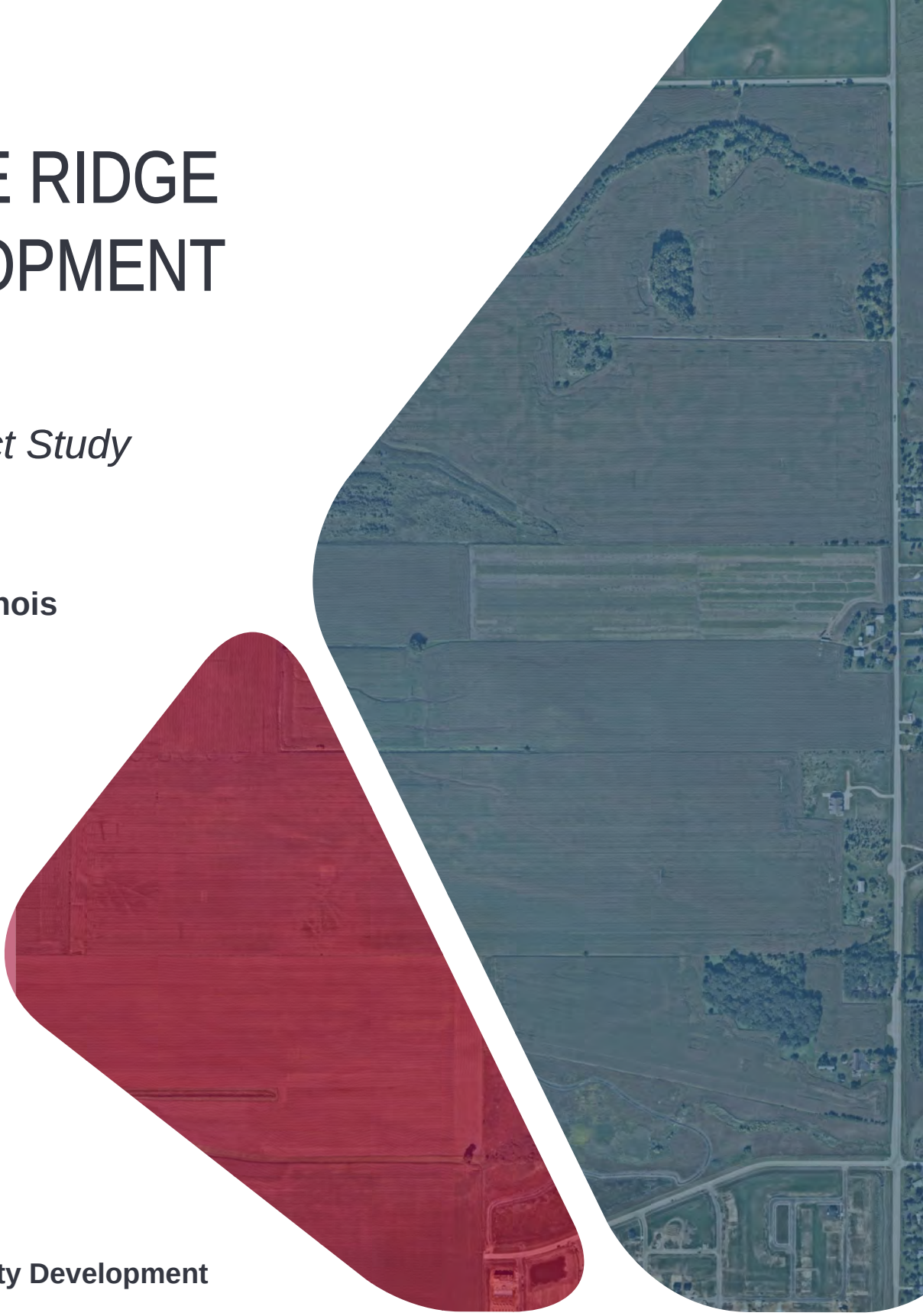
PRAIRIE RIDGE DEVELOPMENT

Traffic Impact Study

Hampshire, Illinois

February 2023



Prepared for:

Crown Community Development

Kimley»Horn

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EXECUTIVE SUMMARY

Kimley-Horn and Associates, Inc., (Kimley-Horn) was retained by Crown Community Development to perform a traffic impact study for a proposed residential development on both sides of Harmony Road (CR 36) between Big Timber Road (CR 21) and Kelley Road in Hampshire, Illinois. The development would provide 1,987 residential units, including 1,101 single-family detached units, 641 townhome units, and 245 active adult single-family units. In addition, an elementary school is contemplated for the development. Access would be provided by new intersections proposed along Melms Road, Big Timber Road, and Harmony Road. For purposes of analysis, full buildout of the development was assumed to be Year 2033.

Existing and future traffic conditions were evaluated for the unsignalized intersections of Harmony Road/Big Timber Road, Harmony Road/Melms Road, Harmony Road/Kelley Road, and Harmony Road/Allen Road. In addition, all proposed intersections were evaluated with full buildout of the proposed development. Consistent with Kane County requirements, future traffic conditions were evaluated for a ten and twenty year design horizon.

Based on the residential nature of the development, the existing 55 MPH speed limit on Harmony Road and Big Timber Road should be reviewed in coordination with Kane County Division of Transportation (KDOT). At the intersection of Harmony Road/Big Timber Road, a northbound right-turn lane and southbound left-turn lane are warranted under Future (2043) No-Build conditions. With the addition of site-generated traffic, a westbound right-turn lane is also warranted at the intersection. At the intersection of Harmony Road/Melms Road, a northbound left-turn lane and southbound right-turn lane are warranted under Future (2043) No-Build conditions. With site-generated traffic, an eastbound right-turn lane is also warranted.

Based on the results of the capacity analysis, the new intersections proposed on Melms Road, Big Timber Road, and Harmony Road are expected to operate with limited delay and queues. Each new intersection should provide a single inbound lane and separate outbound left- and right-turn lanes on the minor leg and stop control should be posted for outbound traffic with one exception. At the intersection of Harmony Road/Access E-Access F, future traffic projections meet criteria for installation of a traffic signal.

At the future intersection of Melms Road/Access A, a westbound left-turn lane should be provided to facilitate inbound turning movements. Based on requirements for Major Access outlined in the *Kane County Division of Transportation Permit Regulations and Access Control Regulations,* deceleration lanes should be provided on Big Timber Road and Harmony Road at the new intersections. For the intersection of Harmony Road/Access E-Access F, the existing northbound and southbound shoulders should be restriped to provide right-turn lanes. At this intersection, the existing median on Harmony Road should also be restriped to provide northbound and southbound left-turn lanes. At the intersection of Harmony Road/Access G, the southbound shoulder should be restriped to provide a right-turn lane and the existing median should be restriped to provide a northbound left-turn lane.

The timeline for installation of the off-site improvements should be reviewed relative to the development phasing plan. Additional details related to the improvements identified above are provided in the *Recommendations & Conclusions* section of this report.

1. INTRODUCTION

Kimley-Horn and Associates, Inc., (Kimley-Horn) was retained by Crown Community Development to conduct a traffic impact study for a proposed residential development on the east and west sides of Harmony Road, between Big Timber Road and Kelley Road, in Hampshire, Illinois. The proposed development would include a total of 1,101 single-family detached units, 641 townhome units, and 245 active adult single-family units. An elementary school is contemplated for the development. A conceptual site plan is provided in the appendix.

Access to the development would be provided by new intersections proposed along Melms Road (Access A) and Big Timber Road (Access B). In addition, four new intersections are proposed along Harmony Road. For purposes of this analysis, these intersections are referred to as Access C through Access G (Access E and Access F represent the west and east legs of the intersection of Harmony Road and the new spine roadway). An aerial view of the study location and the surrounding roadway network is presented in **Exhibit 1.**

As a part of this study, the existing network was analyzed to determine the current operations at the study intersections. Future background traffic volumes were estimated in order to evaluate the impact of area growth without the proposed development. Site trip generation characteristics were then established for the development and added to background traffic volumes in order to assess the site's impact on the area roadway network. Consistent with Kane County Division of Transportation (KDOT) requirements, future traffic conditions were evaluated for "build-plus-ten" (Year 2043) and "build-plus-twenty" (Year 2053) conditions.

This report presents and documents Kimley-Horn's data collection, summarizes the evaluation of existing and projected future traffic conditions on the surrounding roadways, and identifies recommendations to address the potential impact of site-generated traffic on the adjacent roadway network.

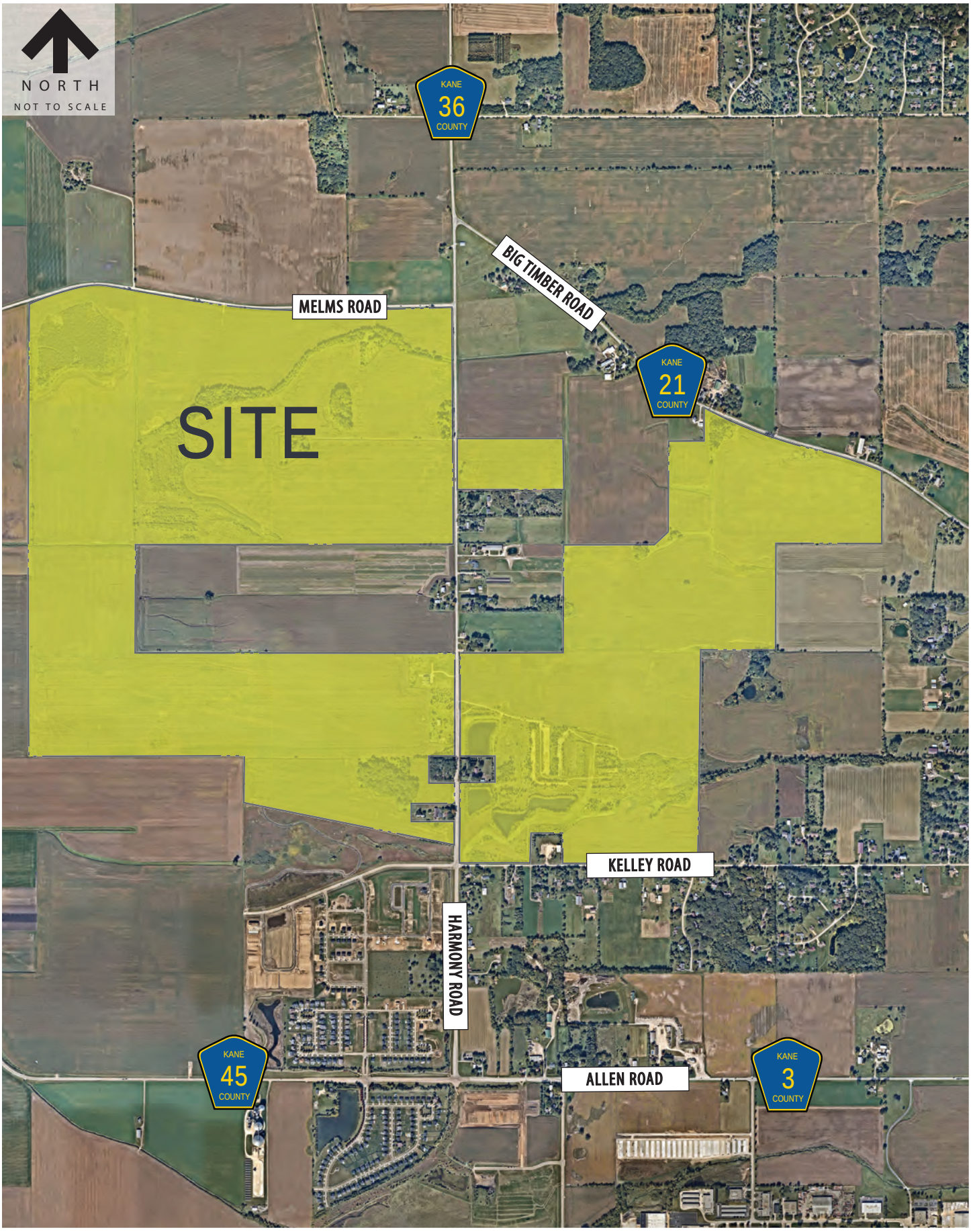

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EXHIBIT 1

SITE LOCATION MAP

2. EXISTING CONDITIONS

Kimley-Horn conducted a review of the site, including existing land uses in the surrounding area, the adjacent street system, current traffic volumes and operating conditions, lane configurations and traffic controls at nearby intersections, and other key roadway characteristics. This section of the report details information on the existing conditions.

2.1. Area Land Uses & Connectivity

Generally located on both sides of Harmony Road between Big Timber Road and Kelley Road, the subject site is currently undeveloped agricultural land. Located within the Village of Hampshire, the subject site is surrounded by residential and agriculture uses.

Interstate 90 (I-90) is located approximately one mile north of the intersection of Harmony Road/Big Timber Road. Interstate 90 provides northwest to southeast access through the northern portion of Illinois. Harmony Road provides access to I-90 via Getty Road and US 20 approximately two miles northeast of the subject site at the I-90/US 20 full interchange. Additionally, Big Timber Road provides connectivity to IL Route 47, which has a full interchange with I-90 approximately five (5) miles east of the subject site.

Metra commuter rail service is located approximately 12 miles southeast of the site along Big Timber Road in Elgin, providing connectivity between Hampshire and Chicago.

2.2. Existing Roadway Characteristics

The subject site is currently accessed via Big Timber Road, Melms Road, and Harmony Road. A summary of the existing roadway network is outlined below.

Harmony Road (CR 36) is a north-south roadway with a single lane provided in each direction. A striped median is provided on Harmony Road north of Kelley Road for approximately one-half mile. At its unsignalized T-intersection with Big Timber Road, Harmony Road operates under a free-flow condition and provides a shared through/right-turn lane on the south leg and a shared through/left-turn lane on the north leg. At its unsignalized intersection with Melms Road, Harmony Road operates under a free-flow condition and provides a shared through/left-turn lane on the south leg; a shared through/right-turn lane is provided on the north leg. At its unsignalized intersection with Kelly Road, Harmony Road operates under a free-flow condition and provides a dedicated left-turn lane, one through lane, and a dedicated right-turn lane on the north leg; a dedicated left-turn lane and a shared through/right-turn lane is provided on the south leg. At its unsignalized T-intersection with Allen Road, Harmony Road operates under minor-leg stop control and provides dedicated left-and right-turn lanes on the north leg. Harmony Road is under the jurisdiction of KDOT and has a posted speed limit of 55 miles per hour (MPH) through the study area. Harmony Road is classified as a Major Collector by the Illinois Department of Transportation (IDOT).

Big Timber Road (CR 21) is a northwest-southeast roadway through the study area. For purposes of the analysis, Big Timber Road was considered an east-west roadway. A single lane is provided in each direction. At its T-intersection with Harmony Road, Big Timber Road operates under minor-leg

stop control and provides a shared left-turn/right-turn lane on the east leg. Big Timber Road is under the jurisdiction of KDOT and has a posted speed limit of 55 MPH through the study area. Big Timber Road is classified as a Minor Collector by IDOT.

Melms Road is an east-west roadway with a single lane in each direction. At its unsignalized T-intersection with Harmony Road, Melms Road operates under minor-leg stop control and provides a shared left-turn/right-turn lane on the west leg. Melms Road is under the jurisdiction of the Village of Hampshire and is classified as a Minor Collector by IDOT. A speed limit is not posted along the facility; a 55 MPH speed limit was assumed for the analysis.

Kelley Road is an east-west roadway with a single lane in each direction. At its unsignalized intersection with Harmony Road, Kelley Road operates under minor-leg stop control and provides a single shared lane on the east and west legs. Kelley Road is under the jurisdiction of the Village of Hampshire and has a posted speed limit of 50 MPH through the study area. Kelley Road is classified as a Local Road by IDOT.

Allen Road (CR 3 east of Harmony Road; CR 45 west of Harmony Road) is an east-west roadway located south of the subject site. Through the study area, Allen Road provides a single lane in each direction. A striped median is provided along Allen Road east of its intersection with Harmony Road. At its unsignalized T-intersection with Harmony Road, Allen Road operates under a free-flow condition and provides a dedicated left-turn lane and one through lane on the west leg; one through lane and a dedicated right-turn lane is provided on the east leg. Allen Road is under the jurisdiction of KDOT and has a posted speed limit of 45 MPH through the study area. Allen Road is classified as a Major Collector east of its intersection with Harmony Road and as a Local Road west of its intersection with Harmony Road.

2.3. Traffic Count Data

Turning movement count data was collected in January 2023 at the following intersections during a typical weekday when area schools were in session.

- Harmony Road / Big Timber Road
- Harmony Road / Melms Road
- Harmony Road / Kelley Road
- Harmony Road / Allen Road

Traffic counts were conducted during the morning (7:00-9:00 AM) and evening (4:00-6:00 PM) peak periods with two exceptions. For the intersection of Harmony Road/Big Timber Road and Harmony Road/Allen Road, the turning movement counts were conducted from 6:00 AM to 6:00 PM for purposes of signal warrant analyses.

The traffic count data indicates peak traffic volumes occur within the study area from 7:00-8:00 AM and 4:00-5:00 PM. For purposes of the analysis, the existing peak hour volumes were rounded to the nearest multiple of five and balanced between intersections. The existing traffic volumes are presented in **Exhibit 2**. A summary of the count data is provided in the appendix.

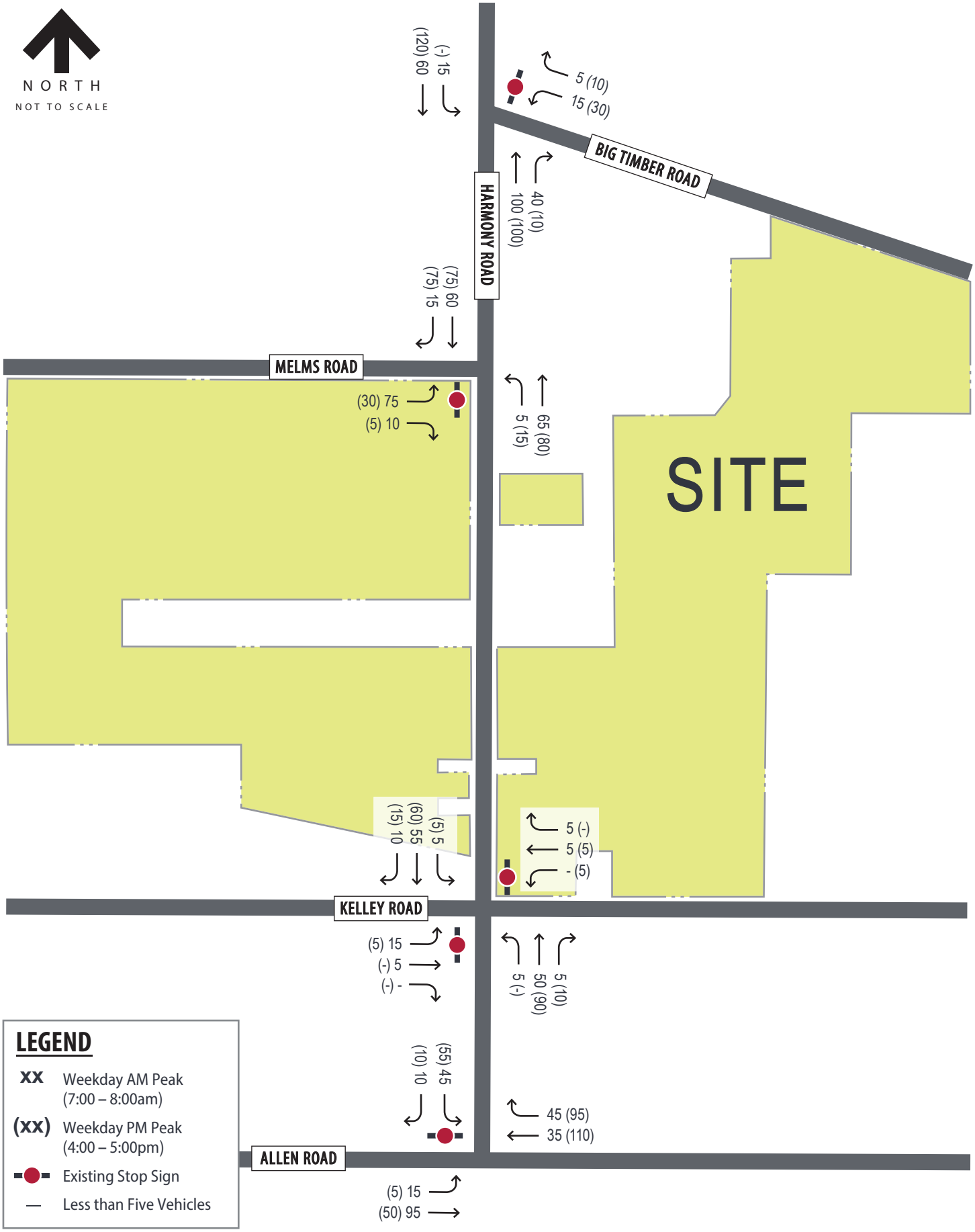

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EXHIBIT 2

EXISTING (2023) TRAFFIC VOLUMES

2.4. Existing Capacity Analyses

Capacity analyses using Synchro Version 11 were conducted to assess existing and future operating conditions at the study intersections during the weekday peak hours. The capacity of an intersection quantifies its ability to accommodate traffic volumes and is expressed in terms of level of service (LOS), measured in average delay per vehicle. LOS grades range from A to F, with LOS A as the highest (best traffic flow and least delay), LOS E as saturated or at-capacity conditions, and LOS F as the lowest (oversaturated conditions). The lowest LOS grade typically accepted by jurisdictional transportation agencies in Northeastern Illinois is LOS D.

The LOS grades shown below, which are provided in the Transportation Research Board's Highway Capacity Manual (HCM), quantify and categorize the driver's discomfort, frustration, fuel consumption, and travel times experienced as a result of intersection control and the resulting traffic queuing. A detailed description of each LOS rating can be found in **Table 2.1**.

Table 2.1. Level of Service Grading Descriptions[1]

Level of Service	Description
A	Minimal control delay; traffic operates at primarily free-flow conditions; unimpeded movement within traffic stream.
B	Minor control delay at signalized intersections; traffic operates at a fairly unimpeded level with slightly restricted movement within traffic stream.
C	Moderate control delay; movement within traffic stream more restricted than at LOS B; formation of queues contributes to lower average travel speeds.
D	Considerable control delay that may be substantially increased by small increases in flow; average travel speeds continue to decrease.
E	High control delay; average travel speed no more than 33 percent of free flow speed.
F	Extremely high control delay; extensive queuing and high volumes create exceedingly restricted traffic flow.

[1]Highway Capacity Manual, 6th Edition.

The range of control delay for each rating (as detailed in the HCM) is shown in **Table 2.2**. Because signalized intersections are expected to carry a larger volume of vehicles and stopping is required during red time, note that higher delays are tolerated for the corresponding LOS ratings.

Table 2.2. Level of Service Grading Criteria[1]

Level of Service	Average Control Delay (s/veh) at:	
	Unsignalized Intersections	Signalized Intersections
A	0 – 10	0 – 10
B	> 10 – 15	> 10 – 20
C	> 15 – 25	> 20 – 35
D	> 25 – 35	> 35 – 55
E	> 35 – 50	> 55 – 80
F[2]	> 50	> 80

[1]Highway Capacity Manual 2010

[2]All movements with a Volume to Capacity (v/C) ratio greater than 1 receive a rating of LOS F.

Based on these standards, capacity results were identified for the study intersections under existing conditions. The results of the capacity analysis for existing conditions are summarized in **Table 2.3**. In this table, operation on each approach and movement is quantified according to the average delay per vehicle and the corresponding level of service. The results are based on Synchro's HCM 6th Edition reports. Copies of the Synchro reports are provided in the appendix.

Table 2.3. Existing (2023) Levels of Service

Intersection	Weekday AM Peak		Weekday PM Peak	
	Delay (s/veh)	LOS	Delay (s/veh)	LOS
Harmony Road / Big Timber Road △				
Westbound	10-	A	10-	A
Southbound (Left)	8	A	7	A
Harmony Road / Melms Road △				
Eastbound	10-	A	10+	B
Northbound (Left)	7	A	8	A
Harmony Road / Kelley Road △				
Eastbound	10-	A	10+	B
Westbound	9	A	10+	B
Northbound (Left)	7	A	7	A
Southbound (Left)	7	A	7	A
Harmony Road / Allen Road △				
Eastbound (Left)	7	A	8	A
Southbound	10-	A	10-	A

△-Minor-Leg Stop-Controlled Intersection

The study intersections currently operate acceptably at LOS B or better during the weekday peak hours. According to the analysis, the 95th percentile queues are estimated to be one vehicle (25 feet) or less for all movements and approaches.

3. FUTURE CONDITIONS

This section of the report outlines the proposed site plan, summarizes site-specific traffic characteristics, and develops future traffic projections.

3.1. Development Characteristics & Site Access

The proposed development would include a total of 1,101 single-family detached units, 641 townhome units, and 245 active adult single-family units. For purposes of the traffic impact analysis, an elementary school was assumed on the southeast quadrant of the intersection of Harmony Road/Access E-Access F. An enrollment of 500 students was assumed based on a review of average elementary school enrollment in Community Unit School District 300.

Access to the development would be provided by new intersections proposed along Melms Road (Access A) and Big Timber Road (Access B). In addition, four new intersections are proposed along Harmony Road. These intersections are referred to as Access C through Access G (Access E and Access F represent the west and east legs of the intersection of Harmony Road and the new spine roadway). A conceptual site plan is provided in the appendix.

3.2. Trip Generation

In order to calculate trips generated by the proposed uses, data was referenced from the Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition. Where available, the trip generation equation for each ITE Land Use Code (LUC) corresponding to a proposed use is shown in **Table 3.1**; where a trip generation equation was not provided by ITE, the average rate is shown. Copies of the ITE data are provided in the appendix.

Table 3.1. ITE Trip Generation Data

ITE Land Use	Unit	Weekday		
		Daily	AM Peak Hour	PM Peak Hour
Single-Family Detached Housing (LUC 210)	Per unit	Ln(T) = 0.92 Ln(X) + 2.68 50% in/50% out	Ln(T) = 0.91 Ln(X) + 0.12 26% in/74% out	Ln(T) = 0.94 Ln(X) + 0.27 63% in/37% out
Single-Family Attached Housing (LUC 215)	Per unit	T = 7.62X - 50.48 50% in/50% out	T = 0.52X - 5.70 31% in/69% out	T = 0.60X - 3.93 57% in/43% out
Senior Adult Housing - Single-Family (LUC 251)	Per unit	Ln(T) = 0.85 Ln(X) + 2.47 50% in/50% out	Ln(T) = 0.76 Ln(X) + 0.16 33% in/67% out	Ln(T) = 0.78 Ln(X) + 0.20 61% in/39% out
Elementary School (LUC 520)	Per student	T = 2.27S 50% in/50% out	T = 0.74S 54% in/46% out	T = 0.16S 46% in/54% out

T = trips X = dwelling units S = students

Based on this data, **Table 3.2** shows the site generated traffic projections for the proposed development.

Table 3.2. Site-Generated Traffic Projections[1]

Land Use	Size	Weekday						
		Daily	AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
Single-Family Detached Housing (LUC 210)	1,101 Units	10,210	190	560	750	650	380	1,030
Townhomes (LUC 215)	641 Units	4,680	95	215	310	215	160	375
Active Adult Single-Family (LUC 251)	245 Units	1,410	30	65	95	65	40	105
Elementary School (LUC 520)	500 Students	1,140	200	170	370	35	45	80
Gross Site Trips		17,440	515	1,010	1,525	965	625	1,590
Internal School Trips (30%)[2]		*-340*	*-60*	*-50*	*-110*	*-10*	*-15*	*-25*
Net New Site Trips		17,100	455	960	1,415	955	610	1,565

[1]In/Out volumes are rounded to the nearest multiple of five.

[2]Approxiamtely 30 percent of school traffic was assumed to route to/from the area along the new spine roadway east of Harmony Road; and therefore, would not travel through the study intersections.

The internal trips referenced in Table 3.2 represent approximately 30 percent of the proposed elementary school traffic which was assumed to route to/from the proposed residences within the area east of Harmony Road. These trips were assumed to be contained by roadways internal to the development and would not travel through the study intersections to access the school.

For purposes of the analysis, it was assumed roughly 70 percent of trips generated by the elementary school would route to/from the proposed residences within the area west of Harmony Road. The remaining 30 percent of trips generated by the proposed elementary school were assumed to travel to/from the east on Big Timber Road and Allen Road due to the location of existing Community Unit School District 300 schools and the current district boundaries.

3.3 Directional Distribution

The estimated distribution of site-generated traffic on the surrounding roadway network as it approaches and departs the site is a function of several variables, such as the nature of surrounding land uses, prevailing traffic volumes/patterns, characteristics of the street system, and the ease with which motorists can travel over various sections of that system. As such, **Table 3.3** presents the anticipated directional distribution from which vehicles will travel to and from the site.

Table 3.3. Estimated Trip Distribution

Traveling to/from:	Estimated Trip Distribution	
	Residential	School
North on Harmony Road	55%	-
East on Big Timber Road	10%	10%
West on Melms Road	10%	-
East on Allen Road	25%	20%
Internal Site	-	25%
Total	100%	100%

Based on these assumptions, the total site-generated trips are depicted in **Exhibit 3**.

3.4. Future Traffic Projections

Full buildout of the proposed development is expected to be complete in Year 2033. Consistent with KDOT requirements for analysis of "build-plus-ten" and "build-plus-twenty" conditions, future traffic conditions were evaluated for Year 2043 and Year 2053, respectively. Future no-build scenarios were prepared to assess future traffic operation without construction of the subject site. Site-generated trips were then added to the no-build scenarios to analyze the development's impact on the study intersections.

Future No-Build Traffic Projections

Background traffic volumes were estimated using data from the Chicago Metropolitan Agency for Planning (CMAP). An official letter documenting the projected Year 2050 traffic volumes on the study roadways is provided in the appendix. Based on information received from CMAP, annual growth rates were determined for roadway segments in the study area, which are presented in **Table 3.4**.

Table 3.4. CMAP Growth Rates

Roadway Segment	Annual Growth Rate
Harmony Road north of Big Timber Road	2.02%
Big Timber Road east of Harmony Road	2.05%
Melms Road west of Harmony Road	1.94%
Harmony Road between Big Timber Road and Kelley Road	1.96%
Harmony Road south of Kelley Road	1.75%
Allen Road west of Harmony Road	1.73%
Allen Road east of Harmony Road	1.75%

In order to estimate traffic growth through the study area, an average annual growth rate of 1.89 percent was applied to the existing traffic volumes through Year 2043 and Year 2053. The Future (2043) No-Build traffic projections are presented in **Exhibit 4**. The Future (2053) No-Build traffic projections are shown in **Exhibit 5**.

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EXHIBIT 3

SITE TRIP ASSIGNMENT

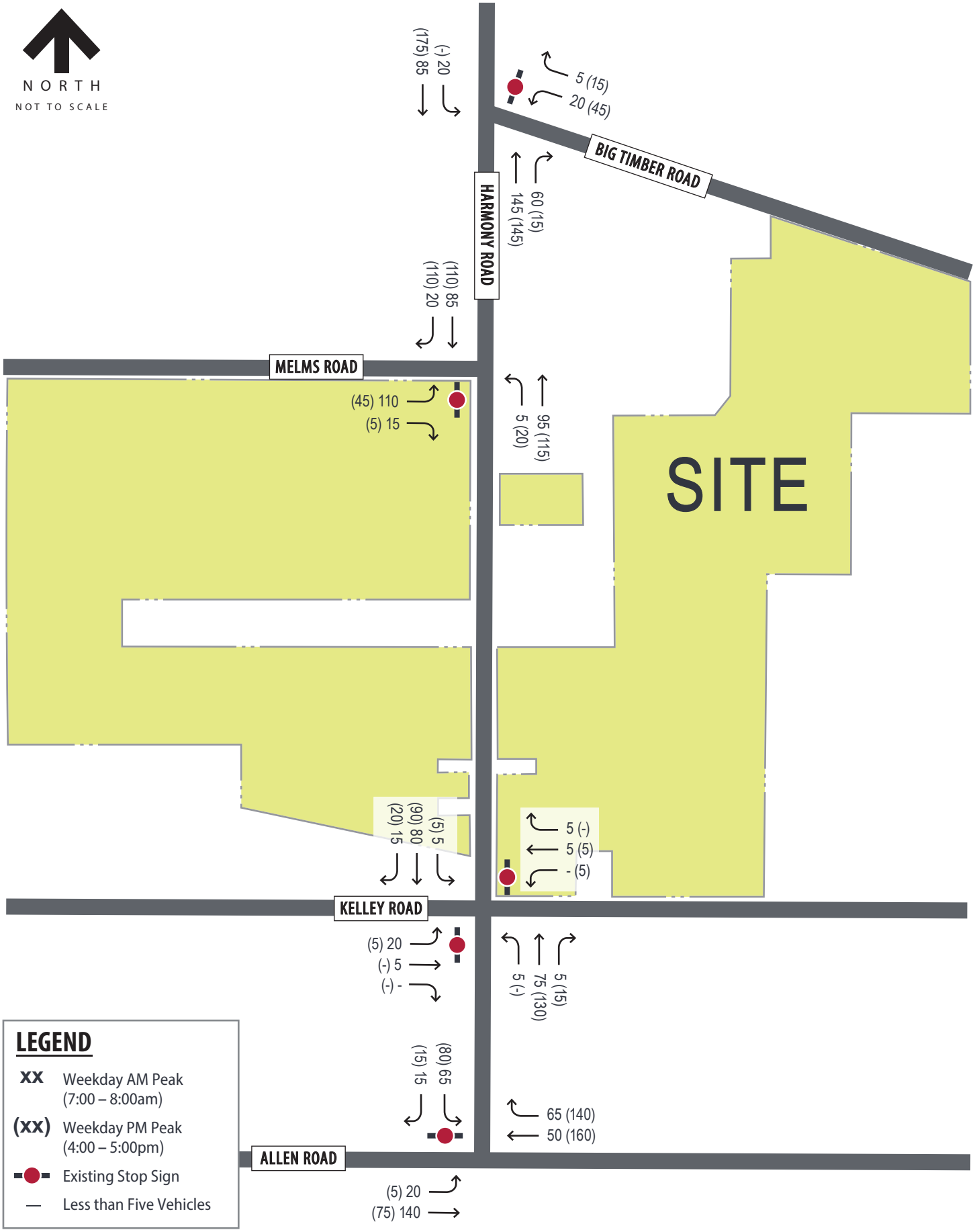

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EXHIBIT 4

FUTURE (2043) NO-BUILD TRAFFIC PROJECTIONS

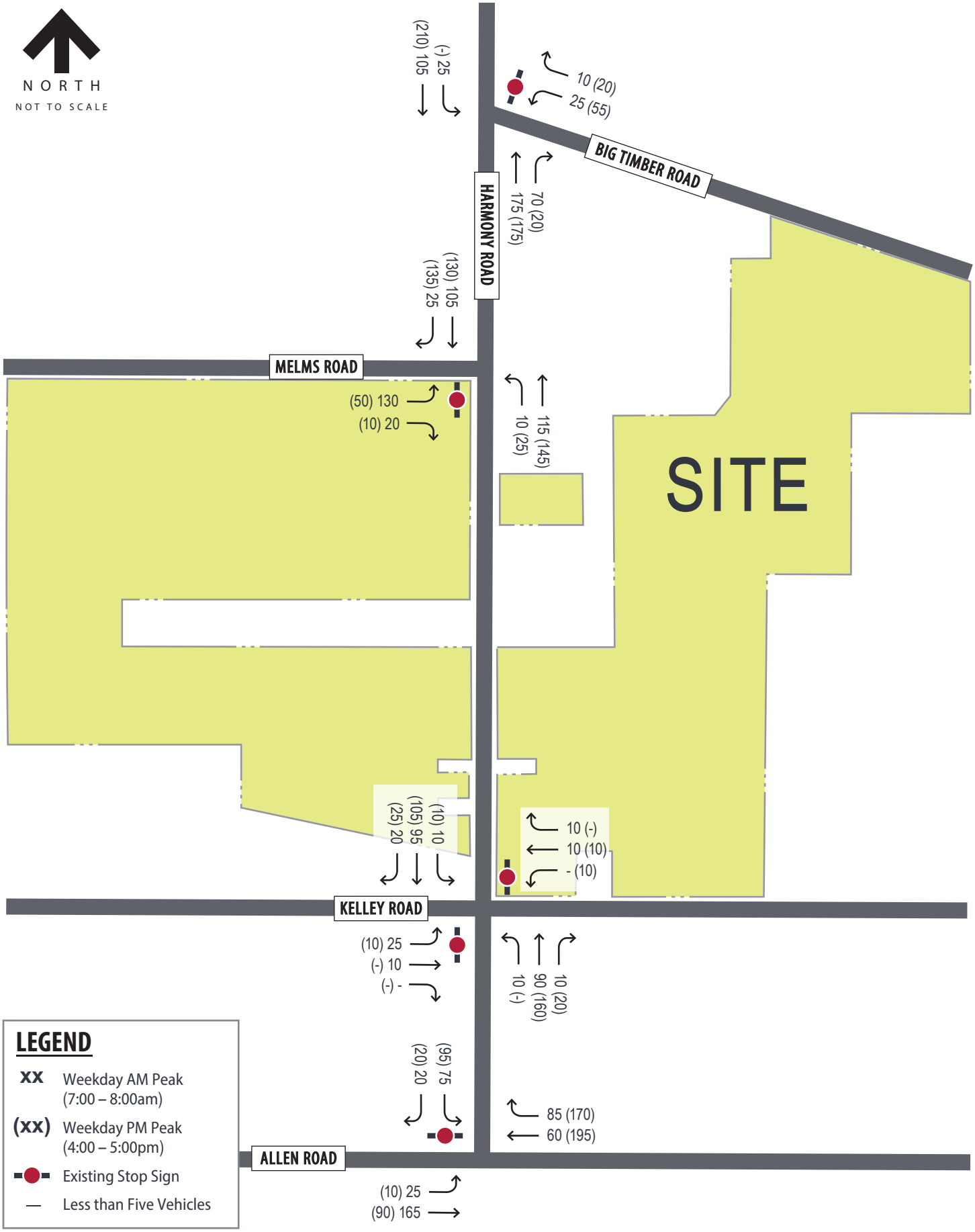

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EXHIBIT 5

FUTURE (2053) NO-BUILD TRAFFIC PROJECTIONS

Future Build Traffic Projections

For the Future (2043) Build scenario, site-generated trips (Exhibit 3) were added to Future (2043) No-Build traffic projections (Exhibit 4). For the Future (2053) Build scenario, site-generated trips (Exhibit 3) were added to Future (2053) No-Build traffic projections (Exhibit 5). Future (2043) Build traffic projections are depicted in **Exhibit 6**. Future (2053) Build traffic projections are depicted in **Exhibit 7**.

3.5. Future Geometry

For the analysis of future traffic conditions, the following roadway improvements were considered based on planned improvements, background traffic growth, and site-generated traffic from the proposed development.

Future Kane County CRIP Roadway Improvements

The Kane County Division of Transportation *Comprehensive Road Improvement Plan (CRIP)* was adopted on January 11, 2022. The improvements identified in the Kane County CRIP include extension of French Road (outside the study area) on a new alignment from IL-72 to the intersection of Harmony Road/Allen Road (Project No. 17). With this improvement, installation of a traffic signal and additional turn lanes are planned at the future intersection of Harmony Road-French Road/Allen Road. As the timeline for extension of French Road is not defined, the existing geometry and traffic control was assumed for the analysis of the intersection of Harmony Road/Allen Road. An excerpt from the Kane County CRIP with project details are provided in the appendix.

Turn Lane Warrants

A review of turn lane warrants was completed based on criteria provided in the *Kane County Division of Transportation Permit Regulations and Access Control Regulations.*

At the intersection of Harmony Road/Big Timber Road, the addition of background traffic growth through Year 2043 (Exhibit 4) would satisfy warrant criteria for a southbound left-turn lane and a northbound right-turn lane. There are no known improvement plans for the intersection of Harmony Road/Big Timber Road; and therefore, the turn lanes were not included in the analysis of no-build conditions. Based on Future (2043) Build traffic projections, warrant criteria for a westbound right-turn lane would be satisfied in addition to the turn lanes identified under the no-build condition. For the analysis of future build conditions the intersection of Harmony Road/Big Timber Road was assumed to include a southbound left-turn lane, a northbound right-turn lane, and a westbound right-turn lane.

At the intersection of Harmony Road/Melms Road, a southbound right-turn lane and a northbound left-turn lane are warranted under Future (2043) No-Build conditions (Exhibit 4). There are no known improvement plans for the intersection of Harmony Road/Melms Road; and therefore, these turn lanes were not included in the analysis of future no-build conditions. Under the Future (2043) Build condition, an eastbound right-turn lane on Melms Road at Harmony Road is also warranted. For the analysis of future build conditions at Harmony Road/Melms Road, a southbound right-turn lane, northbound left-turn lane, and eastbound right-turn lane were assumed.

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EXHIBIT 6

FUTURE (2043) BUILD TRAFFIC PROJECTIONS

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EXHIBIT 7

FUTURE (2053) BUILD TRAFFIC PROJECTIONS

Left- and right-turn lanes were evaluated at the unsignalized intersection of Melms Road/Access A utilizing the IDOT *BDE Manual* because Melms Road is under the jurisdiction of the Village of Hampshire, which does not have specific criteria for turn lanes. Based on volume criteria provided in the IDOT *BDE Manual* for two-lane highways with a design speed of 60 MPH (posted speed limit along Melms Road is 55 MPH), Future (2043) Build volumes meet warrant thresholds for a westbound left-turn lane on Melms Road at Access A. Projected traffic volumes do not meet warrant criteria for an eastbound right-turn lane. Therefore, the analysis of future build conditions includes a westbound left-turn lane at the intersection of Melms Road/Access A.

According to the *Kane County Division of Transportation Permit Regulations and Access Control Regulations*, left- and right-turn deceleration lanes will be required for all access points to a County freeway and all Major Access to any County highway. A Major Access is defined as the following: *An access for subdivision, public street, commercial development, multi-family development, recreational development, or any other development that is expected to generate 150 or more traffic movements per day.* Based on this definition of a Major Access, it was determined that Access B would be considered a Major Access to Big Timber Road (CR 21) and Access C through Access G would be considered Major Access along Harmony Road (CR 36). A summary of the deceleration lanes for each intersection is provided below; these improvements were included in the analysis of future build conditions.

- **Big Timber Road / Access B**: Install an eastbound right-turn lane and a westbound left-turn lane on Big Timber Road. Access B was assumed to provide a single inbound lane and separate outbound left- and right-turn lanes.
- **Harmony Road / Access C**: Install a northbound right-turn lane and a southbound left-turn lane on Harmony Road. Access C was assumed to provide a single inbound lane and separate outbound left- and right-turn lanes.
- **Harmony Road / Access D**: Provide a southbound right-turn lane and a northbound left-turn lane on Harmony Road. Access D was assumed to provide a single inbound lane and separate outbound left- and right-turn lanes.
- **Harmony Road / Access E-Access F**: Stripe the existing shoulder areas on Harmony Road to provide a northbound and southbound right-turn lane. The northbound right-turn lane should provide 89 feet of storage with a 209-foot taper. The southbound right-turn lane should provide 166 feet of storage with a 95-foot taper. Restripe the existing median to provide a northbound and southbound left-turn lane. Access E and Access F were assumed to provide a dedicated left-turn lane and shared through/right-turn lanes.
- **Harmony Road / Access G**: Stripe the shoulder area on Harmony Road to provide a southbound right-turn lane with 132 feet of storage and a 167-foot taper. The existing striped median along Harmony Road should be restriped to provide a northbound left-turn lane. Access G was assumed to provide a single inbound lane and separate outbound left- and right-turn lanes.

