases				8						6		
Detector Phase		4		8	8					6	6	
Switch Phase												
Minimum Initial (s)		24.0		24.0	24.0					26.0	26.0	
Minimum Split (s)		31.0		31.0	31.0					34.0	34.0	
Total Split (s)		31.0		31.0	31.0					34.0	34.0	
Total Split (%)		47.7%		47.7%	47.7%					52.3%	52.3%	
Yellow Time (s)		3.0		3.0	3.0					3.0	3.0	
All-Red Time (s)		4.0		4.0	4.0					5.0	5.0	
Lost Time Adjust (s)		0.0			0.0						0.0	
Total Lost Time (s)		7.0			7.0						8.0	
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode		Max		Max	Max					Max	Max	
Act Effct Green (s)		24.0			24.0						26.0	
Actuated g/C Ratio		0.37			0.37						0.40	

Lanes, Volumes, Timings
 1: Keeler Avenue & Lake Street

09/05/2023

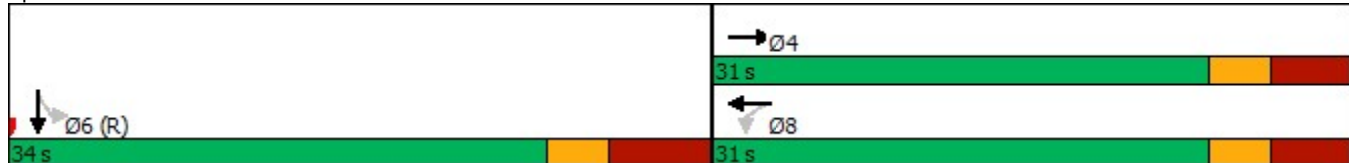


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio		0.24			0.58							0.07
Control Delay		14.2			19.1							7.8
Queue Delay		0.0			0.0							0.0
Total Delay		14.2			19.1							7.8
LOS		B			B							A
Approach Delay		14.2			19.1							7.8
Approach LOS		B			B							A
Queue Length 50th (ft)		36			105							4
Queue Length 95th (ft)		61			154							21
Internal Link Dist (ft)		299			1758			431				155
Turn Bay Length (ft)												
Base Capacity (vph)		1152			1101							596
Starvation Cap Reductn		0			0							0
Spillback Cap Reductn		0			0							0
Storage Cap Reductn		0			0							0
Reduced v/c Ratio		0.24			0.58							0.07

Intersection Summary

Area Type:	Other
Cycle Length:	65
Actuated Cycle Length:	65
Offset:	51 (78%), Referenced to phase 2: and 6:SBTL, Start of Green
Natural Cycle:	65
Control Type:	Pretimed
Maximum v/c Ratio:	0.58
Intersection Signal Delay:	17.2
Intersection LOS:	B
Intersection Capacity Utilization:	56.7%
ICU Level of Service:	B
Analysis Period (min):	15

Splits and Phases: 1: Keeler Avenue & Lake Street



HCM 6th TWSC
2: Kildare Avenue & Lake Street

09/06/2023

Intersection												
Int Delay, s/veh	1.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕↕			↕↕			↕↕				
Traffic Vol, veh/h	2	246	0	0	631	2	40	36	19	0	0	0
Future Vol, veh/h	2	246	0	0	631	2	40	36	19	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	0	2	0	0	2	0	8	0	5	0	0	0
Mvmt Flow	2	254	0	0	651	2	41	37	20	0	0	0

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	653	0	-
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	4.1	-	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	2.2	-	-
Pot Cap-1 Maneuver	943	0	0
Stage 1	-	0	0
Stage 2	-	0	0
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	943	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0.1	0	13.6
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR
Capacity (veh/h)	514	943	-	-	-
HCM Lane V/C Ratio	0.191	0.002	-	-	-
HCM Control Delay (s)	13.6	8.8	0	-	-
HCM Lane LOS	B	A	A	-	-
HCM 95th %tile Q(veh)	0.7	0	-	-	-

HCM 6th TWSC
2: Kildare Avenue & Lake Street

09/06/2023

Intersection												
Int Delay, s/veh	1.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕↕			↕↕			↕↕				
Traffic Vol, veh/h	2	246	0	0	631	2	40	36	19	0	0	0
Future Vol, veh/h	2	246	0	0	631	2	40	36	19	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	0	2	0	0	2	0	8	0	5	0	0	0
Mvmt Flow	2	254	0	0	651	2	41	37	20	0	0	0

