

McKinney Temple

TRAFFIC IMPACT ANALYSIS

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A handwritten signature in blue ink that reads "Pete Kelly". The signature is written in a cursive style and is positioned below the professional seal.

07-03-2024

JULY 2024

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EXECUTIVE SUMMARY

This report documents a traffic impact analysis (TIA) performed for the proposed Temple for the Church of Jesus Christ of Latter-day Saints. The development is located on the northeast corner of FM 75 (Stacy Road) and River Oaks Drive in Fairview, Texas. A conceptual site plan is attached to this document in the **Appendix**. The purpose of this study is to address the traffic impacts of the Temple development on surrounding streets and intersections. This TIA was prepared based on criteria set forth by TxDOT and the Town of Fairview, Texas.

Based on the findings of the TIA, it has been determined that the construction and operation of the Temple for the Church of Jesus Christ of Latter-day Saints will not necessitate any modifications or improvements to the existing infrastructure of Stacy Road, or the study area intersections. The analysis projects that the presence of the Temple will not negatively impact current or future traffic flow and operations in the surrounding area. This conclusion suggests that the expected traffic volume generated by the Temple will be sufficiently accommodated by the existing road network without causing congestion or other traffic-related issues.

RECOMMENDATIONS

Based upon the findings of the TIA carried out for the area of the Temple development, the following recommendations have been made.

INTERSECTION OPERATIONS

Stacy Road – The daily volumes along Stacy Road were observed to be 32,363 vehicles per day. Based on coordination with the Town of Fairview, Stacy Road is estimated to have a daily capacity of 40,000 vehicles. As such, the road is operating at approximately 81% of its estimated capacity. The Town is in coordination with TxDOT concerning Stacy Road and it is projected that it will be widened to a six-lane divided facility in the future.

Recommendation: Consider widening to six lanes when the daily volumes exceed 40,000. Based on historic growth trends, this is projected to happen in 2032.

Responsible Party: TxDOT

Stacy Road & Allen Heights Drive – The northbound approach is projected to operate below acceptable LOS starting in Buildout Background in the PM peak hour with similar LOS conditions projected in subsequent scenarios. The southbound approach is also projected to operate below acceptable LOS starting at Buildout only in the PM peak hour.

The northbound and southbound stop-controlled approaches at the intersection compete against a high traffic volume along Stacy Road. Based on the results of a peak hour signal warrant analysis, the intersection is not projected to meet signal warrants in any of the analysis scenarios. The highest projected queue length for either approach is during the Horizon PM peak scenario is 3-4 vehicles. Additionally, the queue length is projected to remain the same with or without the Temple traffic.

Recommendation: No recommendations at the intersection due to minimal queue lengths and the intersection does not warrant a traffic signal based on peak hour volumes.

Stacy Road & Lost Creek Dr / Chase Oaks Church Drive – The northbound approach currently operates below acceptable LOS in the Existing conditions during the PM peak hour and is projected to operate with similar LOS in subsequent scenarios.

The northbound and southbound stop-controlled approaches at the intersection compete against a high traffic volume along Stacy Road. Based on the results of a peak hour signal warrant analysis, the intersection is not projected to meet signal warrants in any of the analysis scenarios. The highest projected queue length for either approach during the Horizon PM peak scenario is 3-4 vehicles. Additionally, the queue length is projected to remain the same with or without the Temple traffic.

Recommendation: No recommendations at the intersection due to minimal queue lengths and the intersection does not warrant a traffic signal based on peak hour volumes.

Stacy Road & River Oaks Dr / LDS Church Drive – The northbound approach is projected to operate below acceptable LOS starting at Buildout Background conditions during the PM peak hour and is projected to operate with similar LOS in subsequent scenarios.

The northbound and southbound stop-controlled approaches at the intersection compete against a high traffic volume along Stacy Road. Based on the results of a peak hour signal warrant analysis, the intersection is not projected to meet signal warrants in any of the analysis scenarios. The highest projected queue length for either approach during the Horizon PM peak scenario is 2-3 vehicles. Additionally, the queue length is only projected to increase by 1 vehicle with the Temple traffic.

Recommendation: No recommendations at the intersection due to minimal queue lengths and the intersection does not warrant a traffic signal based on peak hour volumes.

SITE DRIVEWAY AUXILIARY LANE ANALYSIS

A right-turn deceleration lane is warranted on a roadway with a posted speed of 50 mph or greater if the projected right-turn volume into a driveway is projected to be greater than 50 vehicles per hour. Based on the auxiliary lane analysis section of this report, no right-turn lanes were warranted at Drive 1 or Drive 2.

Drive 1 and Drive 2 were not analyzed for left-turns as an eastbound left-turn deceleration lane is already provided at Drive 1. Additionally, Drive 2 is projected to operate as a right-in/right-out only access.

SIGHT DISTANCE

Based on field observations and the proposed site plan, all proposed driveways (Drives 1-2) are projected to have adequate sight distance. All driveways should be designed to provide adequate sight distance (i.e. clear sight with no obstructing object, signs, landscaping, etc.).

ACCESS SPACING

According to TxDOT's *Access Management Manual*, a minimum connection spacing of 425 feet is required along roadways with a posted speed greater than 50 mph.

Based on the site plan, Drive 2 is projected to be located 320 feet east of Drive 1 and 200 feet west of a proposed driveway for the Church of Christ property directly east of the Temple. Based on discussions with the project team for the adjacent Church of Christ property, they are proposing to have a separate driveway for their property and not provide cross access between the two properties.

Based on coordination with the Town of Fairview, the Town and its citizens are concerned about allowing Temple traffic to cut through the Church of Christ property via Meandering Way and shared cross access. Therefore, it is recommended that an access spacing variance be granted to allow for Drive 2 to be built as a right-in/right-out access at the currently proposed location.

SIGNAL WARRANT ANALYSIS

A traffic signal can only be warranted through an analysis process based on comparison of the major and minor street traffic volumes and satisfying conditions set forth in the TXMUTCD. Based on the projected volumes through Buildout (2026) and Horizon (2031), no traffic signals are warranted at the study intersections.

CRASH HISTORY

Crashes from the last five years (2019-2023) were viewed from TxDOT's Crash Records Information System (CRIS). The study area had a total of 50 crashes. The intersection of Stacy Road & Angel Parkway had 33 total crashes over the last five years with only 1 being suspected serious injury crashes and no fatalities.

INTRODUCTION

PURPOSE

Kimley-Horn and Associates, Inc. was retained by The Church of Jesus Christ of Latter-day Saints to perform a traffic impact analysis (TIA) for the proposed Temple for the Church of Jesus Christ of Latter-day Saints, located on the northeast corner of FM 75 (Stacy Road) and River Oaks Drive in the Town of Fairview, Texas.

The purpose of this study is to address the traffic impacts of the Temple development on surrounding streets and intersections. This TIA was prepared based on criteria set forth by TxDOT and the Town of Fairview, Texas. The specific objectives of this study are to determine existing and future levels of service at the various study intersections and recommend any capacity or operational related improvements, if necessary.

METHODOLOGY

The traffic evaluation was comprised of five (5) scenarios, for which the AM and PM peak hour level of service (LOS) analyses were performed. All intersection analysis was completed using *Synchro 12TM* software. **Table 1** provides a summary of the assumptions used in each scenario.

Table 1: Analysis Scenario Summary

Scenario	Roadway Conditions	Development Assumptions	Traffic Volumes
Existing (2024)	Existing	Existing	Existing
Buildout (2026) Background	Existing	Existing	Existing + 2 years of growth at 3% per year
Buildout (2026)	Existing + Site Drives	Existing + Temple Development	Existing + 2 years of growth at 3% per year + Temple Development Site Traffic
Horizon (2031) Background	Existing	Existing	Existing + 7 years of growth at 3% per year
Horizon (2031)	Existing + Site Drives	Existing + Temple Development	Existing + 7 years of growth at 3% per year + Temple Development Site Traffic

EXISTING AND PROPOSED LAND USE

SITE LOCATION / STUDY AREA

The Temple development is located on the northeast corner of FM 75 (Stacy Road) and River Oaks Drive in Fairview, Texas. The site is currently vacant and does not generate traffic. A vicinity map is presented in **Exhibit 1**.

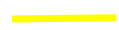
PROPOSED DEVELOPMENT

Based on information provided by the developer, Buildout of the development is projected to be completed by 2026. The site is proposed to have two (2) access points. Drive 1 is an existing full access driveway which currently provides access to a church building also owned by the Church of Jesus Christ of Latter-day Saints. Drive 1 will function as a shared driveway for both the church building and the Temple. Drive 2 is a proposed driveway just east of Drive 1 along FM 75 (Stacy Road) and is proposed to provide right-in/right-out access only. A conceptual site plan is attached to this document in the **Appendix**.

LEGEND



Study Intersections

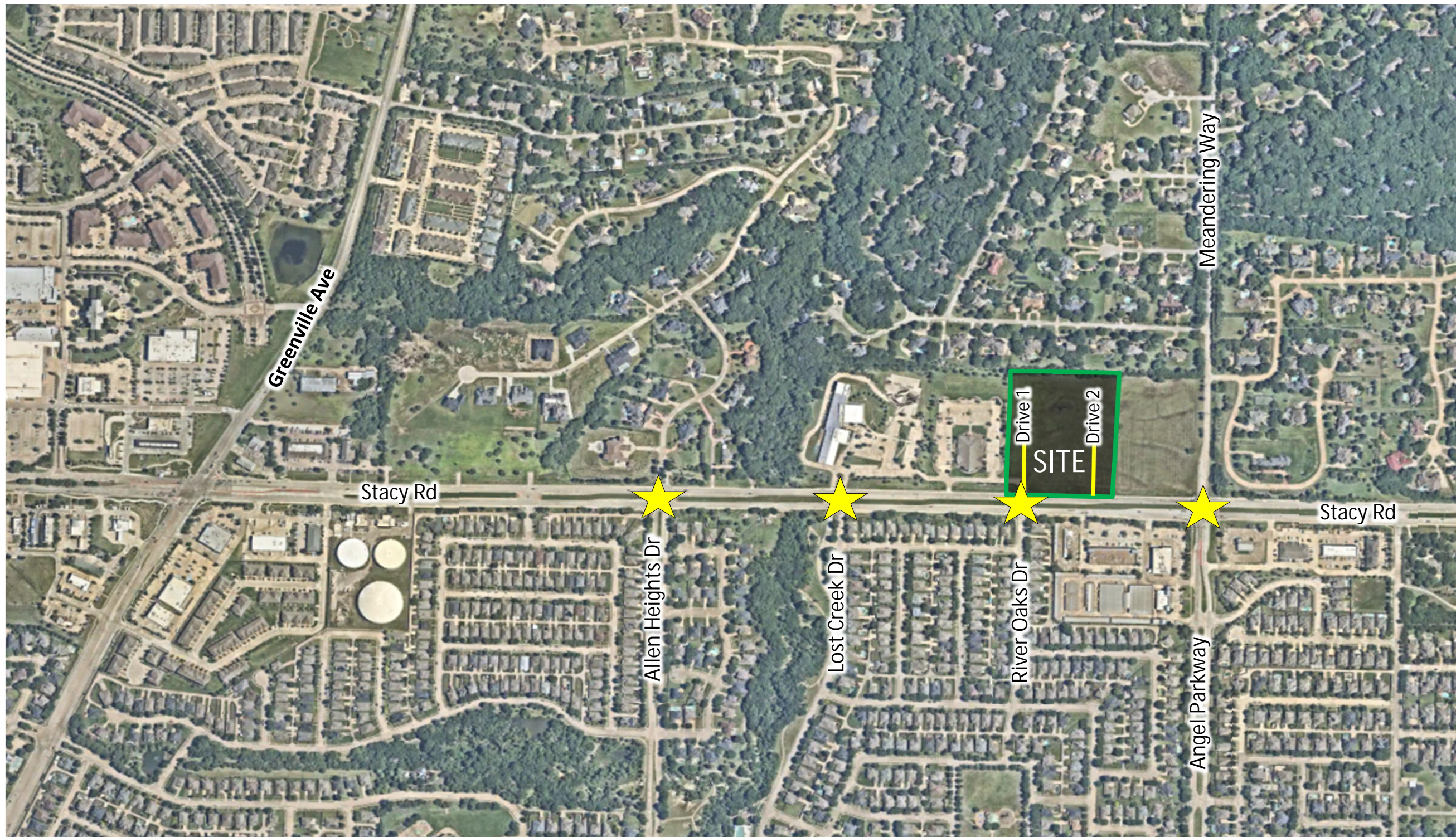


Proposed Site Access

N



NOT TO SCALE



EXISTING TRANSPORTATION SYSTEM

THOROUGHFARE SYSTEM

The following is a general description of the major thoroughfares within the study area as they exist today. **Exhibit 2** presents the existing lane assignment and intersection control.

FM 75 (Stacy Road) is currently a four-lane divided section that runs generally in an east-west direction with a posted speed limit of 50 mph. To the west, Stacy Road provides access to the City of Allen and commercial developments and to the east, it provides access to residential housing developments.

Allen Heights Drive is currently a four-lane divided section that runs generally in a north-south direction with a posted speed limit of 35 mph. To the north, Allen Heights Drive provides access to Stacy Road, and to the south, it provides access to residential neighborhoods.

Lost Creek Drive is currently a two-lane undivided section that runs generally in a north-south direction with a posted speed limit of 35 mph. To the north, Lost Creek Drive provides access to Stacy Road, and to the south, it provides access to residential neighborhoods.

River Oaks Drive is currently a two-lane undivided section that runs generally in a north-south direction with a posted speed limit of 30 mph. To the north, River Oaks Drive provides access to Stacy Road, and to the south, it provides access to residential neighborhoods.

Angel Parkway is currently a four-lane divided section that runs generally in a north-south direction with a posted speed limit of 40 mph. To the north, Angel Parkway provides access to Stacy Road, and to the south, it provides access to residential neighborhoods.

EXISTING TRAFFIC VOLUMES

Turning movement counts were collected on Thursday, June 20, 2024, during the AM (6 - 9am) and PM (4 - 6 pm) peak hours and on Saturday, June 22, 2024, during the Saturday (10am - 12pm) peak hour at the following intersections:

- Stacy Road & Allen Heights Drive
- Stacy Road & Lost Creek Drive / Chase Oaks Church Drive
- Stacy Road & River Oaks Drive / LDS Church Drive
- Stacy Road & Angel Parkway

24-Hour Tube count was collected on Thursday, June 20, 2024, at the following location:

- Stacy Road, between River Oaks Drive and Angel Parkway

Due to traffic counts being collected over the summer when traffic volumes are typically lower than during the school year, the June 2024 turning movement counts were adjusted to reflect equivalent school year conditions. To determine the adjustment percentage necessary, 2024 AM and PM daily volumes for both eastbound and westbound traffic were compared to 2022 TCDS (Traffic Count Database System) traffic counts grown at 3% annually to 2024. The summer adjustment factor was determined to be 4.1% for the AM peak hour volumes and 2.4% for the PM peak hour volumes.

This methodology was discussed and approved by the Town of Fairview Engineer. The calculation of the summer adjustment is summarized in **Table 2**.