Posted Speed Limit

Based on the residential nature of the development and potential elementary school on the southeast quadrant of Harmony Road/Access E-Access F, the existing 55 MPH speed limit posted on Harmony

Road and Big Timber Road should be reviewed in coordination with KDOT. For purposes of the analysis of future conditions, the existing speed limits were assumed.

3.6. Signal Warrant Analyses

Signal warrant analyses were performed according to criteria set by the Manual on Uniform Traffic Control Devices (MUTCD) for Warrant 1 (Eight-Hour Warrant), Condition A (Minimum Vehicular Volume) and Condition B (Interruption of Continuous Traffic). Warrant 1 can be satisfied by meeting any one of three conditions: Condition A (Minimum Vehicular Volume), Condition B (Interruption of Continuous Traffic), or a combined Condition A & B that has reduced volume thresholds that must be met for both conditions in order to warrant a signal.

Using the 12-hour turning movement count data collected at the intersections of Harmony Road/Big Timber Road and Harmony Road/Allen Road, background traffic projections were developed by applying the 1.89 percent growth rate through Year 2043 and Year 2053, consistent with the methodology described in *Future Background Traffic Projections.* The traffic count data for Harmony Road/Allen Road was carried through the intersection of Harmony Road/Access E-Access F to estimate existing through volumes on Harmony Road. The 1.89 percent growth factor was then applied to estimate through volumes on Harmony Road under the future no-build conditions.

To develop 12-hour site-generated traffic, the daily site-generated trips (Table 3.2) were distributed hourly based on time-of-day distribution data included as Appendix A to the ITE Trip Generation Manual, 11th Edition. A copy of the ITE data is provided in the appendix. The hourly trips were assigned to the study intersections based on the trip distribution assumptions (Table 3.3). For purposes of the signal warrant analyses, the turn lanes outlined in *Section 3.5 Future Geometry* were assumed to be in place.

For purposes of the signal warrant analyses, minor-street right-turning volumes were reduced at the study intersections in accordance with Pagone's Theorem, per IDOT requirements. These volumes were analyzed and compared to the MUTCD criteria for Warrant 1 which is summarized in Error! Reference source not found.**5.**

Table 3.5. MUTCD Warrant 1 Signal Warrant Criteria

Intersection / Scenario	Major Street	Higher-Volume Minor-Leg Approach
IDOT Criteria for two-lane Major Street with two-lane Minor Street		
Warrant 1A	350	105
Warrant 1B	525	53
Combination[1]		
Warrant 1A	280	84
Warrant 1B	420	42

[1]To satisfy warrant criteria for the combined Conditions A & B, the minimum volume thresholds for both conditions must be met.

Harmony Road/Big Timber Road

Error! Reference source not found.**6** reports the signal warrant analyses for the intersection of Harmony Road/Big Timber Road. The signal warrant analyses was prepared for Future (2043) Build and Future (2053) Build conditions. As shown, under both future scenarios the projected traffic volumes do not satisfy the warrant criteria for more than eight hours at the intersection.

Table 3.6. Signal Warrant Analysis Summary - Harmony Road/Big Timber Road

Time	Traffic Volume		Warrant Satisfied?		
	Major Street	Higher-Volume Minor-Leg Approach	Warrant 1A	Warrant 1B	Combination Warrant 1A & 1B
Future (2043) Build					
6:00 AM	515	25	No	No	No
7:00 AM	858	53	No	Yes	No
8:00 AM	721	32	No	No	No
9:00 AM	572	27	No	No	No
10:00 AM	539	28	No	No	No
11:00 AM	600	24	No	No	No
12:00 PM	618	30	No	No	No
1:00 PM	635	36	No	No	No
2:00 PM	755	72	No	Yes	No
3:00 PM	954	75	No	Yes	No
4:00 PM[1]	1,052	60	No	Yes	No
5:00 PM	1,001	48	No	No	No
	Total Number of Hours Warrant is Met		0	4	0
	Meets Warrant Criteria?		**No**	**No**	**No**
Future (2053) Build					
6:00 AM	566	27	No	No	No
7:00 AM	926	59	No	Yes	No
8:00 AM	768	34	No	No	No
9:00 AM	610	30	No	No	No
10:00 AM	568	32	No	No	No
11:00 AM	631	28	No	No	No
12:00 PM	648	33	No	No	No
1:00 PM	668	42	No	No	No
2:00 PM	801	83	No	Yes	No
3:00 PM	1,026	88	No	Yes	Yes
4:00 PM[1]	1,124	69	No	Yes	No
5:00 PM	1,057	56	No	Yes	No
	Total Number of Hours Warrant is Met		0	4	0
	Meets Warrant Criteria?		**No**	**No**	**No**

[1]4:00pm was identified as the evening peak hour for purposes of evaluating IDOT peak hour Warrant 1 criteria

Warrant 1 is typically evaluated with at least eight hours of traffic count data for an intersection. However, typical IDOT practice allows a signal warrant to also be evaluated by reducing evening peak hour volumes to 55 percent of their projected total to represent the minimum volume during a given eight-hour period. These reduced volumes were compared to MUTCD Warrant 1 criteria to evaluate the Warrant 1 peak hour scenario. The reduced traffic volumes do not satisfy the peak hour warrant criteria.

For the analysis of future build conditions, the intersection of Harmony Road/Big Timber Road was assumed to continue to operate under minor-leg stop control based on the results of the signal warrant analyses.

Harmony Road/Allen Road

Error! Reference source not found.**7** reports the signal warrant analyses conducted for the intersection of Harmony Road/Allen Road. The signal warrant analyses was prepared for Future (2043) Build and Future (2053) Build conditions. As shown, under both future scenarios the projected traffic volumes do not satisfy the warrant criteria for more than eight hours at the intersection.

Table 3.7. Signal Warrant Analysis Summary - Harmony Road/Allen Road

Time	Traffic Volume		Warrant Satisfied?		
	Major Street	Higher-Volume Minor-Leg Approach	Warrant 1A	Warrant 1B	Combination Warrant 1A & 1B
Future (2043) Build					
6:00 AM	250	190	No	No	No
7:00 AM	368	344	Yes	No	No
8:00 AM	304	315	No	No	No
9:00 AM	246	210	No	No	No
10:00 AM	236	186	No	No	No
11:00 AM	306	214	No	No	No
12:00 PM	300	194	No	No	No
1:00 PM	267	196	No	No	No
2:00 PM	407	242	Yes	No	No
3:00 PM	512	291	Yes	No	Yes
4:00 PM[1]	597	288	Yes	Yes	Yes
5:00 PM	488	284	Yes	No	Yes
	Total Number of Hours Warrant is Met		5	1	3
	Meets Warrant Criteria?		**No**	**No**	**No**
Future (2053) Build					
6:00 AM	296	204	No	No	No
7:00 AM	425	361	Yes	No	Yes
8:00 AM	349	336	No	No	No
9:00 AM	280	221	No	No	No
10:00 AM	267	197	No	No	No
11:00 AM	346	228	No	No	No
12:00 PM	336	203	No	No	No
1:00 PM	296	206	No	No	No
2:00 PM	459	256	Yes	No	Yes
3:00 PM	579	313	Yes	Yes	Yes
4:00 PM[1]	675	307	Yes	Yes	Yes
5:00 PM	545	301	Yes	Yes	Yes
	Total Number of Hours Warrant is Met		5	3	3
	Meets Warrant Criteria?		**No**	**No**	**No**

[1]4:00pm was identified as the evening peak hour for purposes of evaluating IDOT peak hour Warrant 1 criteria

Evening peak hour volumes were then reduced to 55 percent of their projected total to represent the minimum volume during a given eight-hour period for purposes of evaluating IDOT peak hour Warrant 1 criteria. Under the Future (2043) Build scenario, the reduced traffic volumes do not satisfy the peak hour warrant criteria. Under the Future (2053) Build scenario, the reduced traffic volumes satisfy the peak hour warrant criteria for Warrant 1A.

With the planned extension of French Road to the intersection of Harmony Road/Allen Road, identified as Kane County CRIP Project No. 17, a traffic signal will be installed at the future intersection of Harmony Road-French Road/Allen Road. The timeline for completion of the French Road extension is undefined; and therefore, the existing geometry and traffic control was assumed in the analysis of future conditions. Continued monitoring of the intersection of Harmony Road/Allen Road is recommended in order to evaluate future traffic control modifications.

Harmony Road/Access E-Access F

Error! Reference source not found.**8** reports the signal warrant analyses conducted for Future (2043) Build traffic conditions at the intersection of Harmony Road/Access E-Access F. As shown, projected traffic volumes satisfy Warrant 1A criteria for ten hours.

Table 3.8. Signal Warrant Analysis Summary - Harmony Road/Access E-Access F

Time	Traffic Volume		Warrant Satisfied?		
	Major Street	Higher-Volume Minor-Leg Approach	Warrant 1A	Warrant 1B	Combination Warrant 1A & 1B
Future (2043) Build					
6:00 AM	214	153	No	No	No
7:00 AM	364	338	Yes	No	No
8:00 AM	388	242	Yes	No	No
9:00 AM	346	160	No	No	No
10:00 AM	390	133	Yes	No	No
11:00 AM	433	138	Yes	No	Yes
12:00 PM	437	142	Yes	No	Yes
1:00 PM	434	146	Yes	No	Yes
2:00 PM	541	179	Yes	Yes	Yes
3:00 PM[1]	689	178	Yes	Yes	Yes
4:00 PM	662	177	Yes	Yes	Yes
5:00 PM	645	189	Yes	Yes	Yes
Total Number of Hours Warrant is Met			10	4	3
Meets Warrant Criteria?			**Yes**	**No**	**No**

[1]3:00pm was identified as the evening peak hour for purposes of evaluating IDOT peak hour Warrant 1 criteria

As part of the development, an elementary school is contemplated on the southeast quadrant of the intersection of Harmony Road/Access E-Access F. Based on a review of future traffic projections with and without the elementary school, a traffic signal would be warranted at the intersection of Harmony Road/Access E-Access F under the Future (2043) Build scenario. For the analysis of Future (2043) Build and Future (2053) Build conditions, a traffic signal was included at the intersection of Harmony Road/Access E-Access F. For purposes of the capacity analysis, a cycle length of 120 seconds was assumed and splits were optimized.

For the analysis of future build conditions, minor-leg stop control was assumed at the intersections of Melms Road/Access A, Big Timber Road, Access B, Harmony Road/Access C, Harmony Road Access D, and Harmony Road/Access G.

3.7. Future (2043) Capacity Analysis

Capacity results were identified for the study intersections under Future (2043) No-Build and Build conditions. The results of the capacity analysis are summarized in **Table 3.9** on the following page. Consistent with the existing conditions analysis, the results are based on Synchro's HCM 6th Edition reports. Copies of the Synchro reports are included in the appendix.

Table 3.9. Future (2043) Levels of Service

Intersection	No-Build				Build			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Delay (s/veh)	LOS
Harmony Road / Big Timber Road △								
Westbound	11	B	11	B	16	C	31	D
Southbound (Left)	8	A	8	A	9	A	9	A
Harmony Road / Melms Road △								
Eastbound	11	B	11	B	24	C	25-	C
Northbound (Left)	7	A	8	A	8	A	10-	A
Harmony Road / Kelley Road △								
Eastbound	10+	B	11	B	14	B	15+	C
Westbound	10-	A	11	B	12	B	15+	C
Northbound (Left)	7	A	7	A	8	A	8	A
Southbound (Left)	7	A	8	A	8	A	8	A
Harmony Road / Allen Road △								
Eastbound (Left)	8	A	8	A	8	A	9	A
Southbound	10+	B	10+	B	13	B	12	B
Melms Road / Access A △								
Westbound (Left)	N/A		N/A		8	A	8	A
Northbound					10-	A	10-	A
Big Timber Road / Access B △								
Westbound (Left)	N/A		N/A		8	A	8	A
Northbound					10+	B	10+	B
Harmony Road / Access C △								
Westbound	N/A		N/A		13	B	14	B
Southbound (Left)					9	A	8	A
Harmony Road / Access D △								
Eastbound	N/A		N/A		17	C	21	C
Northbound (Left)					8	A	9	A
Harmony Road / Access E-Access F ✱								
Eastbound	N/A		N/A		26	C	33	C
Westbound					32	C	39	D
Northbound					12	B	9	A
Southbound					11	B	9	A
Intersection					*21*	*C*	*17*	*B*
Harmony Road / Access G △								
Eastbound	N/A		N/A		12	B	13	B
Northbound (Left)					8	A	8	A

✱ -Signalized Intersection △-Minor-Leg Stop-Controlled Intersection

With the addition of background and site-generated traffic, the approaches and movements at each of the study intersections are expected to operate acceptably at LOS D or better during both peak hours. Intersections with approaches/movements operating at LOS D are further explained below.

At the unsignalized intersection of Harmony Road/Big Timber Road, the westbound approach is anticipated to operate at LOS D during the evening peak period. Under the build scenario, the 95th percentile queues projected for the westbound left-turn movement are approximately three vehicles (75 feet) or less during the peak hours. The 95th percentile queue for the southbound left-turn movement would be approximately one vehicle (25 feet) or less during the peak hours.

For the intersection of Harmony Road/Allen Road, the existing minor-leg stop control was assumed. With the addition of background traffic growth and site-generated traffic, the southbound approach is expected to operate with nominal delay (LOS B). For all turn movements, the 95th percentile queues are projected to be approximately two vehicles (50 feet) or less in the peak hours.

At the signalized intersection of Harmony Road/Access E-Access F, the westbound approach is expected to operate at LOS D during the evening peak period. The 95th percentile queues projected for the eastbound and westbound left-turn movements are approximately four vehicles (100 feet) or less during the peak hours. The 95th percentile queues estimated for the northbound and southbound left- and right-turn movements are approximately three vehicles (75 feet) or less, which would be accommodated within the storage lanes.

The new intersections proposed along Melms Road, Big Timber Road, and Harmony Road are expected to operate with limited delay at LOS C or better. The 95th percentile queues for inbound and outbound turning movements are expected to be two vehicles (50 feet) or less.

3.8. Future (2053) Capacity Analysis

Capacity results were identified for the study intersections under Future (2053) No-Build and Build conditions. The results of the capacity analysis are summarized in **Table 3.10** on the following page. Consistent with the existing and Future (2043) conditions analyses, the results are based on Synchro's HCM 6th Edition reports. Copies of the Synchro reports are included in the appendix.

Table 3.10. Future (2053) Levels of Service

Intersection	No-Build				Build			
	AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Delay (s/veh)	LOS	Delay (s/veh)	LOS
Harmony Road / Big Timber Road △								
Westbound	11	B	11	B	17	C	40	E
Southbound (Left)	8	A	8	A	9	A	9	A
Harmony Road / Melms Road △								
Eastbound	11	B	12	B	30	D	29	D
Northbound (Left)	8	A	8	A	8	A	10-	A
Harmony Road / Kelley Road △								
Eastbound	11	B	11	B	16	C	17	C
Westbound	10+	B	12	B	13	B	17	C
Northbound (Left)	8	A	8	A	8	A	8	A
Southbound (Left)	7	A	8	A	8	A	8	A
Harmony Road / Allen Road △								
Eastbound (Left)	8	A	8	A	8	A	9	A
Southbound	11	B	11	B	15-	B	14	B
Melms Road / Access A △								
Westbound (Left)	N/A		N/A		8	A	8	A
Northbound					10-	A	10-	A
Big Timber Road / Access B △								
Westbound (Left)	N/A		N/A		8	A	8	A
Northbound					10+	B	10+	B
Harmony Road / Access C △								
Westbound	N/A		N/A		14	B	14	B
Southbound (Left)					9	A	8	A
Harmony Road / Access D △								
Eastbound	N/A		N/A		18	C	23	C
Northbound (Left)					8	A	9	A
Harmony Road / Access E-Access F ✱								
Eastbound	N/A		N/A		28	C	34	C
Westbound					34	C	40	D
Northbound					13	B	9	A
Southbound					11	B	9	A
Intersection					*21*	*C*	*17*	*B*
Harmony Road / Access G △								
Eastbound	N/A		N/A		13	B	14	B
Northbound (Left)					8	A	8	A

✱ -Signalized Intersection △-Minor-Leg Stop-Controlled Intersection

With the addition of background traffic growth, the approaches and movements at each of the study intersections are expected to operate similar to Future (2043) conditions at LOS D or better.

At the unsignalized intersection of Harmony Road/Big Timber Road, the westbound approach is expected to operate at LOS E during the evening peak hour under Build (2053) conditions, as compared to LOS D under Build (2043) conditions. The increase in delay is attributable to higher background traffic volumes on Harmony Road and fewer gaps in traffic to complete the westbound left-turn movement. During the evening peak hour, the 95th percentile queue for the westbound left- and right-turn movements are approximately four vehicles (100 feet) and one vehicle (25 feet), respectively.

The intersection of Harmony Road/Allen Road is expected to operate similar to Future (2043) Build conditions. With the existing traffic control and lane geometry, the southbound approach is projected to operate at LOS B. In the morning peak hour, the 95th percentile queues for the southbound left- and right-turn movements are approximately three vehicles (75 feet) and one vehicle (25 feet), respectively. In the evening peak hour, the 95th percentile queues for the southbound left- and right-turn movements are approximately two vehicles (50 feet) and one vehicle (25 feet). The eastbound left-turn movement is projected to operate at LOS A with 95th percentile queues of one vehicle (25 feet) or less. It is recommended to continue to monitor the intersection and the timeline of the planned improvements identified in the Kane County CRIP.

The proposed intersections along Melms Road, Big Timber Road, and Harmony Road are expected to operate at LOS C or better with 95th percentile queues of approximately two vehicles (50 feet) or less.

5. RECOMMENDATIONS & CONCLUSIONS

Based on Kimley-Horn's review of the proposed site plan and evaluation of existing and future traffic conditions, the study intersections are expected to adequately accommodate the proposed development with the following recommendations. The timeline for implementation of these improvements should be reviewed relative to the development phasing plan.

Posted Speed Limit

- Review the existing 55 MPH posted speed limit on Harmony Road and Big Timber Road with KDOT. Based on the residential nature of the development and potential elementary school, on the southeast quadrant of Harmony Road/Access E-Access F, consider lowering the posted speed limit.

Harmony Road / Big Timber Road

- Provide a northbound right-turn lane and a southbound left-turn lane on Harmony Road.
- Install a westbound right-turn lane on Big Timber Road.

Harmony Road / Melms Road

- Provide a northbound left-turn lane and a southbound right-turn lane on Harmony Road.
- Install an eastbound right-turn lane on Melms Road.

Melms Road / Access A

- Provide a westbound left-turn lane on Melms Road at Access A.
- Provide a single inbound lane and separate outbound left- and right-turn lanes at Access A.
- Post minor-leg stop control for outbound traffic at Access A.

Big Timber Road / Access B

- Provide an eastbound right-turn lane and a westbound left-turn lane on Big Timber Road.
- Provide a single inbound lane and separate outbound left- and right-turn lanes at Access B.
- Post minor-leg stop control for outbound traffic at Access B.

Harmony Road / Access C

- Provide a northbound right-turn lane and a southbound left-turn lane on Harmony Road.
- Provide a single inbound lane and separate outbound left- and right-turn lanes at Access C.
- Install minor-leg stop control for outbound traffic at Access C.

Harmony Road / Access D

- Provide a southbound right-turn lane and a northbound left-turn lane on Harmony Road.
- Provide a single inbound lane and separate outbound left- and right-turn lanes at Access D.
- Post minor-leg stop control for outbound traffic at Access D.

Harmony Road / Access E-Access F

- Install a traffic signal with pedestrian pushbuttons and striped crosswalks on all four legs of the intersection.
- Stripe the existing shoulder area on Harmony Road to provide dedicated northbound and southbound right-turn lanes. The northbound right-turn lane should provide 89 feet of storage

with a 209-foot taper. The southbound right-turn lane should provide 166 feet of storage with a 95-foot taper.
- Restripe the existing median on Harmony Road to provide northbound and southbound left-turn lanes.
- Provide a dedicated left-turn lane and a shared through/right-turn lane on the west and east (i.e., Access E and Access F) legs of the intersection.

Harmony Road / Access G

- Stripe the existing shoulder area on Harmony Road to provide a southbound right-turn lane with 132 feet of storage and a 167-foot taper.
- Restripe the existing median on Harmony Road to provide a northbound left-turn lane.
- Provide a single inbound lane and separate outbound left- and right-turn lanes at Access G.
- Install minor-leg stop control for outbound traffic at Access G.

Regardless of the final configuration of the intersection geometrics, several additional items should be taken into consideration when preparing site and roadway improvement plans for the subject redevelopment. As the site design progresses, care should be taken with landscaping, signage, and monumentation at the site access locations to ensure that adequate horizontal sight distance is provided from the new stop bars. If alterations to the site plan or land use should occur, changes to the analysis provided within this traffic impact study may be needed.

APPENDIX

Conceptual Site Plan

Traffic Count Data

Existing (2023) Capacity Reports

Data from the ITE Trip Generation Manual, 11th Edition

CMAP Year 2050 Projections

Kane County Comprehensive Road Improvement Plan Excerpts

Time-of-Day Distribution Data from the ITE Trip Generation, 11th Edition

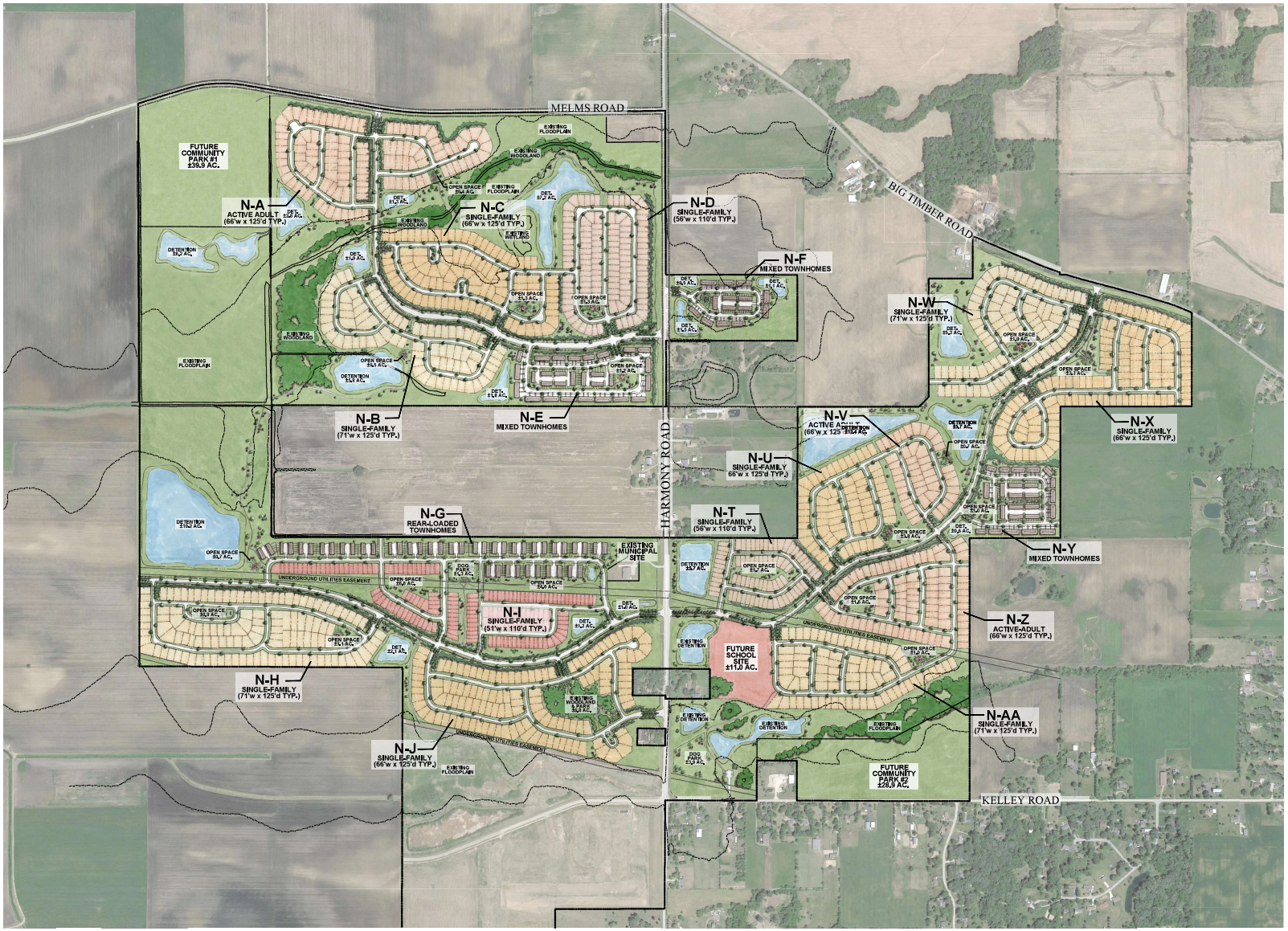
Future (2043) No-Build Capacity Reports

Future (2043) Build Capacity Reports

Future (2053) No-Build Capacity Reports

Future (2053) Build Capacity Reports

CONCEPTUAL SITE PLAN



SITE DATA

LAND USE	UNITS	AREA (AC.)	% OF SITE
NEIGHBORHOOD-A			
ACTIVE ADULT (66'w x 125'd TYP.)	114	32.2	3.36%
NEIGHBORHOOD-B			
SINGLE-FAMILY (71'w x 125'c TYP.)	80	28.9	3.01%
NEIGHBORHOOD-C			
SINGLE-FAMILY (66'w x 125'c TYP.)	97	23.7	3.20%
NEIGHBORHOOD-D			
SINGLE-FAMILY (56'w x 110'c TYP.)	118	27	2.82%
NEIGHBORHOOD-E			
REAR-LOADED TOWNHOMES	55	5.1	0.53%
FRONT-LOADED TOWNHOMES	106	11.9	1.24%
NEIGHBORHOOD-F			
REAR-LOADED TOWNHOMES	30	2.3	0.24%
FRONT-LOADED TOWNHOMES	49	5.8	0.61%
NEIGHBORHOOD-G			
REAR-LOADED TOWNHOMES	272	24.1	2.52%
NEIGHBORHOOD-H			
SINGLE-FAMILY (71'w x 125'c TYP.)	123	36.7	3.83%
NEIGHBORHOOD-I			
RENTAL UNITS (51'w x 110'd TYP.)	146	23.1	2.41%
NEIGHBORHOOD-J			
SINGLE-FAMILY (66'w x 125'c TYP.)	131	37.9	3.96%
NEIGHBORHOOD-T			
SINGLE-FAMILY (56'w x 110'c TYP.)	58	12.4	1.29%
NEIGHBORHOOD-U			
SINGLE-FAMILY (66'w x 125'c TYP.)	70	19.5	2.04%
NEIGHBORHOOD-V			
ACTIVE ADULT (66'w x 125'd TYP.)	46	12.5	1.30%
NEIGHBORHOOD-W			
SINGLE-FAMILY (71'w x 125'c TYP.)	82	23.9	2.49%
NEIGHBORHOOD-X			
SINGLE-FAMILY (66'w x 125'c TYP.)	118	33	3.44%
NEIGHBORHOOD-Y			
REAR-LOADED TOWNHOMES	59	4.1	0.43%
FRONT-LOADED TOWNHOMES	70	9.2	0.96%
NEIGHBORHOOD-Z			
ACTIVE ADULT (66'w x 125'd TYP.)	85	25.4	2.65%
NEIGHBORHOOD-AA			
SINGLE-FAMILY (71'w x 125'c TYP.)	78	24.6	2.57%
FUTURE COMMUNITY PARK NORTH	-	41.7	4.17%
FUTURE COMMUNITY PARK SOUTH	-	30.5	3.05%
FUTURE COMMUNITY CENTER	-	7.5	0.75%
POTENTIAL SCHOOL SITE	-	19.6	1.96%
MUNICIPAL SITE	-	1.8	0.18%
MAIN BOULEVARDS R.O.W.	-	25.3	2.53%
HARMONY ROAD R.O.W.	-	12	1.20%
KELLEY ROAD 40' 1/2 R.O.W.	-	2.4	0.24%
BIG TIMBER ROAD 60' 1/2 R.O.W.	-	3.3	0.33%
NELMS ROAD 60' 1/2 R.O.W.	-	5.8	0.58%
UTILITY EASEMENTS	-	17.2	1.72%
DETENTION / PARK / OPEN SPACE	-	367.8	38.38%
TOTAL	1987	958.2	100.00%

0 500' 1000' 2000'
SCALE: 1"=1000'
NORTH

CONCEPT PLAN
HAMPSHIRE, ILLINOIS

11/15/2022

GARY R. WEBER ASSOCIATES, INC.
LAND PLANNING
ECOLOGICAL CONSULTING
LANDSCAPE ARCHITECTURE
WWW.GRWAINC.COM

L:\Projects\CRN2103\Acad\CRN2103_096_01CP_tmp.dwg

TRAFFIC COUNT DATA

1_Harmony Road & Big Timber Road - TMC

Wed Jan 18, 2023
Full Length (6 AM-6 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Bicycles on Road)
All Movements
ID: 1028841, Location: 42.135627, -88.53508

GEWALT HAMILTON ASSOCIATES, INC.
Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

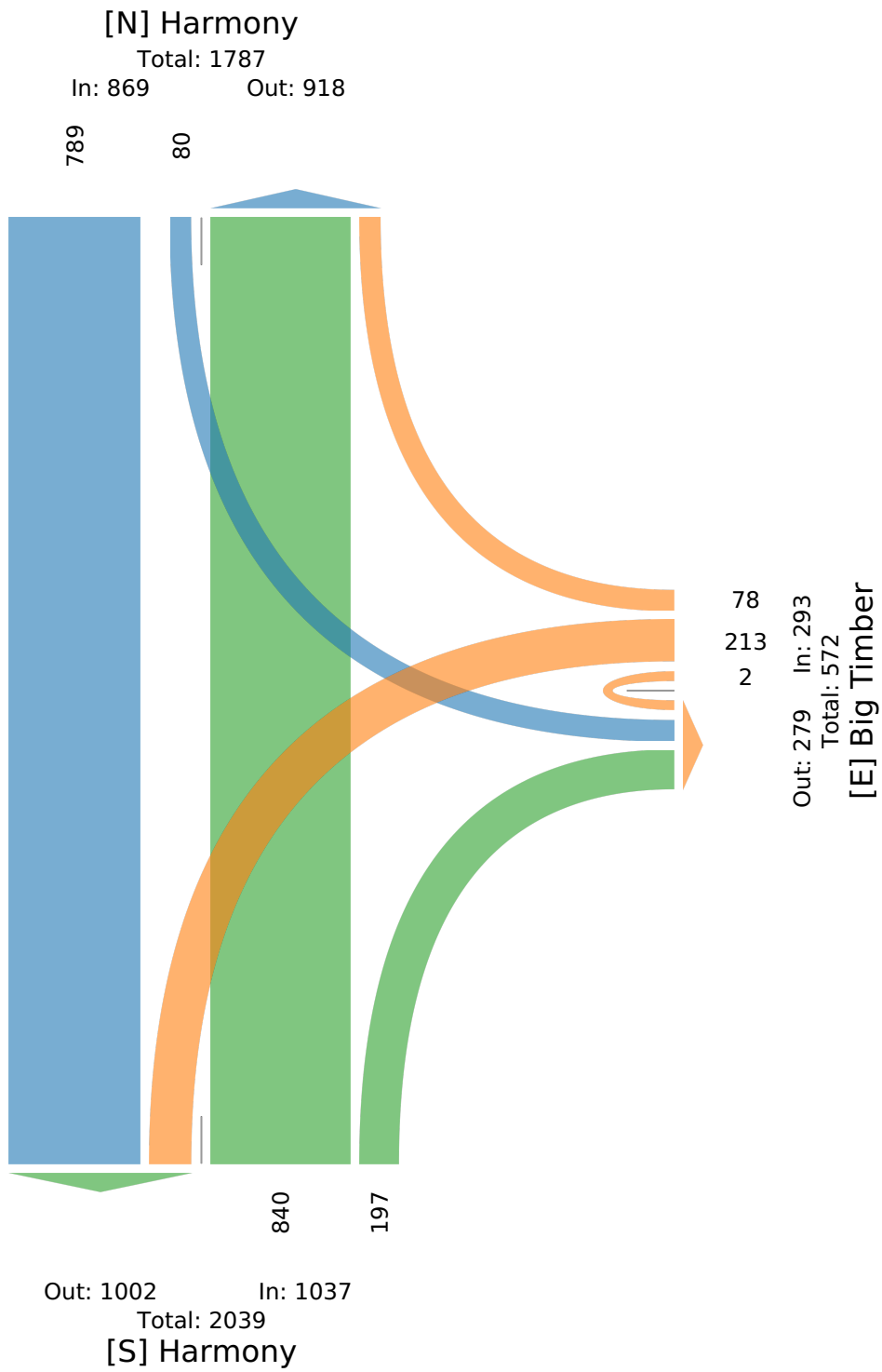
Leg Direction	Big Timber Westbound				Harmony Northbound				Harmony Southbound				
Time	L	R	U	App	T	R	U	App	L	T	U	App	Int
2023-01-18 6:00AM	1	2	0	**3**	12	5	0	**17**	6	10	0	**16**	**36**
6:15AM	4	0	0	**4**	21	6	0	**27**	4	8	0	**12**	**43**
6:30AM	1	2	0	**3**	20	6	0	**26**	1	11	0	**12**	**41**
6:45AM	2	0	0	**2**	33	5	0	**38**	7	14	0	**21**	**61**
Hourly Total	8	4	0	**12**	86	22	0	**108**	18	43	0	**61**	**181**
7:00AM	2	1	0	**3**	21	8	0	**29**	4	19	0	**23**	**55**
7:15AM	4	1	0	**5**	35	12	0	**47**	10	15	0	**25**	**77**
7:30AM	3	3	0	**6**	28	9	0	**37**	2	17	0	**19**	**62**
7:45AM	5	1	0	**6**	22	12	0	**34**	0	14	0	**14**	**54**
Hourly Total	14	6	0	**20**	106	41	0	**147**	16	65	0	**81**	**248**
8:00AM	1	1	0	**2**	13	1	0	**14**	1	18	0	**19**	**35**
8:15AM	5	0	0	**5**	22	7	0	**29**	3	19	0	**22**	**56**
8:30AM	0	2	0	**2**	18	5	0	**23**	0	19	0	**19**	**44**
8:45AM	1	0	0	**1**	19	3	0	**22**	2	6	0	**8**	**31**
Hourly Total	7	3	0	**10**	72	16	0	**88**	6	62	0	**68**	**166**
9:00AM	4	1	0	**5**	18	3	0	**21**	1	7	0	**8**	**34**
9:15AM	4	1	0	**5**	22	4	0	**26**	2	7	0	**9**	**40**
9:30AM	0	1	0	**1**	18	3	0	**21**	0	12	0	**12**	**34**
9:45AM	1	1	0	**2**	8	4	0	**12**	0	12	0	**12**	**26**
Hourly Total	9	4	0	**13**	66	14	0	**80**	3	38	0	**41**	**134**
10:00AM	3	0	0	**3**	10	1	0	**11**	2	6	0	**8**	**22**
10:15AM	2	0	0	**2**	13	3	0	**16**	1	13	0	**14**	**32**
10:30AM	4	1	0	**5**	12	7	0	**19**	2	9	0	**11**	**35**
10:45AM	3	1	0	**4**	8	1	0	**9**	1	9	0	**10**	**23**
Hourly Total	12	2	0	**14**	43	12	0	**55**	6	37	0	**43**	**112**
11:00AM	1	0	0	**1**	14	2	0	**16**	0	8	0	**8**	**25**
11:15AM	4	2	0	**6**	7	1	0	**8**	0	12	0	**12**	**26**
11:30AM	3	0	0	**3**	17	1	0	**18**	0	13	0	**13**	**34**
11:45AM	1	0	0	**1**	11	4	0	**15**	0	15	0	**15**	**31**
Hourly Total	9	2	0	**11**	49	8	0	**57**	0	48	0	**48**	**116**
12:00PM	0	2	0	**2**	10	3	0	**13**	0	9	0	**9**	**24**
12:15PM	3	0	0	**3**	6	2	0	**8**	2	12	0	**14**	**25**
12:30PM	3	5	0	**8**	13	4	0	**17**	2	6	0	**8**	**33**
12:45PM	4	3	0	**7**	14	5	0	**19**	1	10	0	**11**	**37**
Hourly Total	10	10	0	**20**	43	14	0	**57**	5	37	0	**42**	**119**
1:00PM	3	2	0	**5**	13	4	0	**17**	0	18	0	**18**	**40**
1:15PM	3	0	0	**3**	11	3	0	**14**	1	9	0	**10**	**27**
1:30PM	4	2	1	**7**	11	5	0	**16**	3	13	0	**16**	**39**
1:45PM	6	2	0	**8**	3	5	0	**8**	0	12	0	**12**	**28**
Hourly Total	16	6	1	**23**	38	17	0	**55**	4	52	0	**56**	**134**
2:00PM	2	2	1	**5**	15	4	0	**19**	1	14	0	**15**	**39**
2:15PM	13	2	0	**15**	14	3	0	**17**	2	14	0	**16**	**48**
2:30PM	17	2	0	**19**	17	3	0	**20**	0	19	0	**19**	**58**
2:45PM	7	1	0	**8**	14	5	0	**19**	3	26	0	**29**	**56**
Hourly Total	39	7	1	**47**	60	15	0	**75**	6	73	0	**79**	**201**
3:00PM	10	7	0	**17**	18	4	0	**22**	1	24	0	**25**	**64**
3:15PM	11	4	0	**15**	23	4	0	**27**	3	31	0	**34**	**76**
3:30PM	9	5	0	**14**	21	7	0	**28**	3	27	0	**30**	**72**
3:45PM	9	3	0	**12**	30	3	0	**33**	0	43	0	**43**	**88**
Hourly Total	39	19	0	**58**	92	18	0	**110**	7	125	0	**132**	**300**
4:00PM	10	1	0	**11**	37	2	0	**39**	0	36	0	**36**	**86**
4:15PM	4	3	0	**7**	20	4	0	**24**	1	33	0	**34**	**65**
4:30PM	13	1	0	**14**	37	0	0	**37**	1	27	0	**28**	**79**

Leg	Big Timber				Harmony				Harmony				
Direction	Westbound				Northbound				Southbound				
Time	L	R	U	**App**	T	R	U	**App**	L	T	U	**App**	**Int**
4:45PM	1	3	0	**4**	13	2	0	**15**	0	27	0	**27**	**46**
Hourly Total	28	8	0	**36**	107	8	0	**115**	2	123	0	**125**	**276**
5:00PM	4	1	0	**5**	24	1	0	**25**	0	27	0	**27**	**57**
5:15PM	6	2	0	**8**	25	3	0	**28**	2	24	0	**26**	**62**
5:30PM	10	3	0	**13**	14	4	0	**18**	3	22	0	**25**	**56**
5:45PM	2	1	0	**3**	15	4	0	**19**	2	13	0	**15**	**37**
Hourly Total	22	7	0	**29**	78	12	0	**90**	7	86	0	**93**	**212**
Total	213	78	2	**293**	840	197	0	**1037**	80	789	0	**869**	**2199**
% Approach	72.7%	26.6%	0.7%	**-**	81.0%	19.0%	0%	**-**	9.2%	90.8%	0%	**-**	-
% Total	9.7%	3.5%	0.1%	**13.3%**	38.2%	9.0%	0%	**47.2%**	3.6%	35.9%	0%	**39.5%**	-
Lights	192	73	0	**265**	787	170	0	**957**	75	740	0	**815**	2037
% Lights	90.1%	93.6%	0%	**90.4%**	93.7%	86.3%	0%	**92.3%**	93.8%	93.8%	0%	**93.8%**	92.6%
Articulated Trucks	13	2	2	**17**	26	13	0	**39**	1	21	0	**22**	78
% Articulated Trucks	6.1%	2.6%	100%	**5.8%**	3.1%	6.6%	0%	**3.8%**	1.3%	2.7%	0%	**2.5%**	3.5%
Buses and Single-Unit Trucks	8	3	0	**11**	27	14	0	**41**	4	28	0	**32**	84
% Buses and Single-Unit Trucks	3.8%	3.8%	0%	**3.8%**	3.2%	7.1%	0%	**4.0%**	5.0%	3.5%	0%	**3.7%**	3.8%
Bicycles on Road	0	0	0	**0**	0	0	0	**0**	0	0	0	**0**	0
% Bicycles on Road	0%	0%	0%	**0%**	0%	0%	0%	**0%**	0%	0%	0%	**0%**	0%

*L: Left, R: Right, T: Thru, U: U-Turn

1_Harmony Road & Big Timber Road - TMC
Wed Jan 18, 2023
Full Length (6 AM-6 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Bicycles on Road)
All Movements
ID: 1028841, Location: 42.135627, -88.53508

Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US



1_Harmony Road & Big Timber Road - TMC

Wed Jan 18, 2023
Forced Peak (7 AM - 8 AM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Bicycles on Road)
All Movements
ID: 1028841, Location: 42.135627, -88.53508

