

Traffic Impact Study
Proposed Industrial Building
4540 W. Ann Lurie Place
Chicago, Illinois



Prepared For:



KLOA
Kenig, Lindgren, O'Hara, Aboona, Inc.

9, 2022

Table of Contents

List of Figures and Tables, ii

I. Executive Summary.....	1
1. Introduction.....	3
2. Existing Conditions.....	6
Site Location.....	6
Existing Street System Characteristics.....	6
Existing Traffic Volumes.....	9
3. Traffic Characteristics of the Proposed Development.....	14
Proposed Development Plan.....	14
Directional Distribution.....	14
Peak Hour Traffic Volumes.....	14
4. Projected Traffic Conditions.....	17
Development Traffic Assignment.....	17
Ambient Traffic Growth.....	17
Total Projected Traffic Volumes.....	17
5. Traffic Analysis and Recommendations.....	22
Traffic Analyses.....	22
Discussion and Recommendations.....	27
6. Conclusion.....	30
Appendix	

List of Figures and Tables

Figures

Figure 1 – Site Location.....	4
Figure 2 – Aerial View of Site.....	5
Figure 3 – Existing Street Characteristics.....	7
Figure 4 – Existing Traffic Volumes.....	11
Figure 5 – Existing Truck Traffic Volumes.....	12
Figure 6 – Existing Pedestrian/Bicycle Traffic Volumes.....	13
Figure 7 – Estimated Directional Distribution.....	15
Figure 8 – Estimated Site-Generated Passenger Vehicle Traffic Volumes.....	18
Figure 9 – Estimated Site-Generated Truck Traffic Volumes.....	19
Figure 10 – Year 2028 No-Build Traffic Volumes.....	20
Figure 11 – Year 2028 Total Projected Traffic Volumes.....	21

Tables

Table 1 – Estimated Peak Hour and Daily Trip Generation.....	16
Table 2 – Estimated Hourly Truck Trip Generation.....	16
Table 3 – Capacity Analysis Results – Pulaski Road with Ann Lurie Place.....	23
Table 4 – Capacity Analysis Results – Kildare Avenue with 47 th Street.....	24
Table 5 – Capacity Analysis Results – Kildare Avenue with Ann Lurie Place.....	25
Table 6 – Capacity Analysis Results – Kildare Avenue with 45 th Street.....	26

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 building to be located at 4540 W. Ann Lurie Place 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 Pulaski Road with Ann Lurie Place (42nd Place) and Kildare Avenue with Ann Lurie Place, 45th Street, and 47th Street.

As proposed, the site will be developed with an approximately 147,500 square-foot industrial building. The development will provide 29 truck loading bays on the west side of the building. Additionally, 102 parking spaces for employees will be provided on the north, east, and west sides of the building. Access to the site is proposed to be provided via two full movement access drives on Ann Lurie Place.

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

- During the peak pick-up and drop-off periods of the Major Hector P. Garcia MD High School, Kildare Avenue is restricted to a one-way northbound street with queues on Kildare Avenue extending from the school pick-up and drop-off area to 47th Street. Traffic aides are stationed at the intersections of Kildare Avenue with 45th Street and 47th Street to assist with the traffic flow and pedestrian activities.
- During the school peak periods, site traffic will not approach and depart the site via the Kildare Avenue and 47th Street intersection.
- The signalized intersection of Pulaski Road with Ann Lurie Place has sufficient reserve capacity to accommodate site traffic and can accommodate all site-generated traffic during school peak periods.

- The signalized intersection of Kildare Avenue with 47th Street has sufficient reserve capacity to accommodate site traffic. While this intersection will operate differently during school peak periods, this intersection will operate at a good LOS outside of school peak periods and site generated traffic will not turn at this intersection during the school peak periods.
- The unsignalized intersections along Kildare Avenue have sufficient reserve capacity to accommodate site-generated traffic and no traffic control improvements will be required as part of the development.
- 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 building to be located at 4540 W. Ann Lurie Place in Chicago, Illinois. The site, which currently contains a trailer storage lot, is located on the north side of Ann Lurie Place (42nd Place) approximately 1,400 feet west of its intersection with Kildare Avenue. As proposed, the site will be developed with an approximately 147,500 square-foot industrial building. Access to the site is proposed to be provided via two full movement access drives off Ann Lurie Place.

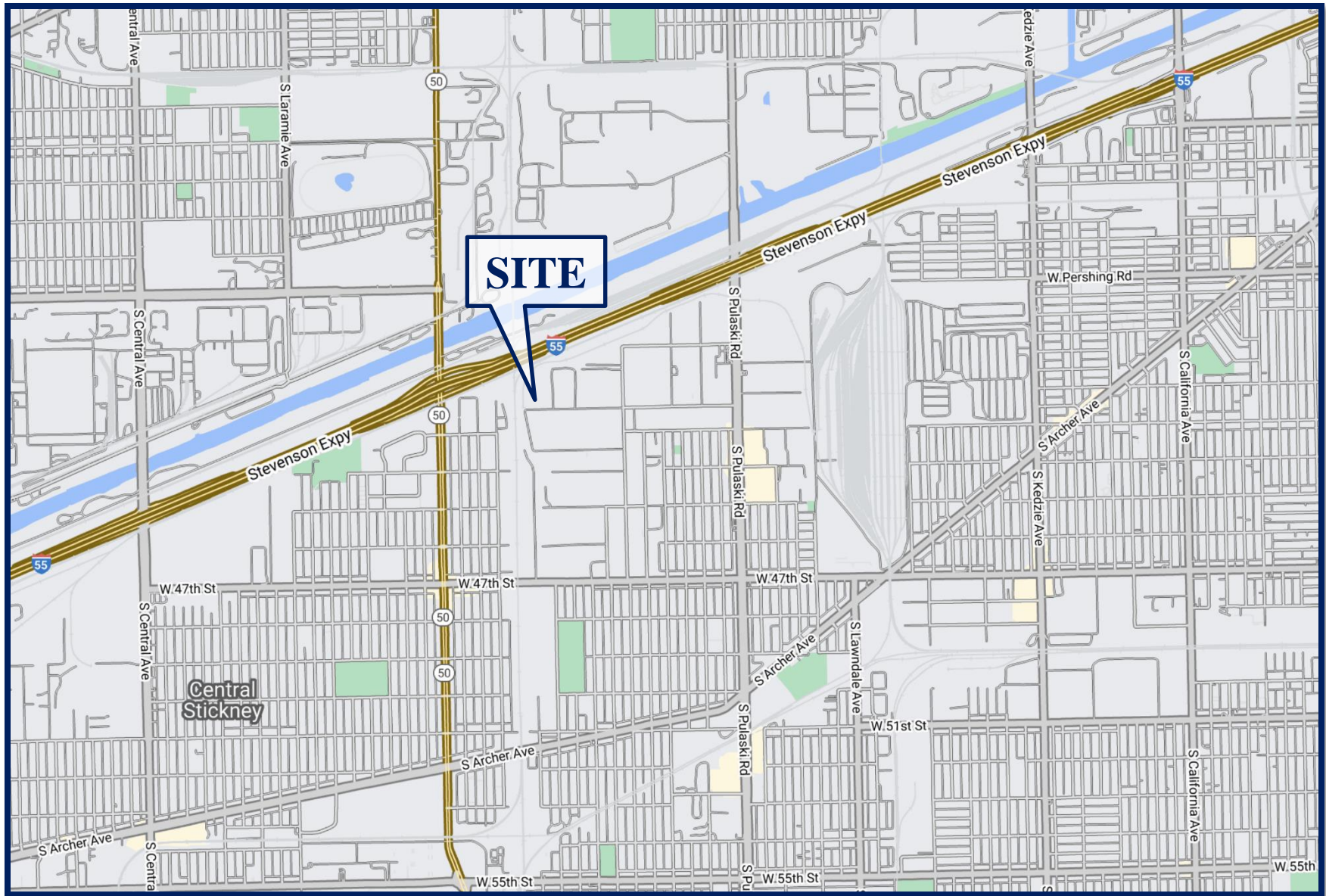
The purpose of this study was to examine existing traffic conditions, assess the impact that the proposed development will have on traffic conditions in the area, and determine if any improvements to the transportation system are required to accommodate the proposed development. **Figure 1** shows the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

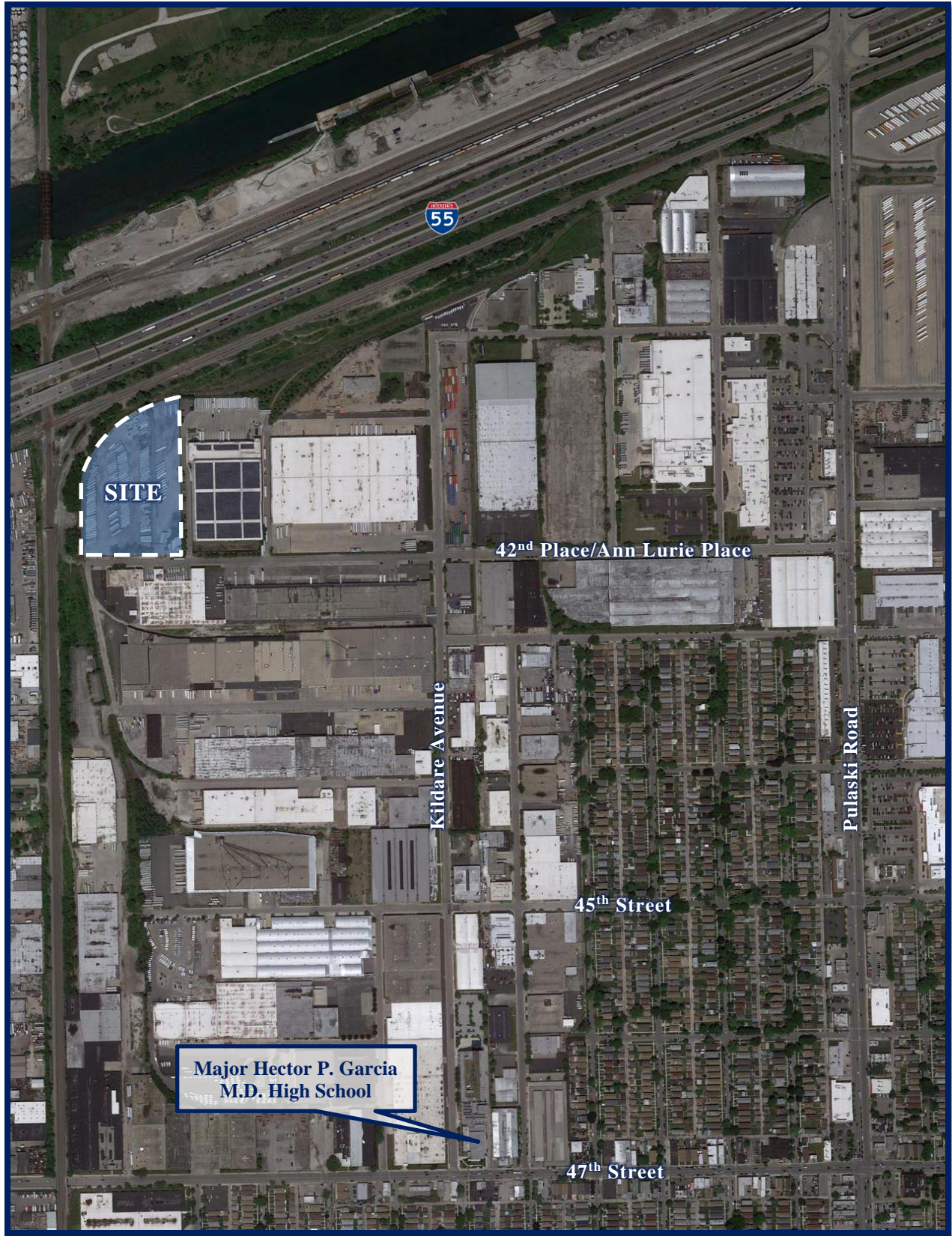
1. Existing Conditions – Analyze the capacity of the existing roadway system using existing peak hour traffic volumes in the surrounding area.
2. Year 2028 No-Build Conditions – Analyzes the capacity of the existing roadway system using existing traffic volumes increased by an ambient area growth factor not attributable to any particular development.
3. Year 2028 Total Projected Conditions – Analyzes the capacity of the future roadway system assuming the projected traffic volumes that include the Year 2028 no-build traffic volumes and the traffic estimated to be generated by the proposed development.



Site Location

Figure 1

*Proposed Industrial Building
Chicago, Illinois*



Aerial View of Site

Figure 2

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

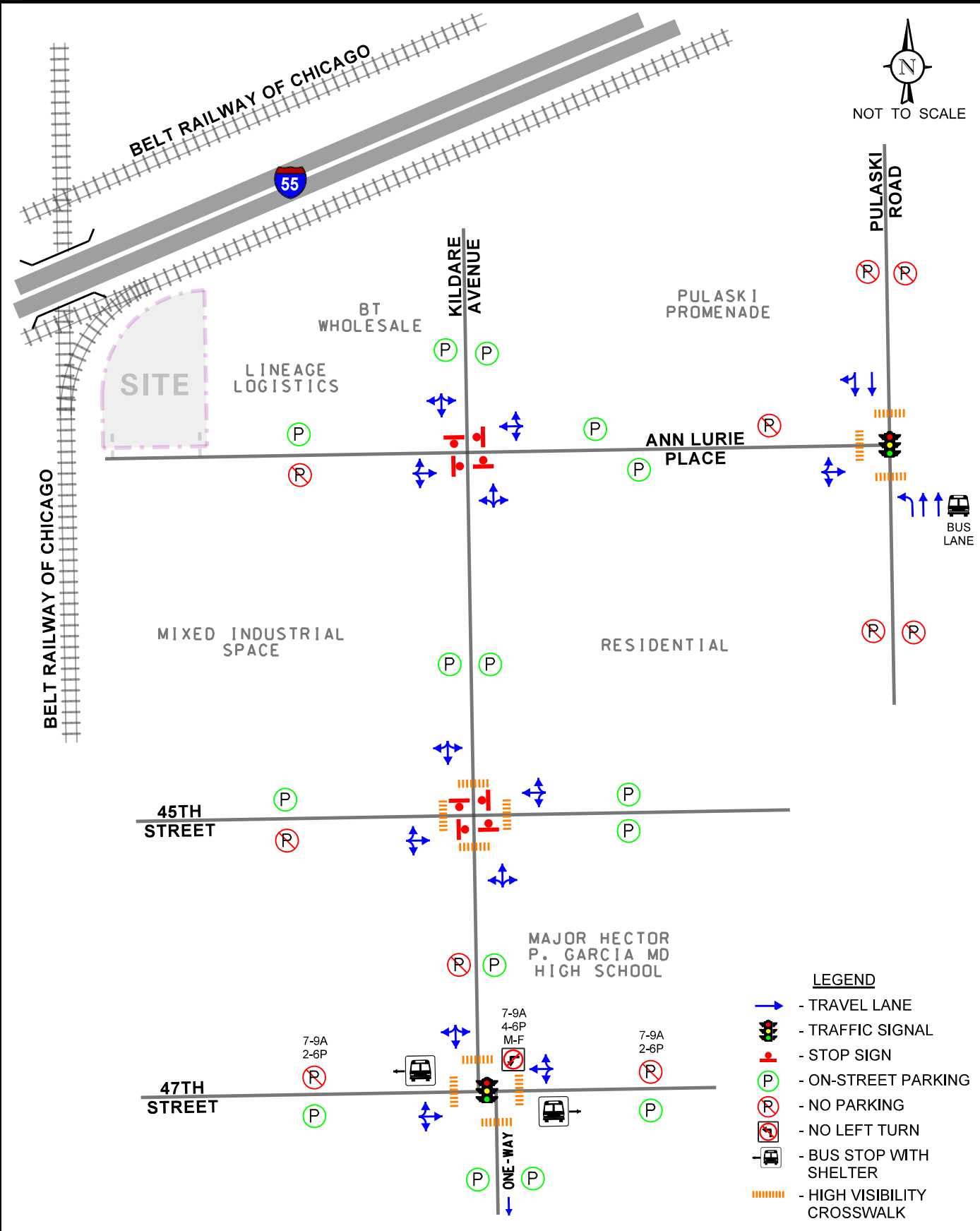
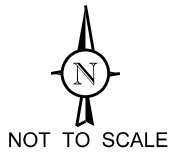
The site, which currently contains a trailer storage lot, is generally bounded by a Belt Railway of Chicago railroad to the north and west, BT Wholesale and Gold Eagle to the east, and Ann Lurie Place to the south. Land uses within the vicinity of the site are primarily industrial north of 43rd Street and west of Keeler Avenue. Multiple commercial uses including Pulaski Promenade are located along Pulaski Road. The Major Hector P. Garcia M.D. High School is located in the northeast quadrant of the intersection of Kildare Avenue with Ann Lurie Place.

Existing Street System Characteristics

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

Pulaski Road is a north-south principal arterial street that generally provides two lanes in each direction. Between Ann Lurie Street and 43rd Street, Pulaski Road provides a northbound bus only lane. At its signalized intersection with Ann Lurie Place, Pulaski Road provides an exclusive left-turn lane, two through lanes, and a bus only lane on the northbound approach and a through lane and a shared through/right-turn lane on the southbound approach. All legs of this intersection provide high visibility crosswalks with pedestrian signals. Approximately one-half mile north of Ann Lurie Place, Pulaski Road has a single point urban interchange with Interstate 55. Pulaski Road is under the jurisdiction of the Illinois Department of Transportation (IDOT), carries an Annual Average Daily Traffic of 40,000 vehicles (IDOT 2021) and is designated as a Strategic Regional Arterial (SRA). Parking is prohibited on both sides of the street.

47th Street is an east-west major collector street. 47th Street provides one lane in each direction; however, during the weekday peak periods, parking restrictions are enforced which adds an additional westbound lane. At its signalized intersection with Kildare Avenue, 47th Street provides one eastbound lane and one westbound lane or two westbound lanes during the peak periods. It should be noted that a parking restriction approaching this intersection on the south side of the street provides adequate space for through and right-turning vehicles to bypass vehicles waiting to turn left. All legs of this intersection provide high visibility crosswalks with pedestrian signals. Within the vicinity of the site, 47th Street is under the jurisdiction of the Chicago Department of Transportation (CDOT) and carries an AADT of 17,400 vehicles (IDOT 2021). Parking is generally permitted on the south side of the street at all times and on the north side of the street outside of the peak periods.



- LEGEND**
- TRAVEL LANE
 - TRAFFIC SIGNAL
 - STOP SIGN
 - ON-STREET PARKING
 - NO PARKING
 - NO LEFT TURN
 - BUS STOP WITH SHELTER
 - HIGH VISIBILITY CROSSWALK

Proposed Industrial
Development
Chicago, Illinois

Existing Street Characteristics



Ann Lurie Place (42nd Place) is an east-west local street that extends west from Pulaski Road and provides one lane in each direction. At its signalized intersection with Pulaski Road, Ann Lurie Place provides a shared left-turn/right-turn lane on the eastbound approach. All legs of this intersection provide high visibility crosswalks with pedestrian signals. At its all-way stop sign-controlled intersection with Kildare Avenue, Ann Lurie Place provides one lane on both approaches. All legs of this intersection provide high visibility crosswalks. Ann Lurie Place is under the jurisdiction of CDOT. Parking is generally permitted on the north side of the street and is generally permitted on the south side of the street east of Kildare Avenue.

Kildare Avenue is a north-south, local street that generally provides one lane in each direction. At its signalized intersection with 47th Street, the south leg of Kildare Avenue is offset approximately 40 feet to the east and is restricted to southbound only traffic. At this intersection, Kildare Avenue provides a shared left-turn/through/right-turn lane on the southbound approach. All legs of this intersection provide high visibility crosswalks with pedestrian signals. At its all-way stop sign-controlled intersections with Ann Lurie Place and 45th Street, Kildare Avenue provides one lane on both approaches. All legs of these intersections provide high visibility crosswalks. Kildare Avenue is under the jurisdiction of CDOT. Non-truck parking is generally permitted on both sides of street north of 45th Street and south of 47th Street. Between 45th Street and 47th Street, private perpendicular parking is provided on the west side of the street and permit parking is provided on the east side of the street except for along the Major Hector P. Garcia M.D. High School frontage which is public parking outside of school hours (7:00 to 5:00 P.M. school days).

45th Street is an east-west local street that provides one lane in each direction. At its all-way stop sign-controlled intersection with Kildare Avenue, 45th Street provides one lane on both approaches. All legs of this intersection provide high visibility crosswalk. This segment of 45th Street terminates just west of Keeler Avenue and does not provide connection to Pulaski Road. 45th Place is under the jurisdiction of CDOT. Parking is generally permitted on the north side of the street and is generally permitted on the south side of the street east of Kildare Avenue.

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 Chicago Transit Authority via the following bus routes that have stops near the development:

Route 47 (47th Street) provides service along 47th Street from Cicero Avenue to Lake Park Avenue. Service is provided seven days a week from 4:00 A.M. to 12:40 A.M. This line provides connection to the CTA Orange, Red, and Green lines and Chicago Midway International Airport.

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. Service is provided seven days a week twenty-four hours a day between Irving Park Road and Harrison Street. Service between Peterson Avenue and 31st Street is from approximately 4:00 A.M. to 1:00 A.M. seven days a week. This line provides connection to the CTA Blue (O'Hare and Forest Park), Pink, and Green lines.

Pedestrian Accommodations. Sidewalks and high-visibility crosswalks are generally provided on the majority of the streets within the study area.

Major Hector P. Garcia M.D. High School Operations

The Major Hector P. Garcia M.D. High School is located in the northeast quadrant of the intersection of Kildare Avenue with 47th Street. Pick-up and drop-off activity occurs on Kildare Avenue along the school frontage. Observations of school activity indicated the following:

- From approximately 7:20 A.M. to 8:05 A.M. and 2:05 P.M. to 2:45 P.M. a barricade is placed on the south leg of Kildare Avenue at its intersection with 45th Street, restricting it to one-way northbound only traffic between 45th Street and 47th Street.
- From approximately 7:30 A.M. to 8:05 A.M and 2:15 P.M. to 2:45 P.M. traffic aides were stationed at the intersections of Kildare Avenue with 45th Street and 47th Street to direct both vehicular and pedestrian traffic.
- From approximately 7:20 A.M. to 8:00 A.M and 2:00 P.M to 2:45 P.M. queues from the pick-up and drop-off activity on Kildare Avenue extended to 47th Street and vehicles were required to wait on 47th Street. During this time, through vehicles on 47th Street were able to continue to traverse the intersection. Westbound vehicles waiting to turn right queued in the outside westbound lane on 47th Street allowing through vehicles to continue and sufficient space was available for eastbound through vehicles on 47th Street to bypass eastbound vehicles waiting to turn left.

It should be noted that the intersection of Kildare Avenue with 47th Street operates with a longer cycle length and different timings during the school peak periods. Outside of these peak pick-up and drop-off periods school operations had a limited impact on traffic operations in the area.

