Traffic Impact Study
Proposed Maple Street Lofts

Mount Prospect, Illinois

Prepared For:

WINGSPAN
DEVELOPMENT GROUP

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

February 28, 2019

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 the proposed Maple Street Lofts mixed-use development to be located in Mount Prospect, Illinois. The site, which is currently occupied by a commuter permit parking lot, vacant industrial lot and an industrial building, is located in the southeast quadrant of the intersection of Maple Street with Prospect Avenue.

As proposed, the site will be redeveloped with a six-story apartment building containing approximately 192 units, approximately 14,148 square-feet of ground floor retail space and a parking garage containing approximately 245 parking spaces, a seven-story apartment building containing approximatley 65 units and an approximately 65-space parking garage, a three-story public parking garage containing approximately 268 parking spaces and 56 townhome units. Access to the development will be provided off Maple Street, Prospect Avenue and Lincoln Street.

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

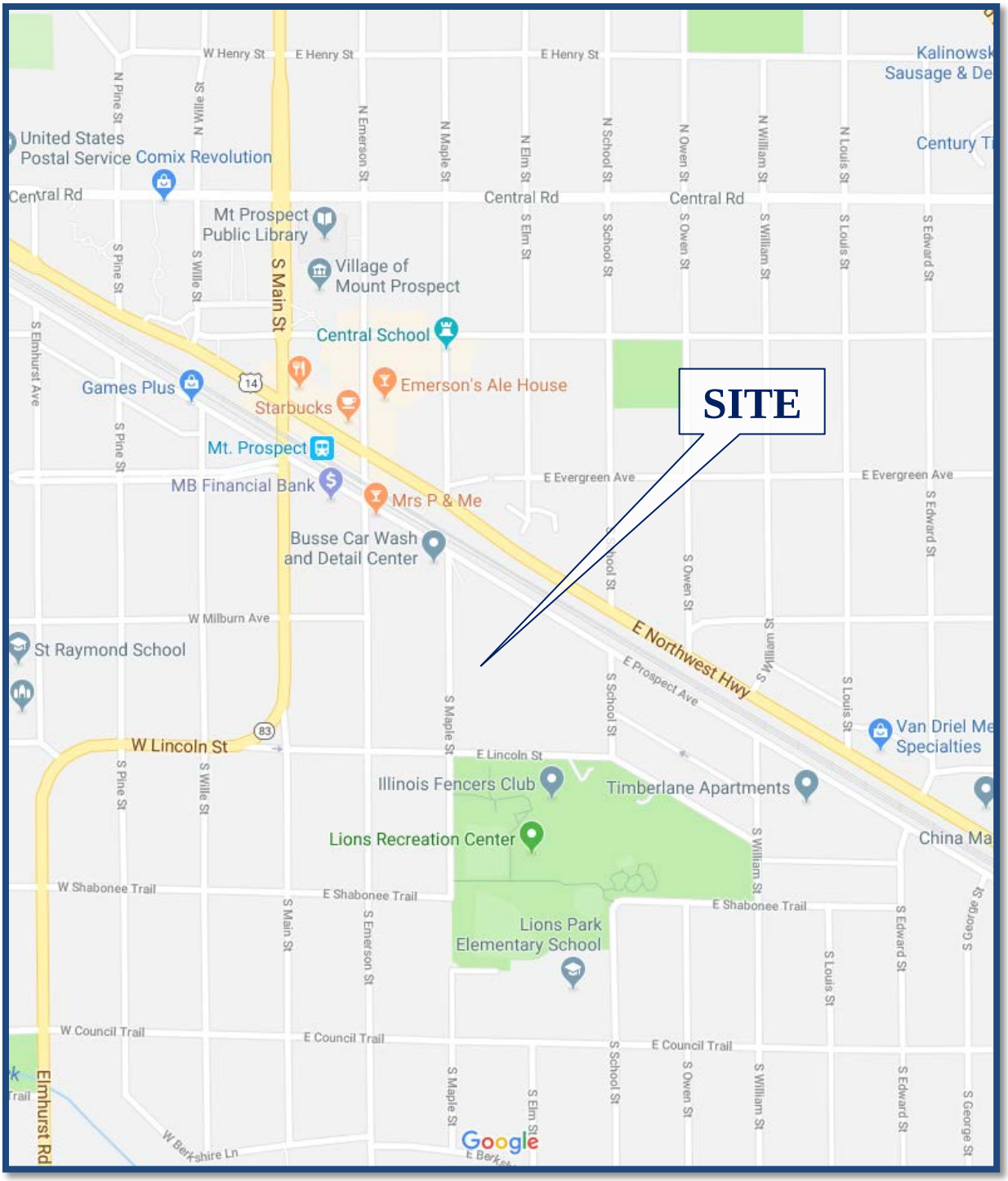
The sections of this report present the following:

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

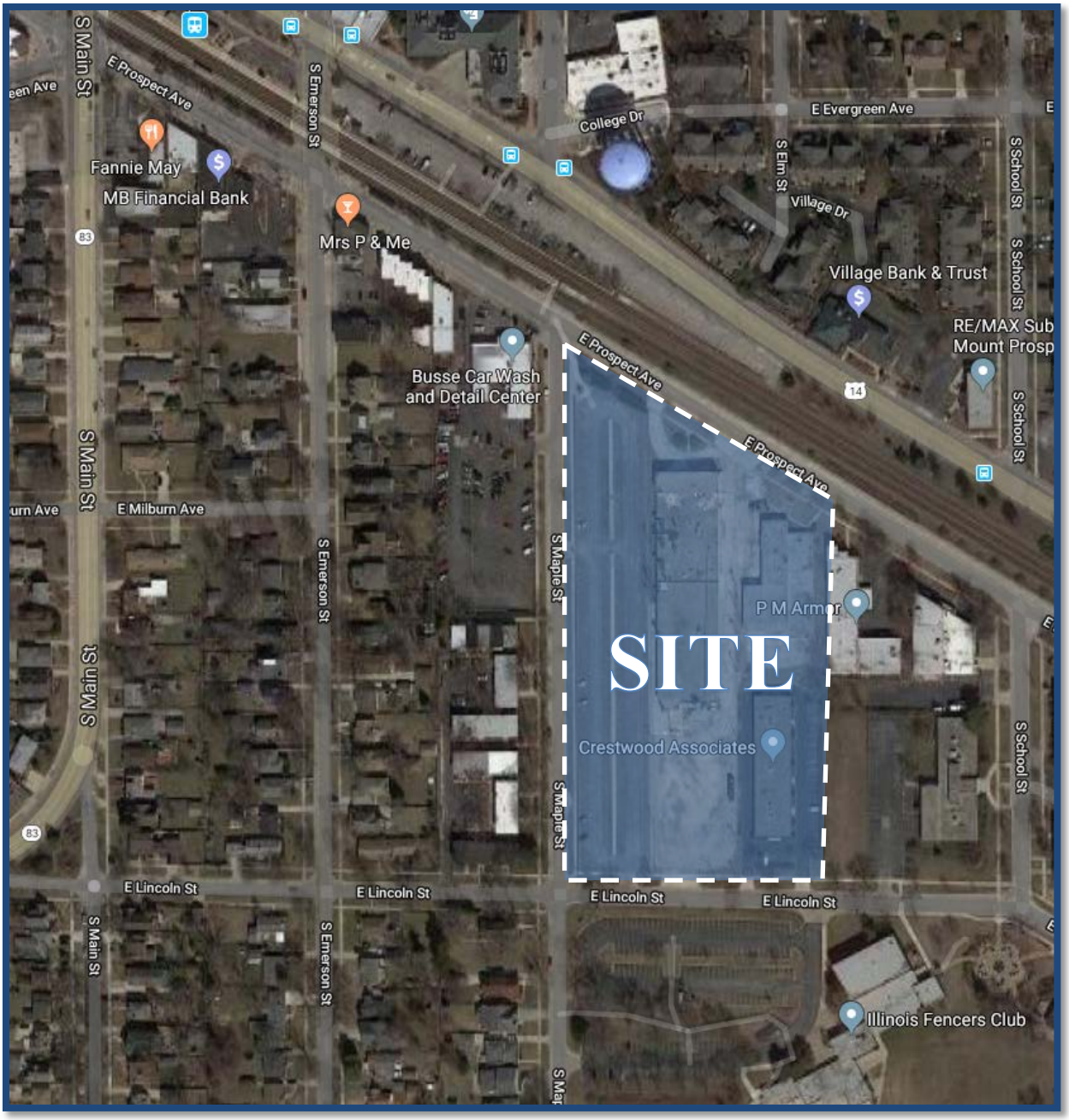
Traffic capacity analyses were conducted for the weekday morning and weekday evening peak hours for the following conditions:

1. Existing Conditions - Analyze the capacity of the existing roadway system using existing peak hour traffic volumes in the surrounding area.

2. Projected Conditions – Analyze the capacity of the future roadway system using the projected traffic volumes that include the existing traffic volumes, ambient area growth not attributable to any particular development, and the traffic estimated to be generated by the full buildout of the proposed development.



Site Location **Figure 1**



Aerial View of Site Location **Figure 2**

2. Existing Conditions

The following provides a description of the geographical location of the site, proximity of the site to public transportation, the previously conducted Mount Prospect Downtown Transportation Study and existing peak hour traffic volumes.

Site Location

As previously indicated, the site is located in the southeast quadrant of the intersection of Maple Street with Prospect Avenue and currently contains a 280-space commuter parking lot, a vacant industrial lot and an industrial building. The site is located approximately 1,300 feet southeast of the Mount Prospect Station for the Union Pacific North-West (UP-NW) Metra Commuter Railway and has a 150 foot walking distance from the front of the building to the inbound (eastbound) train platform. The Metra UP-NW Railway Line runs from Harvard to Chicago, Illinois and carries a total (inbound and outbound) of 65 passenger trains daily on weekdays, 24 on Saturdays, and 15 on Sundays. Furthermore, the site is located within close proximity to the following bus routes:

- Pace Suburban Bus Route 234 (Wheeling) – Provides weekday service from Des Plaines to Wheeling. Rush hour service operates between Des Plaines Metra Station and Pace Buffalo Grove Terminal and serves the following major destinations: Holy Family Hospital, Metra UP Northwest Line stations (Des Plaines, Cumberland and Mt. Prospect), Randhurst Mall, Wheeling H.S., Metra North Central Line station (Wheeling), Wheeling Municipal Complex and Wheeling Tower.

- Pace Suburban Bus Route 694 (Central Road/Mt. Prospect Station) – Provides weekday rush hour service connecting Dana Point Condominiums and Central Park East and Village Apartment Complexes to the Mount Prospect Metra Station. This route also services Bosch Tool Corp.

Pedestrian Accommodations. All of the streets in the immediate area have sidewalks on both sides of the street except for the north side of Prospect Avenue east of Maple Avenue and the south side of Lincoln Street between Maple Street and the access drive serving the Lions Recreation Center. High-visibility crosswalks are provided at the intersections of Maple Street with Lincoln Street and Lincoln Street with School Street and standard style crosswalks are provided at the intersection Maple Street with Prospect Avenue.

Bike Accommodations. As stated in the October 2011 Mount Prospect Bicycle Plan, Emerson Street is a signed bicycle route that has a bicycle level of service of C.

The proximity of the Mount Prospect UP-NW Train Station, the existing Pace bus routes and the existing pedestrian and bicycle facilities will provide an alternate mode of transportation to future residents of the site.

Mount Prospect Downtown Transportation Study

The Village of Mount Prospect commissioned a transportation study of the downtown area in 2018, the results of which are summarized in the Mount Prospect Downtown Transportation Study prepared by Sam Schwartz Consulting dated October 15, 2018. In this study, it was identified that congestion of traffic within the downtown area was primarily attributed to the at grade rail crossings at IL Route 83 and Emmerson Street which are regularly blocked by Metra commuter trains during the peak periods. When an inbound or outbound train is at the Mount Prospect Station, crossing gates are down at both intersections. Furthermore, traffic congestion was exacerbated by traffic signal preemption of emergency vehicles departing the Mount Prospect Police and Fire Station. This study also identified several area improvements to significantly improve the operations of the downtown area. These improvements ranged from short term improvements such as updating pedestrian facilities/signal equipment to long term infrastructure improvements such as new railroad crossings and relocation of the train station and platforms. Some of the identified improvements are as follows:

Short Term Improvements:

- Installation of Directional Pedestrian Push Buttons at Signalized Intersections
- Relocation of the Mount Prospect Police and Fire Station
- Coordination with Metra Train Engineers
- Relocation of Permit Parking Spaces for Commuter Permit Parking Lot

Long Term Improvements:

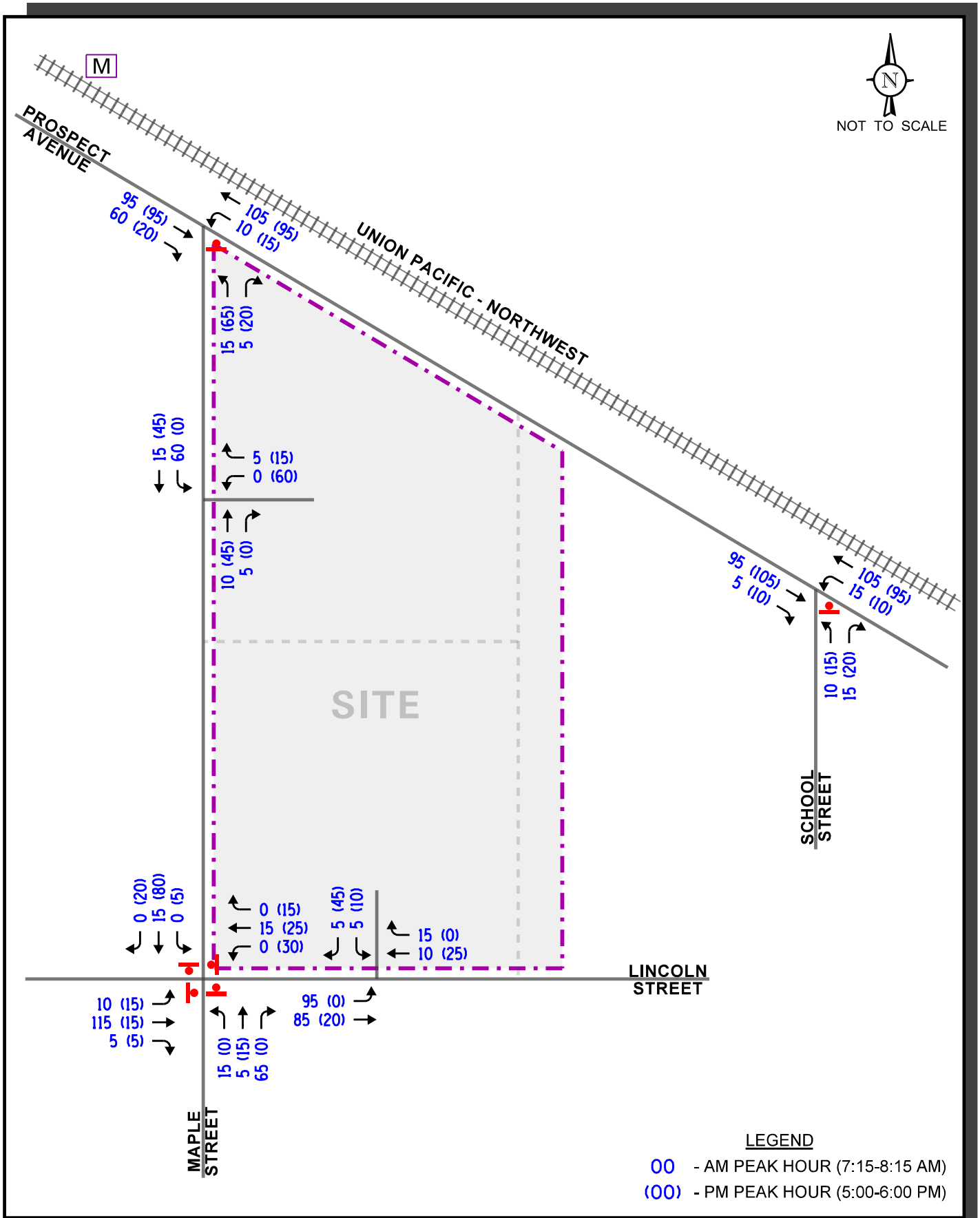
- New At-Grade Rail Crossing at Maple Street
- New Below-Grade Rail Crossing at School Street
- Installation of a Traffic Management Center
- Relocation of Train Platforms

Existing Traffic Volumes

The existing weekday morning and weekday evening peak hour traffic volumes identified in the Mount Prospect Downtown Transportation Study were utilized as a basis for this traffic impact study. The traffic counts were conducted in May 2017 and September 2018 and included the following intersections:

- Prospect Avenue with Maple Street (May 2017)
- Prospect Avenue with School Street (May 2017)
- Maple Street with Lincoln Street (September 2018)
- Maple Street with Commuter Parking Lot Access Drive (September 2018)
- Lincoln Street with Commuter Parking Lot Access Drive (September 2018)

The results of the traffic counts indicated that the weekday morning peak hour of traffic occurs from 7:15 A.M. to 8:15 A.M. and the weekday evening peak hour of traffic occurs from 5:00 P.M. to 6:00 P.M. **Figure 1** illustrates the existing peak hour traffic volumes. As can be seen from Figure 1, the existing commuter parking lot generates 170 inbound trips and 15 outbound trips during the weekday morning peak hour and zero inbound trips and 130 outbound trips during the weekday evening peak hour.



Maple Street Lofts
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Existing Traffic Volumes

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Job No: 18-249 Figure: 1

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 Site and Development Plan

As proposed, the site will be redeveloped with the following:

- A six-story apartment building containing approximately 192 units, approximately 14,148 square-feet of ground floor retail space and a parking garage containing approximately 245 parking spaces. Access to the parking garage will be provided via a full movement access drive off Maple Street. This access drive will provide one inbound lane and one outbound lane. Outbound movements should be under stop-sign control.

- A seven-story apartment building containing approximatley 65 units and an approximately 65-space parking garage. Access to the parking garage will provided via two full movement access drives off of proposed Elm Street. Both access drives will provide one inbound lane and one outbound lane. Outbound movements should be under stop-sign control.

- A three-story public parking garage containing approximately 268 parking spaces. Access to the parking garage will be provided via a full movement access drive off Maple Street. Secondary access to the parking garage will be provided via a full movement access drive off proposed Elm Street. Both access drives will provide one inbound lane and one outbound lane. Outbound movements should be under stop-sign control.

- 56 townhome units consisting of 13 front load units and 43 rear load units. The front-loading units will provide a two-car garage and a driveway apron that can accommodate two additional vehicles and the rear-loading units will provide a two-car garage and a driveway apron that can accommodate one additional vehicle. Access to the townhome units will be provided off of proposed Elm Street.

As part of the proposed development, two private roadways will be constructed. The proposed north-south roadway (Elm Street) will connect Prospect Avenue to Lincoln Street. At its intersections with Prospect Avenue and Lincoln Street, the Elm Street approaches should be under stop-sign control. The proposed east-west roadway (Dawson Drive) will connect Maple Street to proposed Elm Street and will bisect the site. At its unsignalized intersections with Maple Street and proposed Elm Street, the Dawson Drive approaches should be under stop-sign control. These private roadways will provide one lane in each direction and will primarily serve as access roadways to the townhome units and the seven-story apartment building.

Additionally, in conjunction with the proposed development approximately 16 angled parking spaces will be provided on Maple Street, approximately 20 angled parking spaces will be provided on Prospect Avenue, 11 parallel parking spaces will be provided on the proposed Elm Street and 11 parallel parking spaces will be provide on the proposed Dawson Drive.

Site Generated Traffic Volumes

The estimates of traffic to be generated by the development are based upon the proposed land use type and size. The volume of traffic generated for the transit-oriented development was estimated using data published in the Institute of Transportation Engineers (ITE) *Trip Generation Manual*, 10th Edition.

As previously indicated, the proposed development is located approximately 1,300 feet southeast of the Mount Prospect Station serving the UP-NW Metra Commuter Railway which qualifies it as a Transit Oriented Development (TOD). As such, many of the residents will utilize public transportation to get to work. Based on census data provided for households located within one-quarter mile of the Mount Prospect Metra Station, approximately 15 percent of residents utilize public transportation, bicycle or walking to travel to/from work. Therefore, the trips estimated to be generated by the proposed apartment units were conservatively reduced by 15 percent due to the proximity of public transportation.

Furthermore, due to its location within downtown Mount Prospect, the number of trips generated by the proposed commercial space were reduced by 10 percent to take into consideration the interaction between the proposed and existing commercial space as well as the residential developments located to the south of downtown.

Additionally, the site is currently occupied by a commuter permit parking lot. In conjunction with the proposed development 100 of the parking permit parking spaces will be relocated to the existing public parking garage located on the north side of the railway. The remaining 180 parking permits will be contained within the proposed 268-space public parking garage. As such, approximately 40 inbound trips during the weekday morning peak hour and 45 outbound trips during the weekday evening peak hour will be removed from the area roadway network.