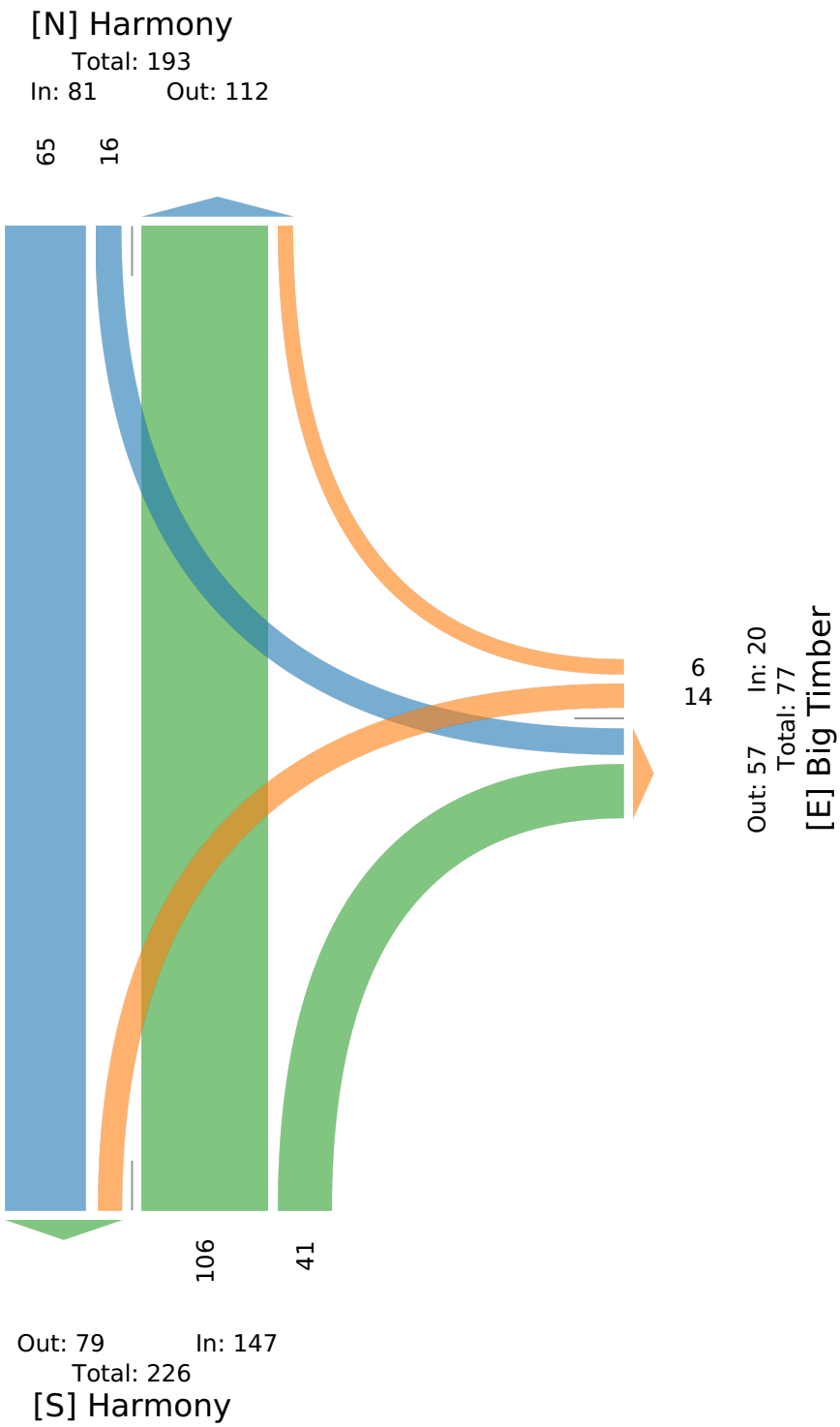
Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg Direction	Big Timber Westbound				Harmony Northbound				Harmony Southbound				
Time	L	R	U	**App**	T	R	U	**App**	L	T	U	**App**	**Int**
2023-01-18 7:00AM	2	1	0	**3**	21	8	0	**29**	4	19	0	**23**	**55**
7:15AM	4	1	0	**5**	35	12	0	**47**	10	15	0	**25**	**77**
7:30AM	3	3	0	**6**	28	9	0	**37**	2	17	0	**19**	**62**
7:45AM	5	1	0	**6**	22	12	0	**34**	0	14	0	**14**	**54**
Total	14	6	0	**20**	106	41	0	**147**	16	65	0	**81**	**248**
% Approach	70.0%	30.0%	0%	**-**	72.1%	27.9%	0%	**-**	19.8%	80.2%	0%	**-**	-
% Total	5.6%	2.4%	0%	**8.1%**	42.7%	16.5%	0%	**59.3%**	6.5%	26.2%	0%	**32.7%**	-
PHF	0.700	0.500	-	**0.833**	0.757	0.854	-	**0.782**	0.400	0.855	-	**0.810**	0.805
Lights	13	5	0	**18**	102	39	0	**141**	15	60	0	**75**	234
% Lights	92.9%	83.3%	0%	**90.0%**	96.2%	95.1%	0%	**95.9%**	93.8%	92.3%	0%	**92.6%**	94.4%
Articulated Trucks	1	1	0	**2**	2	1	0	**3**	0	1	0	**1**	6
% Articulated Trucks	7.1%	16.7%	0%	**10.0%**	1.9%	2.4%	0%	**2.0%**	0%	1.5%	0%	**1.2%**	2.4%
Buses and Single-Unit Trucks	0	0	0	**0**	2	1	0	**3**	1	4	0	**5**	8
% Buses and Single-Unit Trucks	0%	0%	0%	**0%**	1.9%	2.4%	0%	**2.0%**	6.3%	6.2%	0%	**6.2%**	3.2%
Bicycles on Road	0	0	0	**0**	0	0	0	**0**	0	0	0	**0**	0
% Bicycles on Road	0%	0%	0%	**0%**	0%	0%	0%	**0%**	0%	0%	0%	**0%**	0%

*L: Left, R: Right, T: Thru, U: U-Turn

1_Harmony Road & Big Timber Road - TMC
Wed Jan 18, 2023
Forced Peak (7 AM - 8 AM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Bicycles on Road)
All Movements
ID: 1028841, Location: 42.135627, -88.53508

Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US



1_Harmony Road & Big Timber Road - TMC

Wed Jan 18, 2023
Forced Peak (4 PM - 5 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Bicycles on Road)
All Movements
ID: 1028841, Location: 42.135627, -88.53508

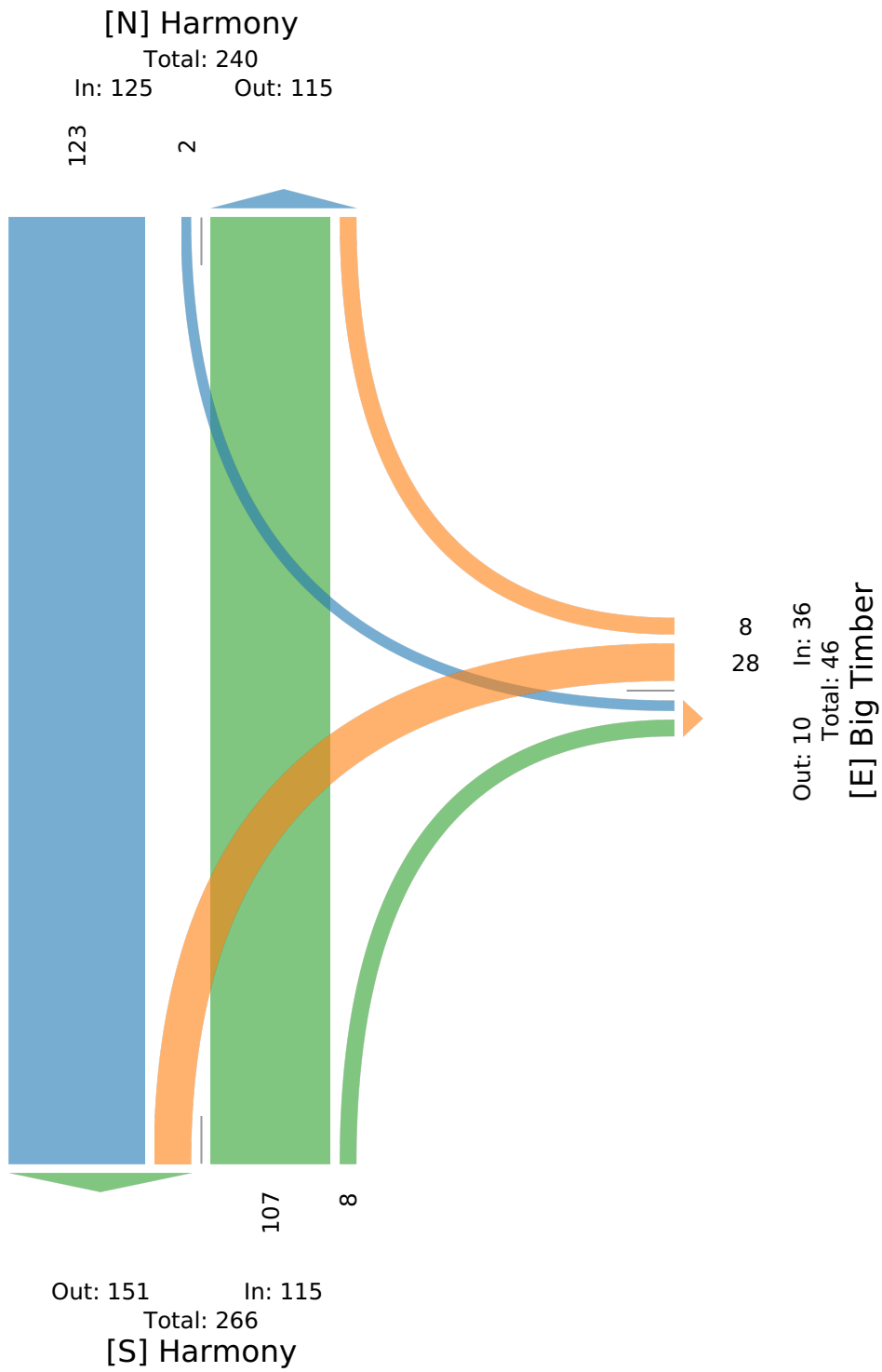
GEWALT HAMILTON ASSOCIATES, INC.
Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg Direction	Big Timber Westbound				Harmony Northbound				Harmony Southbound				
Time	L	R	U	**App**	T	R	U	**App**	L	T	U	**App**	**Int**
2023-01-18 4:00PM	10	1	0	**11**	37	2	0	**39**	0	36	0	**36**	**86**
4:15PM	4	3	0	**7**	20	4	0	**24**	1	33	0	**34**	**65**
4:30PM	13	1	0	**14**	37	0	0	**37**	1	27	0	**28**	**79**
4:45PM	1	3	0	**4**	13	2	0	**15**	0	27	0	**27**	**46**
Total	28	8	0	**36**	107	8	0	**115**	2	123	0	**125**	**276**
% Approach	77.8%	22.2%	0%	**-**	93.0%	7.0%	0%	**-**	1.6%	98.4%	0%	**-**	-
% Total	10.1%	2.9%	0%	**13.0%**	38.8%	2.9%	0%	**41.7%**	0.7%	44.6%	0%	**45.3%**	-
PHF	0.538	0.667	-	**0.643**	0.723	0.500	-	**0.737**	0.500	0.854	-	**0.868**	0.802
Lights	27	8	0	**35**	101	6	0	**107**	2	122	0	**124**	266
% Lights	96.4%	100%	0%	**97.2%**	94.4%	75.0%	0%	**93.0%**	100%	99.2%	0%	**99.2%**	96.4%
Articulated Trucks	0	0	0	**0**	1	0	0	**1**	0	0	0	**0**	1
% Articulated Trucks	0%	0%	0%	**0%**	0.9%	0%	0%	**0.9%**	0%	0%	0%	**0%**	0.4%
Buses and Single-Unit Trucks	1	0	0	**1**	5	2	0	**7**	0	1	0	**1**	9
% Buses and Single-Unit Trucks	3.6%	0%	0%	**2.8%**	4.7%	25.0%	0%	**6.1%**	0%	0.8%	0%	**0.8%**	3.3%
Bicycles on Road	0	0	0	**0**	0	0	0	**0**	0	0	0	**0**	0
% Bicycles on Road	0%	0%	0%	**0%**	0%	0%	0%	**0%**	0%	0%	0%	**0%**	0%

*L: Left, R: Right, T: Thru, U: U-Turn

1_Harmony Road & Big Timber Road - TMC
Wed Jan 18, 2023
Forced Peak (4 PM - 5 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Bicycles on Road)
All Movements
ID: 1028841, Location: 42.135627, -88.53508

Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US



2_Harmony Road & Melms Road - TMC

Wed Jan 18, 2023
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Bicycles on Road)
All Movements
ID: 1028839, Location: 42.13263, -88.535029

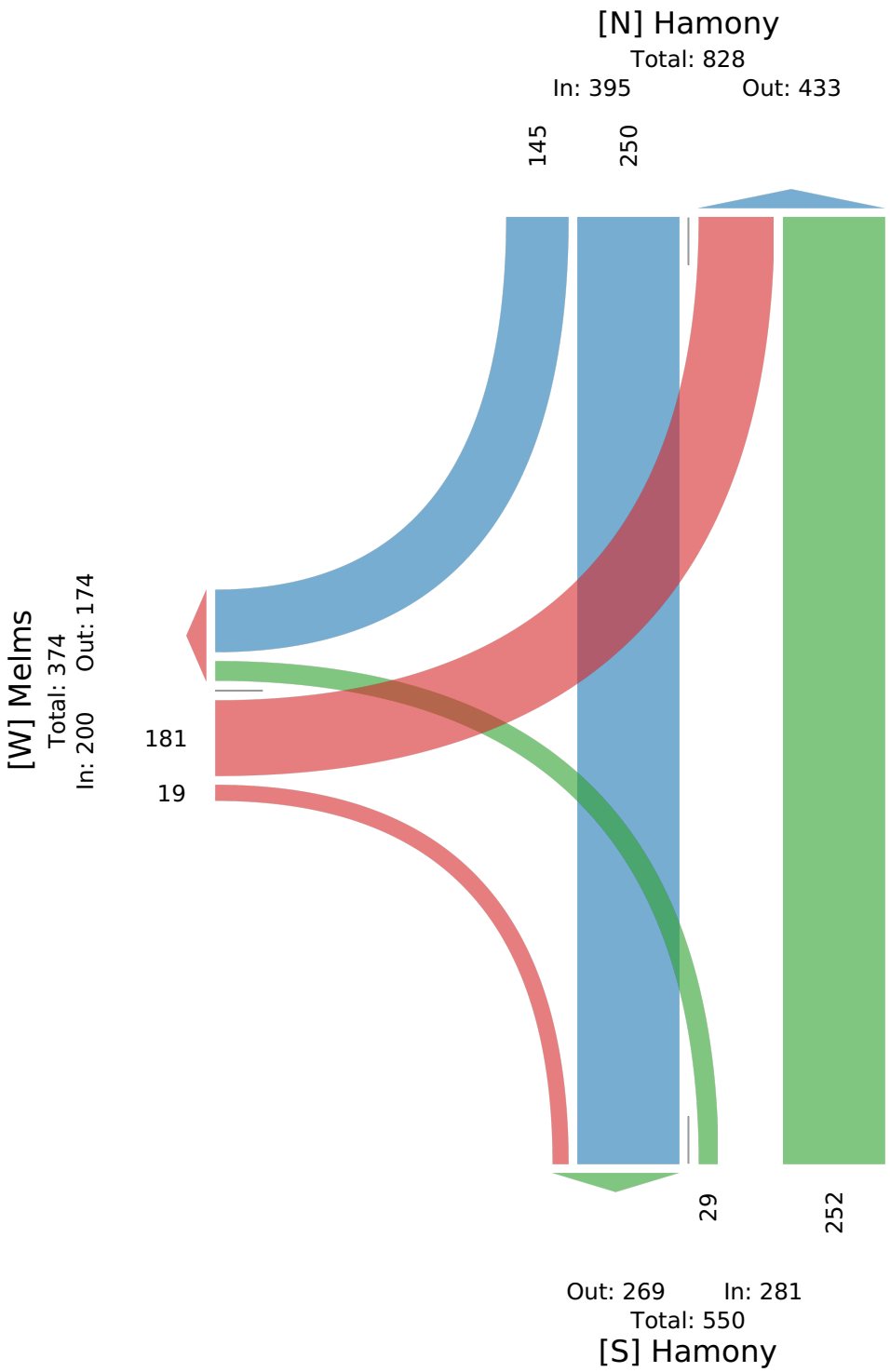
GEWALT HAMILTON ASSOCIATES, INC.
Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg Direction	Melms Eastbound				Hamony Northbound				Hamony Southbound				
Time	L	R	U	**App**	L	T	U	**App**	T	R	U	**App**	**Int**
2023-01-18 7:00AM	17	3	0	**20**	1	12	0	**13**	13	5	0	**18**	**51**
7:15AM	23	0	0	**23**	0	23	0	**23**	15	2	0	**17**	**63**
7:30AM	19	2	0	**21**	0	19	0	**19**	13	5	0	**18**	**58**
7:45AM	18	3	0	**21**	2	15	0	**17**	10	4	0	**14**	**52**
Hourly Total	77	8	0	**85**	3	69	0	**72**	51	16	0	**67**	**224**
8:00AM	6	2	0	**8**	2	8	0	**10**	16	3	0	**19**	**37**
8:15AM	14	1	0	**15**	3	15	0	**18**	21	3	0	**24**	**57**
8:30AM	13	0	0	**13**	0	11	0	**11**	17	2	0	**19**	**43**
8:45AM	8	1	0	**9**	1	14	0	**15**	5	3	0	**8**	**32**
Hourly Total	41	4	0	**45**	6	48	0	**54**	59	11	0	**70**	**169**
4:00PM	9	0	0	**9**	2	28	0	**30**	14	31	0	**45**	**84**
4:15PM	9	1	0	**10**	0	12	0	**12**	23	14	0	**37**	**59**
4:30PM	7	3	0	**10**	11	30	0	**41**	21	19	0	**40**	**91**
4:45PM	3	1	0	**4**	1	13	0	**14**	18	10	0	**28**	**46**
Hourly Total	28	5	0	**33**	14	83	0	**97**	76	74	0	**150**	**280**
5:00PM	9	0	0	**9**	1	14	0	**15**	20	10	0	**30**	**54**
5:15PM	9	0	0	**9**	0	20	0	**20**	15	12	0	**27**	**56**
5:30PM	8	2	0	**10**	4	9	0	**13**	21	15	0	**36**	**59**
5:45PM	9	0	0	**9**	1	9	0	**10**	8	7	0	**15**	**34**
Hourly Total	35	2	0	**37**	6	52	0	**58**	64	44	0	**108**	**203**
Total	181	19	0	**200**	29	252	0	**281**	250	145	0	**395**	**876**
% Approach	90.5%	9.5%	0%	**-**	10.3%	89.7%	0%	**-**	63.3%	36.7%	0%	**-**	-
% Total	20.7%	2.2%	0%	**22.8%**	3.3%	28.8%	0%	**32.1%**	28.5%	16.6%	0%	**45.1%**	-
Lights	173	17	0	**190**	27	237	0	**264**	242	139	0	**381**	835
% Lights	95.6%	89.5%	0%	**95.0%**	93.1%	94.0%	0%	**94.0%**	96.8%	95.9%	0%	**96.5%**	95.3%
Articulated Trucks	4	2	0	**6**	2	1	0	**3**	3	3	0	**6**	15
% Articulated Trucks	2.2%	10.5%	0%	**3.0%**	6.9%	0.4%	0%	**1.1%**	1.2%	2.1%	0%	**1.5%**	1.7%
Buses and Single-Unit Trucks	4	0	0	**4**	0	14	0	**14**	5	3	0	**8**	26
% Buses and Single-Unit Trucks	2.2%	0%	0%	**2.0%**	0%	5.6%	0%	**5.0%**	2.0%	2.1%	0%	**2.0%**	3.0%
Bicycles on Road	0	0	0	**0**	0	0	0	**0**	0	0	0	**0**	0
% Bicycles on Road	0%	0%	0%	**0%**	0%	0%	0%	**0%**	0%	0%	0%	**0%**	0%

*L: Left, R: Right, T: Thru, U: U-Turn

2_Harmony Road & Melms Road - TMC
Wed Jan 18, 2023
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Bicycles on Road)
All Movements
ID: 1028839, Location: 42.13263, -88.535029

Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US



2_Harmony Road & Melms Road - TMC

Wed Jan 18, 2023
AM Peak (7 AM - 8 AM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Bicycles on Road)
All Movements
ID: 1028839, Location: 42.13263, -88.535029

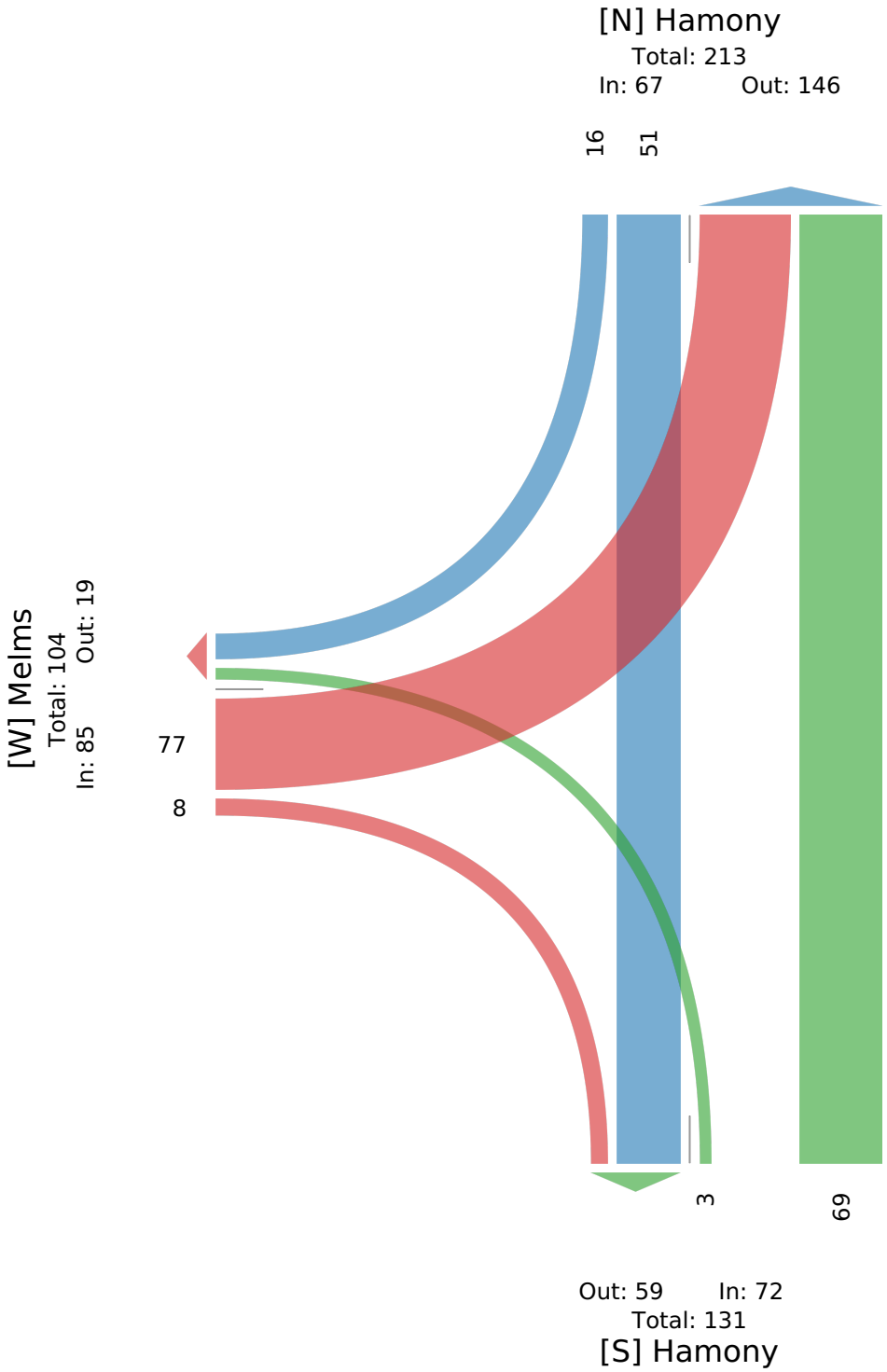
GEWALT HAMILTON ASSOCIATES, INC.
Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg Direction	Melms Eastbound				Hamony Northbound				Hamony Southbound				
Time	L	R	U	**App**	L	T	U	**App**	T	R	U	**App**	**Int**
2023-01-18 7:00AM	17	3	0	**20**	1	12	0	**13**	13	5	0	**18**	**51**
7:15AM	23	0	0	**23**	0	23	0	**23**	15	2	0	**17**	**63**
7:30AM	19	2	0	**21**	0	19	0	**19**	13	5	0	**18**	**58**
7:45AM	18	3	0	**21**	2	15	0	**17**	10	4	0	**14**	**52**
Total	77	8	0	**85**	3	69	0	**72**	51	16	0	**67**	**224**
% Approach	90.6%	9.4%	0%	**-**	4.2%	95.8%	0%	**-**	76.1%	23.9%	0%	**-**	-
% Total	34.4%	3.6%	0%	**37.9%**	1.3%	30.8%	0%	**32.1%**	22.8%	7.1%	0%	**29.9%**	-
PHF	0.837	0.667	-	**0.924**	0.375	0.750	-	**0.783**	0.850	0.800	-	**0.931**	0.889
Lights	75	8	0	**83**	3	66	0	**69**	48	15	0	**63**	215
% Lights	97.4%	100%	0%	**97.6%**	100%	95.7%	0%	**95.8%**	94.1%	93.8%	0%	**94.0%**	96.0%
Articulated Trucks	2	0	0	**2**	0	0	0	**0**	1	1	0	**2**	4
% Articulated Trucks	2.6%	0%	0%	**2.4%**	0%	0%	0%	**0%**	2.0%	6.3%	0%	**3.0%**	1.8%
Buses and Single-Unit Trucks	0	0	0	**0**	0	3	0	**3**	2	0	0	**2**	5
% Buses and Single-Unit Trucks	0%	0%	0%	**0%**	0%	4.3%	0%	**4.2%**	3.9%	0%	0%	**3.0%**	2.2%
Bicycles on Road	0	0	0	**0**	0	0	0	**0**	0	0	0	**0**	0
% Bicycles on Road	0%	0%	0%	**0%**	0%	0%	0%	**0%**	0%	0%	0%	**0%**	0%

*L: Left, R: Right, T: Thru, U: U-Turn

2_Harmony Road & Melms Road - TMC
Wed Jan 18, 2023
AM Peak (7 AM - 8 AM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Bicycles on Road)
All Movements
ID: 1028839, Location: 42.13263, -88.535029

GEWALT HAMILTON ASSOCIATES, INC.
Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US



2_Harmony Road & Melms Road - TMC

Wed Jan 18, 2023
PM Peak (4 PM - 5 PM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Bicycles on Road)
All Movements
ID: 1028839, Location: 42.13263, -88.535029

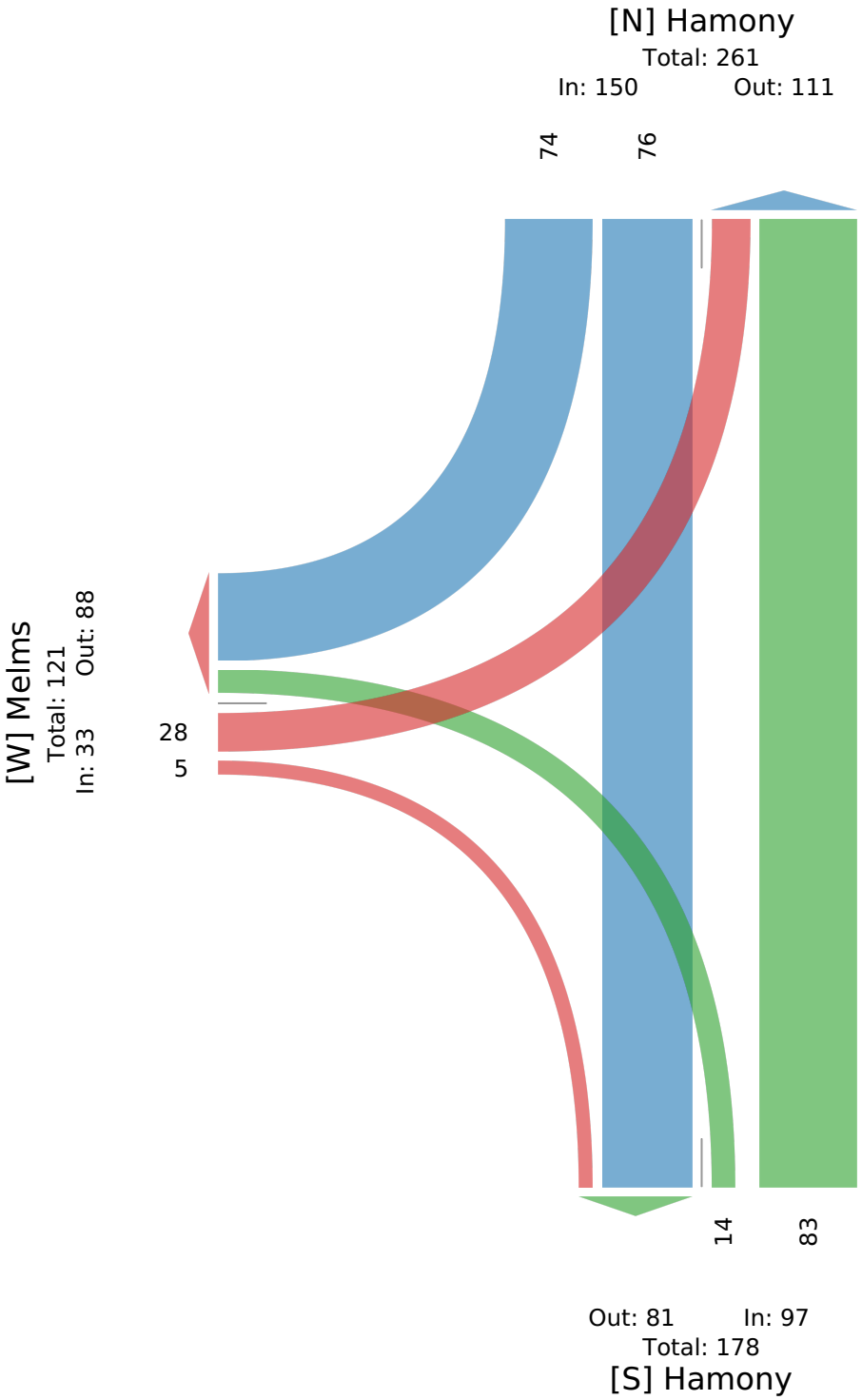
GEWALT HAMILTON ASSOCIATES, INC.
Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg Direction	Melms Eastbound				Hamony Northbound				Hamony Southbound				
Time	L	R	U	**App**	L	T	U	**App**	T	R	U	**App**	**Int**
2023-01-18 4:00PM	9	0	0	**9**	2	28	0	**30**	14	31	0	**45**	**84**
4:15PM	9	1	0	**10**	0	12	0	**12**	23	14	0	**37**	**59**
4:30PM	7	3	0	**10**	11	30	0	**41**	21	19	0	**40**	**91**
4:45PM	3	1	0	**4**	1	13	0	**14**	18	10	0	**28**	**46**
Total	28	5	0	**33**	14	83	0	**97**	76	74	0	**150**	**280**
% Approach	84.8%	15.2%	0%	**-**	14.4%	85.6%	0%	**-**	50.7%	49.3%	0%	**-**	-
% Total	10.0%	1.8%	0%	**11.8%**	5.0%	29.6%	0%	**34.6%**	27.1%	26.4%	0%	**53.6%**	-
PHF	0.778	0.417	-	**0.825**	0.318	0.692	-	**0.591**	0.826	0.597	-	**0.833**	0.769
Lights	27	5	0	**32**	13	78	0	**91**	76	72	0	**148**	271
% Lights	96.4%	100%	0%	**97.0%**	92.9%	94.0%	0%	**93.8%**	100%	97.3%	0%	**98.7%**	96.8%
Articulated Trucks	0	0	0	**0**	1	0	0	**1**	0	0	0	**0**	1
% Articulated Trucks	0%	0%	0%	**0%**	7.1%	0%	0%	**1.0%**	0%	0%	0%	**0%**	0.4%
Buses and Single-Unit Trucks	1	0	0	**1**	0	5	0	**5**	0	2	0	**2**	8
% Buses and Single-Unit Trucks	3.6%	0%	0%	**3.0%**	0%	6.0%	0%	**5.2%**	0%	2.7%	0%	**1.3%**	2.9%
Bicycles on Road	0	0	0	**0**	0	0	0	**0**	0	0	0	**0**	0
% Bicycles on Road	0%	0%	0%	**0%**	0%	0%	0%	**0%**	0%	0%	0%	**0%**	0%

*L: Left, R: Right, T: Thru, U: U-Turn

2_Harmony Road & Melms Road - TMC
Wed Jan 18, 2023
PM Peak (4 PM - 5 PM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Bicycles on Road)
All Movements
ID: 1028839, Location: 42.13263, -88.535029

GEWALT HAMILTON ASSOCIATES, INC.
Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US



3_Harmony Road & Kelley Road - TMC

Wed Jan 18, 2023
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Bicycles on Road)
All Movements
ID: 1028840, Location: 42.113692, -88.534957

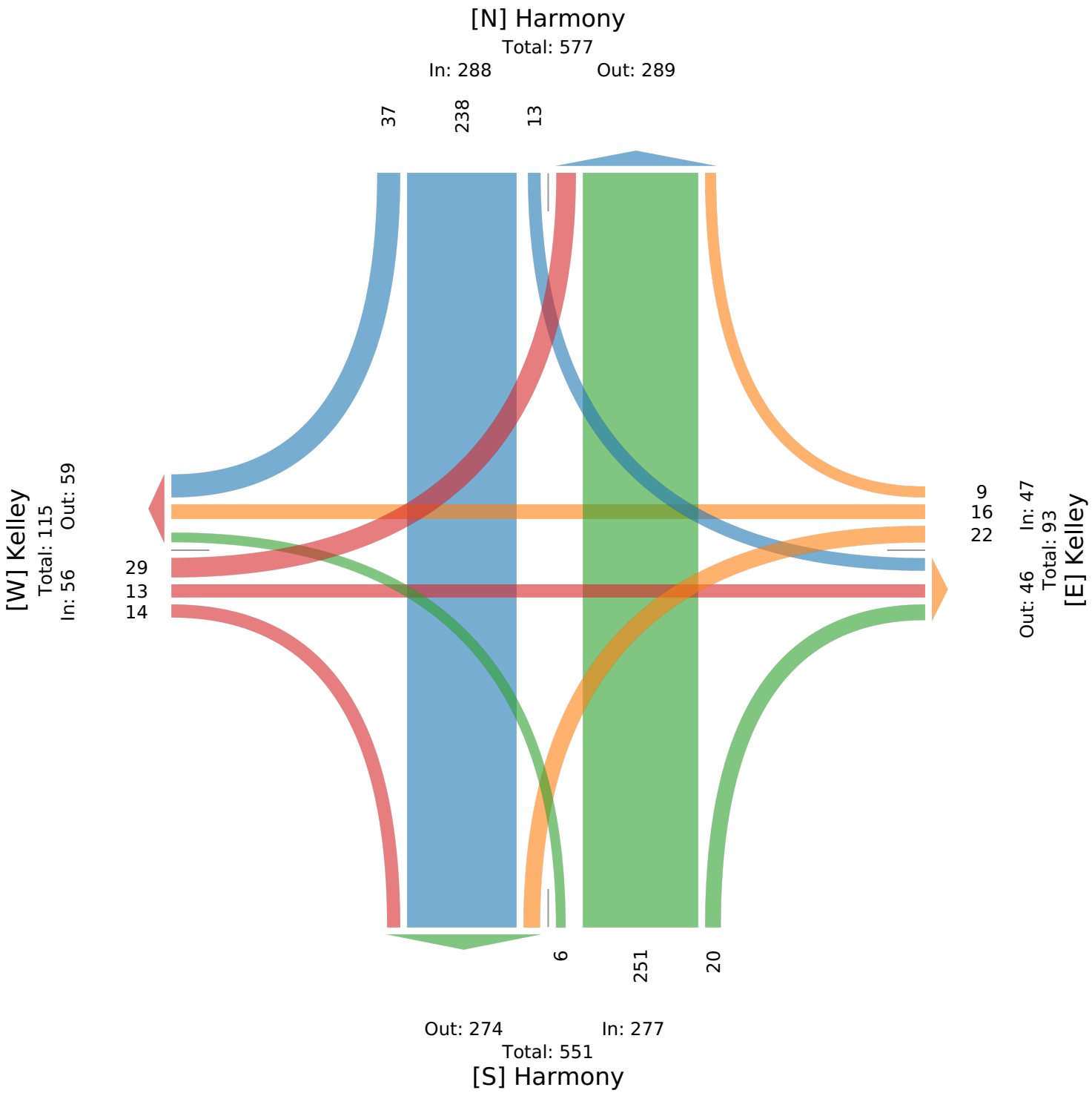
Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg	Kelley					Kelley					Harmony					Harmony					
Direction	Eastbound					Westbound					Northbound					Southbound					
Time	L	T	R	U	App	L	T	R	U	App	L	T	R	U	App	L	T	R	U	App	Int
2023-01-18 7:00AM	3	1	1	0	**5**	0	2	0	0	**2**	0	13	1	0	**14**	0	16	2	0	**18**	**39**
7:15AM	4	1	0	0	**5**	0	1	1	0	**2**	2	18	0	0	**20**	0	19	0	0	**19**	**46**
7:30AM	4	2	0	0	**6**	2	1	2	0	**5**	0	8	1	0	**9**	1	12	5	0	**18**	**38**
7:45AM	2	3	1	0	**6**	0	2	1	0	**3**	2	16	1	0	**19**	2	12	4	0	**18**	**46**
Hourly Total	13	7	2	0	**22**	2	6	4	0	**12**	4	55	3	0	**62**	3	59	11	0	**73**	**169**
8:00AM	1	1	5	0	**7**	1	0	0	0	**1**	0	12	0	0	**12**	0	14	5	0	**19**	**39**
8:15AM	3	1	2	0	**6**	4	0	1	0	**5**	0	12	0	0	**12**	1	23	1	0	**25**	**48**
8:30AM	1	0	1	0	**2**	3	1	0	0	**4**	0	14	1	0	**15**	2	16	0	0	**18**	**39**
8:45AM	0	0	0	0	**0**	0	0	0	0	**0**	1	10	1	0	**12**	0	6	1	0	**7**	**19**
Hourly Total	5	2	8	0	**15**	8	1	1	0	**10**	1	48	2	0	**51**	3	59	7	0	**69**	**145**
4:00PM	2	0	0	0	**2**	2	0	0	0	**2**	0	28	3	0	**31**	0	13	2	0	**15**	**50**
4:15PM	0	0	1	0	**1**	2	2	0	0	**4**	0	14	1	0	**15**	1	19	4	0	**24**	**44**
4:30PM	2	0	1	0	**3**	2	2	1	0	**5**	1	37	2	0	**40**	1	13	6	0	**20**	**68**
4:45PM	3	0	0	0	**3**	0	0	0	0	**0**	0	12	2	0	**14**	1	20	3	0	**24**	**41**
Hourly Total	7	0	2	0	**9**	6	4	1	0	**11**	1	91	8	0	**100**	3	65	15	0	**83**	**203**
5:00PM	1	2	0	0	**3**	1	0	1	0	**2**	0	15	2	0	**17**	1	16	1	0	**18**	**40**
5:15PM	1	1	2	0	**4**	2	2	0	0	**4**	0	23	1	0	**24**	2	12	0	0	**14**	**46**
5:30PM	0	0	0	0	**0**	2	2	1	0	**5**	0	11	1	0	**12**	1	17	3	0	**21**	**38**
5:45PM	2	1	0	0	**3**	1	1	1	0	**3**	0	8	3	0	**11**	0	10	0	0	**10**	**27**
Hourly Total	4	4	2	0	**10**	6	5	3	0	**14**	0	57	7	0	**64**	4	55	4	0	**63**	**151**
Total	29	13	14	0	**56**	22	16	9	0	**47**	6	251	20	0	**277**	13	238	37	0	**288**	**668**
% Approach	51.8%	23.2%	25.0%	0%	**-**	46.8%	34.0%	19.1%	0%	**-**	2.2%	90.6%	7.2%	0%	**-**	4.5%	82.6%	12.8%	0%	**-**	-
% Total	4.3%	1.9%	2.1%	0%	**8.4%**	3.3%	2.4%	1.3%	0%	**7.0%**	0.9%	37.6%	3.0%	0%	**41.5%**	1.9%	35.6%	5.5%	0%	**43.1%**	-
Lights	22	13	12	0	**47**	19	15	9	0	**43**	6	237	18	0	**261**	12	230	36	0	**278**	629
% Lights	75.9%	100%	85.7%	0%	**83.9%**	86.4%	93.8%	100%	0%	**91.5%**	100%	94.4%	90.0%	0%	**94.2%**	92.3%	96.6%	97.3%	0%	**96.5%**	94.2%
Articulated Trucks	1	0	1	0	**2**	0	0	0	0	**0**	0	7	0	0	**7**	0	4	1	0	**5**	14
% Articulated Trucks	3.4%	0%	7.1%	0%	**3.6%**	0%	0%	0%	0%	**0%**	0%	2.8%	0%	0%	**2.5%**	0%	1.7%	2.7%	0%	**1.7%**	2.1%
Buses and Single-Unit Trucks	6	0	1	0	**7**	3	1	0	0	**4**	0	7	2	0	**9**	1	4	0	0	**5**	25
% Buses and Single-Unit Trucks	20.7%	0%	7.1%	0%	**12.5%**	13.6%	6.3%	0%	0%	**8.5%**	0%	2.8%	10.0%	0%	**3.2%**	7.7%	1.7%	0%	0%	**1.7%**	3.7%
Bicycles on Road	0	0	0	0	**0**	0	0	0	0	**0**	0	0	0	0	**0**	0	0	0	0	**0**	0
% Bicycles on Road	0%	0%	0%	0%	**0%**	0%	0%	0%	0%	**0%**	0%	0%	0%	0%	**0%**	0%	0%	0%	0%	**0%**	0%

*L: Left, R: Right, T: Thru, U: U-Turn

3_Harmony Road & Kelley Road - TMC
Wed Jan 18, 2023
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Bicycles on Road)
All Movements
ID: 1028840, Location: 42.113692, -88.534957

Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US



3_Harmony Road & Kelley Road - TMC

Wed Jan 18, 2023
Forced Peak (7 AM - 8 AM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Bicycles on Road)
All Movements
ID: 1028840, Location: 42.113692, -88.534957

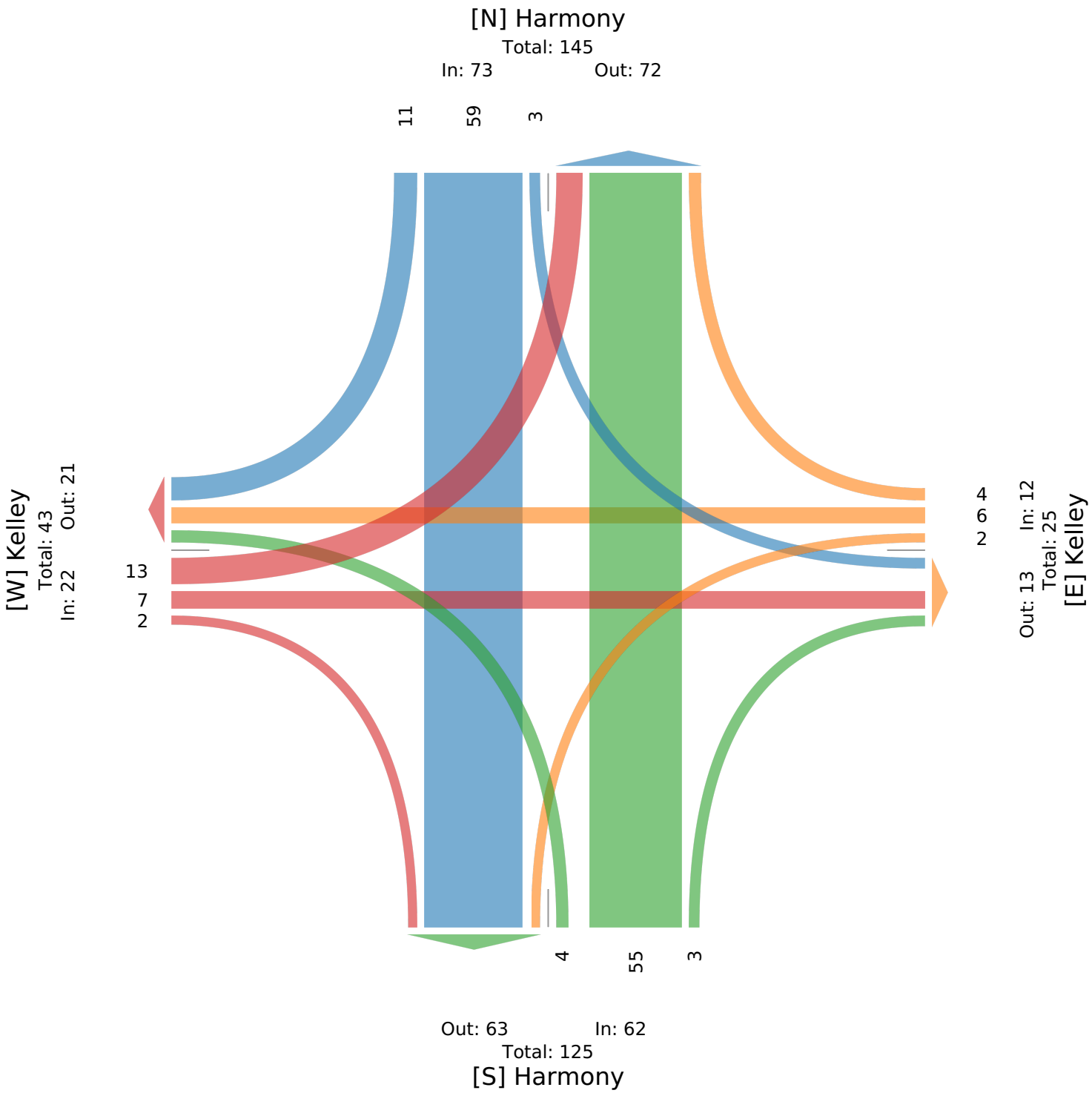
Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg	Kelley					Kelley					Harmony					Harmony					
Direction	Eastbound					Westbound					Northbound					Southbound					
Time	L	T	R	U	App	L	T	R	U	App	L	T	R	U	App	L	T	R	U	App	Int
2023-01-18 7:00AM	3	1	1	0	**5**	0	2	0	0	**2**	0	13	1	0	**14**	0	16	2	0	**18**	**39**
7:15AM	4	1	0	0	**5**	0	1	1	0	**2**	2	18	0	0	**20**	0	19	0	0	**19**	**46**
7:30AM	4	2	0	0	**6**	2	1	2	0	**5**	0	8	1	0	**9**	1	12	5	0	**18**	**38**
7:45AM	2	3	1	0	**6**	0	2	1	0	**3**	2	16	1	0	**19**	2	12	4	0	**18**	**46**
Total	13	7	2	0	**22**	2	6	4	0	**12**	4	55	3	0	**62**	3	59	11	0	**73**	**169**
% Approach	59.1%	31.8%	9.1%	0%	**-**	16.7%	50.0%	33.3%	0%	**-**	6.5%	88.7%	4.8%	0%	**-**	4.1%	80.8%	15.1%	0%	**-**	-
% Total	7.7%	4.1%	1.2%	0%	**13.0%**	1.2%	3.6%	2.4%	0%	**7.1%**	2.4%	32.5%	1.8%	0%	**36.7%**	1.8%	34.9%	6.5%	0%	**43.2%**	-
PHF	0.813	0.583	0.500	-	**0.917**	0.250	0.750	0.500	-	**0.600**	0.500	0.764	0.750	-	**0.775**	0.375	0.776	0.550	-	**0.961**	0.918
Lights	10	7	2	0	**19**	2	5	4	0	**11**	4	53	1	0	**58**	3	57	10	0	**70**	158
% Lights	76.9%	100%	100%	0%	**86.4%**	100%	83.3%	100%	0%	**91.7%**	100%	96.4%	33.3%	0%	**93.5%**	100%	96.6%	90.9%	0%	**95.9%**	93.5%
Articulated Trucks	0	0	0	0	**0**	0	0	0	0	**0**	0	2	0	0	**2**	0	0	1	0	**1**	3
% Articulated Trucks	0%	0%	0%	0%	**0%**	0%	0%	0%	0%	**0%**	0%	3.6%	0%	0%	**3.2%**	0%	0%	9.1%	0%	**1.4%**	1.8%
Buses and Single-Unit Trucks	3	0	0	0	**3**	0	1	0	0	**1**	0	0	2	0	**2**	0	2	0	0	**2**	8
% Buses and Single-Unit Trucks	23.1%	0%	0%	0%	**13.6%**	0%	16.7%	0%	0%	**8.3%**	0%	0%	66.7%	0%	**3.2%**	0%	3.4%	0%	0%	**2.7%**	4.7%
Bicycles on Road	0	0	0	0	**0**	0	0	0	0	**0**	0	0	0	0	**0**	0	0	0	0	**0**	0
% Bicycles on Road	0%	0%	0%	0%	**0%**	0%	0%	0%	0%	**0%**	0%	0%	0%	0%	**0%**	0%	0%	0%	0%	**0%**	0%