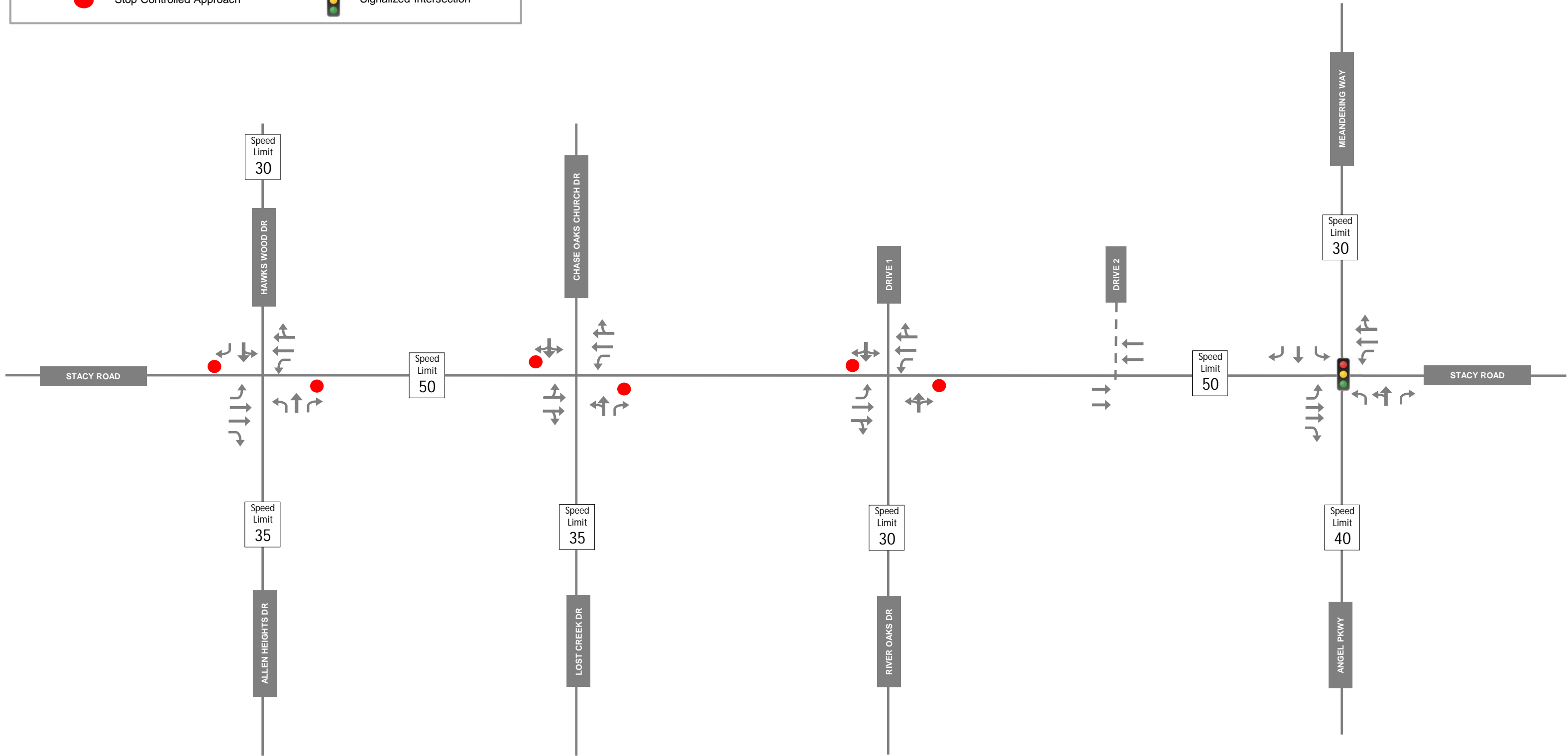
Table 2: Summer Adjustment Factor by Peak Hour

Peak Hour	Direction	Summer 2024	TCDS 2022	TCDS 2024	Difference
AM	EB	818	838	889	8.7%
	WB	1,336	1,253	1,329	-0.5%
AM AVG					4.1%
PM	EB	1,302	1,244	1,320	1.4%
	WB	1,147	1,118	1,186	3.4%
PM AVG					2.4%

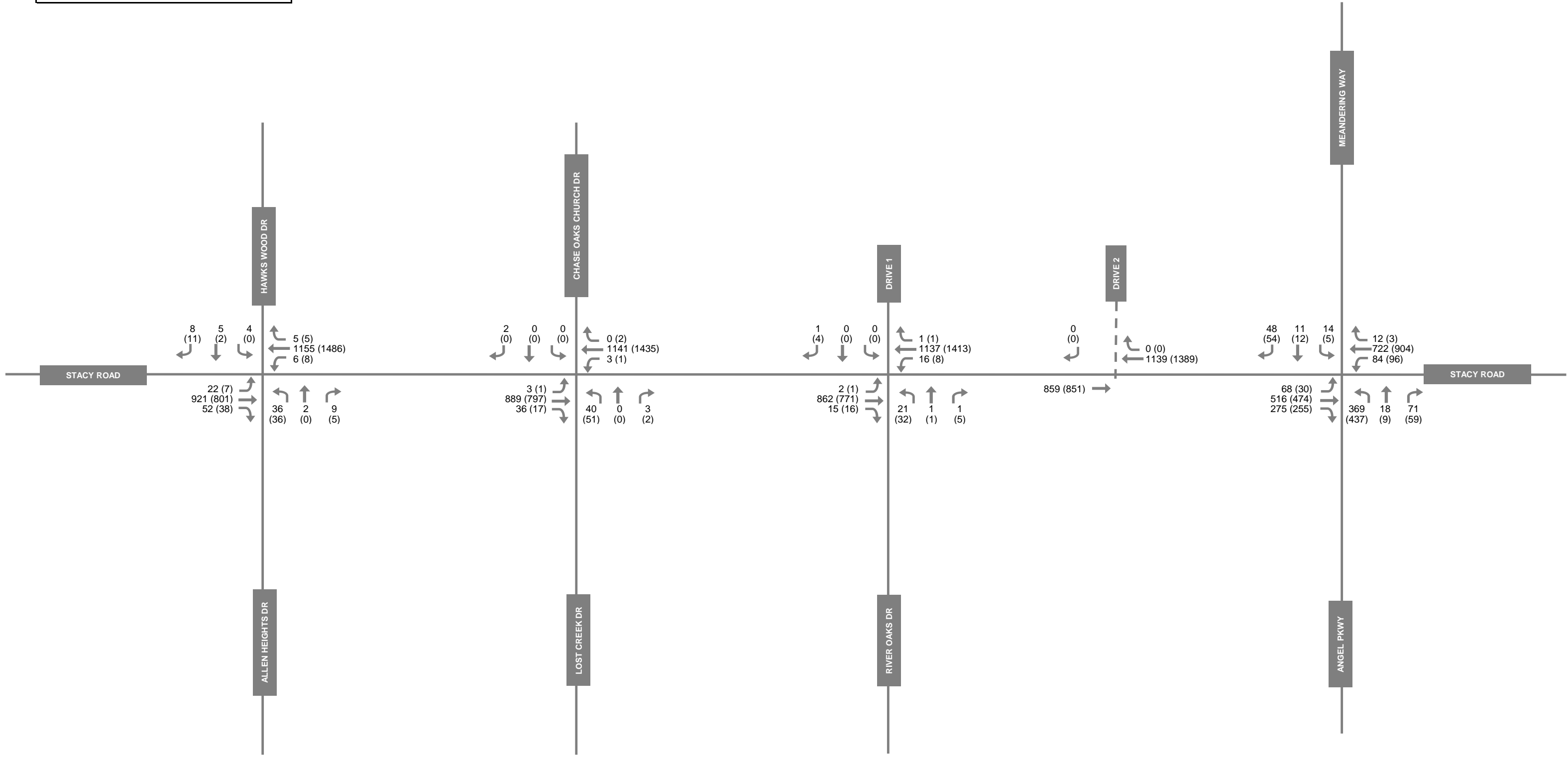
Exhibit 3 presents the adjusted existing weekday AM and PM peak hour traffic volumes. **Exhibit 4** presents the adjust Saturday peak hour traffic volumes. Raw count sheets are provided in the **Appendix**.

LEGEND

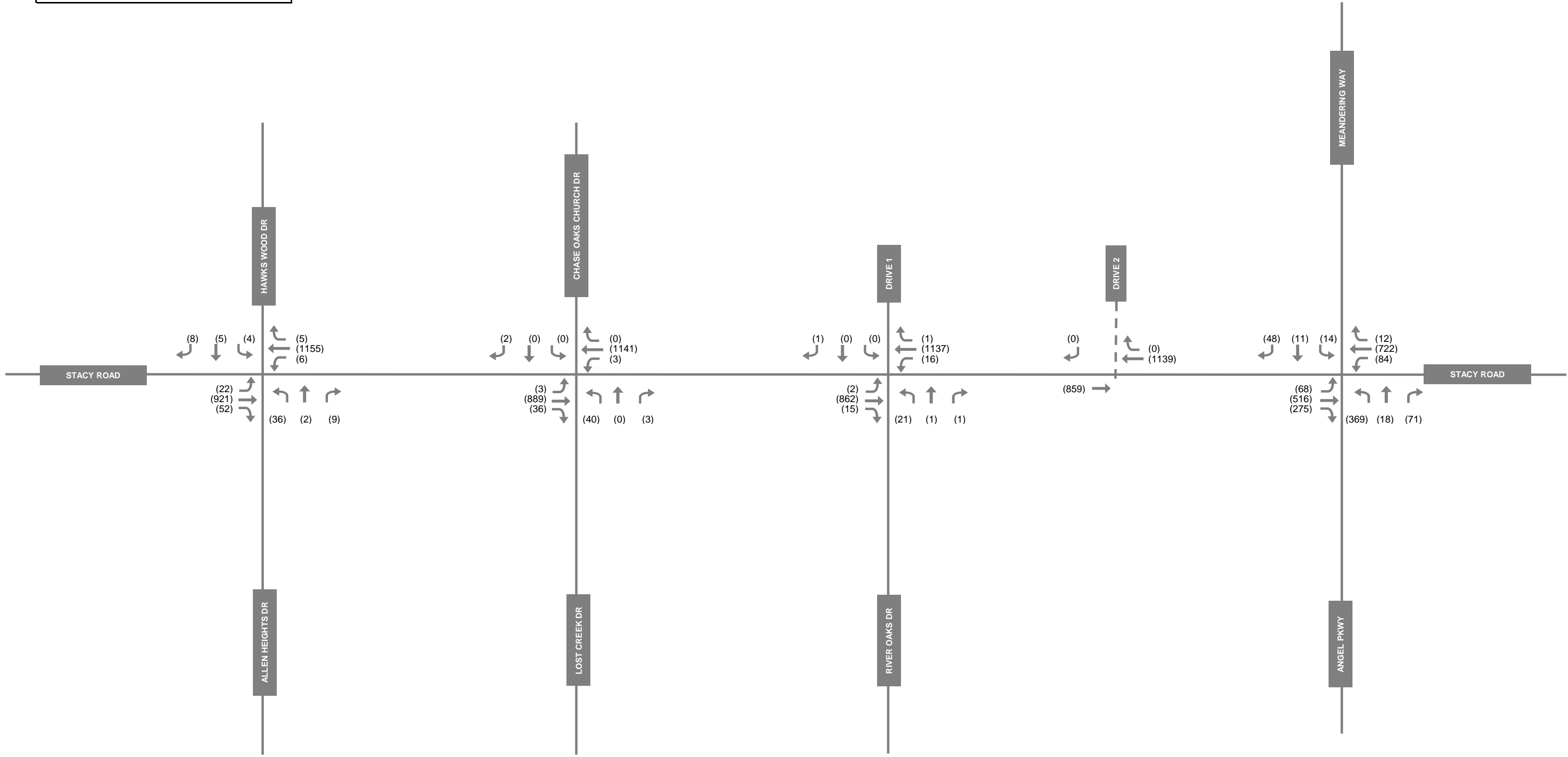
- XX AM Peak Volume
- (XX) PM Peak Volume
- Stop Controlled Approach
- Existing Facility
- - - Future Site Drive
- 🚦 Signalized Intersection



LEGEND:
 X (Y)
 X = AM Peak Hour Turning Movements
 Y = PM Peak Hour Turning Movements
 Volumes may not sum from point to point due to rounding
 and presence of smaller driveways not included in analysis.



LEGEND:
 (Y) = Saturday Peak Hour Turning Movements
 Volumes may not sum from point to point due to rounding and presence of smaller driveways not included in analysis.



PROJECT TRAFFIC CHARACTERISTICS

SITE-GENERATED TRAFFIC

A trip generation analysis was performed to estimate the number of trips in and out of the site daily and during peak periods. Published trip rates for a variety of uses are typically available in the Institute of Transportation Engineers (ITE) *Trip Generation Manual, 11th Edition*. The *Trip Generation Manual* was reviewed for trip rates suitable to estimate trips for this site. The McKinney Temple is a unique religious use facility which serves multiple purposes and is projected to operate Tuesday-Saturday each week. As such, this is a unique land use not contained within the ITE *Trip Generation Manual*. Trips were instead estimated based on characteristics and data provided by the Church of Jesus Christ of Latter-Day Saints on other operating temples of similar size.

The following are the planned building functions and associated trip generation assumptions for the proposed Temple based upon 100 percent capacity, usage, and attendance:

Instruction Sessions – The first session is projected to begin at 6:00 AM and the last session is projected to begin at 8:00 PM. Instruction sessions are projected to begin every hour and can last approximately two hours with a maximum of 32 vehicles per session. It is assumed that 8 sessions occur per day with 32 trip ends in and 32 trip ends out within the analyzed peak hours.

Weddings – The first wedding is projected to begin at 9:00 with the last wedding projected to begin at 5:00 PM. Three rooms within the Temple are dedicated to weddings (one large room and two small rooms). Weddings in the large room will generate 32 vehicles and weddings in the small rooms will generate 13 vehicles each. It is assumed that up to eight weddings (4 in the large room and 2 in each of the small rooms) will be held on the busiest wedding days (typically Friday/Saturday) with 58 trip ends in and 58 trip ends out within the analyzed peak hours (32+13+13).

Baptistry – The first baptismal session is projected to begin at 6:00 AM and the last session is projected to begin at 7:00 PM. Sessions begin every hour and can last approximately one hour with a maximum of 8 vehicles per session. It is assumed that 10 sessions occur per day with 8 trip ends in and 8 trip ends out within the analyzed peak hours.

Staff – Staff are present throughout the day. It is assumed that there are three shifts of staff in a day with a maximum of 18 vehicles per shift. It is assumed that the weekday AM peak will have 18 trip ends in, and the weekday PM peak hour will have 18 trip ends out.

As mentioned above, these assumptions are based on 100 percent capacity. However, in practice, the average attendance at temple sites is much lower. The operation statistics for several similarly sized existing temples show that they operate at approximately 60 percent of capacity on busier days. Therefore, a factor of 60 percent has been applied to the gross trip generation described above.

Table 3 presents the weekday daily, AM, PM, and Saturday peak trips generated for the Temple.