Table 1 tabulates the vehicle trips anticipated for this development.

Trip Generation Comparison

It should be noted that this parcel is currently zoned for I1 (Limited Industrial) and P1 (Off-Street Parking). This zoning currently permits medical office, light industrial and retail uses such as grocery stores. The trip generation estimated to be generated by these other permitted uses was compared to the trip generation estimated to be generated by the proposed development. **Table 2** summarizes the trip generation comparison.

Table 1
PROJECTED SITE-GENERATED TRAFFIC VOLUMES

ITE Land Use Code	Type/Size	Weekday Morning Peak Hour			Weekday Evening Peak Hour			Daily Two-Way Traffic
		In	Out	Total	In	Out	Total	
221	Multi-Family Housing (313 Units)	27	78	105	81	51	132	1,704
	15% Transit Reduction[1]	*-4*	*-12*	*-16*	*-12*	*-8*	*-20*	*-256*
820	Retail (14,148 s.f.)	8	5	13	26	28	54	534
	10% Interaction Reduction[2]	*-1*	*-1*	*-2*	*-3*	*-3*	*-6*	*-54*
	Total New Trips	**30**	**70**	**100**	**92**	**68**	**160**	**1,928**
	Relocation of Commuter Permits	*-40*	*0*	*-40*	*0*	*-45*	*-45*	*--*
	Net New Trips	**-10**	**70**	**-60**	**92**	**23**	**115**	**1,928**

Table 2
VEHICLE TRIP GENERATION COMPARISON OF LAND USES

Source	Type/Size	Weekday Morning Peak Hour		Weekday Evening Peak Hour		Daily Two-Way Traffic
		In	Out	In	Out	
Allowable Use – Option 1						
ITE (720)	Medical Office 36,000 s.f.	70	20	34	90	1296
Allowable Use – Option 2						
ITE (110)	Light Industrial 32,000 s.f.	17	3	2	15	180
ITE (720)	Medical Offices 18,000 s.f.	38	10	18	45	604
	Total	55	13	20	60	784
Allowable Use – Option 3						
ITE (850)	Grocery Store 40,000 s.f.	92	61	201	193	4,048
Proposed Development						
ITE (221/820)	Maple Street Lofts 313 units 14,148 s.f. retail	30	70	92	68	1,928

4. Projected Traffic Conditions

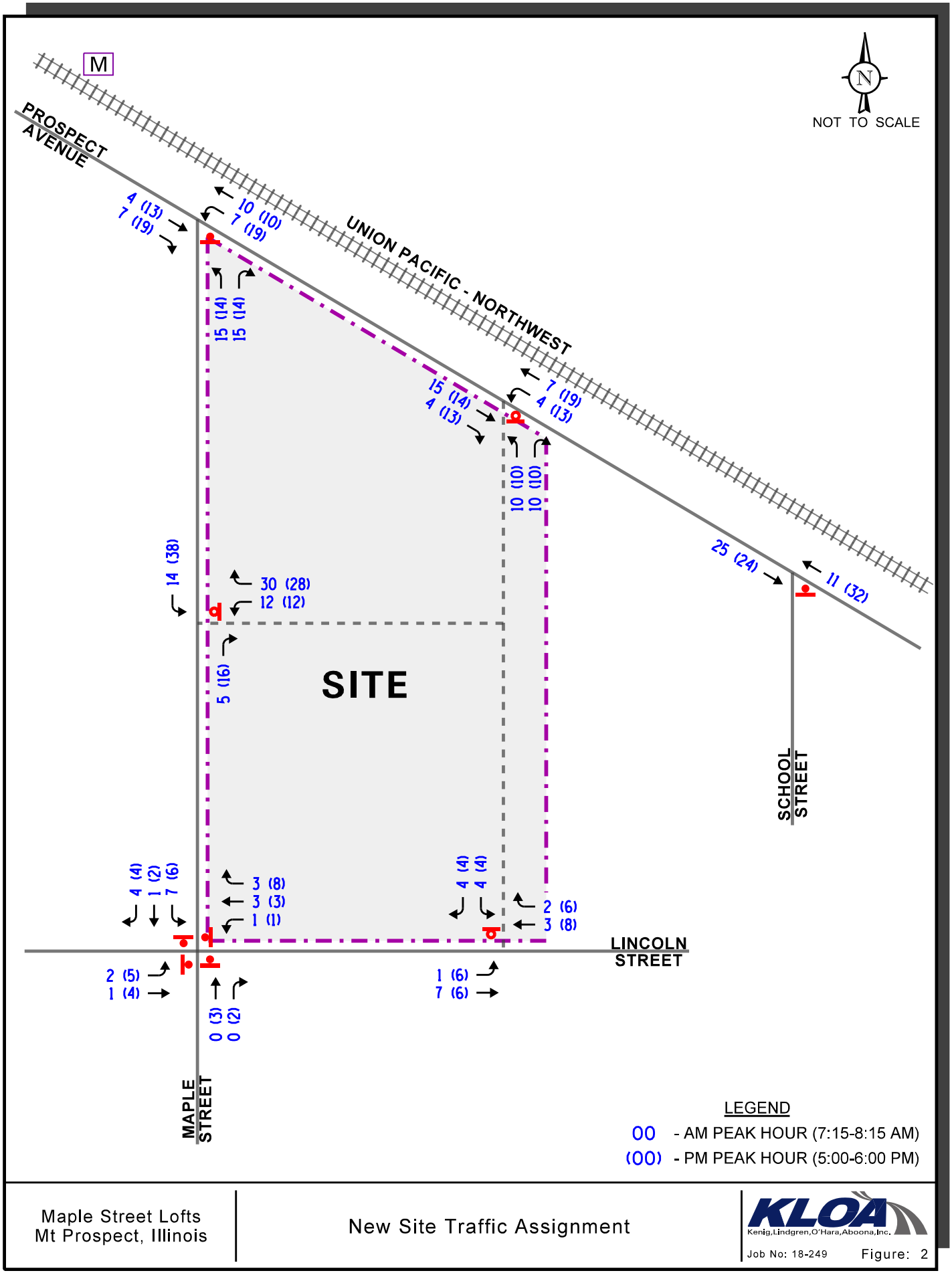
The total projected traffic volumes include the existing traffic volumes, increase in background traffic due to growth, and the traffic estimated to be generated by the proposed subject development.

Development Traffic Assignment

The directions from which residents, guests, patrons and employees will approach and depart the site were estimated based on existing travel patterns, as determined from the traffic counts. The estimated weekday morning and weekday evening peak hour traffic volumes that will be generated by the proposed development were assigned to the roadway system in accordance with the previously described directional distribution. **Figure 2** illustrates the traffic assignment of the new passenger vehicle trips. As previously indicated, in conjunction with the proposed development 100 of the parking permit parking spaces will be relocated to the existing public parking garage located on the north side of the railway. As such, these trips were removed from the roadway network as illustrated in **Figure 3**. The net new trips (sum of Figure 2 and Figure 3) is illustrated in **Figure 4**.

Total Projected Traffic Volumes

The net new trips (Figures 4) were added to the existing traffic volumes to determine the total projected traffic volumes, shown in **Figure 5**.



Maple Street Lofts
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New Site Traffic Assignment

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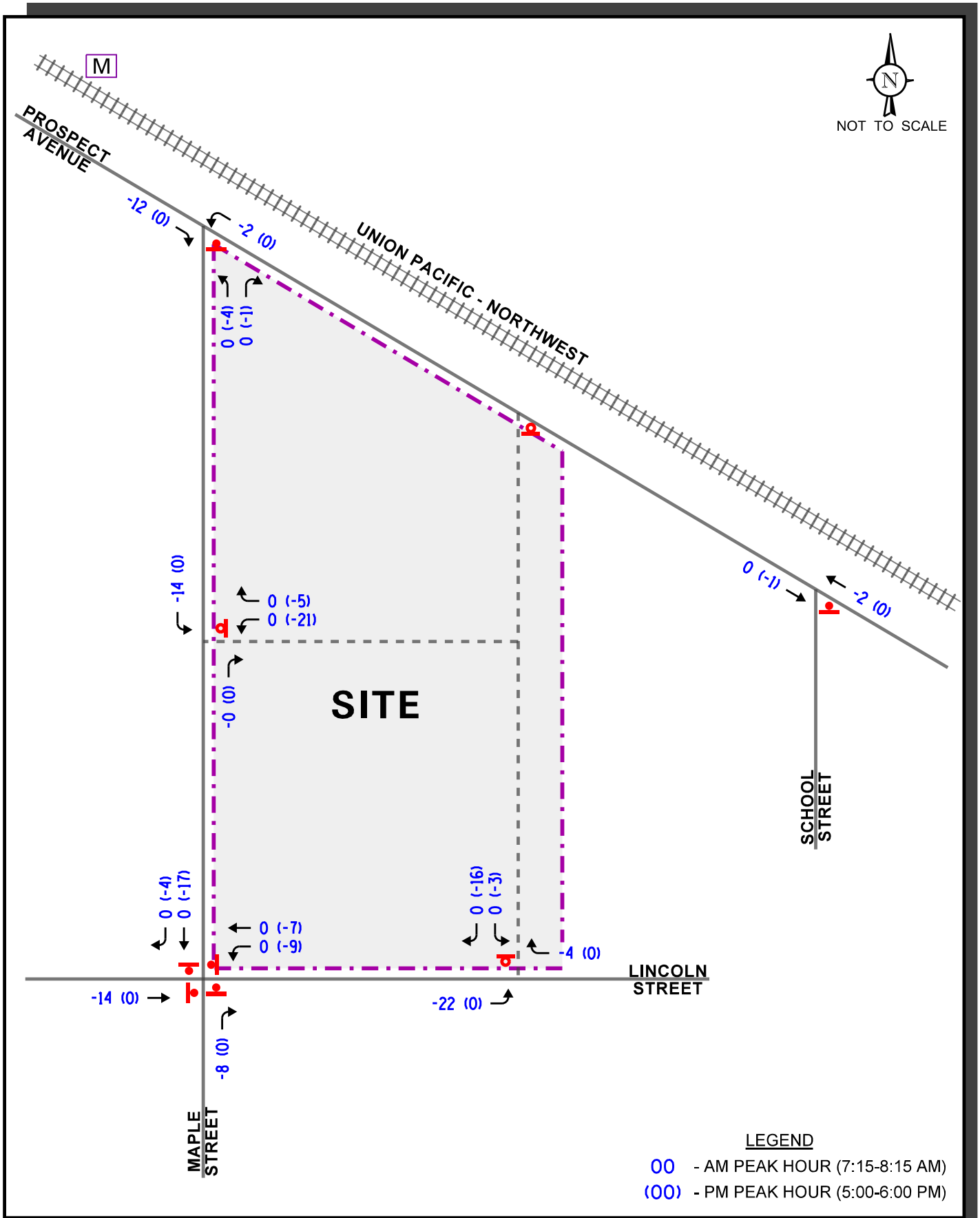

Maple Street Lofts
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Commuter Permit Parking Lot
Trip Reduction

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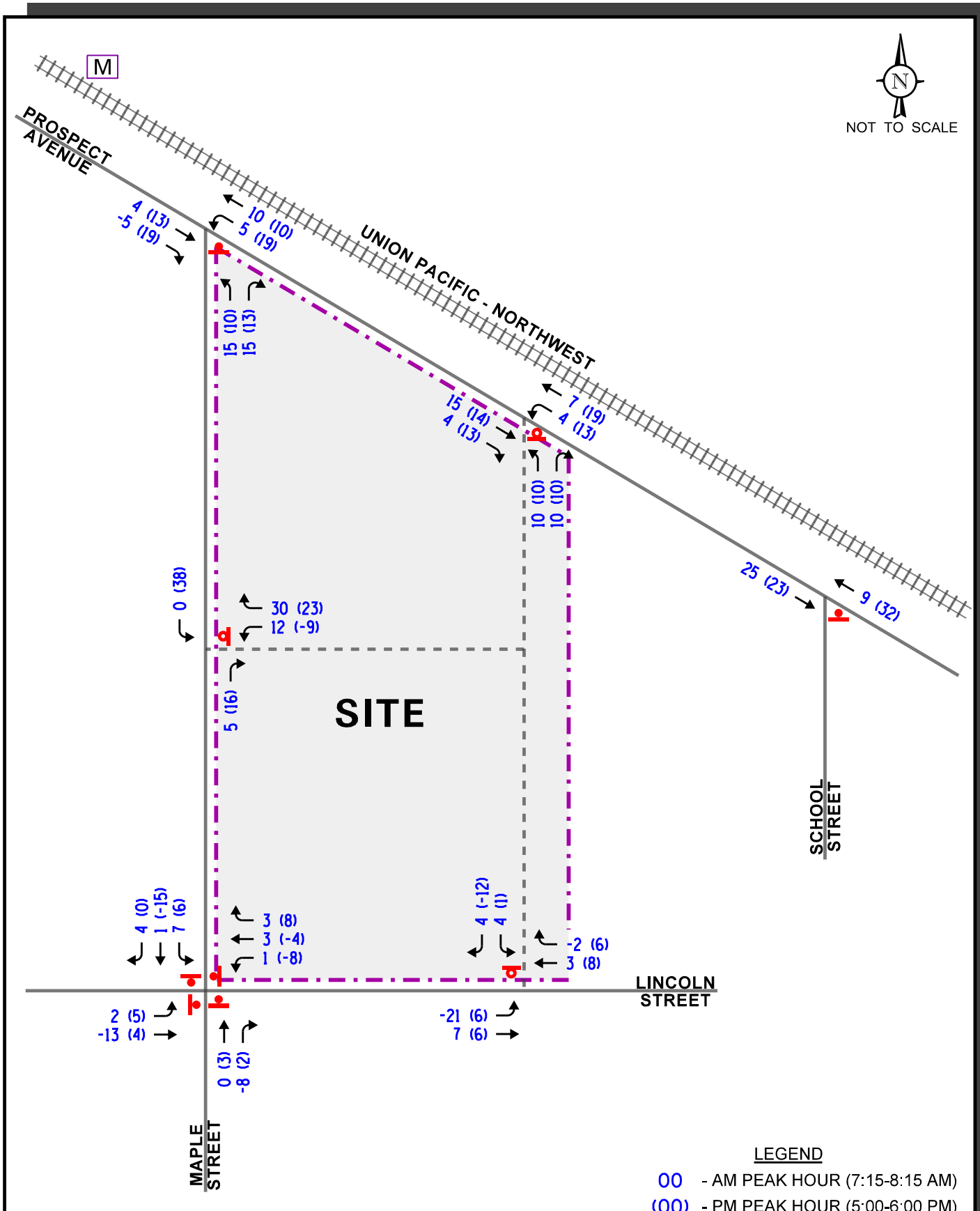

Maple Street Lofts
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Net Trip Assignment

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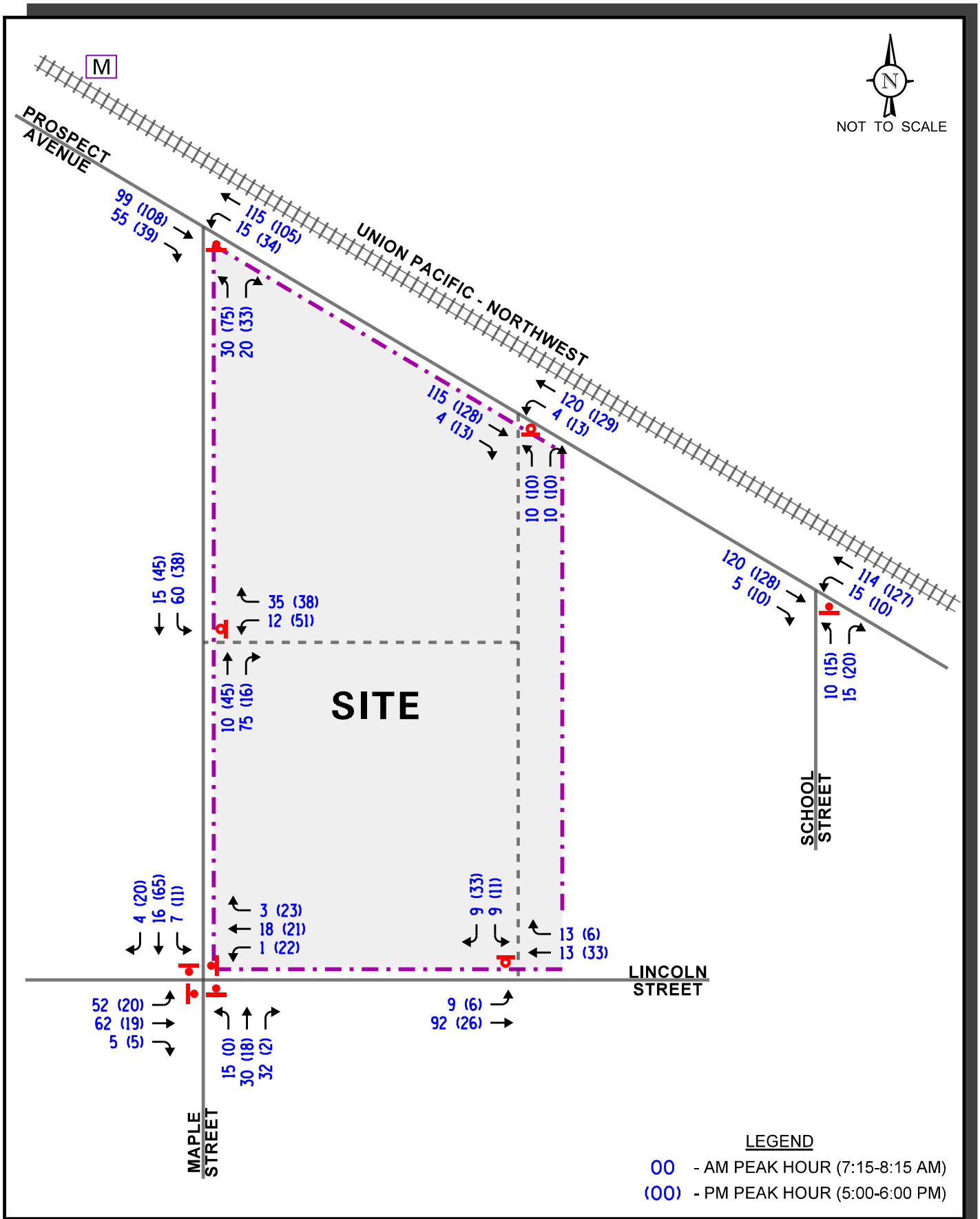

Maple Street Lofts
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Total Projected Traffic Volumes

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Job No: 18-249 Figure: 5

5. Traffic Analysis and Recommendations

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

Traffic Analyses

Roadway and adjacent or nearby intersection analyses were performed for the weekday morning, weekday evening and Saturday midday peak hours for the existing and future projected traffic volumes.

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

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

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

Summaries of the traffic analysis results showing the level of service and overall intersection delay (measured in seconds) for the existing and Year 2025 total projected conditions are presented in **Tables 3** and **4**, respectively. A discussion of the intersections follows. Summary sheets for the capacity analyses are included in the Appendix.

Table 3
CAPACITY ANALYSIS RESULTS
EXISTING CONDITIONS – UNSIGNALIZED

Intersection	Weekday Morning Peak Hour		Weekday Evening Peak Hour	
	LOS	Delay	LOS	Delay
Prospect Avenue with Maple Street				
• Northbound Approach	A	9.9	B	10.3
• Westbound Left Turn	A	7.6	A	7.5
Prospect Avenue with School Street				
• Northbound Approach	A	9.4	A	9.5
• Westbound Left Turn	A	7.5	A	7.5
Maple Street with Lincoln Street				
• Overall	A	7.7	A	7.6
• Eastbound Approach	A	8.0	A	7.5
• Westbound Approach	A	7.4	A	7.6
• Northbound Approach	A	7.3	A	7.4
• Southbound Approach	A	7.5	A	7.7
Maple Street with Commuter Parking Lot Access Drive				
• Westbound Approach	A	8.4	A	9.3
• Southbound Left Turn	A	7.3	--	--
Lincoln Street with Commuter Parking Lot Access Drive				
• Southbound Approach	A	9.6	A	8.7
• Eastbound Left Turn	A	7.4	--	--

LOS = Level of Service
Delay is measured in seconds.