*L: Left, R: Right, T: Thru, U: U-Turn

3_Harmony Road & Kelley Road - TMC
Wed Jan 18, 2023
Forced Peak (7 AM - 8 AM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Bicycles on Road)
All Movements
ID: 1028840, Location: 42.113692, -88.534957

Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US



3_Harmony Road & Kelley Road - TMC

Wed Jan 18, 2023
PM Peak (4 PM - 5 PM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Bicycles on Road)
All Movements
ID: 1028840, Location: 42.113692, -88.534957

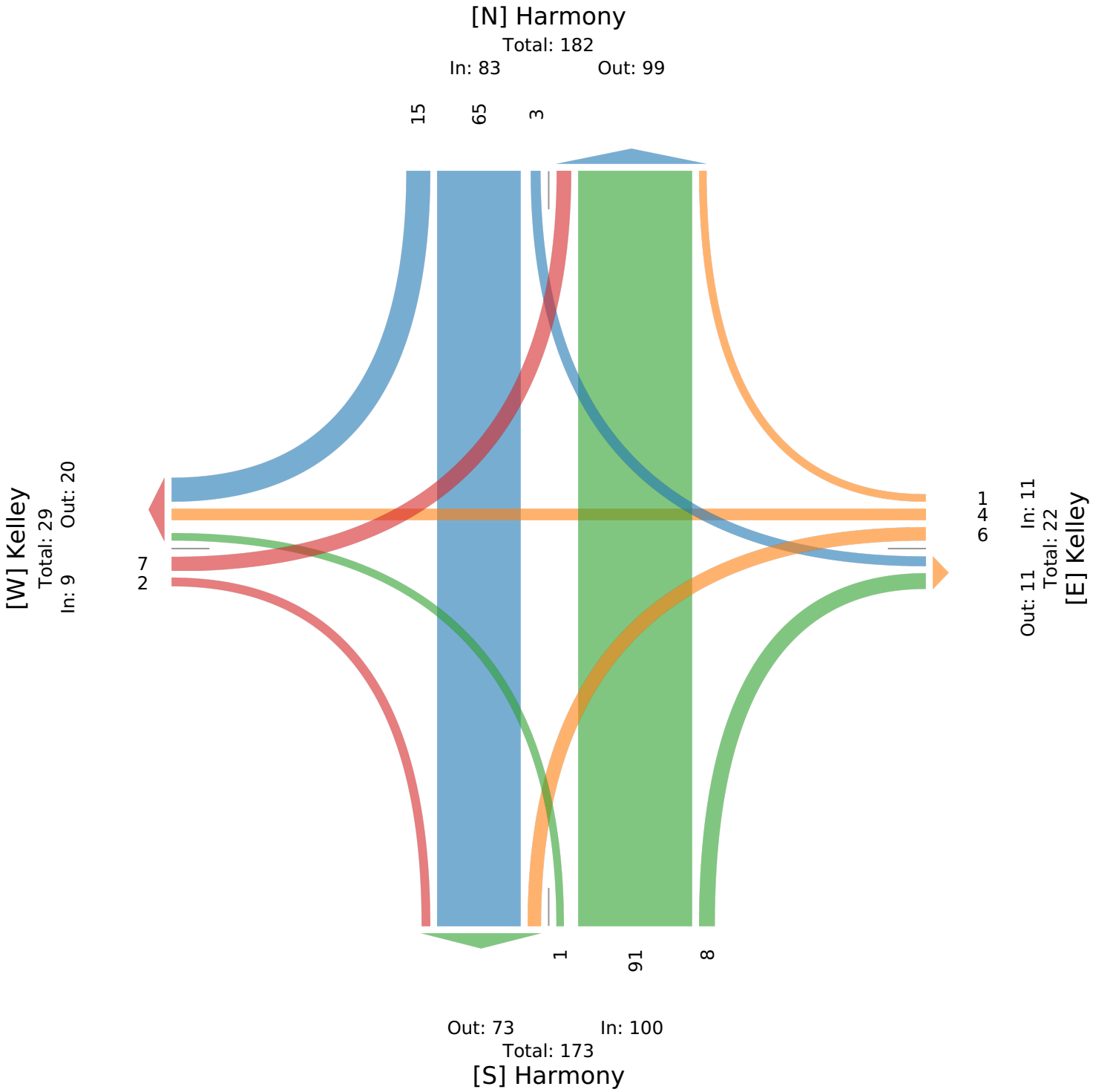
Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg / Direction	Kelley Eastbound					Kelley Westbound					Harmony Northbound					Harmony Southbound					
Time	L	T	R	U	**App**	L	T	R	U	**App**	L	T	R	U	**App**	L	T	R	U	**App**	**Int**
2023-01-18 4:00PM	2	0	0	0	**2**	2	0	0	0	**2**	0	28	3	0	**31**	0	13	2	0	**15**	**50**
4:15PM	0	0	1	0	**1**	2	2	0	0	**4**	0	14	1	0	**15**	1	19	4	0	**24**	**44**
4:30PM	2	0	1	0	**3**	2	2	1	0	**5**	1	37	2	0	**40**	1	13	6	0	**20**	**68**
4:45PM	3	0	0	0	**3**	0	0	0	0	**0**	0	12	2	0	**14**	1	20	3	0	**24**	**41**
Total	7	0	2	0	**9**	6	4	1	0	**11**	1	91	8	0	**100**	3	65	15	0	**83**	**203**
% Approach	77.8%	0%	22.2%	0%	**-**	54.5%	36.4%	9.1%	0%	**-**	1.0%	91.0%	8.0%	0%	**-**	3.6%	78.3%	18.1%	0%	**-**	-
% Total	3.4%	0%	1.0%	0%	**4.4%**	3.0%	2.0%	0.5%	0%	**5.4%**	0.5%	44.8%	3.9%	0%	**49.3%**	1.5%	32.0%	7.4%	0%	**40.9%**	-
PHF	0.583	-	0.500	-	**0.750**	0.750	0.500	0.250	-	**0.550**	0.250	0.615	0.667	-	**0.625**	0.750	0.813	0.625	-	**0.865**	0.746
Lights	4	0	2	0	**6**	4	4	1	0	**9**	1	87	8	0	**96**	3	65	15	0	**83**	194
% Lights	57.1%	0%	100%	0%	**66.7%**	66.7%	100%	100%	0%	**81.8%**	100%	95.6%	100%	0%	**96.0%**	100%	100%	100%	0%	**100%**	95.6%
Articulated Trucks	0	0	0	0	**0**	0	0	0	0	**0**	0	2	0	0	**2**	0	0	0	0	**0**	2
% Articulated Trucks	0%	0%	0%	0%	**0%**	0%	0%	0%	0%	**0%**	0%	2.2%	0%	0%	**2.0%**	0%	0%	0%	0%	**0%**	1.0%
Buses and Single-Unit Trucks	3	0	0	0	**3**	2	0	0	0	**2**	0	2	0	0	**2**	0	0	0	0	**0**	7
% Buses and Single-Unit Trucks	42.9%	0%	0%	0%	**33.3%**	33.3%	0%	0%	0%	**18.2%**	0%	2.2%	0%	0%	**2.0%**	0%	0%	0%	0%	**0%**	3.4%
Bicycles on Road	0	0	0	0	**0**	0	0	0	0	**0**	0	0	0	0	**0**	0	0	0	0	**0**	0
% Bicycles on Road	0%	0%	0%	0%	**0%**	0%	0%	0%	0%	**0%**	0%	0%	0%	0%	**0%**	0%	0%	0%	0%	**0%**	0%

*L: Left, R: Right, T: Thru, U: U-Turn

3_Harmony Road & Kelley Road - TMC
Wed Jan 18, 2023
PM Peak (4 PM - 5 PM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Bicycles on Road)
All Movements
ID: 1028840, Location: 42.113692, -88.534957

GEWALT HAMILTON ASSOCIATES, INC.
Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US



4_Harmony Road & Allen Road - TMC

Wed Jan 18, 2023
Full Length (6 AM-6 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Bicycles on Road)
All Movements
ID: 1028842, Location: 42.106433, -88.535002

GEWALT HAMILTON ASSOCIATES, INC.
Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

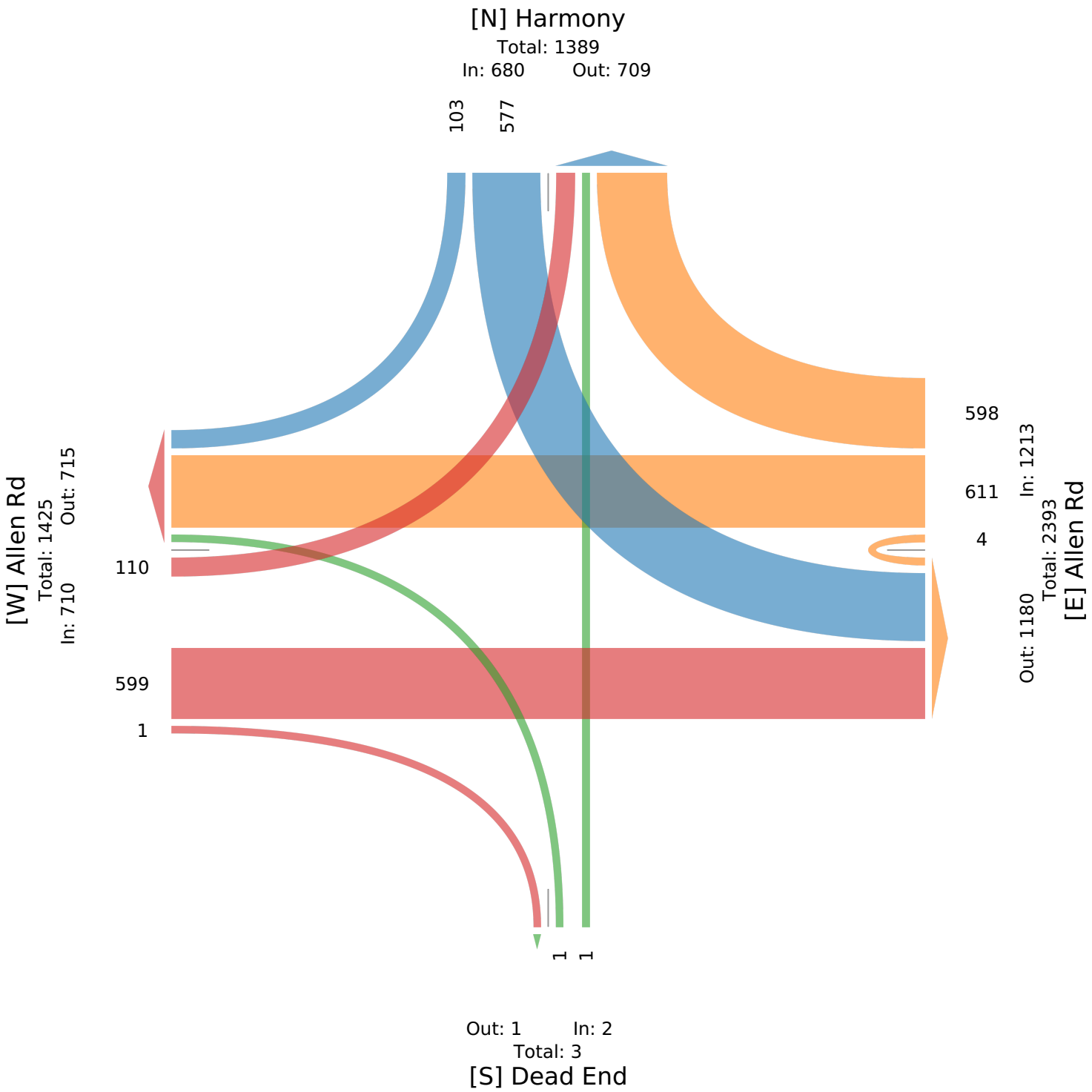
Leg	Allen Rd					Allen Rd					Dead End					Harmony					
Direction	Eastbound					Westbound					Northbound					Southbound					
Time	L	T	R	U	App	L	T	R	U	App	L	T	R	U	App	L	T	R	U	App	Int
2023-01-18 6:00AM	2	14	1	0	**17**	0	1	5	0	**6**	0	0	0	0	**0**	10	0	0	0	**10**	**33**
6:15AM	3	13	0	0	**16**	0	3	5	0	**8**	1	0	0	0	**1**	7	0	4	0	**11**	**36**
6:30AM	3	31	0	0	**34**	0	5	12	0	**17**	0	0	0	0	**0**	11	0	2	0	**13**	**64**
6:45AM	8	24	0	0	**32**	0	6	16	0	**22**	0	0	0	0	**0**	16	0	0	0	**16**	**70**
Hourly Total	16	82	1	0	**99**	0	15	38	0	**53**	1	0	0	0	**1**	44	0	6	0	**50**	**203**
7:00AM	4	17	0	0	**21**	0	7	10	0	**17**	0	0	0	0	**0**	13	0	2	0	**15**	**53**
7:15AM	4	20	0	0	**24**	0	10	15	0	**25**	0	0	0	0	**0**	14	0	7	0	**21**	**70**
7:30AM	4	31	0	0	**35**	0	7	5	0	**12**	0	0	0	0	**0**	14	0	0	0	**14**	**61**
7:45AM	4	28	0	0	**32**	0	11	15	0	**26**	0	0	0	0	**0**	13	0	1	0	**14**	**72**
Hourly Total	16	96	0	0	**112**	0	35	45	0	**80**	0	0	0	0	**0**	54	0	10	0	**64**	**256**
8:00AM	1	15	0	0	**16**	0	11	11	0	**22**	0	0	0	0	**0**	16	0	4	0	**20**	**58**
8:15AM	2	12	0	0	**14**	0	5	10	0	**15**	0	0	0	0	**0**	26	0	1	0	**27**	**56**
8:30AM	1	16	0	0	**17**	0	13	15	0	**28**	0	0	0	0	**0**	19	0	1	0	**20**	**65**
8:45AM	1	15	0	0	**16**	0	10	12	0	**22**	0	0	0	0	**0**	8	0	0	0	**8**	**46**
Hourly Total	5	58	0	0	**63**	0	39	48	0	**87**	0	0	0	0	**0**	69	0	6	0	**75**	**225**
9:00AM	2	5	0	0	**7**	0	11	17	0	**28**	0	0	0	0	**0**	6	0	1	0	**7**	**42**
9:15AM	4	6	0	0	**10**	0	10	10	0	**20**	0	0	0	0	**0**	11	0	1	0	**12**	**42**
9:30AM	0	10	0	0	**10**	0	6	10	0	**16**	0	0	0	0	**0**	12	0	1	0	**13**	**39**
9:45AM	1	15	0	0	**16**	0	4	6	0	**10**	0	0	0	0	**0**	10	0	2	0	**12**	**38**
Hourly Total	7	36	0	0	**43**	0	31	43	0	**74**	0	0	0	0	**0**	39	0	5	0	**44**	**161**
10:00AM	0	8	0	0	**8**	0	6	10	0	**16**	0	0	0	0	**0**	7	0	0	0	**7**	**31**
10:15AM	1	8	0	0	**9**	0	3	7	1	**11**	0	0	0	0	**0**	8	0	1	0	**9**	**29**
10:30AM	3	5	0	0	**8**	0	7	11	1	**19**	0	0	0	0	**0**	10	0	2	0	**12**	**39**
10:45AM	1	15	0	0	**16**	0	8	8	0	**16**	0	0	0	0	**0**	9	0	3	0	**12**	**44**
Hourly Total	5	36	0	0	**41**	0	24	36	2	**62**	0	0	0	0	**0**	34	0	6	0	**40**	**143**
11:00AM	0	8	0	0	**8**	0	15	7	0	**22**	0	0	0	0	**0**	12	0	0	0	**12**	**42**
11:15AM	1	14	0	0	**15**	0	10	8	0	**18**	0	0	0	0	**0**	11	0	0	0	**11**	**44**
11:30AM	5	9	0	0	**14**	0	12	8	0	**20**	0	0	0	0	**0**	8	0	4	0	**12**	**46**
11:45AM	0	10	0	0	**10**	0	15	11	0	**26**	0	0	0	0	**0**	17	0	0	0	**17**	**53**
Hourly Total	6	41	0	0	**47**	0	52	34	0	**86**	0	0	0	0	**0**	48	0	4	0	**52**	**185**
12:00PM	2	12	0	0	**14**	0	13	6	0	**19**	0	0	0	0	**0**	5	0	2	0	**7**	**40**
12:15PM	0	6	0	0	**6**	0	9	4	0	**13**	0	0	0	0	**0**	7	0	8	0	**15**	**34**
12:30PM	4	9	0	0	**13**	0	9	8	0	**17**	0	0	0	0	**0**	6	0	3	0	**9**	**39**
12:45PM	1	6	0	0	**7**	0	17	17	0	**34**	0	0	0	0	**0**	9	0	3	0	**12**	**53**
Hourly Total	7	33	0	0	**40**	0	48	35	0	**83**	0	0	0	0	**0**	27	0	16	0	**43**	**166**
1:00PM	0	5	0	0	**5**	0	8	12	0	**20**	0	0	0	0	**0**	7	0	2	0	**9**	**34**
1:15PM	2	6	0	0	**8**	0	10	7	1	**18**	0	0	0	0	**0**	6	0	1	0	**7**	**33**
1:30PM	5	10	0	0	**15**	0	7	8	0	**15**	0	0	0	0	**0**	8	0	4	0	**12**	**42**
1:45PM	1	7	0	0	**8**	0	6	6	0	**12**	0	0	0	0	**0**	8	0	1	0	**9**	**29**
Hourly Total	8	28	0	0	**36**	0	31	33	1	**65**	0	0	0	0	**0**	29	0	8	0	**37**	**138**
2:00PM	2	8	0	0	**10**	0	6	11	0	**17**	0	0	0	0	**0**	5	0	1	0	**6**	**33**
2:15PM	7	18	0	0	**25**	0	16	11	0	**27**	0	0	0	0	**0**	8	0	1	0	**9**	**61**
2:30PM	3	8	0	0	**11**	0	23	22	0	**45**	0	0	0	0	**0**	9	0	4	0	**13**	**69**
2:45PM	3	10	0	0	**13**	0	19	10	0	**29**	0	0	0	0	**0**	22	0	2	0	**24**	**66**
Hourly Total	15	44	0	0	**59**	0	64	54	0	**118**	0	0	0	0	**0**	44	0	8	0	**52**	**229**
3:00PM	0	6	0	0	**6**	0	25	17	0	**42**	0	0	0	0	**0**	16	0	3	0	**19**	**67**
3:15PM	1	17	0	0	**18**	0	19	18	0	**37**	0	0	0	0	**0**	20	0	4	0	**24**	**79**
3:30PM	2	13	0	0	**15**	0	21	24	0	**45**	0	0	0	0	**0**	14	0	1	0	**15**	**75**
3:45PM	5	14	0	0	**19**	0	20	24	0	**44**	0	0	0	0	**0**	26	0	3	0	**29**	**92**
Hourly Total	8	50	0	0	**58**	0	85	83	0	**168**	0	0	0	0	**0**	76	0	11	0	**87**	**313**
4:00PM	3	14	0	0	**17**	0	28	28	0	**56**	0	0	0	0	**0**	14	0	0	0	**14**	**87**
4:15PM	1	12	0	0	**13**	0	21	19	0	**40**	0	0	0	0	**0**	15	0	6	0	**21**	**74**
4:30PM	1	16	0	0	**17**	0	39	35	0	**74**	0	1	0	0	**1**	12	0	5	0	**17**	**109**

Leg	Allen Rd					Allen Rd					Dead End					Harmony					
Direction	Eastbound					Westbound					Northbound					Southbound					
Time	L	T	R	U	**App**	L	T	R	U	**App**	L	T	R	U	**App**	L	T	R	U	**App**	**Int**
4:45PM	0	8	0	0	**8**	0	24	14	0	**38**	0	0	0	0	**0**	19	0	1	0	**20**	**66**
Hourly Total	5	50	0	0	**55**	0	112	96	0	**208**	0	1	0	0	**1**	60	0	12	0	**72**	**336**
5:00PM	1	15	0	0	**16**	0	19	15	0	**34**	0	0	0	0	**0**	15	0	2	0	**17**	**67**
5:15PM	4	9	0	0	**13**	0	18	20	0	**38**	0	0	0	0	**0**	11	0	5	0	**16**	**67**
5:30PM	3	10	0	0	**13**	0	22	10	1	**33**	0	0	0	0	**0**	17	0	3	0	**20**	**66**
5:45PM	4	11	0	0	**15**	0	16	8	0	**24**	0	0	0	0	**0**	10	0	1	0	**11**	**50**
Hourly Total	12	45	0	0	**57**	0	75	53	1	**129**	0	0	0	0	**0**	53	0	11	0	**64**	**250**
Total	110	599	1	0	**710**	0	611	598	4	**1213**	1	1	0	0	**2**	577	0	103	0	**680**	**2605**
% Approach	15.5%	84.4%	0.1%	0%	**-**	0%	50.4%	49.3%	0.3%	**-**	50.0%	50.0%	0%	0%	**-**	84.9%	0%	15.1%	0%	**-**	-
% Total	4.2%	23.0%	0%	0%	**27.3%**	0%	23.5%	23.0%	0.2%	**46.6%**	0%	0%	0%	0%	**0.1%**	22.1%	0%	4.0%	0%	**26.1%**	-
Lights	90	556	1	0	**647**	0	562	555	4	**1121**	1	0	0	0	**1**	536	0	84	0	**620**	2389
% Lights	81.8%	92.8%	100%	0%	**91.1%**	0%	92.0%	92.8%	100%	**92.4%**	100%	0%	0%	0%	**50.0%**	92.9%	0%	81.6%	0%	**91.2%**	91.7%
Articulated Trucks	12	9	0	0	**21**	0	13	21	0	**34**	0	0	0	0	**0**	20	0	7	0	**27**	82
% Articulated Trucks	10.9%	1.5%	0%	0%	**3.0%**	0%	2.1%	3.5%	0%	**2.8%**	0%	0%	0%	0%	**0%**	3.5%	0%	6.8%	0%	**4.0%**	3.1%
Buses and Single-Unit Trucks	8	33	0	0	**41**	0	36	22	0	**58**	0	1	0	0	**1**	21	0	12	0	**33**	133
% Buses and Single-Unit Trucks	7.3%	5.5%	0%	0%	**5.8%**	0%	5.9%	3.7%	0%	**4.8%**	0%	100%	0%	0%	**50.0%**	3.6%	0%	11.7%	0%	**4.9%**	5.1%
Bicycles on Road	0	1	0	0	**1**	0	0	0	0	**0**	0	0	0	0	**0**	0	0	0	0	**0**	1
% Bicycles on Road	0%	0.2%	0%	0%	**0.1%**	0%	0%	0%	0%	**0%**	0%	0%	0%	0%	**0%**	0%	0%	0%	0%	**0%**	0%

*L: Left, R: Right, T: Thru, U: U-Turn

4_Harmony Road & Allen Road - TMC
Wed Jan 18, 2023
Full Length (6 AM-6 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Bicycles on Road)
All Movements
ID: 1028842, Location: 42.106433, -88.535002

Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US



4_Harmony Road & Allen Road - TMC

Wed Jan 18, 2023
Forced Peak (7 AM - 8 AM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Bicycles on Road)
All Movements
ID: 1028842, Location: 42.106433, -88.535002

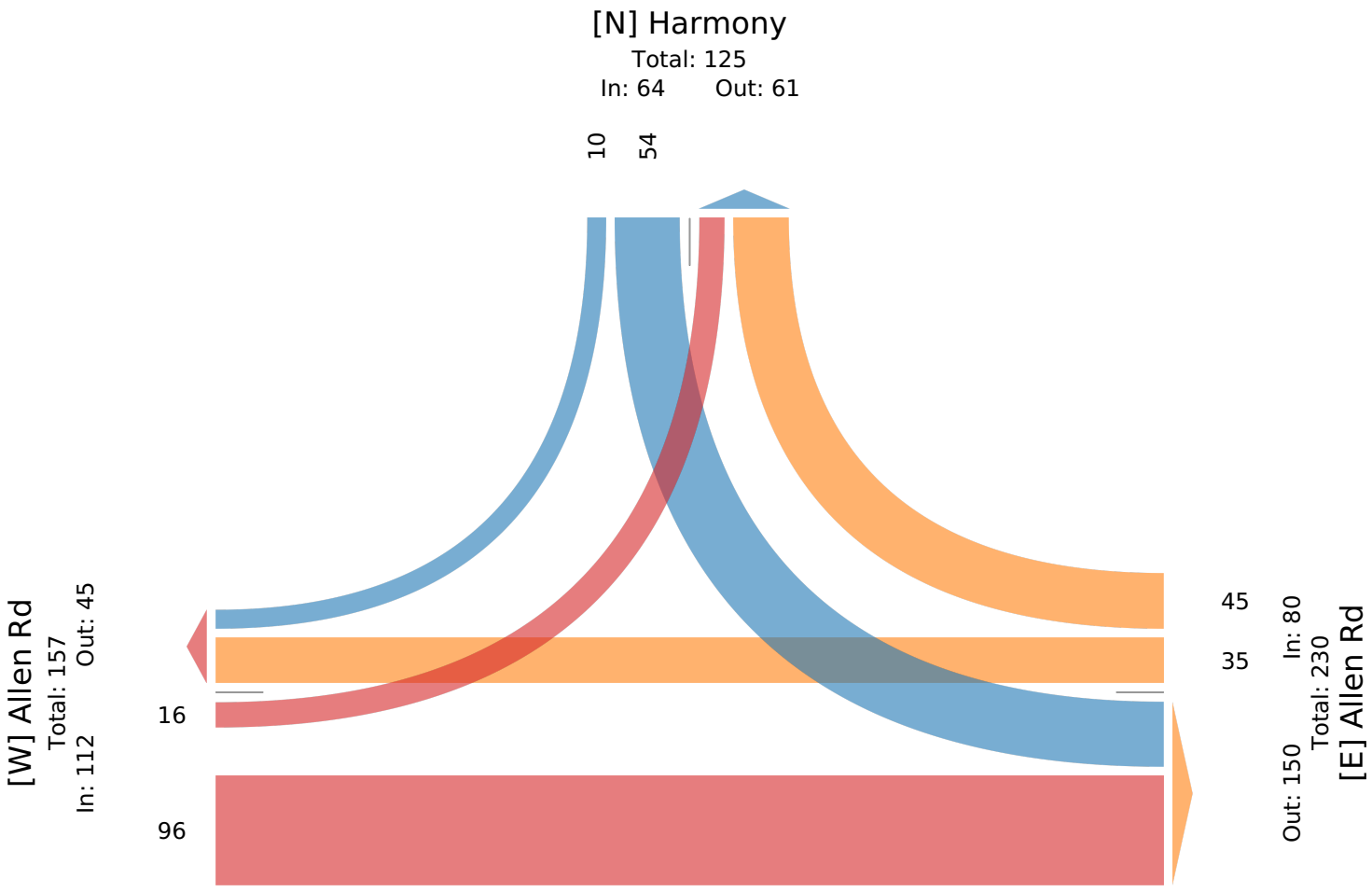
Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg / Direction	Allen Rd Eastbound					Allen Rd Westbound					Dead End Northbound					Harmony Southbound					
Time	L	T	R	U	**App**	L	T	R	U	**App**	L	T	R	U	**App**	L	T	R	U	**App**	**Int**
2023-01-18 7:00AM	4	17	0	0	**21**	0	7	10	0	**17**	0	0	0	0	**0**	13	0	2	0	**15**	**53**
7:15AM	4	20	0	0	**24**	0	10	15	0	**25**	0	0	0	0	**0**	14	0	7	0	**21**	**70**
7:30AM	4	31	0	0	**35**	0	7	5	0	**12**	0	0	0	0	**0**	14	0	0	0	**14**	**61**
7:45AM	4	28	0	0	**32**	0	11	15	0	**26**	0	0	0	0	**0**	13	0	1	0	**14**	**72**
Total	16	96	0	0	**112**	0	35	45	0	**80**	0	0	0	0	**0**	54	0	10	0	**64**	**256**
% Approach	14.3%	85.7%	0%	0%	**-**	0%	43.8%	56.3%	0%	**-**	0%	0%	0%	0%	**-**	84.4%	0%	15.6%	0%	**-**	-
% Total	6.3%	37.5%	0%	0%	**43.8%**	0%	13.7%	17.6%	0%	**31.3%**	0%	0%	0%	0%	**0%**	21.1%	0%	3.9%	0%	**25.0%**	-
PHF	1.000	0.774	-	-	**0.800**	-	0.795	0.750	-	**0.769**	-	-	-	-	**-**	0.964	-	0.357	-	**0.762**	0.889
Lights	15	94	0	0	**109**	0	29	42	0	**71**	0	0	0	0	**0**	52	0	9	0	**61**	241
% Lights	93.8%	97.9%	0%	0%	**97.3%**	0%	82.9%	93.3%	0%	**88.8%**	0%	0%	0%	0%	**-**	96.3%	0%	90.0%	0%	**95.3%**	94.1%
Articulated Trucks	1	0	0	0	**1**	0	1	1	0	**2**	0	0	0	0	**0**	0	0	0	0	**0**	3
% Articulated Trucks	6.3%	0%	0%	0%	**0.9%**	0%	2.9%	2.2%	0%	**2.5%**	0%	0%	0%	0%	**-**	0%	0%	0%	0%	**0%**	1.2%
Buses and Single-Unit Trucks	0	2	0	0	**2**	0	5	2	0	**7**	0	0	0	0	**0**	2	0	1	0	**3**	12
% Buses and Single-Unit Trucks	0%	2.1%	0%	0%	**1.8%**	0%	14.3%	4.4%	0%	**8.8%**	0%	0%	0%	0%	**-**	3.7%	0%	10.0%	0%	**4.7%**	4.7%
Bicycles on Road	0	0	0	0	**0**	0	0	0	0	**0**	0	0	0	0	**0**	0	0	0	0	**0**	0
% Bicycles on Road	0%	0%	0%	0%	**0%**	0%	0%	0%	0%	**0%**	0%	0%	0%	0%	**-**	0%	0%	0%	0%	**0%**	0%

*L: Left, R: Right, T: Thru, U: U-Turn

4_Harmony Road & Allen Road - TMC
Wed Jan 18, 2023
Forced Peak (7 AM - 8 AM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Bicycles on Road)
All Movements
ID: 1028842, Location: 42.106433, -88.535002

Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US



4_Harmony Road & Allen Road - TMC

Wed Jan 18, 2023
Forced Peak (4 PM - 5 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Bicycles on Road)
All Movements
ID: 1028842, Location: 42.106433, -88.535002

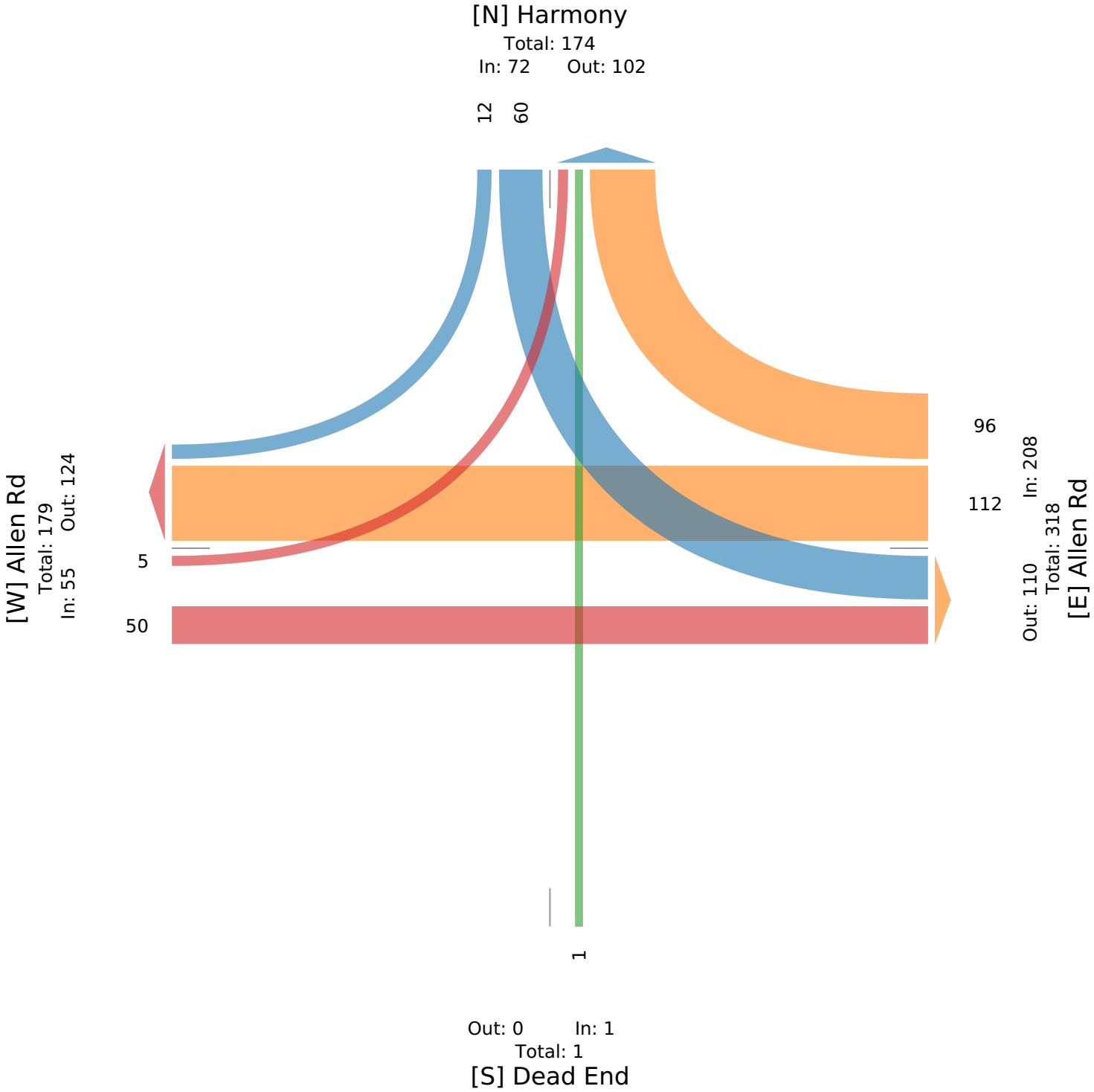
Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US

Leg / Direction	Allen Rd Eastbound					Allen Rd Westbound					Dead End Northbound					Harmony Southbound					
Time	L	T	R	U	**App**	L	T	R	U	**App**	L	T	R	U	**App**	L	T	R	U	**App**	**Int**
2023-01-18 4:00PM	3	14	0	0	**17**	0	28	28	0	**56**	0	0	0	0	**0**	14	0	0	0	**14**	**87**
4:15PM	1	12	0	0	**13**	0	21	19	0	**40**	0	0	0	0	**0**	15	0	6	0	**21**	**74**
4:30PM	1	16	0	0	**17**	0	39	35	0	**74**	0	1	0	0	**1**	12	0	5	0	**17**	**109**
4:45PM	0	8	0	0	**8**	0	24	14	0	**38**	0	0	0	0	**0**	19	0	1	0	**20**	**66**
Total	5	50	0	0	**55**	0	112	96	0	**208**	0	1	0	0	**1**	60	0	12	0	**72**	**336**
% Approach	9.1%	90.9%	0%	0%	**-**	0%	53.8%	46.2%	0%	**-**	0%	100%	0%	0%	**-**	83.3%	0%	16.7%	0%	**-**	-
% Total	1.5%	14.9%	0%	0%	**16.4%**	0%	33.3%	28.6%	0%	**61.9%**	0%	0.3%	0%	0%	**0.3%**	17.9%	0%	3.6%	0%	**21.4%**	-
PHF	0.417	0.781	-	-	**0.809**	-	0.718	0.686	-	**0.703**	-	0.250	-	-	**0.250**	0.789	-	0.500	-	**0.857**	0.771
Lights	4	45	0	0	**49**	0	107	92	0	**199**	0	0	0	0	**0**	60	0	11	0	**71**	319
% Lights	80.0%	90.0%	0%	0%	**89.1%**	0%	95.5%	95.8%	0%	**95.7%**	0%	0%	0%	0%	**0%**	100%	0%	91.7%	0%	**98.6%**	94.9%
Articulated Trucks	1	0	0	0	**1**	0	0	1	0	**1**	0	0	0	0	**0**	0	0	0	0	**0**	2
% Articulated Trucks	20.0%	0%	0%	0%	**1.8%**	0%	0%	1.0%	0%	**0.5%**	0%	0%	0%	0%	**0%**	0%	0%	0%	0%	**0%**	0.6%
Buses and Single-Unit Trucks	0	5	0	0	**5**	0	5	3	0	**8**	0	1	0	0	**1**	0	0	1	0	**1**	15
% Buses and Single-Unit Trucks	0%	10.0%	0%	0%	**9.1%**	0%	4.5%	3.1%	0%	**3.8%**	0%	100%	0%	0%	**100%**	0%	0%	8.3%	0%	**1.4%**	4.5%
Bicycles on Road	0	0	0	0	**0**	0	0	0	0	**0**	0	0	0	0	**0**	0	0	0	0	**0**	0
% Bicycles on Road	0%	0%	0%	0%	**0%**	0%	0%	0%	0%	**0%**	0%	0%	0%	0%	**0%**	0%	0%	0%	0%	**0%**	0%

*L: Left, R: Right, T: Thru, U: U-Turn

4_Harmony Road & Allen Road - TMC
Wed Jan 18, 2023
Forced Peak (4 PM - 5 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Bicycles on Road)
All Movements
ID: 1028842, Location: 42.106433, -88.535002

GEWALT HAMILTON ASSOCIATES, INC.
Provided by: Gewalt Hamilton Associates Inc.
625 Forest Edge Drive, Vernon Hills, IL, 60061, US



EXISTING (2023) CAPACITY REPORTS

Intersection	
Int Delay, s/veh	1.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	15	5	100	40	15	60
Future Vol, veh/h	15	5	100	40	15	60
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	7	17	4	5	6	8
Mvmt Flow	16	5	105	42	16	63

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	221	126	0	0	147	0
Stage 1	126	-	-	-	-	-
Stage 2	95	-	-	-	-	-
Critical Hdwy	6.47	6.37	-	-	4.16	-
Critical Hdwy Stg 1	5.47	-	-	-	-	-
Critical Hdwy Stg 2	5.47	-	-	-	-	-
Follow-up Hdwy	3.563	3.453	-	-	2.254	-
Pot Cap-1 Maneuver	756	886	-	-	1411	-
Stage 1	887	-	-	-	-	-
Stage 2	916	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	747	886	-	-	1411	-
Mov Cap-2 Maneuver	747	-	-	-	-	-
Stage 1	887	-	-	-	-	-
Stage 2	905	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.8	0	1.5
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	777	1411	-
HCM Lane V/C Ratio	-	-	0.027	0.011	-
HCM Control Delay (s)	-	-	9.8	7.6	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Intersection	
Int Delay, s/veh	3.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	75	10	5	65	60	15
Future Vol, veh/h	75	10	5	65	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	95	95	95	95	95	95
Heavy Vehicles, %	3	2	2	4	6	6
Mvmt Flow	79	11	5	68	63	16

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	149	71	79	0	-	0
Stage 1	71	-	-	-	-	-
Stage 2	78	-	-	-	-	-
Critical Hdwy	6.43	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	841	991	1519	-	-	-
Stage 1	949	-	-	-	-	-
Stage 2	943	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	838	991	1519	-	-	-
Mov Cap-2 Maneuver	838	-	-	-	-	-
Stage 1	946	-	-	-	-	-
Stage 2	943	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.7	0.5	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1519	-	854	-	-
HCM Lane V/C Ratio	0.003	-	0.105	-	-
HCM Control Delay (s)	7.4	0	9.7	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.3	-	-

Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	15	5	1	1	5	5	5	50	5	5	55	10
Future Vol, veh/h	15	5	1	1	5	5	5	50	5	5	55	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	235	-	-	155	-	130
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, %	23	2	2	2	17	2	2	4	67	2	3	9
Mvmt Flow	16	5	1	1	5	5	5	53	5	5	58	11