Table 3: Trip Generation Calculation

Land Uses	Daily One-Way Trips	AM Peak Hour One-Way Trips			PM Peak Hour One-Way Trips			Saturday Peak Hour One-Way Trips		
		IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL
Instruction Sessions	304	19	19	38	19	19	38	19	19	38
Weddings	216	35	35	70	35	35	70	35	35	70
Baptistery	100	5	5	10	5	5	10	5	5	10
Staff	66	11	0	11	0	11	11	11	11	22
Total Net New Trips	686	70	59	129	59	70	129	70	70	140

TRIP DISTRIBUTION AND ASSIGNMENT

The distribution and assignment of the site-generated traffic to the study area roadway network was performed for the Temple development based on examination of the existing traffic volumes, the existing roadway network, site access locations, and projected local traffic patterns.

Exhibit 5 presents the inbound and outbound directional distribution percentages for the traffic during the AM and PM peak hours for the Temple development at Buildout. The following outlines the global distribution utilized for the analysis:

- 60% to/from West along Stacy Road
- 15% to/from East along Stacy Road
- 15% to/from South along Angel Parkway
- 5% to/from South along Allen Heights Drive
- 5% to/from North along Meandering Way

Trip assignment was determined based on the unique Temple trip generation presented in **Table 3** and the peak hour trip distributions. **Exhibit 6** presents the projected site generated traffic volumes during the weekday AM and PM peak hours for Buildout of the Temple development. **Exhibit 7** presents the projected site generated traffic volumes during the Saturday peak hour for Buildout of the Temple development.

BACKGROUND GROWTH RATE

To determine a background growth rate for the study area, the TxDOT Traffic Count Database System (TCDS) was utilized. Average annual daily traffic (AADT) data was compared from 2019 to 2022 historical traffic counts along Stacy Road. **Table 4** summarizes the historical data used to determine the background growth rate.

Table 4: Study Area Growth Rate

Year	AADT	Annual Growth Rate
2019	24,310	-
2020	22,895	-5.82%
2021	26,148	14.21%
2022	26,132	-0.05%
Growth Rate		3%

To conservatively represent future conditions, an average annual growth rate of 3% was applied to the existing turning movement volumes to account for background growth that may occur.

DEVELOPMENT OF BUILDOUT TRAFFIC VOLUMES

Buildout (2026) Background weekday traffic volumes (**Exhibit 8**) are composed of Existing weekday traffic volumes (**Exhibit 3**) grown for two (2) years at 3%. Buildout (2026) Background Saturday traffic volumes (**Exhibit 9**) are composed of Existing Saturday traffic volumes (**Exhibit 4**) grown for two (2) years at 3%.

Buildout weekday site traffic (**Exhibit 6**) was added to the Buildout Background weekday traffic volumes (**Exhibit 8**) to represent Buildout weekday total (Background plus site-generated) traffic volumes for the 2026 study year. **Exhibit 10** shows the projected Buildout weekday total traffic volumes for the Temple development.

Buildout Saturday site traffic (**Exhibit 7**) was added to the Buildout Background Saturday traffic volumes (**Exhibit 9**) to represent Buildout Saturday total (Background plus site-generated) traffic volumes for the 2026 study year. **Exhibit 11** shows the projected Buildout Saturday total traffic volumes for the Temple development.

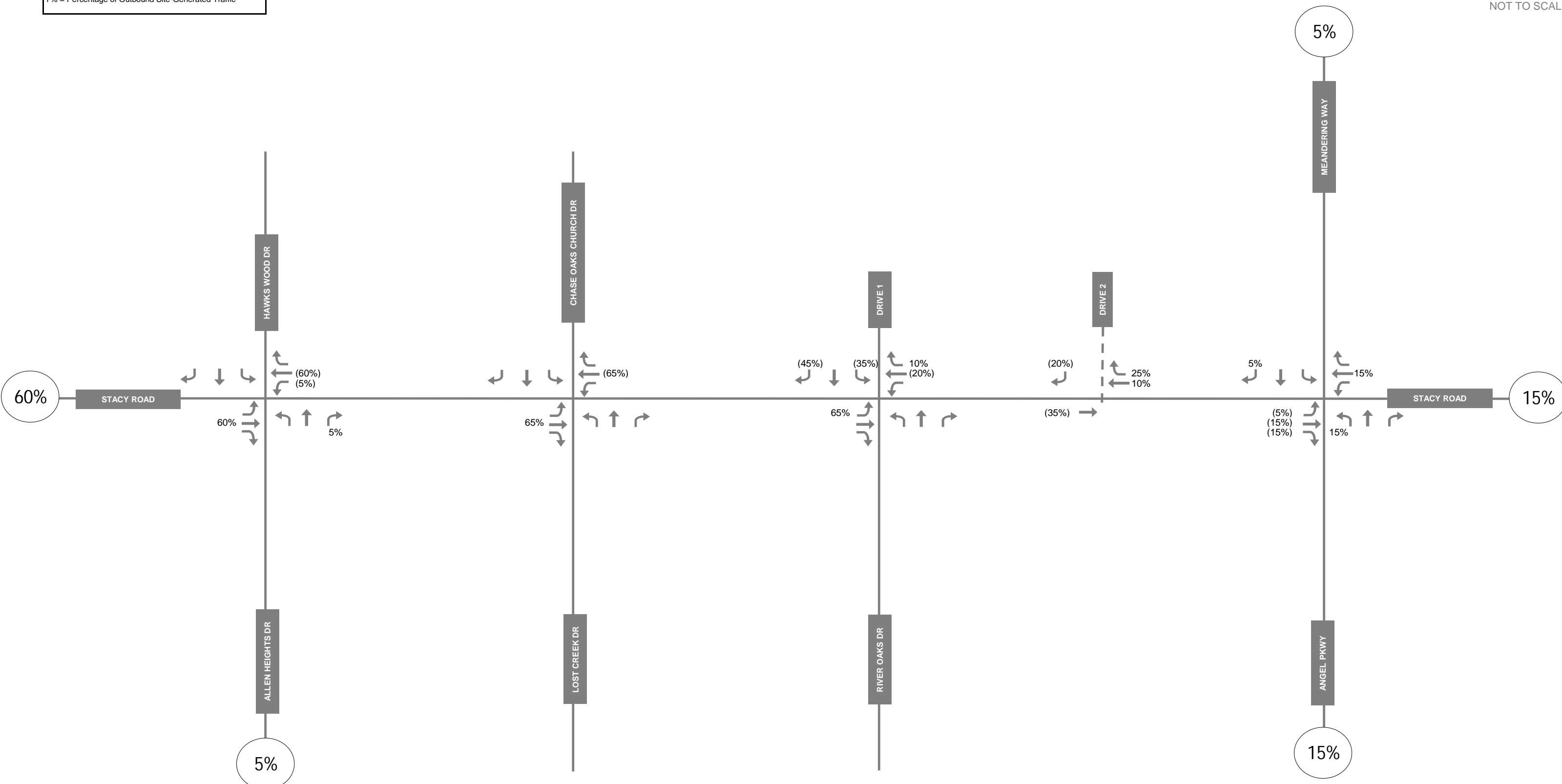
DEVELOPMENT OF HORIZON TRAFFIC VOLUMES

Horizon (2031) Background weekday traffic volumes (**Exhibit 12**) are composed of Existing weekday traffic volumes (**Exhibit 3**) grown for seven (7) years at 3%. Horizon (2031) Background Saturday traffic volumes (**Exhibit 13**) are composed of Existing Saturday traffic volumes (**Exhibit 4**) grown for seven (7) years at 3%.

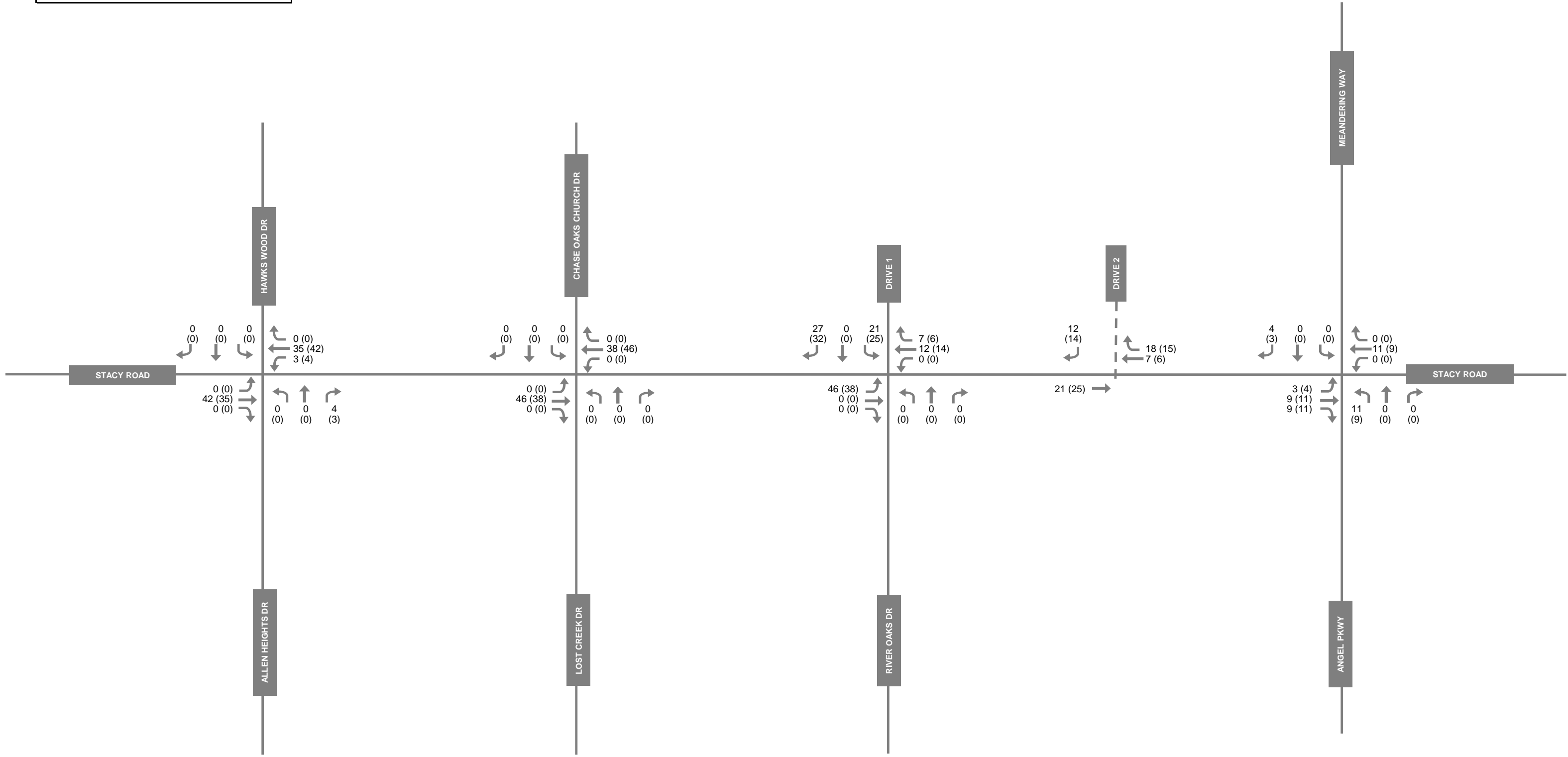
Buildout weekday site traffic (**Exhibit 6**) was added to the Horizon Background weekday traffic volumes (**Exhibit 12**) to represent Horizon weekday total (Background plus site-generated) traffic volumes for the 2031 study year. **Exhibit 14** shows the projected Horizon weekday total traffic volumes for the Temple development.

Buildout Saturday site traffic (**Exhibit 7**) was added to the Horizon Background Saturday traffic volumes (**Exhibit 13**) to represent Horizon Saturday total (Background plus site-generated) traffic volumes for the 2031 study year. **Exhibit 15** shows the projected Horizon Saturday total traffic volumes for the Temple development.

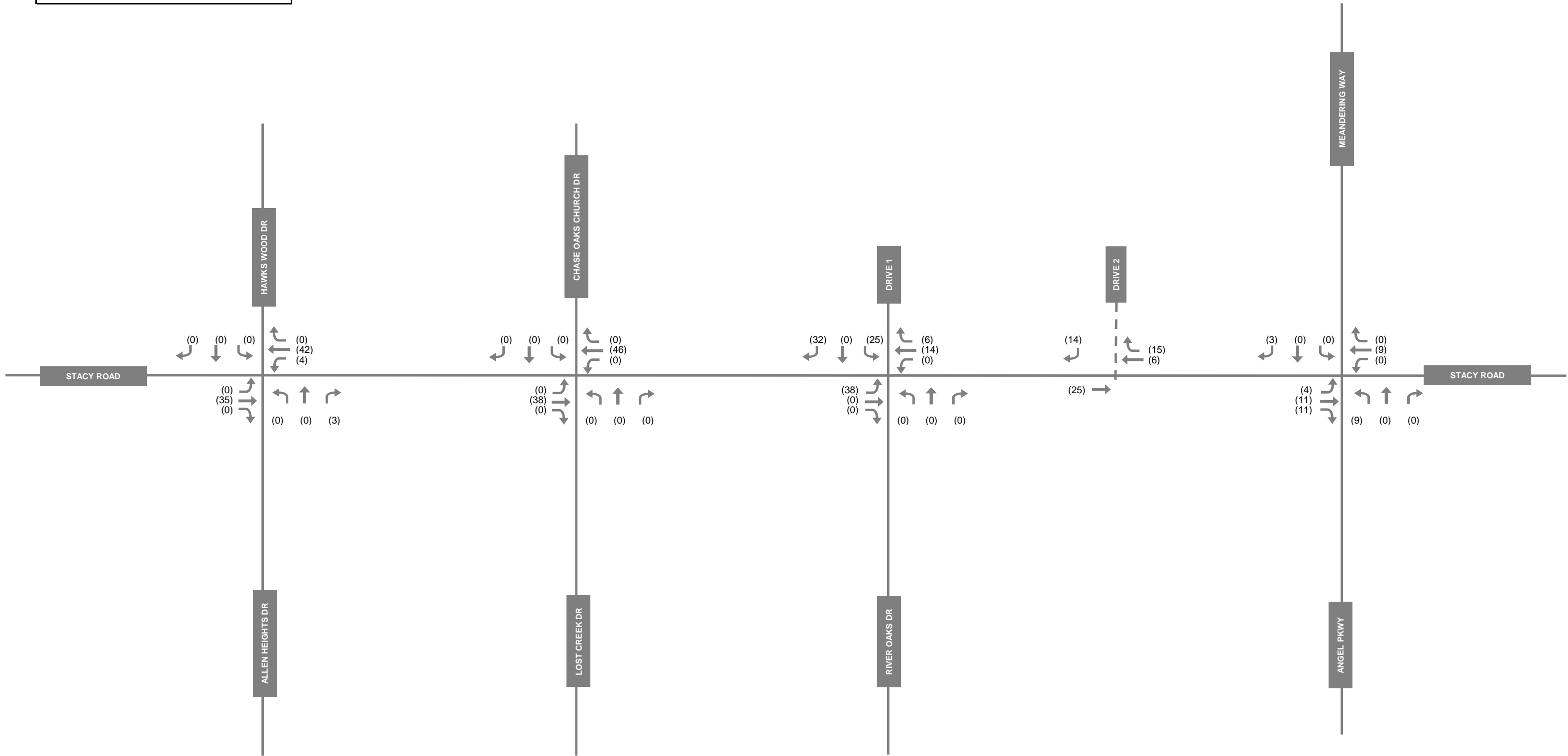
LEGEND:
 X% (Y%)
 X% = Percentage of Inbound Site-Generated Traffic
 Y% = Percentage of Outbound Site-Generated Traffic



