

Traffic Impact Study Tots Land Day Care

Arlington Heights, Illinois



Prepared For:

Tots Land

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

June 6, 2024

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 Tots Land, a proposed day care center to be located at 1007 West Euclid Avenue in Arlington Heights, Illinois. The site, which currently contains a vacant former bank building, is located in the southwest corner of the intersection of Euclid Avenue with Kennicott Avenue. As proposed, the building will be redeveloped into a day care center serving children ranging in age from one to five years of age. The existing drive-through area will be converted into an indoor playroom, thereby increasing the space of the building by approximately 732 square feet. The existing parking lot providing 37 parking spaces will be utilized for employee parking and child pick-up/drop-off activities. Access to the day care center will continue to be provided via the existing access drive off Euclid Avenue and the existing full-movement access drive off Kennicott Avenue.

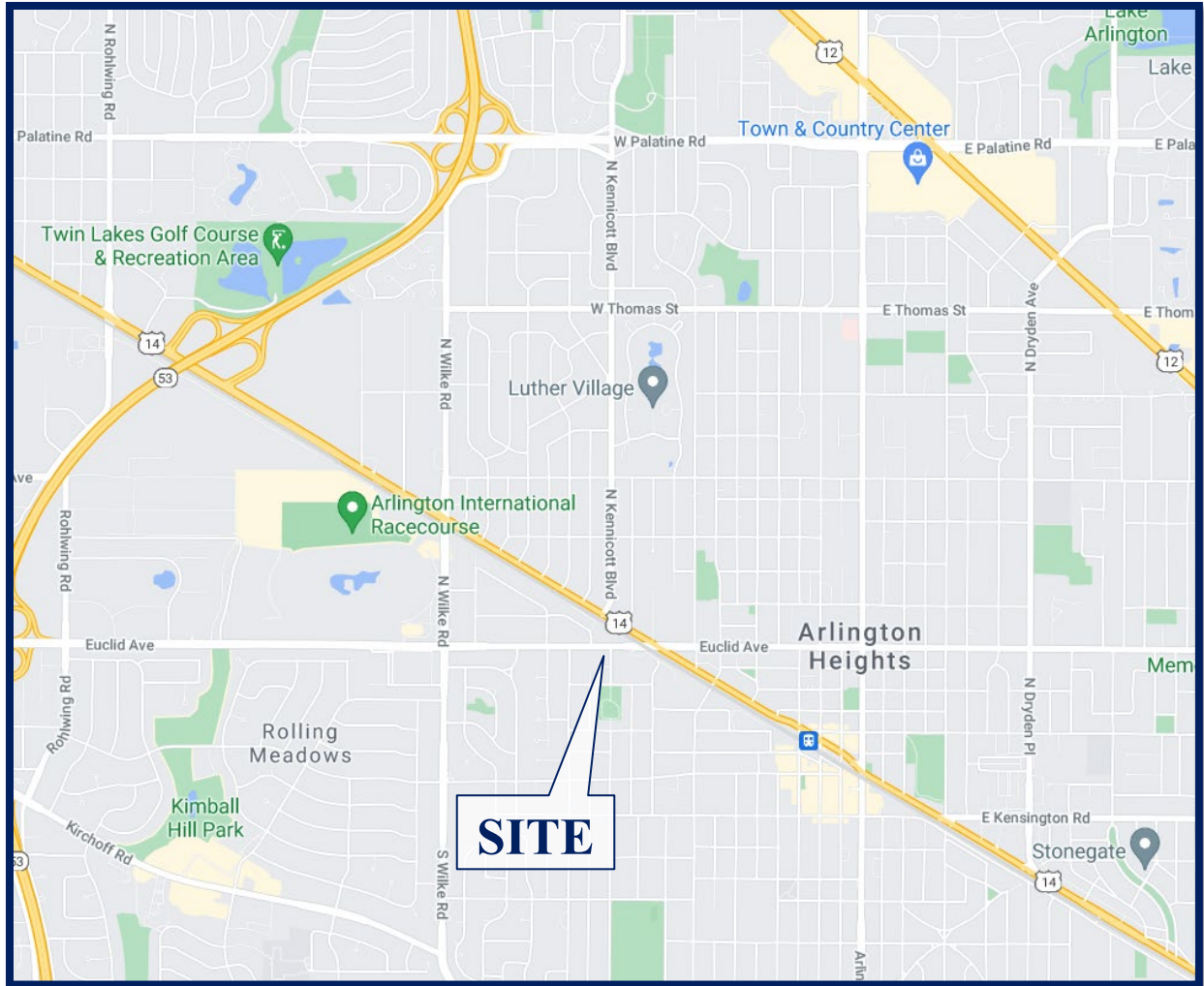
The purpose of this study was to examine background traffic conditions, assess the impact that the proposed day care will have on traffic conditions in the area, and determine if any roadway or access improvements are necessary to accommodate traffic generated by the proposed development. **Figure 1**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

The sections of this report present the following:

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

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

1. Existing Conditions – Analyzes the capacity of the existing roadway system using existing peak hour traffic volumes in the surrounding area.
2. No-Build Conditions – Analyzes the capacity of the existing roadway system using existing peak hour traffic volumes increased by an ambient area growth factor not attributable to any particular development.
3. Projected Conditions – Analyzes the capacity of the future roadway system using the projected traffic volumes that includes the existing traffic volumes, ambient area growth, and increase in traffic estimated to be generated by the day care.



Site Location

Figure 1



Aerial View of Site

Figure 2

2. Existing Conditions

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

Site Location

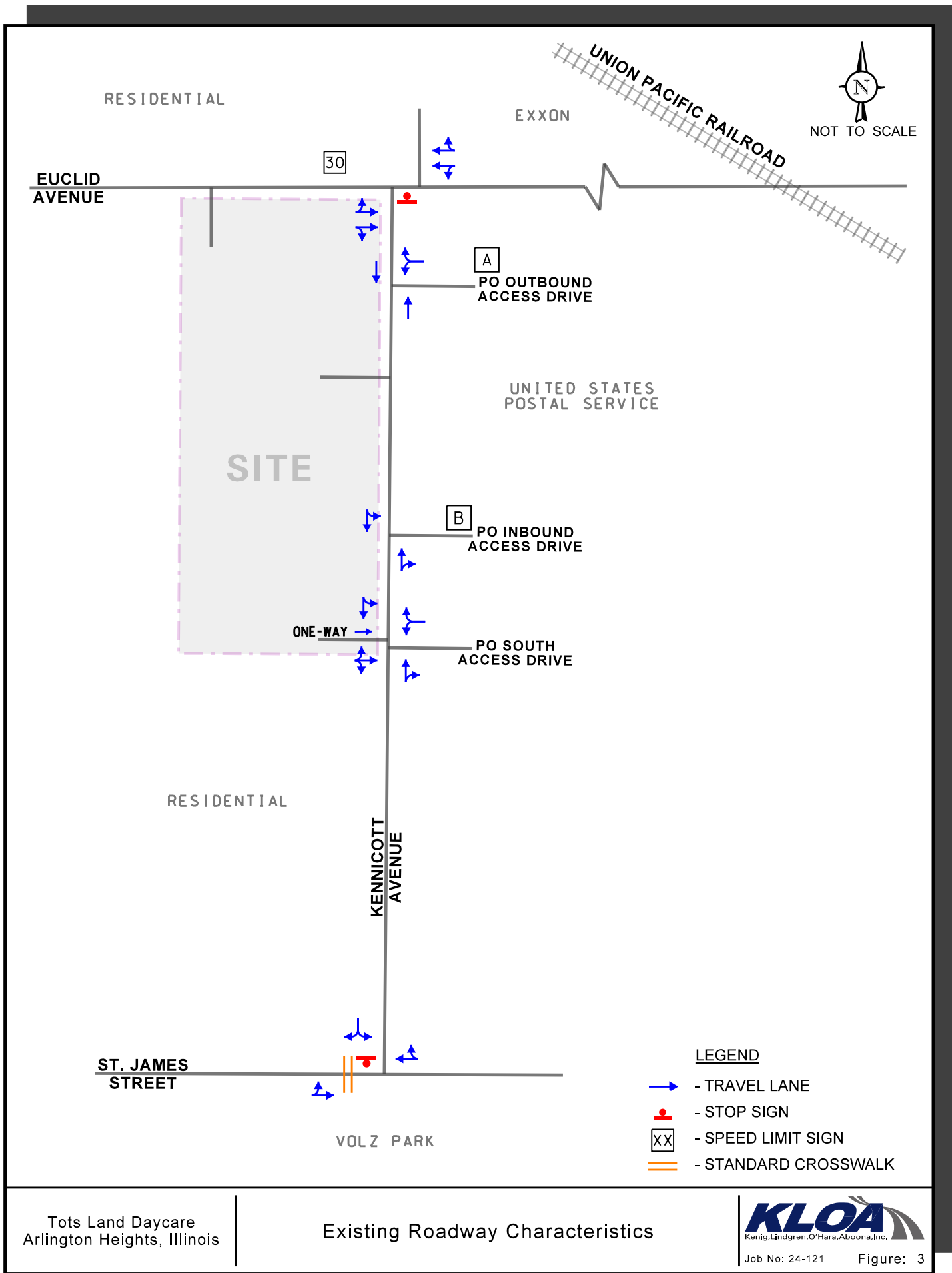
The site is located at 1007 West Euclid Avenue in Arlington Heights, Illinois, in the southwest corner of the intersection of Euclid Avenue with Kennicott Avenue. The site currently contains a vacant former bank building with a drive-through and a surface parking lot. Access to the site is currently provided via an inbound-only access drive off Euclid Avenue, a full-movement access drive off Kennicott Avenue, and an outbound-only access drive off Kennicott Avenue for the drive-through exit. The United States Postal Service Arlington Heights post office is located across Kennicott Avenue to the east. Volz Park is located one block south of the site. A fuel center is located northeast of the site. The remaining immediate area is primarily residential. It should be noted that the Union Pacific Railroad right-of-way is located approximately 500 feet east of Kennicott Avenue, where it has an at-grade crossing with Euclid Avenue. Paralleling the railroad right-of-way on the east side of the tracks is Northwest Highway (US 14), which has a signalized intersection with Euclid Avenue.

Existing Roadway System Characteristics

The characteristics of the existing roadways that surround the proposed location of the day care are illustrated in **Figure 3** and described below.

Euclid Avenue is an east-west minor arterial roadway that provides two lanes in each direction in the vicinity of the site. At its unsignalized intersection with Kennicott Avenue, Euclid Avenue provides a combined left-turn/through lane and a combined through/right-turn lane on the eastbound and westbound approaches. Euclid Avenue carries an annual average daily traffic (AADT) volume of 13,400 vehicles (IDOT 2022), is under the jurisdiction of the Cook County Department of Transportation, and has a posted speed limit of 30 miles per hour.

Kennicott Avenue is a north-south local roadway that provides one lane in each direction. At its unsignalized intersection with Euclid Avenue, the north leg of the intersection is offset by approximately 35 feet and is an inbound-only access drive for a residential complex. Kennicott Avenue provides a combined left-turn/through/right-turn lane on the northbound approach that is under stop sign control. At its unsignalized T-intersection with St. James Street, Kennicott Avenue provides a combined left-turn/right-turn lane on the southbound approach that is under stop sign control. At each of the access drives off Kennicott Avenue that allow for inbound movements, Kennicott Avenue provides no separate turn lanes. Kennicott Avenue is under the jurisdiction of the Village of Arlington Heights.



St. James Street is an east-west local roadway that provides one lane in each direction. At its unsignalized intersection with Kennicott Avenue, St. James Street provides a combined left-turn/through lane on the eastbound approach and a combined through/right-turn lane on the westbound approach. A standard-style crosswalk is provided on the west leg of the intersection. St. James Street is under the jurisdiction of the Village of Arlington Heights and is designated as a bikeway.

Existing Traffic Volumes

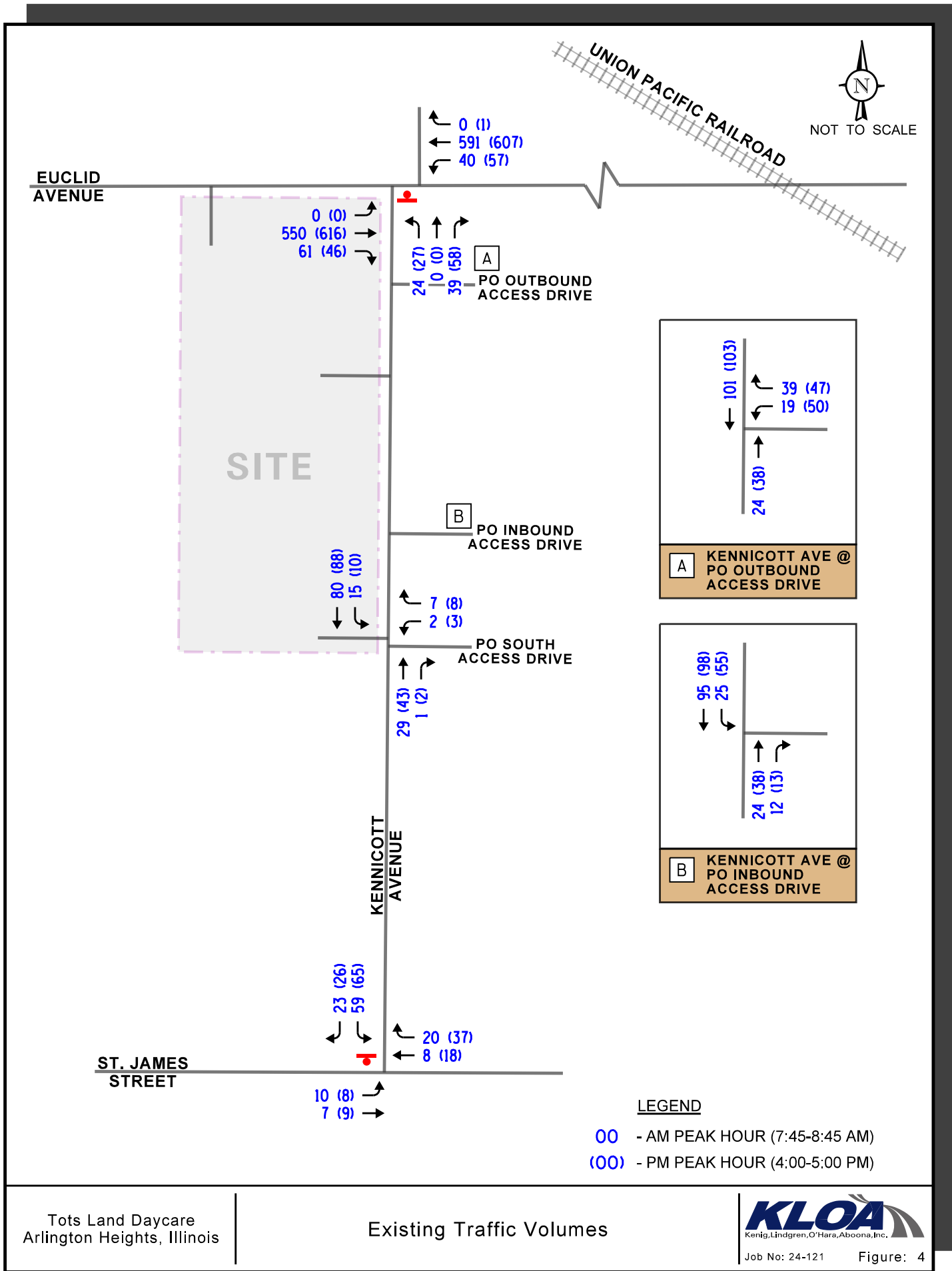
In order to determine current traffic conditions on the existing roadways, KLOA, Inc. conducted peak period traffic counts. The traffic counts were performed on Tuesday, May 28, 2024 during the weekday morning peak period (7:00 A.M. to 9:00 A.M.) and weekday evening peak period (4:00 P.M. to 6:00 P.M.) at the following intersections:

- Euclid Avenue with Kennicott Avenue
- Kennicott Avenue with St. James Street
- Kennicott Avenue with USPS Outbound Access Drive
- Kennicott Avenue with USPS Inbound Access Drive
- Kennicott Avenue with USPS South Access Drive

A review of the traffic count data indicated that the weekday morning peak hour of traffic generally occurs from 7:45 A.M. to 8:45 A.M. and the weekday evening peak hour of traffic generally occurs from 4:00 P.M. to 5:00 P.M. **Figure 4** illustrates the existing peak hour traffic volumes. A copy of the traffic count summary sheets is included in the Appendix.

Railroad Crossing

The Union Pacific Railroad right-of-way has an at-grade crossing approximately 500 feet east of Kennicott Avenue. This right-of way has three tracks, all of which are utilized by Metra commuter rail services as the Union Pacific-Northwest line. During the weekday morning and weekday evening peak hours, multiple trains traverse the railroad lines in both directions, resulting in traffic eastbound queues that extend past Kennicott Avenue. Approximately five trains utilize the crossing during the weekday morning peak hour and approximately four trains utilize the crossing during the weekday evening peak hour. Once the train event is over and eastbound through movements receive the green time at the signal at Northwest Highway, queues typically clear within one to two signal cycles.



Crash Data Summary

KLOA, Inc. obtained crash data¹ from IDOT for the most recent available past five years (2018 to 2022) for the intersections of Kennicott Avenue with Euclid Avenue and St. James Street. The crash data for the intersections is summarized in **Tables 1** and **2**. A review of the crash data indicated that no fatal crashes occurred at the intersections during the review period.