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	139	136	58	143	145	56	69	0	0	58	0	0
Stage 1	68	68	-	66	66	-	-	-	-	-	-	-
Stage 2	71	68	-	77	79	-	-	-	-	-	-	-
Critical Hdwy	7.33	6.52	6.22	7.12	6.67	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.33	5.52	-	6.12	5.67	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.33	5.52	-	6.12	5.67	-	-	-	-	-	-	-
Follow-up Hdwy	3.707	4.018	3.318	3.518	4.153	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	785	755	1008	826	720	1011	1532	-	-	1546	-	-
Stage 1	892	838	-	945	811	-	-	-	-	-	-	-
Stage 2	889	838	-	932	801	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	772	750	1008	817	716	1011	1532	-	-	1546	-	-
Mov Cap-2 Maneuver	772	750	-	817	716	-	-	-	-	-	-	-
Stage 1	889	835	-	942	809	-	-	-	-	-	-	-
Stage 2	876	835	-	922	799	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.8	9.4	0.6	0.5
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1532	-	-	775	836	1546	-	-
HCM Lane V/C Ratio	0.003	-	-	0.029	0.014	0.003	-	-
HCM Control Delay (s)	7.4	-	-	9.8	9.4	7.3	-	-
HCM Lane LOS	A	-	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0	0	-	-

Intersection	
Int Delay, s/veh	2.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	15	95	35	45	45	10
Future Vol, veh/h	15	95	35	45	45	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	210	-	-	190	250	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	6	2	17	7	4	10
Mvmt Flow	16	100	37	47	47	11

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	84	0	-	0	169	37
Stage 1	-	-	-	-	37	-
Stage 2	-	-	-	-	132	-
Critical Hdwy	4.16	-	-	-	6.44	6.3
Critical Hdwy Stg 1	-	-	-	-	5.44	-
Critical Hdwy Stg 2	-	-	-	-	5.44	-
Follow-up Hdwy	2.254	-	-	-	3.536	3.39
Pot Cap-1 Maneuver	1488	-	-	-	817	1013
Stage 1	-	-	-	-	980	-
Stage 2	-	-	-	-	889	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1488	-	-	-	808	1013
Mov Cap-2 Maneuver	-	-	-	-	808	-
Stage 1	-	-	-	-	969	-
Stage 2	-	-	-	-	889	-

Approach	EB	WB	SB
HCM Control Delay, s	1	0	9.5
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1488	-	-	-	808	1013
HCM Lane V/C Ratio	0.011	-	-	-	0.059	0.01
HCM Control Delay (s)	7.4	-	-	-	9.7	8.6
HCM Lane LOS	A	-	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	-	0.2	0

Intersection	
Int Delay, s/veh	1.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	30	10	100	10	1	120
Future Vol, veh/h	30	10	100	10	1	120
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	4	2	6	25	2	2
Mvmt Flow	32	11	105	11	1	126

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	239	111	0	0	116	0
Stage 1	111	-	-	-	-	-
Stage 2	128	-	-	-	-	-
Critical Hdwy	6.44	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.44	-	-	-	-	-
Critical Hdwy Stg 2	5.44	-	-	-	-	-
Follow-up Hdwy	3.536	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	745	942	-	-	1473	-
Stage 1	909	-	-	-	-	-
Stage 2	893	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	744	942	-	-	1473	-
Mov Cap-2 Maneuver	744	-	-	-	-	-
Stage 1	909	-	-	-	-	-
Stage 2	892	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.8	0	0.1
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	785	1473	-
HCM Lane V/C Ratio	-	-	0.054	0.001	-
HCM Control Delay (s)	-	-	9.8	7.4	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.2	0	-

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	30	5	15	80	75	75
Future Vol, veh/h	30	5	15	80	75	75
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	4	2	7	6	2	3
Mvmt Flow	32	5	16	84	79	79

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	235	119	158	0	-	0
Stage 1	119	-	-	-	-	-
Stage 2	116	-	-	-	-	-
Critical Hdwy	6.44	6.22	4.17	-	-	-
Critical Hdwy Stg 1	5.44	-	-	-	-	-
Critical Hdwy Stg 2	5.44	-	-	-	-	-
Follow-up Hdwy	3.536	3.318	2.263	-	-	-
Pot Cap-1 Maneuver	749	933	1392	-	-	-
Stage 1	901	-	-	-	-	-
Stage 2	904	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	740	933	1392	-	-	-
Mov Cap-2 Maneuver	740	-	-	-	-	-
Stage 1	890	-	-	-	-	-
Stage 2	904	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10	1.2	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1392	-	763	-	-
HCM Lane V/C Ratio	0.011	-	0.048	-	-
HCM Control Delay (s)	7.6	0	10	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	1	1	5	5	1	1	90	10	5	60	15
Future Vol, veh/h	5	1	1	5	5	1	1	90	10	5	60	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	235	-	-	155	-	130
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, %	43	2	2	33	2	2	2	4	2	2	2	2
Mvmt Flow	5	1	1	5	5	1	1	95	11	5	63	16

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	179	181	63	185	192	101	79	0	0	106	0	0
Stage 1	73	73	-	103	103	-	-	-	-	-	-	-
Stage 2	106	108	-	82	89	-	-	-	-	-	-	-
Critical Hdwy	7.53	6.52	6.22	7.43	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.53	5.52	-	6.43	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.53	5.52	-	6.43	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.887	4.018	3.318	3.797	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	700	713	1002	712	703	954	1519	-	-	1485	-	-
Stage 1	844	834	-	832	810	-	-	-	-	-	-	-
Stage 2	809	806	-	855	821	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	693	710	1002	708	700	954	1519	-	-	1485	-	-
Mov Cap-2 Maneuver	693	710	-	708	700	-	-	-	-	-	-	-
Stage 1	843	831	-	831	809	-	-	-	-	-	-	-
Stage 2	802	805	-	850	819	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10	10.1	0.1	0.5
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1519	-	-	728	721	1485	-	-
HCM Lane V/C Ratio	0.001	-	-	0.01	0.016	0.004	-	-
HCM Control Delay (s)	7.4	-	-	10	10.1	7.4	-	-
HCM Lane LOS	A	-	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-	-

Intersection	
Int Delay, s/veh	2.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	5	50	110	95	55	10
Future Vol, veh/h	5	50	110	95	55	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	210	-	-	190	250	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	20	10	5	4	2	8
Mvmt Flow	5	53	116	100	58	11

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	216	0	-	0	179	116
Stage 1	-	-	-	-	116	-
Stage 2	-	-	-	-	63	-
Critical Hdwy	4.3	-	-	-	6.42	6.28
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.38	-	-	-	3.518	3.372
Pot Cap-1 Maneuver	1254	-	-	-	811	920
Stage 1	-	-	-	-	909	-
Stage 2	-	-	-	-	960	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1254	-	-	-	808	920
Mov Cap-2 Maneuver	-	-	-	-	808	-
Stage 1	-	-	-	-	905	-
Stage 2	-	-	-	-	960	-

Approach	EB	WB	SB
HCM Control Delay, s	0.7	0	9.7
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1254	-	-	-	808	920
HCM Lane V/C Ratio	0.004	-	-	-	0.072	0.011
HCM Control Delay (s)	7.9	-	-	-	9.8	9
HCM Lane LOS	A	-	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	-	0.2	0

DATA FROM THE ITE TRIP GENERATION MANUAL, 11TH EDITION

Land Use: 210
Single-Family Detached Housing

Description

A single-family detached housing site includes any single-family detached home on an individual lot. A typical site surveyed is a suburban subdivision.

Specialized Land Use

Data have been submitted for several single-family detached housing developments with homes that are commonly referred to as patio homes. A patio home is a detached housing unit that is located on a small lot with little (or no) front or back yard. In some subdivisions, communal maintenance of outside grounds is provided for the patio homes. The three patio home sites total 299 dwelling units with overall weighted average trip generation rates of 5.35 vehicle trips per dwelling unit for weekday, 0.26 for the AM adjacent street peak hour, and 0.47 for the PM adjacent street peak hour. These patio home rates based on a small sample of sites are lower than those for single-family detached housing (Land Use 210), lower than those for single-family attached housing (Land Use 251), and higher than those for senior adult housing -- single-family (Land Use 251). Further analysis of this housing type will be conducted in a future edition of *Trip Generation Manual*.

Additional Data

The technical appendices provide supporting information on time-of-day distributions for this land use. The appendices can be accessed through either the ITETripGen web app or the trip generation resource page on the ITE website (https://www.ite.org/technical-resources/topics/trip-and-parking-generation/).

For 30 of the study sites, data on the number of residents and number of household vehicles are available. The overall averages for the 30 sites are 3.6 residents per dwelling unit and 1.5 vehicles per dwelling unit.

The sites were surveyed in the 1980s, the 1990s, the 2000s, and the 2010s in Arizona, California, Connecticut, Delaware, Illinois, Indiana, Kentucky, Maryland, Massachusetts, Minnesota, Montana, New Jersey, North Carolina, Ohio, Ontario (CAN), Oregon, Pennsylvania, South Carolina, South Dakota, Tennessee, Vermont, Virginia, and West Virginia.

Source Numbers

100, 105, 114, 126, 157, 167, 177, 197, 207, 211, 217, 267, 275, 293, 300, 319, 320, 356, 357, 367, 384, 387, 407, 435, 522, 550, 552, 579, 598, 601, 603, 614, 637, 711, 716, 720, 728, 735, 868, 869, 903, 925, 936, 1005, 1007, 1008, 1010, 1033, 1066, 1077,1078, 1079

Single-Family Detached Housing
(210)

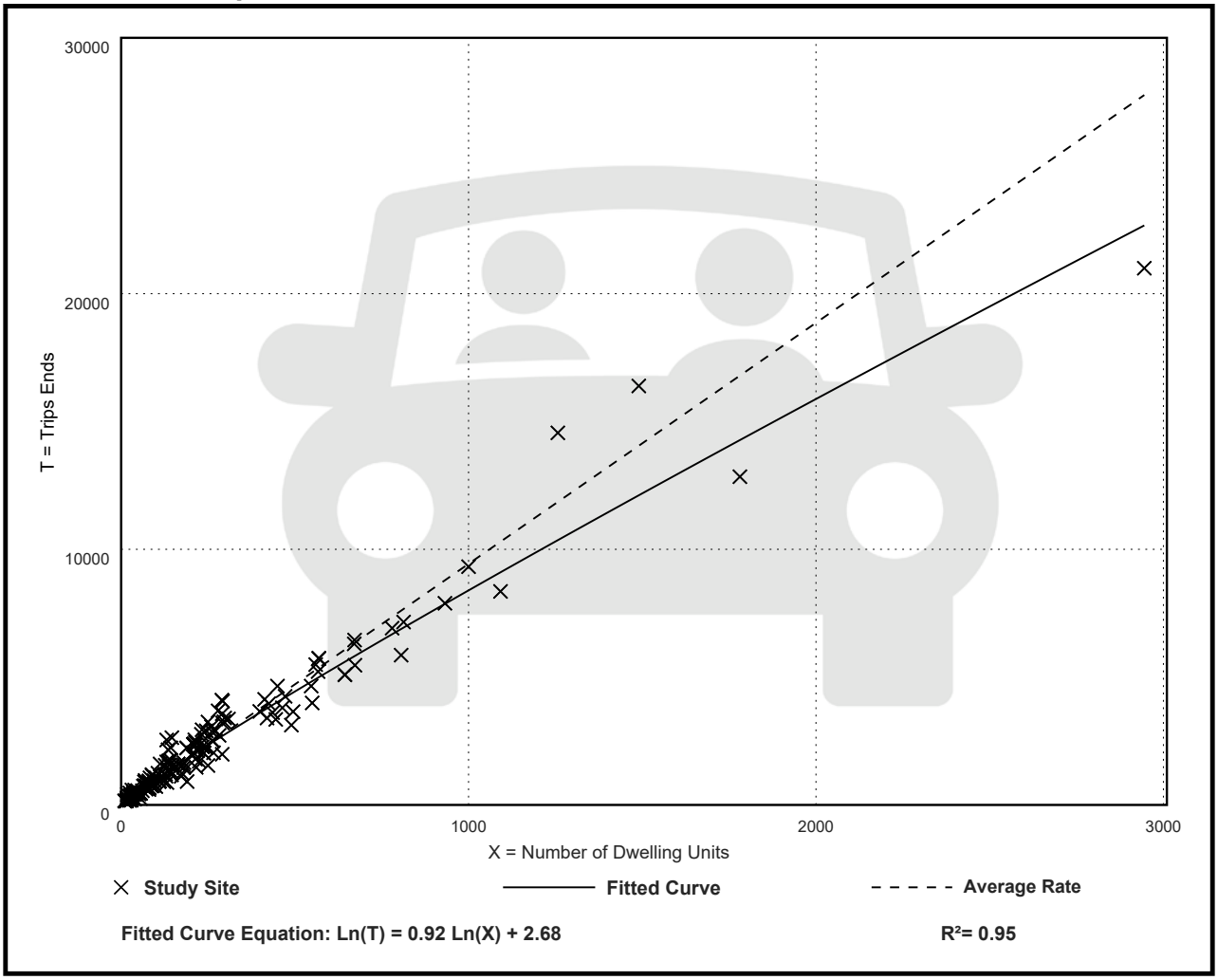
Vehicle Trip Ends vs: Dwelling Units
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 174
Avg. Num. of Dwelling Units: 246
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
9.43	4.45 - 22.61	2.13

Data Plot and Equation



Fitted Curve Equation: Ln(T) = 0.92 Ln(X) + 2.68

R^2= 0.95

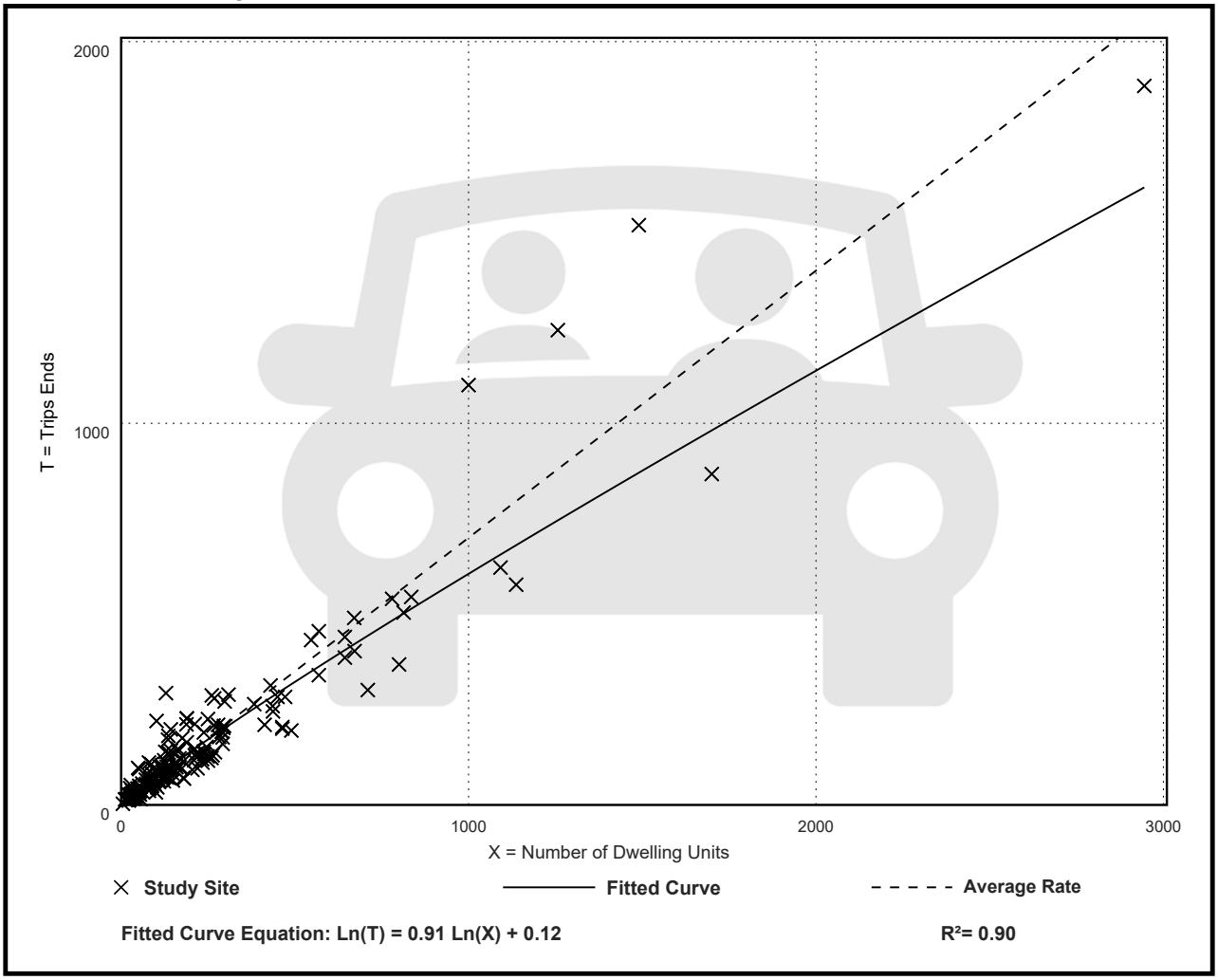
Single-Family Detached Housing
(210)

Vehicle Trip Ends vs: Dwelling Units
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: General Urban/Suburban
Number of Studies: 192
Avg. Num. of Dwelling Units: 226
Directional Distribution: 26% entering, 74% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.70	0.27 - 2.27	0.24

Data Plot and Equation



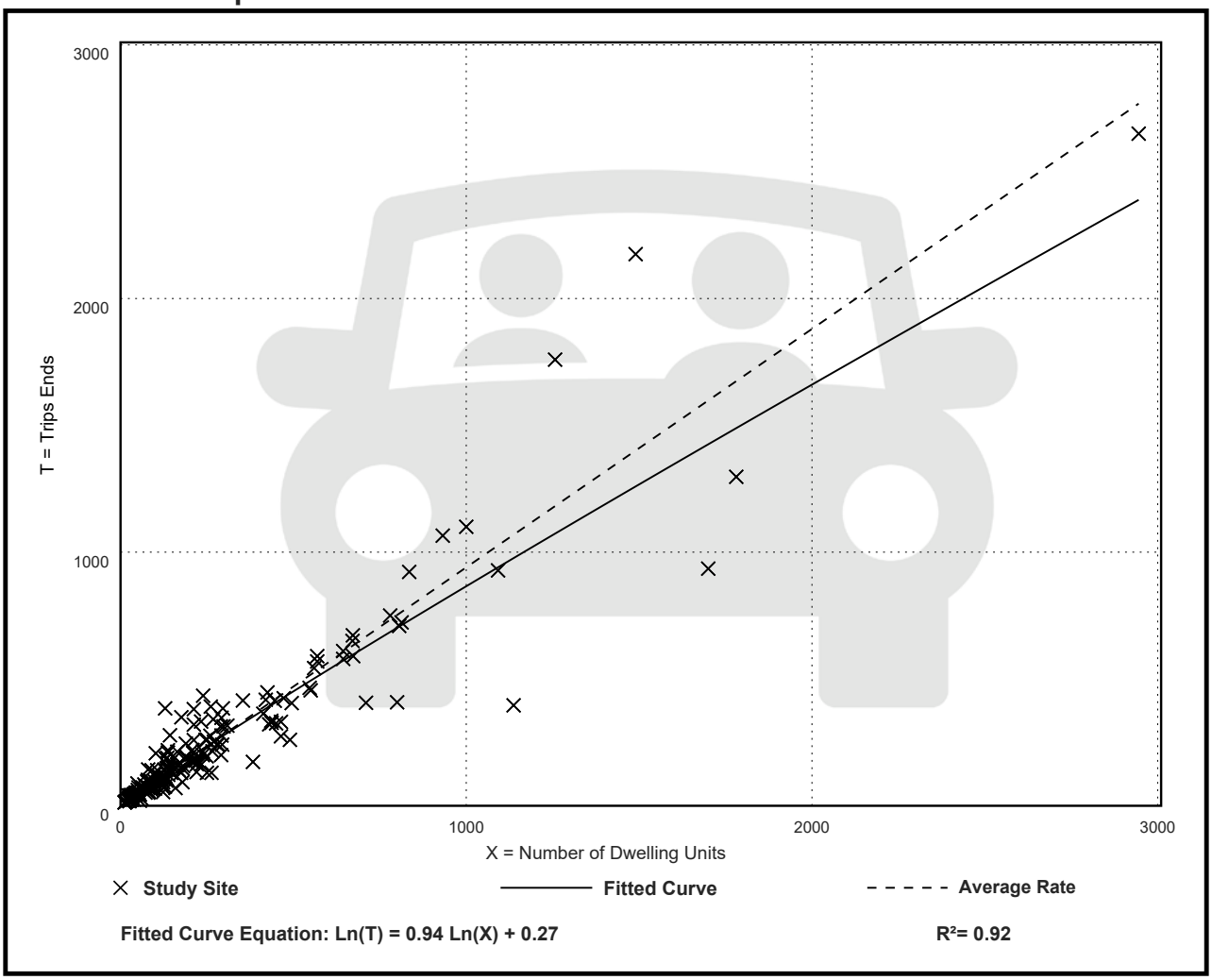
Single-Family Detached Housing
(210)

Vehicle Trip Ends vs: Dwelling Units
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: General Urban/Suburban
Number of Studies: 208
Avg. Num. of Dwelling Units: 248
Directional Distribution: 63% entering, 37% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.94	0.35 - 2.98	0.31

Data Plot and Equation



Land Use: 215
Single-Family Attached Housing

Description

Single-family attached housing includes any single-family housing unit that shares a wall with an adjoining dwelling unit, whether the walls are for living space, a vehicle garage, or storage space.

Additional Data

The database for this land use includes duplexes (defined as a single structure with two distinct dwelling units, typically joined side-by-side and each with at least one outside entrance) and townhouses/rowhouses (defined as a single structure with three or more distinct dwelling units, joined side-by-side in a row and each with an outside entrance).

The technical appendices provide supporting information on time-of-day distributions for this land use. The appendices can be accessed through either the ITETripGen web app or the trip generation resource page on the ITE website (https://www.ite.org/technical-resources/topics/trip-and-parking-generation/).

The sites were surveyed in the 1980s, the 1990s, the 2000s, and the 2010s in British Columbia (CAN), California, Georgia, Illinois, Maryland, Massachusetts, Minnesota, New Jersey, Ontario (CAN), Oregon, Pennsylvania, South Dakota, Utah, Virginia, and Wisconsin.

Source Numbers

168, 204, 211, 237, 305, 306, 319, 321, 357, 390, 418, 525, 571, 583, 638, 735, 868, 869, 870, 896, 912, 959, 1009, 1046, 1056, 1058, 1077

Single-Family Attached Housing
(215)

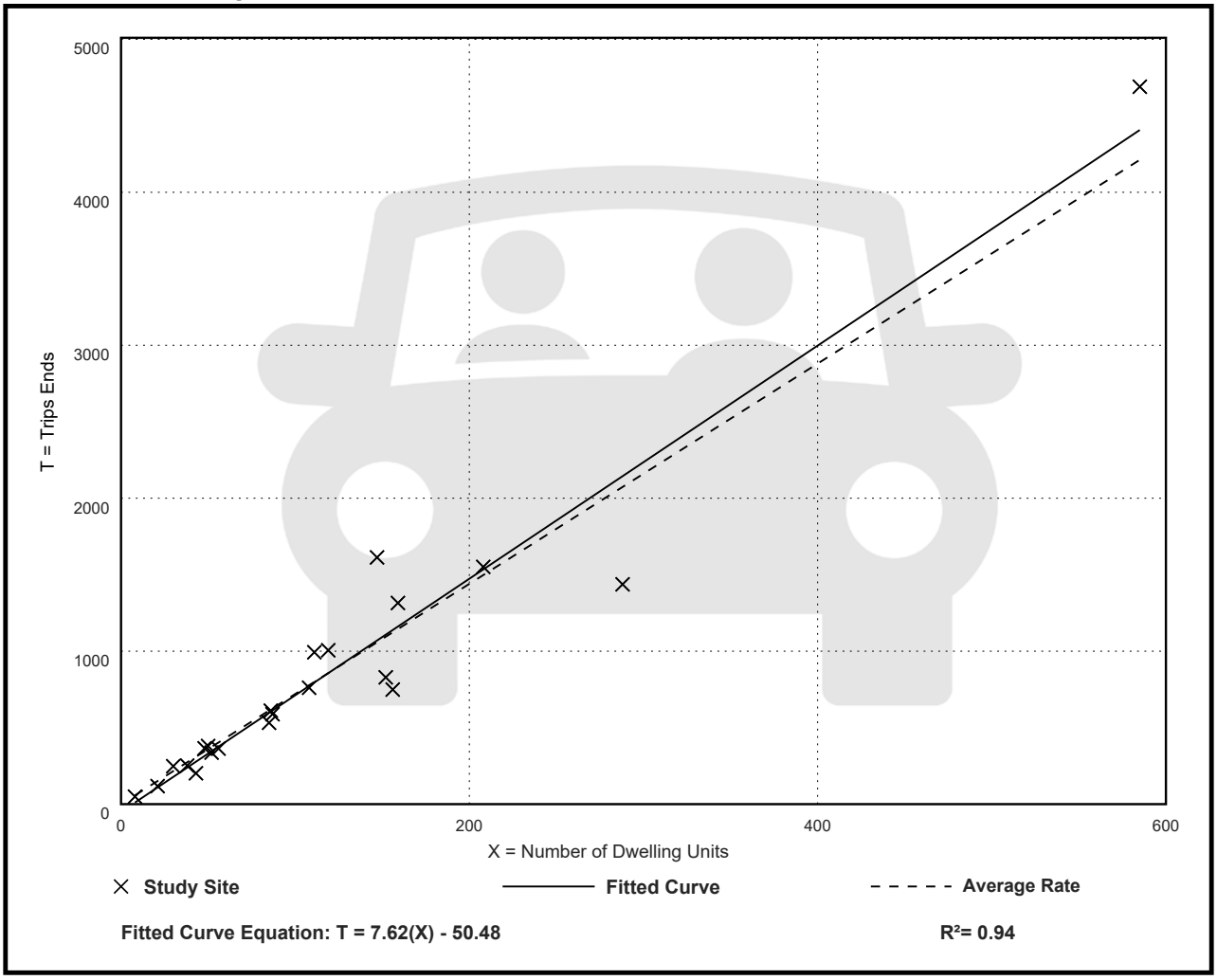
Vehicle Trip Ends vs: Dwelling Units
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 22
Avg. Num. of Dwelling Units: 120
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
7.20	4.70 - 10.97	1.61

Data Plot and Equation



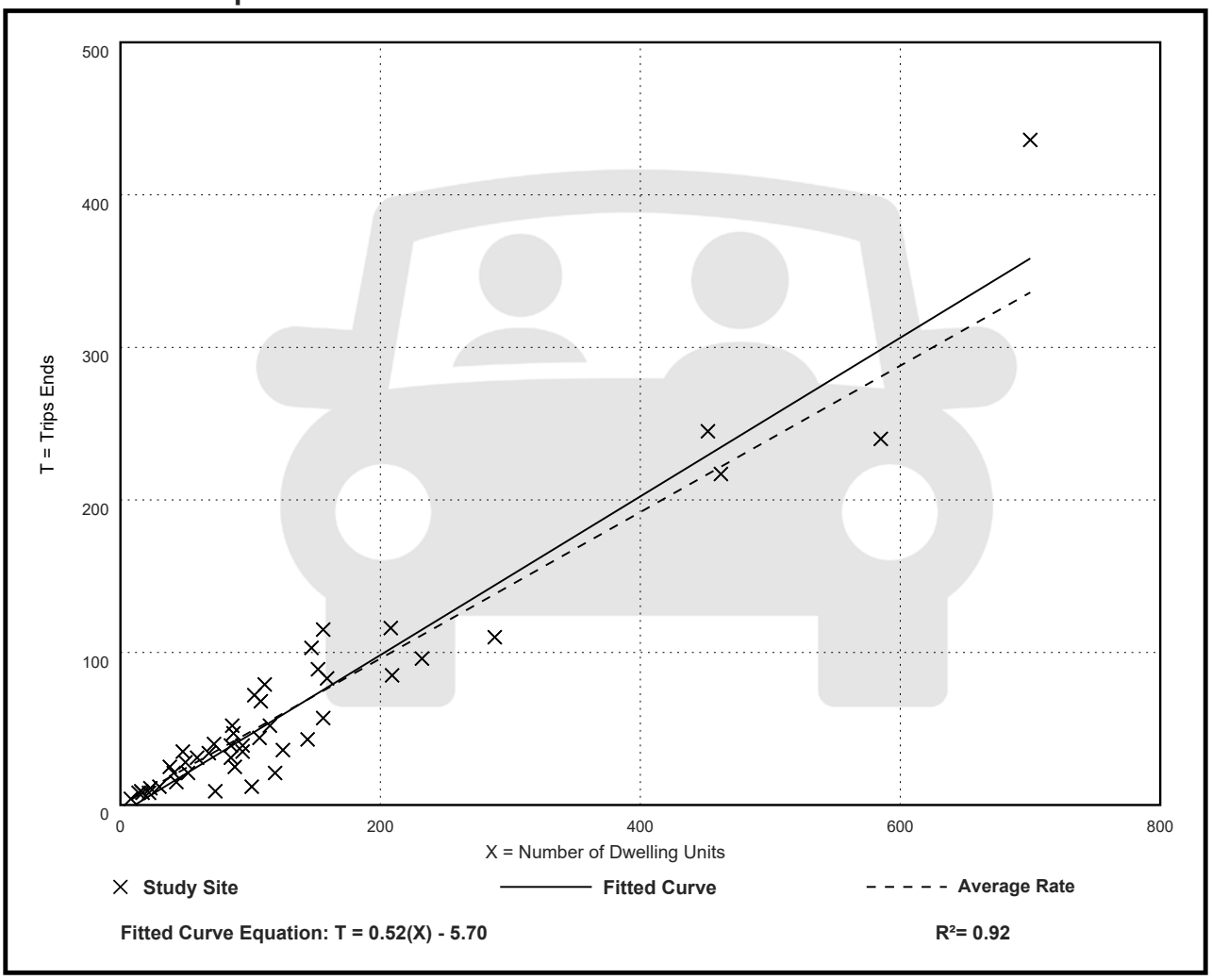
Single-Family Attached Housing
(215)

Vehicle Trip Ends vs: Dwelling Units
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: General Urban/Suburban
Number of Studies: 46
Avg. Num. of Dwelling Units: 135
Directional Distribution: 31% entering, 69% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.48	0.12 - 0.74	0.14

Data Plot and Equation



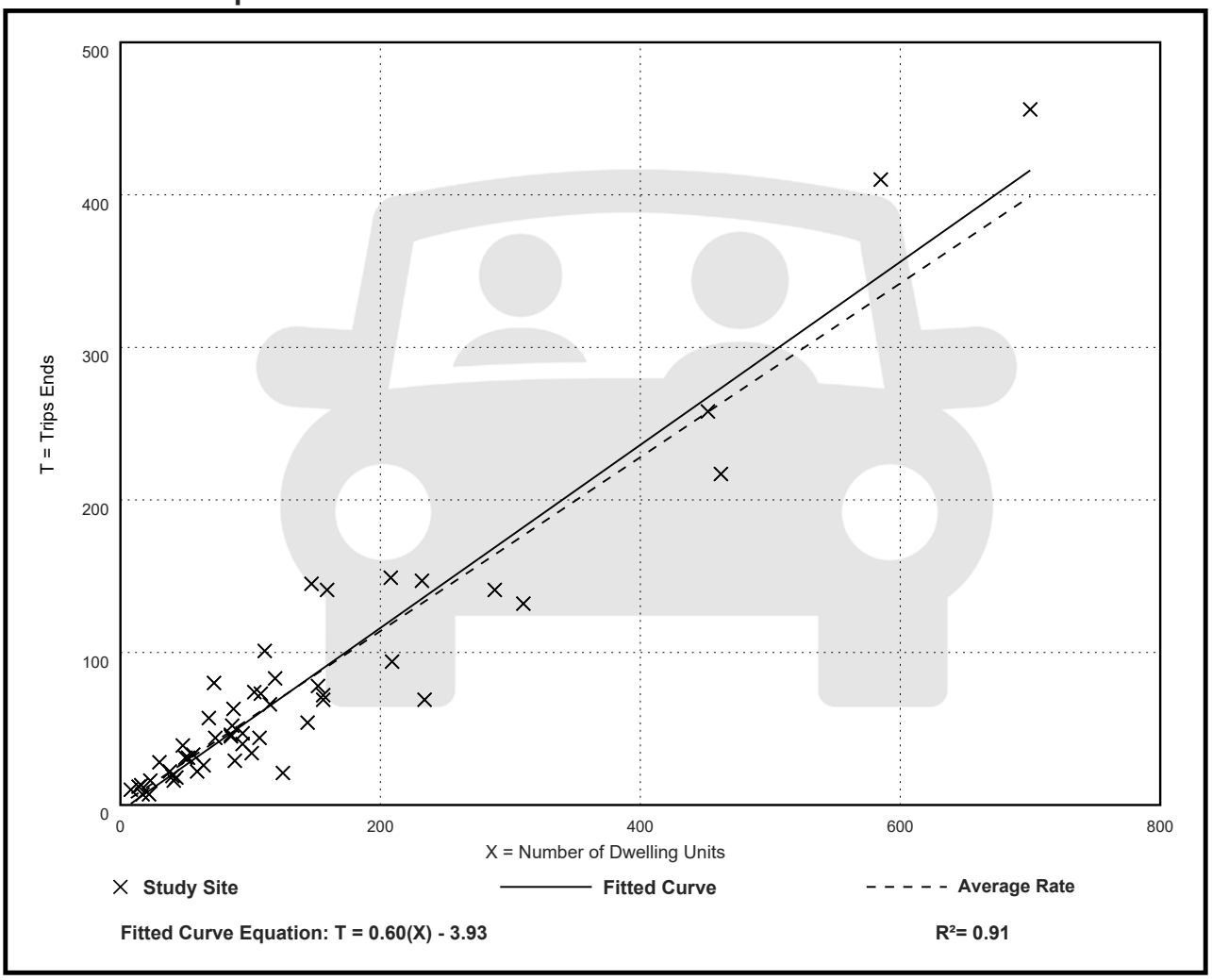
Single-Family Attached Housing
(215)

Vehicle Trip Ends vs: Dwelling Units
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: General Urban/Suburban
Number of Studies: 51
Avg. Num. of Dwelling Units: 136
Directional Distribution: 57% entering, 43% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.57	0.17 - 1.25	0.18

Data Plot and Equation



Land Use: 251
Senior Adult Housing—Single-Family

Description

Senior adult housing—single-family sites are independent living developments that are called various names including retirement communities, age-restricted housing, and active adult communities. The development has a specific age restriction for its residents, typically a minimum of 55 years of age for at least one resident of the household.

Residents in these communities are typically considered active and requiring little to no medical supervision. The percentage of retired residents varies by development. The development may include amenities such as a golf course, swimming pool, 24-hour security, transportation, and common recreational facilities. They generally lack centralized dining and on-site health facilities.

The dwelling units can be either detached or attached. The types of housing types represented by sites in the database include traditional single-family detached homes, patio homes, duplexes, and townhouses. Single-family attached housing includes any single-family housing unit that shares a wall with an adjoining dwelling unit, whether the walls are for living space, a vehicle garage, or storage space.

Senior adult housing—multifamily (Land Use 252), congregate care facility (Land Use 253), assisted living (Land Use 254), and continuing care retirement community (Land Use 255) are related land uses.

Additional Data

Caution should be used when applying trip rates for this land use as it may contain a wide variety of studies ranging from communities with very active, working residents to communities with older, retired residents. As more data become available, consideration will be given to future stratification of this land use.

Many factors affected the trip rates for detached senior adult housing. Factors such as the average age of residents, development location and size, affluence of residents, employment status, and vehicular access should be taken into consideration when conducting an analysis. Some developments were located within close proximity to medical facilities, restaurants, shopping centers, banks, and recreational activities.

The technical appendices provide supporting information on time-of-day distributions for this land use. The appendices can be accessed through either the ITETripGen web app or the trip generation resource page on the ITE website (https://www.ite.org/technical-resources/topics/trip-and-parking-generation/).

For the six sites for which data were provided for both occupied dwelling units and total dwelling units, an average of 98 percent of the units were occupied.

The sites were surveyed in the 1980s, the 1990s, the 2000s, and the 2010s in Alberta (CAN), California, Delaware, Florida, Maryland, New Jersey, New York, Pennsylvania, Virginia, and Washington.

Source Numbers

221, 289, 398, 421, 500, 550, 598, 601, 602, 629, 930, 1015, 1060, 1074

Senior Adult Housing - Single-Family (251)

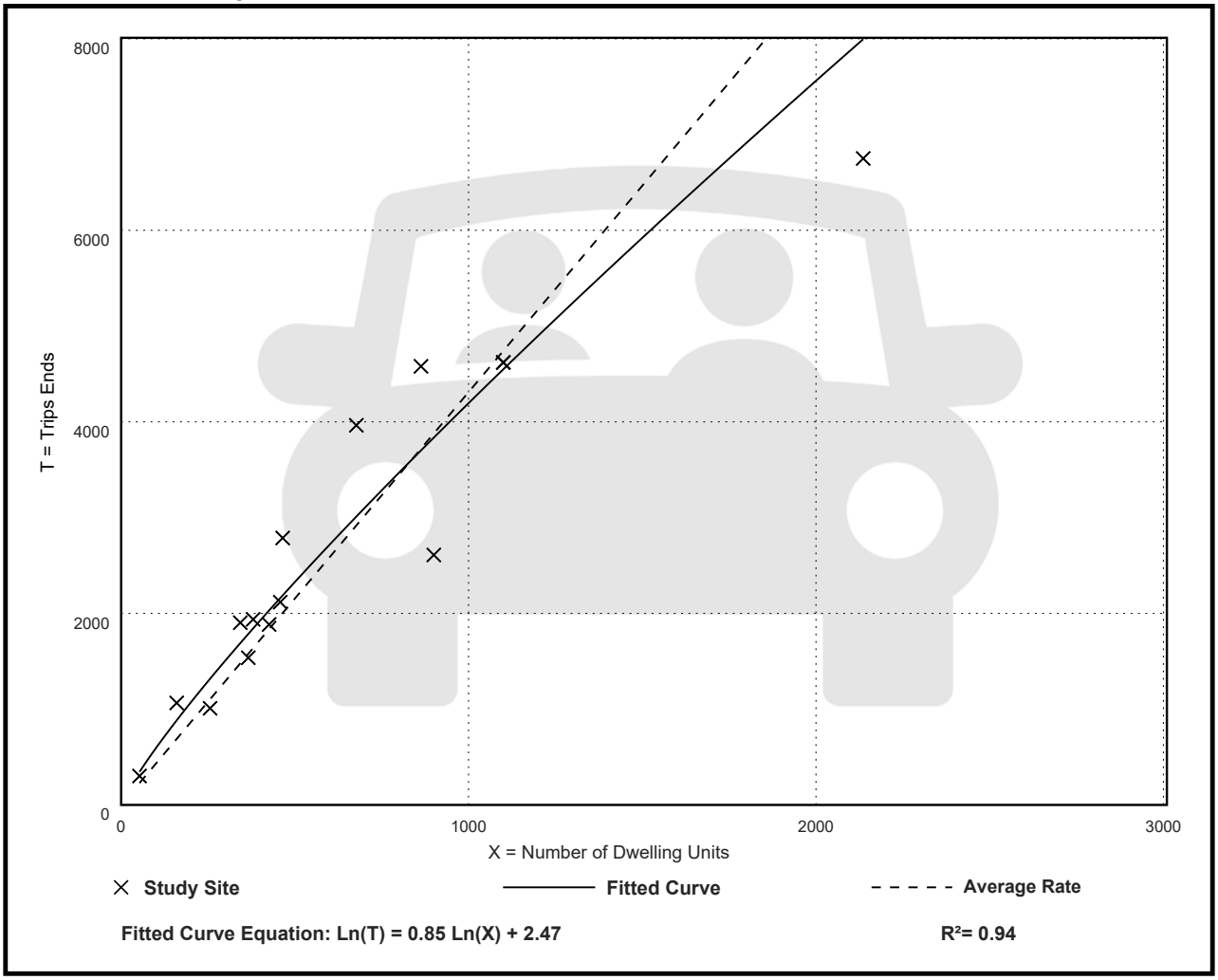
Vehicle Trip Ends vs: Dwelling Units
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 15
Avg. Num. of Dwelling Units: 646
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
4.31	2.90 - 6.66	1.07

Data Plot and Equation



Fitted Curve Equation: Ln(T) = 0.85 Ln(X) + 2.47

R^2= 0.94

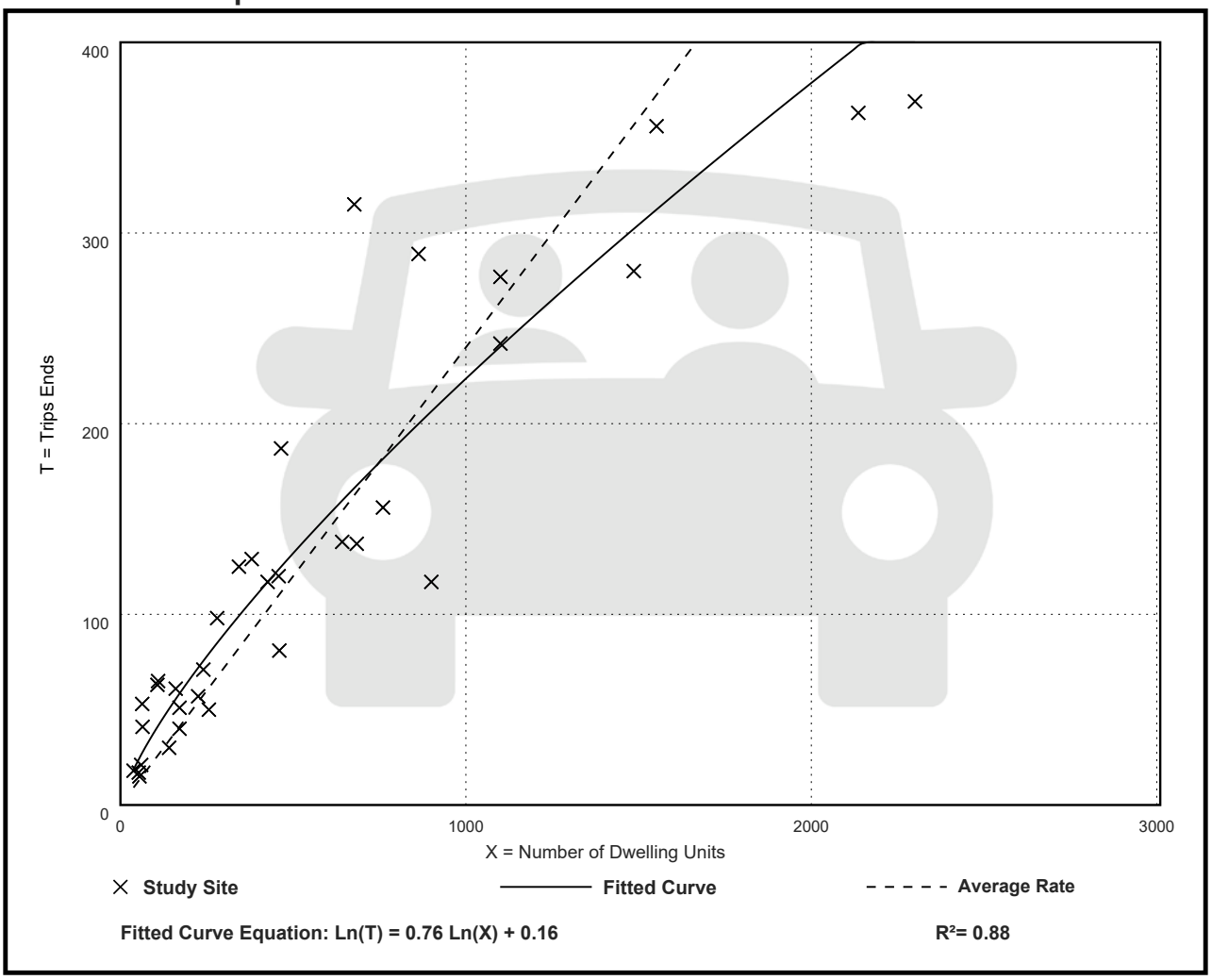
Senior Adult Housing - Single-Family
(251)

Vehicle Trip Ends vs: Dwelling Units
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: General Urban/Suburban
Number of Studies: 34
Avg. Num. of Dwelling Units: 557
Directional Distribution: 33% entering, 67% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.24	0.13 - 0.84	0.10

Data Plot and Equation



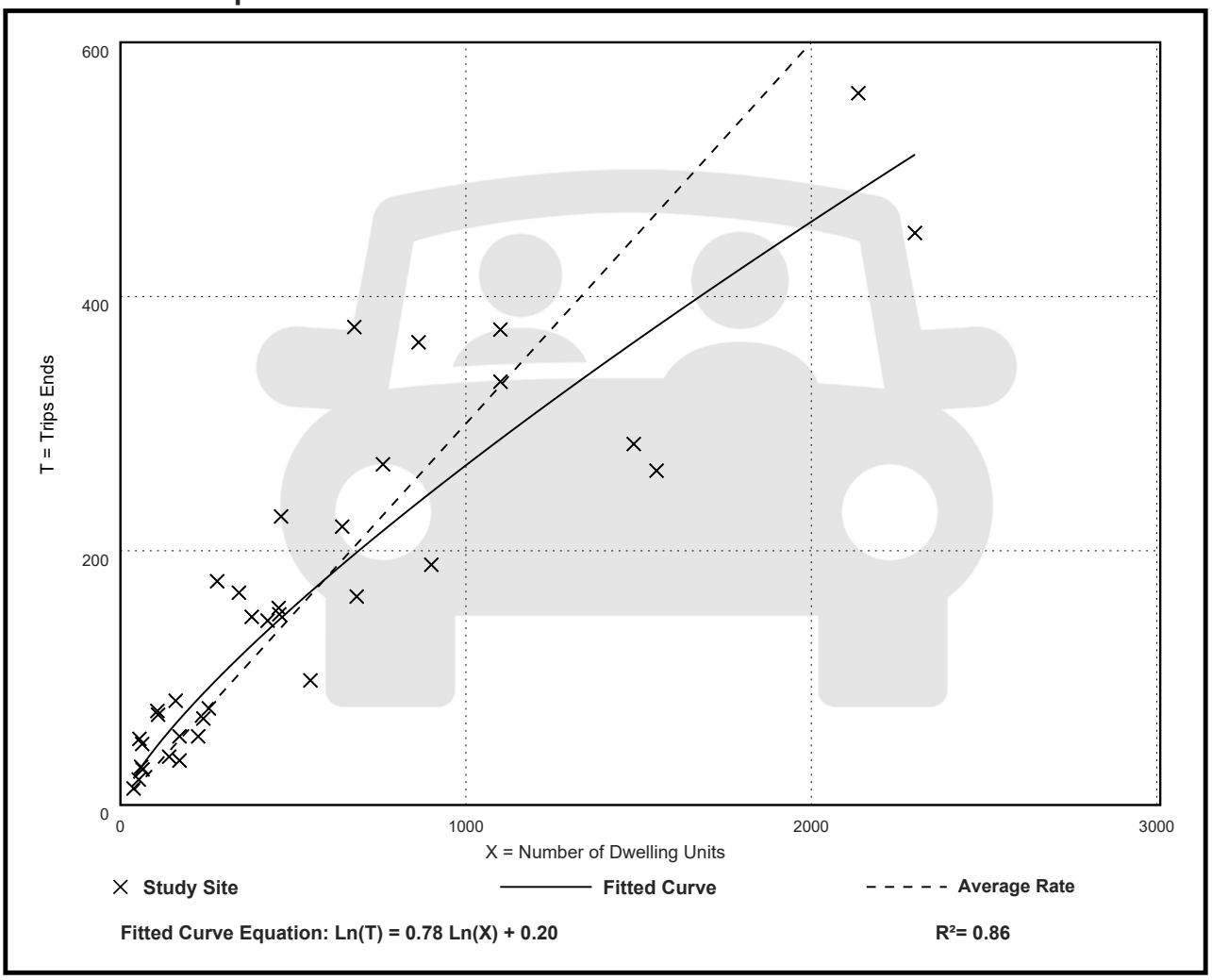
Senior Adult Housing - Single-Family
(251)

Vehicle Trip Ends vs: Dwelling Units
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: General Urban/Suburban
Number of Studies: 35
Avg. Num. of Dwelling Units: 556
Directional Distribution: 61% entering, 39% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.30	0.17 - 0.95	0.12

Data Plot and Equation



Land Use: 520
Elementary School

Description

An elementary school is a public school that typically serves students attending kindergarten through the fifth or sixth grade. An elementary school is usually centrally located in a residential community to facilitate student access. Bus service is commonly provided to students living beyond a specified distance from the school. Middle school/junior high school (Land Use 522), private school (K-8) (Land Use 530), private school (K-12) (Land Use 532), charter elementary school (Land Use 536), and charter school (K-12) (Land Use 538) are related uses.