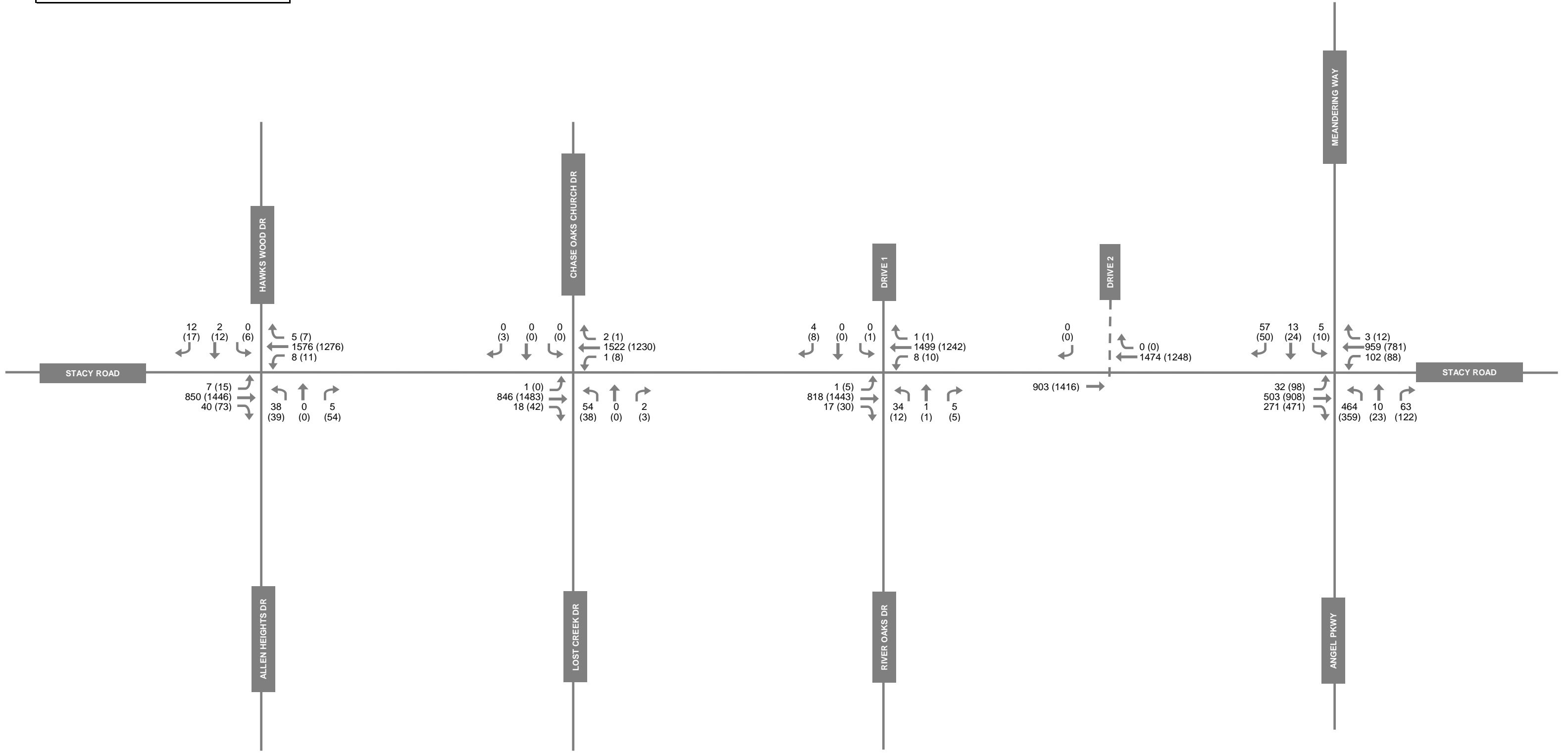
LEGEND:
 X (Y)
 X = AM Peak Hour Turning Movements
 Y = PM Peak Hour Turning Movements
 Volumes may not sum from point to point due to rounding
 and presence of smaller driveways not included in analysis.