Table 4
CAPACITY ANALYSIS RESULTS
PROJECTED CONDITIONS – UNSIGNALIZED

Intersection	Weekday Morning Peak Hour		Weekday Evening Peak Hour	
	LOS	Delay	LOS	Delay
Prospect Avenue with Maple Street				
• Northbound Approach	B	10.1	B	11.1
• Westbound Left Turn	A	7.6	A	7.6
Prospect Avenue with School Street				
• Northbound Approach	A	9.6	A	9.8
• Westbound Left Turn	A	7.5	A	7.5
Maple Street with Lincoln Street				
• Overall	A	7.7	A	7.6
• Eastbound Approach	A	8.0	A	7.6
• Westbound Approach	A	7.4	A	7.5
• Northbound Approach	A	7.5	A	7.4
• Southbound Approach	A	7.5	A	7.7
Maple Street with Proposed Access Drives				
• Westbound Approach	A	9.1	A	9.7
• Southbound Left Turn	A	7.5	A	7.4
Lincoln Street with Proposed Access Drive				
• Southbound Approach	A	8.9	A	8.8
• Eastbound Left Turn	A	7.3	A	7.3
Prospect Avenue with Proposed Access Drive				
• Northbound Approach	A	9.6	A	9.8
• Westbound Left Turn	A	7.5	A	7.5

LOS = Level of Service
Delay is measured in seconds.

Discussion and Recommendations

The results of the capacity analysis indicate that the intersections analyzed, and all of their approaches currently operate at the acceptable level of service (LOS) B or better during the weekday morning and weekday evening peak hour. Under projected conditions, the intersections and all of the approaches are projected to continue operating at the acceptable LOS B or better during the peak hours with increases in delay of less than one second and 95th percentile queues of one to two vehicles. Furthermore, the proposed access drives on Maple Street, Lincoln Street and Prospect Avenue are projected to operate identically to the existing access drives serving the commuter parking lot. Overall, the proposed development will have a limited impact on the operations of the study area intersections and no roadway or traffic control improvements will be required.

IL Route 83 Corridor Evaluation

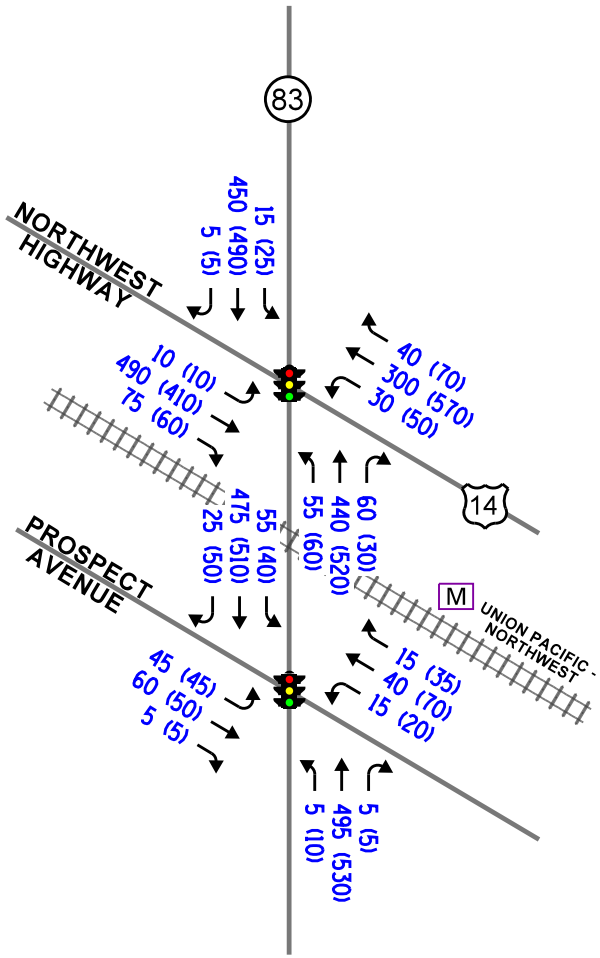
In addition to the intersections evaluated as part of the preceding traffic impact study, the intersections of IL Route 83 with Prospect Avenue and Illinois Route 83 with Northwest Highway (US Route 14) were also evaluated. The existing weekday morning and weekday evening peak hour traffic volumes that were identified in the Mount Prospect Downtown Transportation Study were also utilized for these intersections and the traffic estimated to be generated by the proposed development was assigned to the intersections based on existing travel patterns, as determined from the traffic counts, to project future conditions. **Figure 6** illustrates the existing traffic volumes, the net increase in site traffic assignment, and the total projected traffic volumes for the two intersections.

Capacity analyses were conducted for the intersections utilizing Synchro/SimTraffic 10 software using actual cycle lengths and phasings to determine the average overall vehicle delay and levels of service. **Table 5** summarizes the results of the capacity analyses for the intersection of IL Route 83 with Prospect Avenue and **Table 6** summarizes the results of the capacity analyses for the intersection of IL Route 83 with Northwest Highway.

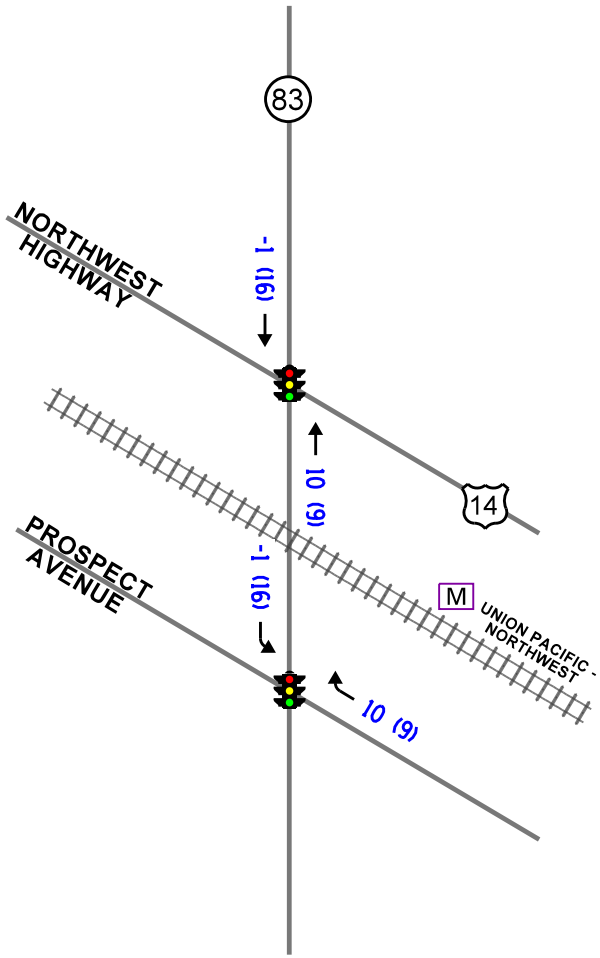
The results of the capacity analysis indicate that overall the intersection of IL Route 83 with Prospect Avenue currently operates at LOS D during the weekday morning and weekday evening peak hours. The intersection of IL Route 83 with Northwest Highway currently operates at LOS C during the weekday morning and weekday evening peak hour.

Under projected conditions, the intersections are projected to continue operating at existing levels of service during the peak hours with increases in delay of approximately one second or less. Furthermore, all of the approaches are projected to continue operating at existing levels of service with increases in delay of approximately three seconds or less.

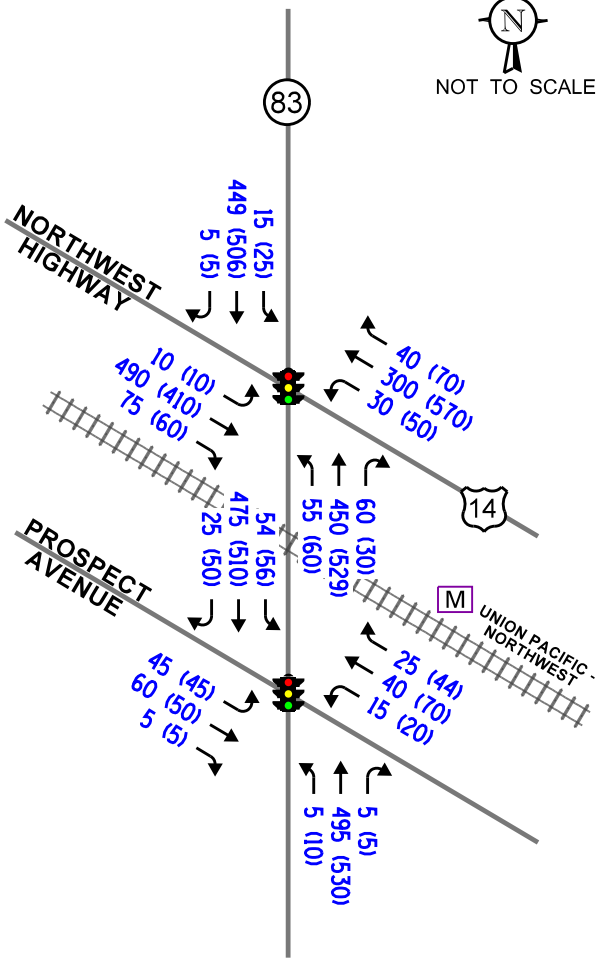
Overall, during the weekday morning peak hour, the traffic projected to be generated by the proposed development is projected to be less than one percent of the total traffic traversing the intersection of IL Route 83 with Prospect Avenue and less than one-half of a percent of the intersection of IL Route 83 with Northwest Highway.



Existing Traffic Volumes



Net Traffic Assignment



Total Projected Traffic Volumes

NOT TO SCALE

Maple Street Lofts
Mt Prospect, Illinois

IL Route 83 Corridor - Traffic Volumes

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Job No: 18-249

Figure: 6

Table 5
CAPACITY ANALYSIS RESULTS – EXISTING CONDITIONS – SIGNALIZED

Intersection	Weekday Morning Peak Hour		Weekday Evening Peak Hour	
	LOS	Delay	LOS	Delay
IL Route 83 with Prospect Avenue				
• Overall	D	36.4	D	38.4
• Eastbound Approach	E	58.8	E	61.5
• Westbound Approach	E	78.3	E	76.7
• Northbound Approach	E	64.3	E	66.0
• Southbound Approach	A	2.8	A	1.9
IL Route 83 with Northwest Highway (US 14)				
• Overall	C	24.6	C	31.6
• Eastbound Approach	C	21.1	C	24.8
• Westbound Approach	D	41.8	D	49.7
• Northbound Approach	A	0.5	A	0.6
• Southbound Approach	D	43.0	D	51.4

LOS = Level of Service
Delay is measured in seconds.

Table 6
CAPACITY ANALYSIS RESULTS
PROJECTED CONDITIONS – SIGNALIZED

Intersection	Weekday Morning Peak Hour		Weekday Evening Peak Hour	
	LOS	Delay	LOS	Delay
IL Route 83 with Prospect Avenue				
• Overall	D	37.4	D	38.7
• Eastbound Approach	E	58.2	E	61.3
• Westbound Approach	E	77.8	E	76.9
• Northbound Approach	E	64.5	E	66.1
• Southbound Approach	E	2.8	A	2.5
IL Route 83 with Northwest Highway (US 14)				
• Overall	C	25.0	C	33.0
• Eastbound Approach	C	22.7	C	25.5
• Westbound Approach	D	42.8	D	52.5
• Northbound Approach	A	0.6	A	0.6
• Southbound Approach	D	43.1	D	51.8

LOS = Level of Service
Delay is measured in seconds.

During the weekday evening peak hour, the traffic projected to be generated by the proposed development is projected to be less than two percent of the total traffic traversing the intersection of IL Route 83 with Prospect Avenue and approximately one percent of the intersection of IL Route 83 with Northwest Highway.

It should be noted that the results of the capacity analyses did not take into consideration the operations of the intersections during train events, emergency vehicle preemption, or when pedestrian phases are triggered. These operations are more reflected in a traffic simulation model which will show queueing and increased delay of vehicles during these events. However, as previously indicated the Village of Mount Prospect is considering several short-term and long-term area improvements to help enhance the flow of traffic along IL Route 83, particularly through these two intersections.

Mount Prospect Downtown Area Improvements

As previously indicated, the findings of the Mount Prospect Downtown Transportation Study identified that congestion of traffic within the downtown area was primarily attributed to the at grade rail crossings at IL Route 83 and Emmerson Street which are regularly blocked by Metra commuter trains during the peak periods. Furthermore, traffic congestion was exacerbated by traffic signal preemption of emergency vehicles departing the Mount Prospect Police and Fire Station. The study identified several key area improvements to significantly improve the operations of the downtown area. The more feasible improvements that can be completed in the short term to enhance the flow of traffic within the downtown area as follows:

- The intersections of IL Route 83 with Northwest Highway and Prospect Avenue currently have one pedestrian push button per corner. When pressed the pedestrian phase is called in both directions. Calling the pedestrian phase for both legs of the intersection may cause unnecessary green time allocation to an approach with no vehicles/pedestrians present. The installation of directional pedestrian push buttons at the intersections will reduce the number of false calls, allowing green time at the intersection to be allocated to approaches with higher traffic and pedestrian volumes.

- The Village has plans to relocate the existing Police and Fire Station located in the northwest quadrant of the intersection of Northwest Highway with Maple Street. The police and fire station currently generates an average of one traffic signal preemption call during each of the weekday morning and weekday evening peak hours which interrupt the programmed operations of the traffic signals for approximately two minutes. The relocation of the Mount Prospect Police and Fire Station will eliminate the emergency preemption calls enhancing the flow of traffic and limit the amount of red time allocated to the approaches of the signalized intersections.

- The Village has plans to coordinate with Metra to develop a new location for train engineers to stop the inbound trains at the station thus allowing the railroad gates at IL Route 83 to remain open (up position) an thus allowing, the continued flow of traffic. In doing so, it is estimated that the time train gates are down approximately 11 minutes during the 90-minute morning rush period by and approximately four minutes during the 90-minute evening rush period. It should be noted that relocating the stopping zone for inbound trains will require the extension of the southerly train platform.

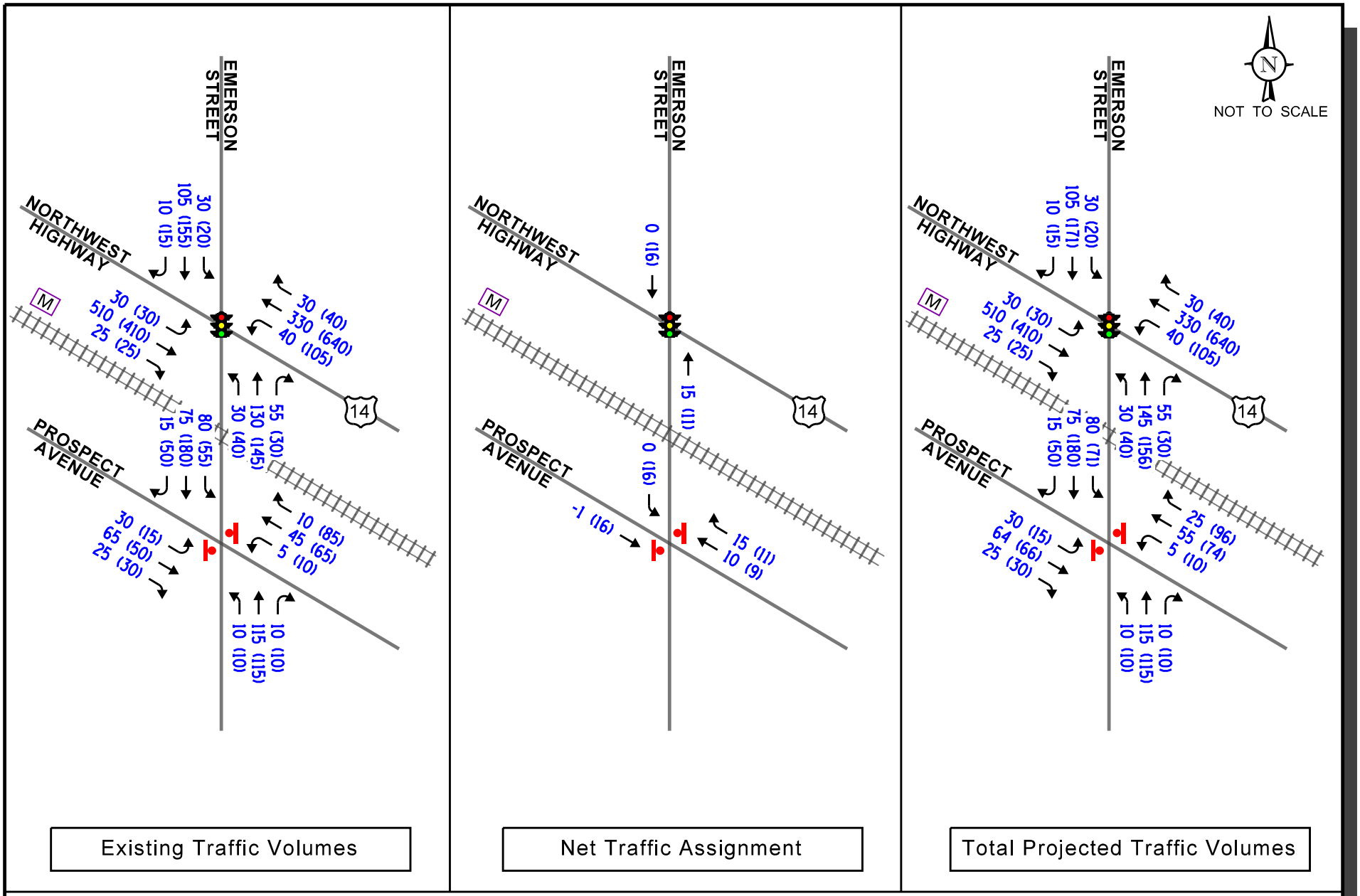
- In conjunction with the proposed development, The Village plans on relocating approximately 100 of the existing commuter permit parking spaces from the proposed parking garage to the existing parking garage located adjacent to the Village Hall on the north side of Northwest Highway. The relocation of these permits will reduce the number of commuter vehicles in the area and will potentially reduce the number of commuters that cross the tracks at IL Route 83 or Emerson Street. The reduction in traffic will offset approximately thirty percent of the traffic estimated to be generated by the proposed development.

Emerson Street Corridor Evaluation

Furthermore, the intersections of Emerson Street with Prospect Avenue and Emerson Street with Northwest Highway (US Route 14) were also evaluated. The existing weekday morning and weekday evening peak hour traffic volumes that were identified in the Mount Prospect Downtown Transportation Study were also utilized for these intersections and the traffic estimated to be generated by the proposed development was assigned to the intersections based on existing travel patterns, as determined from the traffic counts, to project future conditions. **Figure 7** illustrates the existing traffic volumes, the net increase in site traffic assignment, and the total projected traffic volumes for the two intersections.

Capacity analyses were conducted for the intersections utilizing Synchro/SimTraffic 10 software. Actual cycle lengths and phasings were utilized to determine the average overall vehicle delay and levels of service at the intersection of Emerson Street with Northwest Highway. The analyses for the unsignalized intersection of Emerson Street with Prospect Avenue determine the average control delay to vehicles at an intersection. **Table 7** summarizes the results of the capacity analyses for the intersection of Emerson Street with Prospect Avenue and **Table 8** summarizes the results of the capacity analyses for the intersection of Emerson Street with Northwest Highway.

The results of the capacity analysis indicate that the eastbound and westbound approaches of Prospect Avenue at Emerson Street currently operate the acceptable LOS C or better during the weekday morning and weekday evening peak hours. Additionally, the intersection of Emerson Street with Northwest Highway currently operates at LOS B during the weekday morning and weekday evening peak hours.



Maple Street Lofts
Mt Prospect, Illinois

Emerson Street Corridor - Traffic Volumes

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

Job No: 18-249 Figure: 7

Table 7
CAPACITY ANALYSIS RESULTS – EXISTING CONDITIONS

Intersection	Weekday Morning Peak Hour		Weekday Evening Peak Hour	
	LOS	Delay	LOS	Delay
Emerson Street with Prospect Avenue				
• Eastbound Approach	C	15.0	C	15.7
• Westbound Approach	B	13.6	B	14.2
• Northbound Left Turn	A	7.5	A	7.9
• Southbound Left Turn	A	7.8	A	7.9
Emerson Street with Northwest Highway (US 14)				
• Overall	B	10.6	B	12.1
• Eastbound Approach	A	1.5	A	2.1
• Westbound Approach	A	7.8	A	8.8
• Northbound Approach	C	28.1	C	29.8
• Southbound Approach	C	27.5	C	30.4

LOS = Level of Service
Delay is measured in seconds.
1 – Unsignalized Intersection
2 – Signalized Intersection

Table 8
CAPACITY ANALYSIS RESULTS – PROJECTED CONDITIONS

Intersection	Weekday Morning Peak Hour		Weekday Evening Peak Hour	
	LOS	Delay	LOS	Delay
Emerson Street with Prospect Avenue				
• Eastbound Approach	C	15.3	C	17.7
• Westbound Approach	B	13.3	C	15.1
• Northbound Left Turn	A	7.5	A	7.9
• Southbound Left Turn	A	7.8	A	7.9
Emerson Street with Northwest Highway (US 14)				
• Overall	B	10.9	B	12.6
• Eastbound Approach	A	1.7	A	2.2
• Westbound Approach	A	8.4	A	9.2
• Northbound Approach	C	27.9	C	29.6
• Southbound Approach	C	26.2	C	30.3

LOS = Level of Service
Delay is measured in seconds.
1 – Unsignalized Intersection
2 – Signalized Intersection

Under projected conditions, the eastbound and westbound Prospect Avenue approaches are projected to continue operating at LOS C or better during the peak hours with increases in delay of approximately two seconds or less. Furthermore, the intersection of Emerson Street with Northwest Highway is projected to continue operating at LOS B overall with increases in delay of less than one second. Additionally, all of the approaches are projected to operate at existing levels of service with increases in delay of less than one second.