Existing Traffic Volumes

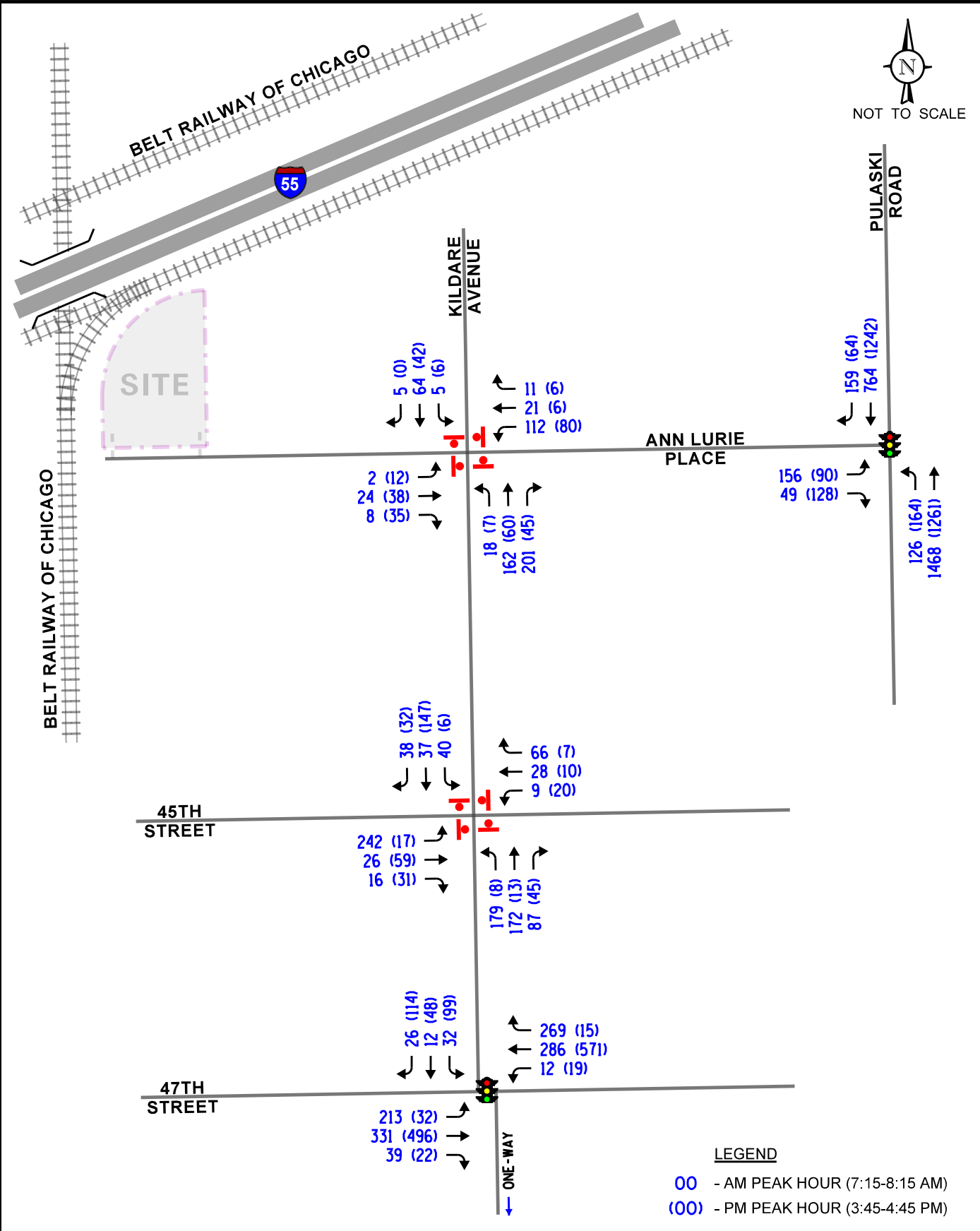
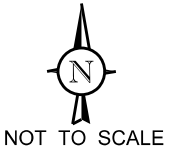
In order to determine current traffic conditions in the vicinity of the site, KLOA, Inc. conducted peak period pedestrian, bike, and vehicle traffic counts using Miovision Scout Video Collection Units on Wednesday May 18, 2021 during the weekday morning (6:30 A.M. to 9:00 A.M.) and weekday evening (3:30 P.M. to 6:00 P.M.) peak periods at the following intersections:

- Pulaski Road with Ann Lurie Place
- Kildare Avenue with Ann Lurie Place
- Kildare Avenue with 45th Street
- Kildare Avenue with 47th Street

The results of the traffic counts indicated that the weekday morning peak hour of traffic occurs from 7:15 A.M. to 8:15 A.M. and the weekday evening peak hour of traffic occurs from 3:45 P.M. to 4:45 P.M. Copies of the traffic count summary sheets are included in the Appendix.

In order to ensure that the traffic counts reflect normal traffic conditions, they were compared with previous hourly counts conducted by IDOT on Pulaski Road in 2019. Overall, the comparison indicated that the traffic counts conducted in 2022 were higher than the historic traffic volumes and, as such, were not adjusted.

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. **Figure 6** illustrates the existing pedestrian and bicycle volumes, showing direction of travel.



LEGEND

- 00 - AM PEAK HOUR (7:15-8:15 AM)
- (00) - PM PEAK HOUR (3:45-4:45 PM)

Proposed Industrial Development
Chicago, Illinois

Existing Traffic Volumes

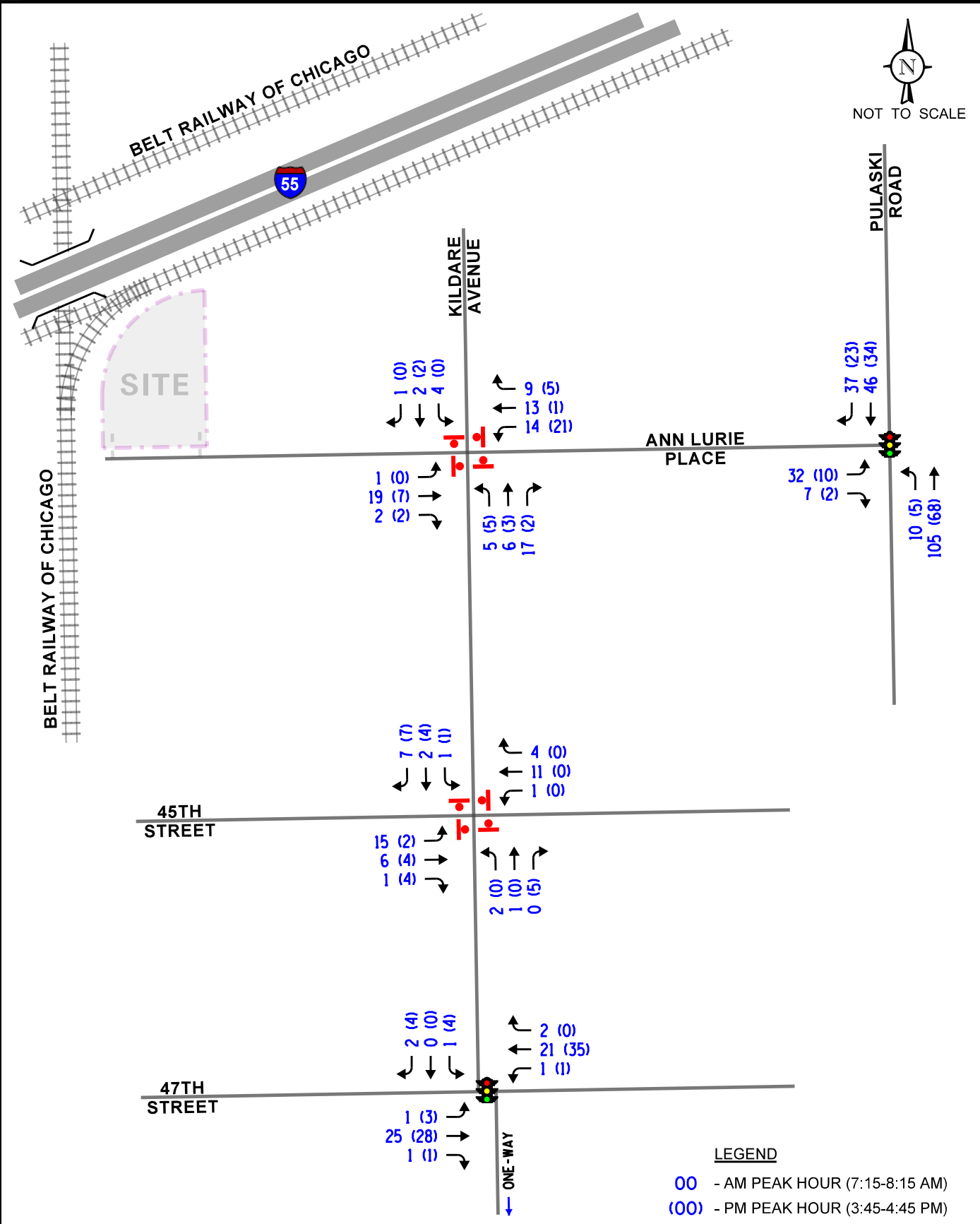


Job No: 22-173

Figure: 4



NOT TO SCALE



LEGEND

- 00 - AM PEAK HOUR (7:15-8:15 AM)
- (00) - PM PEAK HOUR (3:45-4:45 PM)

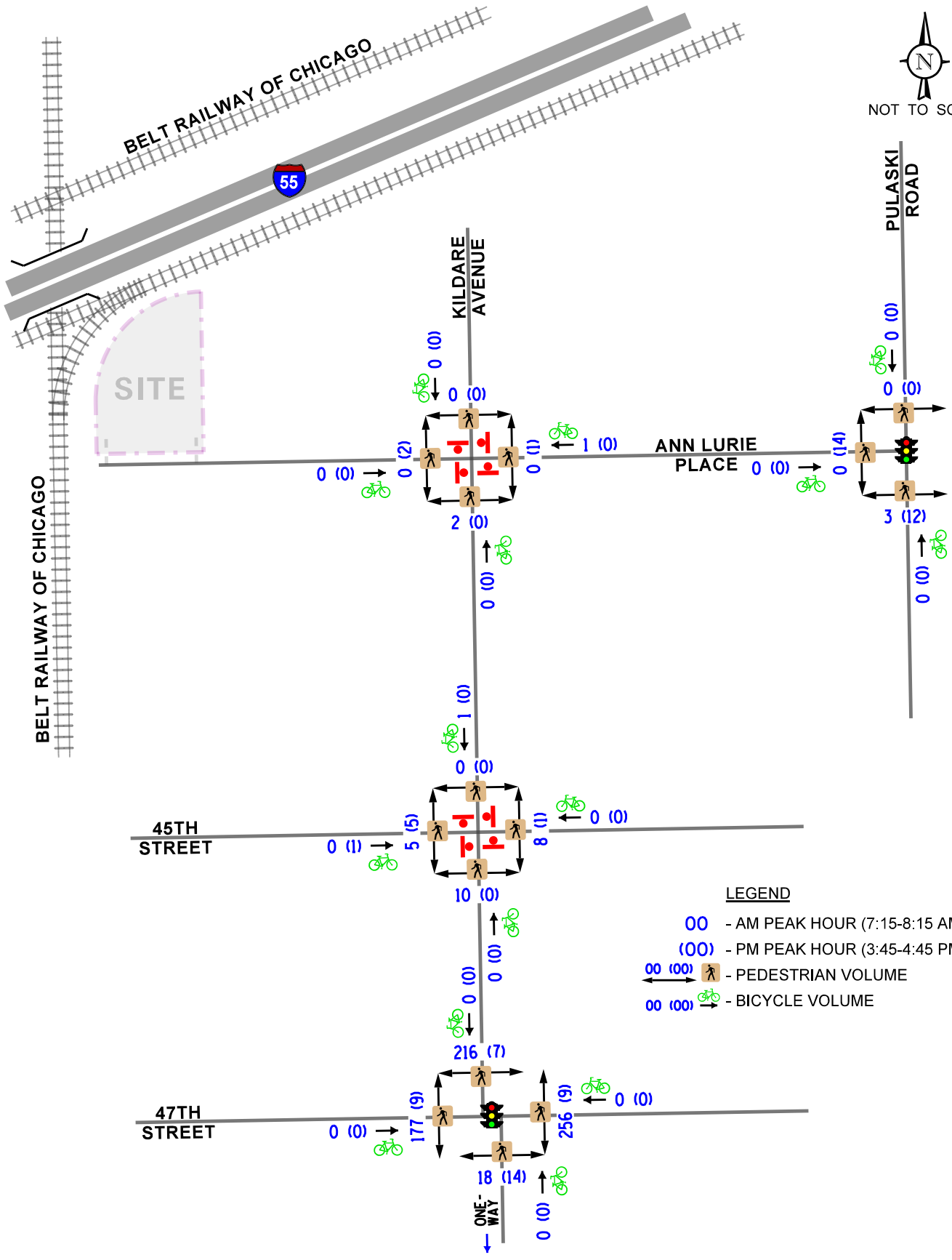
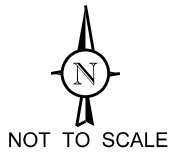
Proposed Industrial Development
Chicago, Illinois

Existing Traffic Volumes - Trucks



Job No: 22-173

Figure: 5



LEGEND
 OO - AM PEAK HOUR (7:15-8:15 AM)
 (OO) - PM PEAK HOUR (3:45-4:45 PM)
 OO (OO) [Pedestrian Icon] - PEDESTRIAN VOLUME
 OO (OO) [Bicycle Icon] - BICYCLE VOLUME

Proposed Industrial Development
 Chicago, Illinois

Existing Pedestrian and Bicycle Traffic Volumes



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 147,500 square-foot light industrial development. The development will provide 29 truck loading bays on the west side of the building. Additionally, 102 parking spaces for employees will be provided on the north, east, and west sides of the building. Access to the development is proposed to be provided as follows:

- A full movement access drive on the north side of Ann Lurie Place located approximately 1,460 feet west of Kildare Avenue. This access drive will provide one inbound lane and one outbound lane with outbound movements under stop sign control. This access drive will serve the employee parking lots.
- A full movement access drive on the north side of Ann Lurie Place located approximately 1,720 feet west of Kildare Avenue. This access drive will provide one inbound lane and one outbound lane wide enough to accommodate truck turning movements. Outbound movements will be under stop sign control. This access drive will primarily serve the truck loading bays.

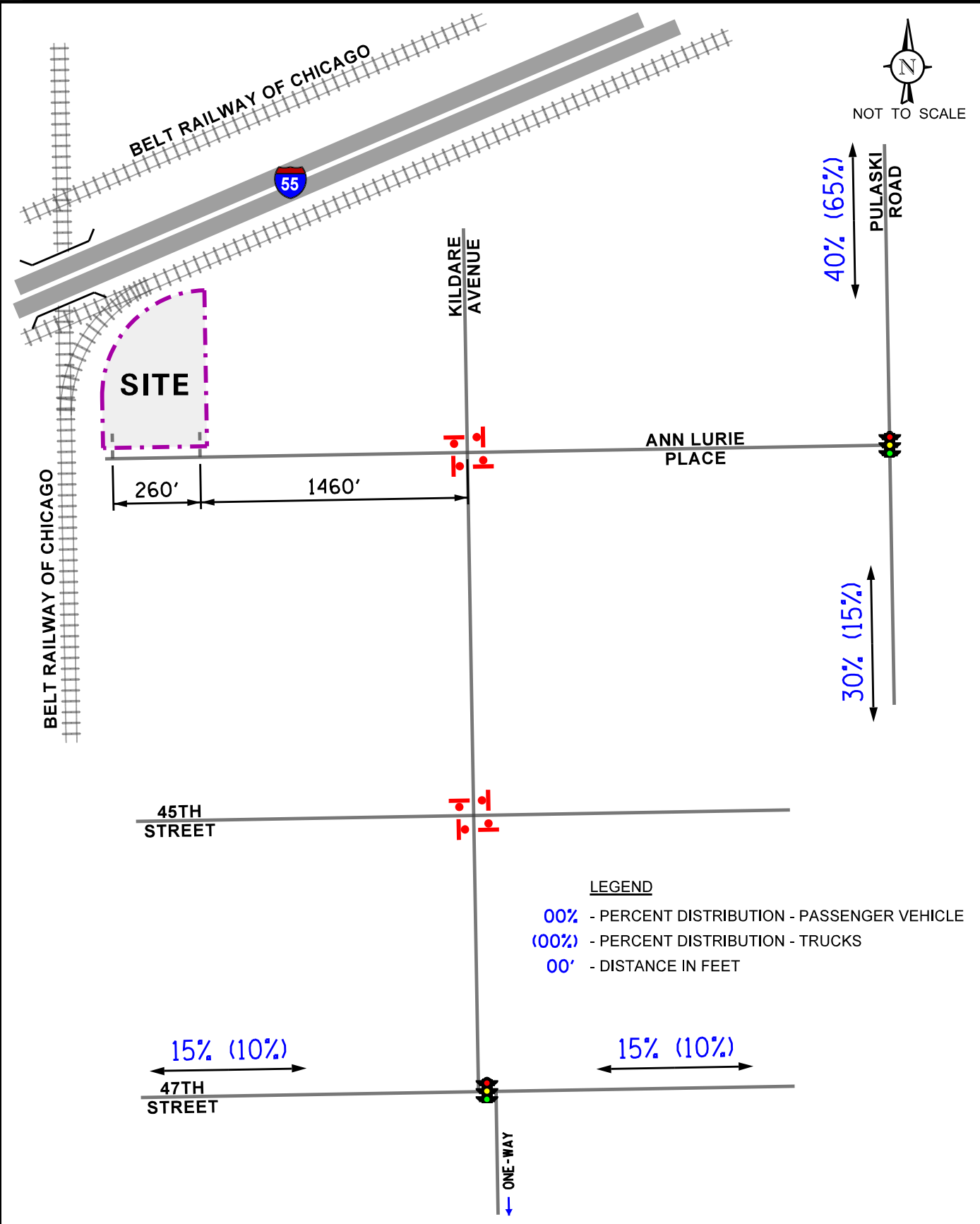
A copy of the preliminary site plan is included in the appendix.

Directional Distribution

The directions from which employees and truck traffic will approach and depart the site were estimated based on existing travel patterns, the proposed access system, and travel routes to and from Interstate 55. It should be noted that truck traffic will be able to approach and depart the site via both Ann Lurie Place and Kildare Avenue. **Figure 7** illustrates the directional distribution of traffic. Figure 7 also shows the distance, in feet, between the existing and proposed access intersections.

Peak Hour Traffic Volumes

The number of peak hour trips estimated to be generated by the proposed development was based on trip generation rates published by the Institute of Transportation Engineers (ITE) in *Trip Generation Manual*, 11th Edition. The “General Light Industrial” (Land-Use Code 110) was used for the development. **Table 1** summarizes the trips projected to be generated by the development during the peak hours and on a daily basis. **Table 2** summarized the truck trips projected to be generated by the development through the day.



Proposed Industrial
Development
Chicago, Illinois

Directional Distribution



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
		110	General Light Industrial¹ (147,500 s.f.)	92	12	104	7	46	53
	Truck Trips ²	2	2	4	2	2	4	19	19
	Passenger Vehicle Trips ³	90	10	100	5	44	49	284	284

1 - Based on the Institute of Transportation Engineers' (ITE) *Trip Generation Manual*, 11th Edition
2 - Daily rate based on ITE manual. Peak hours based on Table 2.
3 - Equal to total trips less truck trips.

Table 2
ESTIMATED HOURLY TRUCK TRIP GENERATION

Hour	Light Industrial (ITE Land-Use Code 110) – 147,500 s.f.					
	Weekday Morning			Weekday Evening		
	In	Out	Total	In	Out	Total
12:00	0	0	0	2	2	4
1:00	0	0	0	2	2	4
2:00	0	0	0	2	2	4
3:00	0	0	0	2	2	4
4:00	0	0	0	1	1	2
5:00	0	0	0	0	0	0
6:00	0	0	0	0	0	0
7:00	2	1	3	0	0	0
8:00	2	2	4	0	0	0
9:00	3	3	6	0	0	0
10:00	2	3	5	0	0	0
11:00	1	1	2	0	0	0

Based on daily truck trips (Table 1) and ITE's Hourly Distribution of Entering and Exiting Truck 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 subject development.

Development Traffic Assignment

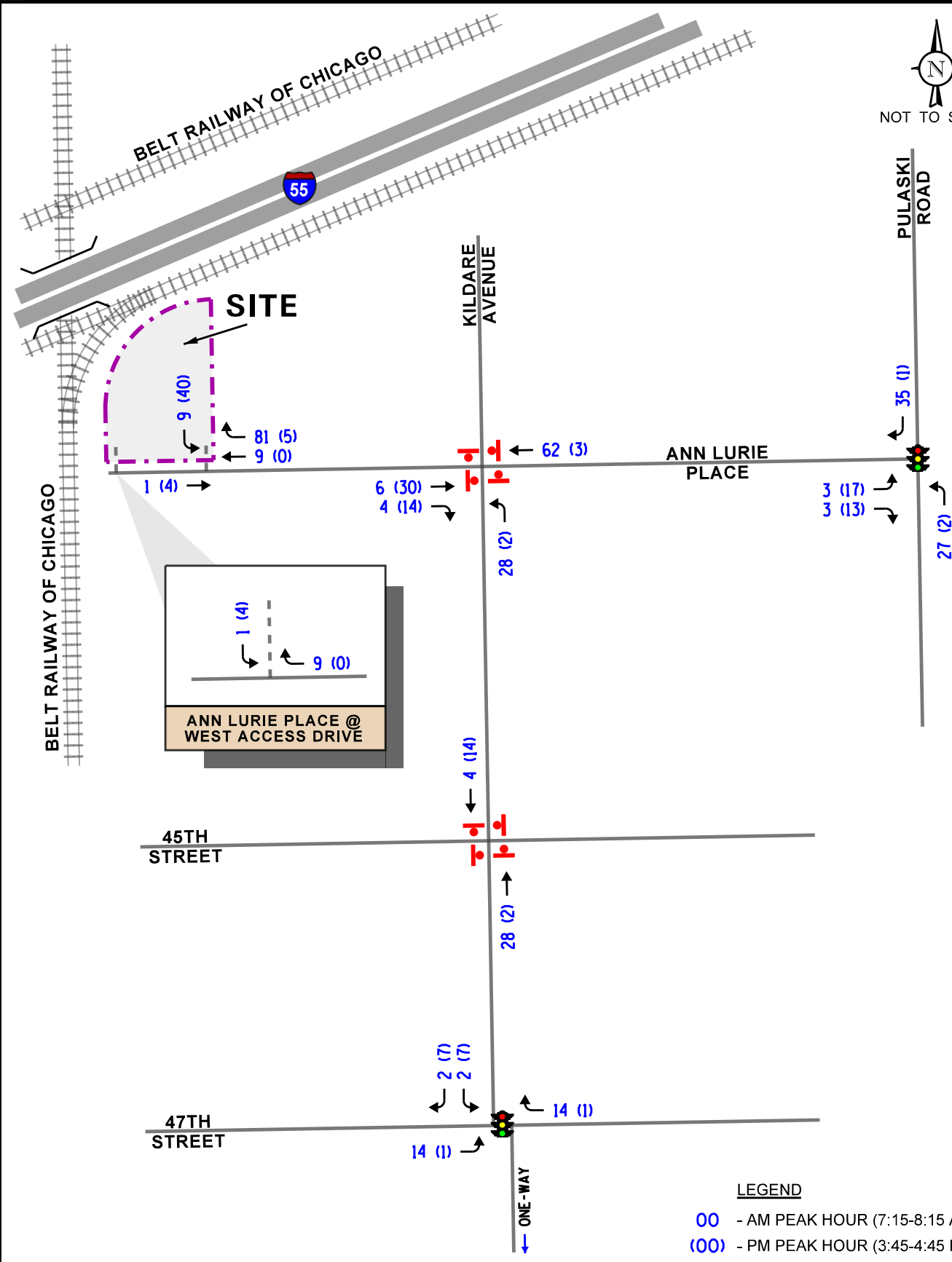
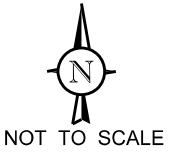
The estimated weekday morning and weekday evening peak hour traffic volumes that will be generated by the proposed development were assigned to the street system in accordance with the previously described directional distribution (Figure 7). **Figure 8** illustrates the traffic assignment of the new employee and delivery van vehicle trips for the development. **Figure 9** 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 also applied to the study area over a six-year period to represent Year 2028 no-build 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 10** illustrates the Year 2028 no-build volumes.

Total Projected Traffic Volumes

The existing traffic volumes increased by the ambient growth in the area, were combined with the new peak hour traffic volumes generated by the subject development to determine the Year 2028 total traffic volumes, shown in **Figure 11**.