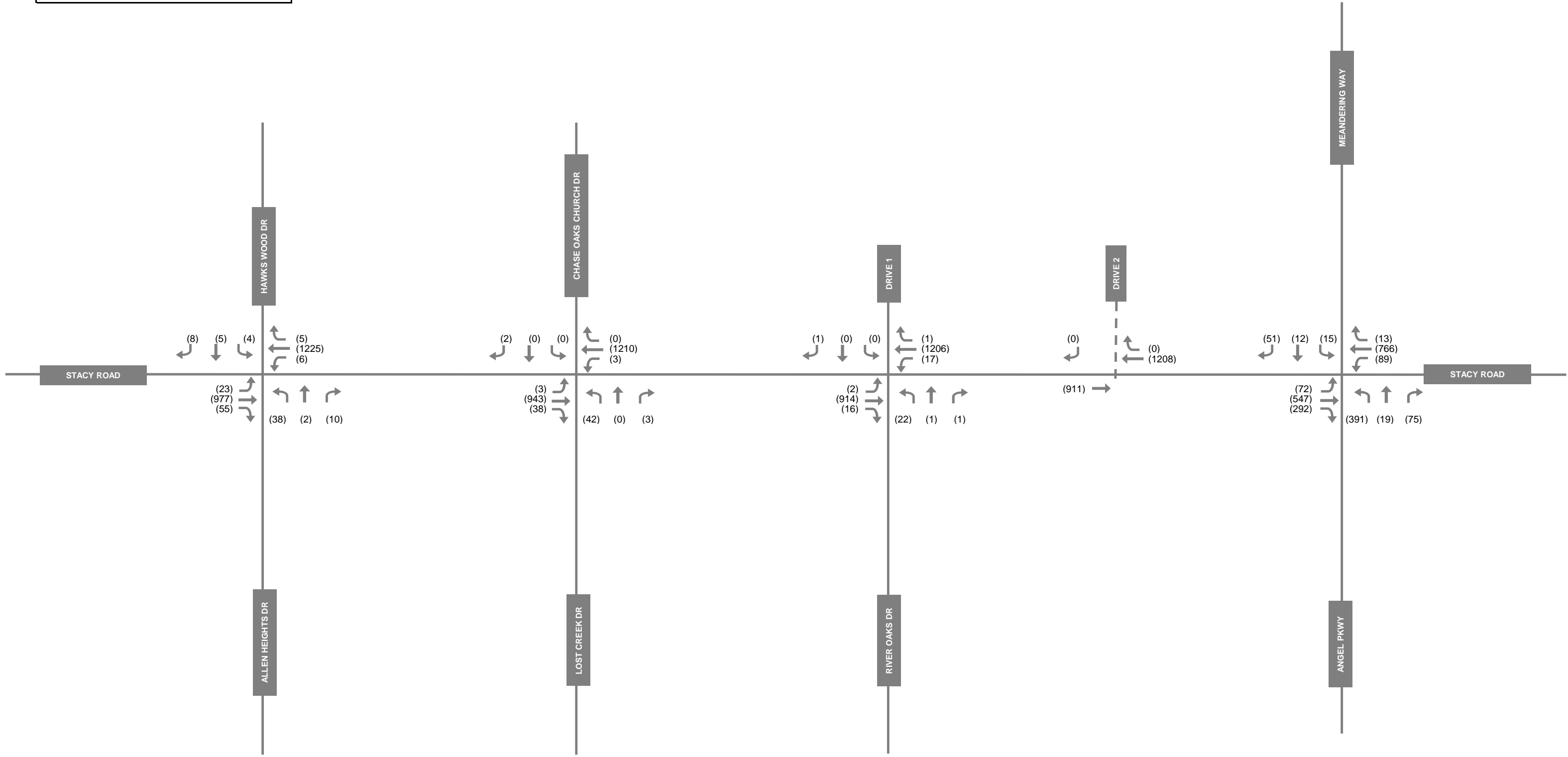
LEGEND:
 (Y) = Saturday Peak Hour Turning Movements
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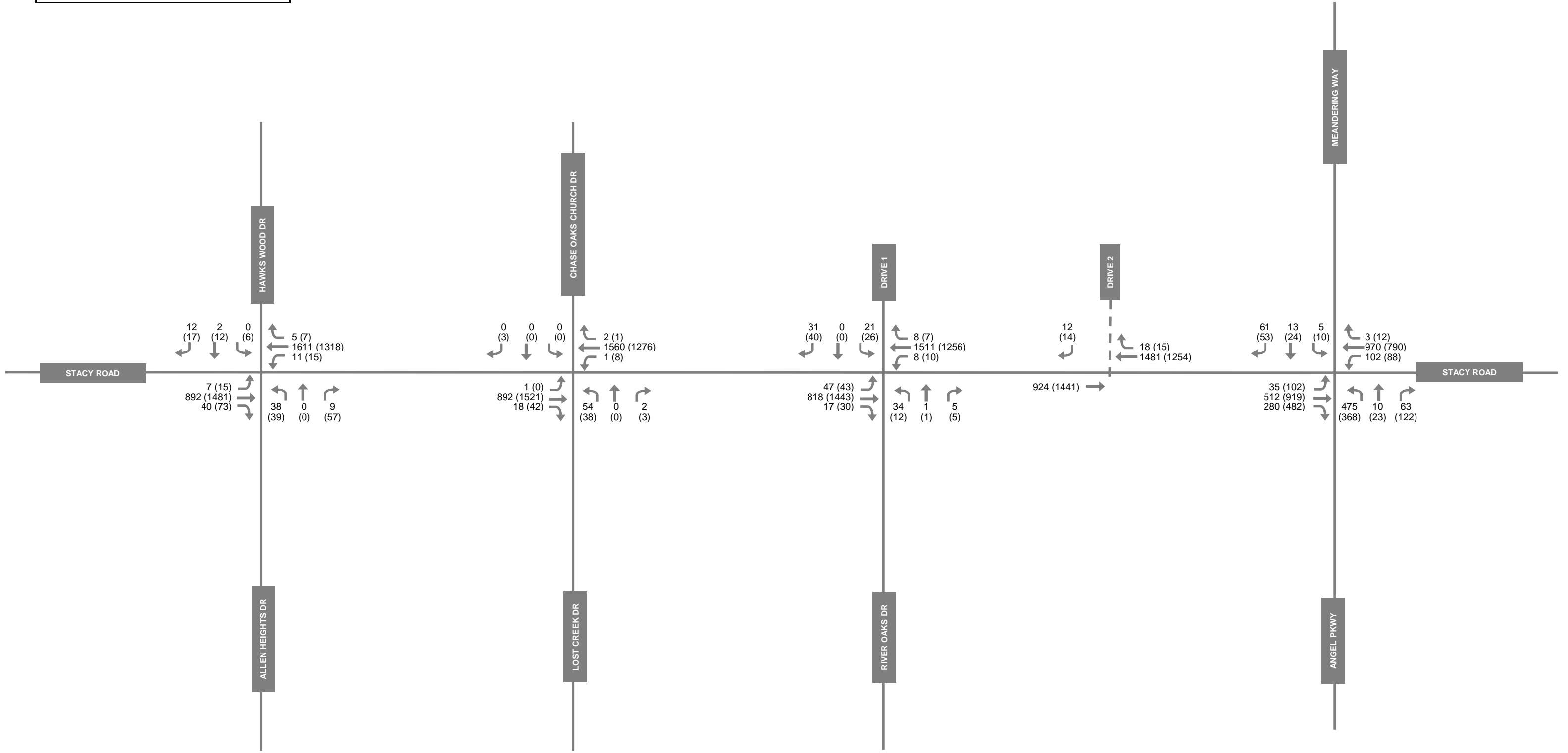
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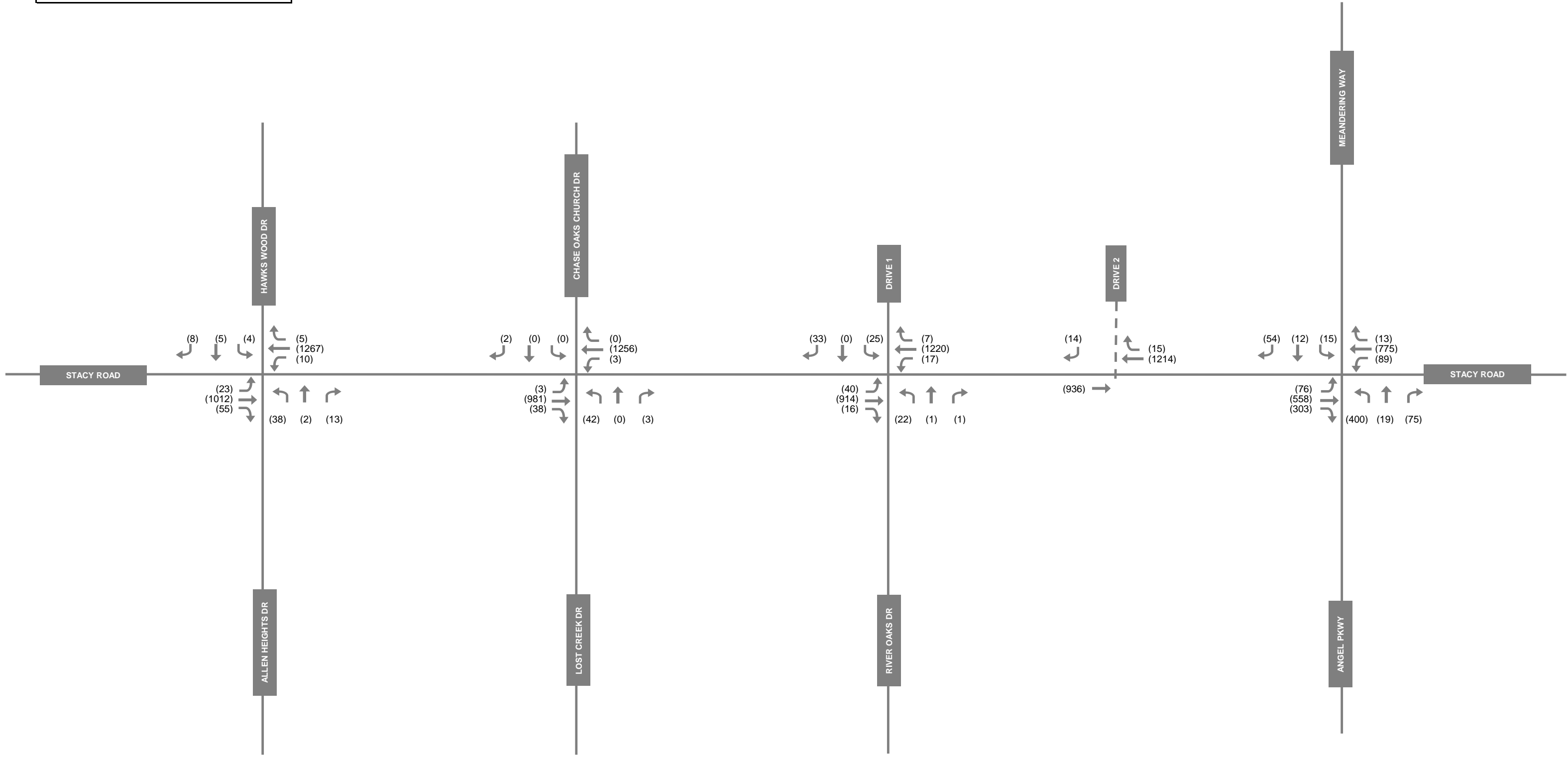
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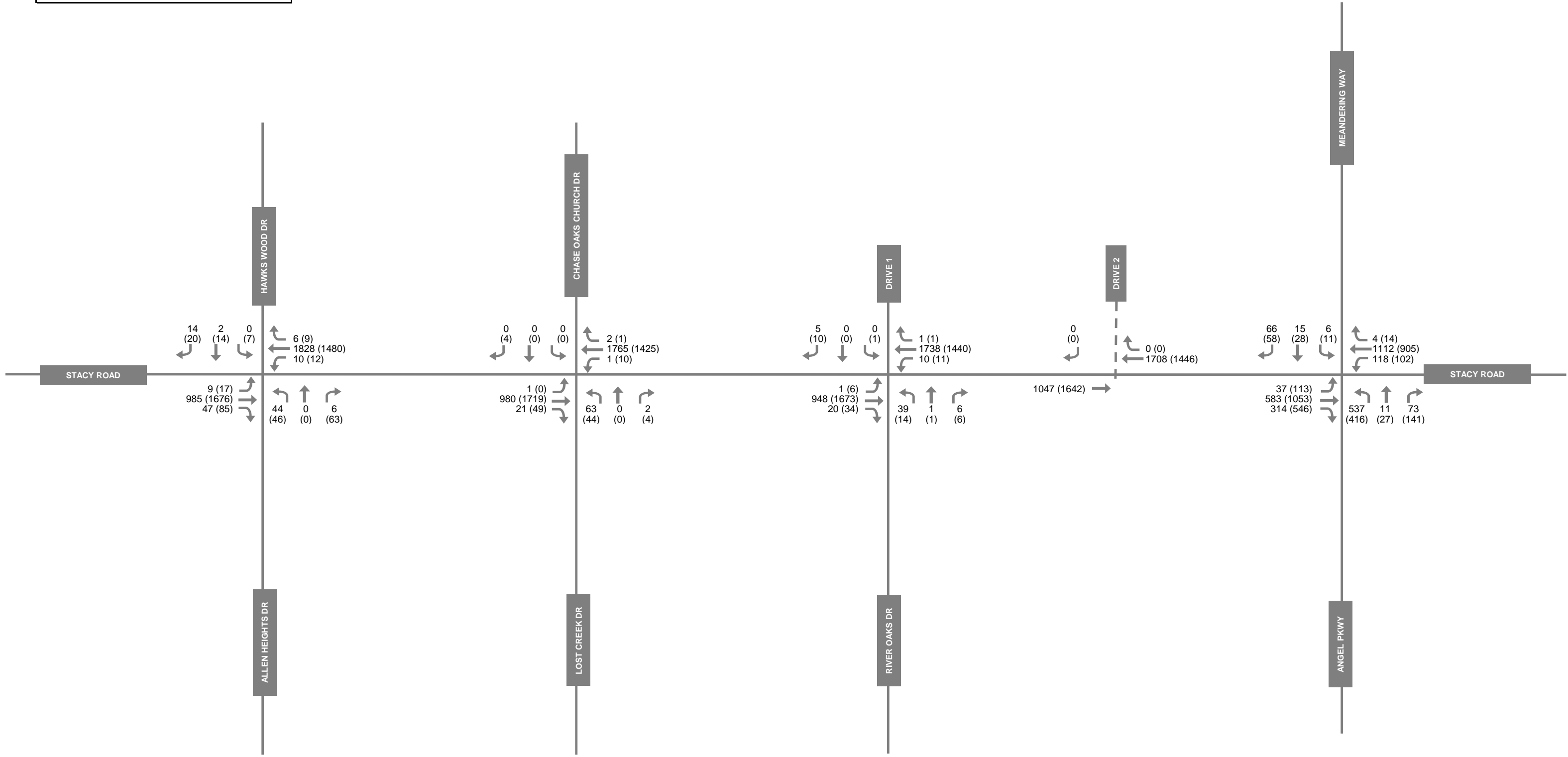
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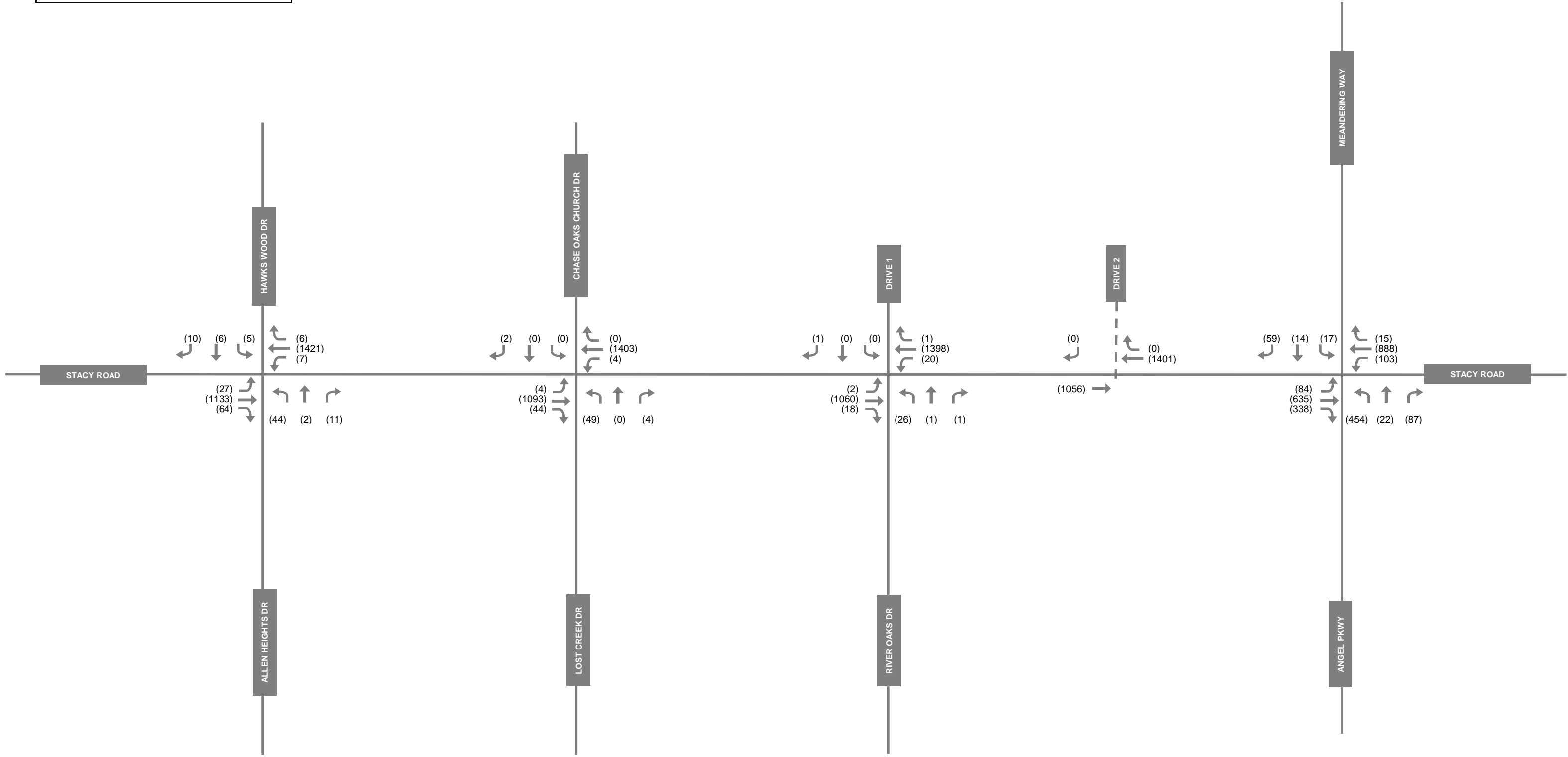
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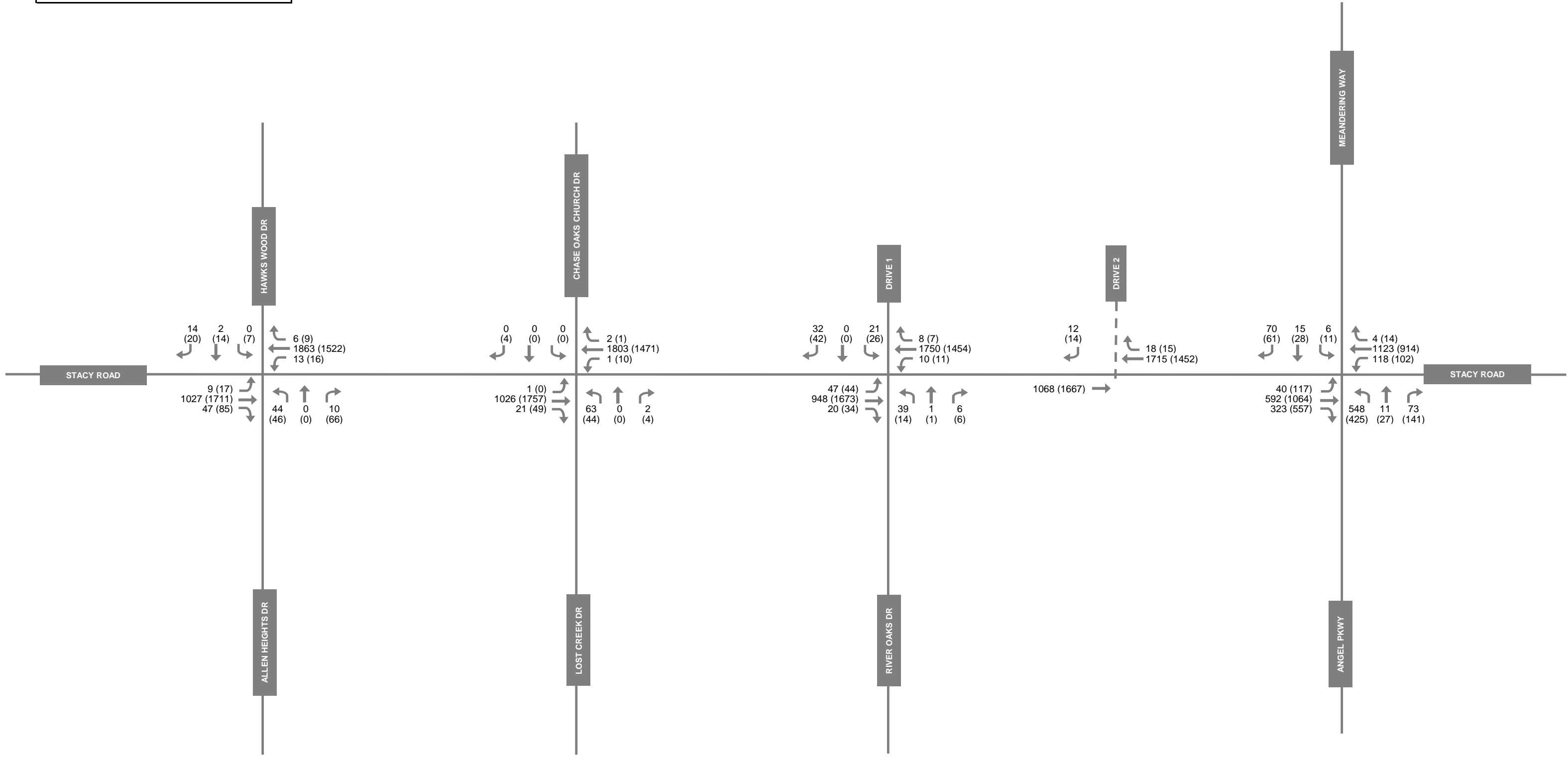
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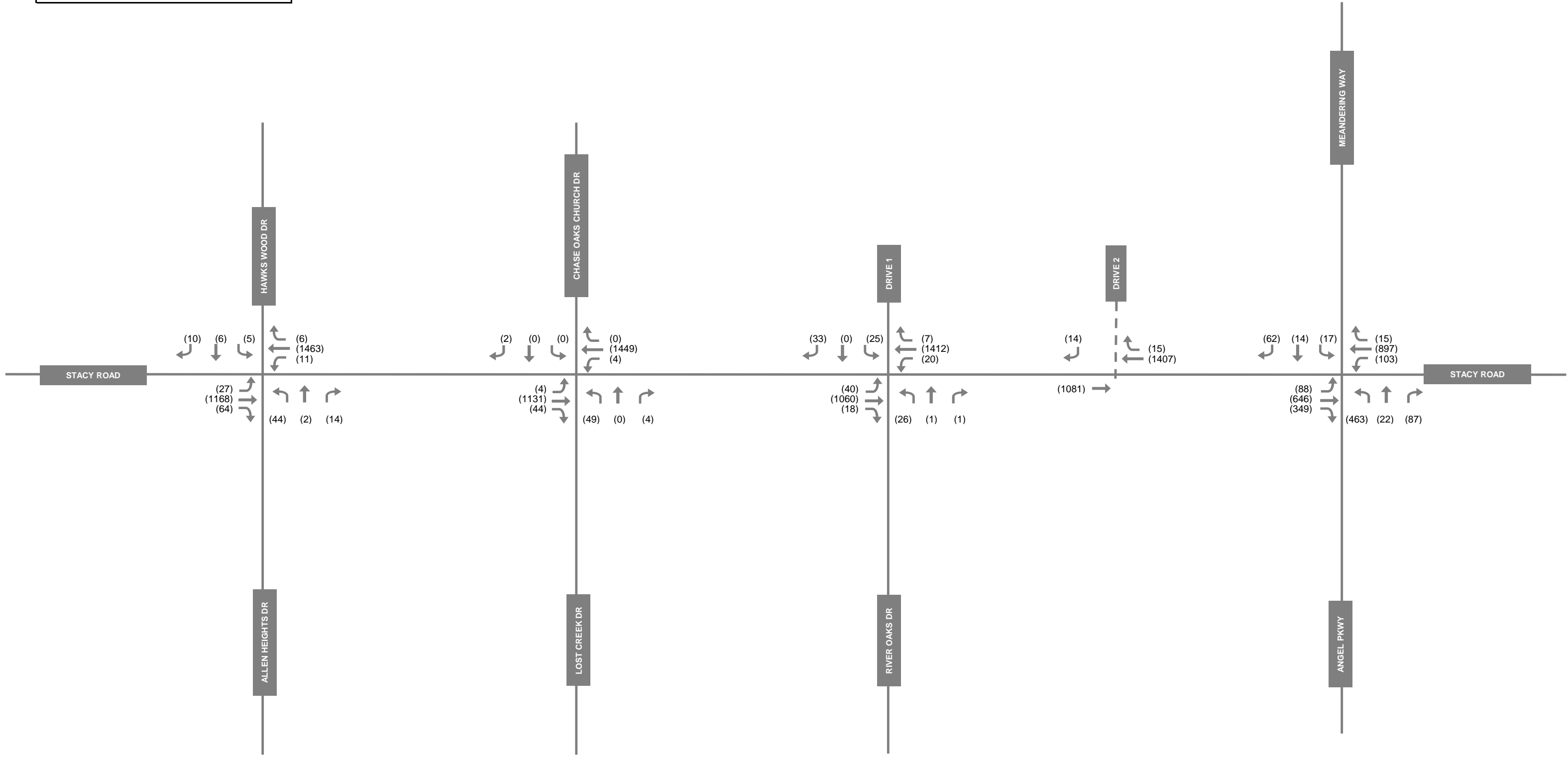
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LEGEND:
 (Y) = Saturday Peak Hour Turning Movements
 Volumes may not sum from point to point due to rounding and presence of smaller driveways not included in analysis.