Overall, the traffic that will be generated by the proposed development is projected to be less than five percent of the total traffic traversing the intersection of Emerson Street with Prospect Avenue during the weekday morning peak hour and approximately ten percent of the total traffic during the weekday evening peak hour. This translates into approximately one vehicle every two to three minutes and one vehicle every minute, respectively.

Additionally, the traffic that will be generated by the proposed development is projected to be approximately one-half of a percent of the total traffic traversing the intersection of Emerson Street with Northwest Highway during the weekday morning peak hour and approximately two percent of the total traffic during the weekday evening peak hour. This translates into approximately one vehicle every three cycles and one vehicle every one to two cycles, respectively.

It should be noted that the results of the capacity analyses did not take into consideration the operations of the intersections during train events which cause increased queueing and delay along these approaches. However, as previously indicated the Village of Mount Prospect is considering several short-term and long-term area improvements to help enhance the flow of traffic within the downtown area including the intersections of Emerson Street with Prospect Avenue and Northwest Highway. Also, as shown previously, the traffic that will be generated by the proposed development is projected to have a limited impact on the operations of these intersections and will not significantly increase the volume of traffic traversing the intersections.

6. Conclusion

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

- The volume of traffic projected to be generated by the proposed development will be reduced due to the proximity of the development to the Mount Prospect Metra Train Station, which qualifies the development as a TOD, and due to the interaction between the proposed development and existing uses within the area.

- The results of the capacity analysis indicate that the traffic estimated to be generated by the proposed development will have a minimal impact on the operations of the adjacent intersections.

- In conjunction with the proposed development, 100 of the existing commuter permit parking spaces will be relocated to the public parking garage located adjacent to Village Hall reducing the volume of traffic within the area of the proposed development

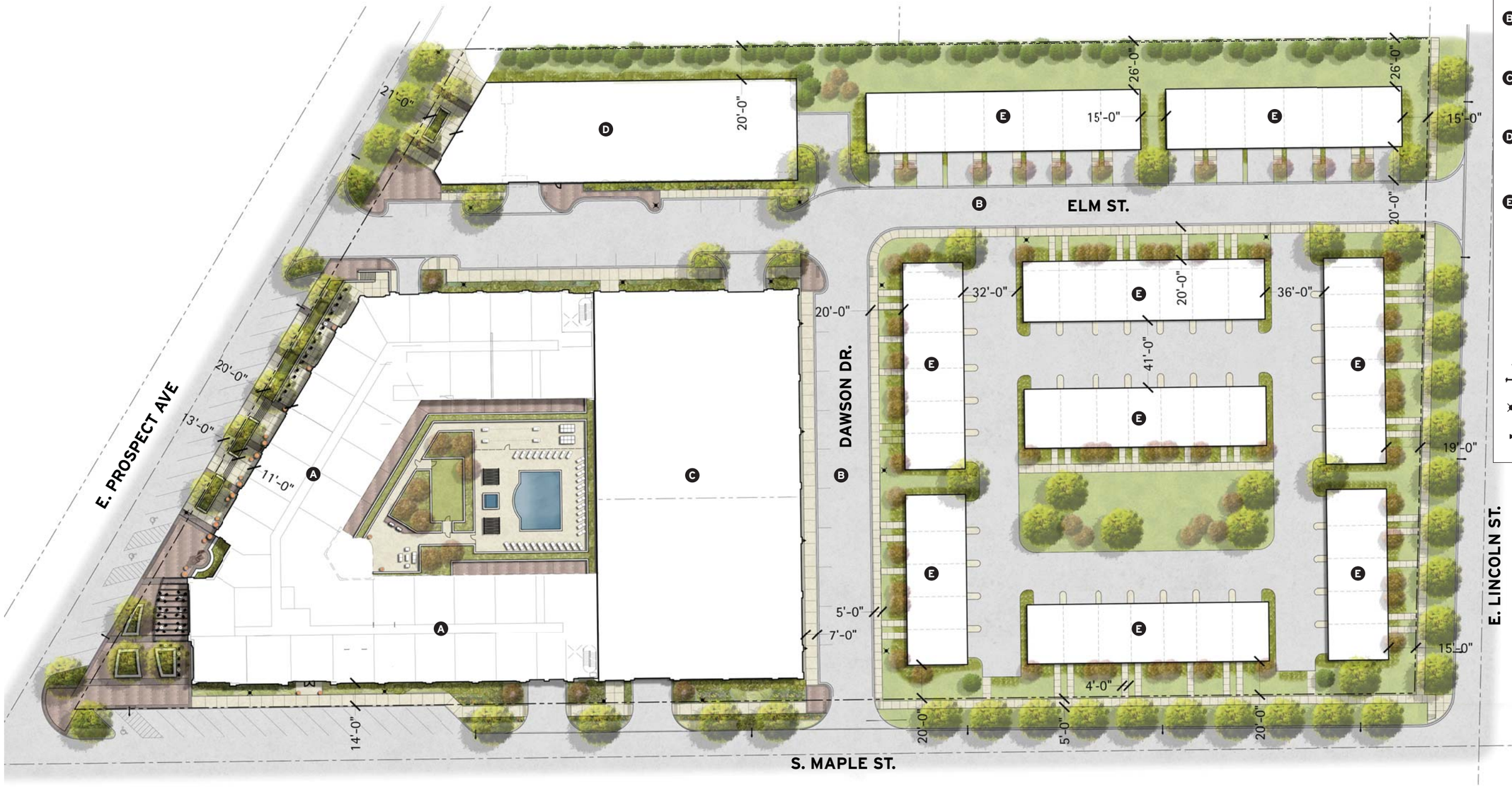
- The improvements identified in the Mount Prospect Downtown Transportation Study will significantly enhance the flow of traffic within the downtown area and will reduce vehicle delay and queueing. The following short-term improvements will enhance the flow of traffic within the downtown area:

  Short Term Improvements:
  - Installation of Directional Pedestrian Push Buttons at Signalized Intersections
  - Relocation of the Mount Prospect Police and Fire Station
  - Coordination with Metra Train Engineers
  - Relocation of Permit Parking Spaces for Commuter Permit Parking Lot

Appendix

Site Plan
Level of Service Criteria
Capacity Analysis Summary Sheets

Site Plan



PLAN HIGHLIGHTS

A 6 STORY APARTMENT
- 192 units
- 245 garage & 36 surface spaces
- 14,148 SF of retail

B PRIVATE ROADS
- Elm Street
- Dawson Drive

C PUBLIC PARKING DECK
- 3-story deck
- 268 total parking spaces

D 7-STORY APARTMENT
- 65 units
- 65 internal spaces (2 stories)
- 21 surface spaces

E ROWHOMES
- 13 Front Load (52 spaces=4.0/du)
- 43 Rear Load (129 spaces=3.0/du)

TOTAL AREA = 6.51 AC

RESIDENTIAL = 5.76 AC

MUNICIPAL = 0.75 AC

LIGHTING SCHEDULE

- Valmont Structures Roadway Light to match downtown lights
- Sternberg Acorn Pedestrian Light to match downtown lights
- Wall sconce on parking deck

MAPLE STREET LOFTS

SITE PLAN

MOUNT PROSPECT, ILLINOIS

SCALE: 1"=40'
0 20' 40' 80' NORTH

FEBRUARY 7, 2019

DRAFT

MAPLE STREET LOFTS

THE LAKOTA GROUP.

Level of Service Criteria

LEVEL OF SERVICE CRITERIA

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

Unsignalized Intersections	
Level of Service	Average Total Delay (SEC/VEH)
A	0 - 10
B	> 10 - 15
C	> 15 - 25
D	> 25 - 35
E	> 35 - 50
F	> 50

Source: *Highway Capacity Manual*, 2010.

Capacity Analysis Summary Sheets

Intersection	
Int Delay, s/veh	1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	95	60	10	105	15	5
Future Vol, veh/h	95	60	10	105	15	5
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	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	103	65	11	114	16	5

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	168	0	272	136
Stage 1	-	-	-	-	136	-
Stage 2	-	-	-	-	136	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1410	-	717	913
Stage 1	-	-	-	-	890	-
Stage 2	-	-	-	-	890	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1410	-	711	913
Mov Cap-2 Maneuver	-	-	-	-	711	-
Stage 1	-	-	-	-	883	-
Stage 2	-	-	-	-	890	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.7	9.9
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	753	-	-	1410	-
HCM Lane V/C Ratio	0.029	-	-	0.008	-
HCM Control Delay (s)	9.9	-	-	7.6	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection	
Intersection Delay, s/veh	7.7
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	115	5	0	15	0	15	5	65	0	15	0
Future Vol, veh/h	10	115	5	0	15	0	15	5	65	0	15	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	11	125	5	0	16	0	16	5	71	0	16	0
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8	7.4	7.3	7.5
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	18%	8%	0%	0%
Vol Thru, %	6%	88%	100%	100%
Vol Right, %	76%	4%	0%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	85	130	15	15
LT Vol	15	10	0	0
Through Vol	5	115	15	15
RT Vol	65	5	0	0
Lane Flow Rate	92	141	16	16
Geometry Grp	1	1	1	1
Degree of Util (X)	0.097	0.162	0.019	0.019
Departure Headway (Hd)	3.795	4.126	4.232	4.281
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	929	866	837	823
Service Time	1.879	2.169	2.304	2.375
HCM Lane V/C Ratio	0.099	0.163	0.019	0.019
HCM Control Delay	7.3	8	7.4	7.5
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.3	0.6	0.1	0.1

Intersection	
Int Delay, s/veh	1.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	95	5	15	105	10	15
Future Vol, veh/h	95	5	15	105	10	15
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	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	103	5	16	114	11	16

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	108	0	252	106
Stage 1	-	-	-	-	106	-
Stage 2	-	-	-	-	146	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1483	-	737	948
Stage 1	-	-	-	-	918	-
Stage 2	-	-	-	-	881	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1483	-	728	948
Mov Cap-2 Maneuver	-	-	-	-	728	-
Stage 1	-	-	-	-	907	-
Stage 2	-	-	-	-	881	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.9	9.4
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	846	-	-	1483	-
HCM Lane V/C Ratio	0.032	-	-	0.011	-
HCM Control Delay (s)	9.4	-	-	7.5	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection	
Int Delay, s/veh	5.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	5	10	5	60	15
Future Vol, veh/h	0	5	10	5	60	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	5	11	5	65	16

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	160	14	0	0	16	0
Stage 1	14	-	-	-	-	-
Stage 2	146	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	831	1066	-	-	1602	-
Stage 1	1009	-	-	-	-	-
Stage 2	881	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	797	1066	-	-	1602	-
Mov Cap-2 Maneuver	797	-	-	-	-	-
Stage 1	968	-	-	-	-	-
Stage 2	881	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.4	0	5.9
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	1066	1602	-
HCM Lane V/C Ratio	-	-	0.005	0.041	-
HCM Control Delay (s)	-	-	8.4	7.3	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0	0.1	-

Intersection	
Int Delay, s/veh	3.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	95	85	10	15	5	5
Future Vol, veh/h	95	85	10	15	5	5
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	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	103	92	11	16	5	5

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	27	0	-	0	317	19
Stage 1	-	-	-	-	19	-
Stage 2	-	-	-	-	298	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1587	-	-	-	676	1059
Stage 1	-	-	-	-	1004	-
Stage 2	-	-	-	-	753	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1587	-	-	-	630	1059
Mov Cap-2 Maneuver	-	-	-	-	630	-
Stage 1	-	-	-	-	936	-
Stage 2	-	-	-	-	753	-

Approach	EB	WB	SB
HCM Control Delay, s	3.9	0	9.6
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1587	-	-	-	790
HCM Lane V/C Ratio	0.065	-	-	-	0.014
HCM Control Delay (s)	7.4	0	-	-	9.6
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0.2	-	-	-	0

Intersection	
Int Delay, s/veh	3.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	95	20	15	95	65	20
Future Vol, veh/h	95	20	15	95	65	20
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	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	103	22	16	103	71	22

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	125	0	249	114
Stage 1	-	-	-	-	114	-
Stage 2	-	-	-	-	135	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1462	-	739	939
Stage 1	-	-	-	-	911	-
Stage 2	-	-	-	-	891	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1462	-	730	939
Mov Cap-2 Maneuver	-	-	-	-	730	-
Stage 1	-	-	-	-	900	-
Stage 2	-	-	-	-	891	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1	10.3
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	770	-	-	1462	-
HCM Lane V/C Ratio	0.12	-	-	0.011	-
HCM Control Delay (s)	10.3	-	-	7.5	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.4	-	-	0	-

Intersection	
Intersection Delay, s/veh	7.6
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	15	15	5	30	25	15	0	15	0	5	80	20
Future Vol, veh/h	15	15	5	30	25	15	0	15	0	5	80	20
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	16	16	5	33	27	16	0	16	0	5	87	22
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.5	7.6	7.4	7.7
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	43%	43%	5%
Vol Thru, %	100%	43%	36%	76%
Vol Right, %	0%	14%	21%	19%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	15	35	70	105
LT Vol	0	15	30	5
Through Vol	15	15	25	80
RT Vol	0	5	15	20
Lane Flow Rate	16	38	76	114
Geometry Grp	1	1	1	1
Degree of Util (X)	0.019	0.045	0.088	0.128
Departure Headway (Hd)	4.221	4.219	4.146	4.04
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	836	838	854	879
Service Time	2.307	2.3	2.218	2.104
HCM Lane V/C Ratio	0.019	0.045	0.089	0.13
HCM Control Delay	7.4	7.5	7.6	7.7
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.1	0.1	0.3	0.4

Intersection	
Int Delay, s/veh	1.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	105	10	10	95	15	20
Future Vol, veh/h	105	10	10	95	15	20
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	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	114	11	11	103	16	22

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	125	0	245	120
Stage 1	-	-	-	-	120	-
Stage 2	-	-	-	-	125	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1462	-	743	931
Stage 1	-	-	-	-	905	-
Stage 2	-	-	-	-	901	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1462	-	737	931
Mov Cap-2 Maneuver	-	-	-	-	737	-
Stage 1	-	-	-	-	898	-
Stage 2	-	-	-	-	901	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.7	9.5
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	837	-	-	1462	-
HCM Lane V/C Ratio	0.045	-	-	0.007	-
HCM Control Delay (s)	9.5	-	-	7.5	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection	
Int Delay, s/veh	4.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	60	15	45	0	0	45
Future Vol, veh/h	60	15	45	0	0	45
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, %	2	2	2	2	2	2
Mvmt Flow	65	16	49	0	0	49

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	98	49	0	0	49	0
Stage 1	49	-	-	-	-	-
Stage 2	49	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	901	1020	-	-	1558	-
Stage 1	973	-	-	-	-	-
Stage 2	973	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	901	1020	-	-	1558	-
Mov Cap-2 Maneuver	901	-	-	-	-	-
Stage 1	973	-	-	-	-	-
Stage 2	973	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.3	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	923	1558	-
HCM Lane V/C Ratio	-	-	0.088	-	-
HCM Control Delay (s)	-	-	9.3	0	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	0.3	0	-

Intersection	
Int Delay, s/veh	4.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	20	25	0	10	45
Future Vol, veh/h	0	20	25	0	10	45
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	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	22	27	0	11	49

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	27	0	-	0	49	27
Stage 1	-	-	-	-	27	-
Stage 2	-	-	-	-	22	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1587	-	-	-	960	1048
Stage 1	-	-	-	-	996	-
Stage 2	-	-	-	-	1001	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	1587	-	-	-	960	1048
Mov Cap-2 Maneuver	-	-	-	-	960	-
Stage 1	-	-	-	-	996	-
Stage 2	-	-	-	-	1001	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0	8.7
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1587	-	-	-	1031
HCM Lane V/C Ratio	-	-	-	-	0.058
HCM Control Delay (s)	0	-	-	-	8.7
HCM Lane LOS	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.2

Intersection	
Int Delay, s/veh	1.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	99	55	15	115	30	20
Future Vol, veh/h	99	55	15	115	30	20
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	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	108	60	16	125	33	22

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	168	0	295	138
Stage 1	-	-	-	-	138	-
Stage 2	-	-	-	-	157	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1410	-	696	910
Stage 1	-	-	-	-	889	-
Stage 2	-	-	-	-	871	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1410	-	688	910
Mov Cap-2 Maneuver	-	-	-	-	688	-
Stage 1	-	-	-	-	878	-
Stage 2	-	-	-	-	871	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.9	10.1
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	762	-	-	1410	-
HCM Lane V/C Ratio	0.071	-	-	0.012	-
HCM Control Delay (s)	10.1	-	-	7.6	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.2	-	-	0	-

Intersection	
Intersection Delay, s/veh	7.7
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	52	62	5	1	18	3	15	30	32	7	16	4
Future Vol, veh/h	52	62	5	1	18	3	15	30	32	7	16	4
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	57	67	5	1	20	3	16	33	35	8	17	4
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8	7.4	7.5	7.5
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	19%	44%	5%	26%
Vol Thru, %	39%	52%	82%	59%
Vol Right, %	42%	4%	14%	15%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	77	119	22	27
LT Vol	15	52	1	7
Through Vol	30	62	18	16
RT Vol	32	5	3	4
Lane Flow Rate	84	129	24	29
Geometry Grp	1	1	1	1
Degree of Util (X)	0.093	0.151	0.028	0.035
Departure Headway (Hd)	4.011	4.209	4.157	4.33
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	879	845	849	832
Service Time	2.103	2.27	2.244	2.33
HCM Lane V/C Ratio	0.096	0.153	0.028	0.035
HCM Control Delay	7.5	8	7.4	7.5
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.3	0.5	0.1	0.1

Intersection	
Int Delay, s/veh	1.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	120	5	15	114	10	15
Future Vol, veh/h	120	5	15	114	10	15
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	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	130	5	16	124	11	16

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	135	0	289	133
Stage 1	-	-	-	-	133	-
Stage 2	-	-	-	-	156	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1449	-	702	916
Stage 1	-	-	-	-	893	-
Stage 2	-	-	-	-	872	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1449	-	694	916
Mov Cap-2 Maneuver	-	-	-	-	694	-
Stage 1	-	-	-	-	882	-
Stage 2	-	-	-	-	872	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.9	9.6
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	812	-	-	1449	-
HCM Lane V/C Ratio	0.033	-	-	0.011	-
HCM Control Delay (s)	9.6	-	-	7.5	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection	
Int Delay, s/veh	4.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	12	35	10	75	60	15
Future Vol, veh/h	12	35	10	75	60	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	13	38	11	82	65	16

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	198	52	0	0	93	0
Stage 1	52	-	-	-	-	-
Stage 2	146	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	791	1016	-	-	1501	-
Stage 1	970	-	-	-	-	-
Stage 2	881	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	756	1016	-	-	1501	-
Mov Cap-2 Maneuver	756	-	-	-	-	-
Stage 1	927	-	-	-	-	-
Stage 2	881	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.1	0	6
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	934	1501	-
HCM Lane V/C Ratio	-	-	0.055	0.043	-
HCM Control Delay (s)	-	-	9.1	7.5	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.2	0.1	-

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	9	92	13	13	9	9
Future Vol, veh/h	9	92	13	13	9	9
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	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	10	100	14	14	10	10

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	28	0	-	0	141	21
Stage 1	-	-	-	-	21	-
Stage 2	-	-	-	-	120	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1585	-	-	-	852	1056
Stage 1	-	-	-	-	1002	-
Stage 2	-	-	-	-	905	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1585	-	-	-	846	1056
Mov Cap-2 Maneuver	-	-	-	-	846	-
Stage 1	-	-	-	-	995	-
Stage 2	-	-	-	-	905	-

Approach	EB	WB	SB
HCM Control Delay, s	0.6	0	8.9
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1585	-	-	-	939
HCM Lane V/C Ratio	0.006	-	-	-	0.021
HCM Control Delay (s)	7.3	0	-	-	8.9
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1

Intersection	
Int Delay, s/veh	0.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	115	4	4	120	10	10
Future Vol, veh/h	115	4	4	120	10	10
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	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	125	4	4	130	11	11

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	129	0	265	127
Stage 1	-	-	-	-	127	-
Stage 2	-	-	-	-	138	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1457	-	724	923
Stage 1	-	-	-	-	899	-
Stage 2	-	-	-	-	889	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1457	-	722	923
Mov Cap-2 Maneuver	-	-	-	-	722	-
Stage 1	-	-	-	-	896	-
Stage 2	-	-	-	-	889	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.2	9.6
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	810	-	-	1457	-
HCM Lane V/C Ratio	0.027	-	-	0.003	-
HCM Control Delay (s)	9.6	-	-	7.5	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection	
Int Delay, s/veh	3.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	108	39	34	105	75	33
Future Vol, veh/h	108	39	34	105	75	33
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	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	117	42	37	114	82	36