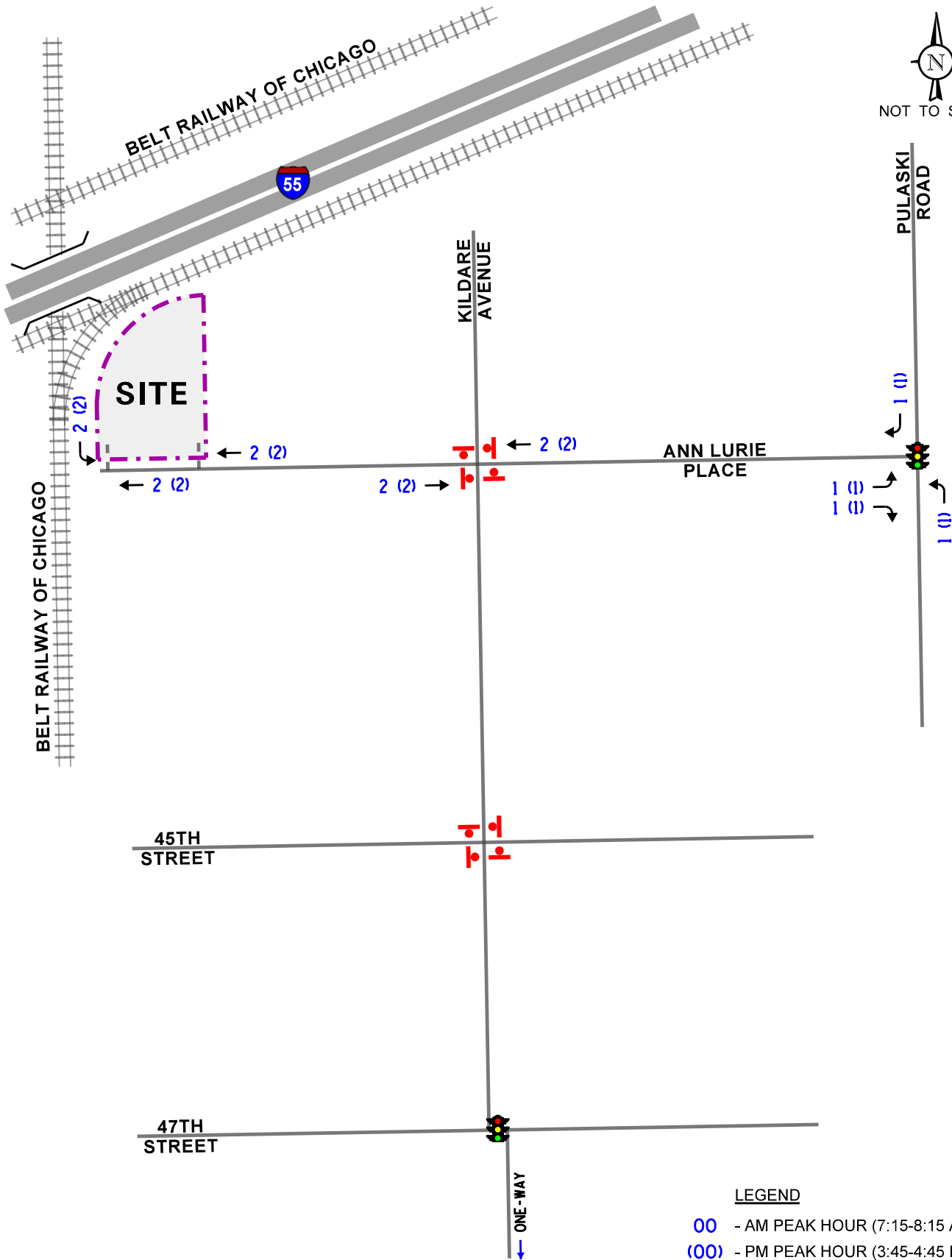
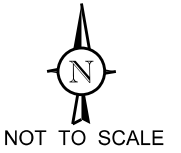
LEGEND

- 00 - AM PEAK HOUR (7:15-8:15 AM)
- (00) - PM PEAK HOUR (3:45-4:45 PM)

Proposed Industrial Development
Chicago, Illinois

Site-Generated Traffic Volumes - Passenger Vehicles

KLOA
Kenig, Lindgren, O'Hara, Aboona, Inc.
Job No: 22-173 Figure: 8



LEGEND

- 00** - AM PEAK HOUR (7:15-8:15 AM)
- (00)** - PM PEAK HOUR (3:45-4:45 PM)

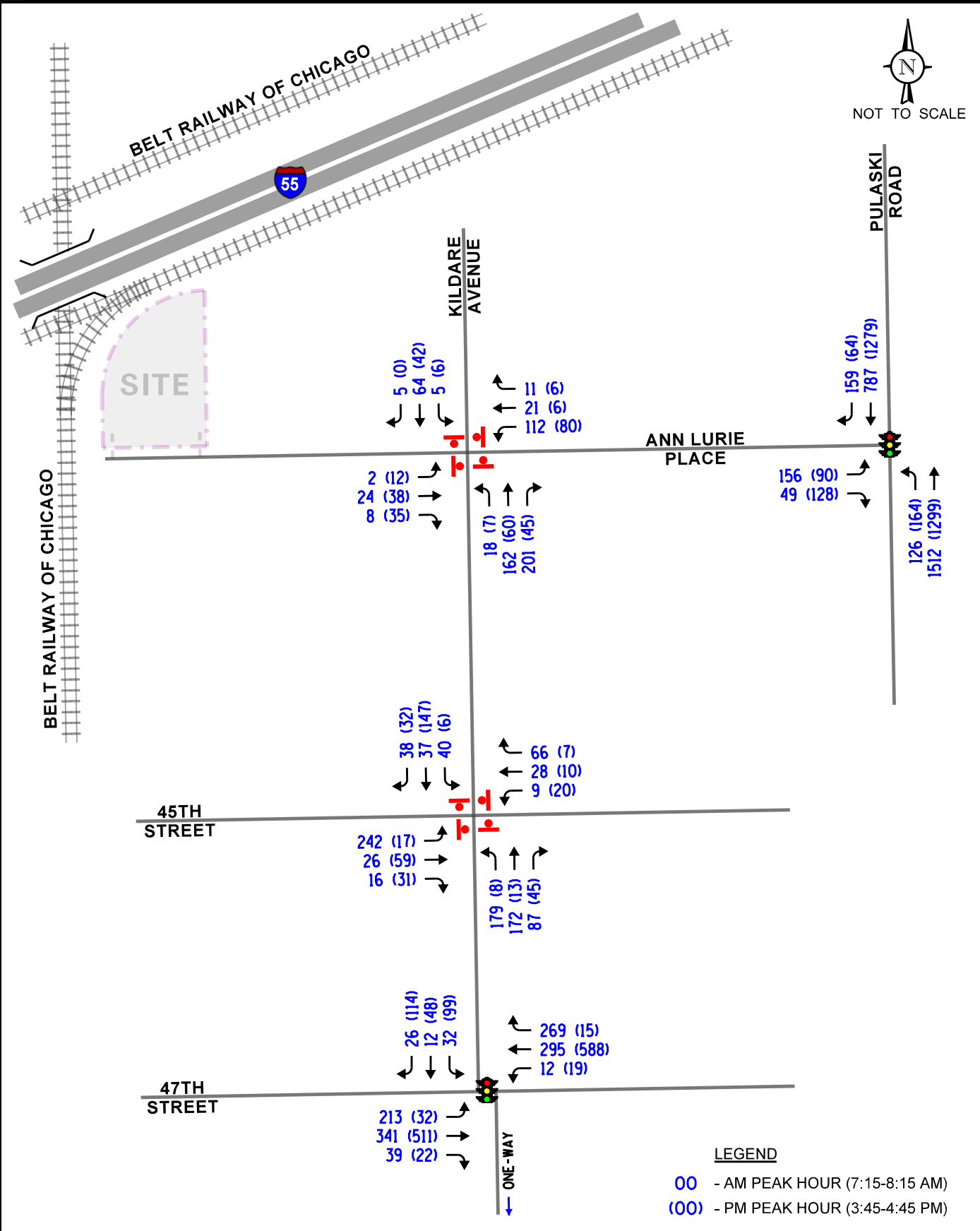
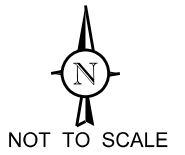
Proposed Industrial
Development
Chicago, Illinois

Site-Generated Traffic Volumes - Trucks



Job No: 22-173

Figure: 9



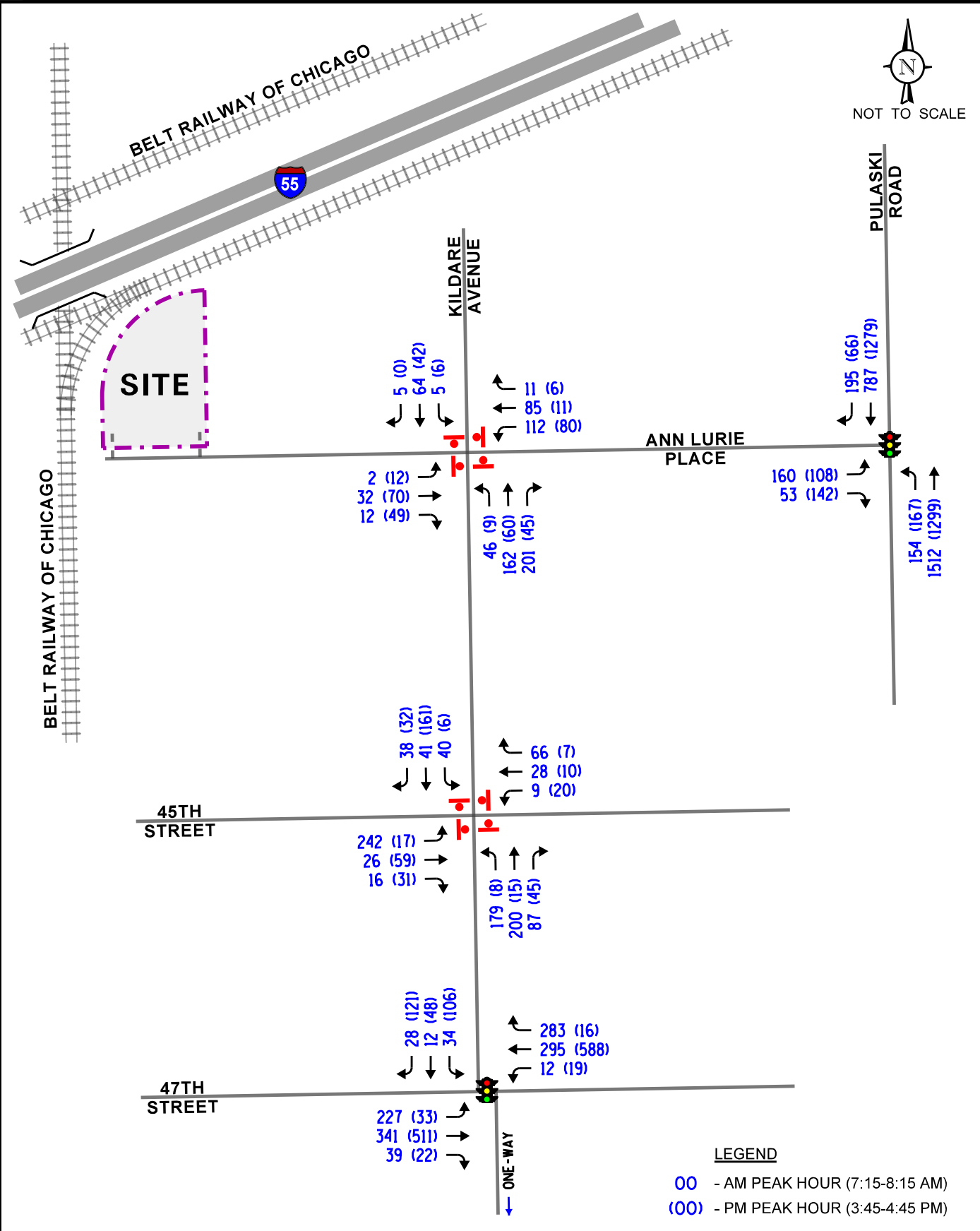
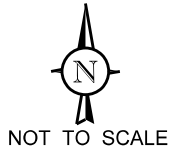
LEGEND

- 00 - AM PEAK HOUR (7:15-8:15 AM)
- (00) - PM PEAK HOUR (3:45-4:45 PM)

Proposed Industrial Development
Chicago, Illinois

Year 2028 No-Build Traffic Volumes

KLOA
Kenig, Lindgren, O'Hara, Aboona, Inc.
Job No: 22-173 Figure: 10



LEGEND

- 00 - AM PEAK HOUR (7:15-8:15 AM)
- (00) - PM PEAK HOUR (3:45-4:45 PM)

Proposed Industrial Development
Chicago, Illinois

Year 2028 Total Traffic Volumes

Job No: 22-173 Figure: 11

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, Year 2028 no-build, and Year 2028 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, Year 2028 no-build, and Year 2028 total projected conditions are presented in **Tables 3** through **6**. A discussion of the intersections follows. Summary sheets for the capacity analyses are included in the Appendix.

Table 3

CAPACITY ANALYSIS RESULTS – PULASKI ROAD WITH ANN LURIE PLACE

	Peak Hour	Eastbound		Northbound		Southbound		Overall
		L	R	L	T	T	R	
Existing Conditions	Weekday Morning	D 51.1		A 7.1	A 9.3	B 11.7		B 13.2
				A – 9.1				
	Weekday Evening	D 36.4		B 14.2	A 7.0	B 14.6		B 13.0
				A – 7.9				
Year 2028 No-Build Conditions	Weekday Morning	D 51.1		A 7.3	A 9.6	B 11.9		B 13.3
				A – 9.4				
	Weekday Evening	D 36.4		B 16.3	A 7.2	B 15.2		B 13.4
				A – 8.2				
Year 2028 Total Conditions	Weekday Morning	D 51.7		A 8.6	A 9.8	B 12.3		B 13.7
				A – 9.7				
	Weekday Morning ¹	D 51.5		A 9.7	A 9.9	B 12.5		B 13.9
				A – 9.9				
Weekday Evening	D 39.2		C 20.9	A 8.1	B 16.3		B 14.9	
			A – 9.6					
1 – Includes reassignment of all site traffic to this intersection.				Letter denotes Level of Service Delay is measured in seconds		R – Right Turn	L – Left Turn T – Through	

Table 4

CAPACITY ANALYSIS RESULTS – KILDARE AVENUE WITH 47TH STREET

	Peak Hour	Eastbound			Westbound			Southbound			Overall
		L	T	R	L	T	R	L	T	R	
Existing Conditions	Weekday Morning ¹	C 20.8	B 12.9		B 12.0			B 19.9			B 14.3
		B – 15.8									
	Weekday Evening	A 7.1	B 13.2		B 14.9			C 23.8			B 15.8
		B – 12.9									
Year 2028 No-Build Conditions	Weekday Morning ¹	C 21.5	B 13.1		B 12.5			B 20.0			B 14.7
		B – 16.1									
	Weekday Evening	A 7.1	B 13.6		B 15.1			C 23.8			B 15.9
		B – 13.2									
Year 2028 Total Conditions	Weekday Morning ¹	C 26.1	B 13.1		B 12.6			C 20.0			B 15.6
		B – 18.0									
	Weekday Evening	A 7.1	B 13.6		B 15.1			C 25.2			B 16.3
		B – 13.2									
1 – Intersection operates differently during Major Hector P. Garcia MD High School peak periods.		Letter denotes Level of Service Delay is measured in seconds				R – Right Turn		L – Left Turn T – Through			

Table 5

CAPACITY ANALYSIS RESULTS – KILDARE AVENUE WITH 42ND PLACE – ALL-WAY STOP SIGN CONTROLLED

Intersection	Weekday Morning Peak Hour		Weekday Evening Peak Hour	
	LOS	Delay	LOS	Delay
Existing Conditions				
• Overall	B	11.6	A	9.0
• Eastbound Approach	A	9.5	A	8.0
• Westbound Approach	B	10.2	A	9.2
• Northbound Approach	B	12.9	A	10.0
• Southbound Approach	A	8.7	A	8.1
Year 2028 No-Build Conditions				
• Overall	B	11.6	A	9.0
• Eastbound Approach	A	9.5	A	8.0
• Westbound Approach	B	10.2	A	9.2
• Northbound Approach	B	12.9	A	10.0
• Southbound Approach	A	8.7	A	8.1
Year 2028 Total Projected Conditions				
• Overall	B	12.4	A	9.1
• Eastbound Approach	A	9.9	A	8.5
• Westbound Approach	B	11.5	A	9.3
• Northbound Approach	B	13.8	A	9.9
• Southbound Approach	A	9.1	A	8.3
LOS = Level of Service Delay is measured in seconds.				

Table 6
 CAPACITY ANALYSIS RESULTS – KILDARE AVENUE WITH 45TH STREET – ALL-WAY
 STOP SIGN CONTROLLED

Intersection	Weekday Morning Peak Hour ¹		Weekday Evening Peak Hour	
	LOS	Delay	LOS	Delay
Existing Conditions				
• Overall	C	17.2	A	8.9
• Eastbound Approach	C	15.7	A	8.8
• Westbound Approach	B	10.6	A	8.1
• Northbound Approach	C	21.5	A	7.7
• Southbound Approach	B	10.6	A	9.6
Year 2028 No-Build Conditions				
• Overall	C	17.2	A	8.9
• Eastbound Approach	C	15.7	A	8.8
• Westbound Approach	B	10.6	A	8.1
• Northbound Approach	C	21.5	A	7.7
• Southbound Approach	B	10.6	A	9.6
Year 2028 Total Projected Conditions				
• Overall	C	19.2	A	9.1
• Eastbound Approach	C	16.2	A	8.9
• Westbound Approach	B	10.9	A	8.2
• Northbound Approach	C	24.9	A	7.8
• Southbound Approach	B	10.9	A	9.8
1 – Intersection operates differently during Major Hector P. Garcia MD High School peak periods.		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 street and traffic control improvements necessary to accommodate the development-generated traffic.

Pulaski Road with Ann Lurie Place

The results of the capacity analysis indicate that overall, this intersection currently operates at Level of Service (LOS) B during the weekday morning peak hour and weekday evening peak hours. Further, all movements operate at LOS D or better during both peak hours and through movements on Pulaski Road operate at LOS B or better during both peak hours. Under Year 2028 no-build conditions, this intersection is projected to continue to operate at LOS B during both peak hours.

Under Year 2028 total projected traffic conditions, this intersection is projected to continue to operate at LOS B during the weekday morning and weekday evening peak hours with increases in delay of approximately one to two seconds over no build conditions. Further, all movements are projected to continue to operate at LOS D or better during both peak hours and through movements on Pulaski Road are projected to continue to operate at LOS B or better during both peak hours.

As previously indicated, during the peak pick-up and drop-off periods of the Major Hector P. Garcia MD High School, Kildare Avenue is restricted to one-way northbound traffic and queues on Kildare Avenue extended from the school pick-up and drop-off area onto 47th Street. Given this congestion during these time periods, it is expected that site traffic will avoid travelling on Kildare Avenue and seek an alternative route to and from the proposed development. In order to reflect this reassignment and to provide a conservative analysis, this intersection was also analyzed assuming that during the weekday morning peak hour all site generated traffic approaches and departs the site via this intersection. The results of this capacity analysis indicate that under Year 2028 total projected conditions, this intersection is projected to continue to operate at LOS B during the weekday morning peak hour and all movements are projected to operate at the same LOS as no-build conditions. It should be noted that the school's peak pick-up activities during the weekday afternoon occurs before the peak hour of roadway traffic and as such the school traffic will have a minimal impact on roadway operations during the weekday evening peak hour.

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 as part of proposed development.

Kildare Avenue with 47th Street

The results of the capacity analysis indicate that overall, this intersection currently operates at LOS B during the weekday morning peak hour and weekday evening peak hours. Further, all movements operate at LOS C or better during both peak hours and through movements on 47th Street operate at LOS B or better during both peak hours.

Under Year 2028 no-build conditions and Year 2028 total projected traffic conditions, this intersection is projected to continue to operate at LOS B during the weekday morning and weekday evening peak hours conditions. Further, all movements are projected to continue to operate at the same LOS during both peak hours and through movements on 47th Street are projected to continue to operate at LOS B or better during both peak hours.

As previously mentioned, during the peak pick-up and drop-off periods of the Major Hector P. Garcia MD High School, Kildare Avenue is restricted to one-way northbound traffic and queues on Kildare Avenue extended from the school pick-up and drop-off area onto 47th Street. Further, a traffic aid is stationed at this intersection to direct both vehicular and pedestrian traffic. While the results of the analysis indicate that this intersection has sufficient capacity to accommodate the existing and projected traffic volumes during the weekday morning peak hour, these results do not fully reflect the impact of drop-off activity. However, during these peak periods site traffic will seek alternative routes to and from the proposed development. Further, the school's peak pick-up activities occur during the weekday afternoon before the peak hour of roadway traffic and as such school operations will have a minimal impact on roadway operations during the weekday evening peak hour.

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 as part of proposed development.

Kildare Avenue with Ann Lurie Place

The results of the capacity analysis indicate that overall, this intersection currently operates at LOS B during the weekday morning peak hour and LOS A during the weekday evening peak hour. Further, all the intersection approaches operate at LOS B or better during both peak hours.

Under Year 2028 total projected conditions, this intersection overall is projected to continue to operate at LOS B during the weekday morning peak hour and LOS A during the weekday evening peak hour with increases in delay of less than one second. Further, all the intersection movements are projected to continue to operate the same LOS as existing conditions during both peak hours. As such, this intersection has sufficient reserve capacity to accommodate the traffic estimated to be generated by the proposed development and no street improvements will be required as part of the proposed development.

Kildare Avenue with 45th Street

The results of the capacity analysis indicate that overall, this intersection currently operates at LOS C during the weekday morning peak hour and LOS A during the weekday evening peak hour. Further, all the intersection approaches operate at LOS C or better during both peak hours.

Under Year 2028 total projected conditions, this intersection overall is projected to continue to operate at LOS C during the weekday morning peak hour and LOS A during the weekday evening peak hour with increases in delay of approximately two and one seconds, respectively. Further, all the intersection movements are projected to continue to operate the same LOS as existing conditions during both peak hours.

As previously mentioned, during the peak pick-up and drop-off periods of the Major Hector P. Garcia MD High School, Kildare Avenue is restricted to a one-way northbound traffic. Further, a traffic aid is stationed at this intersection to direct both vehicular and pedestrian traffic. While the results of the analysis indicate that this intersection has sufficient capacity to accommodate the existing and projected traffic volumes during the weekday morning peak hour, these results do not fully reflect the impact of drop-off activity. However, during these peak periods site traffic will seek alternative routes to and from the proposed development. Further, the school's peak pick-up activities occur during the weekday afternoon before the peak hour of roadway traffic and as such school operations will have a minimal impact on roadway operations during the weekday evening peak hour.

As such, this intersection has sufficient reserve capacity to accommodate the traffic estimated to be generated by the proposed development and no street improvements will be required as part of the proposed development.

Ann Lurie Place with the Site Access Drives

As proposed two full movement access drives will be provided off Ann Lurie Place located approximately 1,460 and 1,720 feet west of Kildare Avenue. The access drives will provide one inbound lane and one outbound lane with outbound movements under stop sign control.

Under existing conditions, Ann Lurie Place carries a limited volume of traffic along the site frontage and exclusively serve local developments. As such, outbound vehicles from the site access drives will be able to turn with limited delay.

6. Conclusion

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

- During the peak pick-up and drop-off periods of the Major Hector P. Garcia MD High School, Kildare Avenue is restricted to a one-way northbound street with queues on Kildare Avenue extending from the school pick-up and drop-off area to 47th Street. Traffic aides are stationed at the intersections of Kildare Avenue with 45th Street and 47th Street to assist with the traffic flow and pedestrian activities.
- During the school peak periods, site traffic will not approach and depart the site via the Kildare Avenue and 47th Street intersection.
- The signalized intersection of Pulaski Road with Ann Lurie Place has sufficient reserve capacity to accommodate site traffic and can accommodate all site-generated traffic during school peak periods.
- The signalized intersection of Kildare Avenue with 47th Street has sufficient reserve capacity to accommodate site traffic. While this intersection will operate differently during school peak periods, this intersection will operate at a good LOS outside of school peak periods and site-generated traffic will not turn at this intersection during the school peak periods.
- The unsignalized intersections along Kildare Avenue have sufficient reserve capacity to accommodate site-generated traffic and no traffic control improvements will be required as part of the development.
- 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 Worksheets
Level of Service Criteria
Capacity Analysis Summary Sheets

Traffic Count Summary Sheets



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

Rosemont, Illinois, United States 60018
(847)518-9990 abowen@kloainc.com

Count Name: Kildare Rd with 45th St TMC
Site Code:
Start Date: 05/18/2022
Page No: 1

Turning Movement Data

Start Time	45th St Eastbound						45th St Westbound						Kildare Rd Northbound						Kildare Rd 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	
6:00 AM	0	18	3	1	0	22	0	0	0	14	0	14	0	0	16	0	0	16	0	3	7	5	0	15	67
6:15 AM	0	19	2	0	0	21	0	1	1	10	0	12	0	2	15	1	0	18	0	4	10	4	0	18	69
6:30 AM	0	43	1	1	1	45	0	3	0	10	0	13	0	3	16	0	1	19	0	2	4	6	0	12	89
6:45 AM	0	50	6	4	0	60	0	2	6	16	0	24	0	2	27	1	0	30	0	1	11	12	0	24	138
Hourly Total	0	130	12	6	1	148	0	6	7	50	0	63	0	7	74	2	1	83	0	10	32	27	0	69	363
7:00 AM	0	55	4	7	0	66	0	5	2	17	0	24	0	7	31	7	0	45	0	2	23	7	2	32	167
7:15 AM	0	69	11	7	0	87	0	3	8	19	1	30	0	23	33	12	0	68	0	4	13	4	0	21	206
7:30 AM	0	57	5	2	1	64	0	2	8	14	3	24	0	61	61	19	6	141	0	15	4	11	0	30	259
7:45 AM	0	65	8	1	3	74	0	0	7	15	3	22	0	57	33	20	2	110	0	20	1	10	0	31	237
Hourly Total	0	246	28	17	4	291	0	10	25	65	7	100	0	148	158	58	8	364	0	41	41	32	2	114	869
8:00 AM	0	51	2	6	1	59	0	4	5	18	1	27	0	38	45	36	2	119	0	1	19	13	0	33	238
8:15 AM	0	35	4	2	2	41	0	0	1	4	0	5	0	3	33	3	0	39	0	3	10	12	0	25	110
8:30 AM	0	33	0	3	0	36	0	1	3	5	0	9	0	3	31	2	0	36	0	7	11	10	0	28	109
8:45 AM	0	23	3	0	0	26	0	2	1	1	0	4	0	6	30	3	1	39	0	1	5	8	0	14	83
Hourly Total	0	142	9	11	3	162	0	7	10	28	1	45	0	50	139	44	3	233	0	12	45	43	0	100	540
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3:00 PM	0	5	9	4	0	18	0	7	3	2	0	12	0	0	7	9	0	16	0	1	24	6	0	31	77
3:15 PM	0	3	11	1	3	15	1	2	2	1	0	6	0	3	7	10	0	20	0	2	27	15	1	44	85
3:30 PM	0	3	19	6	1	28	0	2	2	0	2	4	0	0	8	15	2	23	0	2	43	2	2	47	102
3:45 PM	1	1	26	14	3	42	0	2	1	1	1	4	0	2	0	21	0	23	0	1	43	10	0	54	123
Hourly Total	1	12	65	25	7	103	1	13	8	4	3	26	0	5	22	55	2	82	0	6	137	33	3	176	387
4:00 PM	0	12	12	5	2	29	0	6	1	3	0	10	1	3	12	6	0	22	0	1	41	5	0	47	108
4:15 PM	0	3	9	4	0	16	2	6	4	2	0	14	0	0	0	6	0	6	0	3	29	8	0	40	76
4:30 PM	0	0	12	8	0	20	1	3	4	1	0	9	0	2	1	12	0	15	0	1	34	9	0	44	88
4:45 PM	0	1	7	3	0	11	1	1	3	1	0	6	0	1	2	9	0	12	0	0	30	9	0	39	68
Hourly Total	0	16	40	20	2	76	4	16	12	7	0	39	1	6	15	33	0	55	0	5	134	31	0	170	340
5:00 PM	0	0	16	4	1	20	0	2	1	3	1	6	0	1	3	3	0	7	0	2	36	16	0	54	87
5:15 PM	0	2	9	2	0	13	1	0	2	2	0	5	0	1	2	5	0	8	0	1	35	4	0	40	66
5:30 PM	0	2	5	0	0	7	0	2	3	0	0	5	0	1	2	8	0	11	0	1	24	15	0	40	63
5:45 PM	0	3	4	1	2	8	0	1	0	3	0	4	0	0	3	4	0	7	1	3	27	11	0	42	61
Hourly Total	0	7	34	7	3	48	1	5	6	8	1	20	0	3	10	20	0	33	1	7	122	46	0	176	277
Grand Total	1	553	188	86	20	828	6	57	68	162	12	293	1	219	418	212	14	850	1	81	511	212	5	805	2776
Approach %	0.1	66.8	22.7	10.4	-	-	2.0	19.5	23.2	55.3	-	-	0.1	25.8	49.2	24.9	-	-	0.1	10.1	63.5	26.3	-	-	-
Total %	0.0	19.9	6.8	3.1	-	29.8	0.2	2.1	2.4	5.8	-	10.6	0.0	7.9	15.1	7.6	-	30.6	0.0	2.9	18.4	7.6	-	29.0	-
Lights	1	513	167	69	-	750	6	51	52	149	-	258	1	215	402	201	-	819	0	71	479	176	-	726	2553