TRAFFIC OPERATIONS ANALYSIS

Kimley-Horn and Associates conducted a traffic operations analysis to determine potential capacity deficiencies in the 2024, 2026, and 2031 study years at the study intersections. The acknowledged source for determining overall capacity is the current edition of the *Highway Capacity Manual*.

INTERSECTION ANALYSIS METHODOLOGY

Capacity analysis results are listed in terms of LOS. LOS is a qualitative term describing operating conditions a driver will experience while traveling on a specific street or highway during a specific time interval. It ranges from A (very little delay) to F (longer delays and congestion). LOS D was considered the minimum acceptable LOS for design and evaluation purposes. **Table 5** shows the definition of level of service for signalized and unsignalized intersections.

Table 5: Level of Service Definitions

Level of Service	Signalized Intersection Average Total Delay (sec/veh)	Unsignalized Intersection Average Total Delay (sec/veh)
A	≤10	≤10
B	>10 and ≤20	>10 and ≤15
C	>20 and ≤35	>15 and ≤25
D	>35 and ≤55	>25 and ≤35
E	>55 and ≤80	>35 and ≤50
F	>80	>50

Definitions provided from the Highway Capacity Manual, Special Report 209, Transportation Research Board, 2010.

Study area intersections were analyzed based on average total delay analysis for unsignalized intersections. *Synchro 12TM* was used to calculate LOS at the study area intersections for the following scenarios:

- Existing (2024) – **Exhibits 3 & 4**
- Buildout (2026) Background – **Exhibits 8 & 9**
- Buildout (2026) – **Exhibits 10 & 11**
- Horizon (2031) Background – **Exhibits 12 & 13**
- Horizon (2031) – **Exhibits 14 & 15**

The *Synchro* output sheets for analyses completed are provided in the **Appendix**.

INTERSECTION ANALYSIS RESULTS

Tables 6, 7, and 8 show the intersection operational results for the five scenarios analyzed during the weekday AM, PM, and Saturday peak hours, respectively. They also include the 95th percentile queue lengths for each controlled approach.

Table 6: Traffic Operational Results – AM Peak Hour

Intersection	Type of Control	Approach	Existing (2024)			Buildout Background (2026)			Buildout (2026)			Horizon Background (2031)			Horizon (2031)		
			AM Peak														
			Delay (s)	LOS	Queue (veh)	Delay (s)	LOS	Queue (veh)	Delay (s)	LOS	Queue (veh)	Delay (s)	LOS	Queue (veh)	Delay (s)	LOS	Queue (veh)
Stacy Rd & Allen Heights Dr	TWSC	NB	30.7	D	0.9	34.8	D	1	35.1	E	1.1	51.9	F	1.8	53	F	1.9
		SB	20.3	C	0.2	21.6	C	0.2	22.3	C	0.2	26.1	D	0.3	27	D	0.3
		EBL	14.1	B	0.1	14.9	B	0.1	15.3	C	0.1	17.8	C	0.1	18.3	C	0.1
		WBL	9.9	A	0	10.1	B	0	10.3	B	0.1	10.9	B	0.1	11.1	B	0.1
Stacy Rd & Lost Creek Dr / Chase Oaks Church Dr	TWSC	NB	33.1	D	1.2	37.7	E	1.5	41	E	1.6	59.3	F	2.5	65.2	F	2.7
		SB	0.0	A	0	0.0	A	0	0.0	A	0	0.0	A	0	0.0	A	0
		EBL	13.6	B	0	14.4	B	0	14.7	B	0	16.9	C	0	17.3	C	0
		WBL	9.7	A	0	10	A	0	10.2	B	0	10.7	B	0	10.9	B	0
Stacy Rd & River Oaks Dr / Drive 1	TWSC	NB	26.3	D	0.7	29	D	0.8	39.2	E	1.1	39.2	E	1.3	60.1	F	1.8
		SB	15.1	C	0	15.8	C	0	43.5	E	1.6	18.1	C	0.1	72.2	F	2.4
		EBL	12.9	B	0	13.6	B	0	14.9	B	0.4	15.8	C	0	17.8	C	0.5
		WBL	9.5	A	0	9.7	A	0	9.7	A	0	10.4	B	0	10.4	B	0
Stacy Rd & Drive 2	TWSC	SB						16.7	C	0.1				19.3	C	0.2	
Stacy Rd & Angel Pkwy	Signal	NB	32.3	C	4.5	33.6	C	10.2	34.2	C	10.7	38.9	D	12.9	40.9	D	13.2
		SB	13.2	B	0.2	14.6	B	1.2	15.3	B	1.3	18.8	B	1.5	19.7	B	1.5
		EB	15.5	B	3.9	15.9	B	7.6	16	B	7.9	17.6	B	9.8	17.2	B	10.1
		WB	21.9	C	8.4	22.9	C	15.4	23.2	C	15.8	25.3	C	20.6	27	C	21.2
		Overall	21.8	C	-	22.7	C	-	23	C	-	25.5	C	-	26.6	C	-

Table 7: Traffic Operational Results – PM Peak Hour

Intersection	Type of Control	Approach	Existing (2024)			Buildout Background (2026)			Buildout (2026)			Horizon Background (2031)			Horizon (2031)		
			PM Peak														
			Delay (s)	LOS	Queue (veh)	Delay (s)	LOS	Queue (veh)	Delay (s)	LOS	Queue (veh)	Delay (s)	LOS	Queue (veh)	Delay (s)	LOS	Queue (veh)
Stacy Rd & Allen Heights Dr	TWSC	NB	33.4	D	1.4	39.7	E	1.8	41.9	E	1.9	74.2	F	3.2	78.8	F	3.4
		SB	29.4	D	0.5	33.2	D	0.6	35.4	E	0.7	46.6	E	1	50.5	F	1.1
		EBL	11.5	B	0.1	12	B	0.1	12.3	B	0.1	13.5	B	0.1	13.8	B	0.1
		WBL	12.9	B	0.1	13.6	B	0.1	14	B	0.1	15.8	C	0.1	16.3	C	0.2
Stacy Rd & Lost Creek Dr / Chase Oaks Church Dr	TWSC	NB	55.2	F	1.4	66.5	F	1.8	73.4	F	1.9	130.6	F	3.1	146.6	F	3.3
		SB	13.1	B	0	13.6	B	0	13.9	B	0	15.1	C	0	15.4	C	0
		EBL	0.0	A	0	0.0	A	0	0.0	A	0	0.0	A	0	0.0	A	0
		WBL	13.1	B	0.1	13.9	B	0.1	14.2	B	0.1	16.2	C	0.1	16.6	C	0.1
Stacy Rd & River Oaks Dr / Drive 1	TWSC	NB	34.8	D	0.4	40	E	0.5	48.4	E	0.6	57.8	F	0.9	74.9	F	1.1
		SB	15.5	C	0.1	16.3	C	0.1	34.5	D	1.5	18.3	C	0.1	50.2	F	2.2
		EBL	11.3	B	0	11.7	B	0	12.3	B	0.3	13	B	0	14	B	0.3
		WBL	12.7	B	0.1	13.3	B	0.1	13.3	B	0.1	15.4	C	0.1	15.4	C	0.1
Stacy Rd & Drive 2	TWSC	SB						14.7	B	0.1				16.5	C	0.1	
Stacy Rd & Angel Pkwy	Signal	NB	33.5	C	78.6	36.2	D	8.8	36.7	D	9.0	42.9	D	11.8	43.8	D	12.2
		SB	19.6	B	1.7	21.6	C	1.9	21.8	C	1.9	27.3	C	2.4	27.9	C	2.4
		EB	15.7	B	12.3	16	B	13.8	16.2	B	14.1	19.4	B	18.9	19.5	B	19.3
		WB	20	B	10.5	21.6	C	11.7	21.9	C	12.0	23.4	C	15.8	23.7	C	16.2
		Overall	20.1	C	-	21.3	C	-	21.5	C	-	24.8	C	-	25.2	C	-

Table 8: Traffic Operational Results – PM Peak Hour

Intersection	Type of Control	Approach	Existing (2024)			Buildout Background (2026)			Buildout (2026)			Horizon Background (2031)			Horizon (2031)		
			Saturday Peak														
			Delay (s)	LOS	Queue (veh)	Delay (s)	LOS	Queue (veh)	Delay (s)	LOS	Queue (veh)	Delay (s)	LOS	Queue (veh)	Delay (s)	LOS	Queue (veh)
Stacy Rd & Allen Heights Dr	TWSC	NB	29.2	D	0.9	32.6	D	1	33.7	D	1.1	48.5	E	1.7	51	F	1.9
		SB	23.9	C	0.2	25.7	D	0.2	27.3	D	0.2	32.7	D	0.3	34.9	D	0.3
		EBL	11.6	B	0.1	12.1	B	0.1	12.4	B	0.1	13.7	B	0.2	14.1	B	0.2
		WBL	10.4	B	0	10.7	B	0.1	10.9	B	0.1	11.7	B	0	11.9	B	0.1
Stacy Rd & Lost Creek Dr / Chase Oaks Church Dr	TWSC	NB	28.8	D	0.8	32.1	D	1	34.3	D	1.1	46.1	E	1.7	50.3	F	1.8
		SB	13.2	B	0	13.6	B	0	13.9	B	0	15.1	C	0	15.4	C	0
		EBL	11.3	B	0	11.7	B	0	12	B	0	13	B	0	13.4	B	0
		WBL	10.1	B	0	10.4	B	0	10.6	B	0	11.3	B	0	11.5	B	0
Stacy Rd & River Oaks Dr / Drive 1	TWSC	NB	26.3	D	0.4	28.7	D	0.5	35.2	E	0.6	37.4	E	0.8	48.8	E	1
		SB	13.1	B	0	13.6	B	0	31.7	D	1.3	15	B	0	44.6	E	1.8
		EBL	11.3	B	0	11.7	B	0	12.3	B	0.3	13	B	0	13.9	B	0.3
		WBL	10.0	B	0.1	10.3	B	0.1	10.3	B	0.1	11.1	B	0.1	11.1	B	0.1
Stacy Rd & Drive 2	TWSC	SB						14.3	B	0.1				16	C	0.1	
Stacy Rd & Angel Pkwy	Signal	NB	27.6	C	7.0	30	C	7.7	30.4	C	8.0	33.4	C	10.0	34.1	C	10.2
		SB	13.1	B	1.1	13.9	B	1.0	13.8	B	1.2	16.7	B	1.4	16.6	B	1.4
		EB	14.2	B	6.7	15.1	B	7.3	22.8	C	7.5	16	B	9.2	15.9	B	9.5
		WB	20.7	C	9.8	22.5	C	10.8	15.1	B	11.0	24.6	C	14.0	24.5	C	14.3
		Overall	19.3	B	-	20.9	C	-	21.1	C	-	22.8	C	-	22.9	C	-

INTERSECTION OPERATIONS

Stacy Road – The daily volumes along Stacy Road were observed to be 32,363 vehicles per day. Based on coordination with the Town of Fairview, Stacy Road is estimated to have a daily capacity of 40,000 vehicles. As such, the road is operating at approximately 81% of its estimated capacity. The Town is in coordination with TxDOT concerning Stacy Road and it is projected that it will be widened to a six-lane divided facility in the future.

Recommendation: Consider widening to six lanes when the daily volumes exceed 40,000. Based on historic growth trends, this is projected to happen in 2032.

Responsible Party: TxDOT

Stacy Road & Allen Heights Drive – The northbound approach is projected to operate below acceptable LOS starting in Buildout Background in the PM peak hour with similar LOS conditions projected in subsequent scenarios. The southbound approach is also projected to operate below acceptable LOS starting at Buildout only in the PM peak hour.

The northbound and southbound stop-controlled approaches at the intersection compete against a high traffic volume along Stacy Road. Based on the results of a peak hour signal warrant analysis, the intersection is not projected to meet signal warrants in any of the analysis scenarios. The highest projected queue length for either approach is during the Horizon PM peak scenario is 3-4 vehicles. Additionally, the queue length is projected to remain the same with or without the Temple traffic.

Recommendation: No recommendations at the intersection due to minimal queue lengths and the intersection does not warrant a traffic signal based on peak hour volumes.

Stacy Road & Lost Creek Dr / Chase Oaks Church Drive – The northbound approach currently operates below acceptable LOS in the Existing conditions during the PM peak hour and is projected to operate with similar LOS in subsequent scenarios.

The northbound and southbound stop-controlled approaches at the intersection compete against a high traffic volume along Stacy Road. Based on the results of a peak hour signal warrant analysis, the intersection is not projected to meet signal warrants in any of the analysis scenarios. The highest projected queue length for either approach during the Horizon PM peak scenario is 3-4 vehicles. Additionally, the queue length is projected to remain the same with or without the Temple traffic.

Recommendation: No recommendations at the intersection due to minimal queue lengths and the intersection does not warrant a traffic signal based on peak hour volumes.

Stacy Road & River Oaks Dr / LDS Church Drive – The northbound approach is projected to operate below acceptable LOS starting at Buildout Background conditions during the PM peak hour and is projected to operate with similar LOS in subsequent scenarios.

The northbound and southbound stop-controlled approaches at the intersection compete against a high traffic volume along Stacy Road. Based on the results of a peak hour signal warrant analysis, the intersection is not projected to meet signal warrants in any of the analysis scenarios. The highest projected queue length for either approach during the Horizon PM peak scenario is 2-3 vehicles. Additionally, the queue length is only projected to increase by 1 vehicle with the Temple traffic.

Recommendation: No recommendations at the intersection due to minimal queue lengths and the intersection does not warrant a traffic signal based on peak hour volumes.

SITE DRIVEWAY AUXILIARY LANE ANALYSIS

LEFT-TURN DECELERATION LANES

Drive 1 and Drive 2 were not analyzed for left-turns as an eastbound left-turn deceleration lane is already provided at Drive 1. Additionally, Drive 2 is projected to operate as a right-in/right-out only access.