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	653	0	-
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	4.1	-	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	2.2	-	-
Pot Cap-1 Maneuver	943	0	0
Stage 1	-	0	0
Stage 2	-	0	0
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	943	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0.1	0	13.6
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	WBT	WBR
Capacity (veh/h)	514	943	-	-	-
HCM Lane V/C Ratio	0.191	0.002	-	-	-
HCM Control Delay (s)	13.6	8.8	0	-	-
HCM Lane LOS	B	A	A	-	-
HCM 95th %tile Q(veh)	0.7	0	-	-	-

Intersection												
Int Delay, s/veh	3.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔									↔	
Traffic Vol, veh/h	0	16	5	0	0	0	0	0	0	12	22	2
Future Vol, veh/h	0	16	5	0	0	0	0	0	0	12	22	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	76	76	76	76	76	76	76	76	76	76	76	76
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	14	0
Mvmt Flow	0	21	7	0	0	0	0	0	0	16	29	3

Major/Minor	Minor2			Major2			
Conflicting Flow All	-	63	31		0	0	0
Stage 1	-	63	-		-	-	-
Stage 2	-	0	-		-	-	-
Critical Hdwy	-	6.5	6.2		4.1	-	-
Critical Hdwy Stg 1	-	5.5	-		-	-	-
Critical Hdwy Stg 2	-	-	-		-	-	-
Follow-up Hdwy	-	4	3.3		2.2	-	-
Pot Cap-1 Maneuver	0	832	1049		-	-	-
Stage 1	0	846	-		-	-	-
Stage 2	0	-	-		-	-	-
Platoon blocked, %					-	-	-
Mov Cap-1 Maneuver	-	0	1049		-	-	-
Mov Cap-2 Maneuver	-	0	-		-	-	-
Stage 1	-	0	-		-	-	-
Stage 2	-	0	-		-	-	-

Approach	EB	SB
HCM Control Delay, s	8.5	
HCM LOS	A	

Minor Lane/Major Mvmt	EBLn1	SBL	SBT	SBR
Capacity (veh/h)	1049	-	-	-
HCM Lane V/C Ratio	0.026	-	-	-
HCM Control Delay (s)	8.5	-	-	-
HCM Lane LOS	A	-	-	-
HCM 95th %tile Q(veh)	0.1	-	-	-

Intersection						
Int Delay, s/veh	3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗			↘	
Traffic Vol, veh/h	0	15	0	0	27	0
Future Vol, veh/h	0	15	0	0	27	0
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	11	0
Mvmt Flow	0	16	0	0	28	0

Major/Minor	Minor2		Major2	
Conflicting Flow All	-	28	-	0
Stage 1	-	-	-	-
Stage 2	-	-	-	-
Critical Hdwy	-	6.2	-	-
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	-	3.3	-	-
Pot Cap-1 Maneuver	0	1053	-	-
Stage 1	0	-	-	-
Stage 2	0	-	-	-
Platoon blocked, %			-	-
Mov Cap-1 Maneuver	-	1053	-	-
Mov Cap-2 Maneuver	-	-	-	-
Stage 1	-	-	-	-
Stage 2	-	-	-	-

Approach	EB	SB
HCM Control Delay, s	8.5	0
HCM LOS	A	

Minor Lane/Major Mvmt	EBLn1	SBT	SBR
Capacity (veh/h)	1053	-	-
HCM Lane V/C Ratio	0.015	-	-
HCM Control Delay (s)	8.5	-	-
HCM Lane LOS	A	-	-
HCM 95th %tile Q(veh)	0	-	-

Intersection												
Int Delay, s/veh	3.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔									↔	
Traffic Vol, veh/h	0	16	5	0	0	0	0	0	0	12	22	2
Future Vol, veh/h	0	16	5	0	0	0	0	0	0	12	22	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	76	76	76	76	76	76	76	76	76	76	76	76
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	14	0
Mvmt Flow	0	21	7	0	0	0	0	0	0	16	29	3

Major/Minor	Minor2			Major2			
Conflicting Flow All	-	63	31		0	0	0
Stage 1	-	63	-		-	-	-
Stage 2	-	0	-		-	-	-
Critical Hdwy	-	6.5	6.2		4.1	-	-
Critical Hdwy Stg 1	-	5.5	-		-	-	-
Critical Hdwy Stg 2	-	-	-		-	-	-
Follow-up Hdwy	-	4	3.3		2.2	-	-
Pot Cap-1 Maneuver	0	832	1049		-	-	-
Stage 1	0	846	-		-	-	-
Stage 2	0	-	-		-	-	-
Platoon blocked, %					-	-	-
Mov Cap-1 Maneuver	-	0	1049		-	-	-
Mov Cap-2 Maneuver	-	0	-		-	-	-
Stage 1	-	0	-		-	-	-
Stage 2	-	0	-		-	-	-