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	159	0	326	138
Stage 1	-	-	-	-	138	-
Stage 2	-	-	-	-	188	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1420	-	668	910
Stage 1	-	-	-	-	889	-
Stage 2	-	-	-	-	844	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1420	-	649	910
Mov Cap-2 Maneuver	-	-	-	-	649	-
Stage 1	-	-	-	-	864	-
Stage 2	-	-	-	-	844	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.9	11.1
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	711	-	-	1420	-
HCM Lane V/C Ratio	0.165	-	-	0.026	-
HCM Control Delay (s)	11.1	-	-	7.6	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.6	-	-	0.1	-

Intersection	
Intersection Delay, s/veh	7.6
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	19	5	22	21	23	0	18	2	11	65	20
Future Vol, veh/h	20	19	5	22	21	23	0	18	2	11	65	20
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	22	21	5	24	23	25	0	20	2	12	71	22
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.6	7.5	7.4	7.7
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	45%	33%	11%
Vol Thru, %	90%	43%	32%	68%
Vol Right, %	10%	11%	35%	21%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	20	44	66	96
LT Vol	0	20	22	11
Through Vol	18	19	21	65
RT Vol	2	5	23	20
Lane Flow Rate	22	48	72	104
Geometry Grp	1	1	1	1
Degree of Util (X)	0.025	0.056	0.081	0.118
Departure Headway (Hd)	4.164	4.232	4.048	4.056
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	848	836	875	875
Service Time	2.245	2.308	2.12	2.12
HCM Lane V/C Ratio	0.026	0.057	0.082	0.119
HCM Control Delay	7.4	7.6	7.5	7.7
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.1	0.2	0.3	0.4

Intersection	
Int Delay, s/veh	1.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	128	10	10	127	15	20
Future Vol, veh/h	128	10	10	127	15	20
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	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	139	11	11	138	16	22

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	150	0	305	145
Stage 1	-	-	-	-	145	-
Stage 2	-	-	-	-	160	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1431	-	687	902
Stage 1	-	-	-	-	882	-
Stage 2	-	-	-	-	869	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1431	-	682	902
Mov Cap-2 Maneuver	-	-	-	-	682	-
Stage 1	-	-	-	-	875	-
Stage 2	-	-	-	-	869	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.6	9.8
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	792	-	-	1431	-
HCM Lane V/C Ratio	0.048	-	-	0.008	-
HCM Control Delay (s)	9.8	-	-	7.5	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.2	-	-	0	-

Intersection	
Int Delay, s/veh	4.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	51	38	45	16	38	45
Future Vol, veh/h	51	38	45	16	38	45
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, %	2	2	2	2	2	2
Mvmt Flow	55	41	49	17	41	49

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	189	58	0	0	66	0
Stage 1	58	-	-	-	-	-
Stage 2	131	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	800	1008	-	-	1536	-
Stage 1	965	-	-	-	-	-
Stage 2	895	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	778	1008	-	-	1536	-
Mov Cap-2 Maneuver	778	-	-	-	-	-
Stage 1	939	-	-	-	-	-
Stage 2	895	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.7	0	3.4
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	862	1536	-
HCM Lane V/C Ratio	-	-	0.112	0.027	-
HCM Control Delay (s)	-	-	9.7	7.4	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.4	0.1	-

Intersection	
Int Delay, s/veh	3.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	6	26	33	6	11	33
Future Vol, veh/h	6	26	33	6	11	33
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	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	7	28	36	7	12	36

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	43	0	-	0	82	40
Stage 1	-	-	-	-	40	-
Stage 2	-	-	-	-	42	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1566	-	-	-	920	1031
Stage 1	-	-	-	-	982	-
Stage 2	-	-	-	-	980	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1566	-	-	-	915	1031
Mov Cap-2 Maneuver	-	-	-	-	915	-
Stage 1	-	-	-	-	977	-
Stage 2	-	-	-	-	980	-

Approach	EB	WB	SB
HCM Control Delay, s	1.4	0	8.8
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1566	-	-	-	999
HCM Lane V/C Ratio	0.004	-	-	-	0.048
HCM Control Delay (s)	7.3	0	-	-	8.8
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.2

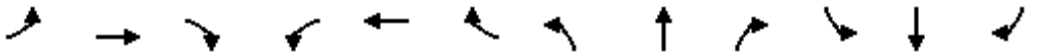
Intersection	
Int Delay, s/veh	1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	128	13	13	129	10	10
Future Vol, veh/h	128	13	13	129	10	10
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	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	139	14	14	140	11	11

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	153	0	314	146
Stage 1	-	-	-	-	146	-
Stage 2	-	-	-	-	168	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1428	-	679	901
Stage 1	-	-	-	-	881	-
Stage 2	-	-	-	-	862	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1428	-	672	901
Mov Cap-2 Maneuver	-	-	-	-	672	-
Stage 1	-	-	-	-	871	-
Stage 2	-	-	-	-	862	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.7	9.8
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	770	-	-	1428	-
HCM Lane V/C Ratio	0.028	-	-	0.01	-
HCM Control Delay (s)	9.8	-	-	7.5	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	490	75	30	320	40	55	440	60	15	450	5
Future Volume (vph)	10	490	75	30	320	40	55	440	60	15	450	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	125		0	115		0	65		0	60		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor	0.99	1.00		0.99	1.00		0.99	1.00		0.99	1.00	
Frt		0.980			0.983			0.982			0.998	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3453	0	1770	3469	0	1770	3459	0	1770	3531	0
Flt Permitted	0.496			0.189			0.412			0.950		
Satd. Flow (perm)	918	3453	0	350	3469	0	761	3459	0	1746	3531	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2109			466			282			1059	
Travel Time (s)		47.9			10.6			6.4			24.1	
Confl. Peds. (#/hr)	8		15	15		8	11		17	17		11
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	11	595	0	32	379	0	58	526	0	16	479	0
Turn Type	pm+pt	NA		pm+pt	NA		custom	NA		Prot	NA	
Protected Phases	5	2		1	6		3 11 12	8 11 12		7	4	
Permitted Phases	2			6			8	3				
Detector Phase	5	2		1	6		3 11 12	8 11 12		7	4	
Switch Phase												
Minimum Initial (s)	3.0	15.0		3.0	15.0					3.0	15.0	
Minimum Split (s)	6.0	41.5		6.0	34.5					7.5	40.5	
Total Split (s)	13.0	37.0		13.0	37.0					15.0	51.0	
Total Split (%)	7.6%	21.8%		7.6%	21.8%					8.8%	30.0%	
Yellow Time (s)	3.0	4.5		3.0	4.5					3.5	4.5	
All-Red Time (s)	0.0	2.0		0.0	2.0					1.0	2.0	
Lost Time Adjust (s)	1.0	-2.5		1.0	-2.5					-0.5	-2.5	
Total Lost Time (s)	4.0	4.0		4.0	4.0					4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag					Lead		
Lead-Lag Optimize?												
Recall Mode	None	None		None	None					None	C-Max	
Act Effct Green (s)	51.5	45.6		62.3	54.1		86.1	90.1		7.6	49.4	
Actuated g/C Ratio	0.30	0.27		0.37	0.32		0.51	0.53		0.04	0.29	

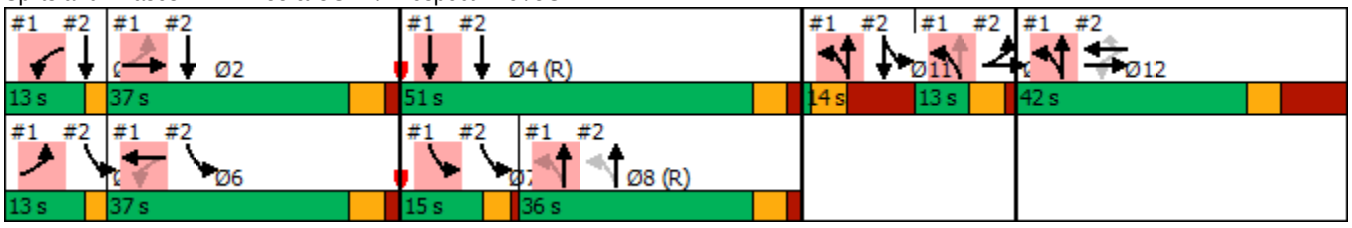
Lane Group	Ø3	Ø8	Ø11	Ø12
Lane Configurations				
Traffic Volume (vph)				
Future Volume (vph)				
Ideal Flow (vphpl)				
Lane Width (ft)				
Grade (%)				
Storage Length (ft)				
Storage Lanes				
Taper Length (ft)				
Lane Util. Factor				
Ped Bike Factor				
Frt				
Flt Protected				
Satd. Flow (prot)				
Flt Permitted				
Satd. Flow (perm)				
Right Turn on Red				
Satd. Flow (RTOR)				
Link Speed (mph)				
Link Distance (ft)				
Travel Time (s)				
Confl. Peds. (#/hr)				
Confl. Bikes (#/hr)				
Peak Hour Factor				
Growth Factor				
Heavy Vehicles (%)				
Bus Blockages (#/hr)				
Parking (#/hr)				
Mid-Block Traffic (%)				
Shared Lane Traffic (%)				
Lane Group Flow (vph)				
Turn Type				
Protected Phases	3	8	11	12
Permitted Phases				
Detector Phase				
Switch Phase				
Minimum Initial (s)	3.0	15.0	1.0	3.0
Minimum Split (s)	9.0	37.5	14.0	42.0
Total Split (s)	13.0	36.0	14.0	42.0
Total Split (%)	8%	21%	8%	25%
Yellow Time (s)	4.5	4.5	4.5	4.5
All-Red Time (s)	1.5	2.0	8.5	8.5
Lost Time Adjust (s)				
Total Lost Time (s)				
Lead/Lag	Lag	Lag	Lead	
Lead-Lag Optimize?				
Recall Mode	None	C-Max	None	None
Act Effct Green (s)				
Actuated g/C Ratio				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.04	0.64		0.14	0.34		0.09	0.29		0.20	0.47	
Control Delay	14.5	21.3		33.6	42.4		0.3	0.4		107.5	40.8	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.2		0.0	0.0	
Total Delay	14.5	21.3		33.6	42.4		0.3	0.6		107.5	40.8	
LOS	B	C		C	D		A	A		F	D	
Approach Delay		21.1			41.8			0.5			43.0	
Approach LOS		C			D			A			D	
Queue Length 50th (ft)	2	71		22	157		0	0		18	163	
Queue Length 95th (ft)	m3	m199		50	198		m0	0		m28	207	
Internal Link Dist (ft)		2029			386			202			979	
Turn Bay Length (ft)	125			115			65			60		
Base Capacity (vph)	340	926		234	1104		846	2209		114	1026	
Starvation Cap Reductn	0	0		0	0		0	870		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.03	0.64		0.14	0.34		0.07	0.39		0.14	0.47	

Intersection Summary			
Area Type:	Other		
Cycle Length: 170			
Actuated Cycle Length: 170			
Offset: 50 (29%), Referenced to phase 4:SBT and 8:NBTL, Start of 1st Green			
Natural Cycle: 160			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.64			
Intersection Signal Delay: 24.6		Intersection LOS: C	
Intersection Capacity Utilization 66.6%		ICU Level of Service C	
Analysis Period (min) 15			

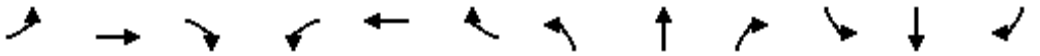
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: IL 83 & US 14/ Prospect Ave./US 14



Lane Group	Ø3	Ø8	Ø11	Ø12
v/c Ratio				
Control Delay				
Queue Delay				
Total Delay				
LOS				
Approach Delay				
Approach LOS				
Queue Length 50th (ft)				
Queue Length 95th (ft)				
Internal Link Dist (ft)				
Turn Bay Length (ft)				
Base Capacity (vph)				
Starvation Cap Reductn				
Spillback Cap Reductn				
Storage Cap Reductn				
Reduced v/c Ratio				

Intersection Summary



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	45	60	5	15	20	15	5	495	5	55	475	25
Future Volume (vph)	45	60	5	15	20	15	5	495	5	55	475	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	185		0	60		70	70		0	25		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor	0.80	1.00		1.00		0.79	0.90	1.00		1.00	1.00	
Frt		0.989				0.850		0.999			0.993	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3497	0	1770	1863	1583	1770	3535	0	1770	3499	0
Flt Permitted	0.950			0.710			0.457			0.950		
Satd. Flow (perm)	1416	3497	0	1318	1863	1245	770	3535	0	1761	3499	0
Right Turn on Red			Yes			No			Yes			Yes
Satd. Flow (RTOR)		5									6	
Link Speed (mph)		25			25			30			30	
Link Distance (ft)		2538			450			457			282	
Travel Time (s)		69.2			12.3			10.4			6.4	
Confl. Peds. (#/hr)	117		2	2		117	72		6	6		72
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	47	68	0	16	21	16	5	526	0	58	526	0
Turn Type	Prot	NA		Perm	NA	Perm	Perm	NA		custom	NA	
Protected Phases	3	3 12			12			8		5 6 7 11	1 2 4 11	
Permitted Phases				12		12	8			5 6 7 11		
Detector Phase	3	3 12		12	12	12	8	8		5 6 7 11	1 2 4 11	
Switch Phase												
Minimum Initial (s)	3.0			3.0	3.0	3.0	15.0	15.0				
Minimum Split (s)	9.0			42.0	42.0	42.0	37.5	37.5				
Total Split (s)	13.0			42.0	42.0	42.0	36.0	36.0				
Total Split (%)	7.6%			24.7%	24.7%	24.7%	21.2%	21.2%				
Yellow Time (s)	4.5			4.5	4.5	4.5	4.5	4.5				
All-Red Time (s)	1.5			8.5	8.5	8.5	2.0	2.0				
Lost Time Adjust (s)	-2.0			-2.0	-2.0	-2.0	-2.5	-2.5				
Total Lost Time (s)	4.0			11.0	11.0	11.0	4.0	4.0				
Lead/Lag	Lag						Lag	Lag				
Lead-Lag Optimize?												
Recall Mode	None			None	None	None	C-Max	C-Max				
Act Effct Green (s)	8.8	32.3		12.5	12.5	12.5	39.8	39.8		83.9	129.7	
Actuated g/C Ratio	0.05	0.19		0.07	0.07	0.07	0.23	0.23		0.49	0.76	

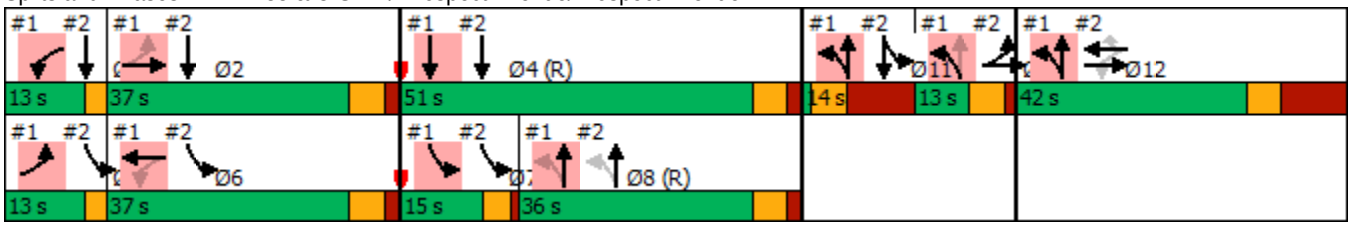
Lane Group	Ø1	Ø2	Ø4	Ø5	Ø6	Ø7	Ø11
Lane Configurations							
Traffic Volume (vph)							
Future Volume (vph)							
Ideal Flow (vphpl)							
Lane Width (ft)							
Grade (%)							
Storage Length (ft)							
Storage Lanes							
Taper Length (ft)							
Lane Util. Factor							
Ped Bike Factor							
Frt							
Flt Protected							
Satd. Flow (prot)							
Flt Permitted							
Satd. Flow (perm)							
Right Turn on Red							
Satd. Flow (RTOR)							
Link Speed (mph)							
Link Distance (ft)							
Travel Time (s)							
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor							
Growth Factor							
Heavy Vehicles (%)							
Bus Blockages (#/hr)							
Parking (#/hr)							
Mid-Block Traffic (%)							
Shared Lane Traffic (%)							
Lane Group Flow (vph)							
Turn Type							
Protected Phases	1	2	4	5	6	7	11
Permitted Phases							
Detector Phase							
Switch Phase							
Minimum Initial (s)	3.0	15.0	15.0	3.0	15.0	3.0	1.0
Minimum Split (s)	6.0	41.5	40.5	6.0	34.5	7.5	14.0
Total Split (s)	13.0	37.0	51.0	13.0	37.0	15.0	14.0
Total Split (%)	8%	22%	30%	8%	22%	9%	8%
Yellow Time (s)	3.0	4.5	4.5	3.0	4.5	3.5	4.5
All-Red Time (s)	0.0	2.0	2.0	0.0	2.0	1.0	8.5
Lost Time Adjust (s)							
Total Lost Time (s)							
Lead/Lag	Lead	Lag		Lead	Lag	Lead	Lead
Lead-Lag Optimize?							
Recall Mode	None	None	C-Max	None	None	None	None
Act Effct Green (s)							
Actuated g/C Ratio							

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.52	0.10		0.17	0.15	0.18	0.03	0.64		0.07	0.20	
Control Delay	85.2	40.6		78.7	77.3	79.3	55.6	64.4		25.2	0.2	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.2	
Total Delay	85.2	40.6		78.7	77.3	79.3	55.6	64.4		25.2	0.4	
LOS	F	D		E	E	E	E	E		C	A	
Approach Delay		58.8			78.3			64.3			2.8	
Approach LOS		E			E			E			A	
Queue Length 50th (ft)	51	31		18	22	18	5	290		53	0	
Queue Length 95th (ft)	m92	m49		42	54	42	19	366		m87	0	
Internal Link Dist (ft)		2458			370			377			202	
Turn Bay Length (ft)	185			60		70	70			25		
Base Capacity (vph)	93	1036		240	339	227	180	827		899	2655	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	1309	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.51	0.07		0.07	0.06	0.07	0.03	0.64		0.06	0.39	

Intersection Summary			
Area Type:	Other		
Cycle Length: 170			
Actuated Cycle Length: 170			
Offset: 50 (29%), Referenced to phase 4:SBT and 8:NBTL, Start of 1st Green			
Natural Cycle: 160			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.64			
Intersection Signal Delay: 36.4		Intersection LOS: D	
Intersection Capacity Utilization 68.8%		ICU Level of Service C	
Analysis Period (min) 15			

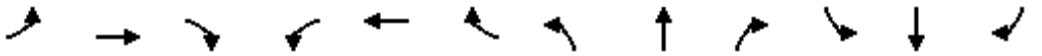
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: IL 83 & U.S. 14/ Prospect Avenue/Prospect Avenue



Lane Group	Ø1	Ø2	Ø4	Ø5	Ø6	Ø7	Ø11
v/c Ratio							
Control Delay							
Queue Delay							
Total Delay							
LOS							
Approach Delay							
Approach LOS							
Queue Length 50th (ft)							
Queue Length 95th (ft)							
Internal Link Dist (ft)							
Turn Bay Length (ft)							
Base Capacity (vph)							
Starvation Cap Reductn							
Spillback Cap Reductn							
Storage Cap Reductn							
Reduced v/c Ratio							

Intersection Summary



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	410	60	50	530	75	60	520	30	25	490	5
Future Volume (vph)	10	410	60	50	530	75	60	520	30	25	490	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	125		0	115		0	65		0	60		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor	1.00	1.00		1.00	1.00		0.98	1.00		1.00	1.00	
Frt		0.981			0.981			0.992			0.999	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3463	0	1770	3465	0	1770	3507	0	1770	3534	0
Flt Permitted	0.248			0.211			0.383			0.950		
Satd. Flow (perm)	462	3463	0	392	3465	0	701	3507	0	1763	3534	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2109			466			282			1059	
Travel Time (s)		47.9			10.6			6.4			24.1	
Confl. Peds. (#/hr)	2		6	6		2	25		5	5		25
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	11	495	0	53	637	0	63	579	0	26	521	0
Turn Type	pm+pt	NA		pm+pt	NA		custom	NA		Prot	NA	
Protected Phases	5	2		1	6		3 11 12	8 11 12		7	4	
Permitted Phases	2			6			8	3				
Detector Phase	5	2		1	6		3 11 12	8 11 12		7	4	
Switch Phase												
Minimum Initial (s)	3.0	15.0		3.0	15.0					3.0	15.0	
Minimum Split (s)	6.0	41.5		6.0	34.5					7.5	40.5	
Total Split (s)	13.0	37.0		13.0	37.0					16.0	51.0	
Total Split (%)	7.6%	21.8%		7.6%	21.8%					9.4%	30.0%	
Yellow Time (s)	3.0	4.5		3.0	4.5					3.5	4.5	
All-Red Time (s)	0.0	2.0		0.0	2.0					1.0	2.0	
Lost Time Adjust (s)	1.0	-2.5		1.0	-2.5					-0.5	-2.5	
Total Lost Time (s)	4.0	4.0		4.0	4.0					4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag					Lead		
Lead-Lag Optimize?												
Recall Mode	None	None		None	None					None	C-Max	
Act Effct Green (s)	44.7	39.0		57.0	49.0		90.5	94.5		8.5	50.0	
Actuated g/C Ratio	0.26	0.23		0.34	0.29		0.53	0.56		0.05	0.29	