Additional Data

Elementary school students generally used school buses more than regular transit and were dropped off and picked up more than high school students, who were apt to walk longer distances, ride bicycles, or, in some cases, drive to school. The percentage of students at the sites who were transported to school via bus varied considerably. Some sites experienced higher than average trip rates because many students did not utilize the available school bus service. Due to the varied transit and school bus usage at these sites, it is desirable that future studies report additional detail on the percentage of students who were bused to school and the percentage that were dropped off and picked up.

The technical appendices provide supporting information on time-of-day distributions for this land use. The appendices can be accessed through either the ITETripGen web app or the trip generation resource page on the ITE website (https://www.ite.org/technical-resources/topics/trip-and-parking-generation/).

The sites were surveyed in the 1980s, the 1990s, the 2000s, and the 2010s in Alabama, Arizona, British Columbia (CAN), California, Connecticut, Florida, Hawaii, Minnesota, Montana, Nevada, New York, Oregon, Texas, Utah, Washinton, and West Virginia.

Source Numbers

186, 383, 390, 395, 533, 536, 572, 579, 583, 609, 611, 612, 613, 632, 707, 852, 856, 858, 866, 877, 878, 896, 940, 1039, 1048, 1067, 1083

Elementary School
(520)

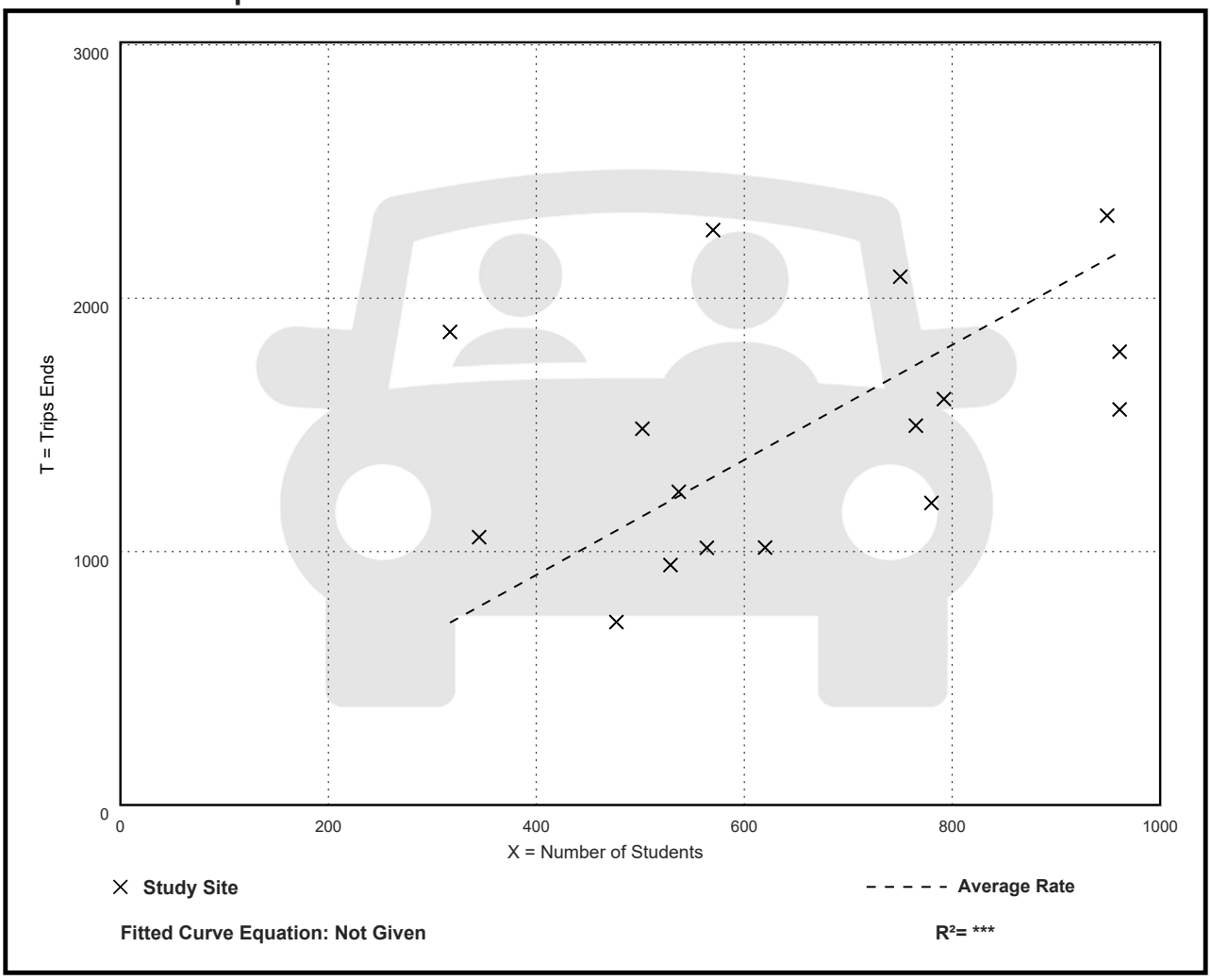
Vehicle Trip Ends vs: Students
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 16
Avg. Num. of Students: 651
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Student

Average Rate	Range of Rates	Standard Deviation
2.27	1.51 - 5.89	0.93

Data Plot and Equation



Fitted Curve Equation: Not Given

R^2= ***

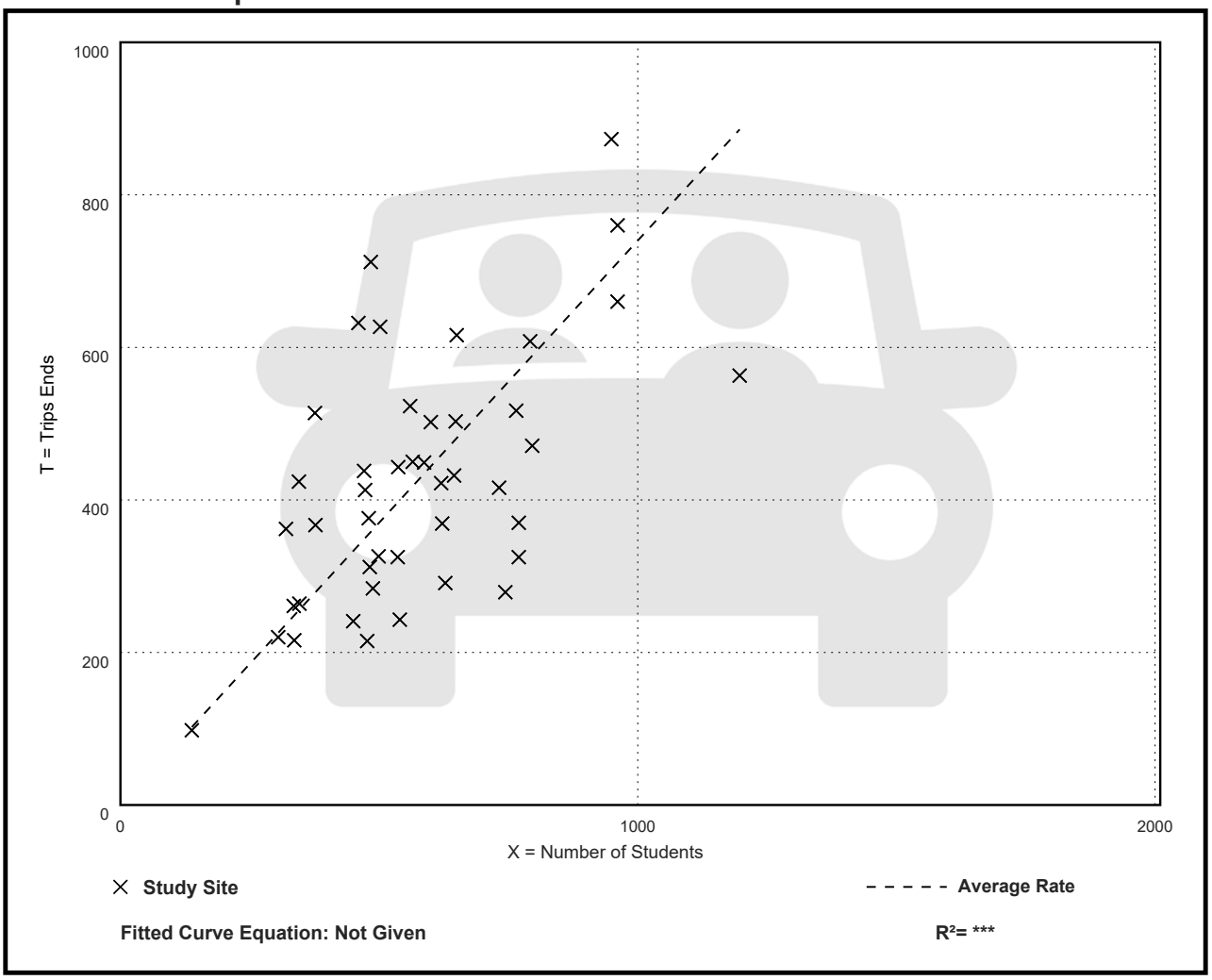
Elementary School
(520)

Vehicle Trip Ends vs: Students
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: General Urban/Suburban
Number of Studies: 44
Avg. Num. of Students: 575
Directional Distribution: 54% entering, 46% exiting

Vehicle Trip Generation per Student

Average Rate	Range of Rates	Standard Deviation
0.74	0.38 - 1.47	0.25

Data Plot and Equation



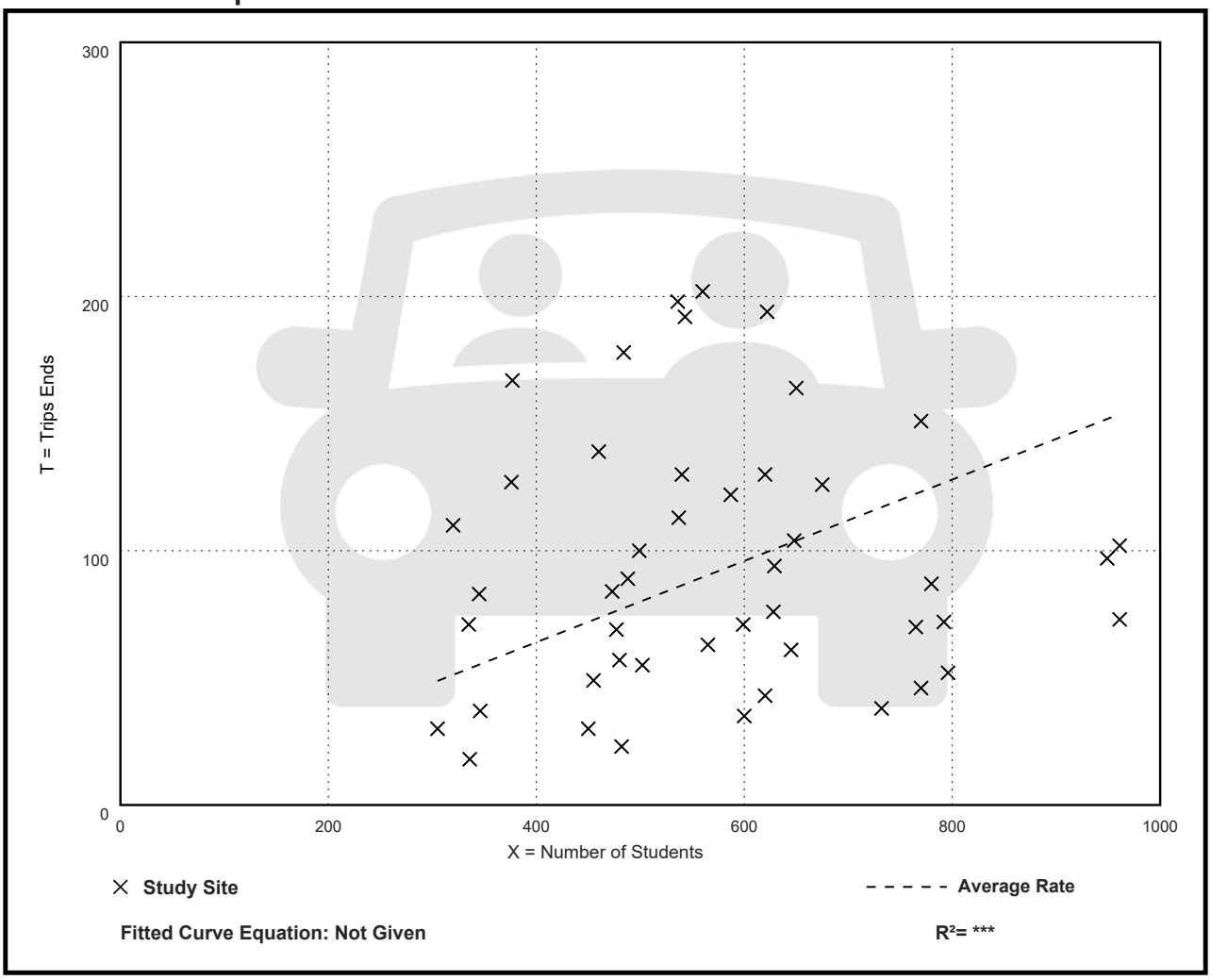
Elementary School
(520)

Vehicle Trip Ends vs: Students
On a: Weekday,
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: General Urban/Suburban
Number of Studies: 47
Avg. Num. of Students: 576
Directional Distribution: 46% entering, 54% exiting

Vehicle Trip Generation per Student

Average Rate	Range of Rates	Standard Deviation
0.16	0.05 - 0.44	0.10

Data Plot and Equation



CMAP YEAR 2050 PROJECTIONS

Chicago Metropolitan Agency for Planning

433 West Van Buren Street
Suite 450
Chicago, IL 60607

312-454-0400
cmap.illinois.gov

January 6, 2023

Daniel Blalock, E.I.T.
Transportation Planning & Traffic Operations (TPTO) Analyst
Kimley-Horn
4201 Winfield Road
Suite 600
Warrenville, IL 60555

Subject: ***Harmony Road from Big Timber Road to Kelley Road***
IDOT

Dear Mr. Blalock:

In response to a request made on your behalf and dated January 5, 2023, we have developed year 2050 average daily traffic (ADT) projections for the subject location.

ROAD SEGMENT	Current ADT	Year 2050 ADT
Harmony Rd north of Big Timber Rd	1,950	3,700
Big Timber Rd east of Harmony Rd	575	1,100
Melms Rd west of Harmony Rd	1,350	2,500
Harmony Rd between Big Timber Rd and Kelley Rd	1,450	2,700
Harmony Rd south of Kelley Rd	1,550	2,700
Allen Rd west of Harmony Rd	750	1,300
Allen Rd east of Harmony Rd	1,550	2,700

Traffic projections are developed using existing ADT data provided in the request letter and the results from the October 2022 CMAP Travel Demand Analysis. The regional travel model uses CMAP 2050 socioeconomic projections and assumes the implementation of the ON TO 2050 Comprehensive Regional Plan for the Northeastern Illinois area. The provision of this data in support of your request does not constitute a CMAP endorsement of the proposed development or any subsequent developments.

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

Sincerely,

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

cc: Rios (IDOT)
2023_TrafficForecasts\Hampshire\ka-02-23\ka-02-23.docx

Kimley»Horn

01/05/2023

Mr. Jose Rodriguez
Chicago Metropolitan Agency for Planning
433 W Van Buren Street, Suite 450
Chicago, IL 60607

RE: Request for 2050 Traffic Projections
Harmony Road
Hampshire, Illinois

Dear Mr. Rodriguez:

Per requirements of the Illinois Department of Transportation (IDOT), Kimley-Horn is formally requesting Year 2050 traffic projections for the following roadway segments in Hampshire, Illinois, for use in developing an annual growth rate for area traffic volumes. For your use, the existing average daily traffic volumes on the roadways as identified by IDOT are as follows:

Harmony Road, north of Big Timber Road	1,950 (2018)
Big Timber Road, east of Harmony Road	575 (2018)
Melms Road, west of Harmony Road	1,350 (2018)
Harmony Road, between Big Timber Road and Kelley Road	1,450 (2018)
Harmony Road, south of Kelley Road	1,550 (2018)
Allen Road, west of Harmony Road	750 (2018)
Allen Road, east of Harmony Road	1,550 (2018)

Please do not hesitate to contact me at 630-791-3633 or via email at Daniel.Blalock@Kimley-Horn.com should you have any questions on this matter.

Sincerely,

Daniel Blalock

Daniel Blalock

Transportation Engineer

KANE COUNTY COMPREHENSIVE ROAD IMPROVEMENT PLAN EXCERPTS

FIGURE 4-1: PROPOSED ROADWAY IMPROVEMENT PLAN

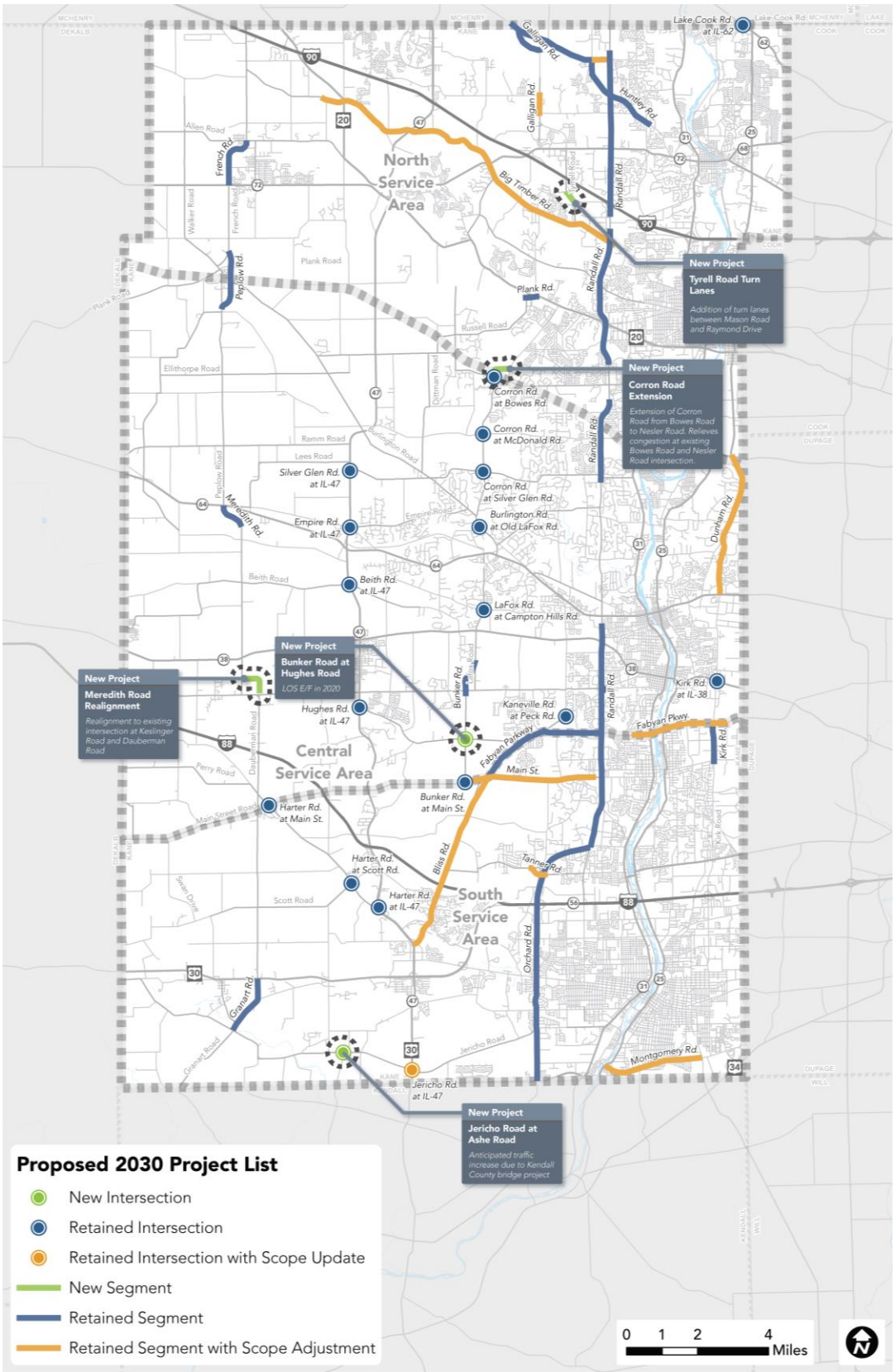


TABLE 4-2: SCOPE OF PROPOSED IMPROVEMENTS

Project	Scope
16	**Fabyan Parkway – Western Avenue to Paramount Parkway** **Eligible Scope Includes:** • Addition of a center left-turn lane on Fabyan Parkway from Heather Road to approximately 1,000 feet west of IL-31 • Widening Fabyan Parkway to a six-lane cross section from approximately 1,000 feet west of IL-31 to roughly 1,000 feet east of IL-25 • Expanding the existing Fox River bridge to accommodate the widened roadway cross section • Addition of a center left-turn lane on Fabyan Parkway from approximately 300 feet east of Raddant Road to approximately 500 feet west of Kirk Road • Addition of a center left-turn lane on Fabyan Parkway from approximately 300 feet east of Kirk Road to Paramount Parkway • Intersection improvements: o **IL-31**: Addition of turn lanes; signal modification to accommodate the expanded roadway cross section o **IL-25**: Addition of turn lanes; signal modification to accommodate the expanded roadway cross section o **Louis Bork Drive / Kautz Road Extension**: Installation of traffic signal and turn lanes **Non-Eligible Scope Includes:** • Installation of a traffic signal at Fabyan Parkway and Paramount Parkway
17	**French Road Realignment with Harmony Road – IL-72 to Allen Road** **Eligible Scope Includes:** • Extension of French Road on a new two-lane alignment from IL-72 to Allen Road, terminating at the existing intersection with Harmony Road • Construction of a new two-lane overpass over CPRR (formerly Soo Line) trackage • Intersection improvements: o **IL-72**: Installation of a traffic signal and addition of with turn lanes on all four approaches o **Allen Road**: Installation of a traffic signal and addition of with turn lanes on all four approaches
18	**Galligan Road – Freeman Road to Binnie Road** **Eligible Scope Includes:** • Addition of a center left-turn lane from Freeman Road to Binnie Road • Addition of a left-turn lanes at the Freeman Road intersection and Binnie Road intersection
19	**Galligan Road Realignment South of Huntley Road** **Eligible Scope Includes:** • Realignment of Galligan Road to a point west of its current intersection with Huntley Road; realigned street to have a two-lane cross section

TIME-OF-DAY DISTRIBUTION DATA
FROM THE ITE TRIP GENERATION MANUAL, 11TH EDITION

Hourly Distribution of Entering and Exiting Vehicle Trips by Land Use

Source: ITE *Trip Generation Manual* , 11th Edition

Land Use Code	210			210			210		
Land Use	Single-Family Detached Housing			Single-Family Detached Housing			Single-Family Detached Housing		
Setting	General Urban/Suburban			General Urban/Suburban			General Urban/Suburban		
Time Period	Weekday			Saturday			Sunday		
# Data Sites	7			3			2		
	% of 24-Hour Vehicle Trips			% of 24-Hour Vehicle Trips			% of 24-Hour Vehicle Trips		
Time	Total	Entering	Exiting	Total	Entering	Exiting	Total	Entering	Exiting
12:00 - 1:00 AM	0.3%	0.5%	0.2%	0.8%	0.6%	1.0%	0.6%	0.6%	0.6%
1:00 - 2:00 AM	0.2%	0.2%	0.1%	0.4%	0.6%	0.2%	0.6%	1.2%	0.0%
2:00 - 3:00 AM	0.2%	0.3%	0.1%	0.3%	0.4%	0.2%	0.0%	0.0%	0.0%
3:00 - 4:00 AM	0.2%	0.2%	0.2%	0.5%	0.4%	0.6%	0.3%	0.0%	0.6%
4:00 - 5:00 AM	0.6%	0.3%	0.8%	0.5%	0.6%	0.4%	0.0%	0.0%	0.0%
5:00 - 6:00 AM	1.2%	0.5%	2.0%	1.0%	0.8%	1.2%	1.8%	1.8%	1.8%
6:00 - 7:00 AM	3.7%	1.6%	5.8%	1.0%	0.4%	1.5%	1.5%	1.8%	1.2%
7:00 - 8:00 AM	6.5%	3.1%	10.0%	2.0%	0.8%	3.3%	1.8%	0.6%	3.0%
8:00 - 9:00 AM	6.2%	3.8%	8.5%	3.8%	2.5%	5.2%	4.7%	0.6%	9.0%
9:00 - 10:00 AM	4.6%	3.3%	5.8%	5.5%	5.0%	6.0%	4.7%	3.5%	6.0%
10:00 - 11:00 AM	4.9%	4.2%	5.6%	8.2%	6.2%	10.2%	11.5%	8.8%	14.4%
11:00 - 12:00 PM	5.3%	5.4%	5.1%	7.2%	8.7%	5.8%	7.7%	8.2%	7.2%
12:00 - 1:00 PM	5.7%	5.7%	5.7%	7.7%	7.3%	8.1%	9.2%	10.5%	7.8%
1:00 - 2:00 PM	6.1%	6.1%	6.0%	8.1%	7.1%	9.0%	9.8%	10.5%	9.0%
2:00 - 3:00 PM	6.6%	7.1%	6.1%	8.0%	8.7%	7.3%	5.9%	5.8%	6.0%
3:00 - 4:00 PM	7.5%	8.7%	6.2%	9.2%	9.8%	8.7%	4.4%	5.8%	3.0%
4:00 - 5:00 PM	8.9%	10.5%	7.4%	6.2%	6.9%	5.4%	8.3%	8.2%	8.4%
5:00 - 6:00 PM	8.7%	10.0%	7.3%	8.4%	9.6%	7.1%	9.8%	11.1%	8.4%
6:00 - 7:00 PM	7.2%	8.5%	5.9%	6.0%	7.3%	4.6%	6.2%	5.8%	6.6%
7:00 - 8:00 PM	5.1%	6.1%	4.2%	5.1%	4.8%	5.4%	5.3%	7.0%	3.6%
8:00 - 9:00 PM	4.6%	6.1%	3.1%	4.8%	6.0%	3.7%	4.1%	5.8%	2.4%
9:00 - 10:00 PM	3.3%	4.4%	2.3%	2.4%	2.7%	2.1%	0.3%	0.6%	0.0%
10:00 - 11:00 PM	1.6%	2.1%	1.0%	1.7%	1.5%	1.9%	1.5%	1.8%	1.2%
11:00 - 12:00 AM	1.0%	1.3%	0.6%	1.4%	1.5%	1.3%	0.0%	0.0%	0.0%

Hourly Distribution of Entering and Exiting Vehicle Trips by Land Use			
Source: ITE *Trip Generation Manual* , 11th Edition			
Land Use Code	215		
Land Use	Single-Family Attached Housing		
Setting	General Urban/Suburban		
Time Period	Weekday		
# Data Sites	7		
	% of 24-Hour Vehicle Trips		
Time	Total	Entering	Exiting
12:00 - 1:00 AM	0.5%	0.7%	0.3%
1:00 - 2:00 AM	0.2%	0.4%	0.1%
2:00 - 3:00 AM	0.3%	0.2%	0.3%
3:00 - 4:00 AM	0.3%	0.3%	0.4%
4:00 - 5:00 AM	0.7%	0.4%	1.0%
5:00 - 6:00 AM	1.4%	0.1%	2.6%
6:00 - 7:00 AM	3.5%	1.1%	5.8%
7:00 - 8:00 AM	7.9%	2.7%	13.2%
8:00 - 9:00 AM	6.6%	3.8%	9.3%
9:00 - 10:00 AM	5.3%	3.7%	6.9%
10:00 - 11:00 AM	4.1%	4.0%	4.3%
11:00 - 12:00 PM	5.3%	4.8%	5.7%
12:00 - 1:00 PM	5.2%	5.4%	5.1%
1:00 - 2:00 PM	4.7%	4.5%	4.8%
2:00 - 3:00 PM	5.8%	5.5%	6.0%
3:00 - 4:00 PM	6.5%	8.2%	4.8%
4:00 - 5:00 PM	7.5%	9.8%	5.1%
5:00 - 6:00 PM	9.4%	12.1%	6.8%
6:00 - 7:00 PM	8.2%	9.8%	6.6%
7:00 - 8:00 PM	5.9%	7.3%	4.5%
8:00 - 9:00 PM	4.7%	5.9%	3.5%
9:00 - 10:00 PM	3.0%	4.8%	1.3%
10:00 - 11:00 PM	2.0%	3.0%	1.1%
11:00 - 12:00 AM	0.9%	1.5%	0.4%

Hourly Distribution of Entering and Exiting Vehicle Trips by Land Use

Source: ITE *Trip Generation Manual* , 11th Edition

Land Use Code	251			251		
Land Use	Senior Adult Housing - Single-Family			Senior Adult Housing - Single-Family		
Setting	General Urban/Suburban			General Urban/Suburban		
Time Period	Weekday			Sunday		
# Data Sites	8			1		
	% of 24-Hour Vehicle Trips			% of 24-Hour Vehicle Trips		
Time	Total	Entering	Exiting	Total	Entering	Exiting
12:00 - 1:00 AM	0.2%	0.3%	0.1%	0.5%	0.4%	0.5%
1:00 - 2:00 AM	0.1%	0.2%	0.1%	0.0%	0.0%	0.0%
2:00 - 3:00 AM	0.1%	0.1%	0.1%	0.0%	0.0%	0.0%
3:00 - 4:00 AM	0.1%	0.1%	0.1%	0.1%	0.0%	0.2%
4:00 - 5:00 AM	0.2%	0.1%	0.4%	0.2%	0.1%	0.3%
5:00 - 6:00 AM	0.7%	0.2%	1.2%	0.2%	0.1%	0.2%
6:00 - 7:00 AM	2.3%	1.0%	3.7%	0.8%	0.6%	1.2%
7:00 - 8:00 AM	5.4%	2.8%	8.0%	1.5%	0.8%	2.2%
8:00 - 9:00 AM	6.4%	3.9%	8.8%	5.1%	3.5%	7.0%
9:00 - 10:00 AM	6.8%	5.2%	8.4%	6.2%	3.5%	8.6%
10:00 - 11:00 AM	7.1%	6.1%	8.1%	6.2%	3.9%	8.9%
11:00 - 12:00 PM	7.5%	7.1%	7.9%	10.5%	10.5%	10.5%
12:00 - 1:00 PM	7.9%	7.8%	7.9%	8.9%	8.5%	9.3%
1:00 - 2:00 PM	7.3%	7.3%	7.3%	8.9%	10.1%	7.4%
2:00 - 3:00 PM	7.4%	7.8%	7.0%	9.9%	11.3%	8.1%
3:00 - 4:00 PM	7.9%	9.0%	6.8%	10.9%	11.6%	9.9%
4:00 - 5:00 PM	7.8%	9.4%	6.2%	8.4%	9.2%	7.4%
5:00 - 6:00 PM	7.8%	9.4%	6.1%	8.2%	8.8%	7.5%
6:00 - 7:00 PM	6.3%	7.2%	5.3%	6.9%	7.7%	6.0%
7:00 - 8:00 PM	3.9%	5.1%	2.7%	2.5%	2.4%	2.6%
8:00 - 9:00 PM	2.9%	4.4%	1.5%	2.5%	3.2%	1.5%
9:00 - 10:00 PM	2.1%	3.1%	1.2%	1.2%	1.5%	0.7%
10:00 - 11:00 PM	1.3%	1.8%	0.8%	0.6%	1.0%	0.2%
11:00 - 12:00 AM	0.6%	0.8%	0.3%	0.3%	0.4%	0.2%

Hourly Distribution of Entering and Exiting Vehicle Trips by Land Use			
Source: ITE *Trip Generation Manual* , 11th Edition			
Land Use Code	520		
Land Use	Elementary School		
Setting	General Urban/Suburban		
Time Period	Weekday		
# Data Sites	13		
	% of 24-Hour Vehicle Trips		
Time	Total	Entering	Exiting
12:00 - 1:00 AM	0.0%	0.0%	0.0%
1:00 - 2:00 AM	0.0%	0.0%	0.0%
2:00 - 3:00 AM	0.0%	0.0%	0.0%
3:00 - 4:00 AM	0.0%	0.0%	0.0%
4:00 - 5:00 AM	0.0%	0.0%	0.0%
5:00 - 6:00 AM	0.0%	0.1%	0.0%
6:00 - 7:00 AM	2.3%	3.2%	1.4%
7:00 - 8:00 AM	31.0%	35.7%	26.3%
8:00 - 9:00 AM	13.0%	11.6%	14.4%
9:00 - 10:00 AM	2.0%	2.1%	2.0%
10:00 - 11:00 AM	2.0%	1.9%	2.1%
11:00 - 12:00 PM	2.7%	2.5%	2.8%
12:00 - 1:00 PM	2.4%	2.7%	2.2%
1:00 - 2:00 PM	3.7%	3.6%	3.9%
2:00 - 3:00 PM	15.4%	14.7%	16.0%
3:00 - 4:00 PM	10.3%	8.5%	12.1%
4:00 - 5:00 PM	8.2%	7.0%	9.4%
5:00 - 6:00 PM	5.2%	4.9%	5.6%
6:00 - 7:00 PM	1.1%	1.1%	1.1%
7:00 - 8:00 PM	0.2%	0.2%	0.2%
8:00 - 9:00 PM	0.2%	0.1%	0.3%
9:00 - 10:00 PM	0.0%	0.0%	0.0%
10:00 - 11:00 PM	0.0%	0.0%	0.0%
11:00 - 12:00 AM	0.0%	0.0%	0.0%

FUTURE (2043) NO-BUILD CAPACITY REPORTS

Intersection	
Int Delay, s/veh	1.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	20	5	145	60	20	85
Future Vol, veh/h	20	5	145	60	20	85
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	7	17	4	5	6	8
Mvmt Flow	21	5	153	63	21	89

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	316	185	0	0	216	0
Stage 1	185	-	-	-	-	-
Stage 2	131	-	-	-	-	-
Critical Hdwy	6.47	6.37	-	-	4.16	-
Critical Hdwy Stg 1	5.47	-	-	-	-	-
Critical Hdwy Stg 2	5.47	-	-	-	-	-
Follow-up Hdwy	3.563	3.453	-	-	2.254	-
Pot Cap-1 Maneuver	667	820	-	-	1330	-
Stage 1	835	-	-	-	-	-
Stage 2	883	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	656	820	-	-	1330	-
Mov Cap-2 Maneuver	656	-	-	-	-	-
Stage 1	835	-	-	-	-	-
Stage 2	868	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.5	0	1.5
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	683	1330	-
HCM Lane V/C Ratio	-	-	0.039	0.016	-
HCM Control Delay (s)	-	-	10.5	7.8	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Intersection	
Int Delay, s/veh	4.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	110	15	5	95	85	20
Future Vol, veh/h	110	15	5	95	85	20
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	3	2	2	4	6	6
Mvmt Flow	116	16	5	100	89	21

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	210	100	110	0	-	0
Stage 1	100	-	-	-	-	-
Stage 2	110	-	-	-	-	-
Critical Hdwy	6.43	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	776	956	1480	-	-	-
Stage 1	921	-	-	-	-	-
Stage 2	912	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	773	956	1480	-	-	-
Mov Cap-2 Maneuver	773	-	-	-	-	-
Stage 1	917	-	-	-	-	-
Stage 2	912	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.5	0.4	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1480	-	791	-	-
HCM Lane V/C Ratio	0.004	-	0.166	-	-
HCM Control Delay (s)	7.4	0	10.5	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.6	-	-

Intersection	
Int Delay, s/veh	2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	5	1	1	5	5	5	75	5	5	80	15
Future Vol, veh/h	20	5	1	1	5	5	5	75	5	5	80	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	235	-	-	155	-	130
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, %	23	2	2	2	17	2	2	4	67	2	3	9
Mvmt Flow	21	5	1	1	5	5	5	79	5	5	84	16

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	191	188	84	197	202	82	100	0	0	84	0	0
Stage 1	94	94	-	92	92	-	-	-	-	-	-	-
Stage 2	97	94	-	105	110	-	-	-	-	-	-	-
Critical Hdwy	7.33	6.52	6.22	7.12	6.67	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.33	5.52	-	6.12	5.67	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.33	5.52	-	6.12	5.67	-	-	-	-	-	-	-
Follow-up Hdwy	3.707	4.018	3.318	3.518	4.153	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	725	707	975	762	668	978	1493	-	-	1513	-	-
Stage 1	864	817	-	915	790	-	-	-	-	-	-	-
Stage 2	860	817	-	901	776	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	713	703	975	753	664	978	1493	-	-	1513	-	-
Mov Cap-2 Maneuver	713	703	-	753	664	-	-	-	-	-	-	-
Stage 1	861	815	-	912	788	-	-	-	-	-	-	-
Stage 2	847	815	-	891	774	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.2	9.6	0.4	0.4
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1493	-	-	718	787	1513	-	-
HCM Lane V/C Ratio	0.004	-	-	0.038	0.015	0.003	-	-
HCM Control Delay (s)	7.4	-	-	10.2	9.6	7.4	-	-
HCM Lane LOS	A	-	-	B	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0	0	-	-

Intersection	
Int Delay, s/veh	2.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	20	140	50	65	65	15
Future Vol, veh/h	20	140	50	65	65	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	210	-	-	190	250	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	6	2	17	7	4	10
Mvmt Flow	21	147	53	68	68	16

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	121	0	-	0	242	53
Stage 1	-	-	-	-	53	-
Stage 2	-	-	-	-	189	-
Critical Hdwy	4.16	-	-	-	6.44	6.3
Critical Hdwy Stg 1	-	-	-	-	5.44	-
Critical Hdwy Stg 2	-	-	-	-	5.44	-
Follow-up Hdwy	2.254	-	-	-	3.536	3.39
Pot Cap-1 Maneuver	1442	-	-	-	742	992
Stage 1	-	-	-	-	964	-
Stage 2	-	-	-	-	838	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1442	-	-	-	731	992
Mov Cap-2 Maneuver	-	-	-	-	731	-
Stage 1	-	-	-	-	950	-
Stage 2	-	-	-	-	838	-

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

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1442	-	-	-	731	992
HCM Lane V/C Ratio	0.015	-	-	-	0.094	0.016
HCM Control Delay (s)	7.5	-	-	-	10.4	8.7
HCM Lane LOS	A	-	-	-	B	A
HCM 95th %tile Q(veh)	0	-	-	-	0.3	0

Intersection	
Int Delay, s/veh	1.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	45	15	145	15	1	175
Future Vol, veh/h	45	15	145	15	1	175
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	4	2	6	25	2	2
Mvmt Flow	47	16	153	16	1	184