% Lights	100.0	92.8	88.8	80.2	-	90.6	100.0	89.5	76.5	92.0	-	88.1	100.0	98.2	96.2	94.8	-	96.4	0.0	87.7	93.7	83.0	-	90.2	92.0
Buses	0	5	0	3	-	8	0	0	0	0	-	0	0	2	0	1	-	3	0	0	1	11	-	12	23
% Buses	0.0	0.9	0.0	3.5	-	1.0	0.0	0.0	0.0	0.0	-	0.0	0.0	0.9	0.0	0.5	-	0.4	0.0	0.0	0.2	5.2	-	1.5	0.8
Single-Unit Trucks	0	24	17	8	-	49	0	5	16	12	-	33	0	1	7	4	-	12	1	6	18	17	-	42	136
% Single-Unit Trucks	0.0	4.3	9.0	9.3	-	5.9	0.0	8.8	23.5	7.4	-	11.3	0.0	0.5	1.7	1.9	-	1.4	100.0	7.4	3.5	8.0	-	5.2	4.9
Articulated Trucks	0	11	4	5	-	20	0	1	0	1	-	2	0	1	9	5	-	15	0	4	11	8	-	23	60
% Articulated Trucks	0.0	2.0	2.1	5.8	-	2.4	0.0	1.8	0.0	0.6	-	0.7	0.0	0.5	2.2	2.4	-	1.8	0.0	4.9	2.2	3.8	-	2.9	2.2
Bicycles on Road	0	0	0	1	-	1	0	0	0	0	-	0	0	0	0	1	-	1	0	0	2	0	-	2	4
% Bicycles on Road	0.0	0.0	0.0	1.2	-	0.1	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.5	-	0.1	0.0	0.0	0.4	0.0	-	0.2	0.1
Pedestrians	-	-	-	-	20	-	-	-	-	-	12	-	-	-	-	-	14	-	-	-	-	-	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 abowen@kloainc.com

Count Name: Kildare Rd with 45th St TMC
Site Code:
Start Date: 05/18/2022
Page No: 3

Turning Movement Peak Hour Data (7:15 AM)

Start Time	45th St Eastbound						45th St Westbound						Kildare Rd Northbound						Kildare Rd 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	69	11	7	0	87	0	3	8	19	1	30	0	23	33	12	0	68	0	4	13	4	0	21	206
7:30 AM	0	57	5	2	1	64	0	2	8	14	3	24	0	61	61	19	6	141	0	15	4	11	0	30	259
7:45 AM	0	65	8	1	3	74	0	0	7	15	3	22	0	57	33	20	2	110	0	20	1	10	0	31	237
8:00 AM	0	51	2	6	1	59	0	4	5	18	1	27	0	38	45	36	2	119	0	1	19	13	0	33	238
Total	0	242	26	16	5	284	0	9	28	66	8	103	0	179	172	87	10	438	0	40	37	38	0	115	940
Approach %	0.0	85.2	9.2	5.6	-	-	0.0	8.7	27.2	64.1	-	-	0.0	40.9	39.3	19.9	-	-	0.0	34.8	32.2	33.0	-	-	-
Total %	0.0	25.7	2.8	1.7	-	30.2	0.0	1.0	3.0	7.0	-	11.0	0.0	19.0	18.3	9.3	-	46.6	0.0	4.3	3.9	4.0	-	12.2	-
PHF	0.000	0.877	0.591	0.571	-	0.816	0.000	0.563	0.875	0.868	-	0.858	0.000	0.734	0.705	0.604	-	0.777	0.000	0.500	0.487	0.731	-	0.871	0.907
Lights	0	227	20	15	-	262	0	8	17	62	-	87	0	177	171	87	-	435	0	39	34	31	-	104	888
% Lights	-	93.8	76.9	93.8	-	92.3	-	88.9	60.7	93.9	-	84.5	-	98.9	99.4	100.0	-	99.3	-	97.5	91.9	81.6	-	90.4	94.5
Buses	0	2	0	0	-	2	0	0	0	0	-	0	0	1	0	0	-	1	0	0	0	0	-	0	3
% Buses	-	0.8	0.0	0.0	-	0.7	-	0.0	0.0	0.0	-	0.0	-	0.6	0.0	0.0	-	0.2	-	0.0	0.0	0.0	-	0.0	0.3
Single-Unit Trucks	0	9	5	1	-	15	0	1	11	3	-	15	0	1	0	0	-	1	0	0	2	6	-	8	39
% Single-Unit Trucks	-	3.7	19.2	6.3	-	5.3	-	11.1	39.3	4.5	-	14.6	-	0.6	0.0	0.0	-	0.2	-	0.0	5.4	15.8	-	7.0	4.1
Articulated Trucks	0	4	1	0	-	5	0	0	0	1	-	1	0	0	1	0	-	1	0	1	0	1	-	2	9
% Articulated Trucks	-	1.7	3.8	0.0	-	1.8	-	0.0	0.0	1.5	-	1.0	-	0.0	0.6	0.0	-	0.2	-	2.5	0.0	2.6	-	1.7	1.0
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	2.7	0.0	-	0.9	0.1
Pedestrians	-	-	-	-	5	-	-	-	-	-	8	-	-	-	-	-	10	-	-	-	-	-	0	-	-
% 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 abowen@kloainc.com

Count Name: Kildare Rd with 45th St TMC
Site Code:
Start Date: 05/18/2022
Page No: 4

Turning Movement Peak Hour Data (3:45 PM)

Start Time	45th St Eastbound						45th St Westbound						Kildare Rd Northbound						Kildare Rd 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	
3:45 PM	1	1	26	14	3	42	0	2	1	1	1	4	0	2	0	21	0	23	0	1	43	10	0	54	123
4:00 PM	0	12	12	5	2	29	0	6	1	3	0	10	1	3	12	6	0	22	0	1	41	5	0	47	108
4:15 PM	0	3	9	4	0	16	2	6	4	2	0	14	0	0	0	6	0	6	0	3	29	8	0	40	76
4:30 PM	0	0	12	8	0	20	1	3	4	1	0	9	0	2	1	12	0	15	0	1	34	9	0	44	88
Total	1	16	59	31	5	107	3	17	10	7	1	37	1	7	13	45	0	66	0	6	147	32	0	185	395
Approach %	0.9	15.0	55.1	29.0	-	-	8.1	45.9	27.0	18.9	-	-	1.5	10.6	19.7	68.2	-	-	0.0	3.2	79.5	17.3	-	-	-
Total %	0.3	4.1	14.9	7.8	-	27.1	0.8	4.3	2.5	1.8	-	9.4	0.3	1.8	3.3	11.4	-	16.7	0.0	1.5	37.2	8.1	-	46.8	-
PHF	0.250	0.333	0.567	0.554	-	0.637	0.375	0.708	0.625	0.583	-	0.661	0.250	0.583	0.271	0.536	-	0.717	0.000	0.500	0.855	0.800	-	0.856	0.803
Lights	1	14	55	26	-	96	3	17	10	7	-	37	1	7	13	40	-	61	0	5	143	25	-	173	367
% Lights	100.0	87.5	93.2	83.9	-	89.7	100.0	100.0	100.0	100.0	-	100.0	100.0	100.0	100.0	88.9	-	92.4	-	83.3	97.3	78.1	-	93.5	92.9
Buses	0	0	0	1	-	1	0	0	0	0	-	0	0	0	0	1	-	1	0	0	0	3	-	3	5
% Buses	0.0	0.0	0.0	3.2	-	0.9	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	2.2	-	1.5	-	0.0	0.0	9.4	-	1.6	1.3
Single-Unit Trucks	0	2	3	1	-	6	0	0	0	0	-	0	0	0	0	1	-	1	0	0	2	2	-	4	11
% Single-Unit Trucks	0.0	12.5	5.1	3.2	-	5.6	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	2.2	-	1.5	-	0.0	1.4	6.3	-	2.2	2.8
Articulated Trucks	0	0	1	2	-	3	0	0	0	0	-	0	0	0	0	3	-	3	0	1	2	2	-	5	11
% Articulated Trucks	0.0	0.0	1.7	6.5	-	2.8	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	6.7	-	4.5	-	16.7	1.4	6.3	-	2.7	2.8
Bicycles on Road	0	0	0	1	-	1	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	1
% Bicycles on Road	0.0	0.0	0.0	3.2	-	0.9	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.3
Pedestrians	-	-	-	-	5	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% 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 abowen@kloainc.com

Count Name: Kildare Rd with 47th St TMC
Site Code:
Start Date: 05/18/2022
Page No: 1

Turning Movement Data

Start Time	47th St Eastbound						47th St Westbound						Northbound Approach Northbound						Kildare Rd 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		
6:00 AM	0	15	68	1	1	84	0	1	96	5	0	102	0	0	0	0	0	0	0	6	1	6	1	13	199	
6:15 AM	0	19	79	4	1	102	0	3	81	9	0	93	0	0	0	0	0	0	0	2	1	8	1	11	206	
6:30 AM	0	16	78	2	1	96	0	2	81	14	0	97	0	0	0	0	1	0	0	1	1	3	1	5	198	
6:45 AM	0	39	94	3	2	136	0	1	95	24	1	120	0	0	0	0	3	0	0	8	0	3	0	11	267	
Hourly Total	0	89	319	10	5	418	0	7	353	52	1	412	0	0	0	0	4	0	0	17	3	20	3	40	870	
7:00 AM	0	47	117	2	2	166	0	1	101	43	2	145	0	0	0	0	1	0	0	11	4	6	2	21	332	
7:15 AM	0	57	71	6	25	134	0	3	81	70	19	154	0	0	0	0	2	0	0	9	1	9	18	19	307	
7:30 AM	0	44	53	15	85	112	0	2	53	64	123	119	0	0	0	0	5	0	0	0	0	0	93	0	231	
7:45 AM	0	48	99	10	60	157	0	6	61	64	90	131	0	0	0	0	7	0	0	0	0	0	87	0	288	
Hourly Total	0	196	340	33	172	569	0	12	296	241	234	549	0	0	0	0	15	0	0	20	5	15	200	40	1158	
8:00 AM	0	64	108	8	7	180	0	1	91	71	24	163	0	0	0	0	4	0	0	23	11	17	18	51	394	
8:15 AM	0	30	99	2	1	131	0	5	107	26	9	138	0	0	0	0	6	0	0	16	3	14	2	33	302	
8:30 AM	0	30	101	5	3	136	0	3	88	18	4	109	0	0	0	0	4	0	0	6	2	9	10	17	262	
8:45 AM	0	26	103	7	2	136	0	0	81	10	0	91	0	0	0	0	3	0	0	2	3	3	1	8	235	
Hourly Total	0	150	411	22	13	583	0	9	367	125	37	501	0	0	0	0	17	0	0	47	19	43	31	109	1193	
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3:00 PM	0	9	84	7	0	100	0	5	103	9	4	117	0	0	0	0	2	0	0	12	5	29	2	46	263	
3:15 PM	0	10	102	7	2	119	0	6	117	7	3	130	0	0	0	0	2	0	0	10	7	19	2	36	285	
3:30 PM	0	14	102	5	2	121	1	9	123	5	2	138	0	0	0	0	3	0	0	22	17	49	2	88	347	
3:45 PM	0	4	122	4	7	130	0	4	140	3	8	147	0	0	0	0	5	0	0	44	20	38	4	102	379	
Hourly Total	0	37	410	23	11	470	1	24	483	24	17	532	0	0	0	0	12	0	0	88	49	135	10	272	1274	
4:00 PM	0	12	149	9	2	170	0	4	138	6	0	148	0	0	0	0	5	0	0	21	10	34	1	65	383	
4:15 PM	0	5	94	3	0	102	0	7	129	0	1	136	0	0	0	0	2	0	0	11	7	22	2	40	278	
4:30 PM	0	11	131	6	0	148	0	4	164	6	0	174	0	0	0	0	2	0	0	23	11	20	0	54	376	
4:45 PM	0	14	120	4	2	138	0	8	157	4	0	169	0	0	0	0	4	0	0	12	15	17	1	44	351	
Hourly Total	0	42	494	22	4	558	0	23	588	16	1	627	0	0	0	0	13	0	0	67	43	93	4	203	1388	
5:00 PM	0	6	147	5	0	158	0	5	149	1	1	155	0	0	0	0	3	0	0	25	8	29	0	62	375	
5:15 PM	0	7	135	5	0	147	0	3	134	4	1	141	0	0	0	0	0	0	0	17	9	19	2	45	333	
5:30 PM	0	7	117	6	0	130	0	7	142	5	0	154	0	0	0	0	4	0	0	7	9	14	0	30	314	
5:45 PM	0	8	121	8	0	137	0	5	133	2	1	140	0	0	0	0	4	0	0	12	10	18	0	40	317	
Hourly Total	0	28	520	24	0	572	0	20	558	12	3	590	0	0	0	0	11	0	0	61	36	80	2	177	1339	
Grand Total	0	542	2494	134	205	3170	1	95	2645	470	293	3211	0	0	0	0	72	0	0	300	155	386	250	841	7222	
Approach %	0.0	17.1	78.7	4.2	-	-	0.0	3.0	82.4	14.6	-	-	0.0	0.0	0.0	0.0	-	-	0.0	35.7	18.4	45.9	-	-	-	
Total %	0.0	7.5	34.5	1.9	-	43.9	0.0	1.3	36.6	6.5	-	44.5	0.0	0.0	0.0	0.0	-	0.0	0.0	4.2	2.1	5.3	-	11.6	-	
Lights	0	524	2333	130	-	2987	1	90	2478	462	-	3031	0	0	0	0	-	0	0	281	155	352	-	788	6806	

% Lights	-	96.7	93.5	97.0	-	94.2	100.0	94.7	93.7	98.3	-	94.4	-	-	-	-	-	-	93.7	100.0	91.2	-	93.7	94.2	
Buses	0	0	26	2	-	28	0	4	25	3	-	32	0	0	0	0	-	0	0	6	0	4	-	10	70
% Buses	-	0.0	1.0	1.5	-	0.9	0.0	4.2	0.9	0.6	-	1.0	-	-	-	-	-	-	2.0	0.0	1.0	-	1.2	1.0	
Single-Unit Trucks	0	5	92	2	-	99	0	0	81	3	-	84	0	0	0	0	-	0	0	5	0	20	-	25	208
% Single-Unit Trucks	-	0.9	3.7	1.5	-	3.1	0.0	0.0	3.1	0.6	-	2.6	-	-	-	-	-	-	1.7	0.0	5.2	-	3.0	2.9	
Articulated Trucks	0	13	41	0	-	54	0	1	61	2	-	64	0	0	0	0	-	0	0	7	0	10	-	17	135
% Articulated Trucks	-	2.4	1.6	0.0	-	1.7	0.0	1.1	2.3	0.4	-	2.0	-	-	-	-	-	-	2.3	0.0	2.6	-	2.0	1.9	
Bicycles on Road	0	0	2	0	-	2	0	0	0	0	-	0	0	0	0	0	-	0	0	1	0	0	-	1	3
% Bicycles on Road	-	0.0	0.1	0.0	-	0.1	0.0	0.0	0.0	0.0	-	0.0	-	-	-	-	-	-	0.3	0.0	0.0	-	0.1	0.0	
Pedestrians	-	-	-	-	205	-	-	-	-	293	-	-	-	-	-	72	-	-	-	-	-	-	250	-	-
% 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 abowen@kloainc.com

Count Name: Kildare Rd with 47th St TMC
Site Code:
Start Date: 05/18/2022
Page No: 3

Turning Movement Peak Hour Data (7:15 AM)

Start Time	47th St Eastbound						47th St Westbound						Northbound Approach Northbound						Kildare Rd 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	57	71	6	25	134	0	3	81	70	19	154	0	0	0	0	2	0	0	9	1	9	18	19	307
7:30 AM	0	44	53	15	85	112	0	2	53	64	123	119	0	0	0	0	5	0	0	0	0	0	93	0	231
7:45 AM	0	48	99	10	60	157	0	6	61	64	90	131	0	0	0	0	7	0	0	0	0	0	87	0	288
8:00 AM	0	64	108	8	7	180	0	1	91	71	24	163	0	0	0	0	4	0	0	23	11	17	18	51	394
Total	0	213	331	39	177	583	0	12	286	269	256	567	0	0	0	0	18	0	0	32	12	26	216	70	1220
Approach %	0.0	36.5	56.8	6.7	-	-	0.0	2.1	50.4	47.4	-	-	0.0	0.0	0.0	0.0	-	-	0.0	45.7	17.1	37.1	-	-	-
Total %	0.0	17.5	27.1	3.2	-	47.8	0.0	1.0	23.4	22.0	-	46.5	0.0	0.0	0.0	0.0	-	0.0	0.0	2.6	1.0	2.1	-	5.7	-
PHF	0.000	0.832	0.766	0.650	-	0.810	0.000	0.500	0.786	0.947	-	0.870	0.000	0.000	0.000	0.000	-	0.000	0.000	0.348	0.273	0.382	-	0.343	0.774
Lights	0	212	306	38	-	556	0	11	265	267	-	543	0	0	0	0	-	0	0	31	12	24	-	67	1166
% Lights	-	99.5	92.4	97.4	-	95.4	-	91.7	92.7	99.3	-	95.8	-	-	-	-	-	-	-	96.9	100.0	92.3	-	95.7	95.6
Buses	0	0	2	0	-	2	0	0	2	1	-	3	0	0	0	0	-	0	0	1	0	0	-	1	6
% Buses	-	0.0	0.6	0.0	-	0.3	-	0.0	0.7	0.4	-	0.5	-	-	-	-	-	-	-	3.1	0.0	0.0	-	1.4	0.5
Single-Unit Trucks	0	0	10	1	-	11	0	0	10	1	-	11	0	0	0	0	-	0	0	0	0	2	-	2	24
% Single-Unit Trucks	-	0.0	3.0	2.6	-	1.9	-	0.0	3.5	0.4	-	1.9	-	-	-	-	-	-	-	0.0	0.0	7.7	-	2.9	2.0
Articulated Trucks	0	1	13	0	-	14	0	1	9	0	-	10	0	0	0	0	-	0	0	0	0	0	-	0	24
% Articulated Trucks	-	0.5	3.9	0.0	-	2.4	-	8.3	3.1	0.0	-	1.8	-	-	-	-	-	-	-	0.0	0.0	0.0	-	0.0	2.0
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
Pedestrians	-	-	-	-	177	-	-	-	-	-	256	-	-	-	-	-	18	-	-	-	-	-	216	-	-
% 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 abowen@kloainc.com

Count Name: Kildare Rd with 47th St TMC
Site Code:
Start Date: 05/18/2022
Page No: 4

Turning Movement Peak Hour Data (3:45 PM)

Start Time	47th St Eastbound						47th St Westbound						Northbound Approach Northbound						Kildare Rd 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	
3:45 PM	0	4	122	4	7	130	0	4	140	3	8	147	0	0	0	0	5	0	0	44	20	38	4	102	379
4:00 PM	0	12	149	9	2	170	0	4	138	6	0	148	0	0	0	0	5	0	0	21	10	34	1	65	383
4:15 PM	0	5	94	3	0	102	0	7	129	0	1	136	0	0	0	0	2	0	0	11	7	22	2	40	278
4:30 PM	0	11	131	6	0	148	0	4	164	6	0	174	0	0	0	0	2	0	0	23	11	20	0	54	376
Total	0	32	496	22	9	550	0	19	571	15	9	605	0	0	0	0	14	0	0	99	48	114	7	261	1416
Approach %	0.0	5.8	90.2	4.0	-	-	0.0	3.1	94.4	2.5	-	-	0.0	0.0	0.0	0.0	-	-	0.0	37.9	18.4	43.7	-	-	-
Total %	0.0	2.3	35.0	1.6	-	38.8	0.0	1.3	40.3	1.1	-	42.7	0.0	0.0	0.0	0.0	-	0.0	0.0	7.0	3.4	8.1	-	18.4	-
PHF	0.000	0.667	0.832	0.611	-	0.809	0.000	0.679	0.870	0.625	-	0.869	0.000	0.000	0.000	0.000	-	0.000	0.000	0.563	0.600	0.750	-	0.640	0.924
Lights	0	29	468	21	-	518	0	18	536	14	-	568	0	0	0	0	-	0	0	95	48	110	-	253	1339
% Lights	-	90.6	94.4	95.5	-	94.2	-	94.7	93.9	93.3	-	93.9	-	-	-	-	-	-	-	96.0	100.0	96.5	-	96.9	94.6
Buses	0	0	5	0	-	5	0	1	6	0	-	7	0	0	0	0	-	0	0	1	0	0	-	1	13
% Buses	-	0.0	1.0	0.0	-	0.9	-	5.3	1.1	0.0	-	1.2	-	-	-	-	-	-	-	1.0	0.0	0.0	-	0.4	0.9
Single-Unit Trucks	0	1	19	1	-	21	0	0	14	0	-	14	0	0	0	0	-	0	0	1	0	2	-	3	38
% Single-Unit Trucks	-	3.1	3.8	4.5	-	3.8	-	0.0	2.5	0.0	-	2.3	-	-	-	-	-	-	-	1.0	0.0	1.8	-	1.1	2.7
Articulated Trucks	0	2	4	0	-	6	0	0	15	1	-	16	0	0	0	0	-	0	0	2	0	2	-	4	26
% Articulated Trucks	-	6.3	0.8	0.0	-	1.1	-	0.0	2.6	6.7	-	2.6	-	-	-	-	-	-	-	2.0	0.0	1.8	-	1.5	1.8
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
Pedestrians	-	-	-	-	9	-	-	-	-	-	9	-	-	-	-	-	14	-	-	-	-	-	7	-	-
% 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 abowen@kloainc.com

Count Name: Pulaski Rd with Ann Lurie PI
Site Code:
Start Date: 05/18/2022
Page No: 1