Table 1
EUCLID AVENUE WITH KENNICOTT AVENUE – CRASH SUMMARY

Year	Type of Crash Frequency							
	Angle	Head On	Object	Rear End	Sideswipe	Turning	Other	Total
2018	0	0	0	1	0	2	0	3
2019	0	0	0	2	0	4	0	6
2020	0	0	0	0	0	2	0	2
2021	0	0	0	0	0	1	0	1
2022	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total	0	0	0	3	0	9	0	12
Average	0.0	0.0	0.0	<1.0	0.0	1.8	0.0	2.4

Table 2
ST. JAMES STREET WITH KENNICOTT AVENUE – CRASH SUMMARY

Year	Type of Crash Frequency							
	Angle	Head On	Object	Rear End	Sideswipe	Turning	Other	Total
2018	0	0	0	0	0	0	0	0
2019	1	0	0	0	0	0	0	1
2020	0	0	0	0	0	0	0	0
2021	0	0	0	0	0	0	0	0
2022	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total	1	0	0	0	0	0	0	1
Average	<1.0	0.0	0.0	0.0	0.0	0.0	0.0	<1.0

¹ IDOT DISCLAIMER: The motor vehicle crash data referenced herein was provided by the Illinois Department of Transportation. Any conclusions drawn from analysis of the aforementioned data are the sole responsibility of the data recipient(s).

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 Operations of Day Care Center

As proposed, the day care center will occupy the existing vacant former bank building located on the site. The day care center is projected to maintain hours of operation of 7:00 A.M. to 6:00 P.M. The current building is 4,995 square feet and a 732 square foot addition is planned to be constructed to enclose the drive-through area, for a total building size of 5,727 square feet. The day care will have a maximum student capacity of approximately 91 children and will have up to 15 total staff members. The day care center will provide care and education for students aged one to five in five different classrooms and age categories.

Access to the day care center will continue to be provided via the existing access drive off Euclid Avenue and the existing full-movement access drive off Kennicott Avenue. The access drive off Euclid Avenue will become outbound right-turn only access as it is only approximately 15 feet wide. The full-movement access drive off Kennicott Avenue will continue to provide one inbound lane and one outbound lane and outbound movements will be under stop sign control.

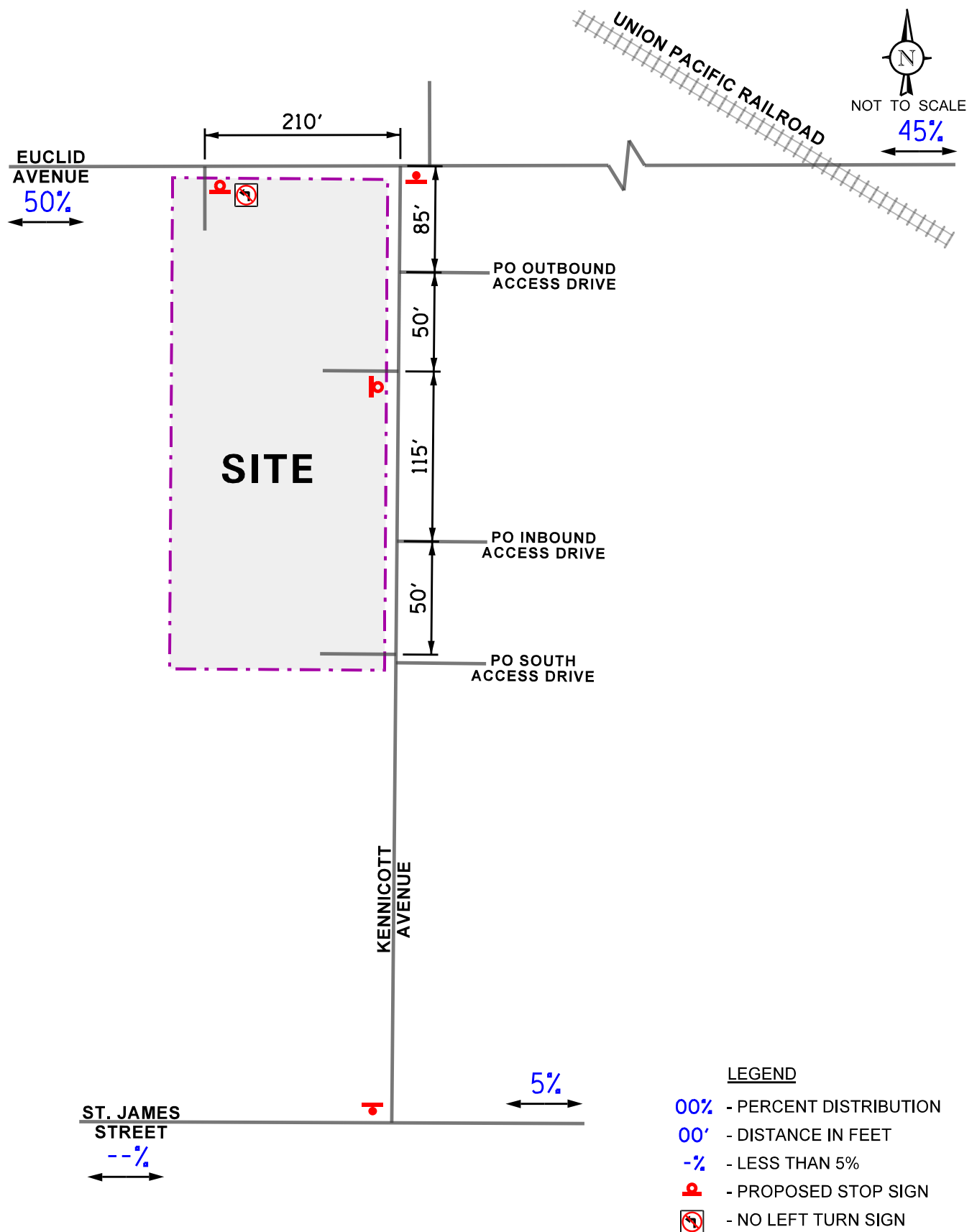
As previously mentioned, the former drive-through bay area will be enclosed to serve as an additional indoor playroom. The former drive-through pavement area outside of the drive through lanes will be converted into outdoor playgrounds. The drive-through exit curb cut will remain and serve as access to the proposed trash enclosure and loading zone to serve the site.

Pick-Up/Drop-Off Operations

The proposed day care center children will be transported to the facility by their parents or other guardians, and most will arrive via personal vehicle. Per the operator, most children are dropped off between the hours of 8:00 A.M. and 9:00 A.M. and get picked up between the hours of 4:30 and 5:30 P.M.

Directional Distribution of Site Traffic

The directional distribution of how traffic will approach and depart the proposed day care center was based on the existing travel patterns, the existing roadway characteristics, and the traffic controls surrounding the site. **Figure 5** illustrates the estimated directional distribution for the proposed day care center traffic.



Tots Land Daycare
Arlington Heights, Illinois

Directional Distribution

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

Job No: 24-121

Figure: 5

Site Traffic Generation

The estimate of traffic to be generated by the proposed day care center was based on trip generation information published in the Institute of Transportation Engineers (ITE) *Trip Generation Manual*, 11th Edition. As previously indicated, the approximately 5,727 square-foot day care center will serve a maximum of 91 children. **Table 3** summarizes the estimated peak hour trip generation based on both variables. As can be seen from the table, trips generated based on the number of students results in a higher number of trips overall, and as such these trips will be utilized in the analysis.

Table 3
ESTIMATED TRIP GENERATION

ITE Land-Use Code	Type/Size	Weekday Morning Peak Hour			Weekday Evening Peak Hour			Daily Trips		
		In	Out	Total	In	Out	Total	In	Out	Total
565	Day Care Center (91 students)	38	33	71	34	38	72	186	186	372
565	Day Care Center (5,727 S.F.)	33	30	63	30	34	64	137	137	274

Furthermore, the building previously operated as a bank with four drive-through lanes. **Table 4** provides a comparison of the number of trips between a bank and the proposed day care center. As can be seen from the table, overall the day care center generates less trips during the weekday evening and on a daily basis. The weekday morning peak hour generates more trips resulting in an increase of only approximately one trip every two minutes.

Table 4
TRIP GENERATION COMPARISON

ITE Land-Use Code	Type/Size	Weekday Morning Peak Hour			Weekday Evening Peak Hour			Daily Trips		
		In	Out	Total	In	Out	Total	In	Out	Total
565	Day Care Center (91 students)	38	33	71	34	38	72	186	186	372
912	Drive-In Bank (4 Drive-In Lanes)	21	13	34	53	55	108	250	250	500
	Difference	+17	+20	+37	-19	-17	-36	-64	-64	-128

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.

Facility Traffic Assignment

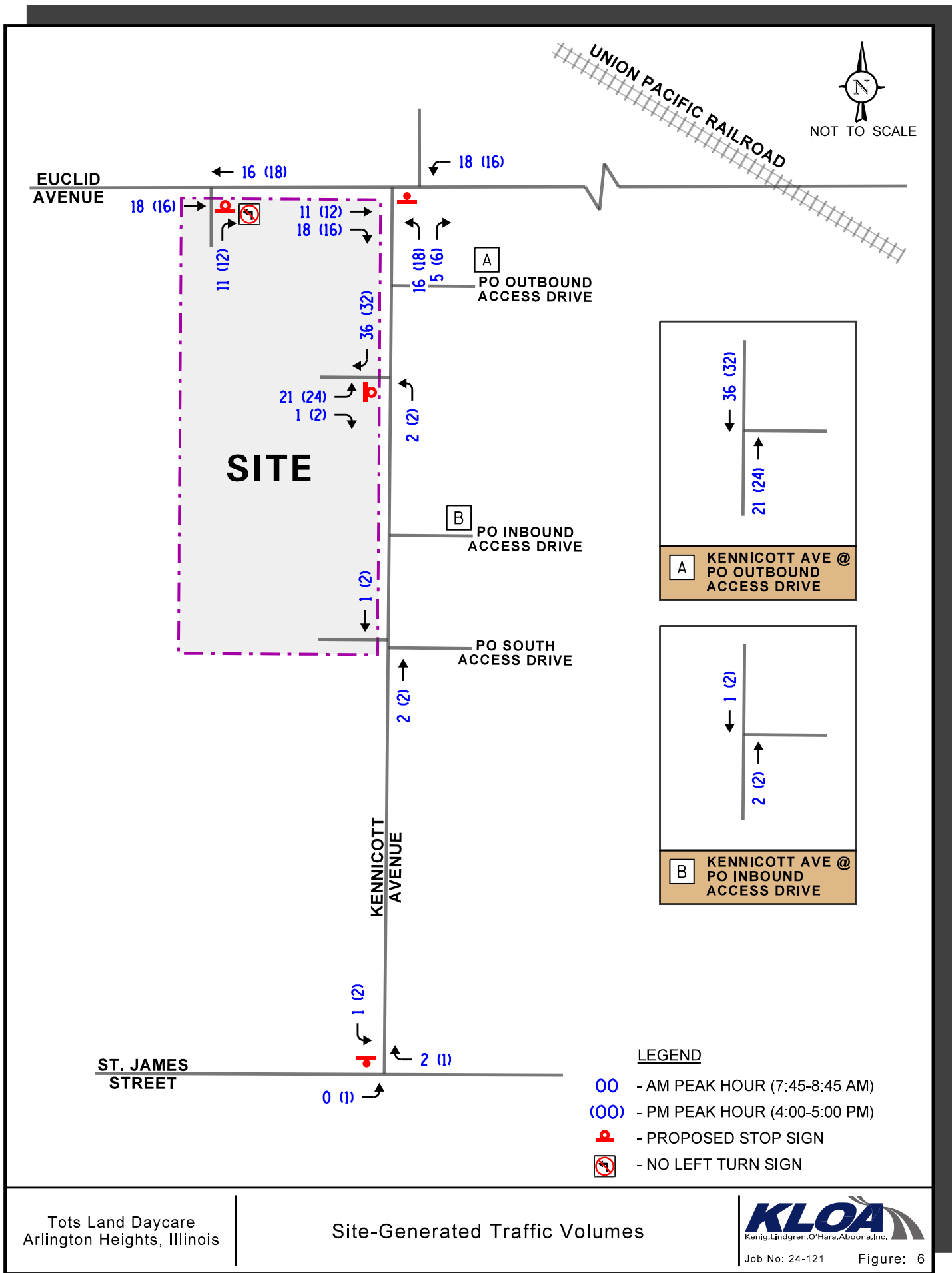
The estimated peak hour traffic volumes that will be generated by the proposed day care were assigned to the roadway system in accordance with the previously described directional distribution. **Figure 6** illustrates the assignment of the traffic volumes estimated to be generated by the proposed development.

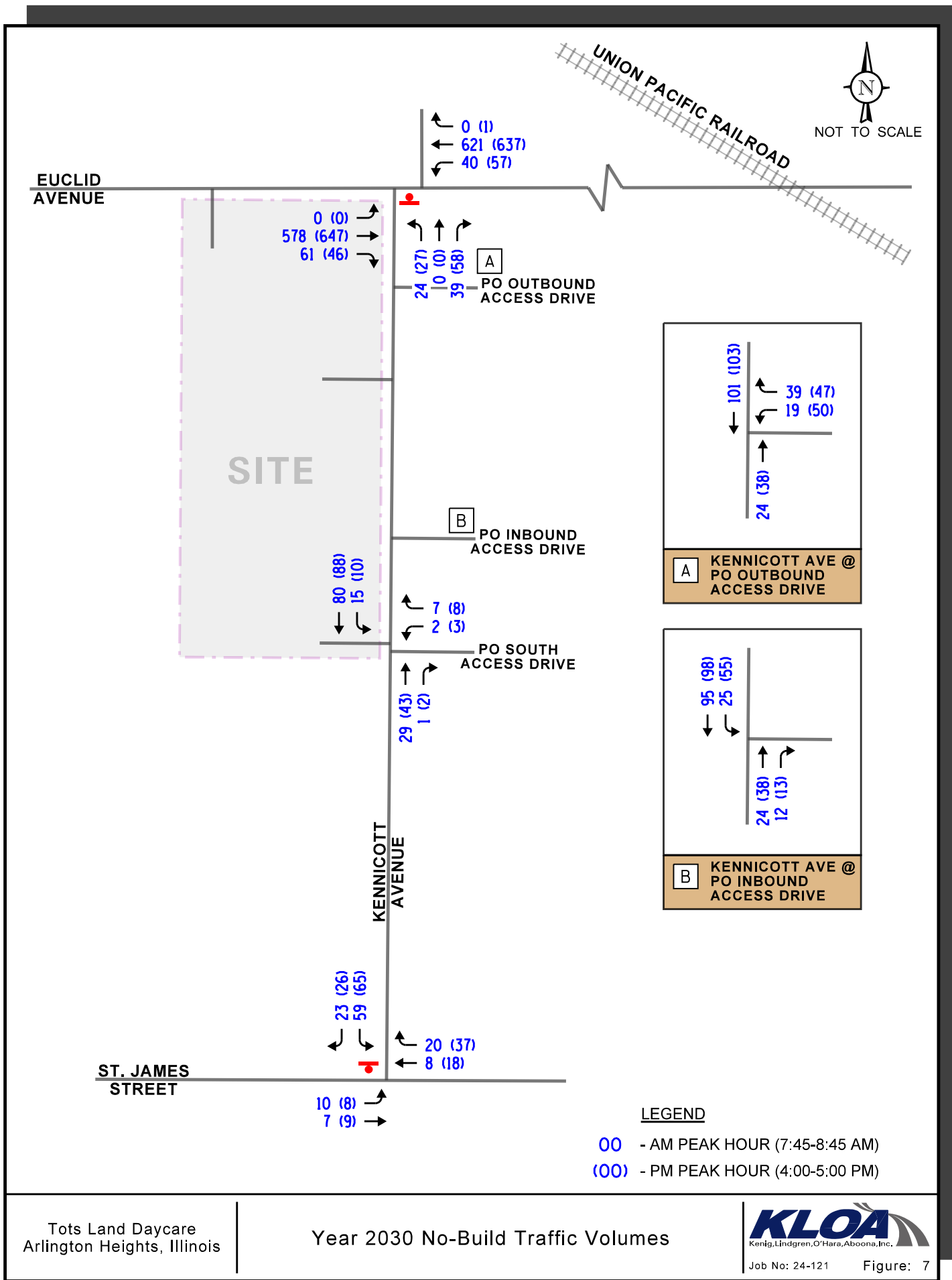
Background Traffic Conditions

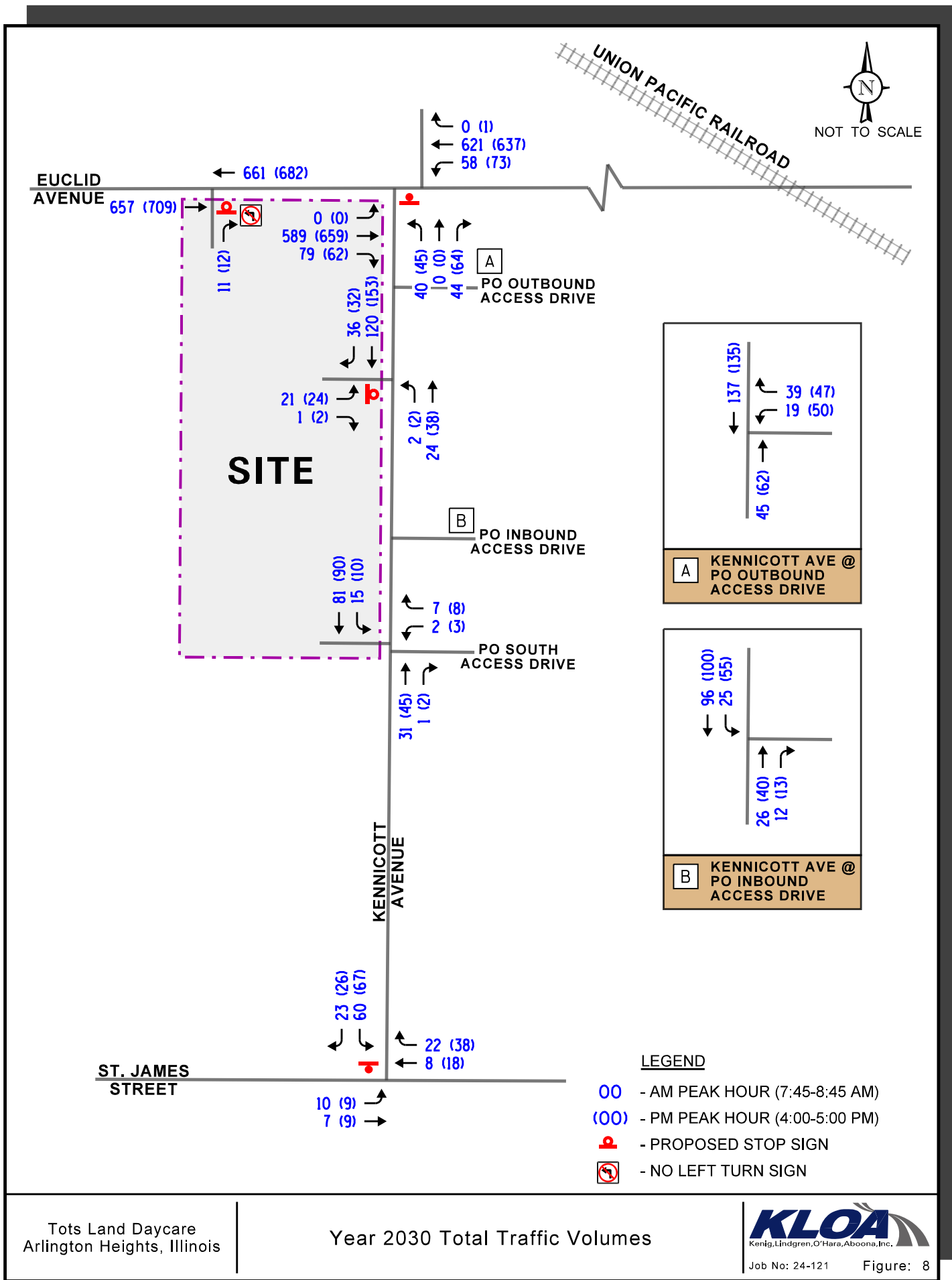
The existing traffic volumes (Figure 4) were increased by a regional growth factor to account for the increase in existing traffic related to regional growth in the area (i.e., not attributable to any particular planned development). Based on 2050 Annual Average Daily Traffic (AADT) projections provided by the Chicago Metropolitan Agency for Planning (CMAP) in a letter dated April 24, 2024, the existing traffic volumes were increased by an annually compounded growth rate of 0.9 percent for six years (one-year buildout plus five years) totaling approximately five percent to represent Year 2030 background conditions. A copy of the CMAP 2050 projections letter is included in the Appendix.