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	347	161	0	0	169	0
Stage 1	161	-	-	-	-	-
Stage 2	186	-	-	-	-	-
Critical Hdwy	6.44	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.44	-	-	-	-	-
Critical Hdwy Stg 2	5.44	-	-	-	-	-
Follow-up Hdwy	3.536	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	646	884	-	-	1409	-
Stage 1	863	-	-	-	-	-
Stage 2	841	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	645	884	-	-	1409	-
Mov Cap-2 Maneuver	645	-	-	-	-	-
Stage 1	863	-	-	-	-	-
Stage 2	840	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.7	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	692	1409	-
HCM Lane V/C Ratio	-	-	0.091	0.001	-
HCM Control Delay (s)	-	-	10.7	7.6	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.3	0	-

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	45	5	20	115	110	110
Future Vol, veh/h	45	5	20	115	110	110
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	4	2	7	6	2	3
Mvmt Flow	47	5	21	121	116	116

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	337	174	232	0	-	0
Stage 1	174	-	-	-	-	-
Stage 2	163	-	-	-	-	-
Critical Hdwy	6.44	6.22	4.17	-	-	-
Critical Hdwy Stg 1	5.44	-	-	-	-	-
Critical Hdwy Stg 2	5.44	-	-	-	-	-
Follow-up Hdwy	3.536	3.318	2.263	-	-	-
Pot Cap-1 Maneuver	654	869	1307	-	-	-
Stage 1	851	-	-	-	-	-
Stage 2	861	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	643	869	1307	-	-	-
Mov Cap-2 Maneuver	643	-	-	-	-	-
Stage 1	837	-	-	-	-	-
Stage 2	861	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.9	1.2	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1307	-	660	-	-
HCM Lane V/C Ratio	0.016	-	0.08	-	-
HCM Control Delay (s)	7.8	0	10.9	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.3	-	-

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	1	1	5	5	1	1	130	15	5	90	20
Future Vol, veh/h	5	1	1	5	5	1	1	130	15	5	90	20
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	235	-	-	155	-	130
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, %	43	2	2	33	2	2	2	4	2	2	2	2
Mvmt Flow	5	1	1	5	5	1	1	137	16	5	95	21

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	255	260	95	264	273	145	116	0	0	153	0	0
Stage 1	105	105	-	147	147	-	-	-	-	-	-	-
Stage 2	150	155	-	117	126	-	-	-	-	-	-	-
Critical Hdwy	7.53	6.52	6.22	7.43	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.53	5.52	-	6.43	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.53	5.52	-	6.43	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.887	4.018	3.318	3.797	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	622	645	962	630	634	902	1473	-	-	1428	-	-
Stage 1	810	808	-	787	775	-	-	-	-	-	-	-
Stage 2	764	769	-	818	792	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	615	642	962	626	631	902	1473	-	-	1428	-	-
Mov Cap-2 Maneuver	615	642	-	626	631	-	-	-	-	-	-	-
Stage 1	809	805	-	786	774	-	-	-	-	-	-	-
Stage 2	757	768	-	813	789	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.6	10.7	0.1	0.3
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1473	-	-	653	646	1428	-	-
HCM Lane V/C Ratio	0.001	-	-	0.011	0.018	0.004	-	-
HCM Control Delay (s)	7.4	-	-	10.6	10.7	7.5	-	-
HCM Lane LOS	A	-	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0	0.1	0	-	-

Intersection	
Int Delay, s/veh	2.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	5	75	160	140	80	15
Future Vol, veh/h	5	75	160	140	80	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	210	-	-	190	250	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	20	10	5	4	2	8
Mvmt Flow	5	79	168	147	84	16

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	315	0	-	0	257	168
Stage 1	-	-	-	-	168	-
Stage 2	-	-	-	-	89	-
Critical Hdwy	4.3	-	-	-	6.42	6.28
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.38	-	-	-	3.518	3.372
Pot Cap-1 Maneuver	1150	-	-	-	732	861
Stage 1	-	-	-	-	862	-
Stage 2	-	-	-	-	934	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1150	-	-	-	729	861
Mov Cap-2 Maneuver	-	-	-	-	729	-
Stage 1	-	-	-	-	859	-
Stage 2	-	-	-	-	934	-

Approach	EB	WB	SB
HCM Control Delay, s	0.5	0	10.4
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1150	-	-	-	729	861
HCM Lane V/C Ratio	0.005	-	-	-	0.116	0.018
HCM Control Delay (s)	8.1	-	-	-	10.6	9.3
HCM Lane LOS	A	-	-	-	B	A
HCM 95th %tile Q(veh)	0	-	-	-	0.4	0.1

FUTURE (2043) BUILD CAPACITY REPORTS

Intersection	
Int Delay, s/veh	2.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	45	85	530	95	50	230
Future Vol, veh/h	45	85	530	95	50	230
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	265	-	265	265	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	7	17	4	5	6	8
Mvmt Flow	47	89	558	100	53	242

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	906	558	0	0	658	0
Stage 1	558	-	-	-	-	-
Stage 2	348	-	-	-	-	-
Critical Hdwy	6.47	6.37	-	-	4.16	-
Critical Hdwy Stg 1	5.47	-	-	-	-	-
Critical Hdwy Stg 2	5.47	-	-	-	-	-
Follow-up Hdwy	3.563	3.453	-	-	2.254	-
Pot Cap-1 Maneuver	300	502	-	-	911	-
Stage 1	563	-	-	-	-	-
Stage 2	704	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	283	502	-	-	911	-
Mov Cap-2 Maneuver	283	-	-	-	-	-
Stage 1	563	-	-	-	-	-
Stage 2	663	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	16	0	1.6
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	283	502	911	-
HCM Lane V/C Ratio	-	-	0.167	0.178	0.058	-
HCM Control Delay (s)	-	-	20.3	13.7	9.2	-
HCM Lane LOS	-	-	C	B	A	-
HCM 95th %tile Q(veh)	-	-	0.6	0.6	0.2	-

Intersection	
Int Delay, s/veh	4.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	145	35	55	480	230	45
Future Vol, veh/h	145	35	55	480	230	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	265	265	-	-	265
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	3	2	2	4	6	6
Mvmt Flow	153	37	58	505	242	47

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	863	242	289	0	-	0
Stage 1	242	-	-	-	-	-
Stage 2	621	-	-	-	-	-
Critical Hdwy	6.43	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	324	797	1273	-	-	-
Stage 1	796	-	-	-	-	-
Stage 2	534	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	309	797	1273	-	-	-
Mov Cap-2 Maneuver	309	-	-	-	-	-
Stage 1	759	-	-	-	-	-
Stage 2	534	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	24	0.8	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1273	-	309	797	-	-
HCM Lane V/C Ratio	0.045	-	0.494	0.046	-	-
HCM Control Delay (s)	8	-	27.5	9.7	-	-
HCM Lane LOS	A	-	D	A	-	-
HCM 95th %tile Q(veh)	0.1	-	2.6	0.1	-	-

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	5	1	1	5	5	5	195	5	5	315	15
Future Vol, veh/h	20	5	1	1	5	5	5	195	5	5	315	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	235	-	-	155	-	130
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, %	23	2	2	2	17	2	2	4	67	2	3	9
Mvmt Flow	21	5	1	1	5	5	5	205	5	5	332	16

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	565	562	332	571	576	208	348	0	0	210	0	0
Stage 1	342	342	-	218	218	-	-	-	-	-	-	-
Stage 2	223	220	-	353	358	-	-	-	-	-	-	-
Critical Hdwy	7.33	6.52	6.22	7.12	6.67	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.33	5.52	-	6.12	5.67	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.33	5.52	-	6.12	5.67	-	-	-	-	-	-	-
Follow-up Hdwy	3.707	4.018	3.318	3.518	4.153	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	405	436	710	432	408	832	1211	-	-	1361	-	-
Stage 1	631	638	-	784	695	-	-	-	-	-	-	-
Stage 2	734	721	-	664	602	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	396	433	710	425	405	832	1211	-	-	1361	-	-
Mov Cap-2 Maneuver	396	433	-	425	405	-	-	-	-	-	-	-
Stage 1	628	635	-	781	692	-	-	-	-	-	-	-
Stage 2	721	718	-	655	600	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	14.4	11.9	0.2	0.1
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1211	-	-	410	531	1361	-	-
HCM Lane V/C Ratio	0.004	-	-	0.067	0.022	0.004	-	-
HCM Control Delay (s)	8	-	-	14.4	11.9	7.7	-	-
HCM Lane LOS	A	-	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0.1	0	-	-

Intersection	
Int Delay, s/veh	6.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	20	140	50	185	300	15
Future Vol, veh/h	20	140	50	185	300	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	210	-	-	190	250	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	6	2	17	7	4	10
Mvmt Flow	21	147	53	195	316	16

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	248	0	-	0	242	53
Stage 1	-	-	-	-	53	-
Stage 2	-	-	-	-	189	-
Critical Hdwy	4.16	-	-	-	6.44	6.3
Critical Hdwy Stg 1	-	-	-	-	5.44	-
Critical Hdwy Stg 2	-	-	-	-	5.44	-
Follow-up Hdwy	2.254	-	-	-	3.536	3.39
Pot Cap-1 Maneuver	1295	-	-	-	742	992
Stage 1	-	-	-	-	964	-
Stage 2	-	-	-	-	838	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1295	-	-	-	730	992
Mov Cap-2 Maneuver	-	-	-	-	730	-
Stage 1	-	-	-	-	949	-
Stage 2	-	-	-	-	838	-

Approach	EB	WB	SB
HCM Control Delay, s	1	0	13.4
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1295	-	-	-	730	992
HCM Lane V/C Ratio	0.016	-	-	-	0.433	0.016
HCM Control Delay (s)	7.8	-	-	-	13.6	8.7
HCM Lane LOS	A	-	-	-	B	A
HCM 95th %tile Q(veh)	0.1	-	-	-	2.2	0

Intersection	
Int Delay, s/veh	2.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	140	5	15	85	15	40
Future Vol, veh/h	140	5	15	85	15	40
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	265	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	147	5	16	89	16	42

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	152	0	271	150
Stage 1	-	-	-	-	150	-
Stage 2	-	-	-	-	121	-
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	-	-	1429	-	718	896
Stage 1	-	-	-	-	878	-
Stage 2	-	-	-	-	904	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1429	-	710	896
Mov Cap-2 Maneuver	-	-	-	-	710	-
Stage 1	-	-	-	-	878	-
Stage 2	-	-	-	-	894	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.1	9.5
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	710	896	-	-	1429	-
HCM Lane V/C Ratio	0.022	0.047	-	-	0.011	-
HCM Control Delay (s)	10.2	9.2	-	-	7.5	-
HCM Lane LOS	B	A	-	-	A	-
HCM 95th %tile Q(veh)	0.1	0.1	-	-	0	-

Intersection	
Int Delay, s/veh	5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	110	35	35	35	95	70
Future Vol, veh/h	110	35	35	35	95	70
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	265	265	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	116	37	37	37	100	74

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	153	0	227	116
Stage 1	-	-	-	-	116	-
Stage 2	-	-	-	-	111	-
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	-	761	936
Stage 1	-	-	-	-	909	-
Stage 2	-	-	-	-	914	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1428	-	741	936
Mov Cap-2 Maneuver	-	-	-	-	741	-
Stage 1	-	-	-	-	909	-
Stage 2	-	-	-	-	890	-

Approach	EB	WB	NB
HCM Control Delay, s	0	3.8	10
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	741	936	-	-	1428	-
HCM Lane V/C Ratio	0.135	0.079	-	-	0.026	-
HCM Control Delay (s)	10.6	9.2	-	-	7.6	-
HCM Lane LOS	B	A	-	-	A	-
HCM 95th %tile Q(veh)	0.5	0.3	-	-	0.1	-

Intersection	
Int Delay, s/veh	0.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	10	20	515	10	5	260
Future Vol, veh/h	10	20	515	10	5	260
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	0	-	265	265	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	11	21	542	11	5	274

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	826	542	0	0	553	0
Stage 1	542	-	-	-	-	-
Stage 2	284	-	-	-	-	-
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	342	540	-	-	1017	-
Stage 1	583	-	-	-	-	-
Stage 2	764	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	340	540	-	-	1017	-
Mov Cap-2 Maneuver	340	-	-	-	-	-
Stage 1	583	-	-	-	-	-
Stage 2	760	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	13.2	0	0.2
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	340	540	1017	-
HCM Lane V/C Ratio	-	-	0.031	0.039	0.005	-
HCM Control Delay (s)	-	-	15.9	11.9	8.6	-
HCM Lane LOS	-	-	C	B	A	-
HCM 95th %tile Q(veh)	-	-	0.1	0.1	0	-

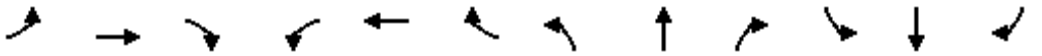
Intersection	
Int Delay, s/veh	4.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	130	85	50	395	220	50
Future Vol, veh/h	130	85	50	395	220	50
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	0	265	-	-	265
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	137	89	53	416	232	53

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	754	232	285	0	-	0
Stage 1	232	-	-	-	-	-
Stage 2	522	-	-	-	-	-
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	377	807	1277	-	-	-
Stage 1	807	-	-	-	-	-
Stage 2	595	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	361	807	1277	-	-	-
Mov Cap-2 Maneuver	361	-	-	-	-	-
Stage 1	773	-	-	-	-	-
Stage 2	595	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	16.6	0.9	0
HCM LOS	C		

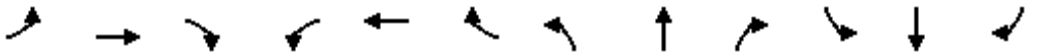
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1277	-	361	807	-	-
HCM Lane V/C Ratio	0.041	-	0.379	0.111	-	-
HCM Control Delay (s)	7.9	-	20.9	10	-	-
HCM Lane LOS	A	-	C	B	-	-
HCM 95th %tile Q(veh)	0.1	-	1.7	0.4	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	150	80	60	95	60	130	25	165	65	70	175	60
Future Volume (veh/h)	150	80	60	95	60	130	25	165	65	70	175	60
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1969	1870	1870	1969	1870
Adj Flow Rate, veh/h	158	84	63	100	63	137	26	174	68	74	184	63
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	321	190	143	355	83	180	626	896	722	645	944	760
Arrive On Green	0.10	0.19	0.19	0.06	0.16	0.16	0.03	0.46	0.46	0.05	0.48	0.48
Sat Flow, veh/h	1781	992	744	1781	524	1141	1781	1969	1585	1781	1969	1585
Grp Volume(v), veh/h	158	0	147	100	0	200	26	174	68	74	184	63
Grp Sat Flow(s),veh/h/ln	1781	0	1736	1781	0	1665	1781	1969	1585	1781	1969	1585
Q Serve(g_s), s	5.5	0.0	5.7	3.5	0.0	8.8	0.6	4.0	1.9	1.6	4.1	1.6
Cycle Q Clear(g_c), s	5.5	0.0	5.7	3.5	0.0	8.8	0.6	4.0	1.9	1.6	4.1	1.6
Prop In Lane	1.00		0.43	1.00		0.69	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	321	0	333	355	0	263	626	896	722	645	944	760
V/C Ratio(X)	0.49	0.00	0.44	0.28	0.00	0.76	0.04	0.19	0.09	0.11	0.19	0.08
Avail Cap(c_a), veh/h	578	0	1038	509	0	842	776	896	722	822	944	760
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.6	0.0	27.2	24.4	0.0	30.7	10.4	12.4	11.8	9.8	11.4	10.7
Incr Delay (d2), s/veh	1.2	0.0	0.9	0.4	0.0	4.5	0.0	0.5	0.3	0.1	0.5	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	4.2	0.0	4.3	2.6	0.0	6.7	0.3	2.8	1.2	0.9	2.8	1.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.8	0.0	28.1	24.9	0.0	35.2	10.4	12.9	12.1	9.8	11.8	11.0
LnGrp LOS	C	A	C	C	A	D	B	B	B	A	B	B
Approach Vol, veh/h		305			300			268			321	
Approach Delay, s/veh		26.4			31.8			12.4			11.2	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.5	39.2	9.4	19.1	6.6	41.0	12.0	16.5
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	11.5	33.5	11.5	45.5	8.5	36.5	18.5	38.5
Max Q Clear Time (g_c+I1), s	3.6	6.0	5.5	7.7	2.6	6.1	7.5	10.8
Green Ext Time (p_c), s	0.1	1.0	0.1	0.9	0.0	1.1	0.3	1.3

Intersection Summary	
HCM 6th Ctrl Delay	20.5
HCM 6th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	150	80	60	95	60	130	25	165	65	70	175	60
Future Volume (veh/h)	150	80	60	95	60	130	25	165	65	70	175	60
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1969	1870	1870	1969	1870
Adj Flow Rate, veh/h	158	84	63	100	63	137	26	174	68	74	184	63
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	321	190	143	355	83	180	626	896	722	645	944	760
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.10	0.19	0.19	0.06	0.16	0.16	0.03	0.46	0.46	0.05	0.48	0.48
Unsig. Movement Delay												
Ln Grp Delay, s/veh	24.8	0.0	28.1	24.9	0.0	35.2	10.4	12.9	12.1	9.8	11.8	11.0
Ln Grp LOS	C	A	C	C	A	D	B	B	B	A	B	B
Approach Vol, veh/h		305			300			268			321	
Approach Delay, s/veh		26.4			31.8			12.4			11.2	
Approach LOS		C			C			B			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	1.1	3.0	1.1	4.0	1.1	3.0	1.1	4.0
Phs Duration (G+Y+Rc), s	8.5	39.2	9.4	19.1	6.6	41.0	12.0	16.5
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green (Gmax), s	11.5	33.5	11.5	45.5	8.5	36.5	18.5	38.5
Max Allow Headway (MAH), s	3.6	4.5	3.8	5.4	3.6	4.5	3.8	5.5
Max Q Clear (g_c+I1), s	3.6	6.0	5.5	7.7	2.6	6.1	7.5	10.8
Green Ext Time (g_e), s	0.1	1.0	0.1	0.9	0.0	1.1	0.3	1.3
Prob of Phs Call (p_c)	0.79	1.00	0.88	1.00	0.42	1.00	0.96	1.00
Prob of Max Out (p_x)	0.01	0.00	0.10	0.00	0.02	0.00	0.00	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1781		1781		1781		1781	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1969		992		1969		524

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1585		744		1585		1141

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)	

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	74	0	100	0	26	0	158	0
Grp Sat Flow (s), veh/h/ln	1781	0	1781	0	1781	0	1781	0
Q Serve Time (g_s), s	1.6	0.0	3.5	0.0	0.6	0.0	5.5	0.0
Cycle Q Clear Time (g_c), s	1.6	0.0	3.5	0.0	0.6	0.0	5.5	0.0
Perm LT Sat Flow (s_l), veh/h/ln	1138	0	1241	0	1133	0	1182	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	34.7	0.0	12.0	0.0	34.7	0.0	12.1	0.0
Perm LT Serve Time (g_u), s	30.6	0.0	8.9	0.0	32.4	0.0	3.3	0.0
Perm LT Q Serve Time (g_ps), s	0.3	0.0	0.3	0.0	0.1	0.0	1.4	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	645	0	355	0	626	0	321	0
V/C Ratio (X)	0.11	0.00	0.28	0.00	0.04	0.00	0.49	0.00
Avail Cap (c_a), veh/h	822	0	509	0	776	0	578	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	9.8	0.0	24.4	0.0	10.4	0.0	23.6	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.4	0.0	0.0	0.0	1.2	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	9.8	0.0	24.9	0.0	10.4	0.0	24.8	0.0
1st-Term Q (Q1), veh/ln	0.5	0.0	1.4	0.0	0.2	0.0	2.2	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	0.00	1.80	0.00	1.80	0.00	1.80	0.00
%ile Back of Q (95%), veh/ln	0.9	0.0	2.6	0.0	0.3	0.0	4.2	0.0
%ile Storage Ratio (RQ%)	0.09	0.00	0.04	0.00	0.03	0.00	0.07	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		
Lanes in Grp	0	1	0	0	0	1	0	0
Grp Vol (v), veh/h	0	174	0	0	0	184	0	0
Grp Sat Flow (s), veh/h/ln	0	1969	0	0	0	1969	0	0
Q Serve Time (g_s), s	0.0	4.0	0.0	0.0	0.0	4.1	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	4.0	0.0	0.0	0.0	4.1	0.0	0.0
Lane Grp Cap (c), veh/h	0	896	0	0	0	944	0	0
V/C Ratio (X)	0.00	0.19	0.00	0.00	0.00	0.19	0.00	0.00
Avail Cap (c_a), veh/h	0	896	0	0	0	944	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	12.4	0.0	0.0	0.0	11.4	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.5	0.0	0.0	0.0	0.5	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	12.9	0.0	0.0	0.0	11.8	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	1.4	0.0	0.0	0.0	1.4	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.00	0.00	1.80	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	2.8	0.0	0.0	0.0	2.8	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.07	0.00	0.00	0.00	0.14	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	68	0	147	0	63	0	200
Grp Sat Flow (s), veh/h/ln	0	1585	0	1736	0	1585	0	1665
Q Serve Time (g_s), s	0.0	1.9	0.0	5.7	0.0	1.6	0.0	8.8
Cycle Q Clear Time (g_c), s	0.0	1.9	0.0	5.7	0.0	1.6	0.0	8.8
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.43	0.00	1.00	0.00	0.69
Lane Grp Cap (c), veh/h	0	722	0	333	0	760	0	263
V/C Ratio (X)	0.00	0.09	0.00	0.44	0.00	0.08	0.00	0.76
Avail Cap (c_a), veh/h	0	722	0	1038	0	760	0	842
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	11.8	0.0	27.2	0.0	10.7	0.0	30.7
Incr Delay (d2), s/veh	0.0	0.3	0.0	0.9	0.0	0.2	0.0	4.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	12.1	0.0	28.1	0.0	11.0	0.0	35.2
1st-Term Q (Q1), veh/ln	0.0	0.6	0.0	2.3	0.0	0.5	0.0	3.4
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.3
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	1.2	0.0	4.3	0.0	1.0	0.0	6.7
%ile Storage Ratio (RQ%)	0.00	0.34	0.00	0.08	0.00	0.16	0.00	0.11
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	20.5
HCM 6th LOS	C

Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	40	15	5	215	320	10
Future Vol, veh/h	40	15	5	215	320	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	265	-	-	130
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	42	16	5	226	337	11

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	573	337	348	0	-	0
Stage 1	337	-	-	-	-	-
Stage 2	236	-	-	-	-	-
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	481	705	1211	-	-	-
Stage 1	723	-	-	-	-	-
Stage 2	803	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	479	705	1211	-	-	-
Mov Cap-2 Maneuver	479	-	-	-	-	-
Stage 1	720	-	-	-	-	-
Stage 2	803	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.4	0.2	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1211	-	479	705	-	-
HCM Lane V/C Ratio	0.004	-	0.088	0.022	-	-
HCM Control Delay (s)	8	-	13.2	10.2	-	-
HCM Lane LOS	A	-	B	B	-	-
HCM 95th %tile Q(veh)	0	-	0.3	0.1	-	-

Intersection	
Int Delay, s/veh	4.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	85	70	410	50	90	600
Future Vol, veh/h	85	70	410	50	90	600
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	265	-	265	265	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	4	2	6	25	2	2
Mvmt Flow	89	74	432	53	95	632

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1254	432	0	0	485	0
Stage 1	432	-	-	-	-	-
Stage 2	822	-	-	-	-	-
Critical Hdwy	6.44	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.44	-	-	-	-	-
Critical Hdwy Stg 2	5.44	-	-	-	-	-
Follow-up Hdwy	3.536	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	188	624	-	-	1078	-
Stage 1	650	-	-	-	-	-
Stage 2	428	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	171	624	-	-	1078	-
Mov Cap-2 Maneuver	171	-	-	-	-	-
Stage 1	650	-	-	-	-	-
Stage 2	390	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	31	0	1.1
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	171	624	1078	-
HCM Lane V/C Ratio	-	-	0.523	0.118	0.088	-
HCM Control Delay (s)	-	-	47.1	11.5	8.7	-
HCM Lane LOS	-	-	E	B	A	-
HCM 95th %tile Q(veh)	-	-	2.6	0.4	0.3	-

Intersection	
Int Delay, s/veh	3.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	85	65	70	375	530	155
Future Vol, veh/h	85	65	70	375	530	155
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	265	265	-	-	265
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	4	2	7	6	2	3
Mvmt Flow	89	68	74	395	558	163

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1101	558	721	0	-	0
Stage 1	558	-	-	-	-	-
Stage 2	543	-	-	-	-	-
Critical Hdwy	6.44	6.22	4.17	-	-	-
Critical Hdwy Stg 1	5.44	-	-	-	-	-
Critical Hdwy Stg 2	5.44	-	-	-	-	-
Follow-up Hdwy	3.536	3.318	2.263	-	-	-
Pot Cap-1 Maneuver	232	529	858	-	-	-
Stage 1	569	-	-	-	-	-
Stage 2	578	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	212	529	858	-	-	-
Mov Cap-2 Maneuver	212	-	-	-	-	-
Stage 1	520	-	-	-	-	-
Stage 2	578	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	24.7	1.5	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	858	-	212	529	-	-
HCM Lane V/C Ratio	0.086	-	0.422	0.129	-	-
HCM Control Delay (s)	9.6	-	33.8	12.8	-	-
HCM Lane LOS	A	-	D	B	-	-
HCM 95th %tile Q(veh)	0.3	-	1.9	0.4	-	-

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	1	1	5	5	1	1	365	15	5	240	20
Future Vol, veh/h	5	1	1	5	5	1	1	365	15	5	240	20
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	235	-	-	155	-	130
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, %	43	2	2	33	2	2	2	4	2	2	2	2
Mvmt Flow	5	1	1	5	5	1	1	384	16	5	253	21

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	660	665	253	669	678	392	274	0	0	400	0	0
Stage 1	263	263	-	394	394	-	-	-	-	-	-	-
Stage 2	397	402	-	275	284	-	-	-	-	-	-	-
Critical Hdwy	7.53	6.52	6.22	7.43	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.53	5.52	-	6.43	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.53	5.52	-	6.43	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.887	4.018	3.318	3.797	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	326	381	786	332	374	657	1289	-	-	1159	-	-
Stage 1	660	691	-	573	605	-	-	-	-	-	-	-
Stage 2	554	600	-	668	676	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	321	379	786	330	372	657	1289	-	-	1159	-	-
Mov Cap-2 Maneuver	321	379	-	330	372	-	-	-	-	-	-	-
Stage 1	659	688	-	572	604	-	-	-	-	-	-	-
Stage 2	548	599	-	663	673	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	15.2	15.2	0	0.2
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1289	-	-	359	365	1159	-	-
HCM Lane V/C Ratio	0.001	-	-	0.021	0.032	0.005	-	-
HCM Control Delay (s)	7.8	-	-	15.2	15.2	8.1	-	-
HCM Lane LOS	A	-	-	C	C	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0	-	-

Intersection	
Int Delay, s/veh	3.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	5	75	160	375	230	15
Future Vol, veh/h	5	75	160	375	230	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	210	-	-	190	250	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	20	10	5	4	2	8
Mvmt Flow	5	79	168	395	242	16

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	563	0	-	0	257	168
Stage 1	-	-	-	-	168	-
Stage 2	-	-	-	-	89	-
Critical Hdwy	4.3	-	-	-	6.42	6.28
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.38	-	-	-	3.518	3.372
Pot Cap-1 Maneuver	925	-	-	-	732	861
Stage 1	-	-	-	-	862	-
Stage 2	-	-	-	-	934	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	925	-	-	-	728	861
Mov Cap-2 Maneuver	-	-	-	-	728	-
Stage 1	-	-	-	-	858	-
Stage 2	-	-	-	-	934	-

Approach	EB	WB	SB
HCM Control Delay, s	0.6	0	12.2
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	925	-	-	-	728	861
HCM Lane V/C Ratio	0.006	-	-	-	0.333	0.018
HCM Control Delay (s)	8.9	-	-	-	12.4	9.3
HCM Lane LOS	A	-	-	-	B	A
HCM 95th %tile Q(veh)	0	-	-	-	1.5	0.1

Intersection	
Int Delay, s/veh	2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	115	20	50	175	10	35
Future Vol, veh/h	115	20	50	175	10	35
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	265	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	121	21	53	184	11	37

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	142	0	422	132
Stage 1	-	-	-	-	132	-
Stage 2	-	-	-	-	290	-
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	-	-	1441	-	588	917
Stage 1	-	-	-	-	894	-
Stage 2	-	-	-	-	759	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1441	-	566	917
Mov Cap-2 Maneuver	-	-	-	-	566	-
Stage 1	-	-	-	-	894	-
Stage 2	-	-	-	-	731	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.7	9.6
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	566	917	-	-	1441	-
HCM Lane V/C Ratio	0.019	0.04	-	-	0.037	-
HCM Control Delay (s)	11.5	9.1	-	-	7.6	-
HCM Lane LOS	B	A	-	-	A	-
HCM 95th %tile Q(veh)	0.1	0.1	-	-	0.1	-

Intersection	
Int Delay, s/veh	4.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	35	105	75	90	65	45
Future Vol, veh/h	35	105	75	90	65	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	-	265	265	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	37	111	79	95	68	47

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	148	0	290	37
Stage 1	-	-	-	-	37	-
Stage 2	-	-	-	-	253	-
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	-	-	1434	-	701	1035
Stage 1	-	-	-	-	985	-
Stage 2	-	-	-	-	789	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1434	-	662	1035
Mov Cap-2 Maneuver	-	-	-	-	662	-
Stage 1	-	-	-	-	985	-
Stage 2	-	-	-	-	746	-

Approach	EB	WB	NB
HCM Control Delay, s	0	3.5	10.1
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	662	1035	-	-	1434	-
HCM Lane V/C Ratio	0.103	0.046	-	-	0.055	-
HCM Control Delay (s)	11.1	8.6	-	-	7.7	-
HCM Lane LOS	B	A	-	-	A	-
HCM 95th %tile Q(veh)	0.3	0.1	-	-	0.2	-

Intersection	
Int Delay, s/veh	0.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	5	15	430	5	20	575
Future Vol, veh/h	5	15	430	5	20	575
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	0	-	265	265	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	5	16	453	5	21	605

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1100	453	0	0	458	0
Stage 1	453	-	-	-	-	-
Stage 2	647	-	-	-	-	-
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	235	607	-	-	1103	-
Stage 1	640	-	-	-	-	-
Stage 2	521	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	231	607	-	-	1103	-
Mov Cap-2 Maneuver	231	-	-	-	-	-
Stage 1	640	-	-	-	-	-
Stage 2	511	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	13.6	0	0.3
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	231	607	1103	-
HCM Lane V/C Ratio	-	-	0.023	0.026	0.019	-
HCM Control Delay (s)	-	-	20.9	11.1	8.3	-
HCM Lane LOS	-	-	C	B	A	-
HCM 95th %tile Q(veh)	-	-	0.1	0.1	0.1	-

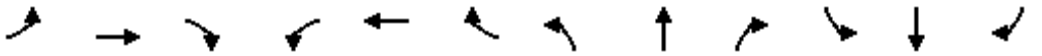
Intersection	
Int Delay, s/veh	2.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	85	35	60	350	440	140
Future Vol, veh/h	85	35	60	350	440	140
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	0	265	-	-	265
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	89	37	63	368	463	147

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	957	463	610	0	-	0
Stage 1	463	-	-	-	-	-
Stage 2	494	-	-	-	-	-
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	286	599	969	-	-	-
Stage 1	634	-	-	-	-	-
Stage 2	613	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	267	599	969	-	-	-
Mov Cap-2 Maneuver	267	-	-	-	-	-
Stage 1	593	-	-	-	-	-
Stage 2	613	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	21.1	1.3	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	969	-	267	599	-	-
HCM Lane V/C Ratio	0.065	-	0.335	0.062	-	-
HCM Control Delay (s)	9	-	25.1	11.4	-	-
HCM Lane LOS	A	-	D	B	-	-
HCM 95th %tile Q(veh)	0.2	-	1.4	0.2	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	105	25	40	60	40	70	65	235	90	110	200	165
Future Volume (veh/h)	105	25	40	60	40	70	65	235	90	110	200	165
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1969	1870	1870	1969	1870
Adj Flow Rate, veh/h	111	26	42	63	42	74	68	247	95	116	211	174
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	257	81	131	287	59	104	772	1098	884	745	1115	897
Arrive On Green	0.07	0.13	0.13	0.05	0.10	0.10	0.05	0.56	0.56	0.06	0.57	0.57
Sat Flow, veh/h	1781	644	1040	1781	607	1070	1781	1969	1585	1781	1969	1585
Grp Volume(v), veh/h	111	0	68	63	0	116	68	247	95	116	211	174
Grp Sat Flow(s),veh/h/ln	1781	0	1683	1781	0	1678	1781	1969	1585	1781	1969	1585
Q Serve(g_s), s	4.6	0.0	3.1	2.6	0.0	5.6	1.3	5.3	2.4	2.3	4.4	4.5
Cycle Q Clear(g_c), s	4.6	0.0	3.1	2.6	0.0	5.6	1.3	5.3	2.4	2.3	4.4	4.5
Prop In Lane	1.00		0.62	1.00		0.64	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	257	0	212	287	0	163	772	1098	884	745	1115	897
V/C Ratio(X)	0.43	0.00	0.32	0.22	0.00	0.71	0.09	0.22	0.11	0.16	0.19	0.19
Avail Cap(c_a), veh/h	454	0	672	428	0	570	910	1098	884	975	1115	897
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.9	0.0	33.4	31.9	0.0	36.7	6.9	9.4	8.7	6.9	8.8	8.9
Incr Delay (d2), s/veh	1.1	0.0	0.9	0.4	0.0	5.6	0.0	0.5	0.2	0.1	0.4	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	3.6	0.0	2.3	2.1	0.0	4.5	0.7	3.4	1.5	1.1	2.8	2.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.0	0.0	34.2	32.3	0.0	42.3	6.9	9.9	9.0	7.0	9.2	9.4
LnGrp LOS	C	A	C	C	A	D	A	A	A	A	A	A
Approach Vol, veh/h		179			179			410			501	
Approach Delay, s/veh		32.9			38.8			9.2			8.8	
Approach LOS		C			D			A			A	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.2	51.3	8.3	15.1	8.5	52.0	10.8	12.7
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	15.5	42.5	10.5	33.5	10.5	47.5	15.5	28.5
Max Q Clear Time (g_c+I1), s	4.3	7.3	4.6	5.1	3.3	6.5	6.6	7.6
Green Ext Time (p_c), s	0.2	1.5	0.0	0.3	0.1	1.6	0.2	0.6

Intersection Summary	
HCM 6th Ctrl Delay	16.5
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	105	25	40	60	40	70	65	235	90	110	200	165
Future Volume (veh/h)	105	25	40	60	40	70	65	235	90	110	200	165
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1969	1870	1870	1969	1870
Adj Flow Rate, veh/h	111	26	42	63	42	74	68	247	95	116	211	174
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	No			No			No			No		
Cap, veh/h	257	81	131	287	59	104	772	1098	884	745	1115	897
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.07	0.13	0.13	0.05	0.10	0.10	0.05	0.56	0.56	0.06	0.57	0.57
Unsig. Movement Delay												
Ln Grp Delay, s/veh	32.0	0.0	34.2	32.3	0.0	42.3	6.9	9.9	9.0	7.0	9.2	9.4
Ln Grp LOS	C	A	C	C	A	D	A	A	A	A	A	A
Approach Vol, veh/h		179			179			410			501	
Approach Delay, s/veh		32.9			38.8			9.2			8.8	
Approach LOS		C			D			A			A	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	1.1	3.0	1.1	4.0	1.1	3.0	1.1	4.0
Phs Duration (G+Y+Rc), s	9.2	51.3	8.3	15.1	8.5	52.0	10.8	12.7
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green (Gmax), s	15.5	42.5	10.5	33.5	10.5	47.5	15.5	28.5
Max Allow Headway (MAH), s	3.6	4.5	3.8	5.5	3.6	4.4	3.8	5.5
Max Q Clear (g_c+I1), s	4.3	7.3	4.6	5.1	3.3	6.5	6.6	7.6
Green Ext Time (g_e), s	0.2	1.5	0.0	0.3	0.1	1.6	0.2	0.6
Prob of Phs Call (p_c)	0.93	1.00	0.77	1.00	0.80	1.00	0.92	1.00
Prob of Max Out (p_x)	0.00	0.00	0.08	0.00	0.01	0.00	0.01	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1781		1781		1781		1781	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1969		644		1969		607

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1585		1040		1585		1070

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)	

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	116	0	63	0	68	0	111	0
Grp Sat Flow (s), veh/h/ln	1781	0	1781	0	1781	0	1781	0
Q Serve Time (g_s), s	2.3	0.0	2.6	0.0	1.3	0.0	4.6	0.0
Cycle Q Clear Time (g_c), s	2.3	0.0	2.6	0.0	1.3	0.0	4.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	1133	0	1333	0	1171	0	1276	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	46.8	0.0	8.2	0.0	46.8	0.0	8.2	0.0
Perm LT Serve Time (g_u), s	41.5	0.0	7.5	0.0	43.1	0.0	2.5	0.0
Perm LT Q Serve Time (g_ps), s	0.6	0.0	0.0	0.0	0.2	0.0	0.5	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	745	0	287	0	772	0	257	0
V/C Ratio (X)	0.16	0.00	0.22	0.00	0.09	0.00	0.43	0.00
Avail Cap (c_a), veh/h	975	0	428	0	910	0	454	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	6.9	0.0	31.9	0.0	6.9	0.0	30.9	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.4	0.0	0.0	0.0	1.1	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	7.0	0.0	32.3	0.0	6.9	0.0	32.0	0.0
1st-Term Q (Q1), veh/ln	0.6	0.0	1.1	0.0	0.4	0.0	1.9	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.80	0.00	1.80	0.00	1.80	0.00	1.80	0.00
%ile Back of Q (95%), veh/ln	1.1	0.0	2.1	0.0	0.7	0.0	3.6	0.0
%ile Storage Ratio (RQ%)	0.11	0.00	0.03	0.00	0.06	0.00	0.07	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		
Lanes in Grp	0	1	0	0	0	1	0	0
Grp Vol (v), veh/h	0	247	0	0	0	211	0	0
Grp Sat Flow (s), veh/h/ln	0	1969	0	0	0	1969	0	0
Q Serve Time (g_s), s	0.0	5.3	0.0	0.0	0.0	4.4	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	5.3	0.0	0.0	0.0	4.4	0.0	0.0
Lane Grp Cap (c), veh/h	0	1098	0	0	0	1115	0	0
V/C Ratio (X)	0.00	0.22	0.00	0.00	0.00	0.19	0.00	0.00
Avail Cap (c_a), veh/h	0	1098	0	0	0	1115	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	9.4	0.0	0.0	0.0	8.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.5	0.0	0.0	0.0	0.4	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	9.9	0.0	0.0	0.0	9.2	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	1.8	0.0	0.0	0.0	1.4	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.00	0.00	1.80	0.00	1.00
%ile Back of Q (95%), veh/ln	0.0	3.4	0.0	0.0	0.0	2.8	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.09	0.00	0.00	0.00	0.14	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	95	0	68	0	174	0	116
Grp Sat Flow (s), veh/h/ln	0	1585	0	1683	0	1585	0	1678
Q Serve Time (g_s), s	0.0	2.4	0.0	3.1	0.0	4.5	0.0	5.6
Cycle Q Clear Time (g_c), s	0.0	2.4	0.0	3.1	0.0	4.5	0.0	5.6
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.62	0.00	1.00	0.00	0.64
Lane Grp Cap (c), veh/h	0	884	0	212	0	897	0	163
V/C Ratio (X)	0.00	0.11	0.00	0.32	0.00	0.19	0.00	0.71
Avail Cap (c_a), veh/h	0	884	0	672	0	897	0	570
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	8.7	0.0	33.4	0.0	8.9	0.0	36.7
Incr Delay (d2), s/veh	0.0	0.2	0.0	0.9	0.0	0.5	0.0	5.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	9.0	0.0	34.2	0.0	9.4	0.0	42.3
1st-Term Q (Q1), veh/ln	0.0	0.7	0.0	1.2	0.0	1.4	0.0	2.3
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.1	0.0	0.1	0.0	0.3
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.80	0.00	1.80	0.00	1.80	0.00	1.80
%ile Back of Q (95%), veh/ln	0.0	1.5	0.0	2.3	0.0	2.8	0.0	4.5
%ile Storage Ratio (RQ%)	0.00	0.41	0.00	0.04	0.00	0.42	0.00	0.07
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	16.5
HCM 6th LOS	B

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	35	10	15	355	255	45
Future Vol, veh/h	35	10	15	355	255	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	0	265	-	-	130
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	37	11	16	374	268	47

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	674	268	315	0	-	0
Stage 1	268	-	-	-	-	-
Stage 2	406	-	-	-	-	-
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	420	771	1245	-	-	-
Stage 1	777	-	-	-	-	-
Stage 2	673	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	415	771	1245	-	-	-
Mov Cap-2 Maneuver	415	-	-	-	-	-
Stage 1	767	-	-	-	-	-
Stage 2	673	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	13.4	0.3	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1245	-	415	771	-	-
HCM Lane V/C Ratio	0.013	-	0.089	0.014	-	-
HCM Control Delay (s)	7.9	-	14.5	9.7	-	-
HCM Lane LOS	A	-	B	A	-	-
HCM 95th %tile Q(veh)	0	-	0.3	0	-	-

FUTURE (2053) NO-BUILD CAPACITY REPORTS

Intersection	
Int Delay, s/veh	1.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	25	10	175	70	25	105
Future Vol, veh/h	25	10	175	70	25	105
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	7	17	4	5	6	8
Mvmt Flow	26	11	184	74	26	111

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	384	221	0	0	258	0
Stage 1	221	-	-	-	-	-
Stage 2	163	-	-	-	-	-
Critical Hdwy	6.47	6.37	-	-	4.16	-
Critical Hdwy Stg 1	5.47	-	-	-	-	-
Critical Hdwy Stg 2	5.47	-	-	-	-	-
Follow-up Hdwy	3.563	3.453	-	-	2.254	-
Pot Cap-1 Maneuver	609	783	-	-	1284	-
Stage 1	804	-	-	-	-	-
Stage 2	854	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	596	783	-	-	1284	-
Mov Cap-2 Maneuver	596	-	-	-	-	-
Stage 1	804	-	-	-	-	-
Stage 2	835	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11	0	1.5
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	640	1284	-
HCM Lane V/C Ratio	-	-	0.058	0.02	-
HCM Control Delay (s)	-	-	11	7.9	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.2	0.1	-

Intersection	
Int Delay, s/veh	4.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	130	20	10	115	105	25
Future Vol, veh/h	130	20	10	115	105	25
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	3	2	2	4	6	6
Mvmt Flow	137	21	11	121	111	26

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	267	124	137	0	-	0
Stage 1	124	-	-	-	-	-
Stage 2	143	-	-	-	-	-
Critical Hdwy	6.43	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	720	927	1447	-	-	-
Stage 1	899	-	-	-	-	-
Stage 2	882	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	714	927	1447	-	-	-
Mov Cap-2 Maneuver	714	-	-	-	-	-
Stage 1	892	-	-	-	-	-
Stage 2	882	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.2	0.6	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1447	-	737	-	-
HCM Lane V/C Ratio	0.007	-	0.214	-	-
HCM Control Delay (s)	7.5	0	11.2	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.8	-	-

Intersection	
Int Delay, s/veh	2.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	25	10	1	1	10	10	10	90	10	10	95	20
Future Vol, veh/h	25	10	1	1	10	10	10	90	10	10	95	20
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	235	-	-	155	-	130
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, %	23	2	2	2	17	2	2	4	67	2	3	9
Mvmt Flow	26	11	1	1	11	11	11	95	11	11	100	21