Turning Movement Data

Start Time	Ann Lurie PI Eastbound					Pulaski Rd Northbound					Pulaski Rd Southbound					Int. Total
	U-Turn	Left	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	
6:30 AM	0	18	12	0	30	0	15	303	0	318	0	122	30	2	152	500
6:45 AM	0	16	13	0	29	0	34	350	0	384	0	143	29	2	172	585
Hourly Total	0	34	25	0	59	0	49	653	0	702	0	265	59	4	324	1085
7:00 AM	0	22	6	1	28	0	17	377	0	394	0	161	27	2	188	610
7:15 AM	0	32	14	0	46	0	26	348	0	374	0	186	31	0	217	637
7:30 AM	0	44	10	0	54	0	25	379	0	404	0	178	46	1	224	682
7:45 AM	0	43	6	0	49	0	34	396	0	430	0	181	40	0	221	700
Hourly Total	0	141	36	1	177	0	102	1500	0	1602	0	706	144	3	850	2629
8:00 AM	0	37	19	0	56	0	41	345	0	386	0	219	42	2	261	703
8:15 AM	0	25	17	0	42	0	33	366	0	399	0	204	39	0	243	684
8:30 AM	0	20	10	0	30	0	33	374	1	407	0	148	30	0	178	615
8:45 AM	0	25	16	0	41	0	35	345	0	380	0	165	30	1	195	616
Hourly Total	0	107	62	0	169	0	142	1430	1	1572	0	736	141	3	877	2618
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3:30 PM	0	30	31	2	61	0	31	319	1	350	0	289	15	1	304	715
3:45 PM	0	28	32	1	60	0	55	304	0	359	0	316	17	0	333	752
Hourly Total	0	58	63	3	121	0	86	623	1	709	0	605	32	1	637	1467
4:00 PM	0	26	33	4	59	1	40	334	0	375	0	326	20	5	346	780
4:15 PM	0	15	30	5	45	0	28	291	0	319	0	286	15	3	301	665
4:30 PM	0	21	33	4	54	0	40	332	0	372	0	314	12	4	326	752
4:45 PM	0	27	43	6	70	0	33	276	0	309	0	286	19	0	305	684
Hourly Total	0	89	139	19	228	1	141	1233	0	1375	0	1212	66	12	1278	2881
5:00 PM	0	32	34	3	66	0	36	320	1	356	0	321	17	0	338	760
5:15 PM	0	16	33	3	49	0	31	280	0	311	0	323	16	3	339	699
5:30 PM	0	20	23	1	43	0	34	287	0	321	0	277	14	2	291	655
5:45 PM	0	20	24	0	44	0	29	245	0	274	0	271	16	0	287	605
Hourly Total	0	88	114	7	202	0	130	1132	1	1262	0	1192	63	5	1255	2719
Grand Total	0	517	439	30	956	1	650	6571	3	7222	0	4716	505	28	5221	13399
Approach %	0.0	54.1	45.9	-	-	0.0	9.0	91.0	-	-	0.0	90.3	9.7	-	-	-
Total %	0.0	3.9	3.3	-	7.1	0.0	4.9	49.0	-	53.9	0.0	35.2	3.8	-	39.0	-
Lights	0	412	417	-	829	1	627	6196	-	6824	0	4479	360	-	4839	12492
% Lights	-	79.7	95.0	-	86.7	100.0	96.5	94.3	-	94.5	-	95.0	71.3	-	92.7	93.2
Buses	0	3	0	-	3	0	0	33	-	33	0	22	10	-	32	68
% Buses	-	0.6	0.0	-	0.3	0.0	0.0	0.5	-	0.5	-	0.5	2.0	-	0.6	0.5
Single-Unit Trucks	0	45	8	-	53	0	13	184	-	197	0	126	60	-	186	436
% Single-Unit Trucks	-	8.7	1.8	-	5.5	0.0	2.0	2.8	-	2.7	-	2.7	11.9	-	3.6	3.3

Articulated Trucks	0	57	14	-	71	0	10	157	-	167	0	88	75	-	163	401
% Articulated Trucks	-	11.0	3.2	-	7.4	0.0	1.5	2.4	-	2.3	-	1.9	14.9	-	3.1	3.0
Bicycles on Road	0	0	0	-	0	0	0	1	-	1	0	1	0	-	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	0.0
Pedestrians	-	-	-	30	-	-	-	-	3	-	-	-	-	28	-	-
% 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 abowen@kloainc.com

Count Name: Pulaski Rd with Ann Lurie PI
Site Code:
Start Date: 05/18/2022
Page No: 3

Turning Movement Peak Hour Data (7:15 AM)

Start Time	Ann Lurie PI Eastbound					Pulaski Rd Northbound					Pulaski Rd Southbound					Int. Total
	U-Turn	Left	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	
7:15 AM	0	32	14	0	46	0	26	348	0	374	0	186	31	0	217	637
7:30 AM	0	44	10	0	54	0	25	379	0	404	0	178	46	1	224	682
7:45 AM	0	43	6	0	49	0	34	396	0	430	0	181	40	0	221	700
8:00 AM	0	37	19	0	56	0	41	345	0	386	0	219	42	2	261	703
Total	0	156	49	0	205	0	126	1468	0	1594	0	764	159	3	923	2722
Approach %	0.0	76.1	23.9	-	-	0.0	7.9	92.1	-	-	0.0	82.8	17.2	-	-	-
Total %	0.0	5.7	1.8	-	7.5	0.0	4.6	53.9	-	58.6	0.0	28.1	5.8	-	33.9	-
PHF	0.000	0.886	0.645	-	0.915	0.000	0.768	0.927	-	0.927	0.000	0.872	0.864	-	0.884	0.968
Lights	0	124	42	-	166	0	116	1363	-	1479	0	718	122	-	840	2485
% Lights	-	79.5	85.7	-	81.0	-	92.1	92.8	-	92.8	-	94.0	76.7	-	91.0	91.3
Buses	0	2	0	-	2	0	0	5	-	5	0	3	1	-	4	11
% Buses	-	1.3	0.0	-	1.0	-	0.0	0.3	-	0.3	-	0.4	0.6	-	0.4	0.4
Single-Unit Trucks	0	17	2	-	19	0	5	63	-	68	0	24	19	-	43	130
% Single-Unit Trucks	-	10.9	4.1	-	9.3	-	4.0	4.3	-	4.3	-	3.1	11.9	-	4.7	4.8
Articulated Trucks	0	13	5	-	18	0	5	37	-	42	0	19	17	-	36	96
% Articulated Trucks	-	8.3	10.2	-	8.8	-	4.0	2.5	-	2.6	-	2.5	10.7	-	3.9	3.5
Bicycles on Road	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
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	3	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-



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

Rosemont, Illinois, United States 60018
(847)518-9990 abowen@kloainc.com

Count Name: Pulaski Rd with Ann Lurie PI
Site Code:
Start Date: 05/18/2022
Page No: 4

Turning Movement Peak Hour Data (3:45 PM)

Start Time	Ann Lurie PI Eastbound					Pulaski Rd Northbound					Pulaski Rd Southbound					Int. Total
	U-Turn	Left	Right	Peds	App. Total	U-Turn	Left	Thru	Peds	App. Total	U-Turn	Thru	Right	Peds	App. Total	
3:45 PM	0	28	32	1	60	0	55	304	0	359	0	316	17	0	333	752
4:00 PM	0	26	33	4	59	1	40	334	0	375	0	326	20	5	346	780
4:15 PM	0	15	30	5	45	0	28	291	0	319	0	286	15	3	301	665
4:30 PM	0	21	33	4	54	0	40	332	0	372	0	314	12	4	326	752
Total	0	90	128	14	218	1	163	1261	0	1425	0	1242	64	12	1306	2949
Approach %	0.0	41.3	58.7	-	-	0.1	11.4	88.5	-	-	0.0	95.1	4.9	-	-	-
Total %	0.0	3.1	4.3	-	7.4	0.0	5.5	42.8	-	48.3	0.0	42.1	2.2	-	44.3	-
PHF	0.000	0.804	0.970	-	0.908	0.250	0.741	0.944	-	0.950	0.000	0.952	0.800	-	0.944	0.945
Lights	0	80	126	-	206	1	158	1193	-	1352	0	1208	41	-	1249	2807
% Lights	-	88.9	98.4	-	94.5	100.0	96.9	94.6	-	94.9	-	97.3	64.1	-	95.6	95.2
Buses	0	0	0	-	0	0	0	12	-	12	0	6	2	-	8	20
% Buses	-	0.0	0.0	-	0.0	0.0	0.0	1.0	-	0.8	-	0.5	3.1	-	0.6	0.7
Single-Unit Trucks	0	5	0	-	5	0	3	29	-	32	0	9	8	-	17	54
% Single-Unit Trucks	-	5.6	0.0	-	2.3	0.0	1.8	2.3	-	2.2	-	0.7	12.5	-	1.3	1.8
Articulated Trucks	0	5	2	-	7	0	2	27	-	29	0	19	13	-	32	68
% Articulated Trucks	-	5.6	1.6	-	3.2	0.0	1.2	2.1	-	2.0	-	1.5	20.3	-	2.5	2.3
Bicycles on Road	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
Pedestrians	-	-	-	14	-	-	-	-	0	-	-	-	-	12	-	-
% 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 abowen@kloainc.com

Count Name: W Ann Lurie PI with Kildare Ave
TMC
Site Code:
Start Date: 05/18/2022
Page No: 1

Turning Movement Data

Start Time	Ann Lurie PI Eastbound						Ann Lurie PI Westbound						Kildare Ave Northbound						Kildare Ave 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	
6:00 AM	0	2	8	2	0	12	0	13	8	0	0	21	0	2	16	8	0	26	0	0	7	0	1	7	66
6:15 AM	0	0	6	5	0	11	0	15	5	1	0	21	0	3	14	6	0	23	0	4	11	0	0	15	70
6:30 AM	0	0	6	3	0	9	0	18	6	2	0	26	0	3	38	19	0	60	0	2	5	1	0	8	103
6:45 AM	0	0	7	3	0	10	0	27	4	1	1	32	0	4	50	22	0	76	0	1	8	3	1	12	130
Hourly Total	0	2	27	13	0	42	0	73	23	4	1	100	0	12	118	55	0	185	0	7	31	4	2	42	369
7:00 AM	0	1	6	3	0	10	0	21	6	0	0	27	0	1	52	32	0	85	0	0	21	0	0	21	143
7:15 AM	0	1	5	2	0	8	0	18	3	3	0	24	0	4	48	53	0	105	0	1	16	1	0	18	155
7:30 AM	0	1	6	3	0	10	0	27	5	3	0	35	0	2	46	59	0	107	0	1	15	1	0	17	169
7:45 AM	0	0	4	0	0	4	1	34	8	2	0	45	0	6	39	48	0	93	0	0	14	1	0	15	157
Hourly Total	0	3	21	8	0	32	1	100	22	8	0	131	0	13	185	192	0	390	0	2	66	3	0	71	624
8:00 AM	0	0	9	3	0	12	0	32	5	3	0	40	0	6	29	41	0	76	0	3	19	2	0	24	152
8:15 AM	0	0	12	2	0	14	0	22	9	3	0	34	0	2	31	22	0	55	0	1	9	3	0	13	116
8:30 AM	0	2	7	1	0	10	0	18	4	1	0	23	0	4	33	23	0	60	0	1	11	1	0	13	106
8:45 AM	0	0	4	2	0	6	0	20	5	3	1	28	0	3	13	24	1	40	0	1	7	0	0	8	82
Hourly Total	0	2	32	8	0	42	0	92	23	10	1	125	0	15	106	110	1	231	0	6	46	6	0	58	456
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3:00 PM	0	6	14	10	4	30	0	13	7	1	0	21	0	3	12	5	0	20	1	1	11	1	0	14	85
3:15 PM	0	4	12	12	0	28	0	30	3	2	0	35	0	1	20	2	2	23	0	4	14	1	0	19	105
3:30 PM	0	0	14	14	0	28	0	13	9	2	0	24	1	1	22	17	0	41	0	8	14	0	1	22	115
3:45 PM	0	8	20	16	0	44	0	17	4	2	1	23	0	0	14	12	1	26	0	3	9	0	0	12	105
Hourly Total	0	18	60	52	4	130	0	73	23	7	1	103	1	5	68	36	3	110	1	16	48	2	1	67	410
4:00 PM	0	2	11	15	1	28	0	21	2	2	0	25	0	3	25	13	1	41	0	2	10	0	0	12	106
4:15 PM	0	2	3	1	0	6	0	24	0	1	0	25	0	1	10	6	0	17	0	1	11	0	0	12	60
4:30 PM	0	0	4	3	1	7	0	18	0	1	0	19	0	3	11	14	0	28	0	0	12	0	0	12	66
4:45 PM	0	0	6	3	0	9	0	17	5	2	0	24	0	2	7	11	0	20	0	0	13	1	0	14	67
Hourly Total	0	4	24	22	2	50	0	80	7	6	0	93	0	9	53	44	1	106	0	3	46	1	0	50	299
5:00 PM	0	1	3	2	2	6	0	28	4	2	0	34	0	1	14	10	0	25	0	0	9	0	0	9	74
5:15 PM	0	3	4	10	0	17	0	13	6	1	0	20	0	1	10	10	0	21	0	1	5	0	0	6	64
5:30 PM	0	0	4	5	0	9	0	20	1	2	0	23	0	0	7	15	0	22	0	0	6	1	0	7	61
5:45 PM	0	1	7	4	0	12	0	19	4	1	0	24	0	4	13	8	0	25	0	0	3	2	0	5	66
Hourly Total	0	5	18	21	2	44	0	80	15	6	0	101	0	6	44	43	0	93	0	1	23	3	0	27	265
Grand Total	0	34	182	124	8	340	1	498	113	41	3	653	1	60	574	480	5	1115	1	35	260	19	3	315	2423
Approach %	0.0	10.0	53.5	36.5	-	-	0.2	76.3	17.3	6.3	-	-	0.1	5.4	51.5	43.0	-	-	0.3	11.1	82.5	6.0	-	-	-
Total %	0.0	1.4	7.5	5.1	-	14.0	0.0	20.6	4.7	1.7	-	27.0	0.0	2.5	23.7	19.8	-	46.0	0.0	1.4	10.7	0.8	-	13.0	-
Lights	0	33	99	104	-	236	0	412	49	15	-	476	1	40	543	433	-	1017	1	24	243	15	-	283	2012

% Lights	-	97.1	54.4	83.9	-	69.4	0.0	82.7	43.4	36.6	-	72.9	100.0	66.7	94.6	90.2	-	91.2	100.0	68.6	93.5	78.9	-	89.8	83.0
Buses	0	0	0	2	-	2	0	12	0	0	-	12	0	0	2	4	-	6	0	0	3	0	-	3	23
% Buses	-	0.0	0.0	1.6	-	0.6	0.0	2.4	0.0	0.0	-	1.8	0.0	0.0	0.3	0.8	-	0.5	0.0	0.0	1.2	0.0	-	1.0	0.9
Single-Unit Trucks	0	0	42	10	-	52	0	36	36	4	-	76	0	11	18	13	-	42	0	2	11	1	-	14	184
% Single-Unit Trucks	-	0.0	23.1	8.1	-	15.3	0.0	7.2	31.9	9.8	-	11.6	0.0	18.3	3.1	2.7	-	3.8	0.0	5.7	4.2	5.3	-	4.4	7.6
Articulated Trucks	0	1	40	7	-	48	1	37	28	22	-	88	0	9	11	29	-	49	0	9	3	3	-	15	200
% Articulated Trucks	-	2.9	22.0	5.6	-	14.1	100.0	7.4	24.8	53.7	-	13.5	0.0	15.0	1.9	6.0	-	4.4	0.0	25.7	1.2	15.8	-	4.8	8.3
Bicycles on Road	0	0	1	1	-	2	0	1	0	0	-	1	0	0	0	1	-	1	0	0	0	0	-	0	4
% Bicycles on Road	-	0.0	0.5	0.8	-	0.6	0.0	0.2	0.0	0.0	-	0.2	0.0	0.0	0.0	0.2	-	0.1	0.0	0.0	0.0	0.0	-	0.0	0.2
Pedestrians	-	-	-	-	8	-	-	-	-	-	3	-	-	-	-	-	5	-	-	-	-	-	3	-	-
% 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 abowen@kloainc.com

Count Name: W Ann Lurie PI with Kildare Ave
TMC
Site Code:
Start Date: 05/18/2022
Page No: 3

Turning Movement Peak Hour Data (7:15 AM)

Start Time	Ann Lurie PI Eastbound						Ann Lurie PI Westbound						Kildare Ave Northbound						Kildare Ave 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	1	5	2	0	8	0	18	3	3	0	24	0	4	48	53	0	105	0	1	16	1	0	18	155
7:30 AM	0	1	6	3	0	10	0	27	5	3	0	35	0	2	46	59	0	107	0	1	15	1	0	17	169
7:45 AM	0	0	4	0	0	4	1	34	8	2	0	45	0	6	39	48	0	93	0	0	14	1	0	15	157
8:00 AM	0	0	9	3	0	12	0	32	5	3	0	40	0	6	29	41	0	76	0	3	19	2	0	24	152
Total	0	2	24	8	0	34	1	111	21	11	0	144	0	18	162	201	0	381	0	5	64	5	0	74	633
Approach %	0.0	5.9	70.6	23.5	-	-	0.7	77.1	14.6	7.6	-	-	0.0	4.7	42.5	52.8	-	-	0.0	6.8	86.5	6.8	-	-	-
Total %	0.0	0.3	3.8	1.3	-	5.4	0.2	17.5	3.3	1.7	-	22.7	0.0	2.8	25.6	31.8	-	60.2	0.0	0.8	10.1	0.8	-	11.7	-
PHF	0.000	0.500	0.667	0.667	-	0.708	0.250	0.816	0.656	0.917	-	0.800	0.000	0.750	0.844	0.852	-	0.890	0.000	0.417	0.842	0.625	-	0.771	0.936
Lights	0	1	5	6	-	12	0	96	8	2	-	106	0	13	156	184	-	353	0	1	62	4	-	67	538
% Lights	-	50.0	20.8	75.0	-	35.3	0.0	86.5	38.1	18.2	-	73.6	-	72.2	96.3	91.5	-	92.7	-	20.0	96.9	80.0	-	90.5	85.0
Buses	0	0	0	0	-	0	0	2	0	0	-	2	0	0	0	3	-	3	0	0	0	0	-	0	5
% Buses	-	0.0	0.0	0.0	-	0.0	0.0	1.8	0.0	0.0	-	1.4	-	0.0	0.0	1.5	-	0.8	-	0.0	0.0	0.0	-	0.0	0.8
Single-Unit Trucks	0	0	15	0	-	15	0	7	9	1	-	17	0	3	5	5	-	13	0	0	2	0	-	2	47
% Single-Unit Trucks	-	0.0	62.5	0.0	-	44.1	0.0	6.3	42.9	9.1	-	11.8	-	16.7	3.1	2.5	-	3.4	-	0.0	3.1	0.0	-	2.7	7.4
Articulated Trucks	0	1	4	2	-	7	1	5	4	8	-	18	0	2	1	9	-	12	0	4	0	1	-	5	42
% Articulated Trucks	-	50.0	16.7	25.0	-	20.6	100.0	4.5	19.0	72.7	-	12.5	-	11.1	0.6	4.5	-	3.1	-	80.0	0.0	20.0	-	6.8	6.6
Bicycles on Road	0	0	0	0	-	0	0	1	0	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	0.9	0.0	0.0	-	0.7	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.0	-	0.0	0.2
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



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

Rosemont, Illinois, United States 60018
(847)518-9990 abowen@kloainc.com

Count Name: W Ann Lurie PI with Kildare Ave
TMC
Site Code:
Start Date: 05/18/2022
Page No: 4

Turning Movement Peak Hour Data (3:45 PM)

Start Time	Ann Lurie PI Eastbound						Ann Lurie PI Westbound						Kildare Ave Northbound						Kildare Ave 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	
3:45 PM	0	8	20	16	0	44	0	17	4	2	1	23	0	0	14	12	1	26	0	3	9	0	0	12	105
4:00 PM	0	2	11	15	1	28	0	21	2	2	0	25	0	3	25	13	1	41	0	2	10	0	0	12	106
4:15 PM	0	2	3	1	0	6	0	24	0	1	0	25	0	1	10	6	0	17	0	1	11	0	0	12	60
4:30 PM	0	0	4	3	1	7	0	18	0	1	0	19	0	3	11	14	0	28	0	0	12	0	0	12	66
Total	0	12	38	35	2	85	0	80	6	6	1	92	0	7	60	45	2	112	0	6	42	0	0	48	337
Approach %	0.0	14.1	44.7	41.2	-	-	0.0	87.0	6.5	6.5	-	-	0.0	6.3	53.6	40.2	-	-	0.0	12.5	87.5	0.0	-	-	-
Total %	0.0	3.6	11.3	10.4	-	25.2	0.0	23.7	1.8	1.8	-	27.3	0.0	2.1	17.8	13.4	-	33.2	0.0	1.8	12.5	0.0	-	14.2	-
PHF	0.000	0.375	0.475	0.547	-	0.483	0.000	0.833	0.375	0.750	-	0.920	0.000	0.583	0.600	0.804	-	0.683	0.000	0.500	0.875	0.000	-	1.000	0.795
Lights	0	12	31	33	-	76	0	59	5	1	-	65	0	2	57	43	-	102	0	6	40	0	-	46	289
% Lights	-	100.0	81.6	94.3	-	89.4	-	73.8	83.3	16.7	-	70.7	-	28.6	95.0	95.6	-	91.1	-	100.0	95.2	-	-	95.8	85.8
Buses	0	0	0	0	-	0	0	2	0	0	-	2	0	0	0	0	-	0	0	0	1	0	-	1	3
% Buses	-	0.0	0.0	0.0	-	0.0	-	2.5	0.0	0.0	-	2.2	-	0.0	0.0	0.0	-	0.0	-	0.0	2.4	-	-	2.1	0.9
Single-Unit Trucks	0	0	2	1	-	3	0	9	1	2	-	12	0	2	1	1	-	4	0	0	0	0	-	0	19
% Single-Unit Trucks	-	0.0	5.3	2.9	-	3.5	-	11.3	16.7	33.3	-	13.0	-	28.6	1.7	2.2	-	3.6	-	0.0	0.0	-	-	0.0	5.6
Articulated Trucks	0	0	5	1	-	6	0	10	0	3	-	13	0	3	2	1	-	6	0	0	1	0	-	1	26
% Articulated Trucks	-	0.0	13.2	2.9	-	7.1	-	12.5	0.0	50.0	-	14.1	-	42.9	3.3	2.2	-	5.4	-	0.0	2.4	-	-	2.1	7.7
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
Pedestrians	-	-	-	-	2	-	-	-	-	-	1	-	-	-	-	-	2	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-

Preliminary Site Plan

ITE Trip Generation Worksheets

General Light Industrial (110)