Total Projected Traffic Volumes

The total projected traffic volumes include the existing traffic volumes increased by the regional growth factor and the traffic estimated to be generated by the proposed development (Figure 6). **Figure 8** shows the Year 2030 total projected traffic volumes.







5. Traffic Analysis and Recommendations

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

Traffic Analyses

Roadway and adjacent or nearby intersection analyses were performed for the weekday morning and evening peak hours for the existing (Year 2024), no-build and future projected (Year 2030) 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 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 2024), no-build, and total projected (Year 2030) conditions are presented in **Tables 5** through **7**. A discussion of the intersections follows. Summary sheets for the capacity analyses are included in the Appendix.

Table 5

UNSIGNALIZED – EXISTING CONDITIONS

Intersection	Weekday Morning Peak Hour		Weekday Evening Peak Hour	
	LOS	Delay	LOS	Delay
Euclid Avenue with Kennicott Avenue/Apartment Access Drive¹				
• Northbound Approach	C	16.2	C	18.8
• Eastbound Left Turn	A	0.0	A	0.0
• Westbound Left Turn	A	8.9	A	9.3
Kennicott Avenue with Post Office Outbound Access Drive¹				
• Westbound Approach	A	8.9	A	9.5
Kennicott Avenue with Post Office Inbound Access Drive¹				
• Southbound Left Turn	A	7.3	A	7.4
Kennicott Avenue with Post Office South Access Drive¹				
• Westbound Approach	A	8.8	A	8.8
• Southbound Left Turn	A	7.4	A	7.3
St. James Street with Kennicott Avenue¹				
• Southbound Approach	A	9.2	A	9.4
• Eastbound Left Turn	A	7.3	A	7.4
LOS = Level of Service Delay is measured in seconds.				
1 – Two-way stop control				

Table 6

UNSIGNALIZED – YEAR 2030 NO-BUILD CONDITIONS

Intersection	Weekday Morning Peak Hour		Weekday Evening Peak Hour	
	LOS	Delay	LOS	Delay
Euclid Avenue with Kennicott Avenue/Apartment Access Drive¹				
• Northbound Approach	C	16.9	C	20.0
• Eastbound Left Turn	A	0.0	A	0.0
• Westbound Left Turn	A	9.0	A	9.4
Kennicott Avenue with Post Office Outbound Access Drive¹				
• Westbound Approach	A	8.9	A	9.5
Kennicott Avenue with Post Office Inbound Access Drive¹				
• Southbound Left Turn	A	7.3	A	7.4
Kennicott Avenue with Post Office South Access Drive¹				
• Westbound Approach	A	8.8	A	8.8
• Southbound Left Turn	A	7.4	A	7.3
St. James Street with Kennicott Avenue¹				
• Southbound Approach	A	9.2	A	9.4
• Eastbound Left Turn	A	7.3	A	7.4
LOS = Level of Service Delay is measured in seconds.				
1 – Two-way stop control				

Table 7

UNSIGNALIZED – YEAR 2030 TOTAL CONDITIONS

Intersection	Weekday Morning Peak Hour		Weekday Evening Peak Hour	
	LOS	Delay	LOS	Delay
Euclid Avenue with Kennicott Avenue/Apartment Access Drive¹				
• Northbound Approach	C	22.0	D	29.5
• Eastbound Left Turn	A	0.0	A	0.0
• Westbound Left Turn	A	9.2	A	9.6
Kennicott Avenue with Post Office Outbound Access Drive¹				
• Westbound Approach	A	9.1	A	9.9
Kennicott Avenue with Post Office Inbound Access Drive¹				
• Southbound Left Turn	A	7.4	A	7.4
Kennicott Avenue with Post Office South Access Drive¹				
• Westbound Approach	A	8.8	A	8.8
• Southbound Left Turn	A	7.4	A	7.3
St. James Street with Kennicott Avenue¹				
• Southbound Approach	A	9.2	A	9.5
• Eastbound Left Turn	A	7.3	A	7.4
Euclid Avenue with Site Access Drive¹				
• Northbound Approach	B	10.6	B	10.8
Kennicott Avenue with Site Access Drive¹				
• Eastbound Approach	A	9.5	A	9.8
• Northbound Left Turn	A	7.5	A	7.6
LOS = Level of Service Delay is measured in seconds.				
1 – Two-way stop control				

Discussion and Recommendations

The following summarizes how the intersections are projected to operate and identifies any roadway and traffic control improvements needed to accommodate the day care center traffic.

Euclid Avenue with Kennicott Avenue

The results of the capacity analysis indicate that all critical movements currently operate at LOS C or better during the weekday morning and weekday evening peak hours. Under Year 2030 total projected conditions, the intersection is projected to operate as follows:

- The northbound approach is projected to operate at LOS C during the weekday morning peak hour and at LOS D during the weekday evening peak hour.
- 95th percentile queues are projected to be approximately two vehicles or less during the peak hours.
- Delays are common and expected when a minor roadway such as Kennicott Avenue meets a major roadway such as Euclid Avenue at an unsignalized intersection.
- The eastbound and westbound left-turn movements are projected to continue to operate at LOS A during the peak hours.
- As indicated earlier, eastbound queues extend to this intersection at times due to the signal at Euclid Avenue with Northwest Highway and the at-grade railroad crossing with the Union Pacific Railroad right-of-way.
 - However, based on observations, queues clear within one or two traffic signal cycles after the train event. Additionally, the signal and railroad crossing result in additional gaps in the westbound traffic stream that allow for turning movements to/from Kennicott Avenue with minimal delay.
- To ensure that eastbound queues extending from the railroad crossing and Northwest Highway do not impede the traffic flow to/from Kennicott Avenue, it is recommended that a “Do Not Block Intersection” sign be posted on Euclid Avenue for eastbound traffic.
- Given the nature of the use of the site, it is recommended that the south leg of the intersection have a marked crosswalk added and the stop bar repainted to ensure the safety of children in proximity to the intersection.

As such, this intersection is projected to continue operating well with the proposed addition of the day care facility.

Kennicott Avenue with Post Office Outbound Access Drive

The results of the capacity analysis indicate that the westbound outbound approach currently operates at LOS A during the weekday morning and weekday evening peak hours. Under Year 2030 total projected conditions, the intersection is projected to operate as follows:

- The westbound approach is projected to operate at LOS A during the peak hours.
- The 95th percentile queue is projected to be one to two vehicles during the peak hours.

As such, this access drive is projected to continue to operate well and no additional roadway or traffic control modifications are required in conjunction with the proposed day care center.

Kennicott Avenue with Post Office Inbound Access Drive

The results of the capacity analysis indicate that the southbound inbound left-turn movement currently operates at LOS A during the weekday morning and weekday evening peak hours. Under Year 2030 total projected conditions, the intersection is projected to operate as follows:

- The southbound left-turn movement is projected to operate at LOS A during the peak hours.
- The 95th percentile queue is projected to be one to two vehicles during the peak hours.

As such, this access drive is projected to continue to operate well and no additional roadway or traffic control modifications are required in conjunction with the proposed day care center.

Kennicott Avenue with Post Office South Access Drive

The results of the capacity analysis indicate that all critical movements currently operate at LOS A during the weekday morning and weekday evening peak hours. Under Year 2030 total projected conditions, the intersection is projected to operate as follows:

- The westbound approach is projected to operate at LOS A during the peak hours.
- The southbound left-turn movement is projected to operate at LOS A during the peak hours.
- Due to the former bank drive-through exit drive being converted into a loading drive for the day care facility, traffic is expected to be sporadic and will not significantly affect the operations of the intersection.

As such, this access drive is projected to continue to operate well and no additional roadway or traffic control modifications are required in conjunction with the proposed day care facility.

Kennicott Avenue with St. James Street

The results of the capacity analysis indicate that all critical movements currently operate at LOS A during the weekday morning and weekday evening peak hours. Under Year 2030 total projected conditions, the intersection is projected to operate as follows:

- The southbound approach is projected to operate at LOS A during the peak hours.
- The eastbound left-turn is projected to operate at LOS A during the peak hours.

As such, this intersection is projected to continue to operate well under future conditions and no roadway or traffic control improvements are needed in conjunction with the proposed day care center.

Euclid Avenue with Site Access Drive

Under Year 2030 total projected conditions, the intersection is projected to operate as follows:

- The existing access drive will be converted to allow outbound northbound right-turns only and the northbound approach will be under stop sign control.
- A no left-turns sign should be posted, restricting movements to right-turns only.
- The northbound approach is projected to operate at LOS B during the peak hours, with 95th percentile queues of approximately one to two vehicles during the peak hours.

As such, this access drive is projected to provide flexible and efficient access to the site and no additional roadway or traffic control modifications are required.

Kennicott Avenue with Site Access Drive

Under Year 2030 total projected conditions, the intersection is projected to operate as follows:

- The intersection will continue to provide one inbound lane and one outbound lane, and outbound movements will be under stop sign control.
- The eastbound approach is projected to operate at LOS A during the peak hours, with 95th percentile queues of one to two vehicles.
- The northbound left-turn movements are projected to operate at LOS A during the peak hours.

As such, this access drive is projected to provide flexible and efficient access to the site and no additional roadway or traffic control modifications are required.

Parking Evaluation

The Village of Arlington Heights municipal code requires parking at a ratio of three parking spaces for every two employees for a day care. As such, with the proposed maximum of approximately 15 employees, a total of 23 parking spaces are required for the day care center based on village code. As proposed, the site will provide 37 parking spaces which includes two ADA accessible spaces. Therefore, the proposed parking lot will be able to meet requirements and adequately serve the facility.

Pick-Up and Drop-Off Operations Evaluation

As previously indicated, children will arrive at the proposed day care center via personal vehicle, transported by their parents or other guardians. For the purposes of this evaluation, it was assumed that most children will be driven to the facility, the vehicle parked, and then the children walked into the building. Once dropped off, the driver will return to the vehicle and leave the site. At the end of the day, to depart, the children are assumed to be walked out of the facility by their respective parent or guardian to the parked vehicle.

Based on operator surveys of existing day care facilities, most children are dropped off between the hours of 7:00 A.M. and 9:30 A.M. The largest number of students dropped off typically occurs between 8:00 A.M. and 9:00 A.M. with approximately 37 percent of students being dropped off during this peak hour. This results in approximately 34 children being dropped off during this peak hour. Most children are picked up between the hours of 4:00 P.M. and 6:00 P.M. Throughout the day it is generally assumed that 15 parking spaces will be occupied by employees. This results in 22 parking spaces available to be utilized for pick-up/drop-off activities and for visitors.

Due to the ongoing nature of drop-off and pick-up activities with the process for parents and guardians taking approximately five to ten minutes, the available parking spaces during the peak period will provide adequate parking to accommodate both parked vehicles for staff and drop-off and pick up activities.

Circulation through the site is proposed to be two-way. Vehicles will enter the site at the full-movement access drive off Kennicott Avenue and will park in available spaces throughout the parking lot. Vehicles then can exit from either the right-turn only access drive off Euclid Avenue or proceed to utilize the access drive off Kennicott Avenue.

Based on the above, the proposed site will adequately accommodate drop-off and pick-up activities, minimizing conflicts and congestion on site and any potential for traffic backups onto area roadways.

6. Conclusion

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

- The existing vacant former bank building at the southwest corner of the intersection of Euclid Avenue with Kennicott Avenue will be renovated into a day care center.
- The existing drive-through bank system will be eliminated and the drive-through bays will be enclosed and transformed into an indoor playroom serving the facility.
- The existing access drives will serve as follows in the future conditions:
 - The inbound-only access drive off Euclid Avenue will remain and will be converted to provide outbound right-turn movements only.
 - The full-movement access drive off Kennicott Avenue will remain and continue to serve the site.
 - The drive-through exit access drive curb cut will remain and will serve as a loading area for the day care center.
- The results of the capacity analysis indicate that the proposed day care center traffic will not have a significant impact on the area roadways.
- The proposed access system will provide flexible and efficient access to the site.
- The proposed 37 parking spaces will meet Village code and will be adequate in accommodating the projected parking demand.
- The drop-off/pick-up operations of the proposed day care center will be adequately accommodated onsite with minimal congestion and conflicts.
- It is recommended that a “Do Not Block Intersection” sign be posted on Euclid Avenue with Kennicott Avenue for the eastbound approach.
- It is recommended that at the south leg of the intersection of Euclid Avenue with Kennicott Avenue a marked crosswalk added and the stop bar repainted.

Appendix

Traffic Count Summary Sheets

Site Plan

ITE Trip Generation Sheets

CMAP 2050 Projections Letter

Level of Service Criteria

Capacity Analysis Summary Sheets

Traffic Count Summary Sheets



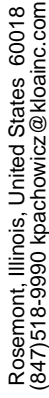
Kenig Lindgren O'Hara Aboona, Inc.
9575 W. Higgins Rd., Suite 400

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

Count Name: Euclid Avenue with Kennicott
Avenue TMC
Site Code:
Start Date: 05/28/2024
Page No: 1