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	256	250	100	262	266	101	121	0	0	106	0	0
Stage 1	122	122	-	123	123	-	-	-	-	-	-	-
Stage 2	134	128	-	139	143	-	-	-	-	-	-	-
Critical Hdwy	7.33	6.52	6.22	7.12	6.67	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.33	5.52	-	6.12	5.67	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.33	5.52	-	6.12	5.67	-	-	-	-	-	-	-
Follow-up Hdwy	3.707	4.018	3.318	3.518	4.153	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	656	653	956	691	615	954	1467	-	-	1485	-	-
Stage 1	834	795	-	881	766	-	-	-	-	-	-	-
Stage 2	821	790	-	864	751	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	633	644	956	674	606	954	1467	-	-	1485	-	-
Mov Cap-2 Maneuver	633	644	-	674	606	-	-	-	-	-	-	-
Stage 1	828	789	-	875	761	-	-	-	-	-	-	-
Stage 2	795	784	-	845	746	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	11	10	0.7	0.6
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1467	-	-	642	738	1485	-	-
HCM Lane V/C Ratio	0.007	-	-	0.059	0.03	0.007	-	-
HCM Control Delay (s)	7.5	-	-	11	10	7.4	-	-
HCM Lane LOS	A	-	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0.1	0	-	-

Intersection	
Int Delay, s/veh	2.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	25	165	60	85	75	20
Future Vol, veh/h	25	165	60	85	75	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	210	-	-	190	250	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	6	2	17	7	4	10
Mvmt Flow	26	174	63	89	79	21

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	152	0	-	0	289	63
Stage 1	-	-	-	-	63	-
Stage 2	-	-	-	-	226	-
Critical Hdwy	4.16	-	-	-	6.44	6.3
Critical Hdwy Stg 1	-	-	-	-	5.44	-
Critical Hdwy Stg 2	-	-	-	-	5.44	-
Follow-up Hdwy	2.254	-	-	-	3.536	3.39
Pot Cap-1 Maneuver	1405	-	-	-	697	980
Stage 1	-	-	-	-	955	-
Stage 2	-	-	-	-	807	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1405	-	-	-	684	980
Mov Cap-2 Maneuver	-	-	-	-	684	-
Stage 1	-	-	-	-	937	-
Stage 2	-	-	-	-	807	-

Approach	EB	WB	SB
HCM Control Delay, s	1	0	10.5
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1405	-	-	-	684	980
HCM Lane V/C Ratio	0.019	-	-	-	0.115	0.021
HCM Control Delay (s)	7.6	-	-	-	10.9	8.8
HCM Lane LOS	A	-	-	-	B	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0.4	0.1

Intersection	
Int Delay, s/veh	1.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	55	20	175	20	1	210
Future Vol, veh/h	55	20	175	20	1	210
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	4	2	6	25	2	2
Mvmt Flow	58	21	184	21	1	221

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	418	195	0	0	205	0
Stage 1	195	-	-	-	-	-
Stage 2	223	-	-	-	-	-
Critical Hdwy	6.44	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.44	-	-	-	-	-
Critical Hdwy Stg 2	5.44	-	-	-	-	-
Follow-up Hdwy	3.536	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	588	846	-	-	1366	-
Stage 1	833	-	-	-	-	-
Stage 2	809	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	587	846	-	-	1366	-
Mov Cap-2 Maneuver	587	-	-	-	-	-
Stage 1	833	-	-	-	-	-
Stage 2	808	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.4	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	639	1366	-
HCM Lane V/C Ratio	-	-	0.124	0.001	-
HCM Control Delay (s)	-	-	11.4	7.6	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.4	0	-

Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	50	10	25	145	130	135
Future Vol, veh/h	50	10	25	145	130	135
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	4	2	7	6	2	3
Mvmt Flow	53	11	26	153	137	142

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	413	208	279	0	-	0
Stage 1	208	-	-	-	-	-
Stage 2	205	-	-	-	-	-
Critical Hdwy	6.44	6.22	4.17	-	-	-
Critical Hdwy Stg 1	5.44	-	-	-	-	-
Critical Hdwy Stg 2	5.44	-	-	-	-	-
Follow-up Hdwy	3.536	3.318	2.263	-	-	-
Pot Cap-1 Maneuver	592	832	1255	-	-	-
Stage 1	822	-	-	-	-	-
Stage 2	825	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	578	832	1255	-	-	-
Mov Cap-2 Maneuver	578	-	-	-	-	-
Stage 1	803	-	-	-	-	-
Stage 2	825	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.6	1.2	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1255	-	609	-	-
HCM Lane V/C Ratio	0.021	-	0.104	-	-
HCM Control Delay (s)	7.9	0	11.6	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.3	-	-

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	1	1	10	10	1	1	160	20	10	105	25
Future Vol, veh/h	10	1	1	10	10	1	1	160	20	10	105	25
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	235	-	-	155	-	130
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, %	43	2	2	33	2	2	2	4	2	2	2	2
Mvmt Flow	11	1	1	11	11	1	1	168	21	11	111	26

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	320	324	111	328	340	179	137	0	0	189	0	0
Stage 1	133	133	-	181	181	-	-	-	-	-	-	-
Stage 2	187	191	-	147	159	-	-	-	-	-	-	-
Critical Hdwy	7.53	6.52	6.22	7.43	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.53	5.52	-	6.43	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.53	5.52	-	6.43	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.887	4.018	3.318	3.797	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	561	594	942	570	582	864	1447	-	-	1385	-	-
Stage 1	781	786	-	754	750	-	-	-	-	-	-	-
Stage 2	729	742	-	787	766	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	549	589	942	565	577	864	1447	-	-	1385	-	-
Mov Cap-2 Maneuver	549	589	-	565	577	-	-	-	-	-	-	-
Stage 1	780	780	-	753	749	-	-	-	-	-	-	-
Stage 2	717	741	-	779	760	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	11.4	11.5	0	0.5
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1447	-	-	572	580	1385	-	-
HCM Lane V/C Ratio	0.001	-	-	0.022	0.038	0.008	-	-
HCM Control Delay (s)	7.5	-	-	11.4	11.5	7.6	-	-
HCM Lane LOS	A	-	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0	-	-

Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	10	90	195	170	95	20
Future Vol, veh/h	10	90	195	170	95	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	210	-	-	190	250	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	20	10	5	4	2	8
Mvmt Flow	11	95	205	179	100	21

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	384	0	-	0	322	205
Stage 1	-	-	-	-	205	-
Stage 2	-	-	-	-	117	-
Critical Hdwy	4.3	-	-	-	6.42	6.28
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.38	-	-	-	3.518	3.372
Pot Cap-1 Maneuver	1083	-	-	-	672	821
Stage 1	-	-	-	-	829	-
Stage 2	-	-	-	-	908	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1083	-	-	-	665	821
Mov Cap-2 Maneuver	-	-	-	-	665	-
Stage 1	-	-	-	-	821	-
Stage 2	-	-	-	-	908	-

Approach	EB	WB	SB
HCM Control Delay, s	0.8	0	11.1
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1083	-	-	-	665	821
HCM Lane V/C Ratio	0.01	-	-	-	0.15	0.026
HCM Control Delay (s)	8.4	-	-	-	11.4	9.5
HCM Lane LOS	A	-	-	-	B	A
HCM 95th %tile Q(veh)	0	-	-	-	0.5	0.1

FUTURE (2053) BUILD CAPACITY REPORTS

Intersection	
Int Delay, s/veh	2.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	50	90	560	105	55	250
Future Vol, veh/h	50	90	560	105	55	250
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	265	-	265	265	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	7	17	4	5	6	8
Mvmt Flow	53	95	589	111	58	263

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	968	589	0	0	700	0
Stage 1	589	-	-	-	-	-
Stage 2	379	-	-	-	-	-
Critical Hdwy	6.47	6.37	-	-	4.16	-
Critical Hdwy Stg 1	5.47	-	-	-	-	-
Critical Hdwy Stg 2	5.47	-	-	-	-	-
Follow-up Hdwy	3.563	3.453	-	-	2.254	-
Pot Cap-1 Maneuver	276	481	-	-	879	-
Stage 1	545	-	-	-	-	-
Stage 2	681	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	258	481	-	-	879	-
Mov Cap-2 Maneuver	258	-	-	-	-	-
Stage 1	545	-	-	-	-	-
Stage 2	636	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	17.2	0	1.7
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	258	481	879	-
HCM Lane V/C Ratio	-	-	0.204	0.197	0.066	-
HCM Control Delay (s)	-	-	22.5	14.3	9.4	-
HCM Lane LOS	-	-	C	B	A	-
HCM 95th %tile Q(veh)	-	-	0.7	0.7	0.2	-

Intersection	
Int Delay, s/veh	6.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	165	40	60	500	250	50
Future Vol, veh/h	165	40	60	500	250	50
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	265	265	-	-	265
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	3	2	2	4	6	6
Mvmt Flow	174	42	63	526	263	53

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	915	263	316	0	-	0
Stage 1	263	-	-	-	-	-
Stage 2	652	-	-	-	-	-
Critical Hdwy	6.43	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	302	776	1244	-	-	-
Stage 1	779	-	-	-	-	-
Stage 2	517	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	287	776	1244	-	-	-
Mov Cap-2 Maneuver	287	-	-	-	-	-
Stage 1	739	-	-	-	-	-
Stage 2	517	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	30.1	0.9	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1244	-	287	776	-	-
HCM Lane V/C Ratio	0.051	-	0.605	0.054	-	-
HCM Control Delay (s)	8	-	35	9.9	-	-
HCM Lane LOS	A	-	E	A	-	-
HCM 95th %tile Q(veh)	0.2	-	3.7	0.2	-	-

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	25	10	1	1	10	10	10	210	10	10	330	20
Future Vol, veh/h	25	10	1	1	10	10	10	210	10	10	330	20
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	235	-	-	155	-	130
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, %	23	2	2	2	17	2	2	4	67	2	3	9
Mvmt Flow	26	11	1	1	11	11	11	221	11	11	347	21

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	629	623	347	635	639	227	368	0	0	232	0	0
Stage 1	369	369	-	249	249	-	-	-	-	-	-	-
Stage 2	260	254	-	386	390	-	-	-	-	-	-	-
Critical Hdwy	7.33	6.52	6.22	7.12	6.67	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.33	5.52	-	6.12	5.67	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.33	5.52	-	6.12	5.67	-	-	-	-	-	-	-
Follow-up Hdwy	3.707	4.018	3.318	3.518	4.153	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	367	402	696	391	375	812	1191	-	-	1336	-	-
Stage 1	610	621	-	755	674	-	-	-	-	-	-	-
Stage 2	701	697	-	637	582	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	350	395	696	377	369	812	1191	-	-	1336	-	-
Mov Cap-2 Maneuver	350	395	-	377	369	-	-	-	-	-	-	-
Stage 1	605	616	-	748	668	-	-	-	-	-	-	-
Stage 2	675	691	-	620	577	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	15.9	12.5	0.4	0.2
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1191	-	-	367	499	1336	-	-
HCM Lane V/C Ratio	0.009	-	-	0.103	0.044	0.008	-	-
HCM Control Delay (s)	8.1	-	-	15.9	12.5	7.7	-	-
HCM Lane LOS	A	-	-	C	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.3	0.1	0	-	-

Intersection	
Int Delay, s/veh	6.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	25	165	60	205	310	20
Future Vol, veh/h	25	165	60	205	310	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	210	-	-	190	250	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	6	2	17	7	4	10
Mvmt Flow	26	174	63	216	326	21

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	279	0	-	0	289	63
Stage 1	-	-	-	-	63	-
Stage 2	-	-	-	-	226	-
Critical Hdwy	4.16	-	-	-	6.44	6.3
Critical Hdwy Stg 1	-	-	-	-	5.44	-
Critical Hdwy Stg 2	-	-	-	-	5.44	-
Follow-up Hdwy	2.254	-	-	-	3.536	3.39
Pot Cap-1 Maneuver	1261	-	-	-	697	980
Stage 1	-	-	-	-	955	-
Stage 2	-	-	-	-	807	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1261	-	-	-	682	980
Mov Cap-2 Maneuver	-	-	-	-	682	-
Stage 1	-	-	-	-	935	-
Stage 2	-	-	-	-	807	-

Approach	EB	WB	SB
HCM Control Delay, s	1	0	14.6
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1261	-	-	-	682	980
HCM Lane V/C Ratio	0.021	-	-	-	0.478	0.021
HCM Control Delay (s)	7.9	-	-	-	15	8.8
HCM Lane LOS	A	-	-	-	C	A
HCM 95th %tile Q(veh)	0.1	-	-	-	2.6	0.1

Intersection	
Int Delay, s/veh	1.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	165	5	15	95	15	40
Future Vol, veh/h	165	5	15	95	15	40
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	265	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	174	5	16	100	16	42

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	179	0	309	177
Stage 1	-	-	-	-	177	-
Stage 2	-	-	-	-	132	-
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	-	-	1397	-	683	866
Stage 1	-	-	-	-	854	-
Stage 2	-	-	-	-	894	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1397	-	675	866
Mov Cap-2 Maneuver	-	-	-	-	675	-
Stage 1	-	-	-	-	854	-
Stage 2	-	-	-	-	884	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1	9.7
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	675	866	-	-	1397	-
HCM Lane V/C Ratio	0.023	0.049	-	-	0.011	-
HCM Control Delay (s)	10.5	9.4	-	-	7.6	-
HCM Lane LOS	B	A	-	-	A	-
HCM 95th %tile Q(veh)	0.1	0.2	-	-	0	-

Intersection	
Int Delay, s/veh	4.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	125	35	35	45	95	70
Future Vol, veh/h	125	35	35	45	95	70
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	265	265	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	132	37	37	47	100	74

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	169	0	253	132
Stage 1	-	-	-	-	132	-
Stage 2	-	-	-	-	121	-
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	-	-	1409	-	736	917
Stage 1	-	-	-	-	894	-
Stage 2	-	-	-	-	904	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1409	-	717	917
Mov Cap-2 Maneuver	-	-	-	-	717	-
Stage 1	-	-	-	-	894	-
Stage 2	-	-	-	-	880	-

Approach	EB	WB	NB
HCM Control Delay, s	0	3.3	10.2
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	717	917	-	-	1409	-
HCM Lane V/C Ratio	0.139	0.08	-	-	0.026	-
HCM Control Delay (s)	10.8	9.3	-	-	7.6	-
HCM Lane LOS	B	A	-	-	A	-
HCM 95th %tile Q(veh)	0.5	0.3	-	-	0.1	-

Intersection	
Int Delay, s/veh	0.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	10	20	540	10	5	285
Future Vol, veh/h	10	20	540	10	5	285
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	0	-	265	265	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	11	21	568	11	5	300

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	878	568	0	0	579	0
Stage 1	568	-	-	-	-	-
Stage 2	310	-	-	-	-	-
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	318	522	-	-	995	-
Stage 1	567	-	-	-	-	-
Stage 2	744	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	316	522	-	-	995	-
Mov Cap-2 Maneuver	316	-	-	-	-	-
Stage 1	567	-	-	-	-	-
Stage 2	740	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	13.7	0	0.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	316	522	995	-
HCM Lane V/C Ratio	-	-	0.033	0.04	0.005	-
HCM Control Delay (s)	-	-	16.8	12.2	8.6	-
HCM Lane LOS	-	-	C	B	A	-
HCM 95th %tile Q(veh)	-	-	0.1	0.1	0	-

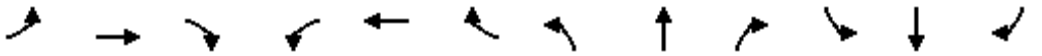
Intersection	
Int Delay, s/veh	4.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	130	85	50	420	245	50
Future Vol, veh/h	130	85	50	420	245	50
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	0	265	-	-	265
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	137	89	53	442	258	53

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	806	258	311	0	-	0
Stage 1	258	-	-	-	-	-
Stage 2	548	-	-	-	-	-
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	351	781	1249	-	-	-
Stage 1	785	-	-	-	-	-
Stage 2	579	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	336	781	1249	-	-	-
Mov Cap-2 Maneuver	336	-	-	-	-	-
Stage 1	752	-	-	-	-	-
Stage 2	579	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	17.9	0.9	0
HCM LOS	C		

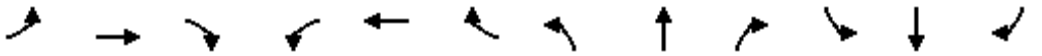
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1249	-	336	781	-	-
HCM Lane V/C Ratio	0.042	-	0.407	0.115	-	-
HCM Control Delay (s)	8	-	22.9	10.2	-	-
HCM Lane LOS	A	-	C	B	-	-
HCM 95th %tile Q(veh)	0.1	-	1.9	0.4	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	150	80	60	95	60	130	25	190	65	70	200	60
Future Volume (veh/h)	150	80	60	95	60	130	25	190	65	70	200	60
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1969	1870	1870	1969	1870
Adj Flow Rate, veh/h	158	84	63	100	63	137	26	200	68	74	211	63
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	312	187	141	346	82	178	618	927	746	637	972	783
Arrive On Green	0.10	0.19	0.19	0.06	0.16	0.16	0.03	0.47	0.47	0.05	0.49	0.49
Sat Flow, veh/h	1781	992	744	1781	524	1141	1781	1969	1585	1781	1969	1585
Grp Volume(v), veh/h	158	0	147	100	0	200	26	200	68	74	211	63
Grp Sat Flow(s),veh/h/ln	1781	0	1736	1781	0	1665	1781	1969	1585	1781	1969	1585
Q Serve(g_s), s	5.8	0.0	6.0	3.7	0.0	9.2	0.6	4.8	1.9	1.7	4.9	1.7
Cycle Q Clear(g_c), s	5.8	0.0	6.0	3.7	0.0	9.2	0.6	4.8	1.9	1.7	4.9	1.7
Prop In Lane	1.00		0.43	1.00		0.69	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	312	0	328	346	0	259	618	927	746	637	972	783
V/C Ratio(X)	0.51	0.00	0.45	0.29	0.00	0.77	0.04	0.22	0.09	0.12	0.22	0.08
Avail Cap(c_a), veh/h	528	0	945	487	0	781	736	927	746	781	972	783
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.0	0.0	28.7	25.8	0.0	32.4	10.3	12.5	11.7	9.7	11.5	10.7
Incr Delay (d2), s/veh	1.3	0.0	1.0	0.5	0.0	4.8	0.0	0.5	0.2	0.1	0.5	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	0.0	2.5	1.6	0.0	4.0	0.2	1.9	0.7	0.5	1.8	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.2	0.0	29.7	26.3	0.0	37.2	10.3	13.0	11.9	9.8	12.0	10.9
LnGrp LOS	C	A	C	C	A	D	B	B	B	A	B	B
Approach Vol, veh/h		305			300			294			348	
Approach Delay, s/veh		27.9			33.6			12.5			11.3	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.5	42.2	9.7	19.6	6.7	44.0	12.3	16.9
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	10.5	36.5	11.5	43.5	7.5	39.5	17.5	37.5
Max Q Clear Time (g_c+I1), s	3.7	6.8	5.7	8.0	2.6	6.9	7.8	11.2
Green Ext Time (p_c), s	0.1	1.1	0.1	0.9	0.0	1.2	0.3	1.2

Intersection Summary	
HCM 6th Ctrl Delay	21.0
HCM 6th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	150	80	60	95	60	130	25	190	65	70	200	60
Future Volume (veh/h)	150	80	60	95	60	130	25	190	65	70	200	60
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1969	1870	1870	1969	1870
Adj Flow Rate, veh/h	158	84	63	100	63	137	26	200	68	74	211	63
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	312	187	141	346	82	178	618	927	746	637	972	783
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.10	0.19	0.19	0.06	0.16	0.16	0.03	0.47	0.47	0.05	0.49	0.49
Unsig. Movement Delay												
Ln Grp Delay, s/veh	26.2	0.0	29.7	26.3	0.0	37.2	10.3	13.0	11.9	9.8	12.0	10.9
Ln Grp LOS	C	A	C	C	A	D	B	B	B	A	B	B
Approach Vol, veh/h		305			300			294			348	
Approach Delay, s/veh		27.9			33.6			12.5			11.3	
Approach LOS		C			C			B			B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	1.1	3.0	1.1	4.0	1.1	3.0	1.1	4.0
Phs Duration (G+Y+Rc), s	8.5	42.2	9.7	19.6	6.7	44.0	12.3	16.9
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green (Gmax), s	10.5	36.5	11.5	43.5	7.5	39.5	17.5	37.5
Max Allow Headway (MAH), s	3.6	4.5	3.8	5.4	3.6	4.5	3.8	5.5
Max Q Clear (g_c+I1), s	3.7	6.8	5.7	8.0	2.6	6.9	7.8	11.2
Green Ext Time (g_e), s	0.1	1.1	0.1	0.9	0.0	1.2	0.3	1.2
Prob of Phs Call (p_c)	0.81	1.00	0.89	1.00	0.44	1.00	0.97	1.00
Prob of Max Out (p_x)	0.02	0.00	0.12	0.00	0.12	0.00	0.01	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1781		1781		1781		1781	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1969		992		1969		524

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1585		744		1585		1141

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)	

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	74	0	100	0	26	0	158	0
Grp Sat Flow (s), veh/h/ln	1781	0	1781	0	1781	0	1781	0
Q Serve Time (g_s), s	1.7	0.0	3.7	0.0	0.6	0.0	5.8	0.0
Cycle Q Clear Time (g_c), s	1.7	0.0	3.7	0.0	0.6	0.0	5.8	0.0
Perm LT Sat Flow (s_l), veh/h/ln	1111	0	1241	0	1105	0	1182	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	37.7	0.0	12.4	0.0	37.7	0.0	12.6	0.0
Perm LT Serve Time (g_u), s	32.9	0.0	9.1	0.0	34.6	0.0	3.2	0.0
Perm LT Q Serve Time (g_ps), s	0.3	0.0	0.3	0.0	0.1	0.0	1.4	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	637	0	346	0	618	0	312	0
V/C Ratio (X)	0.12	0.00	0.29	0.00	0.04	0.00	0.51	0.00
Avail Cap (c_a), veh/h	781	0	487	0	736	0	528	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	9.7	0.0	25.8	0.0	10.3	0.0	25.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.5	0.0	0.0	0.0	1.3	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	9.8	0.0	26.3	0.0	10.3	0.0	26.2	0.0
1st-Term Q (Q1), veh/ln	0.5	0.0	1.5	0.0	0.2	0.0	2.4	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	0.5	0.0	1.6	0.0	0.2	0.0	2.5	0.0
%ile Storage Ratio (RQ%)	0.05	0.00	0.02	0.00	0.02	0.00	0.04	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		
Lanes in Grp	0	1	0	0	0	1	0	0
Grp Vol (v), veh/h	0	200	0	0	0	211	0	0
Grp Sat Flow (s), veh/h/ln	0	1969	0	0	0	1969	0	0
Q Serve Time (g_s), s	0.0	4.8	0.0	0.0	0.0	4.9	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	4.8	0.0	0.0	0.0	4.9	0.0	0.0
Lane Grp Cap (c), veh/h	0	927	0	0	0	972	0	0
V/C Ratio (X)	0.00	0.22	0.00	0.00	0.00	0.22	0.00	0.00
Avail Cap (c_a), veh/h	0	927	0	0	0	972	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	12.5	0.0	0.0	0.0	11.5	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.5	0.0	0.0	0.0	0.5	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	13.0	0.0	0.0	0.0	12.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	1.7	0.0	0.0	0.0	1.7	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	1.9	0.0	0.0	0.0	1.8	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.05	0.00	0.00	0.00	0.09	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	68	0	147	0	63	0	200
Grp Sat Flow (s), veh/h/ln	0	1585	0	1736	0	1585	0	1665
Q Serve Time (g_s), s	0.0	1.9	0.0	6.0	0.0	1.7	0.0	9.2
Cycle Q Clear Time (g_c), s	0.0	1.9	0.0	6.0	0.0	1.7	0.0	9.2
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.43	0.00	1.00	0.00	0.69
Lane Grp Cap (c), veh/h	0	746	0	328	0	783	0	259
V/C Ratio (X)	0.00	0.09	0.00	0.45	0.00	0.08	0.00	0.77
Avail Cap (c_a), veh/h	0	746	0	945	0	783	0	781
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	11.7	0.0	28.7	0.0	10.7	0.0	32.4
Incr Delay (d2), s/veh	0.0	0.2	0.0	1.0	0.0	0.2	0.0	4.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	11.9	0.0	29.7	0.0	10.9	0.0	37.2
1st-Term Q (Q1), veh/ln	0.0	0.6	0.0	2.4	0.0	0.5	0.0	3.6
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.3
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.7	0.0	2.5	0.0	0.6	0.0	4.0
%ile Storage Ratio (RQ%)	0.00	0.19	0.00	0.05	0.00	0.09	0.00	0.06
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	21.0
HCM 6th LOS	C

Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	40	15	5	240	345	10
Future Vol, veh/h	40	15	5	240	345	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	265	-	-	130
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	42	16	5	253	363	11

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	626	363	374	0	-	0
Stage 1	363	-	-	-	-	-
Stage 2	263	-	-	-	-	-
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	448	682	1184	-	-	-
Stage 1	704	-	-	-	-	-
Stage 2	781	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	446	682	1184	-	-	-
Mov Cap-2 Maneuver	446	-	-	-	-	-
Stage 1	701	-	-	-	-	-
Stage 2	781	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.9	0.2	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1184	-	446	682	-	-
HCM Lane V/C Ratio	0.004	-	0.094	0.023	-	-
HCM Control Delay (s)	8.1	-	13.9	10.4	-	-
HCM Lane LOS	A	-	B	B	-	-
HCM 95th %tile Q(veh)	0	-	0.3	0.1	-	-

Intersection	
Int Delay, s/veh	5.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	95	75	440	55	90	635
Future Vol, veh/h	95	75	440	55	90	635
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	265	-	265	265	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	4	2	6	25	2	2
Mvmt Flow	100	79	463	58	95	668

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1321	463	0	0	521	0
Stage 1	463	-	-	-	-	-
Stage 2	858	-	-	-	-	-
Critical Hdwy	6.44	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.44	-	-	-	-	-
Critical Hdwy Stg 2	5.44	-	-	-	-	-
Follow-up Hdwy	3.536	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	171	599	-	-	1045	-
Stage 1	629	-	-	-	-	-
Stage 2	412	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	155	599	-	-	1045	-
Mov Cap-2 Maneuver	155	-	-	-	-	-
Stage 1	629	-	-	-	-	-
Stage 2	375	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	40.4	0	1.1
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	155	599	1045	-
HCM Lane V/C Ratio	-	-	0.645	0.132	0.091	-
HCM Control Delay (s)	-	-	62.9	11.9	8.8	-
HCM Lane LOS	-	-	F	B	A	-
HCM 95th %tile Q(veh)	-	-	3.6	0.5	0.3	-

Intersection	
Int Delay, s/veh	3.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	90	70	75	405	550	180
Future Vol, veh/h	90	70	75	405	550	180
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	265	265	-	-	265
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	4	2	7	6	2	3
Mvmt Flow	95	74	79	426	579	189

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1163	579	768	0	-	0
Stage 1	579	-	-	-	-	-
Stage 2	584	-	-	-	-	-
Critical Hdwy	6.44	6.22	4.17	-	-	-
Critical Hdwy Stg 1	5.44	-	-	-	-	-
Critical Hdwy Stg 2	5.44	-	-	-	-	-
Follow-up Hdwy	3.536	3.318	2.263	-	-	-
Pot Cap-1 Maneuver	213	515	824	-	-	-
Stage 1	557	-	-	-	-	-
Stage 2	554	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	193	515	824	-	-	-
Mov Cap-2 Maneuver	193	-	-	-	-	-
Stage 1	504	-	-	-	-	-
Stage 2	554	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	28.5	1.5	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	824	-	193	515	-	-
HCM Lane V/C Ratio	0.096	-	0.491	0.143	-	-
HCM Control Delay (s)	9.8	-	40.4	13.2	-	-
HCM Lane LOS	A	-	E	B	-	-
HCM 95th %tile Q(veh)	0.3	-	2.4	0.5	-	-

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	1	1	10	10	1	1	395	20	10	255	25
Future Vol, veh/h	10	1	1	10	10	1	1	395	20	10	255	25
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	235	-	-	155	-	130
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, %	43	2	2	33	2	2	2	4	2	2	2	2
Mvmt Flow	11	1	1	11	11	1	1	416	21	11	268	26

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	725	729	268	733	745	427	294	0	0	437	0	0
Stage 1	290	290	-	429	429	-	-	-	-	-	-	-
Stage 2	435	439	-	304	316	-	-	-	-	-	-	-
Critical Hdwy	7.53	6.52	6.22	7.43	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.53	5.52	-	6.43	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.53	5.52	-	6.43	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.887	4.018	3.318	3.797	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	293	350	771	300	342	628	1268	-	-	1123	-	-
Stage 1	637	672	-	548	584	-	-	-	-	-	-	-
Stage 2	527	578	-	644	655	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	283	346	771	296	338	628	1268	-	-	1123	-	-
Mov Cap-2 Maneuver	283	346	-	296	338	-	-	-	-	-	-	-
Stage 1	636	665	-	547	583	-	-	-	-	-	-	-
Stage 2	516	577	-	636	648	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	17.4	17	0	0.3
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1268	-	-	304	323	1123	-	-
HCM Lane V/C Ratio	0.001	-	-	0.042	0.068	0.009	-	-
HCM Control Delay (s)	7.8	-	-	17.4	17	8.2	-	-
HCM Lane LOS	A	-	-	C	C	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.2	0	-	-

Intersection	
Int Delay, s/veh	3.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	10	90	195	405	245	20
Future Vol, veh/h	10	90	195	405	245	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	210	-	-	190	250	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	20	10	5	4	2	8
Mvmt Flow	11	95	205	426	258	21

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	631	0	-	0	322	205
Stage 1	-	-	-	-	205	-
Stage 2	-	-	-	-	117	-
Critical Hdwy	4.3	-	-	-	6.42	6.28
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.38	-	-	-	3.518	3.372
Pot Cap-1 Maneuver	871	-	-	-	672	821
Stage 1	-	-	-	-	829	-
Stage 2	-	-	-	-	908	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	871	-	-	-	663	821
Mov Cap-2 Maneuver	-	-	-	-	663	-
Stage 1	-	-	-	-	818	-
Stage 2	-	-	-	-	908	-

Approach	EB	WB	SB
HCM Control Delay, s	0.9	0	13.5
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	871	-	-	-	663	821
HCM Lane V/C Ratio	0.012	-	-	-	0.389	0.026
HCM Control Delay (s)	9.2	-	-	-	13.8	9.5
HCM Lane LOS	A	-	-	-	B	A
HCM 95th %tile Q(veh)	0	-	-	-	1.8	0.1

Intersection	
Int Delay, s/veh	1.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	125	20	50	205	10	35
Future Vol, veh/h	125	20	50	205	10	35
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	265	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	132	21	53	216	11	37

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	153	0	465	143
Stage 1	-	-	-	-	143	-
Stage 2	-	-	-	-	322	-
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	-	556	905
Stage 1	-	-	-	-	884	-
Stage 2	-	-	-	-	735	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1428	-	535	905
Mov Cap-2 Maneuver	-	-	-	-	535	-
Stage 1	-	-	-	-	884	-
Stage 2	-	-	-	-	708	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.5	9.7
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	535	905	-	-	1428	-
HCM Lane V/C Ratio	0.02	0.041	-	-	0.037	-
HCM Control Delay (s)	11.9	9.1	-	-	7.6	-
HCM Lane LOS	B	A	-	-	A	-
HCM 95th %tile Q(veh)	0.1	0.1	-	-	0.1	-

Intersection	
Int Delay, s/veh	3.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	40	105	75	105	65	45
Future Vol, veh/h	40	105	75	105	65	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	-	265	265	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	42	111	79	111	68	47

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	153	0	311	42
Stage 1	-	-	-	-	42	-
Stage 2	-	-	-	-	269	-
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	-	681	1029
Stage 1	-	-	-	-	980	-
Stage 2	-	-	-	-	776	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1428	-	644	1029
Mov Cap-2 Maneuver	-	-	-	-	644	-
Stage 1	-	-	-	-	980	-
Stage 2	-	-	-	-	733	-

Approach	EB	WB	NB
HCM Control Delay, s	0	3.2	10.2
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	644	1029	-	-	1428	-
HCM Lane V/C Ratio	0.106	0.046	-	-	0.055	-
HCM Control Delay (s)	11.3	8.7	-	-	7.7	-
HCM Lane LOS	B	A	-	-	A	-
HCM 95th %tile Q(veh)	0.4	0.1	-	-	0.2	-

Intersection	
Int Delay, s/veh	0.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	5	15	465	5	20	600
Future Vol, veh/h	5	15	465	5	20	600
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	0	-	265	265	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	5	16	489	5	21	632

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1163	489	0	0	494	0
Stage 1	489	-	-	-	-	-
Stage 2	674	-	-	-	-	-
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	215	579	-	-	1070	-
Stage 1	616	-	-	-	-	-
Stage 2	506	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	211	579	-	-	1070	-
Mov Cap-2 Maneuver	211	-	-	-	-	-
Stage 1	616	-	-	-	-	-
Stage 2	496	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	211	579	1070	-
HCM Lane V/C Ratio	-	-	0.025	0.027	0.02	-
HCM Control Delay (s)	-	-	22.5	11.4	8.4	-
HCM Lane LOS	-	-	C	B	A	-
HCM 95th %tile Q(veh)	-	-	0.1	0.1	0.1	-

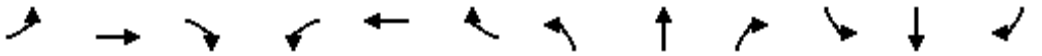
Intersection	
Int Delay, s/veh	2.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	85	35	60	385	465	140
Future Vol, veh/h	85	35	60	385	465	140
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	0	265	-	-	265
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	89	37	63	405	489	147

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1020	489	636	0	-	0
Stage 1	489	-	-	-	-	-
Stage 2	531	-	-	-	-	-
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	262	579	947	-	-	-
Stage 1	616	-	-	-	-	-
Stage 2	590	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	244	579	947	-	-	-
Mov Cap-2 Maneuver	244	-	-	-	-	-
Stage 1	575	-	-	-	-	-
Stage 2	590	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	23.3	1.2	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	947	-	244	579	-	-
HCM Lane V/C Ratio	0.067	-	0.367	0.064	-	-
HCM Control Delay (s)	9.1	-	28.1	11.6	-	-
HCM Lane LOS	A	-	D	B	-	-
HCM 95th %tile Q(veh)	0.2	-	1.6	0.2	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	105	25	40	60	40	70	65	270	90	110	225	165
Future Volume (veh/h)	105	25	40	60	40	70	65	270	90	110	225	165
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1969	1870	1870	1969	1870
Adj Flow Rate, veh/h	111	26	42	63	42	74	68	284	95	116	237	174
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	254	81	131	282	59	103	756	1114	897	720	1130	910
Arrive On Green	0.07	0.13	0.13	0.05	0.10	0.10	0.05	0.57	0.57	0.05	0.57	0.57
Sat Flow, veh/h	1781	644	1040	1781	607	1070	1781	1969	1585	1781	1969	1585
Grp Volume(v), veh/h	111	0	68	63	0	116	68	284	95	116	237	174
Grp Sat Flow(s),veh/h/ln	1781	0	1683	1781	0	1678	1781	1969	1585	1781	1969	1585
Q Serve(g_s), s	4.8	0.0	3.2	2.7	0.0	5.8	1.3	6.3	2.4	2.3	5.0	4.5
Cycle Q Clear(g_c), s	4.8	0.0	3.2	2.7	0.0	5.8	1.3	6.3	2.4	2.3	5.0	4.5
Prop In Lane	1.00		0.62	1.00		0.64	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	254	0	212	282	0	162	756	1114	897	720	1130	910
V/C Ratio(X)	0.44	0.00	0.32	0.22	0.00	0.72	0.09	0.25	0.11	0.16	0.21	0.19
Avail Cap(c_a), veh/h	441	0	634	419	0	535	869	1114	897	943	1130	910
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.8	0.0	34.4	32.9	0.0	37.8	6.8	9.5	8.6	6.9	8.9	8.8
Incr Delay (d2), s/veh	1.2	0.0	0.9	0.4	0.0	5.8	0.1	0.6	0.2	0.1	0.4	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	0.0	1.3	1.2	0.0	2.6	0.4	2.3	0.8	0.6	1.8	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.0	0.0	35.2	33.3	0.0	43.6	6.9	10.0	8.9	7.0	9.3	9.3
LnGrp LOS	C	A	D	C	A	D	A	B	A	A	A	A
Approach Vol, veh/h		179			179			447			527	
Approach Delay, s/veh		33.8			40.0			9.3			8.8	
Approach LOS		C			D			A			A	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.2	53.3	8.4	15.3	8.5	54.0	10.9	12.8
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	15.5	43.5	10.5	32.5	9.5	49.5	15.5	27.5
Max Q Clear Time (g_c+I1), s	4.3	8.3	4.7	5.2	3.3	7.0	6.8	7.8
Green Ext Time (p_c), s	0.2	1.7	0.0	0.3	0.1	1.7	0.2	0.6

Intersection Summary	
HCM 6th Ctrl Delay	16.5
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	105	25	40	60	40	70	65	270	90	110	225	165
Future Volume (veh/h)	105	25	40	60	40	70	65	270	90	110	225	165
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1969	1870	1870	1969	1870
Adj Flow Rate, veh/h	111	26	42	63	42	74	68	284	95	116	237	174
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	No			No			No			No		
Cap, veh/h	254	81	131	282	59	103	756	1114	897	720	1130	910
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.07	0.13	0.13	0.05	0.10	0.10	0.05	0.57	0.57	0.05	0.57	0.57
Unsig. Movement Delay												
Ln Grp Delay, s/veh	33.0	0.0	35.2	33.3	0.0	43.6	6.9	10.0	8.9	7.0	9.3	9.3
Ln Grp LOS	C	A	D	C	A	D	A	B	A	A	A	A
Approach Vol, veh/h		179			179			447			527	
Approach Delay, s/veh		33.8			40.0			9.3			8.8	
Approach LOS		C			D			A			A	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	1.1	3.0	1.1	4.0	1.1	3.0	1.1	4.0
Phs Duration (G+Y+Rc), s	9.2	53.3	8.4	15.3	8.5	54.0	10.9	12.8
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green (Gmax), s	15.5	43.5	10.5	32.5	9.5	49.5	15.5	27.5
Max Allow Headway (MAH), s	3.6	4.5	3.8	5.5	3.6	4.4	3.8	5.5
Max Q Clear (g_c+I1), s	4.3	8.3	4.7	5.2	3.3	7.0	6.8	7.8
Green Ext Time (g_e), s	0.2	1.7	0.0	0.3	0.1	1.7	0.2	0.6
Prob of Phs Call (p_c)	0.94	1.00	0.78	1.00	0.80	1.00	0.93	1.00
Prob of Max Out (p_x)	0.00	0.00	0.08	0.00	0.04	0.00	0.01	0.00

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1781		1781		1781		1781	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1969		644		1969		607

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		1585		1040		1585		1070

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)		L (Pr/Pm)	

Lanes in Grp	1	0	1	0	1	0	1	0
Grp Vol (v), veh/h	116	0	63	0	68	0	111	0
Grp Sat Flow (s), veh/h/ln	1781	0	1781	0	1781	0	1781	0
Q Serve Time (g_s), s	2.3	0.0	2.7	0.0	1.3	0.0	4.8	0.0
Cycle Q Clear Time (g_c), s	2.3	0.0	2.7	0.0	1.3	0.0	4.8	0.0
Perm LT Sat Flow (s_l), veh/h/ln	1095	0	1333	0	1143	0	1276	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	48.8	0.0	8.3	0.0	48.8	0.0	8.3	0.0
Perm LT Serve Time (g_u), s	42.5	0.0	7.7	0.0	44.5	0.0	2.5	0.0
Perm LT Q Serve Time (g_ps), s	0.7	0.0	0.0	0.0	0.3	0.0	0.6	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	720	0	282	0	756	0	254	0
V/C Ratio (X)	0.16	0.00	0.22	0.00	0.09	0.00	0.44	0.00
Avail Cap (c_a), veh/h	943	0	419	0	869	0	441	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	6.9	0.0	32.9	0.0	6.8	0.0	31.8	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.4	0.0	0.1	0.0	1.2	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	7.0	0.0	33.3	0.0	6.9	0.0	33.0	0.0
1st-Term Q (Q1), veh/ln	0.6	0.0	1.2	0.0	0.4	0.0	2.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	0.6	0.0	1.2	0.0	0.4	0.0	2.1	0.0
%ile Storage Ratio (RQ%)	0.06	0.00	0.02	0.00	0.04	0.00	0.04	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		
Lanes in Grp	0	1	0	0	0	1	0	0
Grp Vol (v), veh/h	0	284	0	0	0	237	0	0
Grp Sat Flow (s), veh/h/ln	0	1969	0	0	0	1969	0	0
Q Serve Time (g_s), s	0.0	6.3	0.0	0.0	0.0	5.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	6.3	0.0	0.0	0.0	5.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	1114	0	0	0	1130	0	0
V/C Ratio (X)	0.00	0.25	0.00	0.00	0.00	0.21	0.00	0.00
Avail Cap (c_a), veh/h	0	1114	0	0	0	1130	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	9.5	0.0	0.0	0.0	8.9	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.6	0.0	0.0	0.0	0.4	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	10.0	0.0	0.0	0.0	9.3	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	2.1	0.0	0.0	0.0	1.7	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.0	0.0	0.1	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	2.3	0.0	0.0	0.0	1.8	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.06	0.00	0.00	0.00	0.09	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	95	0	68	0	174	0	116
Grp Sat Flow (s), veh/h/ln	0	1585	0	1683	0	1585	0	1678
Q Serve Time (g_s), s	0.0	2.4	0.0	3.2	0.0	4.5	0.0	5.8
Cycle Q Clear Time (g_c), s	0.0	2.4	0.0	3.2	0.0	4.5	0.0	5.8
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.62	0.00	1.00	0.00	0.64
Lane Grp Cap (c), veh/h	0	897	0	212	0	910	0	162
V/C Ratio (X)	0.00	0.11	0.00	0.32	0.00	0.19	0.00	0.72
Avail Cap (c_a), veh/h	0	897	0	634	0	910	0	535
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	8.6	0.0	34.4	0.0	8.8	0.0	37.8
Incr Delay (d2), s/veh	0.0	0.2	0.0	0.9	0.0	0.5	0.0	5.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	8.9	0.0	35.2	0.0	9.3	0.0	43.6
1st-Term Q (Q1), veh/ln	0.0	0.8	0.0	1.3	0.0	1.4	0.0	2.3
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.1	0.0	0.1	0.0	0.3
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.8	0.0	1.3	0.0	1.5	0.0	2.6
%ile Storage Ratio (RQ%)	0.00	0.23	0.00	0.02	0.00	0.24	0.00	0.04
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	16.5
HCM 6th LOS	B

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	35	10	15	390	280	45
Future Vol, veh/h	35	10	15	390	280	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	0	265	-	-	130
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	37	11	16	411	295	47

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	738	295	342	0	-	0
Stage 1	295	-	-	-	-	-
Stage 2	443	-	-	-	-	-
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	385	744	1217	-	-	-
Stage 1	755	-	-	-	-	-
Stage 2	647	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	380	744	1217	-	-	-
Mov Cap-2 Maneuver	380	-	-	-	-	-
Stage 1	745	-	-	-	-	-
Stage 2	647	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	14.3	0.3	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1217	-	380	744	-	-
HCM Lane V/C Ratio	0.013	-	0.097	0.014	-	-
HCM Control Delay (s)	8	-	15.5	9.9	-	-
HCM Lane LOS	A	-	C	A	-	-
HCM 95th %tile Q(veh)	0	-	0.3	0	-	-

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