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

Setting/Location: General Urban/Suburban

Number of Studies: 37

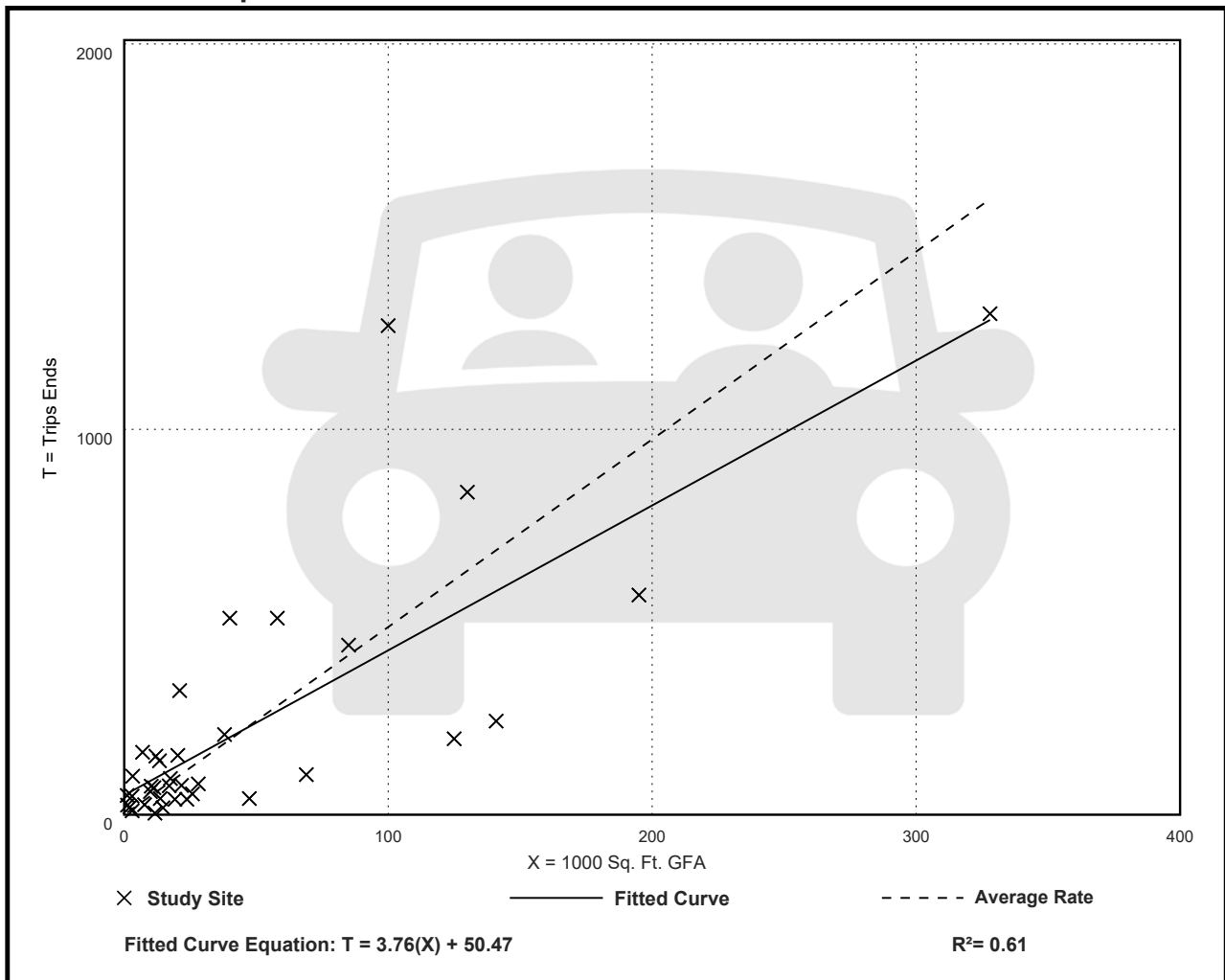
Avg. 1000 Sq. Ft. GFA: 45

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

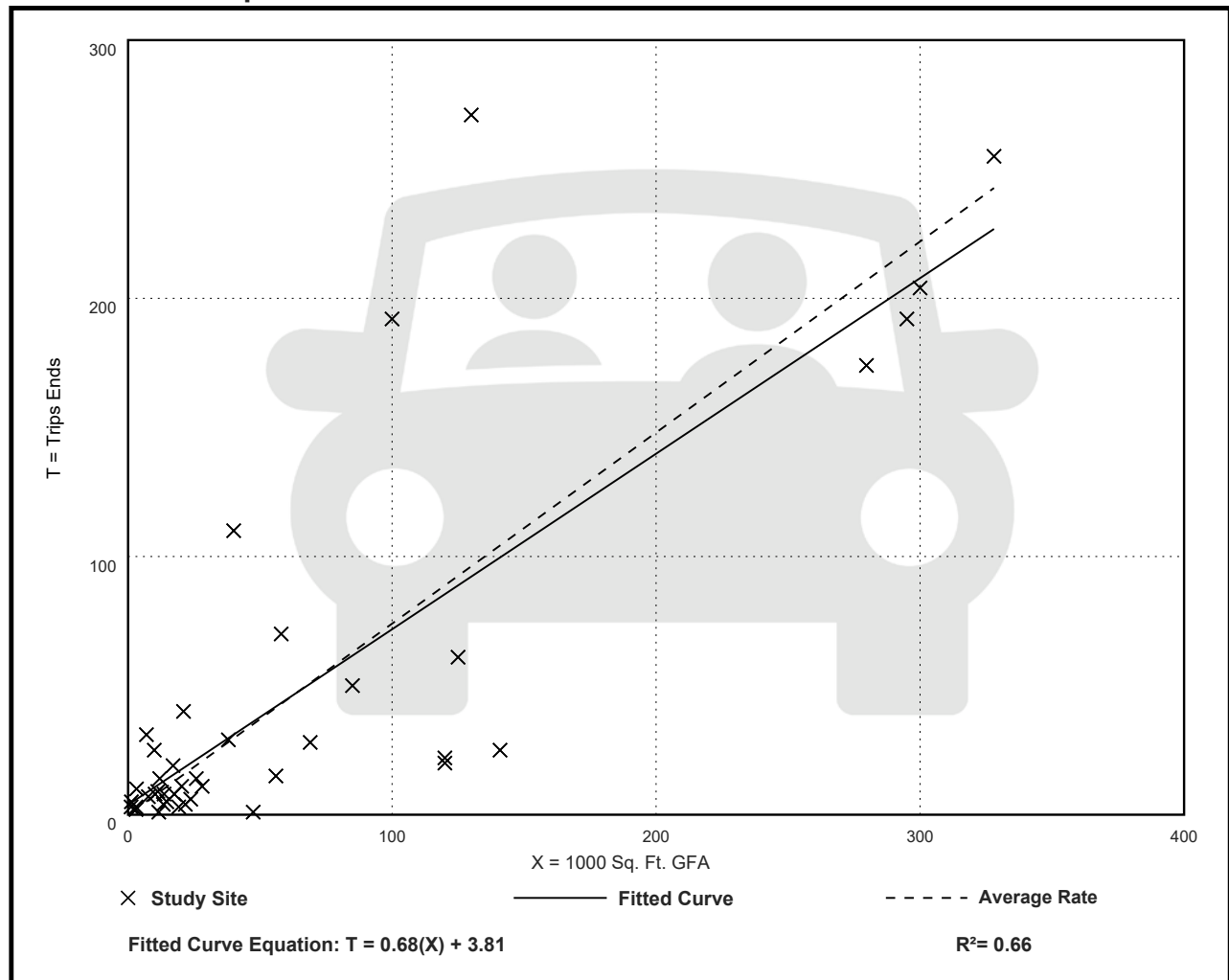
Avg. 1000 Sq. Ft. GFA: 65

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

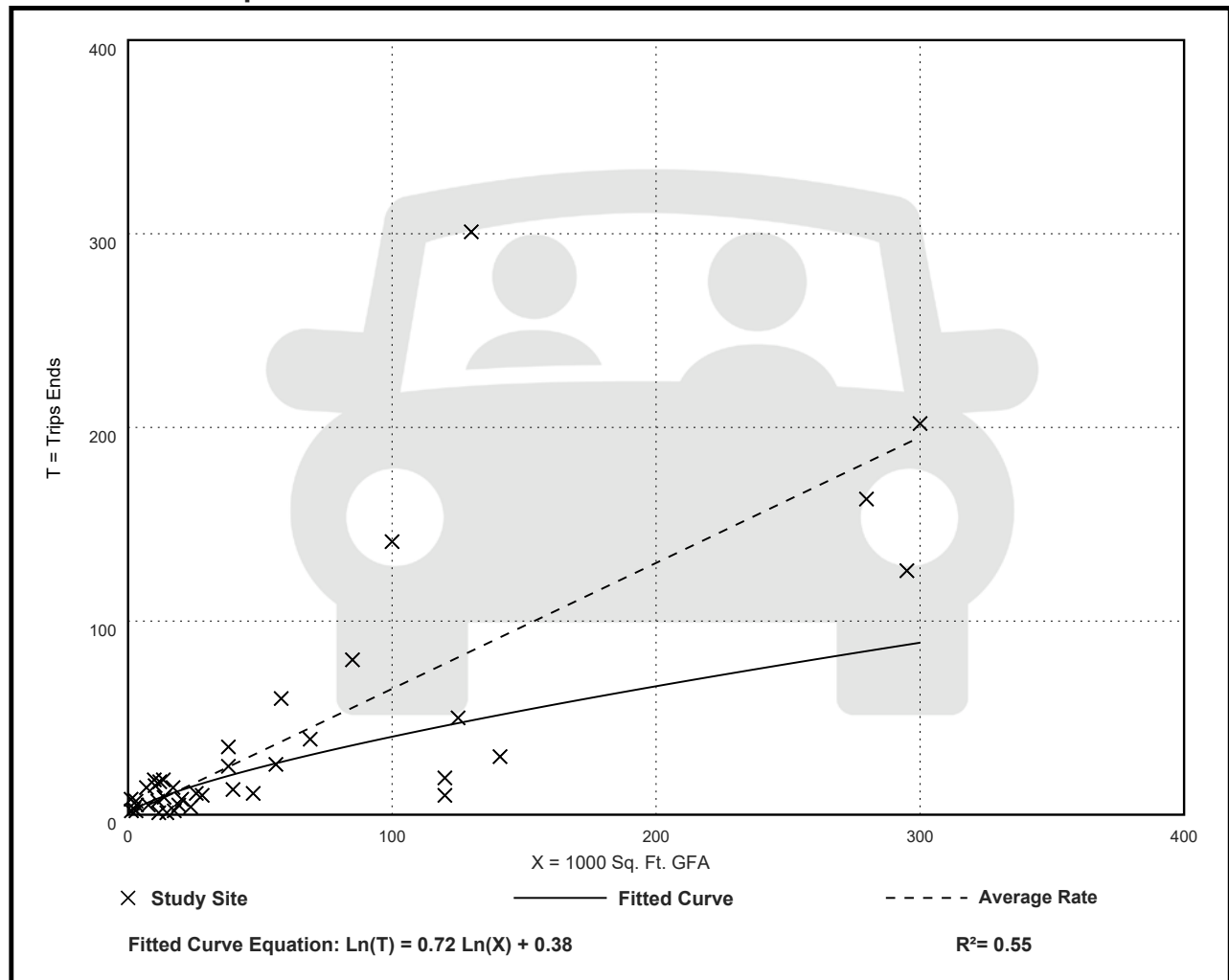
Avg. 1000 Sq. Ft. GFA: 58

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*, 2010.

Capacity Analysis Summary Sheets
2022 Existing Weekday Morning Peak Hour Conditions

Lanes, Volumes, Timings
 1: Pulaski Road & Ann Lurie Place

06/06/2022



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	156	49	126	1468	764	159
Future Volume (vph)	156	49	126	1468	764	159
Ideal Flow (vphpl)	1900	1900	1900	2000	1900	1900
Lane Width (ft)	16	12	12	11	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	110			0
Storage Lanes	1	0	1			0
Taper Length (ft)	25		70			
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95
Ped Bike Factor	1.00					
Frt	0.968				0.974	
Flt Protected	0.963		0.950			
Satd. Flow (prot)	1514	0	1671	3433	3228	0
Flt Permitted	0.963		0.240			
Satd. Flow (perm)	1510	0	422	3433	3228	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	14				38	
Link Speed (mph)	30			30	30	
Link Distance (ft)	2024			1535	9118	
Travel Time (s)	46.0			34.9	207.2	
Confl. Peds. (#/hr)	3					
Confl. Bikes (#/hr)						
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	21%	14%	8%	7%	6%	23%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)	0	0				
Mid-Block Traffic (%)	0%			0%	0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	212	0	130	1513	952	0
Turn Type	Prot		pm+pt	NA	NA	
Protected Phases	4		5	2	6	
Permitted Phases			2			
Detector Phase	4		5	2	6	
Switch Phase						
Minimum Initial (s)	10.0		7.0	64.0	64.0	
Minimum Split (s)	17.0		10.0	68.0	68.0	
Total Split (s)	32.0		10.0	78.0	68.0	
Total Split (%)	29.1%		9.1%	70.9%	61.8%	
Yellow Time (s)	3.0		3.0	3.0	3.0	
All-Red Time (s)	2.0		0.0	1.0	1.0	
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	
Total Lost Time (s)	5.0		3.0	4.0	4.0	
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None		None	C-Max	C-Max	
Act Effect Green (s)	21.0		81.0	80.0	69.4	
Actuated g/C Ratio	0.19		0.74	0.73	0.63	

Lanes, Volumes, Timings
 1: Pulaski Road & Ann Lurie Place

06/06/2022

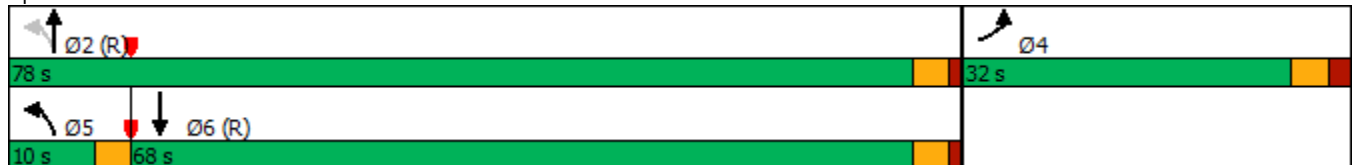


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
v/c Ratio	0.71		0.33	0.61	0.46	
Control Delay	51.1		7.1	9.3	11.7	
Queue Delay	0.0		0.0	0.0	0.0	
Total Delay	51.1		7.1	9.3	11.7	
LOS	D		A	A	B	
Approach Delay	51.1			9.1	11.7	
Approach LOS	D			A	B	
Queue Length 50th (ft)	131		23	241	165	
Queue Length 95th (ft)	202		49	365	240	
Internal Link Dist (ft)	1944			1455	9038	
Turn Bay Length (ft)			110			
Base Capacity (vph)	382		396	2495	2049	
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	0.55		0.33	0.61	0.46	

Intersection Summary

Area Type:	Other
Cycle Length:	110
Actuated Cycle Length:	110
Offset:	85 (77%), Referenced to phase 2:NBTL and 6:SBT, Start of Green
Natural Cycle:	95
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.71
Intersection Signal Delay:	13.2
Intersection LOS:	B
Intersection Capacity Utilization	82.8%
ICU Level of Service	E
Analysis Period (min)	15

Splits and Phases: 1: Pulaski Road & Ann Lurie Place



Lanes, Volumes, Timings

2: 47th Street & Kildare Avenue

06/06/2022



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	213	331	39	12	286	269	0	0	0	32	12	26
Future Volume (vph)	213	331	39	12	286	269	0	0	0	32	12	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	12	11	12	12	12	12	12	16	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		25	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.88	0.99			0.75							0.67
Frt		0.984			0.929							0.950
Flt Protected	0.950				0.999							0.978
Satd. Flow (prot)	1745	1669	0	0	2328	0	0	0	0	0	1704	0
Flt Permitted	0.286				0.941							0.978
Satd. Flow (perm)	460	1669	0	0	2192	0	0	0	0	0	1282	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		11			320							30
Link Speed (mph)		30			30			30				30
Link Distance (ft)		3304			1008			396				1322
Travel Time (s)		75.1			22.9			9.0				30.0
Confl. Peds. (#/hr)	216		18	18		216	177		256	256		177
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	8%	3%	8%	7%	1%	0%	0%	0%	3%	0%	8%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%				0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	277	481	0	0	736	0	0	0	0	0	92	0
Turn Type	pm+pt	NA		Perm	NA						Perm	NA
Protected Phases	7	4			8							6
Permitted Phases	4			8						6		
Detector Phase	7	4		8	8					6		6
Switch Phase												
Minimum Initial (s)	8.0	60.0		49.0	49.0					30.0	30.0	
Minimum Split (s)	11.0	65.0		54.0	54.0					35.0	35.0	
Total Split (s)	11.0	65.0		54.0	54.0					35.0	35.0	
Total Split (%)	11.0%	65.0%		54.0%	54.0%					35.0%	35.0%	
Yellow Time (s)	3.0	3.0		3.0	3.0					3.0	3.0	
All-Red Time (s)	0.0	2.0		2.0	2.0					2.0	2.0	
Lost Time Adjust (s)	0.0	0.0			0.0							0.0
Total Lost Time (s)	3.0	5.0			5.0							5.0
Lead/Lag	Lead			Lag	Lag							
Lead-Lag Optimize?	Yes			Yes	Yes							
Recall Mode	Max	Max		Max	Max					Max	Max	
Act Effect Green (s)	62.0	60.0			49.0							30.0
Actuated g/C Ratio	0.62	0.60			0.49							0.30

Lanes, Volumes, Timings
2: 47th Street & Kildare Avenue

06/06/2022

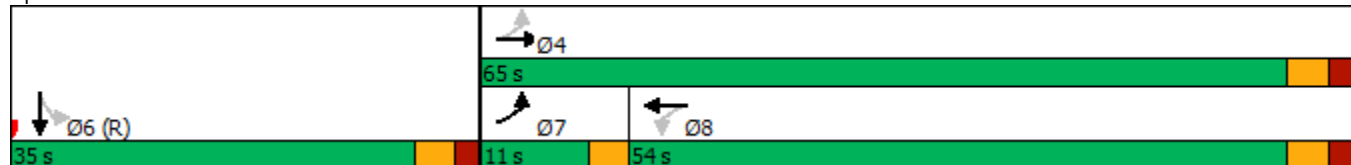


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.71	0.48			0.59							0.23
Control Delay	20.8	12.9			12.0							19.9
Queue Delay	0.0	0.0			0.0							0.0
Total Delay	20.8	12.9			12.0							19.9
LOS	C	B			B							B
Approach Delay		15.8			12.0							19.9
Approach LOS		B			B							B
Queue Length 50th (ft)	73	155			92							29
Queue Length 95th (ft)	94	183			104							56
Internal Link Dist (ft)		3224			928			316				1242
Turn Bay Length (ft)												
Base Capacity (vph)	388	1005			1237							405
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	0.71	0.48			0.59							0.23

Intersection Summary

Area Type:	Other
Cycle Length:	100
Actuated Cycle Length:	100
Offset:	11 (11%), Referenced to phase 2: and 6:SBTL, Start of Green
Natural Cycle:	100
Control Type:	Pretimed
Maximum v/c Ratio:	0.71
Intersection Signal Delay:	14.3
Intersection LOS:	B
Intersection Capacity Utilization:	128.3%
ICU Level of Service:	H
Analysis Period (min):	15

Splits and Phases: 2: 47th Street & Kildare Avenue



HCM 6th AWSC
3: Kildare Avenue & Ann Lurie Place

06/06/2022

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	2	24	8	112	21	11	18	162	201	5	64	5
Future Vol, veh/h	2	24	8	112	21	11	18	162	201	5	64	5
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	50	79	25	13	62	82	28	4	8	8	3	2
Mvmt Flow	2	26	9	119	22	12	19	172	214	5	68	5
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	10.2	12.9	8.7
HCM LOS	A	B	B	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	5%	6%	78%	7%
Vol Thru, %	43%	71%	15%	86%
Vol Right, %	53%	24%	8%	7%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	381	34	144	74
LT Vol	18	2	112	5
Through Vol	162	24	21	64
RT Vol	201	8	11	5
Lane Flow Rate	405	36	153	79
Geometry Grp	1	1	1	1
Degree of Util (X)	0.529	0.061	0.232	0.11
Departure Headway (Hd)	4.695	6.027	5.447	5.02
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	766	589	654	709
Service Time	2.742	4.114	3.518	3.09
HCM Lane V/C Ratio	0.529	0.061	0.234	0.111
HCM Control Delay	12.9	9.5	10.2	8.7
HCM Lane LOS	B	A	B	A
HCM 95th-tile Q	3.1	0.2	0.9	0.4

HCM 6th AWSC
4: Kildare Avenue & 45th Street

06/06/2022

Intersection	
Intersection Delay, s/veh	17.2
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	242	26	16	9	28	66	179	172	87	40	37	38
Future Vol, veh/h	242	26	16	9	28	66	179	172	87	40	37	38
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles, %	6	23	6	11	39	6	1	1	0	3	5	18
Mvmt Flow	266	29	18	10	31	73	197	189	96	44	41	42
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	15.7	10.6	21.5	10.6
HCM LOS	C	B	C	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	41%	85%	9%	35%
Vol Thru, %	39%	9%	27%	32%
Vol Right, %	20%	6%	64%	33%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	438	284	103	115
LT Vol	179	242	9	40
Through Vol	172	26	28	37
RT Vol	87	16	66	38
Lane Flow Rate	481	312	113	126
Geometry Grp	1	1	1	1
Degree of Util (X)	0.724	0.526	0.191	0.209
Departure Headway (Hd)	5.413	6.063	6.077	5.966
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	664	593	585	596
Service Time	3.475	4.132	4.169	4.056
HCM Lane V/C Ratio	0.724	0.526	0.193	0.211
HCM Control Delay	21.5	15.7	10.6	10.6
HCM Lane LOS	C	C	B	B
HCM 95th-tile Q	6.2	3.1	0.7	0.8

Capacity Analysis Summary Sheets
2022 Existing Weekday Evening Peak Hour Conditions

Lanes, Volumes, Timings
1: Pulaski Road & Ann Lurie Place

06/06/2022



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	90	128	164	1261	1242	64
Future Volume (vph)	90	128	164	1261	1242	64
Ideal Flow (vphpl)	1900	1900	1900	2000	1900	1900
Lane Width (ft)	16	12	12	11	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	110			0
Storage Lanes	1	0	1			0
Taper Length (ft)	25		70			
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95
Ped Bike Factor	0.99				1.00	
Frt	0.921				0.993	
Flt Protected	0.980		0.950			
Satd. Flow (prot)	1655	0	1752	3498	3417	0
Flt Permitted	0.980		0.124			
Satd. Flow (perm)	1645	0	229	3498	3417	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	68				8	
Link Speed (mph)	30			30	30	
Link Distance (ft)	2024			1535	9118	
Travel Time (s)	46.0			34.9	207.2	
Confl. Peds. (#/hr)	12		14			14
Confl. Bikes (#/hr)						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	11%	2%	3%	5%	3%	36%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)	0	0				
Mid-Block Traffic (%)	0%			0%	0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	230	0	173	1327	1374	0
Turn Type	Prot		pm+pt	NA	NA	
Protected Phases	4		5	2	6	
Permitted Phases			2			
Detector Phase	4		5	2	6	
Switch Phase						
Minimum Initial (s)	10.0		7.0	56.0	56.0	
Minimum Split (s)	15.0		10.0	60.0	60.0	
Total Split (s)	30.0		10.0	70.0	60.0	
Total Split (%)	30.0%		10.0%	70.0%	60.0%	
Yellow Time (s)	3.0		3.0	3.0	3.0	
All-Red Time (s)	2.0		0.0	1.0	1.0	
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	
Total Lost Time (s)	5.0		3.0	4.0	4.0	
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None		None	C-Max	C-Max	
Act Effect Green (s)	17.2		74.8	73.8	62.3	
Actuated g/C Ratio	0.17		0.75	0.74	0.62	

Lanes, Volumes, Timings
 1: Pulaski Road & Ann Lurie Place

06/06/2022

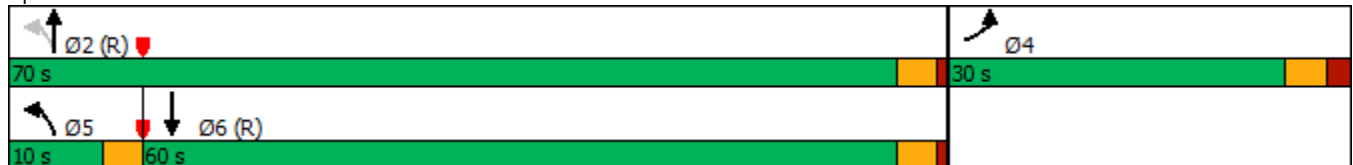


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
v/c Ratio	0.68		0.57	0.51	0.64	
Control Delay	36.4		14.2	7.0	14.6	
Queue Delay	0.0		0.0	0.0	0.0	
Total Delay	36.4		14.2	7.0	14.6	
LOS	D		B	A	B	
Approach Delay	36.4			7.9	14.6	
Approach LOS	D			A	B	
Queue Length 50th (ft)	97		26	157	267	
Queue Length 95th (ft)	164		81	266	399	
Internal Link Dist (ft)	1944			1455	9038	
Turn Bay Length (ft)			110			
Base Capacity (vph)	464		301	2582	2131	
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	0.50		0.57	0.51	0.64	

Intersection Summary

Area Type: Other
 Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green
 Natural Cycle: 85
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.68
 Intersection Signal Delay: 13.0
 Intersection Capacity Utilization 79.4%
 Analysis Period (min) 15
 Intersection LOS: B
 ICU Level of Service D

Splits and Phases: 1: Pulaski Road & Ann Lurie Place



Lanes, Volumes, Timings
2: 47th Street & Kildare Avenue

06/06/2022



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	32	496	22	19	571	15	0	0	0	99	48	114
Future Volume (vph)	32	496	22	19	571	15	0	0	0	99	48	114
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	12	11	12	12	12	12	12	16	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		25	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.99	1.00			1.00							0.98
Frt		0.994			0.996							0.941
Flt Protected	0.950				0.998							0.981
Satd. Flow (prot)	1601	1719	0	0	3275	0	0	0	0	0	1904	0
Flt Permitted	0.328				0.930							0.981
Satd. Flow (perm)	550	1719	0	0	3051	0	0	0	0	0	1889	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		5			4							46
Link Speed (mph)		30			30			30				30
Link Distance (ft)		3304			1008			396				1322
Travel Time (s)		75.1			22.9			9.0				30.0
Confl. Peds. (#/hr)	7		14	14		7	9		9	9		9
Confl. Bikes (#/hr)												
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	9%	6%	5%	5%	6%	0%	0%	0%	0%	4%	0%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%				0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	35	563	0	0	658	0	0	0	0	0	284	0
Turn Type	pm+pt	NA		Perm	NA						Perm	NA
Protected Phases	7	4			8							6
Permitted Phases	4			8						6		
Detector Phase	7	4		8	8					6		6
Switch Phase												
Minimum Initial (s)	5.0	50.0		42.0	42.0					25.0	25.0	
Minimum Split (s)	8.0	55.0		47.0	47.0					30.0	30.0	
Total Split (s)	8.0	55.0		47.0	47.0					30.0	30.0	
Total Split (%)	9.4%	64.7%		55.3%	55.3%					35.3%	35.3%	
Yellow Time (s)	3.0	3.0		3.0	3.0					3.0	3.0	
All-Red Time (s)	0.0	2.0		2.0	2.0					2.0	2.0	
Lost Time Adjust (s)	0.0	0.0			0.0							0.0
Total Lost Time (s)	3.0	5.0			5.0							5.0
Lead/Lag	Lead			Lag	Lag							
Lead-Lag Optimize?	Yes			Yes	Yes							
Recall Mode	Max	Max		Max	Max					Max	Max	
Act Effect Green (s)	52.0	50.0			42.0							25.0
Actuated g/C Ratio	0.61	0.59			0.49							0.29