RIGHT-TURN DECELERATION LANES

TxDOT's Access Management Manual provides reference criteria for auxiliary lanes for the intersections within the Temple development. According to Table 2.3, *Auxiliary Lane Thresholds*, a right-turn deceleration lane is warranted on a roadway with a posted speed of 50 mph or greater if the projected right-turn volume into a driveway is projected to be greater than 50 vehicles per hour. Stacy Road has a posted speed limit of 50 mph.

The study area intersections were analyzed for auxiliary lanes based on projected increased traffic volumes in future scenarios and a right-turn deceleration lane is not warranted at Drive 1 or Drive 2, along Stacy Road. The projected right-turning volume is not expected to exceed more than 18 vehicles per hour in the AM peak at either driveway.

SIGHT DISTANCE

Sight distance requirements are outlined in the American Association of State Highway and Transportation Officials (AASHTO) *Green Book*. For roadways with a posted speed of 50 mph, like Stacy

Road, an intersection sight distance of 555 feet is required for a left-turn from stop and 480 feet is required for a right-turn from stop.

Based on field observations and the proposed site plan, all proposed driveways (Drives 1 and 2) are projected to have adequate intersection sight distance for both left and right-turns from stop. All driveways should be designed to provide adequate sight distance (i.e. clear sight with no obstructing object, signs, landscaping, etc.).

ACCESS SPACING

Access spacing was evaluated based on the TxDOT *Access Management Manual, Table 2-2*. For a roadway with a posted speed of 50 mph, like Stacy Road, the minimum connection spacing is 425 feet.

Based on the site plan, Drive 2 is projected to be located 320 feet east of Drive 1 and 200 feet west of a proposed driveway for the Church of Christ property directly east of the Temple. Based on discussions with the project team for the adjacent Church of Christ property, they are proposing to have a separate driveway for their property and not provide cross access between the two properties.

Based on coordination with the Town of Fairview, the Town and its citizens are concerned about allowing Temple traffic to cut through the Church of Christ property via Meandering Way and shared cross access. Therefore, it is requested that an access spacing variance be granted to allow for Drive 2 to be built as a right-in/right-out access at the currently proposed location.

SIGNAL WARRANT ANALYSIS

A traffic signal can only be warranted through an analysis process based on comparison of the major and minor street traffic volumes and satisfying conditions set forth in TXMUTCD. Traffic signal warrant analyses were completed for the following intersections:

- Stacy Road & Allen Heights Drive
- Stacy Road & Lost Creek Drive / Chase Oaks Church Drive
- Stacy Road & River Oaks Drive / LDS Church Drive

Based on the projected volumes through Buildout (2026) and Horizon (2031), no signals are warranted at the study intersections. Signal warrant analysis graphs are provided in the **Appendix**.

CRASH HISTORY

Crashes from the last five years (2019-2023) were viewed from TxDOT's Crash Records Information System (CRIS). The study area had a total of 50 crashes. Only 1 of the 50 crashes was a suspected serious injury crash and no fatalities. The intersection of Stacy Road & Angel Parkway had 33 total crashes over the last five years with 1 being suspected serious injury crashes and no fatalities. It is projected that crashes will be reduced with the updated signal timing recently implemented at the intersection by the City of Allen. The northbound and southbound approaches now operate with split phasing and protected left turns are also implemented along Stacy Road, reducing left-turning conflicts.

Additionally, most crashes at the other median openings were reported as either minor or no-injury crashes. It is projected that with the widening of Stacy Road in the future, additional gaps in traffic will be available for northbound and southbound turning vehicles.

RECOMMENDATIONS

Based upon the findings of the TIA carried out for the area, the following recommendations have been made.

INTERSECTION OPERATIONS

Stacy Road – The daily volumes along Stacy Road were observed to be 32,363 vehicles per day. Based on coordination with the Town of Fairview, Stacy Road is estimated to have a daily capacity of 40,000 vehicles. As such, the road is operating at approximately 81% of its estimated capacity. The Town is in coordination with TxDOT concerning Stacy Road and it is projected that it will be widened to a six-lane divided facility in the future.

Recommendation: Consider widening to six lanes when the daily volumes exceed 40,000. Based on historic growth trends, this is projected to happen in 2032.

Responsible Party: TxDOT

Stacy Road & Allen Heights Drive – The northbound approach is projected to operate below acceptable LOS starting in Buildout Background in the PM peak hour with similar LOS conditions projected in subsequent scenarios. The southbound approach is also projected to operate below acceptable LOS starting at Buildout only in the PM peak hour.

The northbound and southbound stop-controlled approaches at the intersection compete against a high traffic volume along Stacy Road. Based on the results of a peak hour signal warrant analysis, the intersection is not projected to meet signal warrants in any of the analysis scenarios. The highest projected queue length for either approach is during the Horizon PM peak scenario is 3-4 vehicles. Additionally, the queue length is projected to remain the same with or without the Temple traffic.

Recommendation: No recommendations at the intersection due to minimal queue lengths and the intersection does not warrant a traffic signal based on peak hour volumes.

Stacy Road & Lost Creek Dr / Chase Oaks Church Drive – The northbound approach currently operates below acceptable LOS in the Existing conditions during the PM peak hour, and is projected to operate with similar LOS in subsequent scenarios.

The northbound and southbound stop-controlled approaches at the intersection compete against a high traffic volume along Stacy Road. Based on the results of a peak hour signal warrant analysis, the intersection is not projected to meet signal warrants in any of the analysis scenarios. The highest projected queue length for either approach during the Horizon PM peak scenario is 3-4 vehicles. Additionally, the queue length is projected to remain the same with or without the Temple traffic.

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The northbound and southbound stop-controlled approaches at the intersection compete against a high traffic volume along Stacy Road. Based on the results of a peak hour signal warrant analysis, the

intersection is not projected to meet signal warrants in any of the analysis scenarios. The highest projected queue length for either approach during the Horizon PM peak scenario is 2-3 vehicles. Additionally, the queue length is only projected to increase by 1 vehicle with the Temple traffic.

Recommendation: No recommendations at the intersection due to minimal queue lengths and the intersection does not warrant a traffic signal based on peak hour volumes.

SITE DRIVEWAY AUXILIARY LANE ANALYSIS

A right-turn deceleration lane is warranted on a roadway with a posted speed of 50 mph or greater if the projected right-turn volume into a driveway is projected to be greater than 50 vehicles per hour. Based on the auxiliary lane analysis section of this report, no right-turn lanes were warranted at Drive 1 or Drive 2.

Drive 1 and Drive 2 were not analyzed for left-turns as an eastbound left-turn deceleration lane is already provided at Drive 1. Additionally, Drive 2 is projected to operate as a right-in/right-out only access.

SIGHT DISTANCE

Based on field observations and the proposed site plan, all proposed driveways (Drives 1-2) are projected to have adequate sight distance. All driveways should be designed to provide adequate sight distance (i.e. clear sight with no obstructing object, signs, landscaping, etc.).

ACCESS SPACING

According to TxDOT's *Access Management Manual*, a minimum connection spacing of 425 feet is required along roadways with a posted speed greater than 50 mph.

Based on the site plan, Drive 2 is projected to be located 320 feet east of Drive 1 and 200 feet west of a proposed driveway for the Church of Christ property directly east of the Temple. Based on discussions with the project team for the adjacent Church of Christ property, they are proposing to have a separate driveway for their property and not provide cross access between the two properties.

Based on coordination with the Town of Fairview, the Town and its citizens are concerned about allowing Temple traffic to cut through the Church of Christ property via Meandering Way and shared cross access. Therefore, it is recommended that an access spacing variance be granted to allow for Drive 2 to be built as a right-in/right-out access at the currently proposed location.

SIGNAL WARRANT ANALYSIS

A traffic signal can only be warranted through an analysis process based on comparison of the major and minor street traffic volumes and satisfying conditions set forth in the TXMUTCD. Based on the projected volumes through Buildout (2026) and Horizon (2031), no traffic signals are warranted at the study intersections.

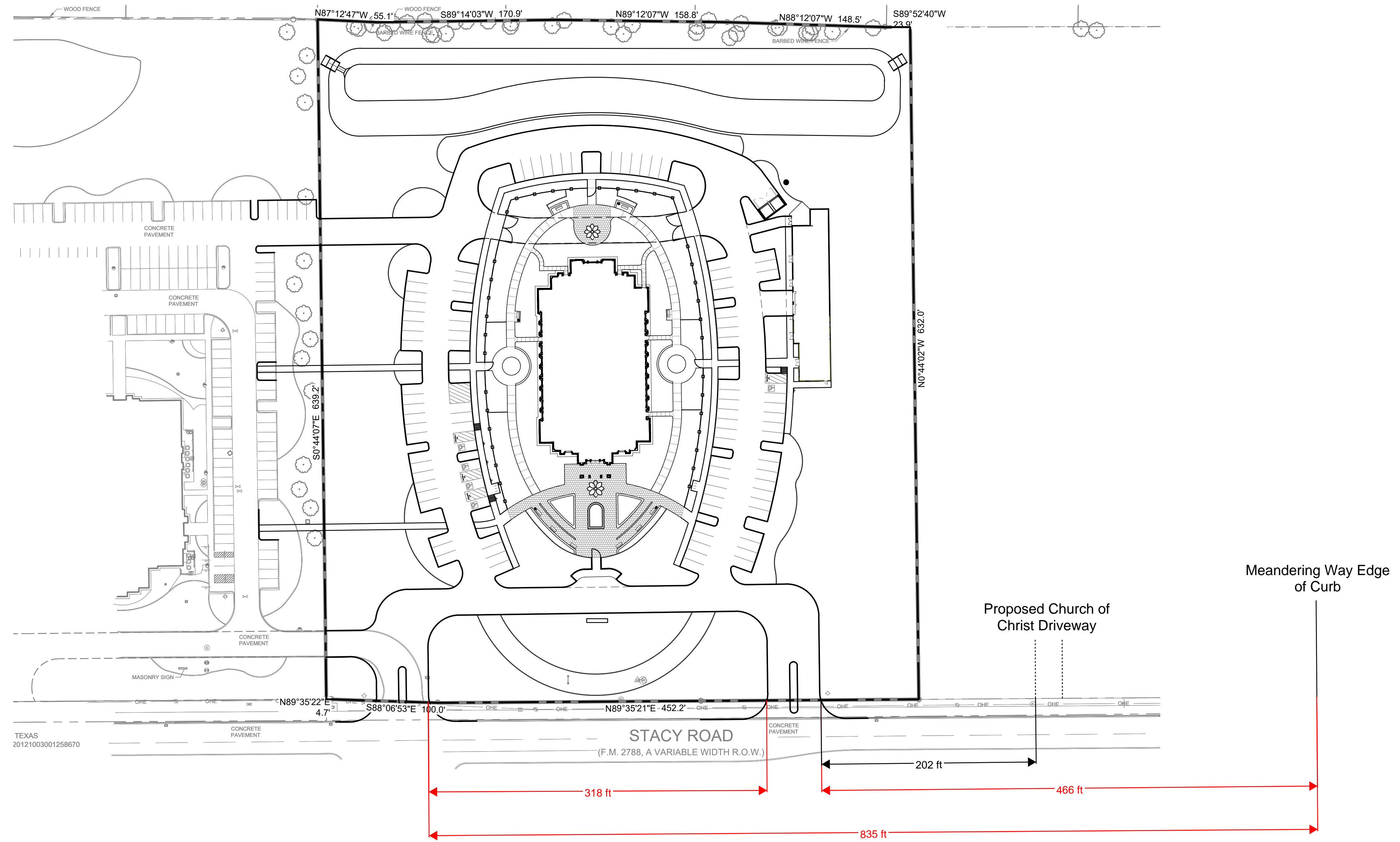
CRASH HISTORY

Crashes from the last five years (2019-2023) were viewed from TxDOT's Crash Records Information System (CRIS). The study area had a total of 50 crashes. The intersection of Stacy Road & Angel Parkway had 33 total crashes over the last five years with only 1 being suspected serious injury crashes and no fatalities.

APPENDIX

1. Site Plan
2. Traffic Counts
3. Existing Synchro Analysis
4. Buildout Synchro Analysis
5. Horizon Synchro Analysis
6. Signal Warrant Analysis