Turning Movement Data

Start Time	Euclid Avenue Eastbound						Euclid Avenue Westbound						Kennicott Avenue Northbound						Access Drive Southbound							
	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	Int. Total	
7:00 AM	0	0	119	10	0	129	0	6	99	0	0	105	0	6	0	4	0	0	10	0	1	0	0	0	1	245
7:15 AM	0	0	142	16	0	158	0	3	100	0	0	103	0	3	0	6	0	0	9	0	0	0	0	0	0	270
7:30 AM	0	0	125	17	0	142	0	11	140	0	0	151	0	5	0	7	0	0	12	0	0	0	0	0	0	305
7:45 AM	0	0	144	19	0	163	0	6	131	0	1	137	0	8	0	9	0	0	17	0	1	0	0	0	1	318
Hourly Total	0	0	530	62	0	592	0	26	470	0	1	496	0	22	0	26	0	48	0	2	0	0	0	0	2	1138
8:00 AM	0	0	157	18	0	175	0	9	137	0	1	146	0	6	0	9	0	15	0	0	1	0	0	0	1	337
8:15 AM	0	0	129	15	0	144	0	8	167	0	0	175	0	3	0	11	0	14	0	0	1	0	0	0	1	334
8:30 AM	0	0	120	9	0	129	0	16	156	0	1	172	0	7	0	10	0	17	0	0	0	0	0	0	0	318
8:45 AM	0	0	105	7	1	112	0	15	110	0	0	125	0	7	0	8	0	15	0	0	0	0	0	0	0	252
Hourly Total	0	0	511	49	1	560	0	48	570	0	2	618	0	23	0	38	0	61	0	0	2	0	0	0	2	1241
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	0	0	181	12	0	193	0	11	141	1	0	153	0	8	0	11	0	19	0	0	0	0	0	0	0	365
4:15 PM	0	0	128	15	0	143	0	10	147	0	0	157	0	3	0	13	0	16	0	0	0	0	0	0	0	316
4:30 PM	0	0	144	10	0	154	0	20	169	0	0	189	1	6	0	16	0	23	0	0	0	0	0	0	0	366
4:45 PM	0	0	163	9	0	172	0	16	149	0	0	165	0	9	0	18	0	27	0	1	0	1	0	0	2	366
Hourly Total	0	0	616	46	0	662	0	57	606	1	0	664	1	26	0	58	0	85	0	1	0	1	0	0	2	1413
5:00 PM	0	1	155	6	0	162	0	10	159	2	0	171	0	5	0	10	0	15	0	0	0	0	0	0	0	348
5:15 PM	0	0	133	17	0	150	0	10	150	1	0	161	0	8	0	2	0	10	0	2	1	0	0	0	3	324
5:30 PM	0	0	127	7	0	134	0	8	120	2	0	130	0	8	0	10	0	18	0	0	0	0	0	0	0	282
5:45 PM	0	1	127	8	0	136	0	6	141	0	0	147	0	10	0	8	0	18	0	0	0	0	0	0	0	301
Hourly Total	0	2	542	38	0	582	0	34	570	5	0	609	0	31	0	30	0	61	0	2	1	0	0	0	3	1255
Grand Total	0	2	2199	195	1	2396	0	165	2216	6	3	2387	1	102	0	152	0	255	0	5	3	1	0	0	9	5047
Approach %	0.0	0.1	91.8	8.1	-	-	0.0	6.9	92.8	0.3	-	-	0.4	40.0	0.0	59.6	-	-	0.0	55.6	33.3	11.1	-	-	-	-
Total %	0.0	0.0	43.6	3.9	-	47.5	0.0	3.3	43.9	0.1	-	47.3	0.0	2.0	0.0	3.0	-	5.1	0.0	0.1	0.1	0.0	-	-	0.2	-
Lights	0	2	2161	194	-	2357	0	162	2188	5	-	2355	1	96	0	150	-	247	-	0	5	2	1	-	8	4967
% Lights	-	100.0	98.3	99.5	-	98.4	-	98.2	98.7	83.3	-	98.7	100.0	94.1	-	98.7	-	96.9	-	100.0	66.7	100.0	-	-	88.9	98.4
Buses	0	0	3	0	-	3	0	0	7	0	-	7	0	1	0	0	-	1	0	0	0	0	-	-	0	11
% Buses	-	0.0	0.1	0.0	-	0.1	-	0.0	0.3	0.0	-	0.3	0.0	1.0	-	0.0	-	0.4	-	0.0	0.0	0.0	-	-	0.0	0.2
Single-Unit Trucks	0	0	27	0	-	27	0	2	17	0	-	19	0	5	0	1	-	6	0	0	0	0	-	-	0	52
% Single-Unit Trucks	-	0.0	1.2	0.0	-	1.1	-	1.2	0.8	0.0	-	0.8	0.0	4.9	-	0.7	-	2.4	-	0.0	0.0	0.0	-	-	0.0	1.0
Articulated Trucks	0	0	8	1	-	9	0	1	4	0	-	5	0	0	0	1	-	1	0	0	0	0	-	-	0	15
% Articulated Trucks	-	0.0	0.4	0.5	-	0.4	-	0.6	0.2	0.0	-	0.2	-	0.0	0.0	-	0.7	-	0.4	-	0.0	0.0	-	-	0.0	0.3
Bicycles on Road	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	-	-	1	2



Site Code:
Start Date: 05/28/2024
Page No: 3

Turning Movement Peak Hour Data (7:45 AM)

Start Time	Euclid Avenue Eastbound						Euclid Avenue Westbound						Kennicott Avenue Northbound						Access Drive Southbound					
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	Int. Total					
7:45 AM	0	0	144	19	0	163	0	6	131	0	1	137	0	8	0	9	0	17	318					
8:00 AM	0	0	157	18	0	175	0	9	137	0	1	146	0	6	0	9	0	15	337					
8:15 AM	0	0	129	15	0	144	0	8	167	0	0	175	0	3	0	11	0	14	334					
8:30 AM	0	0	120	9	0	129	0	16	156	0	1	172	0	7	0	10	0	17	318					
Total	0	0	550	61	0	611	0	39	591	0	3	630	0	24	0	39	0	63	1307					
Approach %	0.0	0.0	90.0	10.0	-	-	0.0	6.2	93.8	0.0	-	-	0.0	38.1	0.0	61.9	-	-	-					
Total %	0.0	0.0	42.1	4.7	-	46.7	0.0	3.0	45.2	0.0	-	48.2	0.0	1.8	0.0	3.0	-	4.8	0.2					
PHF	0.000	0.000	0.876	0.803	-	0.873	0.000	0.609	0.885	0.000	-	0.900	0.000	0.750	0.000	0.886	-	0.926	0.750					
Lights	0	0	535	60	-	595	0	39	579	0	-	618	0	23	0	39	-	62	2					
% Lights	-	-	97.3	98.4	-	97.4	-	100.0	98.0	-	-	98.1	-	95.8	-	100.0	-	98.4	66.7					
Buses	0	0	2	0	-	2	0	0	4	0	-	4	0	0	0	0	-	0	6					
% Buses	-	-	0.4	0.0	-	0.3	-	0.0	0.7	-	-	0.6	-	0.0	-	0.0	-	0.0	0.5					
Single-Unit Trucks	0	0	10	0	-	10	0	0	6	0	-	6	0	1	0	0	-	1	0					
% Single-Unit Trucks	-	-	1.8	0.0	-	1.6	-	0.0	1.0	-	-	1.0	-	4.2	-	0.0	-	1.6	0.0					
Articulated Trucks	0	0	3	1	-	4	0	0	2	0	-	2	0	0	0	0	-	0	6					
% Articulated Trucks	-	-	0.5	1.6	-	0.7	-	0.0	0.3	-	-	0.3	-	0.0	0.0	-	-	0.0	0.5					
Bicycles on Road	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	-	0.0	0.0	-	-	0.0	-	0.0	-	0.0	-	0.0	0.1					
Pedestrians	-	-	-	-	0	-	-	-	-	-	3	-	-	-	-	-	0	-	-					
% Pedestrians	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-					



Site Code:
Start Date: 05/28/2024
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Turning Movement Peak Hour Data (4:00 PM)

[illegible]



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

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

Count Name: Kennicott Avenue with Post Office
access drive (north) TMC
Site Code:
Start Date: 05/28/2024
Page No: 1

Turning Movement Data

Start Time	Access Drive Eastbound						Post Office Access Drive Westbound						Kennicott Avenue Northbound						Kennicott Avenue Southbound						Int. Total	
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total		
7:00 AM	0	0	0	0	0	0	0	3	0	3	0	6	0	0	8	0	0	0	8	0	0	16	0	0	16	30
7:15 AM	0	0	0	0	0	0	0	4	0	1	1	5	0	0	8	0	0	0	8	0	0	18	0	0	18	31
7:30 AM	0	0	0	0	0	0	0	2	0	3	0	5	0	0	9	0	0	0	9	0	1	25	0	0	26	40
7:45 AM	0	0	0	0	0	0	0	4	0	8	1	12	0	0	4	0	0	1	4	0	0	25	0	0	25	41
Hourly Total	0	0	0	0	0	0	0	13	0	15	2	28	0	0	29	0	1	1	29	0	1	84	0	0	85	142
8:00 AM	0	0	0	0	0	0	0	2	0	8	1	10	0	0	10	0	0	0	10	0	0	30	0	0	30	50
8:15 AM	0	0	0	0	0	0	0	4	0	11	0	15	0	0	4	0	0	0	4	0	0	27	0	0	27	46
8:30 AM	0	0	0	0	0	0	0	9	0	12	0	21	0	0	6	0	0	0	6	0	0	24	0	0	24	51
8:45 AM	0	0	0	0	0	0	0	2	0	6	1	8	0	0	5	0	0	0	5	0	0	21	0	0	21	34
Hourly Total	0	0	0	0	0	0	0	17	0	37	2	54	0	0	25	0	0	0	25	0	0	102	0	0	102	181
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	0	0	0	0	0	0	0	8	0	11	0	19	0	0	8	0	0	0	8	0	0	23	0	0	23	50
4:15 PM	0	0	0	0	0	0	0	14	0	11	0	25	0	0	5	0	0	0	5	0	0	24	0	0	24	54
4:30 PM	0	0	0	0	0	0	0	18	0	12	1	30	1	0	10	0	0	0	11	0	0	31	0	1	31	72
4:45 PM	0	0	0	0	0	0	0	10	0	13	1	23	0	0	14	0	2	14	14	1	0	23	0	0	24	61
Hourly Total	0	0	0	0	0	0	0	50	0	47	2	97	1	0	37	0	2	38	38	1	0	101	0	1	102	237
5:00 PM	0	0	0	0	0	0	0	6	0	11	0	17	0	0	2	0	0	2	2	0	0	17	0	0	17	36
5:15 PM	0	0	0	0	0	0	0	4	0	7	0	11	0	0	6	0	0	6	6	0	0	21	0	0	21	38
5:30 PM	0	0	0	0	0	0	0	0	0	8	1	8	0	0	8	0	0	8	8	0	1	17	0	0	18	34
5:45 PM	0	0	0	0	0	0	0	1	0	11	1	12	0	0	7	0	0	7	7	0	0	16	0	0	16	35
Hourly Total	0	0	0	0	0	0	0	11	0	37	2	48	0	0	23	0	0	23	23	0	1	71	0	0	72	143
Grand Total	0	0	0	0	0	0	0	91	0	136	8	227	1	0	114	0	3	115	115	1	2	358	0	1	361	703
Approach %	0.0	0.0	0.0	0.0	-	-	0.0	40.1	0.0	59.9	-	-	0.9	0.0	99.1	0.0	-	-	-	0.3	0.6	99.2	0.0	-	-	-
Total %	0.0	0.0	0.0	0.0	-	0.0	0.0	12.9	0.0	19.3	-	32.3	0.1	0.0	16.2	0.0	-	16.4	0.1	0.3	50.9	0.0	-	-	51.4	-
Lights	0	0	0	0	-	0	0	91	0	136	-	227	1	0	108	0	-	109	1	2	350	0	-	363	689	
% Lights	-	-	-	-	-	-	-	100.0	-	100.0	-	100.0	100.0	-	94.7	-	-	94.8	100.0	100.0	97.8	-	-	97.8	98.0	-
Buses	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0
% Buses	-	-	-	-	-	-	-	0.0	-	0.0	-	0.0	0.0	-	0.0	-	-	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0
Single-Unit Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	5	0	-	5	0	0	4	0	-	4	9	-
% Single-Unit Trucks	-	-	-	-	-	-	-	0.0	-	0.0	-	0.0	0.0	-	4.4	-	-	4.3	0.0	0.0	1.1	-	-	1.1	1.3	-
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	1	0	-	1	0	0	1	0	-	1	2	-
% Articulated Trucks	-	-	-	-	-	-	-	0.0	-	0.0	-	0.0	0.0	-	0.9	-	-	0.9	0.0	0.0	0.3	-	-	0.3	0.3	-
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	3	0	-	3	3	-

[illegible]



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Count Name: Kennicott Avenue with Post Office
access drive (north) TMC
Site Code:
Start Date: 05/28/2024
Page No: 3

Turning Movement Peak Hour Data (7:45 AM)

Start Time	Access Drive Eastbound						Post Office Access Drive Westbound						Kennicott Avenue Northbound						Kennicott Avenue Southbound						Int. Total	
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total		
7:45 AM	0	0	0	0	0	0	0	4	0	0	8	1	12	0	0	4	0	0	1	4	0	0	25	0	25	41
8:00 AM	0	0	0	0	0	0	0	2	0	0	8	1	10	0	0	10	0	0	10	0	0	30	0	30	50	
8:15 AM	0	0	0	0	0	0	0	4	0	0	11	0	15	0	0	4	0	0	4	4	0	0	27	0	27	46
8:30 AM	0	0	0	0	0	0	0	9	0	0	12	0	21	0	0	6	0	0	6	6	0	0	24	0	24	51
Total	0	0	0	0	0	0	0	19	0	0	39	2	58	0	0	24	0	1	24	0	0	106	0	106	188	
Approach %	0.0	0.0	0.0	0.0	-	-	0.0	32.8	0.0	0.0	67.2	-	-	0.0	0.0	100.0	0.0	-	-	0.0	0.0	100.0	0.0	-	-	-
Total %	0.0	0.0	0.0	0.0	-	0.0	0.0	10.1	0.0	0.0	20.7	-	30.9	0.0	0.0	12.8	0.0	-	12.8	0.0	0.0	56.4	0.0	-	56.4	-
PHF	0.000	0.000	0.000	0.000	-	0.000	0.000	0.528	0.000	0.813	-	0.690	0.000	0.000	0.000	0.600	0.000	-	0.600	0.000	0.000	0.883	0.000	-	0.883	0.922
Lights	0	0	0	0	-	0	0	19	0	0	39	-	58	0	0	23	0	-	23	0	0	102	0	-	102	183
% Lights	-	-	-	-	-	-	-	100.0	-	100.0	-	100.0	-	100.0	-	95.8	-	-	95.8	-	-	96.2	-	-	96.2	97.3
Buses	0	0	0	0	-	0	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	-	0	0	0
% Buses	-	-	-	-	-	-	-	0.0	-	0.0	0.0	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	0.0
Single-Unit Trucks	0	0	0	0	-	0	0	0	0	0	0	-	0	0	0	1	0	-	1	0	0	2	0	-	2	3
% Single-Unit Trucks	-	-	-	-	-	-	-	0.0	-	0.0	0.0	-	0.0	-	-	4.2	-	-	4.2	-	-	1.9	-	-	1.9	1.6
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	-	0	0	0
% Articulated Trucks	-	-	-	-	-	-	-	0.0	-	0.0	0.0	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	-	-	0.0	0.0
Bicycles on Road	0	0	0	0	-	0	0	0	0	0	0	-	0	0	0	0	0	-	0	0	2	0	-	2	2	2
% Bicycles on Road	-	-	-	-	-	-	-	0.0	-	0.0	0.0	-	0.0	-	-	0.0	-	-	0.0	-	-	1.9	-	-	1.9	1.1
Pedestrians	-	-	-	-	0	-	-	-	-	-	-	2	-	-	-	-	-	1	-	-	-	-	0	-	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-



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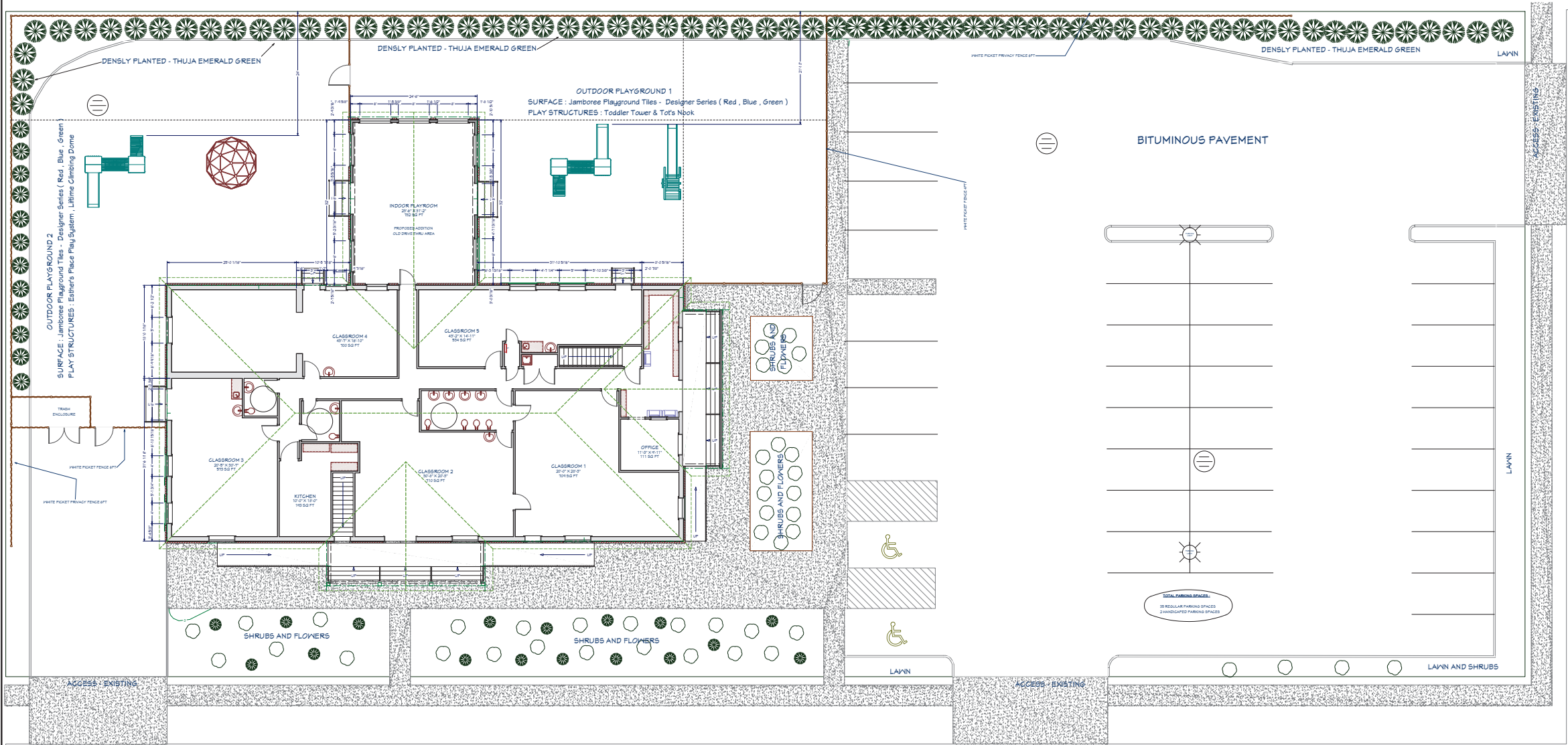
Turning Movement Peak Hour Data (4:00 PM)