Lanes, Volumes, Timings
2: 47th Street & Kildare Avenue

06/06/2022

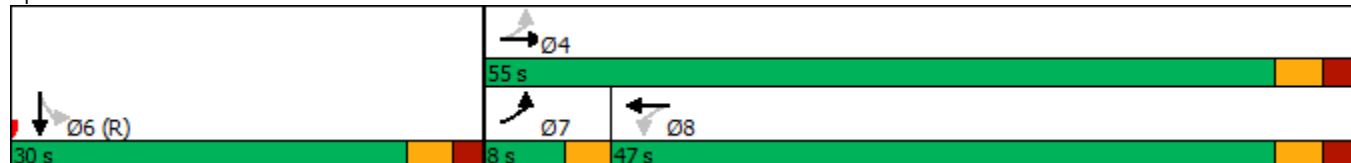


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.09	0.56			0.44							0.48
Control Delay	7.1	13.2			14.9							23.8
Queue Delay	0.0	0.0			0.0							0.0
Total Delay	7.1	13.2			14.9							23.8
LOS	A	B			B							C
Approach Delay		12.9			14.9							23.8
Approach LOS		B			B							C
Queue Length 50th (ft)	7	167			112							103
Queue Length 95th (ft)	18	257			156							177
Internal Link Dist (ft)		3224			928			316				1242
Turn Bay Length (ft)												
Base Capacity (vph)	398	1013			1509							588
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	0.09	0.56			0.44							0.48

Intersection Summary

Area Type:	Other
Cycle Length:	85
Actuated Cycle Length:	85
Offset:	11 (13%), Referenced to phase 2: and 6:SBTL, Start of Green
Natural Cycle:	85
Control Type:	Pretimed
Maximum v/c Ratio:	0.56
Intersection Signal Delay:	15.8
Intersection LOS:	B
Intersection Capacity Utilization:	72.1%
ICU Level of Service:	C
Analysis Period (min):	15

Splits and Phases: 2: 47th Street & Kildare Avenue



HCM 6th AWSC
3: Kildare Avenue & Ann Lurie Place

06/06/2022

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	12	38	35	80	6	6	7	60	45	6	42	0
Future Vol, veh/h	12	38	35	80	6	6	7	60	45	6	42	0
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles, %	0	18	6	26	17	89	71	5	4	0	5	0
Mvmt Flow	15	48	44	100	8	8	9	75	56	8	53	0
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	9.2	10	8.1
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	6%	14%	87%	12%
Vol Thru, %	54%	45%	7%	88%
Vol Right, %	40%	41%	7%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	112	85	92	48
LT Vol	7	12	80	6
Through Vol	60	38	6	42
RT Vol	45	35	6	0
Lane Flow Rate	140	106	115	60
Geometry Grp	1	1	1	1
Degree of Util (X)	0.213	0.129	0.164	0.078
Departure Headway (Hd)	5.488	4.37	5.136	4.657
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	654	820	699	768
Service Time	3.52	2.399	3.165	2.694
HCM Lane V/C Ratio	0.214	0.129	0.165	0.078
HCM Control Delay	10	8	9.2	8.1
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.8	0.4	0.6	0.3

HCM 6th AWSC
4: Kildare Avenue & 45th Street

06/06/2022

Intersection	
Intersection Delay, s/veh	8.9
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	17	59	31	20	10	7	8	13	45	6	147	32
Future Vol, veh/h	17	59	31	20	10	7	8	13	45	6	147	32
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles, %	12	7	13	0	0	0	0	0	1	17	3	22
Mvmt Flow	21	74	39	25	13	9	10	16	56	8	184	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	8.8	8.1	7.7	9.6
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	12%	16%	54%	3%
Vol Thru, %	20%	55%	27%	79%
Vol Right, %	68%	29%	19%	17%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	66	107	37	185
LT Vol	8	17	20	6
Through Vol	13	59	10	147
RT Vol	45	31	7	32
Lane Flow Rate	82	134	46	231
Geometry Grp	1	1	1	1
Degree of Util (X)	0.097	0.176	0.062	0.297
Departure Headway (Hd)	4.221	4.746	4.792	4.617
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	848	756	746	779
Service Time	2.253	2.779	2.829	2.643
HCM Lane V/C Ratio	0.097	0.177	0.062	0.297
HCM Control Delay	7.7	8.8	8.1	9.6
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.3	0.6	0.2	1.2

Capacity Analysis Summary Sheets
2028 No Build Weekday Morning Peak Hour Conditions

Lanes, Volumes, Timings
1: Pulaski Road & Ann Lurie Place

06/07/2022



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	156	49	126	1512	787	159
Future Volume (vph)	156	49	126	1512	787	159
Ideal Flow (vphpl)	1900	1900	1900	2000	1900	1900
Lane Width (ft)	16	12	12	11	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	110			0
Storage Lanes	1	0	1			0
Taper Length (ft)	25		70			
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95
Ped Bike Factor	1.00					
Frt	0.968				0.975	
Flt Protected	0.963		0.950			
Satd. Flow (prot)	1514	0	1671	3433	3233	0
Flt Permitted	0.963		0.232			
Satd. Flow (perm)	1510	0	408	3433	3233	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	14				37	
Link Speed (mph)	30			30	30	
Link Distance (ft)	2024			1535	9118	
Travel Time (s)	46.0			34.9	207.2	
Confl. Peds. (#/hr)	3					
Confl. Bikes (#/hr)						
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	21%	14%	8%	7%	6%	23%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)	0	0				
Mid-Block Traffic (%)	0%			0%	0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	212	0	130	1559	975	0
Turn Type	Prot		pm+pt	NA	NA	
Protected Phases	4		5	2	6	
Permitted Phases			2			
Detector Phase	4		5	2	6	
Switch Phase						
Minimum Initial (s)	10.0		7.0	64.0	64.0	
Minimum Split (s)	17.0		10.0	68.0	68.0	
Total Split (s)	32.0		10.0	78.0	68.0	
Total Split (%)	29.1%		9.1%	70.9%	61.8%	
Yellow Time (s)	3.0		3.0	3.0	3.0	
All-Red Time (s)	2.0		0.0	1.0	1.0	
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	
Total Lost Time (s)	5.0		3.0	4.0	4.0	
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None		None	C-Max	C-Max	
Act Effect Green (s)	21.0		81.0	80.0	69.4	
Actuated g/C Ratio	0.19		0.74	0.73	0.63	

Lanes, Volumes, Timings
 1: Pulaski Road & Ann Lurie Place

06/07/2022

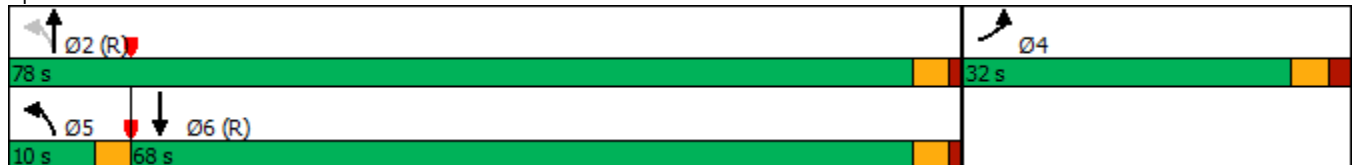


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
v/c Ratio	0.71		0.34	0.62	0.48	
Control Delay	51.1		7.3	9.6	11.9	
Queue Delay	0.0		0.0	0.0	0.0	
Total Delay	51.1		7.3	9.6	11.9	
LOS	D		A	A	B	
Approach Delay	51.1			9.4	11.9	
Approach LOS	D			A	B	
Queue Length 50th (ft)	131		23	255	172	
Queue Length 95th (ft)	202		49	386	248	
Internal Link Dist (ft)	1944			1455	9038	
Turn Bay Length (ft)			110			
Base Capacity (vph)	382		387	2495	2052	
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	0.55		0.34	0.62	0.48	

Intersection Summary

Area Type: Other
 Cycle Length: 110
 Actuated Cycle Length: 110
 Offset: 85 (77%), Referenced to phase 2:NBTL and 6:SBT, Start of Green
 Natural Cycle: 95
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.71
 Intersection Signal Delay: 13.3
 Intersection Capacity Utilization 82.8%
 Analysis Period (min) 15
 Intersection LOS: B
 ICU Level of Service E

Splits and Phases: 1: Pulaski Road & Ann Lurie Place



Lanes, Volumes, Timings

2: 47th Street & Kildare Avenue

06/07/2022



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	213	341	39	12	295	269	0	0	0	32	12	26
Future Volume (vph)	213	341	39	12	295	269	0	0	0	32	12	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	12	11	12	12	12	12	12	16	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		25	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.88	0.99			0.75						0.66	
Frt		0.985			0.930						0.950	
Flt Protected	0.950				0.999						0.978	
Satd. Flow (prot)	1745	1670	0	0	2325	0	0	0	0	0	1697	0
Flt Permitted	0.281				0.941						0.978	
Satd. Flow (perm)	452	1670	0	0	2188	0	0	0	0	0	1270	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		10			312						30	
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		3304			1008			396			1322	
Travel Time (s)		75.1			22.9			9.0			30.0	
Confl. Peds. (#/hr)	238		20	20		238	195		272	272		195
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	8%	3%	8%	7%	1%	0%	0%	0%	3%	0%	8%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	277	494	0	0	748	0	0	0	0	0	92	0
Turn Type	pm+pt	NA		Perm	NA					Perm	NA	
Protected Phases	7	4			8						6	
Permitted Phases	4			8						6		
Detector Phase	7	4		8	8					6	6	
Switch Phase												
Minimum Initial (s)	8.0	60.0		49.0	49.0					30.0	30.0	
Minimum Split (s)	11.0	65.0		54.0	54.0					35.0	35.0	
Total Split (s)	11.0	65.0		54.0	54.0					35.0	35.0	
Total Split (%)	11.0%	65.0%		54.0%	54.0%					35.0%	35.0%	
Yellow Time (s)	3.0	3.0		3.0	3.0					3.0	3.0	
All-Red Time (s)	0.0	2.0		2.0	2.0					2.0	2.0	
Lost Time Adjust (s)	0.0	0.0			0.0						0.0	
Total Lost Time (s)	3.0	5.0			5.0						5.0	
Lead/Lag	Lead			Lag	Lag							
Lead-Lag Optimize?	Yes			Yes	Yes							
Recall Mode	Max	Max		Max	Max					Max	Max	
Act Effect Green (s)	62.0	60.0			49.0						30.0	
Actuated g/C Ratio	0.62	0.60			0.49						0.30	

Lanes, Volumes, Timings
2: 47th Street & Kildare Avenue

06/07/2022

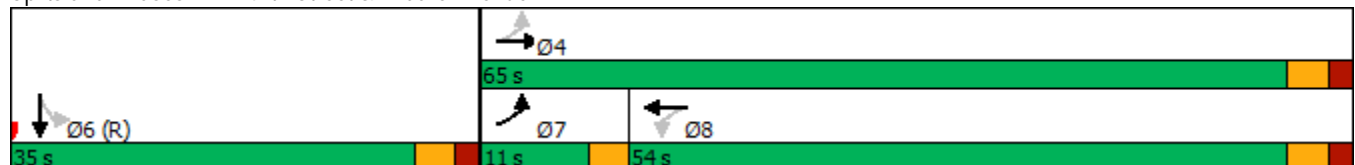


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.72	0.49			0.61							0.23
Control Delay	21.5	13.1			12.5							20.0
Queue Delay	0.0	0.0			0.0							0.0
Total Delay	21.5	13.1			12.5							20.0
LOS	C	B			B							B
Approach Delay		16.1			12.5							20.0
Approach LOS		B			B							B
Queue Length 50th (ft)	73	162			98							29
Queue Length 95th (ft)	94	189			110							56
Internal Link Dist (ft)		3224			928			316				1242
Turn Bay Length (ft)												
Base Capacity (vph)	383	1006			1231							402
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	0.72	0.49			0.61							0.23

Intersection Summary

Area Type:	Other
Cycle Length:	100
Actuated Cycle Length:	100
Offset:	11 (11%), Referenced to phase 2: and 6:SBTL, Start of Green
Natural Cycle:	100
Control Type:	Pretimed
Maximum v/c Ratio:	0.72
Intersection Signal Delay:	14.7
Intersection LOS:	B
Intersection Capacity Utilization	128.3%
ICU Level of Service	H
Analysis Period (min)	15

Splits and Phases: 2: 47th Street & Kildare Avenue



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	2	24	8	112	21	11	18	162	201	5	64	5
Future Vol, veh/h	2	24	8	112	21	11	18	162	201	5	64	5
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	50	79	25	13	62	82	28	4	8	8	3	2
Mvmt Flow	2	26	9	119	22	12	19	172	214	5	68	5
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	10.2	12.9	8.7
HCM LOS	A	B	B	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	5%	6%	78%	7%
Vol Thru, %	43%	71%	15%	86%
Vol Right, %	53%	24%	8%	7%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	381	34	144	74
LT Vol	18	2	112	5
Through Vol	162	24	21	64
RT Vol	201	8	11	5
Lane Flow Rate	405	36	153	79
Geometry Grp	1	1	1	1
Degree of Util (X)	0.529	0.061	0.232	0.11
Departure Headway (Hd)	4.695	6.027	5.447	5.02
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	766	589	654	709
Service Time	2.742	4.114	3.518	3.09
HCM Lane V/C Ratio	0.529	0.061	0.234	0.111
HCM Control Delay	12.9	9.5	10.2	8.7
HCM Lane LOS	B	A	B	A
HCM 95th-tile Q	3.1	0.2	0.9	0.4

HCM 6th AWSC
4: Kildare Avenue & 45th Street

06/07/2022

Intersection	
Intersection Delay, s/veh	17.2
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	242	26	16	9	28	66	179	172	87	40	37	38
Future Vol, veh/h	242	26	16	9	28	66	179	172	87	40	37	38
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles, %	6	23	6	11	39	6	1	1	0	3	5	18
Mvmt Flow	266	29	18	10	31	73	197	189	96	44	41	42
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	15.7	10.6	21.5	10.6
HCM LOS	C	B	C	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	41%	85%	9%	35%
Vol Thru, %	39%	9%	27%	32%
Vol Right, %	20%	6%	64%	33%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	438	284	103	115
LT Vol	179	242	9	40
Through Vol	172	26	28	37
RT Vol	87	16	66	38
Lane Flow Rate	481	312	113	126
Geometry Grp	1	1	1	1
Degree of Util (X)	0.724	0.526	0.191	0.209
Departure Headway (Hd)	5.413	6.063	6.077	5.966
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	664	593	585	596
Service Time	3.475	4.132	4.169	4.056
HCM Lane V/C Ratio	0.724	0.526	0.193	0.211
HCM Control Delay	21.5	15.7	10.6	10.6
HCM Lane LOS	C	C	B	B
HCM 95th-tile Q	6.2	3.1	0.7	0.8

Capacity Analysis Summary Sheets
2028 No Build Weekday Evening Peak Hour Conditions

Lanes, Volumes, Timings
1: Pulaski Road & Ann Lurie Place

06/07/2022



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	90	128	164	1299	1279	64
Future Volume (vph)	90	128	164	1299	1279	64
Ideal Flow (vphpl)	1900	1900	1900	2000	1900	1900
Lane Width (ft)	16	12	12	11	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	110			0
Storage Lanes	1	0	1			0
Taper Length (ft)	25		70			
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95
Ped Bike Factor	0.99				1.00	
Frt	0.921				0.993	
Flt Protected	0.980		0.950			
Satd. Flow (prot)	1655	0	1752	3498	3419	0
Flt Permitted	0.980		0.114			
Satd. Flow (perm)	1644	0	210	3498	3419	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	68				8	
Link Speed (mph)	30			30	30	
Link Distance (ft)	2024			1535	9118	
Travel Time (s)	46.0			34.9	207.2	
Confl. Peds. (#/hr)	13		15			15
Confl. Bikes (#/hr)						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	11%	2%	3%	5%	3%	36%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)	0	0				
Mid-Block Traffic (%)	0%			0%	0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	230	0	173	1367	1413	0
Turn Type	Prot		pm+pt	NA	NA	
Protected Phases	4		5	2	6	
Permitted Phases			2			
Detector Phase	4		5	2	6	
Switch Phase						
Minimum Initial (s)	10.0		7.0	56.0	56.0	
Minimum Split (s)	15.0		10.0	60.0	60.0	
Total Split (s)	30.0		10.0	70.0	60.0	
Total Split (%)	30.0%		10.0%	70.0%	60.0%	
Yellow Time (s)	3.0		3.0	3.0	3.0	
All-Red Time (s)	2.0		0.0	1.0	1.0	
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	
Total Lost Time (s)	5.0		3.0	4.0	4.0	
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None		None	C-Max	C-Max	
Act Effect Green (s)	17.2		74.8	73.8	62.1	
Actuated g/C Ratio	0.17		0.75	0.74	0.62	

Lanes, Volumes, Timings
 1: Pulaski Road & Ann Lurie Place

06/07/2022

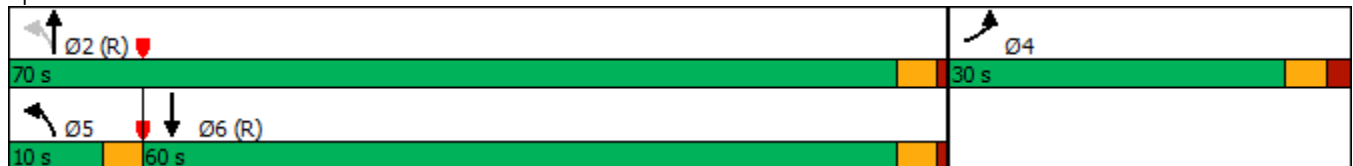


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
v/c Ratio	0.68		0.59	0.53	0.66	
Control Delay	36.4		16.3	7.2	15.2	
Queue Delay	0.0		0.0	0.0	0.0	
Total Delay	36.4		16.3	7.2	15.2	
LOS	D		B	A	B	
Approach Delay	36.4			8.2	15.2	
Approach LOS	D			A	B	
Queue Length 50th (ft)	97		26	166	282	
Queue Length 95th (ft)	164		#102	279	417	
Internal Link Dist (ft)	1944			1455	9038	
Turn Bay Length (ft)			110			
Base Capacity (vph)	464		292	2582	2125	
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	0.50		0.59	0.53	0.66	

Intersection Summary

Area Type: Other
 Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green
 Natural Cycle: 85
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.68
 Intersection Signal Delay: 13.4
 Intersection LOS: B
 Intersection Capacity Utilization 79.4%
 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.

Splits and Phases: 1: Pulaski Road & Ann Lurie Place



Lanes, Volumes, Timings

2: 47th Street & Kildare Avenue

06/07/2022



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	32	511	22	19	588	15	0	0	0	99	48	114
Future Volume (vph)	32	511	22	19	588	15	0	0	0	99	48	114
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	12	11	12	12	12	12	12	16	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		25	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.99	1.00			1.00							0.98
Frt		0.994			0.996							0.941
Flt Protected	0.950				0.998							0.981
Satd. Flow (prot)	1601	1719	0	0	3275	0	0	0	0	0	1903	0
Flt Permitted	0.319				0.930							0.981
Satd. Flow (perm)	534	1719	0	0	3050	0	0	0	0	0	1886	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		4			4							46
Link Speed (mph)		30			30			30				30
Link Distance (ft)		3304			1008			396				1322
Travel Time (s)		75.1			22.9			9.0				30.0
Confl. Peds. (#/hr)	8		15	15		8	10		10	10		10
Confl. Bikes (#/hr)												
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	9%	6%	5%	5%	6%	0%	0%	0%	0%	4%	0%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%				0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	35	579	0	0	676	0	0	0	0	0	284	0
Turn Type	pm+pt	NA		Perm	NA						Perm	NA
Protected Phases	7	4			8							6
Permitted Phases	4			8						6		
Detector Phase	7	4		8	8					6		6
Switch Phase												
Minimum Initial (s)	5.0	50.0		42.0	42.0					25.0	25.0	
Minimum Split (s)	8.0	55.0		47.0	47.0					30.0	30.0	
Total Split (s)	8.0	55.0		47.0	47.0					30.0	30.0	
Total Split (%)	9.4%	64.7%		55.3%	55.3%					35.3%	35.3%	
Yellow Time (s)	3.0	3.0		3.0	3.0					3.0	3.0	
All-Red Time (s)	0.0	2.0		2.0	2.0					2.0	2.0	
Lost Time Adjust (s)	0.0	0.0			0.0							0.0
Total Lost Time (s)	3.0	5.0			5.0							5.0
Lead/Lag	Lead			Lag	Lag							
Lead-Lag Optimize?	Yes			Yes	Yes							
Recall Mode	Max	Max		Max	Max					Max	Max	
Act Effect Green (s)	52.0	50.0			42.0							25.0
Actuated g/C Ratio	0.61	0.59			0.49							0.29

Lanes, Volumes, Timings
2: 47th Street & Kildare Avenue

06/07/2022

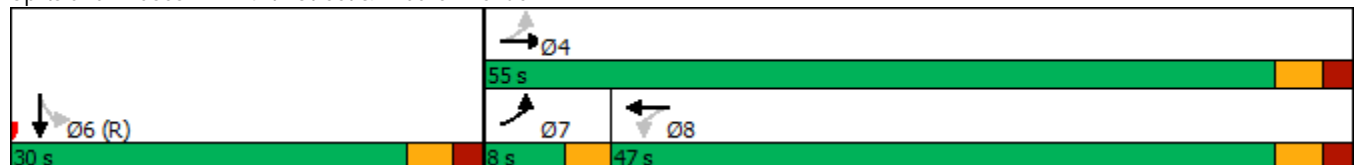


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.09	0.57			0.45							0.48
Control Delay	7.1	13.6			15.1							23.8
Queue Delay	0.0	0.0			0.0							0.0
Total Delay	7.1	13.6			15.1							23.8
LOS	A	B			B							C
Approach Delay		13.2			15.1							23.8
Approach LOS		B			B							C
Queue Length 50th (ft)	7	175			116							103
Queue Length 95th (ft)	18	268			161							177
Internal Link Dist (ft)		3224			928			316				1242
Turn Bay Length (ft)												
Base Capacity (vph)	389	1012			1509							587
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	0.09	0.57			0.45							0.48

Intersection Summary

Area Type:	Other
Cycle Length:	85
Actuated Cycle Length:	85
Offset:	11 (13%), Referenced to phase 2: and 6:SBTL, Start of Green
Natural Cycle:	85
Control Type:	Pretimed
Maximum v/c Ratio:	0.57
Intersection Signal Delay:	15.9
Intersection LOS:	B
Intersection Capacity Utilization:	72.1%
ICU Level of Service:	C
Analysis Period (min):	15

Splits and Phases: 2: 47th Street & Kildare Avenue



HCM 6th AWSC
3: Kildare Avenue & Ann Lurie Place

06/07/2022

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	12	38	35	80	6	6	7	60	45	6	42	0
Future Vol, veh/h	12	38	35	80	6	6	7	60	45	6	42	0
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles, %	0	18	6	26	17	89	71	5	4	0	5	0
Mvmt Flow	15	48	44	100	8	8	9	75	56	8	53	0
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	9.2	10	8.1
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	6%	14%	87%	12%
Vol Thru, %	54%	45%	7%	88%
Vol Right, %	40%	41%	7%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	112	85	92	48
LT Vol	7	12	80	6
Through Vol	60	38	6	42
RT Vol	45	35	6	0
Lane Flow Rate	140	106	115	60
Geometry Grp	1	1	1	1
Degree of Util (X)	0.213	0.129	0.164	0.078
Departure Headway (Hd)	5.488	4.37	5.136	4.657
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	654	820	699	768
Service Time	3.52	2.399	3.165	2.694
HCM Lane V/C Ratio	0.214	0.129	0.165	0.078
HCM Control Delay	10	8	9.2	8.1
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.8	0.4	0.6	0.3

HCM 6th AWSC
4: Kildare Avenue & 45th Street

06/07/2022

Intersection	
Intersection Delay, s/veh	8.9
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	17	59	31	20	10	7	8	13	45	6	147	32
Future Vol, veh/h	17	59	31	20	10	7	8	13	45	6	147	32
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles, %	12	7	13	0	0	0	0	0	11	17	3	22
Mvmt Flow	21	74	39	25	13	9	10	16	56	8	184	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	8.8	8.1	7.7	9.6
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	12%	16%	54%	3%
Vol Thru, %	20%	55%	27%	79%
Vol Right, %	68%	29%	19%	17%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	66	107	37	185
LT Vol	8	17	20	6
Through Vol	13	59	10	147
RT Vol	45	31	7	32
Lane Flow Rate	82	134	46	231
Geometry Grp	1	1	1	1
Degree of Util (X)	0.097	0.176	0.062	0.297
Departure Headway (Hd)	4.221	4.746	4.792	4.617
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	848	756	746	779
Service Time	2.253	2.779	2.829	2.643
HCM Lane V/C Ratio	0.097	0.177	0.062	0.297
HCM Control Delay	7.7	8.8	8.1	9.6
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.3	0.6	0.2	1.2

Capacity Analysis Summary Sheets
2028 Projected Weekday Morning Peak Hour Conditions