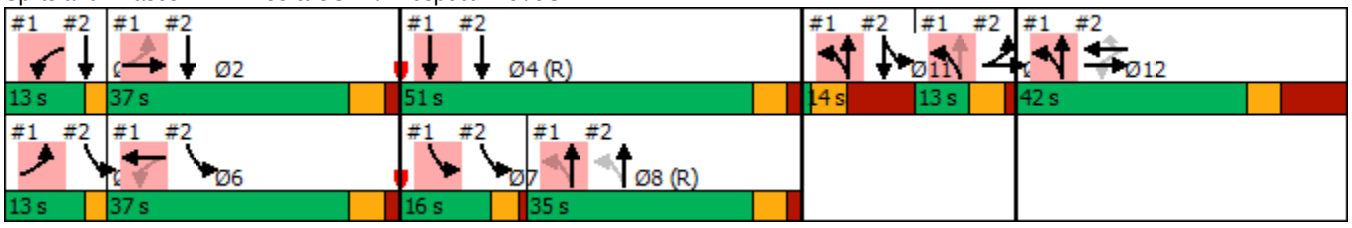
Lane Group	Ø3	Ø8	Ø11	Ø12
Lane Configurations				
Traffic Volume (vph)				
Future Volume (vph)				
Ideal Flow (vphpl)				
Lane Width (ft)				
Grade (%)				
Storage Length (ft)				
Storage Lanes				
Taper Length (ft)				
Lane Util. Factor				
Ped Bike Factor				
Frt				
Flt Protected				
Satd. Flow (prot)				
Flt Permitted				
Satd. Flow (perm)				
Right Turn on Red				
Satd. Flow (RTOR)				
Link Speed (mph)				
Link Distance (ft)				
Travel Time (s)				
Confl. Peds. (#/hr)				
Confl. Bikes (#/hr)				
Peak Hour Factor				
Growth Factor				
Heavy Vehicles (%)				
Bus Blockages (#/hr)				
Parking (#/hr)				
Mid-Block Traffic (%)				
Shared Lane Traffic (%)				
Lane Group Flow (vph)				
Turn Type				
Protected Phases	3	8	11	12
Permitted Phases				
Detector Phase				
Switch Phase				
Minimum Initial (s)	3.0	15.0	1.0	3.0
Minimum Split (s)	9.0	37.5	14.0	42.0
Total Split (s)	13.0	35.0	14.0	42.0
Total Split (%)	8%	21%	8%	25%
Yellow Time (s)	4.5	4.5	4.5	4.5
All-Red Time (s)	1.5	2.0	8.5	8.5
Lost Time Adjust (s)				
Total Lost Time (s)				
Lead/Lag	Lag	Lag	Lead	
Lead-Lag Optimize?				
Recall Mode	None	C-Max	None	None
Act Effct Green (s)				
Actuated g/C Ratio				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.07	0.62		0.22	0.64		0.09	0.30		0.30	0.50	
Control Delay	14.5	25.0		36.9	50.0		0.4	0.4		76.8	50.1	
Queue Delay	0.0	0.0		0.0	0.8		0.0	0.3		0.0	0.0	
Total Delay	14.5	25.0		36.9	50.8		0.4	0.7		76.8	50.1	
LOS	B	C		D	D		A	A		E	D	
Approach Delay		24.8			49.7			0.6			51.4	
Approach LOS		C			D			A			D	
Queue Length 50th (ft)	2	256		39	261		0	0		23	301	
Queue Length 95th (ft)	m2	m361		74	305		m0	0		m33	363	
Internal Link Dist (ft)		2029			386			202			979	
Turn Bay Length (ft)	125			115			65			60		
Base Capacity (vph)	199	795		244	999		831	2235		124	1040	
Starvation Cap Reductn	0	0		0	135		0	969		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.06	0.62		0.22	0.74		0.08	0.46		0.21	0.50	

Intersection Summary			
Area Type:	Other		
Cycle Length: 170			
Actuated Cycle Length: 170			
Offset: 63 (37%), Referenced to phase 4:SBT and 8:NBTL, Start of 1st Green			
Natural Cycle: 160			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.68			
Intersection Signal Delay: 31.6		Intersection LOS: C	
Intersection Capacity Utilization 65.8%		ICU Level of Service C	
Analysis Period (min) 15			

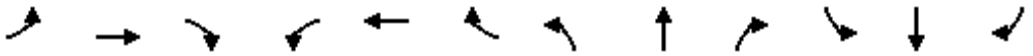
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: IL 83 & US 14/ Prospect Ave./US 14



Lane Group	Ø3	Ø8	Ø11	Ø12
v/c Ratio				
Control Delay				
Queue Delay				
Total Delay				
LOS				
Approach Delay				
Approach LOS				
Queue Length 50th (ft)				
Queue Length 95th (ft)				
Internal Link Dist (ft)				
Turn Bay Length (ft)				
Base Capacity (vph)				
Starvation Cap Reductn				
Spillback Cap Reductn				
Storage Cap Reductn				
Reduced v/c Ratio				

Intersection Summary



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	45	50	5	20	65	35	10	530	5	40	510	50
Future Volume (vph)	45	50	5	20	65	35	10	530	5	40	510	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	185		0	60		70	70		0	25		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor	0.93	1.00		0.99		0.91	0.90	1.00		1.00	0.99	
Frt		0.987				0.850		0.999			0.987	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3488	0	1770	1863	1583	1770	3535	0	1770	3462	0
Flt Permitted	0.950			0.717			0.429			0.950		
Satd. Flow (perm)	1648	3488	0	1327	1863	1447	720	3535	0	1763	3462	0
Right Turn on Red			Yes			No			Yes			Yes
Satd. Flow (RTOR)		5									13	
Link Speed (mph)		25			25			30			30	
Link Distance (ft)		2538			450			457			282	
Travel Time (s)		69.2			12.3			10.4			6.4	
Confl. Peds. (#/hr)	43		4	4		43	82		5	5		82
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	47	58	0	21	68	37	11	563	0	42	590	0
Turn Type	Prot	NA		Perm	NA	Perm	Perm	NA		custom	NA	
Protected Phases	3	3 12			12			8		5 6 7 11	1 2 4 11	
Permitted Phases				12		12	8			5 6 7 11		
Detector Phase	3	3 12		12	12	12	8	8		5 6 7 11	1 2 4 11	
Switch Phase												
Minimum Initial (s)	3.0			3.0	3.0	3.0	15.0	15.0				
Minimum Split (s)	9.0			42.0	42.0	42.0	37.5	37.5				
Total Split (s)	13.0			42.0	42.0	42.0	35.0	35.0				
Total Split (%)	7.6%			24.7%	24.7%	24.7%	20.6%	20.6%				
Yellow Time (s)	4.5			4.5	4.5	4.5	4.5	4.5				
All-Red Time (s)	1.5			8.5	8.5	8.5	2.0	2.0				
Lost Time Adjust (s)	-2.0			-2.0	-2.0	-2.0	-2.5	-2.5				
Total Lost Time (s)	4.0			11.0	11.0	11.0	4.0	4.0				
Lead/Lag	Lag						Lag	Lag				
Lead-Lag Optimize?												
Recall Mode	None			None	None	None	C-Max	C-Max				
Act Effct Green (s)	8.8	37.0		17.2	17.2	17.2	39.5	39.5		79.5	125.0	
Actuated g/C Ratio	0.05	0.22		0.10	0.10	0.10	0.23	0.23		0.47	0.74	

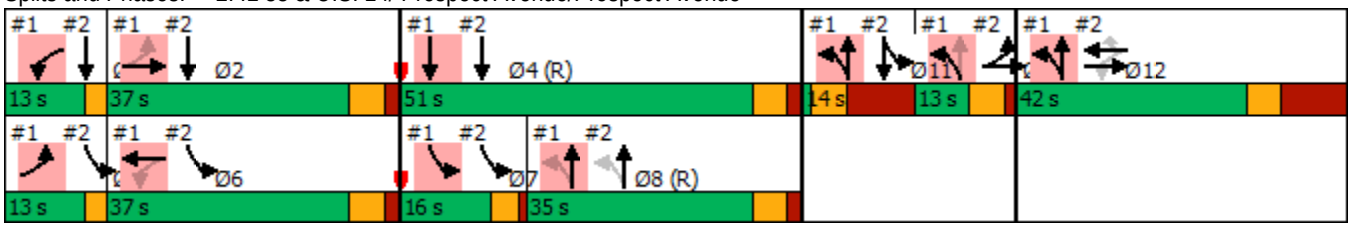
Lane Group	Ø1	Ø2	Ø4	Ø5	Ø6	Ø7	Ø11
Lane Configurations							
Traffic Volume (vph)							
Future Volume (vph)							
Ideal Flow (vphpl)							
Lane Width (ft)							
Grade (%)							
Storage Length (ft)							
Storage Lanes							
Taper Length (ft)							
Lane Util. Factor							
Ped Bike Factor							
Frt							
Flt Protected							
Satd. Flow (prot)							
Flt Permitted							
Satd. Flow (perm)							
Right Turn on Red							
Satd. Flow (RTOR)							
Link Speed (mph)							
Link Distance (ft)							
Travel Time (s)							
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor							
Growth Factor							
Heavy Vehicles (%)							
Bus Blockages (#/hr)							
Parking (#/hr)							
Mid-Block Traffic (%)							
Shared Lane Traffic (%)							
Lane Group Flow (vph)							
Turn Type							
Protected Phases	1	2	4	5	6	7	11
Permitted Phases							
Detector Phase							
Switch Phase							
Minimum Initial (s)	3.0	15.0	15.0	3.0	15.0	3.0	1.0
Minimum Split (s)	6.0	41.5	40.5	6.0	34.5	7.5	14.0
Total Split (s)	13.0	37.0	51.0	13.0	37.0	16.0	14.0
Total Split (%)	8%	22%	30%	8%	22%	9%	8%
Yellow Time (s)	3.0	4.5	4.5	3.0	4.5	3.5	4.5
All-Red Time (s)	0.0	2.0	2.0	0.0	2.0	1.0	8.5
Lost Time Adjust (s)							
Total Lost Time (s)							
Lead/Lag	Lead	Lag		Lead	Lag	Lead	Lead
Lead-Lag Optimize?							
Recall Mode	None	None	C-Max	None	None	None	None
Act Effct Green (s)							
Actuated g/C Ratio							

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.52	0.08		0.16	0.36	0.25	0.07	0.68		0.05	0.23	
Control Delay	86.9	40.9		73.7	78.0	76.1	57.8	66.2		23.1	0.2	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.2	
Total Delay	86.9	40.9		73.7	78.0	76.1	57.8	66.2		23.1	0.4	
LOS	F	D		E	E	E	E	E		C	A	
Approach Delay		61.5			76.7			66.0			1.9	
Approach LOS		E			E			E			A	
Queue Length 50th (ft)	52	26		22	74	40	10	316		37	0	
Queue Length 95th (ft)	m90	m42		53	125	79	31	#404		m66	0	
Internal Link Dist (ft)		2458			370			377			202	
Turn Bay Length (ft)	185			60		70	70			25		
Base Capacity (vph)	93	1033		241	339	263	167	822		856	2549	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	1116	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.51	0.06		0.09	0.20	0.14	0.07	0.68		0.05	0.41	

Intersection Summary

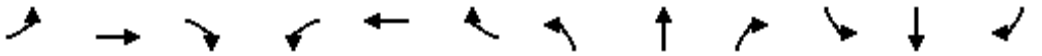
Area Type: Other
Cycle Length: 170
Actuated Cycle Length: 170
Offset: 63 (37%), Referenced to phase 4:SBT and 8:NBTL, Start of 1st Green
Natural Cycle: 160
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.68
Intersection Signal Delay: 38.4 Intersection LOS: D
Intersection Capacity Utilization 65.3% ICU Level of Service C
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: IL 83 & U.S. 14/ Prospect Avenue/Prospect Avenue



Lane Group	Ø1	Ø2	Ø4	Ø5	Ø6	Ø7	Ø11
v/c Ratio							
Control Delay							
Queue Delay							
Total Delay							
LOS							
Approach Delay							
Approach LOS							
Queue Length 50th (ft)							
Queue Length 95th (ft)							
Internal Link Dist (ft)							
Turn Bay Length (ft)							
Base Capacity (vph)							
Starvation Cap Reductn							
Spillback Cap Reductn							
Storage Cap Reductn							
Reduced v/c Ratio							

Intersection Summary



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	490	75	30	300	40	55	450	60	15	449	5
Future Volume (vph)	10	490	75	30	300	40	55	450	60	15	449	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	125		0	115		0	65		0	60		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor	0.99	1.00		0.99	1.00		0.99	1.00		0.99	1.00	
Frt		0.980			0.982			0.982			0.998	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3453	0	1770	3465	0	1770	3459	0	1770	3531	0
Flt Permitted	0.517			0.174			0.412			0.950		
Satd. Flow (perm)	956	3453	0	322	3465	0	761	3459	0	1746	3531	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2109			466			282			1059	
Travel Time (s)		47.9			10.6			6.4			24.1	
Confl. Peds. (#/hr)	8		15	15		8	11		17	17		11
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	11	595	0	32	358	0	58	537	0	16	478	0
Turn Type	pm+pt	NA		pm+pt	NA		custom	NA		Prot	NA	
Protected Phases	5	2		1	6		3 11 12	8 11 12		7	4	
Permitted Phases	2			6			8	3				
Detector Phase	5	2		1	6		3 11 12	8 11 12		7	4	
Switch Phase												
Minimum Initial (s)	3.0	15.0		3.0	15.0					3.0	15.0	
Minimum Split (s)	6.0	41.5		6.0	34.5					7.5	40.5	
Total Split (s)	13.0	37.0		13.0	37.0					15.0	51.0	
Total Split (%)	7.6%	21.8%		7.6%	21.8%					8.8%	30.0%	
Yellow Time (s)	3.0	4.5		3.0	4.5					3.5	4.5	
All-Red Time (s)	0.0	2.0		0.0	2.0					1.0	2.0	
Lost Time Adjust (s)	1.0	-2.5		1.0	-2.5					-0.5	-2.5	
Total Lost Time (s)	4.0	4.0		4.0	4.0					4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag					Lead		
Lead-Lag Optimize?												
Recall Mode	None	None		None	None					None	C-Max	
Act Effct Green (s)	49.4	43.5		60.6	52.4		87.8	91.8		7.6	49.2	
Actuated g/C Ratio	0.29	0.26		0.36	0.31		0.52	0.54		0.04	0.29	

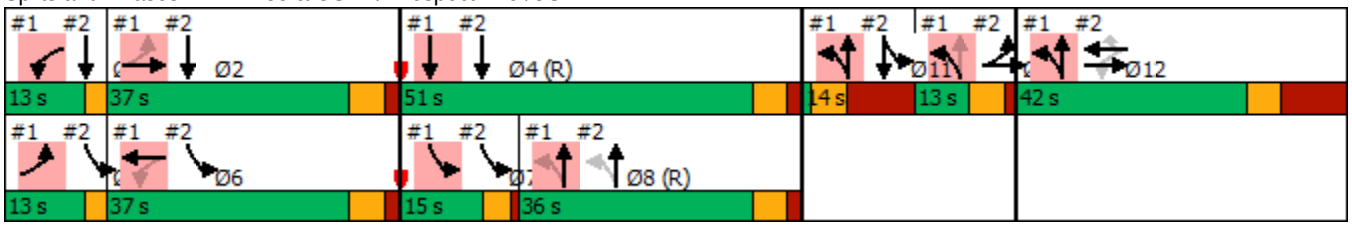
Lane Group	Ø3	Ø8	Ø11	Ø12
Lane Configurations				
Traffic Volume (vph)				
Future Volume (vph)				
Ideal Flow (vphpl)				
Lane Width (ft)				
Grade (%)				
Storage Length (ft)				
Storage Lanes				
Taper Length (ft)				
Lane Util. Factor				
Ped Bike Factor				
Frt				
Flt Protected				
Satd. Flow (prot)				
Flt Permitted				
Satd. Flow (perm)				
Right Turn on Red				
Satd. Flow (RTOR)				
Link Speed (mph)				
Link Distance (ft)				
Travel Time (s)				
Confl. Peds. (#/hr)				
Confl. Bikes (#/hr)				
Peak Hour Factor				
Growth Factor				
Heavy Vehicles (%)				
Bus Blockages (#/hr)				
Parking (#/hr)				
Mid-Block Traffic (%)				
Shared Lane Traffic (%)				
Lane Group Flow (vph)				
Turn Type				
Protected Phases	3	8	11	12
Permitted Phases				
Detector Phase				
Switch Phase				
Minimum Initial (s)	3.0	15.0	1.0	3.0
Minimum Split (s)	9.0	37.5	14.0	42.0
Total Split (s)	13.0	36.0	14.0	42.0
Total Split (%)	8%	21%	8%	25%
Yellow Time (s)	4.5	4.5	4.5	4.5
All-Red Time (s)	1.5	2.0	8.5	8.5
Lost Time Adjust (s)				
Total Lost Time (s)				
Lead/Lag	Lag	Lag	Lead	
Lead-Lag Optimize?				
Recall Mode	None	C-Max	None	None
Act Effct Green (s)				
Actuated g/C Ratio				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.04	0.67		0.14	0.34		0.09	0.29		0.20	0.47	
Control Delay	14.8	22.9		35.1	43.5		0.4	0.4		107.5	40.9	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.2		0.0	0.0	
Total Delay	14.8	22.9		35.1	43.5		0.4	0.6		107.5	40.9	
LOS	B	C		D	D		A	A		F	D	
Approach Delay		22.7			42.8			0.6			43.1	
Approach LOS		C			D			A			D	
Queue Length 50th (ft)	2	72		23	150		0	0		18	163	
Queue Length 95th (ft)	m3	m282		50	189		m0	0		m28	206	
Internal Link Dist (ft)		2029			386			202			979	
Turn Bay Length (ft)	125			115			65			60		
Base Capacity (vph)	338	884		225	1067		845	2205		114	1021	
Starvation Cap Reductn	0	0		0	0		0	902		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.03	0.67		0.14	0.34		0.07	0.41		0.14	0.47	

Intersection Summary			
Area Type:	Other		
Cycle Length: 170			
Actuated Cycle Length: 170			
Offset: 50 (29%), Referenced to phase 4:SBT and 8:NBTL, Start of 1st Green			
Natural Cycle: 160			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.67			
Intersection Signal Delay: 25.0		Intersection LOS: C	
Intersection Capacity Utilization 66.6%		ICU Level of Service C	
Analysis Period (min) 15			

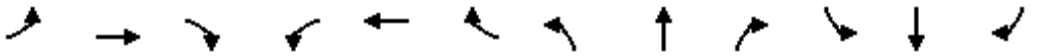
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: IL 83 & US 14/ Prospect Ave./US 14



Lane Group	Ø3	Ø8	Ø11	Ø12
v/c Ratio				
Control Delay				
Queue Delay				
Total Delay				
LOS				
Approach Delay				
Approach LOS				
Queue Length 50th (ft)				
Queue Length 95th (ft)				
Internal Link Dist (ft)				
Turn Bay Length (ft)				
Base Capacity (vph)				
Starvation Cap Reductn				
Spillback Cap Reductn				
Storage Cap Reductn				
Reduced v/c Ratio				