Approach	EB	SB
HCM Control Delay, s	8.5	
HCM LOS	A	

Minor Lane/Major Mvmt	EBLn1	SBL	SBT	SBR
Capacity (veh/h)	1049	-	-	-
HCM Lane V/C Ratio	0.026	-	-	-
HCM Control Delay (s)	8.5	-	-	-
HCM Lane LOS	A	-	-	-
HCM 95th %tile Q(veh)	0.1	-	-	-

Intersection						
Int Delay, s/veh	3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		↗			↘	
Traffic Vol, veh/h	0	15	0	0	27	0
Future Vol, veh/h	0	15	0	0	27	0
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	11	0
Mvmt Flow	0	16	0	0	28	0

Major/Minor	Minor2		Major2	
Conflicting Flow All	-	28	-	0
Stage 1	-	-	-	-
Stage 2	-	-	-	-
Critical Hdwy	-	6.2	-	-
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	-	3.3	-	-
Pot Cap-1 Maneuver	0	1053	-	-
Stage 1	0	-	-	-
Stage 2	0	-	-	-
Platoon blocked, %			-	-
Mov Cap-1 Maneuver	-	1053	-	-
Mov Cap-2 Maneuver	-	-	-	-
Stage 1	-	-	-	-
Stage 2	-	-	-	-

Approach	EB	SB
HCM Control Delay, s	8.5	0
HCM LOS	A	

Minor Lane/Major Mvmt	EBLn1	SBT	SBR
Capacity (veh/h)	1053	-	-
HCM Lane V/C Ratio	0.015	-	-
HCM Control Delay (s)	8.5	-	-
HCM Lane LOS	A	-	-
HCM 95th %tile Q(veh)	0	-	-

Additional Capacity Analysis Tables

CAPACITY ANALYSIS RESULTS – EXISTING CONDITIONS

Intersection	Weekday Morning Peak Hour		Weekday Evening Peak Hour	
	V/C	Queue	V/C	Queue
Lake Street with Keeler Avenue¹				
• Eastbound Approach	0.54	144	0.23	60
• Westbound Approach	0.24	58	0.57	149
• Southbound Approach	0.04	<25	0.05	<25
Lake Street with Kildare Avenue²				
• Eastbound Left Turn	0.01	<25	<0.01	<25
• Northbound Approach	0.12	<25	0.18	<25
Keeler Avenue with Kinzie Street³				
• Eastbound Approach	0.07	<25	0.06	<25
• Westbound Approach	0.06	<25	0.26	<25
Keeler Avenue with Carroll Avenue²				
• Eastbound Approach	0.02	<25	0.03	<25
1 – Signalized 2 – Two-Way Stop Control 3 – All-Way Stop Control	V/C = Volume to Capacity Ratio Queue = 95 th Percentile Queue in feet			

CAPACITY ANALYSIS RESULTS – YEAR 2029 PROJECTED CONDITIONS

Intersection	Weekday Morning Peak Hour		Weekday Evening Peak Hour	
	V/C	Queue	V/C	Queue
Lake Street with Keeler Avenue¹				
• Eastbound Approach	0.56	149	0.24	61
• Westbound Approach	0.25	62	0.58	154
• Southbound Approach	0.05	<25	0.07	<25
Lake Street with Kildare Avenue²				
• Eastbound Left Turn	0.01	<25	<0.01	<25
• Northbound Approach	0.14	<25	0.19	<25
Lake Street with the Proposed Access Drive²				
• Eastbound Left Turn	0.02	<25	<0.01	<25
Keeler Avenue with Kinzie Street³				
• Eastbound Approach	0.07	<25	0.06	<25
• Westbound Approach	0.07	<25	0.26	28
Keeler Avenue with Carroll Avenue²				
• Eastbound Approach	0.02	<25	0.03	<25
Keeler Avenue with the East-West Alley²				
• Eastbound Approach	<0.01	<25	0.02	<25
1 – Signalized	V/C = Volume to Capacity Ratio			
2 – Two-Way Stop Control	Queue = 95 th Percentile Queue in feet			
3 – All-Way Stop Control				