Lanes, Volumes, Timings
1: Pulaski Road & Ann Lurie Place

06/07/2022



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	160	53	154	1512	787	195
Future Volume (vph)	160	53	154	1512	787	195
Ideal Flow (vphpl)	1900	1900	1900	2000	1900	1900
Lane Width (ft)	16	12	12	11	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	110			0
Storage Lanes	1	0	1			0
Taper Length (ft)	25		70			
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95
Ped Bike Factor	1.00					
Frt	0.966				0.970	
Flt Protected	0.964		0.950			
Satd. Flow (prot)	1510	0	1687	3433	3225	0
Flt Permitted	0.964		0.219			
Satd. Flow (perm)	1506	0	389	3433	3225	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	14				47	
Link Speed (mph)	30			30	30	
Link Distance (ft)	2024			1535	9118	
Travel Time (s)	46.0			34.9	207.2	
Confl. Peds. (#/hr)	3					
Confl. Bikes (#/hr)						
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	21%	15%	7%	7%	6%	19%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)	0	0				
Mid-Block Traffic (%)	0%			0%	0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	220	0	159	1559	1012	0
Turn Type	Prot		pm+pt	NA	NA	
Protected Phases	4		5	2	6	
Permitted Phases			2			
Detector Phase	4		5	2	6	
Switch Phase						
Minimum Initial (s)	10.0		7.0	64.0	64.0	
Minimum Split (s)	17.0		10.0	68.0	68.0	
Total Split (s)	32.0		10.0	78.0	68.0	
Total Split (%)	29.1%		9.1%	70.9%	61.8%	
Yellow Time (s)	3.0		3.0	3.0	3.0	
All-Red Time (s)	2.0		0.0	1.0	1.0	
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	
Total Lost Time (s)	5.0		3.0	4.0	4.0	
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None		None	C-Max	C-Max	
Act Effect Green (s)	21.5		80.5	79.5	68.7	
Actuated g/C Ratio	0.20		0.73	0.72	0.62	

Lanes, Volumes, Timings
 1: Pulaski Road & Ann Lurie Place

06/07/2022

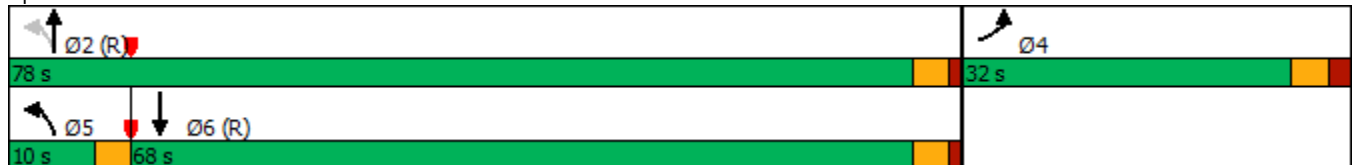


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
v/c Ratio	0.72		0.42	0.63	0.50	
Control Delay	51.7		8.6	9.8	12.3	
Queue Delay	0.0		0.0	0.0	0.0	
Total Delay	51.7		8.6	9.8	12.3	
LOS	D		A	A	B	
Approach Delay	51.7			9.7	12.3	
Approach LOS	D			A	B	
Queue Length 50th (ft)	137		29	261	186	
Queue Length 95th (ft)	210		59	386	259	
Internal Link Dist (ft)	1944			1455	9038	
Turn Bay Length (ft)			110			
Base Capacity (vph)	381		376	2481	2033	
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	0.58		0.42	0.63	0.50	

Intersection Summary

Area Type: Other
 Cycle Length: 110
 Actuated Cycle Length: 110
 Offset: 85 (77%), Referenced to phase 2:NBTL and 6:SBT, Start of Green
 Natural Cycle: 95
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.72
 Intersection Signal Delay: 13.7
 Intersection Capacity Utilization 84.8%
 Analysis Period (min) 15
 Intersection LOS: B
 ICU Level of Service E

Splits and Phases: 1: Pulaski Road & Ann Lurie Place



Lanes, Volumes, Timings
2: 47th Street & Kildare Avenue

06/07/2022



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	227	341	39	12	295	283	0	0	0	34	12	28
Future Volume (vph)	227	341	39	12	295	283	0	0	0	34	12	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	12	11	12	12	12	12	12	16	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		25	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.88	0.99			0.74							0.66
Frt		0.985			0.928							0.949
Flt Protected	0.950				0.999							0.978
Satd. Flow (prot)	1745	1670	0	0	2299	0	0	0	0	0	1698	0
Flt Permitted	0.272				0.941							0.978
Satd. Flow (perm)	440	1670	0	0	2165	0	0	0	0	0	1269	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		10			329							31
Link Speed (mph)		30			30			30				30
Link Distance (ft)		3304			1008			396				1322
Travel Time (s)		75.1			22.9			9.0				30.0
Confl. Peds. (#/hr)	238		20	20		238	195		272	272		195
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	8%	3%	8%	7%	1%	0%	0%	0%	3%	0%	7%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%				0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	295	494	0	0	767	0	0	0	0	0	96	0
Turn Type	pm+pt	NA		Perm	NA						Perm	NA
Protected Phases	7	4			8							6
Permitted Phases	4			8						6		
Detector Phase	7	4		8	8					6		6
Switch Phase												
Minimum Initial (s)	8.0	60.0		49.0	49.0					30.0	30.0	
Minimum Split (s)	11.0	65.0		54.0	54.0					35.0	35.0	
Total Split (s)	11.0	65.0		54.0	54.0					35.0	35.0	
Total Split (%)	11.0%	65.0%		54.0%	54.0%					35.0%	35.0%	
Yellow Time (s)	3.0	3.0		3.0	3.0					3.0	3.0	
All-Red Time (s)	0.0	2.0		2.0	2.0					2.0	2.0	
Lost Time Adjust (s)	0.0	0.0			0.0							0.0
Total Lost Time (s)	3.0	5.0			5.0							5.0
Lead/Lag	Lead			Lag	Lag							
Lead-Lag Optimize?	Yes			Yes	Yes							
Recall Mode	Max	Max		Max	Max					Max	Max	
Act Effect Green (s)	62.0	60.0			49.0							30.0
Actuated g/C Ratio	0.62	0.60			0.49							0.30

Lanes, Volumes, Timings

2: 47th Street & Kildare Avenue

06/07/2022



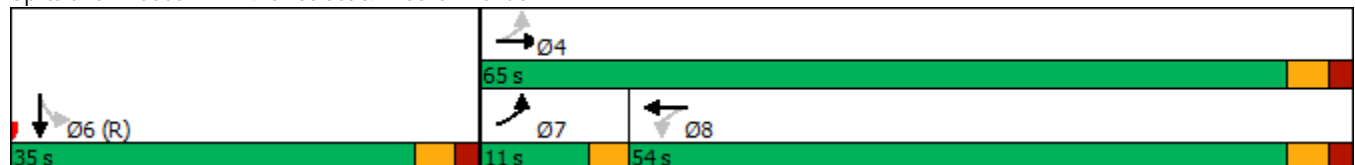
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.78	0.49			0.62							0.24
Control Delay	26.1	13.1			12.6							20.0
Queue Delay	0.0	0.0			0.0							0.0
Total Delay	26.1	13.1			12.6							20.0
LOS	C	B			B							C
Approach Delay		18.0			12.6							20.0
Approach LOS		B			B							C
Queue Length 50th (ft)	79	162			100							31
Queue Length 95th (ft)	100	189			112							58
Internal Link Dist (ft)		3224			928			316				1242
Turn Bay Length (ft)												
Base Capacity (vph)	377	1006			1228							402
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	0.78	0.49			0.62							0.24

Intersection Summary

Area Type: Other
 Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 11 (11%), Referenced to phase 2: and 6:SBTL, Start of Green
 Natural Cycle: 100
 Control Type: Pretimed
 Maximum v/c Ratio: 0.78
 Intersection Signal Delay: 15.6
 Intersection Capacity Utilization 128.3%
 Analysis Period (min) 15

Intersection LOS: B
 ICU Level of Service H

Splits and Phases: 2: 47th Street & Kildare Avenue



Lanes, Volumes, Timings
1: Pulaski Road & Ann Lurie Place

06/07/2022



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	161	56	181	1512	787	196
Future Volume (vph)	161	56	181	1512	787	196
Ideal Flow (vphpl)	1900	1900	1900	2000	1900	1900
Lane Width (ft)	16	12	12	11	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	110			0
Storage Lanes	1	0	1			0
Taper Length (ft)	25		70			
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95
Ped Bike Factor	1.00					
Frt	0.965				0.970	
Flt Protected	0.964		0.950			
Satd. Flow (prot)	1522	0	1703	3433	3225	0
Flt Permitted	0.964		0.218			
Satd. Flow (perm)	1518	0	391	3433	3225	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	15				48	
Link Speed (mph)	30			30	30	
Link Distance (ft)	2024			1535	9118	
Travel Time (s)	46.0			34.9	207.2	
Confl. Peds. (#/hr)	3					
Confl. Bikes (#/hr)						
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	20%	14%	6%	7%	6%	19%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)	0	0				
Mid-Block Traffic (%)	0%			0%	0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	224	0	187	1559	1013	0
Turn Type	Prot		pm+pt	NA	NA	
Protected Phases	4		5	2	6	
Permitted Phases			2			
Detector Phase	4		5	2	6	
Switch Phase						
Minimum Initial (s)	10.0		7.0	64.0	64.0	
Minimum Split (s)	17.0		10.0	68.0	68.0	
Total Split (s)	32.0		10.0	78.0	68.0	
Total Split (%)	29.1%		9.1%	70.9%	61.8%	
Yellow Time (s)	3.0		3.0	3.0	3.0	
All-Red Time (s)	2.0		0.0	1.0	1.0	
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	
Total Lost Time (s)	5.0		3.0	4.0	4.0	
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None		None	C-Max	C-Max	
Act Effect Green (s)	21.6		80.4	79.4	68.4	
Actuated g/C Ratio	0.20		0.73	0.72	0.62	

Lanes, Volumes, Timings
 1: Pulaski Road & Ann Lurie Place

06/07/2022

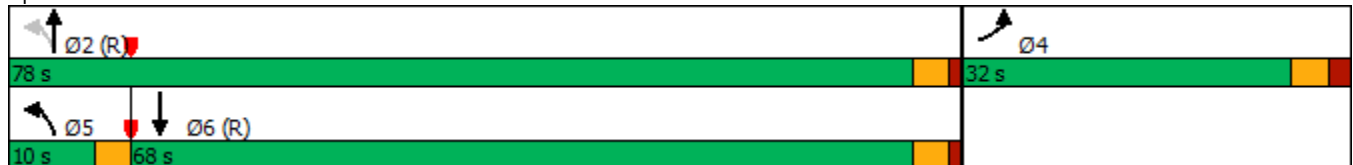


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
v/c Ratio	0.72		0.49	0.63	0.50	
Control Delay	51.5		9.7	9.9	12.5	
Queue Delay	0.0		0.0	0.0	0.0	
Total Delay	51.5		9.7	9.9	12.5	
LOS	D		A	A	B	
Approach Delay	51.5			9.9	12.5	
Approach LOS	D			A	B	
Queue Length 50th (ft)	139		35	263	191	
Queue Length 95th (ft)	214		69	386	260	
Internal Link Dist (ft)	1944			1455	9038	
Turn Bay Length (ft)			110			
Base Capacity (vph)	384		381	2479	2024	
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	0.58		0.49	0.63	0.50	

Intersection Summary

Area Type:	Other
Cycle Length:	110
Actuated Cycle Length:	110
Offset:	85 (77%), Referenced to phase 2:NBTL and 6:SBT, Start of Green
Natural Cycle:	95
Control Type:	Actuated-Coordinated
Maximum v/c Ratio:	0.72
Intersection Signal Delay:	13.9
Intersection LOS:	B
Intersection Capacity Utilization	86.5%
ICU Level of Service	E
Analysis Period (min)	15

Splits and Phases: 1: Pulaski Road & Ann Lurie Place



HCM 6th AWSC
3: Kildare Avenue & Ann Lurie Place

06/07/2022

Intersection	
Intersection Delay, s/veh	12.4
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	2	32	12	112	85	11	46	162	201	5	64	5
Future Vol, veh/h	2	32	12	112	85	11	46	162	201	5	64	5
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	50	66	17	13	18	82	11	4	8	8	3	2
Mvmt Flow	2	34	13	119	90	12	49	172	214	5	68	5
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	9.9	11.5	13.8	9.1
HCM LOS	A	B	B	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	11%	4%	54%	7%
Vol Thru, %	40%	70%	41%	86%
Vol Right, %	49%	26%	5%	7%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	409	46	208	74
LT Vol	46	2	112	5
Through Vol	162	32	85	64
RT Vol	201	12	11	5
Lane Flow Rate	435	49	221	79
Geometry Grp	1	1	1	1
Degree of Util (X)	0.565	0.086	0.344	0.118
Departure Headway (Hd)	4.674	6.305	5.59	5.406
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	761	571	646	664
Service Time	2.76	4.317	3.596	3.425
HCM Lane V/C Ratio	0.572	0.086	0.342	0.119
HCM Control Delay	13.8	9.9	11.5	9.1
HCM Lane LOS	B	A	B	A
HCM 95th-tile Q	3.6	0.3	1.5	0.4

HCM 6th AWSC
4: Kildare Avenue & 45th Street

06/07/2022

Intersection	
Intersection Delay, s/veh	19.2
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	242	26	16	9	28	66	179	200	87	40	41	38
Future Vol, veh/h	242	26	16	9	28	66	179	200	87	40	41	38
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles, %	6	23	6	11	39	6	1	1	0	3	5	18
Mvmt Flow	266	29	18	10	31	73	197	220	96	44	45	42
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	16.2	10.9	24.9	10.9
HCM LOS	C	B	C	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	38%	85%	9%	34%
Vol Thru, %	43%	9%	27%	34%
Vol Right, %	19%	6%	64%	32%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	466	284	103	119
LT Vol	179	242	9	40
Through Vol	200	26	28	41
RT Vol	87	16	66	38
Lane Flow Rate	512	312	113	131
Geometry Grp	1	1	1	1
Degree of Util (X)	0.775	0.535	0.198	0.224
Departure Headway (Hd)	5.448	6.175	6.313	6.161
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	661	580	572	586
Service Time	3.526	4.266	4.322	4.161
HCM Lane V/C Ratio	0.775	0.538	0.198	0.224
HCM Control Delay	24.9	16.2	10.9	10.9
HCM Lane LOS	C	C	B	B
HCM 95th-tile Q	7.4	3.2	0.7	0.9

Capacity Analysis Summary Sheets
2028 Projected Weekday Evening Peak Hour Condition

Lanes, Volumes, Timings
1: Pulaski Road & Ann Lurie Place

06/07/2022



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	108	142	167	1299	1279	66
Future Volume (vph)	108	142	167	1299	1279	66
Ideal Flow (vphpl)	1900	1900	1900	2000	1900	1900
Lane Width (ft)	16	12	12	11	12	12
Grade (%)	0%			0%	0%	
Storage Length (ft)	0	0	110			0
Storage Lanes	1	0	1			0
Taper Length (ft)	25		70			
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95
Ped Bike Factor	0.99				1.00	
Frt	0.924				0.993	
Flt Protected	0.979		0.950			
Satd. Flow (prot)	1662	0	1736	3498	3417	0
Flt Permitted	0.979		0.109			
Satd. Flow (perm)	1651	0	199	3498	3417	0
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	63				8	
Link Speed (mph)	30			30	30	
Link Distance (ft)	2024			1535	9118	
Travel Time (s)	46.0			34.9	207.2	
Confl. Peds. (#/hr)	13		15			15
Confl. Bikes (#/hr)						
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	10%	2%	4%	5%	3%	36%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)	0	0				
Mid-Block Traffic (%)	0%			0%	0%	
Shared Lane Traffic (%)						
Lane Group Flow (vph)	263	0	176	1367	1415	0
Turn Type	Prot		pm+pt	NA	NA	
Protected Phases	4		5	2	6	
Permitted Phases			2			
Detector Phase	4		5	2	6	
Switch Phase						
Minimum Initial (s)	10.0		7.0	56.0	56.0	
Minimum Split (s)	15.0		10.0	60.0	60.0	
Total Split (s)	30.0		10.0	70.0	60.0	
Total Split (%)	30.0%		10.0%	70.0%	60.0%	
Yellow Time (s)	3.0		3.0	3.0	3.0	
All-Red Time (s)	2.0		0.0	1.0	1.0	
Lost Time Adjust (s)	0.0		0.0	0.0	0.0	
Total Lost Time (s)	5.0		3.0	4.0	4.0	
Lead/Lag			Lead		Lag	
Lead-Lag Optimize?			Yes		Yes	
Recall Mode	None		None	C-Max	C-Max	
Act Effect Green (s)	19.1		72.9	71.9	60.5	
Actuated g/C Ratio	0.19		0.73	0.72	0.60	

Lanes, Volumes, Timings
 1: Pulaski Road & Ann Lurie Place

06/07/2022

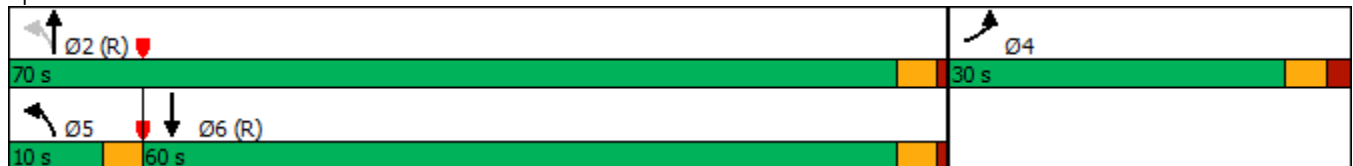


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
v/c Ratio	0.72		0.64	0.54	0.68	
Control Delay	39.2		20.9	8.1	16.3	
Queue Delay	0.0		0.0	0.0	0.0	
Total Delay	39.2		20.9	8.1	16.3	
LOS	D		C	A	B	
Approach Delay	39.2			9.6	16.3	
Approach LOS	D			A	B	
Queue Length 50th (ft)	120		29	184	310	
Queue Length 95th (ft)	194		#85	287	418	
Internal Link Dist (ft)	1944			1455	9038	
Turn Bay Length (ft)			110			
Base Capacity (vph)	462		274	2516	2070	
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	0.57		0.64	0.54	0.68	

Intersection Summary

Area Type: Other
 Cycle Length: 100
 Actuated Cycle Length: 100
 Offset: 0 (0%), Referenced to phase 2:NBTL and 6:SBT, Start of Green
 Natural Cycle: 85
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.72
 Intersection Signal Delay: 14.9
 Intersection LOS: B
 Intersection Capacity Utilization 81.5%
 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.

Splits and Phases: 1: Pulaski Road & Ann Lurie Place



Lanes, Volumes, Timings
2: 47th Street & Kildare Avenue

06/07/2022



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	33	511	22	19	588	16	0	0	0	121	48	106
Future Volume (vph)	33	511	22	19	588	16	0	0	0	121	48	106
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	12	11	12	12	12	12	12	16	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		25	0		0	0		0	0		0
Storage Lanes	1		0	0		0	0		0	0		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.99	1.00			1.00							0.98
Frt		0.994			0.996							0.948
Flt Protected	0.950				0.998							0.978
Satd. Flow (prot)	1601	1719	0	0	3275	0	0	0	0	0	1921	0
Flt Permitted	0.319				0.930							0.978
Satd. Flow (perm)	535	1719	0	0	3050	0	0	0	0	0	1900	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		4			4							38
Link Speed (mph)		30			30			30				30
Link Distance (ft)		3304			1008			396				1322
Travel Time (s)		75.1			22.9			9.0				30.0
Confl. Peds. (#/hr)	8		15	15		8	10		10	10		10
Confl. Bikes (#/hr)												
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	9%	6%	5%	5%	6%	0%	0%	0%	0%	4%	0%	3%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%				0%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	36	579	0	0	677	0	0	0	0	0	299	0
Turn Type	pm+pt	NA		Perm	NA						Perm	NA
Protected Phases	7	4			8							6
Permitted Phases	4			8						6		
Detector Phase	7	4		8	8					6	6	
Switch Phase												
Minimum Initial (s)	5.0	50.0		42.0	42.0					25.0	25.0	
Minimum Split (s)	8.0	55.0		47.0	47.0					30.0	30.0	
Total Split (s)	8.0	55.0		47.0	47.0					30.0	30.0	
Total Split (%)	9.4%	64.7%		55.3%	55.3%					35.3%	35.3%	
Yellow Time (s)	3.0	3.0		3.0	3.0					3.0	3.0	
All-Red Time (s)	0.0	2.0		2.0	2.0					2.0	2.0	
Lost Time Adjust (s)	0.0	0.0			0.0							0.0
Total Lost Time (s)	3.0	5.0			5.0							5.0
Lead/Lag	Lead			Lag	Lag							
Lead-Lag Optimize?	Yes			Yes	Yes							
Recall Mode	Max	Max		Max	Max					Max	Max	
Act Effect Green (s)	52.0	50.0			42.0							25.0
Actuated g/C Ratio	0.61	0.59			0.49							0.29

Lanes, Volumes, Timings
2: 47th Street & Kildare Avenue

06/07/2022

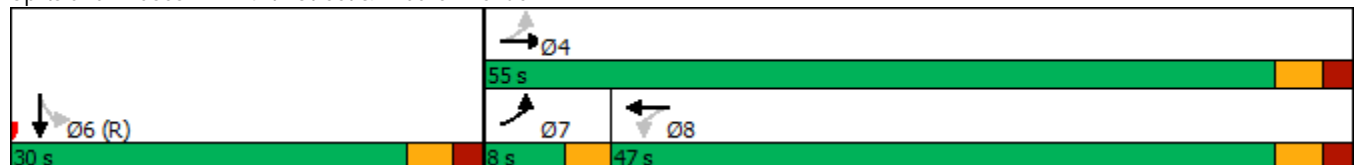


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.09	0.57			0.45							0.51
Control Delay	7.1	13.6			15.1							25.2
Queue Delay	0.0	0.0			0.0							0.0
Total Delay	7.1	13.6			15.1							25.2
LOS	A	B			B							C
Approach Delay		13.2			15.1							25.2
Approach LOS		B			B							C
Queue Length 50th (ft)	7	175			116							114
Queue Length 95th (ft)	18	268			161							192
Internal Link Dist (ft)		3224			928			316				1242
Turn Bay Length (ft)												
Base Capacity (vph)	390	1012			1509							585
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	0.09	0.57			0.45							0.51

Intersection Summary

Area Type:	Other
Cycle Length:	85
Actuated Cycle Length:	85
Offset:	11 (13%), Referenced to phase 2: and 6:SBTL, Start of Green
Natural Cycle:	85
Control Type:	Pretimed
Maximum v/c Ratio:	0.57
Intersection Signal Delay:	16.3
Intersection LOS:	B
Intersection Capacity Utilization:	72.8%
ICU Level of Service:	C
Analysis Period (min):	15

Splits and Phases: 2: 47th Street & Kildare Avenue



HCM 6th AWSC
3: Kildare Avenue & Ann Lurie Place

06/07/2022

Intersection	
Intersection Delay, s/veh	9.1
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	12	70	49	80	11	6	9	60	45	6	42	0
Future Vol, veh/h	12	70	49	80	11	6	9	60	45	6	42	0
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles, %	0	13	4	26	27	83	56	5	4	0	5	0
Mvmt Flow	15	88	61	100	14	8	11	75	56	8	53	0
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	8.5	9.3	9.9	8.3
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	8%	9%	82%	12%
Vol Thru, %	53%	53%	11%	88%
Vol Right, %	39%	37%	6%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	114	131	97	48
LT Vol	9	12	80	6
Through Vol	60	70	11	42
RT Vol	45	49	6	0
Lane Flow Rate	142	164	121	60
Geometry Grp	1	1	1	1
Degree of Util (X)	0.213	0.2	0.175	0.08
Departure Headway (Hd)	5.387	4.395	5.196	4.808
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	665	815	690	742
Service Time	3.429	2.426	3.232	2.855
HCM Lane V/C Ratio	0.214	0.201	0.175	0.081
HCM Control Delay	9.9	8.5	9.3	8.3
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.8	0.7	0.6	0.3

HCM 6th AWSC
4: Kildare Avenue & 45th Street

06/07/2022

Intersection	
Intersection Delay, s/veh	9.1
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	17	59	31	20	10	7	8	15	45	6	161	32
Future Vol, veh/h	17	59	31	20	10	7	8	15	45	6	161	32
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles, %	12	7	13	0	0	0	0	0	11	17	2	22
Mvmt Flow	21	74	39	25	13	9	10	19	56	8	201	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	8.9	8.2	7.8	9.8
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	12%	16%	54%	3%
Vol Thru, %	22%	55%	27%	81%
Vol Right, %	66%	29%	19%	16%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	68	107	37	199
LT Vol	8	17	20	6
Through Vol	15	59	10	161
RT Vol	45	31	7	32
Lane Flow Rate	85	134	46	249
Geometry Grp	1	1	1	1
Degree of Util (X)	0.101	0.178	0.062	0.32
Departure Headway (Hd)	4.257	4.795	4.842	4.631
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	841	748	738	776
Service Time	2.29	2.83	2.884	2.658
HCM Lane V/C Ratio	0.101	0.179	0.062	0.321
HCM Control Delay	7.8	8.9	8.2	9.8
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.3	0.6	0.2	1.4