Intersection Summary



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	45	60	5	15	40	25	5	495	5	54	475	25
Future Volume (vph)	45	60	5	15	40	25	5	495	5	54	475	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	185		0	60		70	70		0	25		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor	0.81	1.00		1.00		0.79	0.90	1.00		1.00	1.00	
Frt		0.989				0.850		0.999			0.993	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3497	0	1770	1863	1583	1770	3535	0	1770	3499	0
Flt Permitted	0.950			0.710			0.457			0.950		
Satd. Flow (perm)	1426	3497	0	1318	1863	1245	770	3535	0	1761	3499	0
Right Turn on Red			Yes			No			Yes			Yes
Satd. Flow (RTOR)		5									6	
Link Speed (mph)		25			25			30			30	
Link Distance (ft)		2538			450			457			282	
Travel Time (s)		69.2			12.3			10.4			6.4	
Confl. Peds. (#/hr)	117		2	2		117	72		6	6		72
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	47	68	0	16	42	26	5	526	0	57	526	0
Turn Type	Prot	NA		Perm	NA	Perm	Perm	NA		custom	NA	
Protected Phases	3	3 12			12			8		5 6 7 11	1 2 4 11	
Permitted Phases				12		12	8			5 6 7 11		
Detector Phase	3	3 12		12	12	12	8	8		5 6 7 11	1 2 4 11	
Switch Phase												
Minimum Initial (s)	3.0			3.0	3.0	3.0	15.0	15.0				
Minimum Split (s)	9.0			42.0	42.0	42.0	37.5	37.5				
Total Split (s)	13.0			42.0	42.0	42.0	36.0	36.0				
Total Split (%)	7.6%			24.7%	24.7%	24.7%	21.2%	21.2%				
Yellow Time (s)	4.5			4.5	4.5	4.5	4.5	4.5				
All-Red Time (s)	1.5			8.5	8.5	8.5	2.0	2.0				
Lost Time Adjust (s)	-2.0			-2.0	-2.0	-2.0	-2.5	-2.5				
Total Lost Time (s)	4.0			11.0	11.0	11.0	4.0	4.0				
Lead/Lag	Lag						Lag	Lag				
Lead-Lag Optimize?												
Recall Mode	None			None	None	None	C-Max	C-Max				
Act Effct Green (s)	8.8	34.3		14.4	14.4	14.4	39.6	39.6		82.2	127.7	
Actuated g/C Ratio	0.05	0.20		0.08	0.08	0.08	0.23	0.23		0.48	0.75	

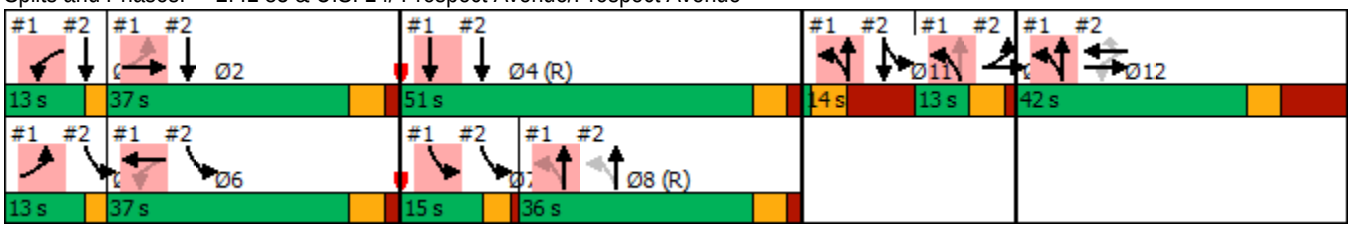
Lane Group	Ø1	Ø2	Ø4	Ø5	Ø6	Ø7	Ø11
Lane Configurations							
Traffic Volume (vph)							
Future Volume (vph)							
Ideal Flow (vphpl)							
Lane Width (ft)							
Grade (%)							
Storage Length (ft)							
Storage Lanes							
Taper Length (ft)							
Lane Util. Factor							
Ped Bike Factor							
Frt							
Flt Protected							
Satd. Flow (prot)							
Flt Permitted							
Satd. Flow (perm)							
Right Turn on Red							
Satd. Flow (RTOR)							
Link Speed (mph)							
Link Distance (ft)							
Travel Time (s)							
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor							
Growth Factor							
Heavy Vehicles (%)							
Bus Blockages (#/hr)							
Parking (#/hr)							
Mid-Block Traffic (%)							
Shared Lane Traffic (%)							
Lane Group Flow (vph)							
Turn Type							
Protected Phases	1	2	4	5	6	7	11
Permitted Phases							
Detector Phase							
Switch Phase							
Minimum Initial (s)	3.0	15.0	15.0	3.0	15.0	3.0	1.0
Minimum Split (s)	6.0	41.5	40.5	6.0	34.5	7.5	14.0
Total Split (s)	13.0	37.0	51.0	13.0	37.0	15.0	14.0
Total Split (%)	8%	22%	30%	8%	22%	9%	8%
Yellow Time (s)	3.0	4.5	4.5	3.0	4.5	3.5	4.5
All-Red Time (s)	0.0	2.0	2.0	0.0	2.0	1.0	8.5
Lost Time Adjust (s)							
Total Lost Time (s)							
Lead/Lag	Lead	Lag		Lead	Lag	Lead	Lead
Lead-Lag Optimize?							
Recall Mode	None	None	C-Max	None	None	None	None
Act Effct Green (s)							
Actuated g/C Ratio							

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.52	0.10		0.14	0.27	0.25	0.03	0.64		0.07	0.20	
Control Delay	85.2	39.5		75.4	77.7	79.3	55.6	64.5		25.0	0.2	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.2	
Total Delay	85.2	39.5		75.4	77.7	79.3	55.6	64.5		25.0	0.4	
LOS	F	D		E	E	E	E	E		C	A	
Approach Delay		58.2			77.8			64.5			2.8	
Approach LOS		E			E			E			A	
Queue Length 50th (ft)	51	31		17	45	28	5	290		52	0	
Queue Length 95th (ft)	m92	m48		43	86	61	19	366		m85	0	
Internal Link Dist (ft)		2458			370			377			202	
Turn Bay Length (ft)	185			60		70	70			25		
Base Capacity (vph)	93	1036		240	339	227	179	822		880	2614	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	1267	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.51	0.07		0.07	0.12	0.11	0.03	0.64		0.06	0.39	

Intersection Summary			
Area Type:	Other		
Cycle Length: 170			
Actuated Cycle Length: 170			
Offset: 50 (29%), Referenced to phase 4:SBT and 8:NBTL, Start of 1st Green			
Natural Cycle: 160			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.67			
Intersection Signal Delay: 37.4		Intersection LOS: D	
Intersection Capacity Utilization 68.8%		ICU Level of Service C	
Analysis Period (min) 15			

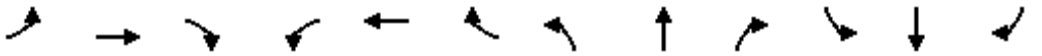
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: IL 83 & U.S. 14/ Prospect Avenue/Prospect Avenue



Lane Group	Ø1	Ø2	Ø4	Ø5	Ø6	Ø7	Ø11
v/c Ratio							
Control Delay							
Queue Delay							
Total Delay							
LOS							
Approach Delay							
Approach LOS							
Queue Length 50th (ft)							
Queue Length 95th (ft)							
Internal Link Dist (ft)							
Turn Bay Length (ft)							
Base Capacity (vph)							
Starvation Cap Reductn							
Spillback Cap Reductn							
Storage Cap Reductn							
Reduced v/c Ratio							

Intersection Summary



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	410	60	50	570	70	60	529	30	25	506	5
Future Volume (vph)	10	410	60	50	570	70	60	529	30	25	506	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	125		0	115		0	65		0	60		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor		1.00		1.00	1.00		0.98	1.00		1.00	1.00	
Frt		0.981			0.984			0.992			0.999	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3463	0	1770	3477	0	1770	3507	0	1770	3534	0
Flt Permitted	0.207			0.207			0.366			0.950		
Satd. Flow (perm)	386	3463	0	384	3477	0	670	3507	0	1763	3534	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			30			30			30	
Link Distance (ft)		2109			466			282			1059	
Travel Time (s)		47.9			10.6			6.4			24.1	
Confl. Peds. (#/hr)	2		6	6		2	25		5	5		25
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	11	495	0	53	674	0	63	589	0	26	538	0
Turn Type	pm+pt	NA		pm+pt	NA		custom	NA		Prot	NA	
Protected Phases	5	2		1	6		3 11 12	8 11 12		7	4	
Permitted Phases	2			6			8	3				
Detector Phase	5	2		1	6		3 11 12	8 11 12		7	4	
Switch Phase												
Minimum Initial (s)	3.0	15.0		3.0	15.0					3.0	15.0	
Minimum Split (s)	6.0	41.5		6.0	34.5					7.5	40.5	
Total Split (s)	13.0	37.0		13.0	37.0					16.0	51.0	
Total Split (%)	7.6%	21.8%		7.6%	21.8%					9.4%	30.0%	
Yellow Time (s)	3.0	4.5		3.0	4.5					3.5	4.5	
All-Red Time (s)	0.0	2.0		0.0	2.0					1.0	2.0	
Lost Time Adjust (s)	1.0	-2.5		1.0	-2.5					-0.5	-2.5	
Total Lost Time (s)	4.0	4.0		4.0	4.0					4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag					Lead		
Lead-Lag Optimize?												
Recall Mode	None	None		None	None					None	C-Max	
Act Effct Green (s)	44.5	38.4		56.4	48.0		91.1	95.1		8.5	49.9	
Actuated g/C Ratio	0.26	0.23		0.33	0.28		0.54	0.56		0.05	0.29	

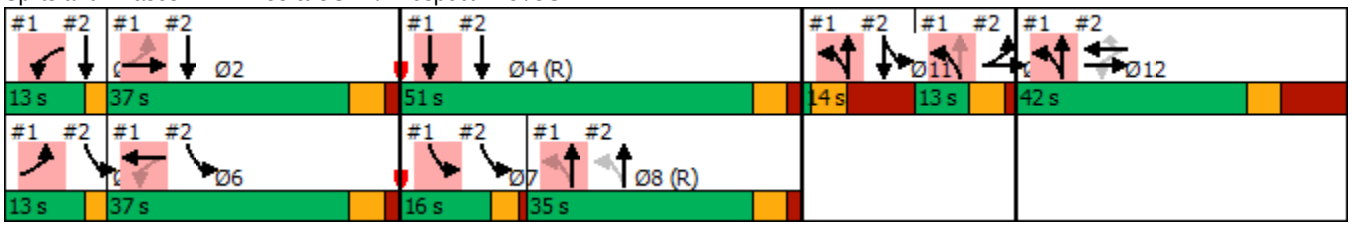
Lane Group	Ø3	Ø8	Ø11	Ø12
Lane Configurations				
Traffic Volume (vph)				
Future Volume (vph)				
Ideal Flow (vphpl)				
Lane Width (ft)				
Grade (%)				
Storage Length (ft)				
Storage Lanes				
Taper Length (ft)				
Lane Util. Factor				
Ped Bike Factor				
Frt				
Flt Protected				
Satd. Flow (prot)				
Flt Permitted				
Satd. Flow (perm)				
Right Turn on Red				
Satd. Flow (RTOR)				
Link Speed (mph)				
Link Distance (ft)				
Travel Time (s)				
Confl. Peds. (#/hr)				
Confl. Bikes (#/hr)				
Peak Hour Factor				
Growth Factor				
Heavy Vehicles (%)				
Bus Blockages (#/hr)				
Parking (#/hr)				
Mid-Block Traffic (%)				
Shared Lane Traffic (%)				
Lane Group Flow (vph)				
Turn Type				
Protected Phases	3	8	11	12
Permitted Phases				
Detector Phase				
Switch Phase				
Minimum Initial (s)	3.0	15.0	1.0	3.0
Minimum Split (s)	9.0	37.5	14.0	42.0
Total Split (s)	13.0	35.0	14.0	42.0
Total Split (%)	8%	21%	8%	25%
Yellow Time (s)	4.5	4.5	4.5	4.5
All-Red Time (s)	1.5	2.0	8.5	8.5
Lost Time Adjust (s)				
Total Lost Time (s)				
Lead/Lag	Lag	Lag	Lead	
Lead-Lag Optimize?				
Recall Mode	None	C-Max	None	None
Act Effct Green (s)				
Actuated g/C Ratio				

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.07	0.63		0.22	0.69		0.09	0.30		0.30	0.52	
Control Delay	14.7	25.8		37.9	52.6		0.4	0.3		76.8	50.6	
Queue Delay	0.0	0.0		0.0	1.0		0.0	0.3		0.0	0.0	
Total Delay	14.7	25.8		37.9	53.6		0.4	0.6		76.8	50.6	
LOS	B	C		D	D		A	A		E	D	
Approach Delay		25.5			52.5			0.6			51.8	
Approach LOS		C			D			A			D	
Queue Length 50th (ft)	3	293		39	280		0	0		23	312	
Queue Length 95th (ft)	m2	m361		75	384		m0	0		m33	377	
Internal Link Dist (ft)		2029			386			202			979	
Turn Bay Length (ft)	125			115			65			60		
Base Capacity (vph)	180	782		241	981		823	2233		124	1038	
Starvation Cap Reductn	0	0		0	119		0	976		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.06	0.63		0.22	0.78		0.08	0.47		0.21	0.52	

Intersection Summary			
Area Type:	Other		
Cycle Length: 170			
Actuated Cycle Length: 170			
Offset: 63 (37%), Referenced to phase 4:SBT and 8:NBTL, Start of 1st Green			
Natural Cycle: 160			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.69			
Intersection Signal Delay: 33.0		Intersection LOS: C	
Intersection Capacity Utilization 66.7%		ICU Level of Service C	
Analysis Period (min) 15			

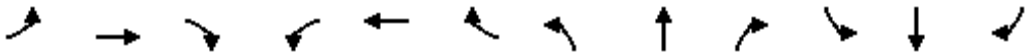
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: IL 83 & US 14/ Prospect Ave./US 14



Lane Group	Ø3	Ø8	Ø11	Ø12
v/c Ratio				
Control Delay				
Queue Delay				
Total Delay				
LOS				
Approach Delay				
Approach LOS				
Queue Length 50th (ft)				
Queue Length 95th (ft)				
Internal Link Dist (ft)				
Turn Bay Length (ft)				
Base Capacity (vph)				
Starvation Cap Reductn				
Spillback Cap Reductn				
Storage Cap Reductn				
Reduced v/c Ratio				

Intersection Summary



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	45	50	5	20	70	44	10	530	5	56	510	50
Future Volume (vph)	45	50	5	20	70	44	10	530	5	56	510	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	185		0	60		70	70		0	25		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor	0.93	1.00		0.99		0.91	0.90	1.00		1.00	0.99	
Frt		0.987				0.850		0.999			0.987	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	3488	0	1770	1863	1583	1770	3535	0	1770	3462	0
Flt Permitted	0.950			0.717			0.429			0.950		
Satd. Flow (perm)	1649	3488	0	1327	1863	1447	720	3535	0	1763	3462	0
Right Turn on Red			Yes			No			Yes			Yes
Satd. Flow (RTOR)		5									13	
Link Speed (mph)		25			25			30			30	
Link Distance (ft)		2538			450			457			282	
Travel Time (s)		69.2			12.3			10.4			6.4	
Confl. Peds. (#/hr)	43		4	4		43	82		5	5		82
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	47	58	0	21	74	46	11	563	0	59	590	0
Turn Type	Prot	NA		Perm	NA	Perm	Perm	NA		custom	NA	
Protected Phases	3	3 12			12			8		5 6 7 11	1 2 4 11	
Permitted Phases				12		12	8			5 6 7 11		
Detector Phase	3	3 12		12	12	12	8	8		5 6 7 11	1 2 4 11	
Switch Phase												
Minimum Initial (s)	3.0			3.0	3.0	3.0	15.0	15.0				
Minimum Split (s)	9.0			42.0	42.0	42.0	37.5	37.5				
Total Split (s)	13.0			42.0	42.0	42.0	35.0	35.0				
Total Split (%)	7.6%			24.7%	24.7%	24.7%	20.6%	20.6%				
Yellow Time (s)	4.5			4.5	4.5	4.5	4.5	4.5				
All-Red Time (s)	1.5			8.5	8.5	8.5	2.0	2.0				
Lost Time Adjust (s)	-2.0			-2.0	-2.0	-2.0	-2.5	-2.5				
Total Lost Time (s)	4.0			11.0	11.0	11.0	4.0	4.0				
Lead/Lag	Lag						Lag	Lag				
Lead-Lag Optimize?												
Recall Mode	None			None	None	None	C-Max	C-Max				
Act Effct Green (s)	8.8	37.7		17.9	17.9	17.9	39.4	39.4		78.9	124.3	
Actuated g/C Ratio	0.05	0.22		0.11	0.11	0.11	0.23	0.23		0.46	0.73	

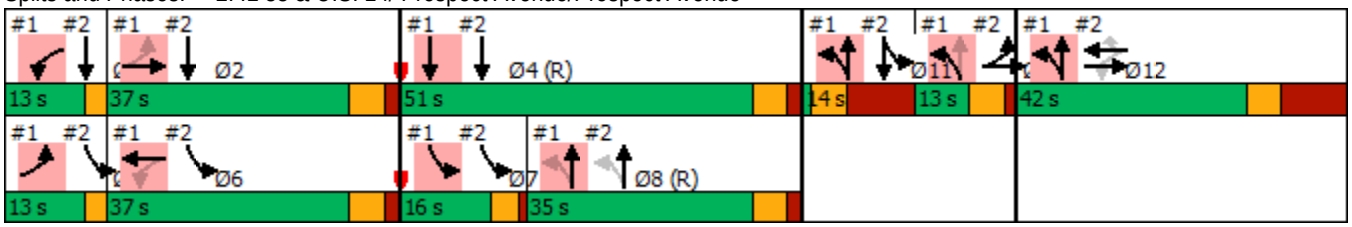
Lane Group	Ø1	Ø2	Ø4	Ø5	Ø6	Ø7	Ø11
Lane Configurations							
Traffic Volume (vph)							
Future Volume (vph)							
Ideal Flow (vphpl)							
Lane Width (ft)							
Grade (%)							
Storage Length (ft)							
Storage Lanes							
Taper Length (ft)							
Lane Util. Factor							
Ped Bike Factor							
Frt							
Flt Protected							
Satd. Flow (prot)							
Flt Permitted							
Satd. Flow (perm)							
Right Turn on Red							
Satd. Flow (RTOR)							
Link Speed (mph)							
Link Distance (ft)							
Travel Time (s)							
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Peak Hour Factor							
Growth Factor							
Heavy Vehicles (%)							
Bus Blockages (#/hr)							
Parking (#/hr)							
Mid-Block Traffic (%)							
Shared Lane Traffic (%)							
Lane Group Flow (vph)							
Turn Type							
Protected Phases	1	2	4	5	6	7	11
Permitted Phases							
Detector Phase							
Switch Phase							
Minimum Initial (s)	3.0	15.0	15.0	3.0	15.0	3.0	1.0
Minimum Split (s)	6.0	41.5	40.5	6.0	34.5	7.5	14.0
Total Split (s)	13.0	37.0	51.0	13.0	37.0	16.0	14.0
Total Split (%)	8%	22%	30%	8%	22%	9%	8%
Yellow Time (s)	3.0	4.5	4.5	3.0	4.5	3.5	4.5
All-Red Time (s)	0.0	2.0	2.0	0.0	2.0	1.0	8.5
Lost Time Adjust (s)							
Total Lost Time (s)							
Lead/Lag	Lead	Lag		Lead	Lag	Lead	Lead
Lead-Lag Optimize?							
Recall Mode	None	None	C-Max	None	None	None	None
Act Effct Green (s)							
Actuated g/C Ratio							

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.52	0.07		0.15	0.38	0.30	0.07	0.69		0.07	0.23	
Control Delay	86.9	40.6		72.7	77.9	77.1	57.8	66.3		24.0	0.2	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.2	
Total Delay	86.9	40.6		72.7	77.9	77.1	57.8	66.3		24.0	0.4	
LOS	F	D		E	E	E	E	E		C	A	
Approach Delay		61.3			76.9			66.1			2.5	
Approach LOS		E			E			E			A	
Queue Length 50th (ft)	52	26		22	80	50	10	316		52	0	
Queue Length 95th (ft)	m90	m42		51	133	91	31	#404		m86	0	
Internal Link Dist (ft)		2458			370			377			202	
Turn Bay Length (ft)	185			60		70	70			25		
Base Capacity (vph)	93	1033		241	339	263	166	820		845	2534	
Starvation Cap Reductn	0	0		0	0	0	0	0		0	1122	
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	
Reduced v/c Ratio	0.51	0.06		0.09	0.22	0.17	0.07	0.69		0.07	0.42	

Intersection Summary

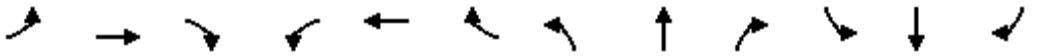
Area Type: Other
Cycle Length: 170
Actuated Cycle Length: 170
Offset: 63 (37%), Referenced to phase 4:SBT and 8:NBTL, Start of 1st Green
Natural Cycle: 160
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.69
Intersection Signal Delay: 38.7 Intersection LOS: D
Intersection Capacity Utilization 65.3% ICU Level of Service C
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: IL 83 & U.S. 14/ Prospect Avenue/Prospect Avenue