Start Time	Access Drive Eastbound						Post Office Access Drive Westbound						Kennicott Avenue Northbound						Kennicott Avenue Southbound						Int. Total	
	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total	U-Turn	Left	Thru	Right	Peds	App. Total		
4:00 PM	0	0	0	0	0	0	0	8	0	11	0	19	0	0	8	0	0	0	8	0	0	23	0	0	23	50
4:15 PM	0	0	0	0	0	0	0	14	0	11	0	25	0	0	5	0	0	5	0	0	24	0	0	24	54	
4:30 PM	0	0	0	0	0	0	0	18	0	12	1	30	1	0	10	0	0	11	0	0	31	0	1	31	72	
4:45 PM	0	0	0	0	0	0	0	10	0	13	1	23	0	0	14	0	2	14	1	0	23	0	0	24	61	
Total	0	0	0	0	0	0	0	50	0	47	2	97	1	0	37	0	2	38	1	0	101	0	1	102	237	
Approach %	0.0	0.0	0.0	0.0	-	-	0.0	51.5	0.0	48.5	-	-	2.6	0.0	97.4	0.0	-	-	1.0	0.0	99.0	0.0	-	-	-	
Total %	0.0	0.0	0.0	0.0	-	0.0	0.0	21.1	0.0	19.8	-	40.9	0.4	0.0	15.6	0.0	-	16.0	0.4	0.0	42.6	0.0	-	43.0	-	
PHF	0.000	0.000	0.000	0.000	-	0.000	0.000	0.694	0.000	0.904	-	0.808	0.250	0.000	0.661	0.000	-	0.679	0.250	0.000	0.815	0.000	-	0.823	0.823	
Lights	0	0	0	0	-	0	0	50	0	47	-	97	1	0	34	0	-	35	1	0	100	0	-	101	233	
% Lights	-	-	-	-	-	-	-	100.0	-	100.0	-	100.0	100.0	-	91.9	-	-	92.1	100.0	-	99.0	-	-	99.0	98.3	
Buses	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	0	0	0	-	0	0	
% Buses	-	-	-	-	-	-	-	0.0	-	0.0	-	0.0	0.0	-	0.0	-	-	0.0	0.0	-	0.0	-	-	0.0	0.0	
Single-Unit Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	2	0	-	2	0	0	0	0	-	0	2	
% Single-Unit Trucks	-	-	-	-	-	-	-	0.0	-	0.0	-	0.0	0.0	-	5.4	-	-	5.3	0.0	-	0.0	-	-	0.0	0.8	
Articulated Trucks	0	0	0	0	-	0	0	0	0	0	-	0	0	0	1	0	-	1	0	0	1	0	-	1	2	
% Articulated Trucks	-	-	-	-	-	-	-	0.0	-	0.0	-	0.0	0.0	-	2.7	-	-	2.6	0.0	-	1.0	-	-	1.0	0.8	
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	
Pedestrians	-	-	-	-	0	-	-	-	-	-	2	-	-	-	-	-	-	2	-	-	-	-	1	-	-	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	100.0	-	-	

	St. James with Kennicott							Post Office Inbound			Post Office south Access			
	EB		WB		SB			SB	NB		SB	NB	WB	
	L	T	T	R	L	R		L	R		L	R	L	R
7:00	2	2	2	2	6	4		2	2		3	1	0	0
7:15	5	1		5	8	2		1	2		4	2	0	0
7:30	2	0		2	11	4		4	2		12	0	0	1
7:45	1	6	0	0	4	3		5	0		5	0	1	3
8:00	2	4	3	3	10	4		9	4		7	0	0	1
8:15	2	4	3	3	5	4		4	2		1	1	1	0
8:30	2	0	2	2	9	4		7	6		2	0	0	3
8:45	2	0	2	2	5	7		10	3		0	1	0	1

	St. James with Kennicott						Post Office Inbound			Post Office south Access					
	EB		WB		SB		SB	NB		SB	NB	L	WB	R	
	L	T	T	R	L	R	L	R		L	R	L	L	R	
4:00	1	3	5	7	13	6	20	2		3	0	1	1	2	
4:15	2	2	2	8	7	5	10	4		3	1	1	1	1	
4:30	1	2	9	12	21	8	13	6		1	1	1	1	3	
4:45	3	2	2	7	18	5	12	1		3	0	0	0	2	
5:00	6	2	7	6	12	7	12	2		1	0	0	0	3	
5:15	5	5	7	10	11	8	9	7		0	1	1	1	3	
5:30	1	2	1	7	9	10	5	2		3	1	1	1	1	
5:45	4	1	3	8	9	7	9	6		3	1	1	1	1	

Site Plan



N KENNICOTT AVENUE
BITUMINOUS PAVEMENT
66' PUBLIC RIGHT OF WAY

N EUCLID AVENUE
BITUMINOUS PAVEMENT
66' PUBLIC RIGHT OF WAY

1st Floor

DRAWINGS PROVIDED BY:
DAMIAN DWULT

PROJECT DESCRIPTION:
**1007 W EUCLID AVE
ARLINGTON HTS. IL**

SHEET TITLE:
**FULL SITE
PLAN**

NO.	DESCRIPTION	BY	DATE

DATE:

SCALE:

SHEET:
A-1

ITE Trip Generation Sheets

Day Care Center (565)

Vehicle Trip Ends vs: Students
On a: Weekday

Setting/Location: General Urban/Suburban

Number of Studies: 14

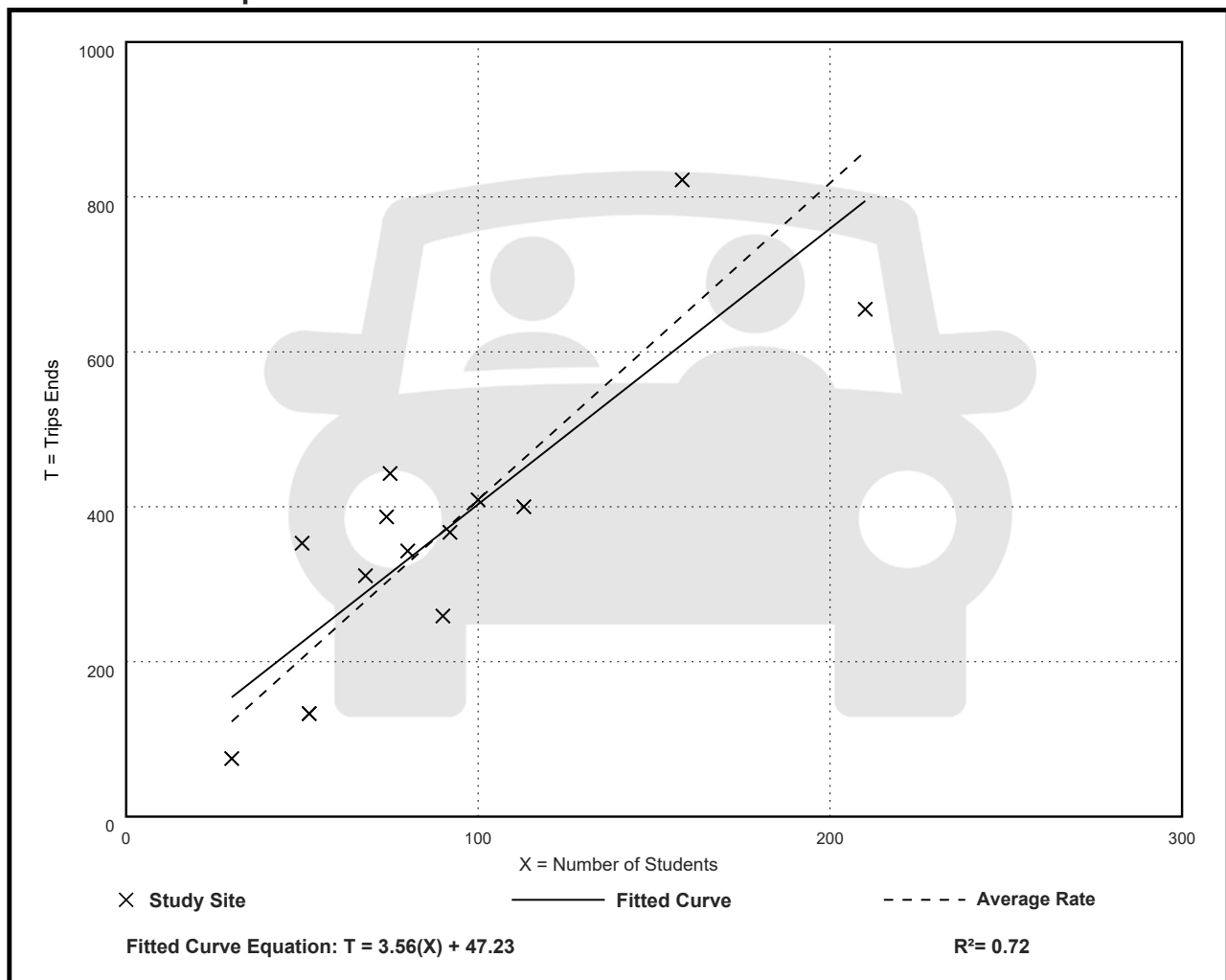
Avg. Num. of Students: 89

Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Student

Average Rate	Range of Rates	Standard Deviation
4.09	2.50 - 7.06	1.21

Data Plot and Equation



Day Care Center (565)

Vehicle Trip Ends vs: Students

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: 75

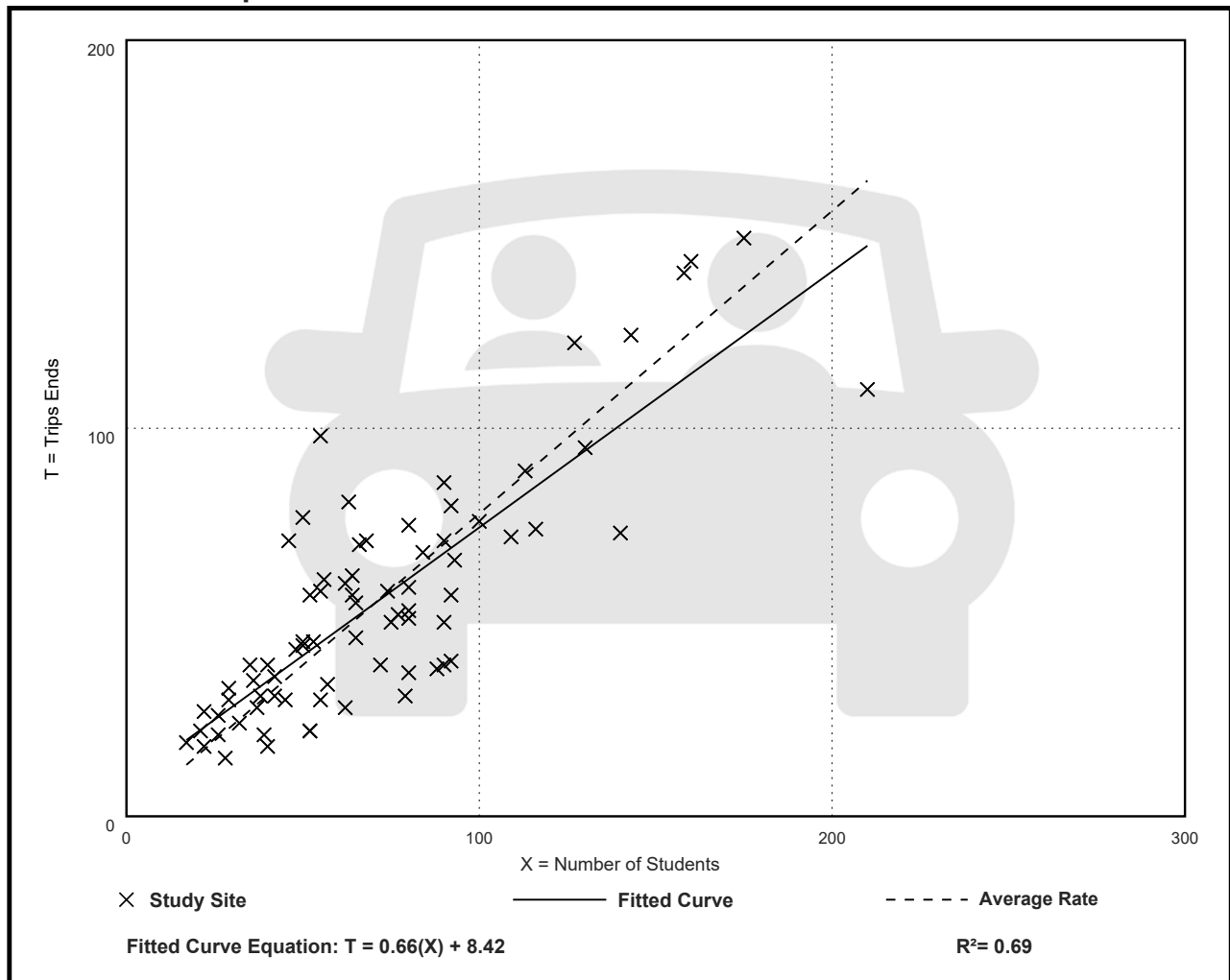
Avg. Num. of Students: 71

Directional Distribution: 53% entering, 47% exiting

Vehicle Trip Generation per Student

Average Rate	Range of Rates	Standard Deviation
0.78	0.39 - 1.78	0.25

Data Plot and Equation



Day Care Center (565)

Vehicle Trip Ends vs: Students

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: 75

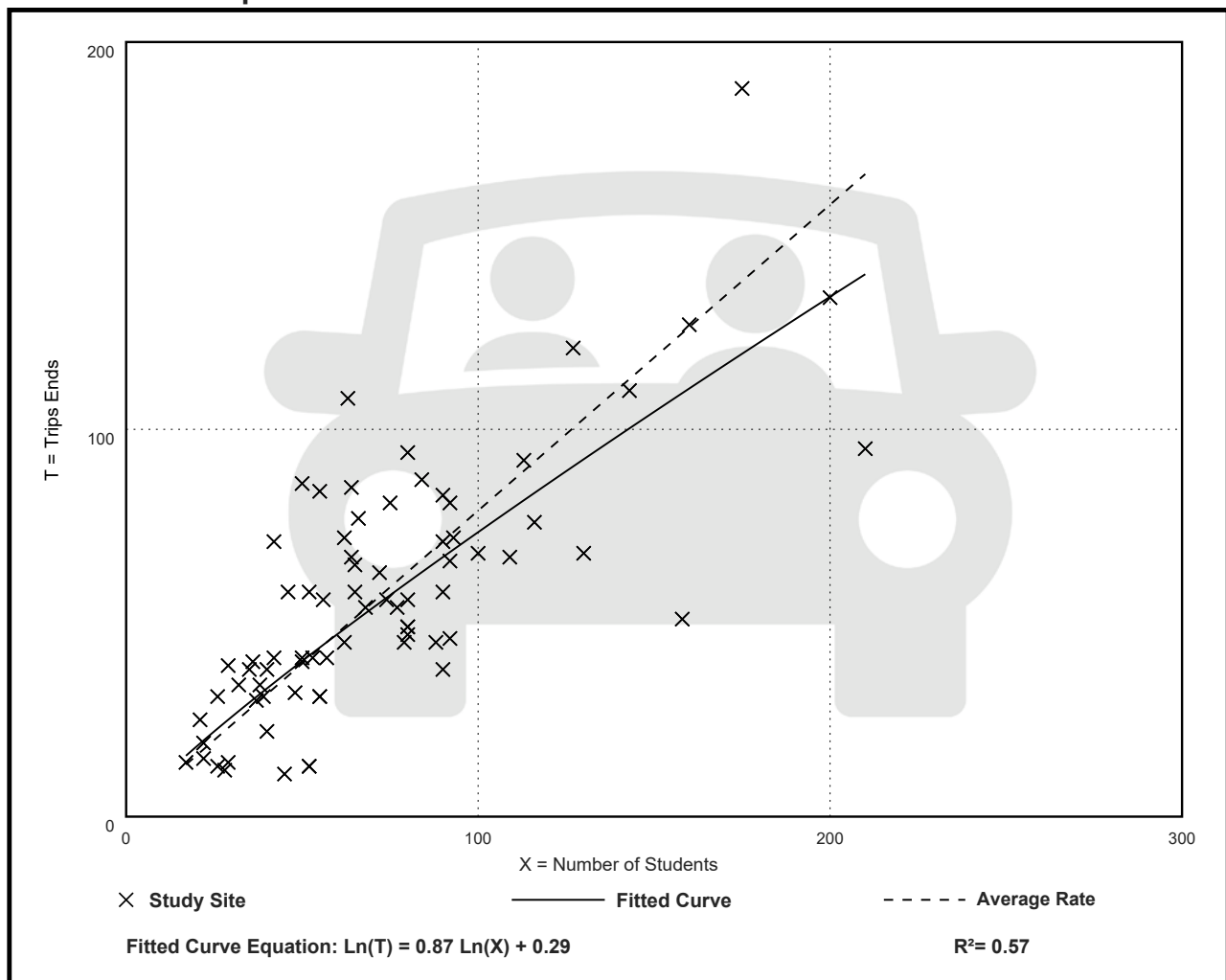
Avg. Num. of Students: 72

Directional Distribution: 47% entering, 53% exiting

Vehicle Trip Generation per Student

Average Rate	Range of Rates	Standard Deviation
0.79	0.24 - 1.72	0.30

Data Plot and Equation



Day Care Center (565)