Lane Group	Ø1	Ø2	Ø4	Ø5	Ø6	Ø7	Ø11
v/c Ratio							
Control Delay							
Queue Delay							
Total Delay							
LOS							
Approach Delay							
Approach LOS							
Queue Length 50th (ft)							
Queue Length 95th (ft)							
Internal Link Dist (ft)							
Turn Bay Length (ft)							
Base Capacity (vph)							
Starvation Cap Reductn							
Spillback Cap Reductn							
Storage Cap Reductn							
Reduced v/c Ratio							

Intersection Summary



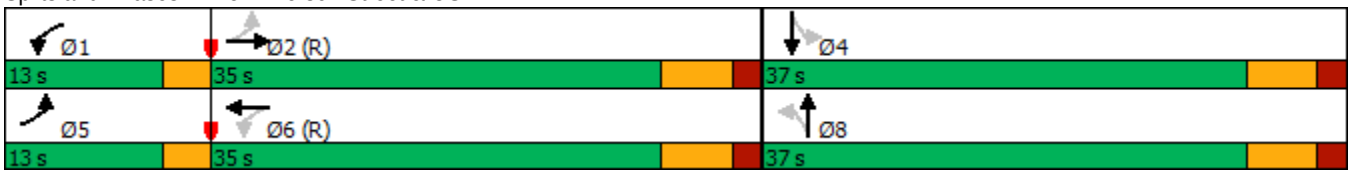
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	510	25	40	330	30	30	130	55	30	105	10
Future Volume (vph)	30	510	25	40	330	30	30	130	55	30	105	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	110		0	105		0	50		0	95		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.98	1.00		0.98	1.00		0.97	0.99		0.98	1.00	
Frt		0.993			0.987			0.955			0.986	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	3505	0	1805	3485	0	1805	1792	0	1805	1865	0
Flt Permitted	0.527			0.417			0.645			0.486		
Satd. Flow (perm)	985	3505	0	774	3485	0	1187	1792	0	902	1865	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		6			13			29			7	
Link Speed (mph)		30			30			20			20	
Link Distance (ft)		466			458			244			846	
Travel Time (s)		10.6			10.4			8.3			28.8	
Confl. Peds. (#/hr)	17		31	31		17	46		34	34		46
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	2%	0%	0%	2%	0%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	32	563	0	42	379	0	32	195	0	32	122	0
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	5	2		1	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	3.0	15.0		3.0	15.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	6.0	28.5		6.0	31.5		34.5	34.5		36.5	36.5	
Total Split (s)	13.0	35.0		13.0	35.0		37.0	37.0		37.0	37.0	
Total Split (%)	15.3%	41.2%		15.3%	41.2%		43.5%	43.5%		43.5%	43.5%	
Yellow Time (s)	3.0	4.5		3.0	4.5		4.5	4.5		4.5	4.5	
All-Red Time (s)	0.0	2.0		0.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	1.0	-2.5		1.0	-2.5		-2.5	-2.5		-2.5	-2.5	
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?												
Recall Mode	None	C-Max		None	C-Max		None	None		None	None	
Act Effct Green (s)	56.6	53.4		56.9	53.5		17.8	17.8		17.8	17.8	
Actuated g/C Ratio	0.67	0.63		0.67	0.63		0.21	0.21		0.21	0.21	

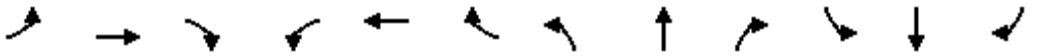
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.05	0.26		0.07	0.17		0.13	0.49		0.17	0.31	
Control Delay	1.0	1.5		5.5	8.0		26.4	28.3		27.7	27.5	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	1.0	1.5		5.5	8.0		26.4	28.3		27.7	27.5	
LOS	A	A		A	A		C	C		C	C	
Approach Delay		1.5			7.8			28.1			27.5	
Approach LOS		A			A			C			C	
Queue Length 50th (ft)	1	18		6	42		14	78		14	52	
Queue Length 95th (ft)	m2	27		19	79		35	128		35	90	
Internal Link Dist (ft)		386			378			164			766	
Turn Bay Length (ft)	110			105			50			95		
Base Capacity (vph)	768	2204		645	2199		460	713		350	728	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.04	0.26		0.07	0.17		0.07	0.27		0.09	0.17	

Intersection Summary			
Area Type:	Other		
Cycle Length: 85			
Actuated Cycle Length: 85			
Offset: 27 (32%), Referenced to phase 2:EBTL and 6:WBTL, Start of 1st Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.49			
Intersection Signal Delay: 10.6		Intersection LOS: B	
Intersection Capacity Utilization 59.2%		ICU Level of Service B	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 25: Emerson Street & US 14





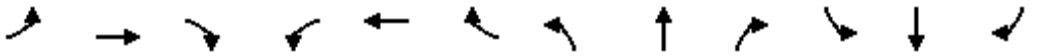
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	410	25	105	640	40	40	145	30	20	155	15
Future Volume (vph)	30	410	25	105	640	40	40	145	30	20	155	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	110		0	105		0	50		0	95		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.99	1.00		0.99	1.00		0.97	0.99		0.97	0.99	
Frt		0.991			0.991			0.974			0.987	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	3503	0	1805	3501	0	1805	1836	0	1805	1866	0
Flt Permitted	0.361			0.450			0.522			0.509		
Satd. Flow (perm)	679	3503	0	846	3501	0	957	1836	0	942	1866	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		9			9			13			6	
Link Speed (mph)		30			30			20			20	
Link Distance (ft)		466			458			244			846	
Travel Time (s)		10.6			10.4			8.3			28.8	
Confl. Peds. (#/hr)	19		11	11		19	55		39	39		55
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	2%	0%	0%	2%	0%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	32	458	0	111	716	0	42	185	0	21	179	0
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	5	2		1	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	3.0	15.0		3.0	15.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	6.0	28.5		6.0	31.5		34.5	34.5		36.5	36.5	
Total Split (s)	13.0	41.0		13.0	41.0		31.0	31.0		31.0	31.0	
Total Split (%)	15.3%	48.2%		15.3%	48.2%		36.5%	36.5%		36.5%	36.5%	
Yellow Time (s)	3.0	4.5		3.0	4.5		4.5	4.5		4.5	4.5	
All-Red Time (s)	0.0	2.0		0.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	1.0	-2.5		1.0	-2.5		-2.5	-2.5		-2.5	-2.5	
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?												
Recall Mode	None	C-Max		None	C-Max		None	None		None	None	
Act Effct Green (s)	54.6	50.5		57.7	53.4		17.9	17.9		17.9	17.9	
Actuated g/C Ratio	0.64	0.59		0.68	0.63		0.21	0.21		0.21	0.21	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.06	0.22		0.17	0.32		0.21	0.47		0.11	0.45	
Control Delay	1.6	2.1		5.8	9.2		28.4	30.2		26.1	30.9	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	1.6	2.1		5.8	9.2		28.4	30.2		26.1	30.9	
LOS	A	A		A	A		C	C		C	C	
Approach Delay		2.1			8.8			29.8			30.4	
Approach LOS		A			A			C			C	
Queue Length 50th (ft)	2	15		16	92		19	81		9	81	
Queue Length 95th (ft)	m4	23		42	158		42	129		26	127	
Internal Link Dist (ft)		386			378			164			766	
Turn Bay Length (ft)	110			105			50			95		
Base Capacity (vph)	579	2083		686	2204		303	592		299	596	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	30		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.06	0.22		0.16	0.33		0.14	0.31		0.07	0.30	

Intersection Summary			
Area Type:	Other		
Cycle Length: 85			
Actuated Cycle Length: 85			
Offset: 33 (39%), Referenced to phase 2:EBTL and 6:WBTL, Start of 1st Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.47			
Intersection Signal Delay: 12.1		Intersection LOS: B	
Intersection Capacity Utilization 66.7%		ICU Level of Service C	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 25: Emerson Street & US 14



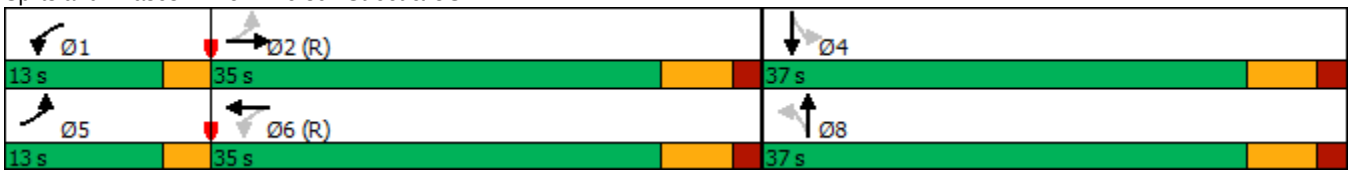
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	510	25	40	330	30	30	145	55	30	105	10
Future Volume (vph)	30	510	25	40	330	30	30	145	55	30	105	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	110		0	105		0	50		0	95		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.98	1.00		0.98	1.00		0.97	0.99		0.98	1.00	
Frt		0.993			0.987			0.959			0.986	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	3505	0	1805	3485	0	1805	1801	0	1805	1865	0
Flt Permitted	0.527			0.414			0.650			0.469		
Satd. Flow (perm)	985	3505	0	768	3485	0	1196	1801	0	872	1865	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		6			13			26			7	
Link Speed (mph)		30			30			20			20	
Link Distance (ft)		466			458			244			846	
Travel Time (s)		10.6			10.4			8.3			28.8	
Confl. Peds. (#/hr)	17		31	31		17	46		34	34		46
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	2%	0%	0%	2%	0%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	32	563	0	42	379	0	32	211	0	32	122	0
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	5	2		1	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	3.0	15.0		3.0	15.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	6.0	28.5		6.0	31.5		34.5	34.5		36.5	36.5	
Total Split (s)	13.0	35.0		13.0	35.0		37.0	37.0		37.0	37.0	
Total Split (%)	15.3%	41.2%		15.3%	41.2%		43.5%	43.5%		43.5%	43.5%	
Yellow Time (s)	3.0	4.5		3.0	4.5		4.5	4.5		4.5	4.5	
All-Red Time (s)	0.0	2.0		0.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	1.0	-2.5		1.0	-2.5		-2.5	-2.5		-2.5	-2.5	
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?												
Recall Mode	None	C-Max		None	C-Max		None	None		None	None	
Act Effct Green (s)	55.5	52.2		55.7	52.4		19.0	19.0		19.0	19.0	
Actuated g/C Ratio	0.65	0.61		0.66	0.62		0.22	0.22		0.22	0.22	

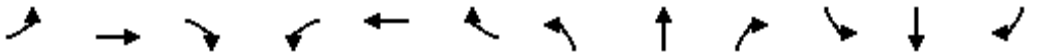
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.05	0.26		0.07	0.18		0.12	0.50		0.16	0.29	
Control Delay	1.1	1.7		6.0	8.7		25.0	28.3		26.4	26.1	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	1.1	1.7		6.0	8.7		25.0	28.3		26.4	26.1	
LOS	A	A		A	A		C	C		C	C	
Approach Delay		1.7			8.4			27.9			26.2	
Approach LOS		A			A			C			C	
Queue Length 50th (ft)	1	20		6	44		14	87		14	52	
Queue Length 95th (ft)	m3	30		20	83		33	137		34	87	
Internal Link Dist (ft)		386			378			164			766	
Turn Bay Length (ft)	110			105			50			95		
Base Capacity (vph)	754	2155		631	2151		464	715		338	728	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.04	0.26		0.07	0.18		0.07	0.30		0.09	0.17	

Intersection Summary			
Area Type:	Other		
Cycle Length: 85			
Actuated Cycle Length: 85			
Offset: 27 (32%), Referenced to phase 2:EBTL and 6:WBTL, Start of 1st Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.50			
Intersection Signal Delay: 10.9		Intersection LOS: B	
Intersection Capacity Utilization 59.2%		ICU Level of Service B	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 25: Emerson Street & US 14





Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	410	25	105	640	40	40	156	30	20	171	15
Future Volume (vph)	30	410	25	105	640	40	40	156	30	20	171	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	110		0	105		0	50		0	95		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.99	1.00		0.99	1.00		0.97	0.99		0.97	1.00	
Frt		0.991			0.991			0.976			0.988	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	3503	0	1805	3501	0	1805	1840	0	1805	1868	0
Flt Permitted	0.359			0.448			0.495			0.495		
Satd. Flow (perm)	675	3503	0	842	3501	0	908	1840	0	916	1868	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		9			9			12			6	
Link Speed (mph)		30			30			20			20	
Link Distance (ft)		466			458			244			846	
Travel Time (s)		10.6			10.4			8.3			28.8	
Confl. Peds. (#/hr)	19		11	11		19	55		39	39		55
Confl. Bikes (#/hr)												
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	0%	2%	0%	0%	2%	0%	0%	0%	0%	0%	0%	0%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	32	458	0	111	716	0	42	196	0	21	196	0
Turn Type	pm+pt	NA		pm+pt	NA		Perm	NA		Perm	NA	
Protected Phases	5	2		1	6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	5	2		1	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	3.0	15.0		3.0	15.0		8.0	8.0		8.0	8.0	
Minimum Split (s)	6.0	28.5		6.0	31.5		34.5	34.5		36.5	36.5	
Total Split (s)	13.0	41.0		13.0	41.0		31.0	31.0		31.0	31.0	
Total Split (%)	15.3%	48.2%		15.3%	48.2%		36.5%	36.5%		36.5%	36.5%	
Yellow Time (s)	3.0	4.5		3.0	4.5		4.5	4.5		4.5	4.5	
All-Red Time (s)	0.0	2.0		0.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	1.0	-2.5		1.0	-2.5		-2.5	-2.5		-2.5	-2.5	
Total Lost Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag							
Lead-Lag Optimize?												
Recall Mode	None	C-Max		None	C-Max		None	None		None	None	
Act Effct Green (s)	53.8	49.7		57.0	52.7		18.7	18.7		18.7	18.7	
Actuated g/C Ratio	0.63	0.58		0.67	0.62		0.22	0.22		0.22	0.22	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.06	0.22		0.17	0.33		0.21	0.47		0.10	0.47	
Control Delay	1.7	2.2		6.1	9.7		27.9	30.0		25.4	30.9	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	1.7	2.2		6.1	9.7		27.9	30.0		25.4	30.9	
LOS	A	A		A	A		C	C		C	C	
Approach Delay		2.2			9.2			29.6			30.3	
Approach LOS		A			A			C			C	
Queue Length 50th (ft)	2	15		17	94		19	86		9	89	
Queue Length 95th (ft)	m4	23		43	162		42	135		25	137	
Internal Link Dist (ft)		386			378			164			766	
Turn Bay Length (ft)	110			105			50			95		
Base Capacity (vph)	571	2050		677	2173		288	592		290	597	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	48		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.06	0.22		0.16	0.34		0.15	0.33		0.07	0.33	

Intersection Summary			
Area Type:	Other		
Cycle Length: 85			
Actuated Cycle Length: 85			
Offset: 33 (39%), Referenced to phase 2:EBTL and 6:WBTL, Start of 1st Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.47			
Intersection Signal Delay: 12.6		Intersection LOS: B	
Intersection Capacity Utilization 66.8%		ICU Level of Service C	
Analysis Period (min) 15			

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 25: Emerson Street & US 14

Intersection	
Int Delay, s/veh	6.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	30	65	25	5	45	10	10	115	10	80	75	15
Future Vol, veh/h	30	65	25	5	45	10	10	115	10	80	75	15
Conflicting Peds, #/hr	112	0	5	5	0	112	13	0	30	30	0	13
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	50	-	-	-	65	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	0	0	0	0	0	0
Mvmt Flow	32	68	26	5	47	11	11	121	11	84	79	16

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	558	452	105	486	455	269	108	0	0	162	0	0
Stage 1	268	268	-	179	179	-	-	-	-	-	-	-
Stage 2	290	184	-	307	276	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	440	503	949	492	501	770	1495	-	-	1429	-	-
Stage 1	738	687	-	823	751	-	-	-	-	-	-	-
Stage 2	718	747	-	703	682	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	339	452	935	390	450	681	1479	-	-	1393	-	-
Mov Cap-2 Maneuver	339	452	-	390	450	-	-	-	-	-	-	-
Stage 1	724	639	-	796	726	-	-	-	-	-	-	-
Stage 2	594	722	-	571	634	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	15	13.6	0.6	3.6
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1479	-	-	409	935	443	681	1393	-	-
HCM Lane V/C Ratio	0.007	-	-	0.244	0.028	0.119	0.015	0.06	-	-
HCM Control Delay (s)	7.5	0	-	16.6	9	14.2	10.4	7.8	-	-
HCM Lane LOS	A	A	-	C	A	B	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.9	0.1	0.4	0	0.2	-	-

Intersection	
Int Delay, s/veh	6.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	15	50	30	10	65	85	10	115	10	55	180	50
Future Vol, veh/h	15	50	30	10	65	85	10	115	10	55	180	50
Conflicting Peds, #/hr	43	0	8	8	0	43	32	0	69	69	0	32
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	50	-	-	-	65	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	0	0	0	0	0	0
Mvmt Flow	16	53	32	11	68	89	11	121	11	58	189	53

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	634	587	256	600	608	239	274	0	0	201	0	0
Stage 1	364	364	-	218	218	-	-	-	-	-	-	-
Stage 2	270	223	-	382	390	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	392	422	783	413	410	800	1301	-	-	1383	-	-
Stage 1	655	624	-	784	723	-	-	-	-	-	-	-
Stage 2	736	719	-	640	608	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	264	366	757	317	356	727	1266	-	-	1303	-	-
Mov Cap-2 Maneuver	264	366	-	317	356	-	-	-	-	-	-	-
Stage 1	632	580	-	732	676	-	-	-	-	-	-	-
Stage 2	554	672	-	529	565	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	15.7	14.2	0.6	1.5
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1266	-	-	336	757	350	727	1303	-	-
HCM Lane V/C Ratio	0.008	-	-	0.204	0.042	0.226	0.123	0.044	-	-
HCM Control Delay (s)	7.9	0	-	18.4	10	18.3	10.6	7.9	-	-
HCM Lane LOS	A	A	-	C	B	C	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.8	0.1	0.9	0.4	0.1	-	-

Intersection	
Int Delay, s/veh	7.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	30	64	25	5	55	25	10	115	10	80	75	15
Future Vol, veh/h	30	64	25	5	55	25	10	115	10	80	75	15
Conflicting Peds, #/hr	112	0	5	5	0	112	13	0	30	30	0	13
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	50	-	-	-	65	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	0	0	0	0	0	0
Mvmt Flow	32	67	26	5	58	26	11	121	11	84	79	16

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	571	452	105	486	455	269	108	0	0	162	0	0
Stage 1	268	268	-	179	179	-	-	-	-	-	-	-
Stage 2	303	184	-	307	276	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	432	503	949	492	501	770	1495	-	-	1429	-	-
Stage 1	738	687	-	823	751	-	-	-	-	-	-	-
Stage 2	706	747	-	703	682	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	319	452	935	390	450	681	1479	-	-	1393	-	-
Mov Cap-2 Maneuver	319	452	-	390	450	-	-	-	-	-	-	-
Stage 1	724	639	-	796	726	-	-	-	-	-	-	-
Stage 2	562	722	-	572	634	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	15.3	13.3	0.6	3.6
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1479	-	-	399	935	444	681	1393	-	-
HCM Lane V/C Ratio	0.007	-	-	0.248	0.028	0.142	0.039	0.06	-	-
HCM Control Delay (s)	7.5	0	-	17	9	14.4	10.5	7.8	-	-
HCM Lane LOS	A	A	-	C	A	B	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	1	0.1	0.5	0.1	0.2	-	-

Intersection	
Int Delay, s/veh	7.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	15	66	30	10	74	96	10	115	10	71	180	50
Future Vol, veh/h	15	66	30	10	74	96	10	115	10	71	180	50
Conflicting Peds, #/hr	43	0	8	8	0	43	32	0	69	69	0	32
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	-	-	50	-	-	-	65	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	0	0	0	0	0	0
Mvmt Flow	16	69	32	11	78	101	11	121	11	75	189	53

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	679	621	256	642	642	239	274	0	0	201	0	0
Stage 1	398	398	-	218	218	-	-	-	-	-	-	-
Stage 2	281	223	-	424	424	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	366	403	783	387	392	800	1301	-	-	1383	-	-
Stage 1	628	603	-	784	723	-	-	-	-	-	-	-
Stage 2	726	719	-	608	587	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	231	345	757	279	336	727	1266	-	-	1303	-	-
Mov Cap-2 Maneuver	231	345	-	279	336	-	-	-	-	-	-	-
Stage 1	606	553	-	732	676	-	-	-	-	-	-	-
Stage 2	528	672	-	477	538	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	17.7	15.1	0.6	1.9
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1266	-	-	316	757	328	727	1303	-	-
HCM Lane V/C Ratio	0.008	-	-	0.27	0.042	0.27	0.139	0.057	-	-
HCM Control Delay (s)	7.9	0	-	20.6	10	20	10.8	7.9	-	-
HCM Lane LOS	A	A	-	C	B	C	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	1.1	0.1	1.1	0.5	0.2	-	-