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

Setting/Location: General Urban/Suburban

Number of Studies: 27

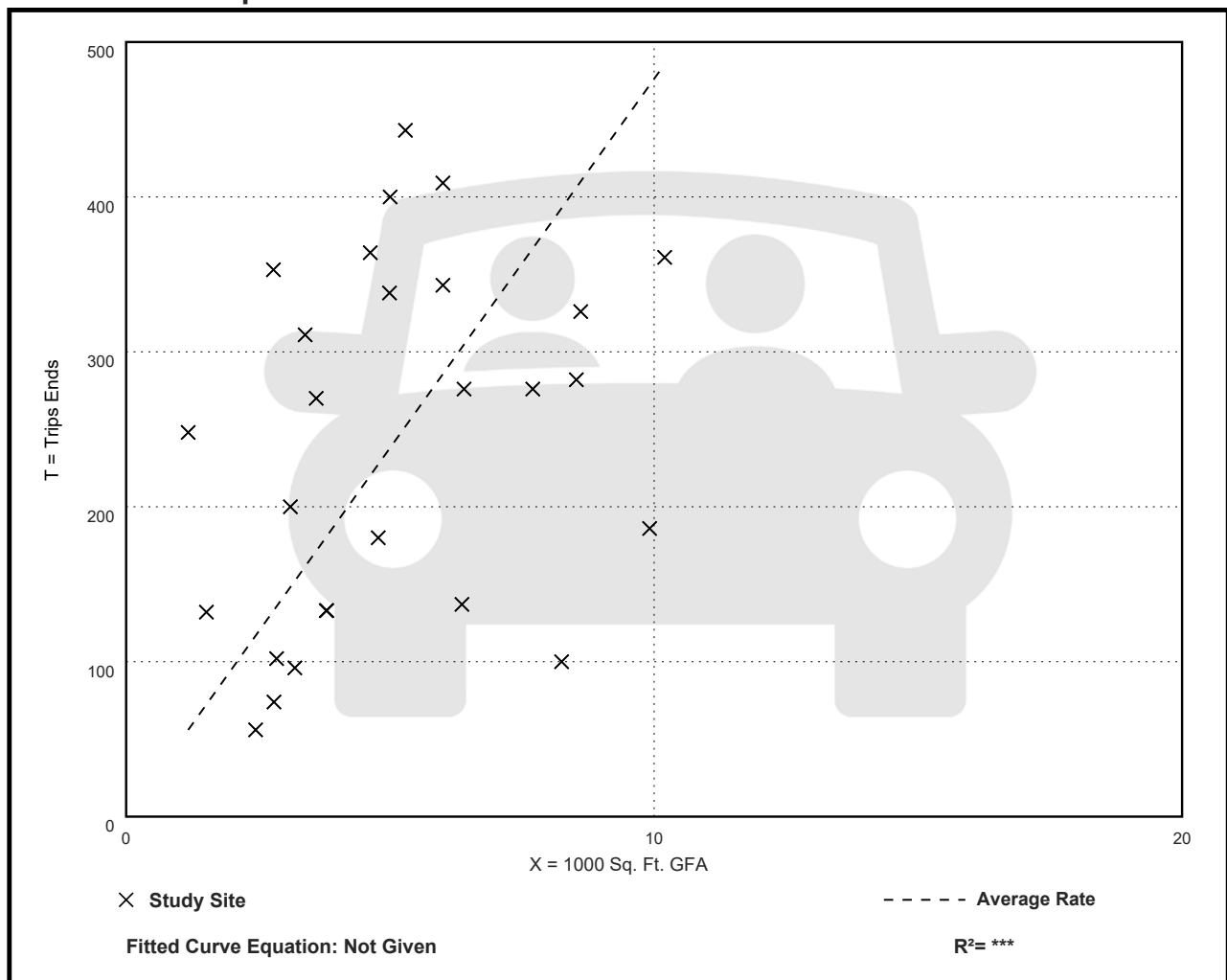
Avg. 1000 Sq. Ft. GFA: 5

Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
47.62	12.12 - 211.06	29.78

Data Plot and Equation



Day Care Center (565)

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: 89

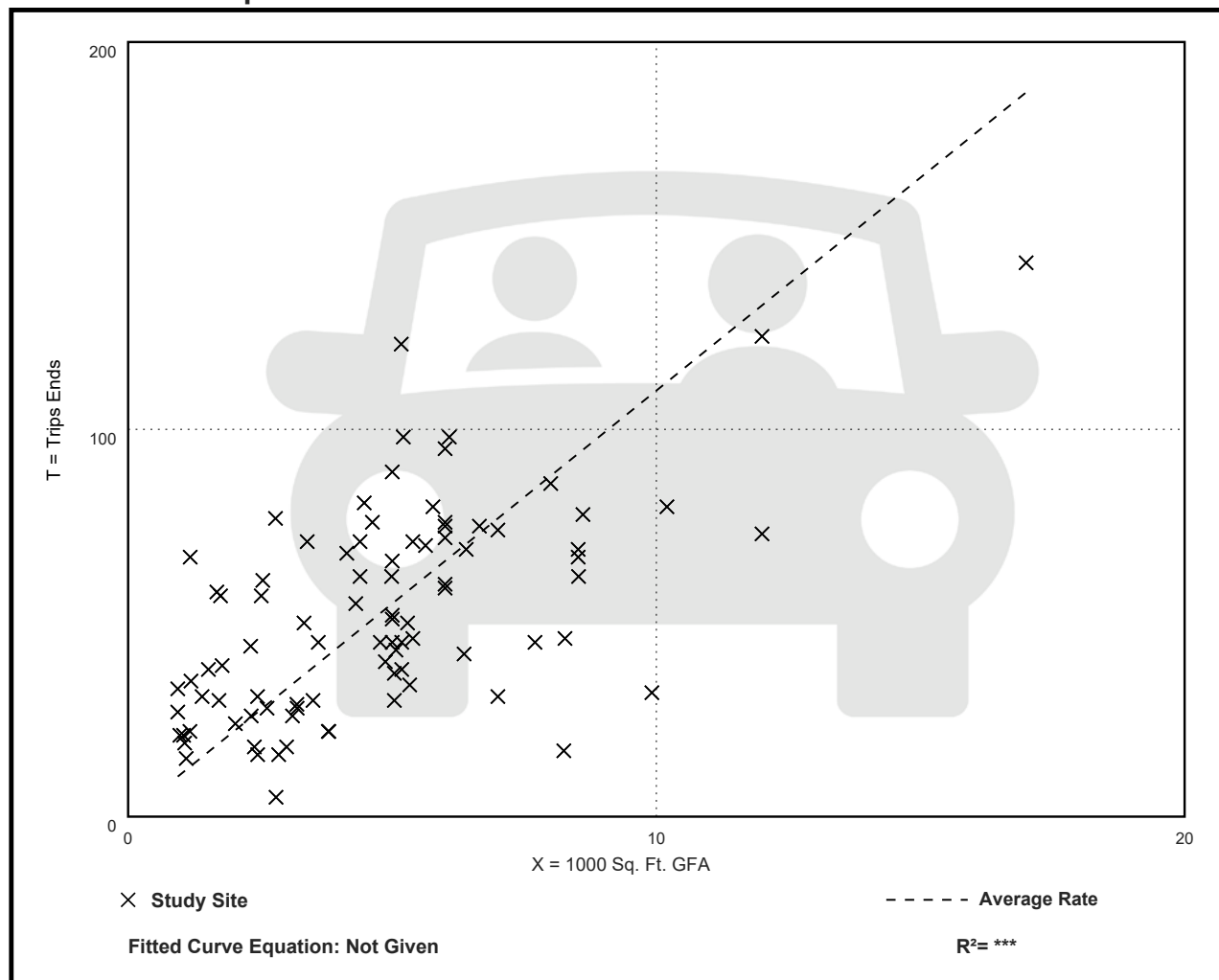
Avg. 1000 Sq. Ft. GFA: 5

Directional Distribution: 53% entering, 47% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
11.00	1.79 - 57.02	6.08

Data Plot and Equation



Day Care Center (565)

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: 90

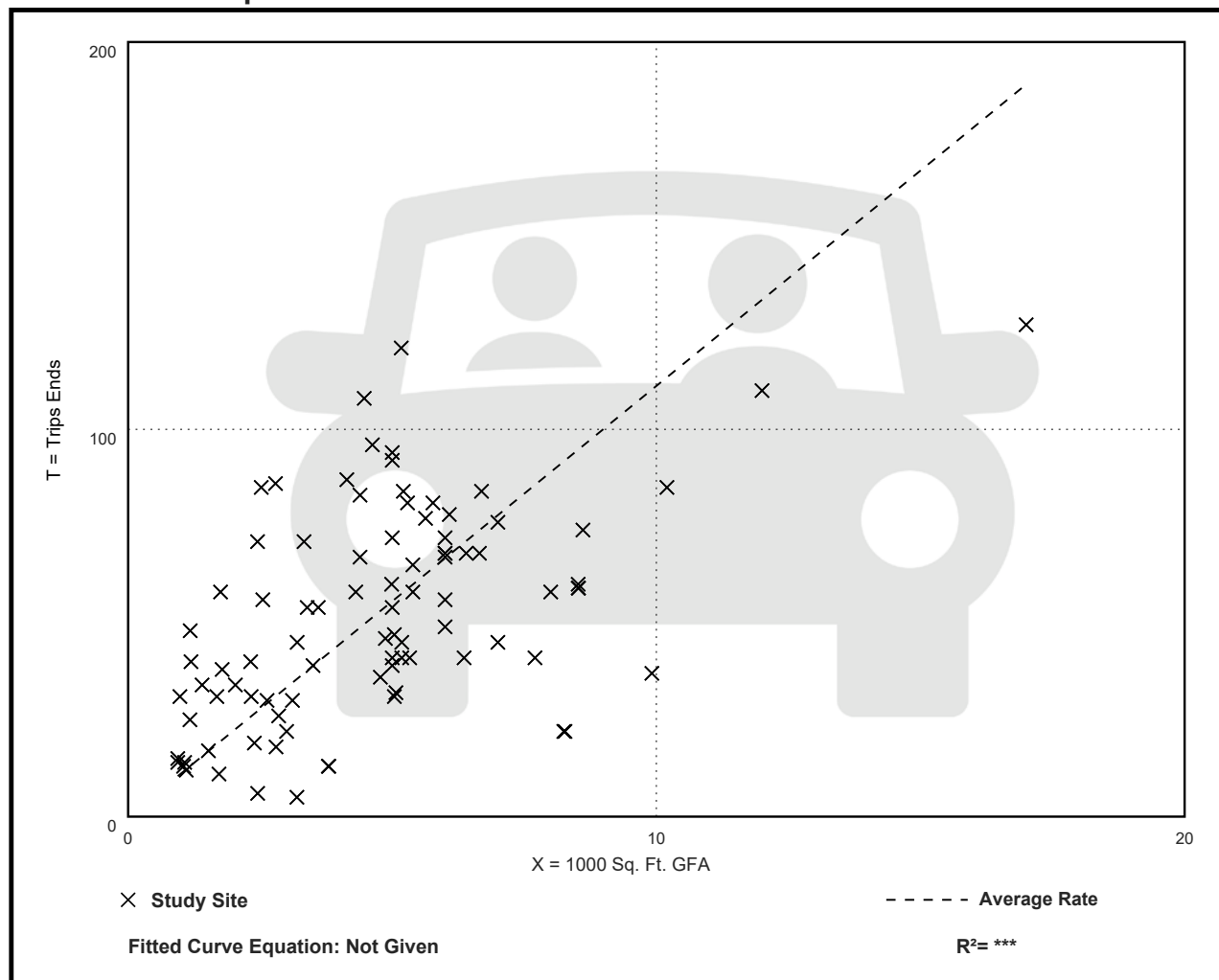
Avg. 1000 Sq. Ft. GFA: 5

Directional Distribution: 47% entering, 53% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
11.12	1.56 - 40.85	6.28

Data Plot and Equation



CMAP 2050 Projections Letter



Chicago Metropolitan
Agency for Planning

433 West Van Buren Street, Suite 450
Chicago, IL 60607
cmap.illinois.gov | 312-454-0400

April 24, 2024

Ryan May
Project Coordinator
Kenig, Lindgren, O'Hara and Aboona, Inc.
9575 West Higgins Road
Suite 400
Rosemont, IL 60018

Subject: Euclid Avenue at Kennicott Avenue
IDOT

Dear Ms. May:

In response to a request made on your behalf and dated April 23, 2024, we have developed year 2050 average daily traffic (ADT) projections for the subject location.

ROAD SEGMENT	Current ADT (2022)	Year 2050 ADT
Euclid Ave, at Kennicott Ave	13,700	17,100

Traffic projections are developed using existing ADT data provided in the request letter and the results from the December 2023 CMAP Travel Demand Analysis. The regional travel model uses CMAP 2050 socioeconomic projections and assumes the implementation of the ON TO 2050 Comprehensive Regional Plan for the Northeastern Illinois area. The provision of this data in support of your request does not constitute a CMAP endorsement of the proposed development or any subsequent developments.

If you have any questions, please call me at (312) 386-8806 or email me at jrodriguez@cmap.illinois.gov

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

cc: Rios (IDOT)
S:\AdminGroups\ResearchAnalysis\2024_TrafficForecasts\ArlingtonHeights\ck-51-24\ck-51-24.docx

Level of Service Criteria

LEVEL OF SERVICE CRITERIA




Signalized Intersections		
Level of Service	Interpretation	Average Control Delay (seconds per vehicle)
A	Favorable progression. Most vehicles arrive during the green indication and travel through the intersection without stopping.	≤ 10
B	Good progression, with more vehicles stopping than for Level of Service A.	$> 10 - 20$
C	Individual cycle failures (i.e., one or more queued vehicles are not able to depart as a result of insufficient capacity during the cycle) may begin to appear. Number of vehicles stopping is significant, although many vehicles still pass through the intersection without stopping.	$> 20 - 35$
D	The volume-to-capacity ratio is high and either progression is ineffective or the cycle length is too long. Many vehicles stop and individual cycle failures are noticeable.	$> 35 - 55$
E	Progression is unfavorable. The volume-to-capacity ratio is high and the cycle length is long. Individual cycle failures are frequent.	$> 55 - 80$
F	The volume-to-capacity ratio is very high, progression is very poor, and the cycle length is long. Most cycles fail to clear the queue.	> 80
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: <i>Highway Capacity Manual</i> , 6 th Edition.		

Capacity Analysis Summary Sheets
Existing Weekday Morning Peak Hour

Intersection												
Int Delay, s/veh	1.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕↕			↕↕			↕				
Traffic Vol, veh/h	0	550	61	40	591	0	24	0	39	0	0	0
Future Vol, veh/h	0	550	61	40	591	0	24	0	39	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	0	3	2	0	2	0	4	0	0	0	0	0
Mvmt Flow	0	567	63	41	609	0	25	0	40	0	0	0
Major/Minor	Major1			Major2			Minor1					
Conflicting Flow All	609	0	0	630	0	0	986	1290	315			
Stage 1	-	-	-	-	-	-	599	599	-			
Stage 2	-	-	-	-	-	-	387	691	-			
Critical Hdwy	4.1	-	-	4.1	-	-	6.88	6.5	6.9			
Critical Hdwy Stg 1	-	-	-	-	-	-	5.88	5.5	-			
Critical Hdwy Stg 2	-	-	-	-	-	-	5.88	5.5	-			
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.54	4	3.3			
Pot Cap-1 Maneuver	979	-	-	962	-	-	241	165	687			
Stage 1	-	-	-	-	-	-	506	494	-			
Stage 2	-	-	-	-	-	-	650	449	-			
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	979	-	-	962	-	-	226	0	687			
Mov Cap-2 Maneuver	-	-	-	-	-	-	226	0	-			
Stage 1	-	-	-	-	-	-	506	0	-			
Stage 2	-	-	-	-	-	-	608	0	-			
Approach	EB			WB			NB					
HCM Control Delay, s	0			0.8			16.2					
HCM LOS	C											
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR					
Capacity (veh/h)	387	979	-	-	962	-	-					
HCM Lane V/C Ratio	0.168	-	-	-	0.043	-	-					
HCM Control Delay (s)	16.2	0	-	-	8.9	0.3	-					
HCM Lane LOS	C	A	-	-	A	A	-					
HCM 95th %tile Q(veh)	0.6	0	-	-	0.1	-	-					

Intersection

Int Delay, s/veh 2.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	19	39	24	0	0	101
Future Vol, veh/h	19	39	24	0	0	101
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	4	0	0	2
Mvmt Flow	21	42	26	0	0	110




Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	136	26	0
Stage 1	26	-	-
Stage 2	110	-	-
Critical Hdwy	6.4	6.2	-
Critical Hdwy Stg 1	5.4	-	-
Critical Hdwy Stg 2	5.4	-	-
Follow-up Hdwy	3.5	3.3	-
Pot Cap-1 Maneuver	862	1056	-
Stage 1	1002	-	-
Stage 2	920	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	862	1056	-
Mov Cap-2 Maneuver	862	-	-
Stage 1	1002	-	-
Stage 2	920	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.9	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBTWBLn1	SBT
Capacity (veh/h)	- 983	-
HCM Lane V/C Ratio	- 0.064	-
HCM Control Delay (s)	- 8.9	-
HCM Lane LOS	- A	-
HCM 95th %tile Q(veh)	- 0.2	-

Intersection

Int Delay, s/veh 1.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	24	12	25	95
Future Vol, veh/h	0	0	24	12	25	95
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	71	71	71	71	71	71
Heavy Vehicles, %	0	0	4	0	0	2
Mvmt Flow	0	0	34	17	35	134




Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	247	43	0
Stage 1	43	-	-
Stage 2	204	-	-
Critical Hdwy	6.4	6.2	-
Critical Hdwy Stg 1	5.4	-	-
Critical Hdwy Stg 2	5.4	-	-
Follow-up Hdwy	3.5	3.3	-
Pot Cap-1 Maneuver	746	1033	-
Stage 1	985	-	-
Stage 2	835	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	728	1033	-
Mov Cap-2 Maneuver	728	-	-
Stage 1	985	-	-
Stage 2	815	-	-

Approach	WB	NB	SB
HCM Control Delay, s	0	0	1.5
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	1568	-
HCM Lane V/C Ratio	-	-	0.022	-
HCM Control Delay (s)	-	-	0	7.3
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0.1	-

Intersection

Int Delay, s/veh 1.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	2	7	29	1	15	80
Future Vol, veh/h	2	7	29	1	15	80
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	69	69	69	69	69	69
Heavy Vehicles, %	0	2	0	0	4	0
Mvmt Flow	3	10	42	1	22	116




Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	203	43	0
Stage 1	43	-	-
Stage 2	160	-	-
Critical Hdwy	6.4	6.22	-
Critical Hdwy Stg 1	5.4	-	-
Critical Hdwy Stg 2	5.4	-	-
Follow-up Hdwy	3.5	3.318	-
Pot Cap-1 Maneuver	790	1027	-
Stage 1	985	-	-
Stage 2	874	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	778	1027	-
Mov Cap-2 Maneuver	778	-	-
Stage 1	985	-	-
Stage 2	861	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.8	0	1.2
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	959	1553
HCM Lane V/C Ratio	-	-	0.014	0.014
HCM Control Delay (s)	-	-	8.8	7.4
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0	0

HCM 6th TWSC
5: St. James Street & Kennicott Avenue

06/05/2024




Intersection						
Int Delay, s/veh	6.5					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	10	7	8	20	59	23
Future Vol, veh/h	10	7	8	20	59	23
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	75	75	75	75	75	75
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	13	9	11	27	79	31
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	38	0	-	0	60	25
Stage 1	-	-	-	-	25	-
Stage 2	-	-	-	-	35	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1585	-	-	-	952	1057
Stage 1	-	-	-	-	1003	-
Stage 2	-	-	-	-	993	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1585	-	-	-	944	1057
Mov Cap-2 Maneuver	-	-	-	-	944	-
Stage 1	-	-	-	-	995	-
Stage 2	-	-	-	-	993	-
Approach	EB	WB		SB		
HCM Control Delay, s	4.3	0		9.2		
HCM LOS				A		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1585	-	-	-	973	
HCM Lane V/C Ratio	0.008	-	-	-	0.112	
HCM Control Delay (s)	7.3	0	-	-	9.2	
HCM Lane LOS	A	A	-	-	A	
HCM 95th %tile Q(veh)	0	-	-	-	0.4	

Capacity Analysis Summary Sheets
Existing Weekday Evening Peak Hour

HCM 6th TWSC




1: Kennicott Avenue/Apartment Access Drive & Euclid Avenue

06/05/2024

Intersection												
Int Delay, s/veh	1.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	616	46	57	607	0	27	0	58	0	0	0
Future Vol, veh/h	0	616	46	57	607	0	27	0	58	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	0	1	0	2	1	0	11	0	2	0	0	0
Mvmt Flow	0	642	48	59	632	0	28	0	60	0	0	0
Major/Minor	Major1			Major2			Minor1					
Conflicting Flow All	632	0	0	690	0	0	1100	1416	345			
Stage 1	-	-	-	-	-	-	666	666	-			
Stage 2	-	-	-	-	-	-	434	750	-			
Critical Hdwy	4.1	-	-	4.14	-	-	7.02	6.5	6.94			
Critical Hdwy Stg 1	-	-	-	-	-	-	6.02	5.5	-			
Critical Hdwy Stg 2	-	-	-	-	-	-	6.02	5.5	-			
Follow-up Hdwy	2.2	-	-	2.22	-	-	3.61	4	3.32			
Pot Cap-1 Maneuver	960	-	-	900	-	-	193	139	651			
Stage 1	-	-	-	-	-	-	449	460	-			
Stage 2	-	-	-	-	-	-	595	422	-			
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	960	-	-	900	-	-	174	0	651			
Mov Cap-2 Maneuver	-	-	-	-	-	-	174	0	-			
Stage 1	-	-	-	-	-	-	449	0	-			
Stage 2	-	-	-	-	-	-	535	0	-			
Approach	EB			WB			NB					
HCM Control Delay, s	0			1.2			18.8					
HCM LOS							C					
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR					
Capacity (veh/h)	348	960	-	-	900	-	-					
HCM Lane V/C Ratio	0.254	-	-	-	0.066	-	-					
HCM Control Delay (s)	18.8	0	-	-	9.3	0.4	-					
HCM Lane LOS	C	A	-	-	A	A	-					
HCM 95th %tile Q(veh)	1	0	-	-	0.2	-	-					

Intersection

Int Delay, s/veh 3.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	50	47	38	0	0	103
Future Vol, veh/h	50	47	38	0	0	103
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	82	82	82	82	82	82
Heavy Vehicles, %	0	0	8	0	0	1
Mvmt Flow	61	57	46	0	0	126




Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	172	46	0
Stage 1	46	-	-
Stage 2	126	-	-
Critical Hdwy	6.4	6.2	-
Critical Hdwy Stg 1	5.4	-	-
Critical Hdwy Stg 2	5.4	-	-
Follow-up Hdwy	3.5	3.3	-
Pot Cap-1 Maneuver	823	1029	-
Stage 1	982	-	0
Stage 2	905	-	0
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	823	1029	-
Mov Cap-2 Maneuver	823	-	-
Stage 1	982	-	-
Stage 2	905	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.5	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBTWBLn1	SBT
Capacity (veh/h)	- 911	-
HCM Lane V/C Ratio	- 0.13	-
HCM Control Delay (s)	- 9.5	-
HCM Lane LOS	- A	-
HCM 95th %tile Q(veh)	- 0.4	-

Intersection

Int Delay, s/veh 2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	38	13	55	98
Future Vol, veh/h	0	0	38	13	55	98
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	77	77	77	77	77	77
Heavy Vehicles, %	0	0	8	0	0	1
Mvmt Flow	0	0	49	17	71	127




Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	327	58	0
Stage 1	58	-	-
Stage 2	269	-	-
Critical Hdwy	6.4	6.2	-
Critical Hdwy Stg 1	5.4	-	-
Critical Hdwy Stg 2	5.4	-	-
Follow-up Hdwy	3.5	3.3	-
Pot Cap-1 Maneuver	671	1014	-
Stage 1	970	-	-
Stage 2	781	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	638	1014	-
Mov Cap-2 Maneuver	638	-	-
Stage 1	970	-	-
Stage 2	743	-	-

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

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	-	1549
HCM Lane V/C Ratio	-	-	-	0.046
HCM Control Delay (s)	-	-	0	7.4
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	-	0.1

Intersection

Int Delay, s/veh 1.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	3	8	43	2	10	88
Future Vol, veh/h	3	8	43	2	10	88
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	0	8	0	0	1	0
Mvmt Flow	3	8	45	2	10	92




Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	158	46	0
Stage 1	46	-	-
Stage 2	112	-	-
Critical Hdwy	6.4	6.28	-
Critical Hdwy Stg 1	5.4	-	-
Critical Hdwy Stg 2	5.4	-	-
Follow-up Hdwy	3.5	3.372	-
Pot Cap-1 Maneuver	838	1007	-
Stage 1	982	-	-
Stage 2	918	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	832	1007	-
Mov Cap-2 Maneuver	832	-	-
Stage 1	982	-	-
Stage 2	912	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.8	0	0.7
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	952	1567
HCM Lane V/C Ratio	-	-	0.012	0.007
HCM Control Delay (s)	-	-	8.8	7.3
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0	0

HCM 6th TWSC
5: St. James Street & Kennicott Avenue

06/05/2024

Intersection						
Int Delay, s/veh	5.6					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	8	9	18	37	65	26
Future Vol, veh/h	8	9	18	37	65	26
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	71	71	71	71	71	71
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	11	13	25	52	92	37
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	77	0	-	0	86	51
Stage 1	-	-	-	-	51	-
Stage 2	-	-	-	-	35	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1535	-	-	-	920	1023
Stage 1	-	-	-	-	977	-
Stage 2	-	-	-	-	993	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1535	-	-	-	914	1023
Mov Cap-2 Maneuver	-	-	-	-	914	-
Stage 1	-	-	-	-	970	-
Stage 2	-	-	-	-	993	-
Approach	EB	WB		SB		
HCM Control Delay, s	3.5	0		9.4		
HCM LOS	A					
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1535	-	-	-	943	
HCM Lane V/C Ratio	0.007	-	-	-	0.136	
HCM Control Delay (s)	7.4	0	-	-	9.4	
HCM Lane LOS	A	A	-	-	A	
HCM 95th %tile Q(veh)	0	-	-	-	0.5	




Capacity Analysis Summary Sheets
Year 2030 No-Build Weekday Morning Peak Hour




Intersection												
Int Delay, s/veh	1.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔↔			↔↔			↔				
Traffic Vol, veh/h	0	578	61	40	621	0	24	0	39	0	0	0
Future Vol, veh/h	0	578	61	40	621	0	24	0	39	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	0	3	2	0	2	0	4	0	0	0	0	0
Mvmt Flow	0	596	63	41	640	0	25	0	40	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	640	0	0	659	0	0	1030	1350	330
Stage 1	-	-	-	-	-	-	628	628	-
Stage 2	-	-	-	-	-	-	402	722	-
Critical Hdwy	4.1	-	-	4.1	-	-	6.88	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	5.88	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.88	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.54	4	3.3
Pot Cap-1 Maneuver	954	-	-	939	-	-	226	152	672
Stage 1	-	-	-	-	-	-	489	479	-
Stage 2	-	-	-	-	-	-	638	434	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	954	-	-	939	-	-	211	0	672
Mov Cap-2 Maneuver	-	-	-	-	-	-	211	0	-
Stage 1	-	-	-	-	-	-	489	0	-
Stage 2	-	-	-	-	-	-	595	0	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.8	16.9
HCM LOS			C




Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR
Capacity (veh/h)	367	954	-	-	939	-	-
HCM Lane V/C Ratio	0.177	-	-	-	0.044	-	-
HCM Control Delay (s)	16.9	0	-	-	9	0.3	-
HCM Lane LOS	C	A	-	-	A	A	-
HCM 95th %tile Q(veh)	0.6	0	-	-	0.1	-	-

Intersection						
Int Delay, s/veh	2.8					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	19	39	24	0	0	101
Future Vol, veh/h	19	39	24	0	0	101
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	4	0	0	2
Mvmt Flow	21	42	26	0	0	110
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	136	26	0	-	-	-
Stage 1	26	-	-	-	-	-
Stage 2	110	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	-	-
Pot Cap-1 Maneuver	862	1056	-	0	0	-
Stage 1	1002	-	-	0	0	-
Stage 2	920	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	862	1056	-	-	-	-
Mov Cap-2 Maneuver	862	-	-	-	-	-
Stage 1	1002	-	-	-	-	-
Stage 2	920	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	8.9	0	0			
HCM LOS	A					
Minor Lane/Major Mvmt	NBTWBLn1		SBT			
Capacity (veh/h)	- 983		-			
HCM Lane V/C Ratio	- 0.064		-			
HCM Control Delay (s)	- 8.9		-			
HCM Lane LOS	- A		-			
HCM 95th %tile Q(veh)	- 0.2		-			

Intersection						
Int Delay, s/veh	1.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	24	12	25	95
Future Vol, veh/h	0	0	24	12	25	95
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	71	71	71	71	71	71
Heavy Vehicles, %	0	0	4	0	0	2
Mvmt Flow	0	0	34	17	35	134
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	247	43	0	0	51	0
Stage 1	43	-	-	-	-	-
Stage 2	204	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	746	1033	-	-	1568	-
Stage 1	985	-	-	-	-	-
Stage 2	835	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	728	1033	-	-	1568	-
Mov Cap-2 Maneuver	728	-	-	-	-	-
Stage 1	985	-	-	-	-	-
Stage 2	815	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	0	0		1.5		
HCM LOS	A					
Minor Lane/Major Mvmt	NBT	NBRWBLn1		SBL	SBT	
Capacity (veh/h)	-	-		1568	-	
HCM Lane V/C Ratio	-	-		0.022	-	
HCM Control Delay (s)	-	-		0	7.3	
HCM Lane LOS	-	-		A	A	
HCM 95th %tile Q(veh)	-	-		0.1	-	

Intersection

Int Delay, s/veh 1.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	2	7	29	1	15	80
Future Vol, veh/h	2	7	29	1	15	80
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	69	69	69	69	69	69
Heavy Vehicles, %	0	2	0	0	4	0
Mvmt Flow	3	10	42	1	22	116




Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	203	43	0
Stage 1	43	-	-
Stage 2	160	-	-
Critical Hdwy	6.4	6.22	-
Critical Hdwy Stg 1	5.4	-	-
Critical Hdwy Stg 2	5.4	-	-
Follow-up Hdwy	3.5	3.318	-
Pot Cap-1 Maneuver	790	1027	-
Stage 1	985	-	-
Stage 2	874	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	778	1027	-
Mov Cap-2 Maneuver	778	-	-
Stage 1	985	-	-
Stage 2	861	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.8	0	1.2
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	959	1553
HCM Lane V/C Ratio	-	-	0.014	0.014
HCM Control Delay (s)	-	-	8.8	7.4
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0	0

HCM 6th TWSC
5: St. James Street & Kennicott Avenue

06/05/2024




Intersection						
Int Delay, s/veh	6.5					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	10	7	8	20	59	23
Future Vol, veh/h	10	7	8	20	59	23
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	75	75	75	75	75	75
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	13	9	11	27	79	31
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	38	0	-	0	60	25
Stage 1	-	-	-	-	25	-
Stage 2	-	-	-	-	35	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1585	-	-	-	952	1057
Stage 1	-	-	-	-	1003	-
Stage 2	-	-	-	-	993	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1585	-	-	-	944	1057
Mov Cap-2 Maneuver	-	-	-	-	944	-
Stage 1	-	-	-	-	995	-
Stage 2	-	-	-	-	993	-
Approach	EB	WB		SB		
HCM Control Delay, s	4.3	0		9.2		
HCM LOS				A		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1585	-	-	-	973	
HCM Lane V/C Ratio	0.008	-	-	-	0.112	
HCM Control Delay (s)	7.3	0	-	-	9.2	
HCM Lane LOS	A	A	-	-	A	
HCM 95th %tile Q(veh)	0	-	-	-	0.4	




Capacity Analysis Summary Sheets
Year 2030 No-Build Weekday Evening Peak Hour




HCM 6th TWSC

1: Kennicott Avenue/Apartment Access Drive & Euclid Avenue

06/05/2024




Intersection												
Int Delay, s/veh	1.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	647	46	57	637	0	27	0	58	0	0	0
Future Vol, veh/h	0	647	46	57	637	0	27	0	58	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	0	1	0	2	1	0	11	0	2	0	0	0
Mvmt Flow	0	674	48	59	664	0	28	0	60	0	0	0
Major/Minor	Major1			Major2			Minor1					
Conflicting Flow All	664	0	0	722	0	0	1148	1480	361			
Stage 1	-	-	-	-	-	-	698	698	-			
Stage 2	-	-	-	-	-	-	450	782	-			
Critical Hdwy	4.1	-	-	4.14	-	-	7.02	6.5	6.94			
Critical Hdwy Stg 1	-	-	-	-	-	-	6.02	5.5	-			
Critical Hdwy Stg 2	-	-	-	-	-	-	6.02	5.5	-			
Follow-up Hdwy	2.2	-	-	2.22	-	-	3.61	4	3.32			
Pot Cap-1 Maneuver	935	-	-	876	-	-	179	127	636			
Stage 1	-	-	-	-	-	-	432	445	-			
Stage 2	-	-	-	-	-	-	584	408	-			
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	935	-	-	876	-	-	160	0	636			
Mov Cap-2 Maneuver	-	-	-	-	-	-	160	0	-			
Stage 1	-	-	-	-	-	-	432	0	-			
Stage 2	-	-	-	-	-	-	522	0	-			
Approach	EB			WB			NB					
HCM Control Delay, s	0			1.1			20					
HCM LOS							C					
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR					
Capacity (veh/h)	327	935	-	-	876	-	-					
HCM Lane V/C Ratio	0.271	-	-	-	0.068	-	-					
HCM Control Delay (s)	20	0	-	-	9.4	0.4	-					
HCM Lane LOS	C	A	-	-	A	A	-					
HCM 95th %tile Q(veh)	1.1	0	-	-	0.2	-	-					

Intersection						
Int Delay, s/veh	3.9					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	50	47	38	0	0	103
Future Vol, veh/h	50	47	38	0	0	103
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	82	82	82	82	82	82
Heavy Vehicles, %	0	0	8	0	0	1
Mvmt Flow	61	57	46	0	0	126
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	172	46	0	-	-	-
Stage 1	46	-	-	-	-	-
Stage 2	126	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	-	-
Pot Cap-1 Maneuver	823	1029	-	0	0	-
Stage 1	982	-	-	0	0	-
Stage 2	905	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	823	1029	-	-	-	-
Mov Cap-2 Maneuver	823	-	-	-	-	-
Stage 1	982	-	-	-	-	-
Stage 2	905	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	9.5	0	0			
HCM LOS	A					
Minor Lane/Major Mvmt	NBTWBLn1		SBT			
Capacity (veh/h)	-	911	-			
HCM Lane V/C Ratio	-	0.13	-			
HCM Control Delay (s)	-	9.5	-			
HCM Lane LOS	-	A	-			
HCM 95th %tile Q(veh)	-	0.4	-			

Intersection						
Int Delay, s/veh	2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	38	13	55	98
Future Vol, veh/h	0	0	38	13	55	98
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	77	77	77	77	77	77
Heavy Vehicles, %	0	0	8	0	0	1
Mvmt Flow	0	0	49	17	71	127
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	327	58	0	0	66	0
Stage 1	58	-	-	-	-	-
Stage 2	269	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	671	1014	-	-	1549	-
Stage 1	970	-	-	-	-	-
Stage 2	781	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	638	1014	-	-	1549	-
Mov Cap-2 Maneuver	638	-	-	-	-	-
Stage 1	970	-	-	-	-	-
Stage 2	743	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s	0	0		2.7		
HCM LOS	A					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	-	1549	-	
HCM Lane V/C Ratio	-	-	-	0.046	-	
HCM Control Delay (s)	-	-	0	7.4	0	
HCM Lane LOS	-	-	A	A	A	
HCM 95th %tile Q(veh)	-	-	-	0.1	-	

Intersection

Int Delay, s/veh 1.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	3	8	43	2	10	88
Future Vol, veh/h	3	8	43	2	10	88
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	0	8	0	0	1	0
Mvmt Flow	3	8	45	2	10	92




Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	158	46	0
Stage 1	46	-	-
Stage 2	112	-	-
Critical Hdwy	6.4	6.28	-
Critical Hdwy Stg 1	5.4	-	-
Critical Hdwy Stg 2	5.4	-	-
Follow-up Hdwy	3.5	3.372	-
Pot Cap-1 Maneuver	838	1007	-
Stage 1	982	-	-
Stage 2	918	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	832	1007	-
Mov Cap-2 Maneuver	832	-	-
Stage 1	982	-	-
Stage 2	912	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.8	0	0.7
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	952	1567
HCM Lane V/C Ratio	-	-	0.012	0.007
HCM Control Delay (s)	-	-	8.8	7.3
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0	0

HCM 6th TWSC
5: St. James Street & Kennicott Avenue

06/05/2024

Intersection						
Int Delay, s/veh	5.6					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	8	9	18	37	65	26
Future Vol, veh/h	8	9	18	37	65	26
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	71	71	71	71	71	71
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	11	13	25	52	92	37
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	77	0	-	0	86	51
Stage 1	-	-	-	-	51	-
Stage 2	-	-	-	-	35	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1535	-	-	-	920	1023
Stage 1	-	-	-	-	977	-
Stage 2	-	-	-	-	993	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1535	-	-	-	914	1023
Mov Cap-2 Maneuver	-	-	-	-	914	-
Stage 1	-	-	-	-	970	-
Stage 2	-	-	-	-	993	-
Approach	EB	WB		SB		
HCM Control Delay, s	3.5	0		9.4		
HCM LOS				A		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1535	-	-	-	943	
HCM Lane V/C Ratio	0.007	-	-	-	0.136	
HCM Control Delay (s)	7.4	0	-	-	9.4	
HCM Lane LOS	A	A	-	-	A	
HCM 95th %tile Q(veh)	0	-	-	-	0.5	




Capacity Analysis Summary Sheets
Year 2030 Total Projected Weekday Morning Peak Hour

HCM 6th TWSC

1: Kennicott Avenue/Apartment Access Drive & Euclid Avenue




06/05/2024

Intersection												
Int Delay, s/veh	1.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔↔			↔↔			↕				
Traffic Vol, veh/h	0	589	79	58	621	0	40	0	44	0	0	0
Future Vol, veh/h	0	589	79	58	621	0	40	0	44	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	0	3	2	0	2	0	4	0	0	0	0	0
Mvmt Flow	0	607	81	60	640	0	41	0	45	0	0	0
Major/Minor	Major1			Major2			Minor1					
Conflicting Flow All	640	0	0	688	0	0	1088	1408	344			
Stage 1	-	-	-	-	-	-	648	648	-			
Stage 2	-	-	-	-	-	-	440	760	-			
Critical Hdwy	4.1	-	-	4.1	-	-	6.88	6.5	6.9			
Critical Hdwy Stg 1	-	-	-	-	-	-	5.88	5.5	-			
Critical Hdwy Stg 2	-	-	-	-	-	-	5.88	5.5	-			
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.54	4	3.3			
Pot Cap-1 Maneuver	954	-	-	916	-	-	207	140	658			
Stage 1	-	-	-	-	-	-	477	469	-			
Stage 2	-	-	-	-	-	-	611	417	-			
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	954	-	-	916	-	-	186	0	658			
Mov Cap-2 Maneuver	-	-	-	-	-	-	186	0	-			
Stage 1	-	-	-	-	-	-	477	0	-			
Stage 2	-	-	-	-	-	-	549	0	-			
Approach	EB			WB			NB					
HCM Control Delay, s	0			1.2			22					
HCM LOS							C					
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR					
Capacity (veh/h)	298	954	-	-	916	-	-					
HCM Lane V/C Ratio	0.291	-	-	-	0.065	-	-					
HCM Control Delay (s)	22	0	-	-	9.2	0.4	-					
HCM Lane LOS	C	A	-	-	A	A	-					
HCM 95th %tile Q(veh)	1.2	0	-	-	0.2	-	-					

Intersection						
Int Delay, s/veh	2.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	19	39	45	0	0	137
Future Vol, veh/h	19	39	45	0	0	137
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	4	0	0	2
Mvmt Flow	21	42	49	0	0	149
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	198	49	0	-	-	-
Stage 1	49	-	-	-	-	-
Stage 2	149	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	-	-
Pot Cap-1 Maneuver	795	1025	-	0	0	-
Stage 1	979	-	-	0	0	-
Stage 2	884	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	795	1025	-	-	-	-
Mov Cap-2 Maneuver	795	-	-	-	-	-
Stage 1	979	-	-	-	-	-
Stage 2	884	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	9.1	0	0			
HCM LOS	A					
Minor Lane/Major Mvmt	NBTWBLn1		SBT			
Capacity (veh/h)	- 936		-			
HCM Lane V/C Ratio	- 0.067		-			
HCM Control Delay (s)	- 9.1		-			
HCM Lane LOS	- A		-			
HCM 95th %tile Q(veh)	- 0.2		-			

Intersection

Int Delay, s/veh 1.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	26	12	25	96
Future Vol, veh/h	0	0	26	12	25	96
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	71	71	71	71	71	71
Heavy Vehicles, %	0	0	4	0	0	2
Mvmt Flow	0	0	37	17	35	135




Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	251	46	0
Stage 1	46	-	-
Stage 2	205	-	-
Critical Hdwy	6.4	6.2	-
Critical Hdwy Stg 1	5.4	-	-
Critical Hdwy Stg 2	5.4	-	-
Follow-up Hdwy	3.5	3.3	-
Pot Cap-1 Maneuver	742	1029	-
Stage 1	982	-	-
Stage 2	834	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	724	1029	-
Mov Cap-2 Maneuver	724	-	-
Stage 1	982	-	-
Stage 2	814	-	-

Approach	WB	NB	SB
HCM Control Delay, s	0	0	1.5
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	1564	-
HCM Lane V/C Ratio	-	-	0.023	-
HCM Control Delay (s)	-	-	0	7.4
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0.1	-

Intersection

Int Delay, s/veh 1.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	2	7	31	1	15	81
Future Vol, veh/h	2	7	31	1	15	81
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	69	69	69	69	69	69
Heavy Vehicles, %	0	2	0	0	4	0
Mvmt Flow	3	10	45	1	22	117




Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	207	46	0
Stage 1	46	-	-
Stage 2	161	-	-
Critical Hdwy	6.4	6.22	-
Critical Hdwy Stg 1	5.4	-	-
Critical Hdwy Stg 2	5.4	-	-
Follow-up Hdwy	3.5	3.318	-
Pot Cap-1 Maneuver	786	1023	-
Stage 1	982	-	-
Stage 2	873	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	774	1023	-
Mov Cap-2 Maneuver	774	-	-
Stage 1	982	-	-
Stage 2	860	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.8	0	1.1
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	955	1549
HCM Lane V/C Ratio	-	-	0.014	0.014
HCM Control Delay (s)	-	-	8.8	7.4
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0	0

HCM 6th TWSC
5: St. James Street & Kennicott Avenue

06/05/2024

Intersection						
Int Delay, s/veh	6.4					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	10	7	8	22	60	23
Future Vol, veh/h	10	7	8	22	60	23
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	75	75	75	75	75	75
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	13	9	11	29	80	31
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	40	0	-	0	61	26
Stage 1	-	-	-	-	26	-
Stage 2	-	-	-	-	35	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1583	-	-	-	950	1056
Stage 1	-	-	-	-	1002	-
Stage 2	-	-	-	-	993	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1583	-	-	-	942	1056
Mov Cap-2 Maneuver	-	-	-	-	942	-
Stage 1	-	-	-	-	994	-
Stage 2	-	-	-	-	993	-
Approach	EB	WB		SB		
HCM Control Delay, s	4.3	0		9.2		
HCM LOS	A					
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1583	-	-	-	971	
HCM Lane V/C Ratio	0.008	-	-	-	0.114	
HCM Control Delay (s)	7.3	0	-	-	9.2	
HCM Lane LOS	A	A	-	-	A	
HCM 95th %tile Q(veh)	0	-	-	-	0.4	




HCM 6th TWSC
6: Site Access Drive & Euclid Avenue

06/05/2024

Intersection						
Int Delay, s/veh	0.1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑↑		↗
Traffic Vol, veh/h	657	0	0	661	0	11
Future Vol, veh/h	657	0	0	661	0	11
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	3	0	0	2	0	0
Mvmt Flow	692	0	0	696	0	12
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	-	-	-	-	346
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.3
Pot Cap-1 Maneuver	-	0	0	-	0	656
Stage 1	-	0	0	-	0	-
Stage 2	-	0	0	-	0	-
Platoon blocked, %	-			-		
Mov Cap-1 Maneuver	-	-	-	-	-	656
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0		10.6	
HCM LOS					B	
Minor Lane/Major Mvmt	NBLn1	EBT	WBT			
Capacity (veh/h)	656	-	-			
HCM Lane V/C Ratio	0.018	-	-			
HCM Control Delay (s)	10.6	-	-			
HCM Lane LOS	B	-	-			
HCM 95th %tile Q(veh)	0.1	-	-			

HCM 6th TWSC
7: Kennicott Avenue & Site Access Drive

06/05/2024

Intersection						
Int Delay, s/veh	1.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	21	1	2	24	120	36
Future Vol, veh/h	21	1	2	24	120	36
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	4	2	0
Mvmt Flow	22	1	2	25	126	38
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	174	145	164	0	-	0
Stage 1	145	-	-	-	-	-
Stage 2	29	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	821	908	1427	-	-	-
Stage 1	887	-	-	-	-	-
Stage 2	999	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	820	908	1427	-	-	-
Mov Cap-2 Maneuver	820	-	-	-	-	-
Stage 1	886	-	-	-	-	-
Stage 2	999	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	9.5	0.6		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1427	-	824	-	-	
HCM Lane V/C Ratio	0.001	-	0.028	-	-	
HCM Control Delay (s)	7.5	0	9.5	-	-	
HCM Lane LOS	A	A	A	-	-	
HCM 95th %tile Q(veh)	0	-	0.1	-	-	

Capacity Analysis Summary Sheets
Year 2030 Total Projected Weekday Evening Peak Hour

HCM 6th TWSC

1: Kennicott Avenue/Apartment Access Drive & Euclid Avenue




06/05/2024

Intersection												
Int Delay, s/veh	2.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔↔			↔↔			↔				
Traffic Vol, veh/h	0	659	62	73	637	1	45	0	64	0	0	0
Future Vol, veh/h	0	659	62	73	637	1	45	0	64	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	0	1	0	2	1	0	11	0	2	0	0	0
Mvmt Flow	0	686	65	76	664	1	47	0	67	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	665	0	0	751	0	0	1203	1536	376
Stage 1	-	-	-	-	-	-	719	719	-
Stage 2	-	-	-	-	-	-	484	817	-
Critical Hdwy	4.1	-	-	4.14	-	-	7.02	6.5	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.02	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.02	5.5	-
Follow-up Hdwy	2.2	-	-	2.22	-	-	3.61	4	3.32
Pot Cap-1 Maneuver	934	-	-	854	-	-	164	117	622
Stage 1	-	-	-	-	-	-	421	436	-
Stage 2	-	-	-	-	-	-	560	393	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	934	-	-	854	-	-	141	0	622
Mov Cap-2 Maneuver	-	-	-	-	-	-	141	0	-
Stage 1	-	-	-	-	-	-	421	0	-
Stage 2	-	-	-	-	-	-	481	0	-




Approach	EB	WB	NB
HCM Control Delay, s	0	1.5	29.5
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR
Capacity (veh/h)	258	934	-	-	854	-	-
HCM Lane V/C Ratio	0.44	-	-	-	0.089	-	-
HCM Control Delay (s)	29.5	0	-	-	9.6	0.6	-
HCM Lane LOS	D	A	-	-	A	A	-
HCM 95th %tile Q(veh)	2.1	0	-	-	0.3	-	-

Intersection						
Int Delay, s/veh	3.3					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	50	47	62	0	0	135
Future Vol, veh/h	50	47	62	0	0	135
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	82	82	82	82	82	82
Heavy Vehicles, %	0	0	8	0	0	1
Mvmt Flow	61	57	76	0	0	165
Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	241	76	0	-	-	-
Stage 1	76	-	-	-	-	-
Stage 2	165	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	-	-
Pot Cap-1 Maneuver	752	991	-	0	0	-
Stage 1	952	-	-	0	0	-
Stage 2	869	-	-	0	0	-
Platoon blocked, %			-			-
Mov Cap-1 Maneuver	752	991	-	-	-	-
Mov Cap-2 Maneuver	752	-	-	-	-	-
Stage 1	952	-	-	-	-	-
Stage 2	869	-	-	-	-	-
Approach	WB	NB	SB			
HCM Control Delay, s	9.9	0	0			
HCM LOS	A					
Minor Lane/Major Mvmt	NBTWBLn1		SBT			
Capacity (veh/h)	- 852		-			
HCM Lane V/C Ratio	- 0.139		-			
HCM Control Delay (s)	- 9.9		-			
HCM Lane LOS	- A		-			
HCM 95th %tile Q(veh)	- 0.5		-			

Intersection

Int Delay, s/veh 1.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	40	13	55	100
Future Vol, veh/h	0	0	40	13	55	100
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	77	77	77	77	77	77
Heavy Vehicles, %	0	0	8	0	0	1
Mvmt Flow	0	0	52	17	71	130




Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	333	61	0
Stage 1	61	-	-
Stage 2	272	-	-
Critical Hdwy	6.4	6.2	-
Critical Hdwy Stg 1	5.4	-	-
Critical Hdwy Stg 2	5.4	-	-
Follow-up Hdwy	3.5	3.3	-
Pot Cap-1 Maneuver	666	1010	-
Stage 1	967	-	-
Stage 2	778	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	633	1010	-
Mov Cap-2 Maneuver	633	-	-
Stage 1	967	-	-
Stage 2	739	-	-

Approach	WB	NB	SB
HCM Control Delay, s	0	0	2.6
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	-	1545
HCM Lane V/C Ratio	-	-	-	0.046
HCM Control Delay (s)	-	-	0	7.4
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	-	0.1

Intersection

Int Delay, s/veh 1.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	3	8	45	2	10	90
Future Vol, veh/h	3	8	45	2	10	90
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	0	8	0	0	1	0
Mvmt Flow	3	8	47	2	10	94




Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	162	48	0
Stage 1	48	-	-
Stage 2	114	-	-
Critical Hdwy	6.4	6.28	-
Critical Hdwy Stg 1	5.4	-	-
Critical Hdwy Stg 2	5.4	-	-
Follow-up Hdwy	3.5	3.372	-
Pot Cap-1 Maneuver	834	1004	-
Stage 1	980	-	-
Stage 2	916	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	828	1004	-
Mov Cap-2 Maneuver	828	-	-
Stage 1	980	-	-
Stage 2	910	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.8	0	0.7
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	949	1564
HCM Lane V/C Ratio	-	-	0.012	0.007
HCM Control Delay (s)	-	-	8.8	7.3
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0	0

HCM 6th TWSC
5: St. James Street & Kennicott Avenue

06/05/2024

Intersection						
Int Delay, s/veh	5.7					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	9	9	18	38	67	26
Future Vol, veh/h	9	9	18	38	67	26
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	71	71	71	71	71	71
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	13	13	25	54	94	37
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	79	0	-	0	91	52
Stage 1	-	-	-	-	52	-
Stage 2	-	-	-	-	39	-
Critical Hdwy	4.1	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1532	-	-	-	914	1021
Stage 1	-	-	-	-	976	-
Stage 2	-	-	-	-	989	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1532	-	-	-	906	1021
Mov Cap-2 Maneuver	-	-	-	-	906	-
Stage 1	-	-	-	-	967	-
Stage 2	-	-	-	-	989	-
Approach	EB	WB		SB		
HCM Control Delay, s	3.7	0		9.5		
HCM LOS	A					
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	1532	-	-	-	-	935
HCM Lane V/C Ratio	0.008	-	-	-	-	0.14
HCM Control Delay (s)	7.4	0	-	-	-	9.5
HCM Lane LOS	A	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	-	0.5




HCM 6th TWSC
6: Site Access Drive & Euclid Avenue

06/05/2024

Intersection						
Int Delay, s/veh	0.1					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑			↑↑		↗
Traffic Vol, veh/h	709	0	0	682	0	12
Future Vol, veh/h	709	0	0	682	0	12
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	746	0	0	718	0	13
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	-	-	-	-	373
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.3
Pot Cap-1 Maneuver	-	0	0	-	0	630
Stage 1	-	0	0	-	0	-
Stage 2	-	0	0	-	0	-
Platoon blocked, %	-			-		
Mov Cap-1 Maneuver	-	-	-	-	-	630
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0		10.8	
HCM LOS					B	
Minor Lane/Major Mvmt	NBLn1		EBT	WBT		
Capacity (veh/h)	630		-	-		
HCM Lane V/C Ratio	0.02		-	-		
HCM Control Delay (s)	10.8		-	-		
HCM Lane LOS	B		-	-		
HCM 95th %tile Q(veh)	0.1		-	-		

HCM 6th TWSC
7: Kennicott Avenue & Site Access Drive

06/05/2024

Intersection						
Int Delay, s/veh	1.1					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	24	2	2	38	153	32
Future Vol, veh/h	24	2	2	38	153	32
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	0	0	0	8	1	0
Mvmt Flow	25	2	2	40	161	34
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	222	178	195	0	-	0
Stage 1	178	-	-	-	-	-
Stage 2	44	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	771	870	1390	-	-	-
Stage 1	858	-	-	-	-	-
Stage 2	984	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	770	870	1390	-	-	-
Mov Cap-2 Maneuver	770	-	-	-	-	-
Stage 1	857	-	-	-	-	-
Stage 2	984	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s	9.8	0.4		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1390	-	777	-	-	
HCM Lane V/C Ratio	0.002	-	0.035	-	-	
HCM Control Delay (s)	7.6	0	9.8	-	-	
HCM Lane LOS	A	A	A	-	-	
HCM 95th %tile Q(veh)	0	-	0.1	-	-	