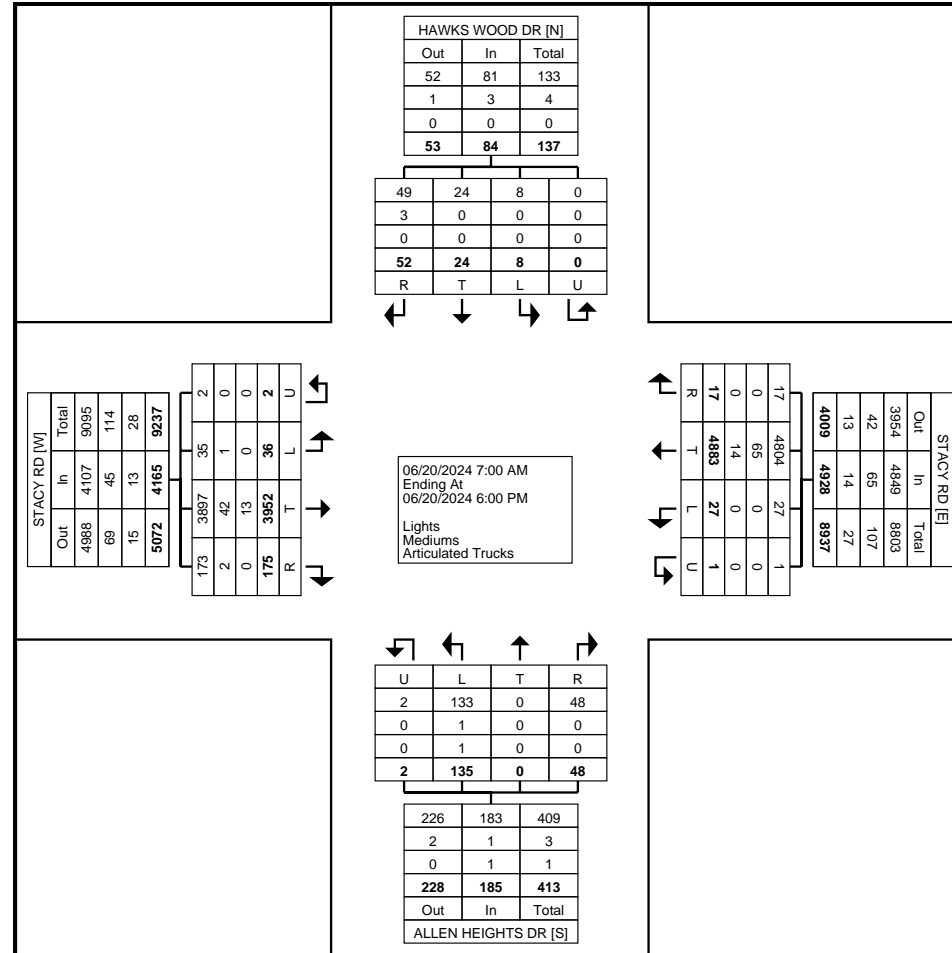
SITE PLAN



TRAFFIC COUNTS

Turning Movement Data

Start Time	HAWKS WOOD DR Southbound					STACY RD Westbound					ALLEN HEIGHTS DR Northbound					STACY RD Eastbound					Int. Total
	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	
7:00 AM	0	0	4	0	4	2	266	0	0	268	7	0	2	0	9	1	113	2	0	116	397
7:15 AM	0	0	2	0	2	0	312	1	0	313	6	0	0	0	6	1	110	4	0	115	436
7:30 AM	0	0	2	0	2	0	313	0	0	313	10	0	4	0	14	1	162	2	0	165	494
7:45 AM	0	0	4	0	4	1	349	2	0	352	11	0	1	0	12	2	173	1	0	176	544
Hourly Total	0	0	12	0	12	3	1240	3	0	1246	34	0	7	0	41	5	558	9	0	572	1871
8:00 AM	0	1	3	0	4	1	345	1	0	347	4	0	1	0	5	1	186	6	1	194	550
8:15 AM	0	0	0	0	0	2	317	0	0	319	11	0	0	0	11	1	199	8	1	209	539
8:30 AM	0	0	1	0	1	3	411	3	0	417	6	0	1	0	7	0	184	10	0	194	619
8:45 AM	0	1	7	0	8	1	356	1	1	359	14	0	3	0	17	3	201	13	0	217	601
Hourly Total	0	2	11	0	13	7	1429	5	1	1442	35	0	5	0	40	5	770	37	2	814	2309
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hourly Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	3	4	0	7	3	228	1	0	232	5	0	3	0	8	3	308	16	0	327	574
4:15 PM	0	2	4	0	6	1	240	0	0	241	8	0	5	0	13	1	325	17	0	343	603
4:30 PM	1	4	4	0	9	2	281	1	0	284	10	0	6	0	16	3	322	14	0	339	648
4:45 PM	1	2	1	0	4	1	291	0	0	292	8	0	2	1	11	5	339	15	0	359	666
Hourly Total	2	11	13	0	26	7	1040	2	0	1049	31	0	16	1	48	12	1294	62	0	1368	2491
5:00 PM	3	3	6	0	12	4	293	2	0	299	8	0	4	0	12	3	324	20	0	347	670
5:15 PM	1	5	2	0	8	2	287	0	0	289	7	0	6	1	14	1	341	18	0	360	671
5:30 PM	0	2	5	0	7	0	294	2	0	296	7	0	2	0	9	5	341	11	0	357	669
5:45 PM	2	1	3	0	6	4	300	3	0	307	13	0	8	0	21	5	324	18	0	347	681
Hourly Total	6	11	16	0	33	10	1174	7	0	1191	35	0	20	1	56	14	1330	67	0	1411	2691
Grand Total	8	24	52	0	84	27	4883	17	1	4928	135	0	48	2	185	36	3952	175	2	4165	9362
Approach %	9.5	28.6	61.9	0.0	-	0.5	99.1	0.3	0.0	-	73.0	0.0	25.9	1.1	-	0.9	94.9	4.2	0.0	-	-
Total %	0.1	0.3	0.6	0.0	0.9	0.3	52.2	0.2	0.0	52.6	1.4	0.0	0.5	0.0	2.0	0.4	42.2	1.9	0.0	44.5	-
Lights	8	24	49	0	81	27	4804	17	1	4849	133	0	48	2	183	35	3897	173	2	4107	9220
% Lights	100.0	100.0	94.2	-	96.4	100.0	98.4	100.0	100.0	98.4	98.5	-	100.0	100.0	98.9	97.2	98.6	98.9	100.0	98.6	98.5
Mediums	0	0	3	0	3	0	65	0	0	65	1	0	0	0	1	1	42	2	0	45	114
% Mediums	0.0	0.0	5.8	-	3.6	0.0	1.3	0.0	0.0	1.3	0.7	-	0.0	0.0	0.5	2.8	1.1	1.1	0.0	1.1	1.2
Articulated Trucks	0	0	0	0	0	0	14	0	0	14	1	0	0	0	1	0	13	0	0	13	28
% Articulated Trucks	0.0	0.0	0.0	-	0.0	0.0	0.3	0.0	0.0	0.3	0.7	-	0.0	0.0	0.5	0.0	0.3	0.0	0.0	0.3	0.3



Turning Movement Data Plot

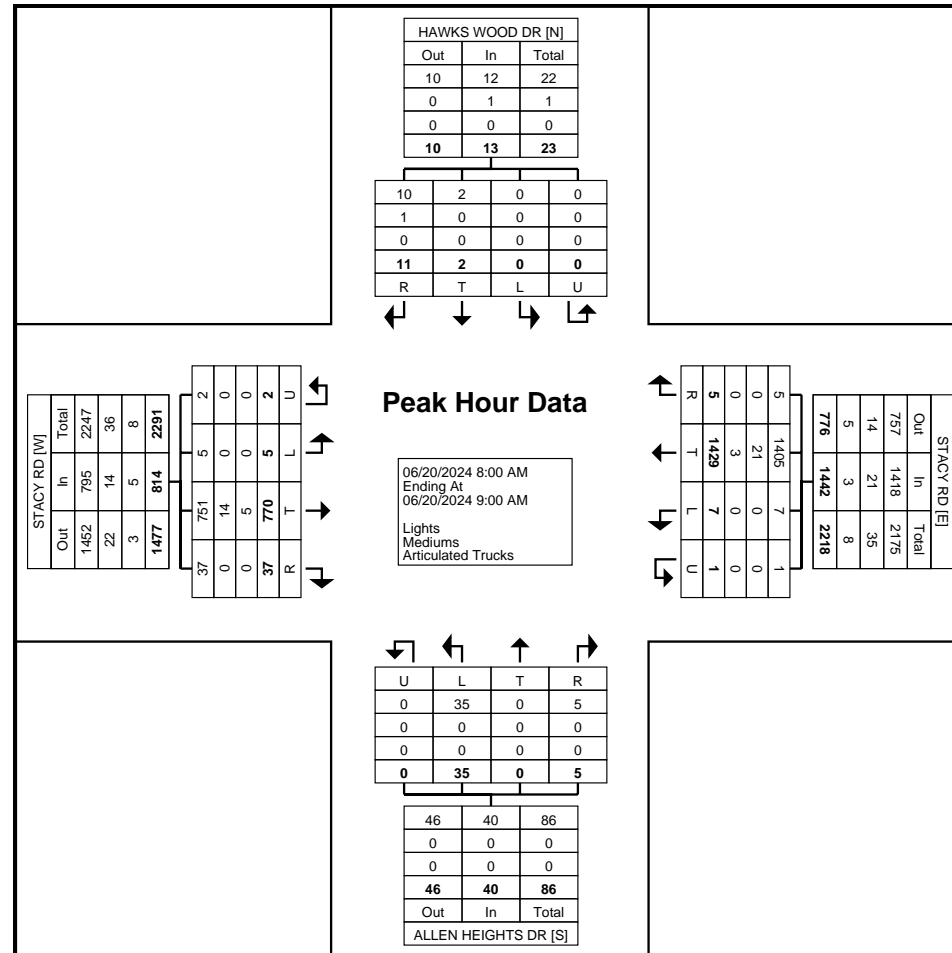
GRAM Traffic NTX Inc.
1120 W. Lovers Lane

Arlington, Texas, United States 76013
817.265.8968 connor@gramntx.com

Count Name: STACY RD @ ALLEN HEIGHTS
DR
Site Code:
Start Date: 06/20/2024
Page No: 3

Turning Movement Peak Hour Data (8:00 AM)

Start Time	HAWKS WOOD DR Southbound					STACY RD Westbound					ALLEN HEIGHTS DR Northbound					STACY RD Eastbound					Int. Total
	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	
8:00 AM	0	1	3	0	4	1	345	1	0	347	4	0	1	0	5	1	186	6	1	194	550
8:15 AM	0	0	0	0	0	2	317	0	0	319	11	0	0	0	11	1	199	8	1	209	539
8:30 AM	0	0	1	0	1	3	411	3	0	417	6	0	1	0	7	0	184	10	0	194	619
8:45 AM	0	1	7	0	8	1	356	1	1	359	14	0	3	0	17	3	201	13	0	217	601
Total	0	2	11	0	13	7	1429	5	1	1442	35	0	5	0	40	5	770	37	2	814	2309
Approach %	0.0	15.4	84.6	0.0	-	0.5	99.1	0.3	0.1	-	87.5	0.0	12.5	0.0	-	0.6	94.6	4.5	0.2	-	-
Total %	0.0	0.1	0.5	0.0	0.6	0.3	61.9	0.2	0.0	62.5	1.5	0.0	0.2	0.0	1.7	0.2	33.3	1.6	0.1	35.3	-
PHF	0.000	0.500	0.393	0.000	0.406	0.583	0.869	0.417	0.250	0.865	0.625	0.000	0.417	0.000	0.588	0.417	0.958	0.712	0.500	0.938	0.933
Lights	0	2	10	0	12	7	1405	5	1	1418	35	0	5	0	40	5	751	37	2	795	2265
% Lights	-	100.0	90.9	-	92.3	100.0	98.3	100.0	100.0	98.3	100.0	-	100.0	-	100.0	100.0	97.5	100.0	100.0	97.7	98.1
Mediums	0	0	1	0	1	0	21	0	0	21	0	0	0	0	0	0	14	0	0	14	36
% Mediums	-	0.0	9.1	-	7.7	0.0	1.5	0.0	0.0	1.5	0.0	-	0.0	-	0.0	0.0	1.8	0.0	0.0	1.7	1.6
Articulated Trucks	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	5	0	0	5	8
% Articulated Trucks	-	0.0	0.0	-	0.0	0.0	0.2	0.0	0.0	0.2	0.0	-	0.0	-	0.0	0.0	0.6	0.0	0.0	0.6	0.3



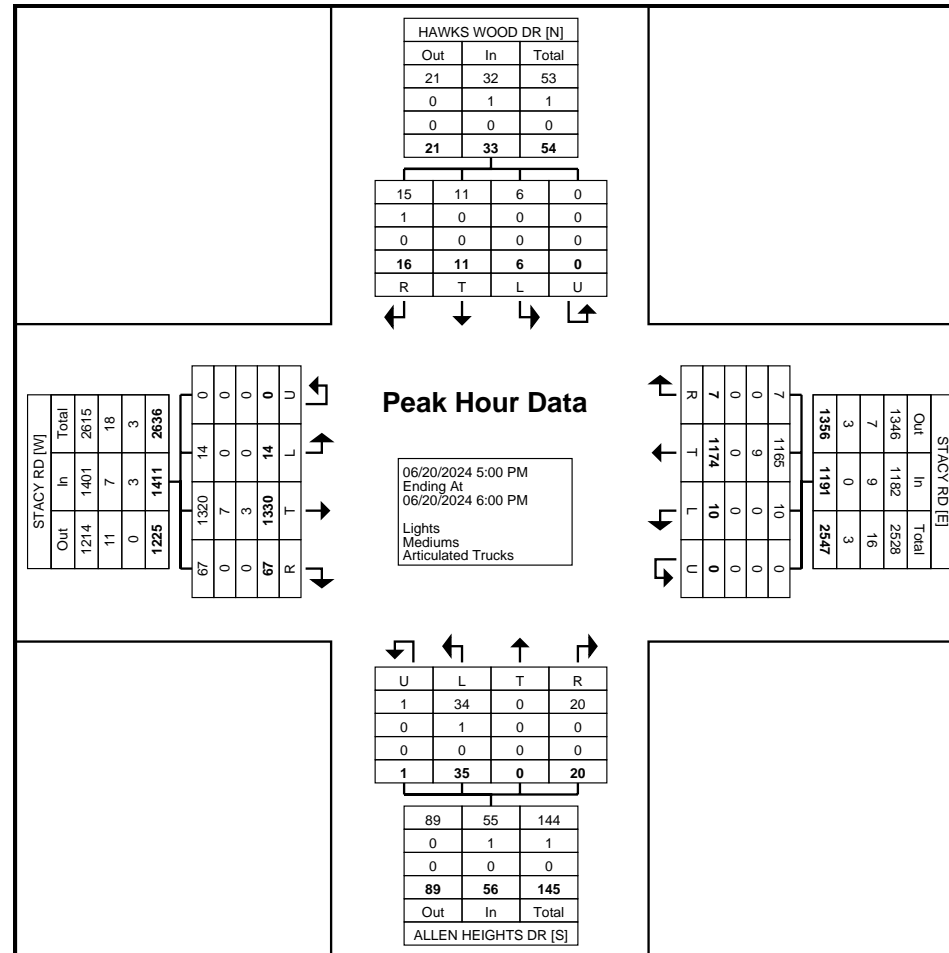
Turning Movement Peak Hour Data Plot (8:00 AM)

GRAM Traffic NTX Inc.
 1120 W. Lovers Lane
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 817.265.8968 connor@gramntx.com

Count Name: STACY RD @ ALLEN HEIGHTS
 DR
 Site Code:
 Start Date: 06/20/2024
 Page No: 5

Turning Movement Peak Hour Data (5:00 PM)

Start Time	HAWKS WOOD DR Southbound					STACY RD Westbound					ALLEN HEIGHTS DR Northbound					STACY RD Eastbound					Int. Total
	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	
5:00 PM	3	3	6	0	12	4	293	2	0	299	8	0	4	0	12	3	324	20	0	347	670
5:15 PM	1	5	2	0	8	2	287	0	0	289	7	0	6	1	14	1	341	18	0	360	671
5:30 PM	0	2	5	0	7	0	294	2	0	296	7	0	2	0	9	5	341	11	0	357	669
5:45 PM	2	1	3	0	6	4	300	3	0	307	13	0	8	0	21	5	324	18	0	347	681
Total	6	11	16	0	33	10	1174	7	0	1191	35	0	20	1	56	14	1330	67	0	1411	2691
Approach %	18.2	33.3	48.5	0.0	-	0.8	98.6	0.6	0.0	-	62.5	0.0	35.7	1.8	-	1.0	94.3	4.7	0.0	-	-
Total %	0.2	0.4	0.6	0.0	1.2	0.4	43.6	0.3	0.0	44.3	1.3	0.0	0.7	0.0	2.1	0.5	49.4	2.5	0.0	52.4	-
PHF	0.500	0.550	0.667	0.000	0.688	0.625	0.978	0.583	0.000	0.970	0.673	0.000	0.625	0.250	0.667	0.700	0.975	0.838	0.000	0.980	0.988
Lights	6	11	15	0	32	10	1165	7	0	1182	34	0	20	1	55	14	1320	67	0	1401	2670
% Lights	100.0	100.0	93.8	-	97.0	100.0	99.2	100.0	-	99.2	97.1	-	100.0	100.0	98.2	100.0	99.2	100.0	-	99.3	99.2
Mediums	0	0	1	0	1	0	9	0	0	9	1	0	0	0	1	0	7	0	0	7	18
% Mediums	0.0	0.0	6.3	-	3.0	0.0	0.8	0.0	-	0.8	2.9	-	0.0	0.0	1.8	0.0	0.5	0.0	-	0.5	0.7
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	3
% Articulated Trucks	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.2	0.0	-	0.2	0.1



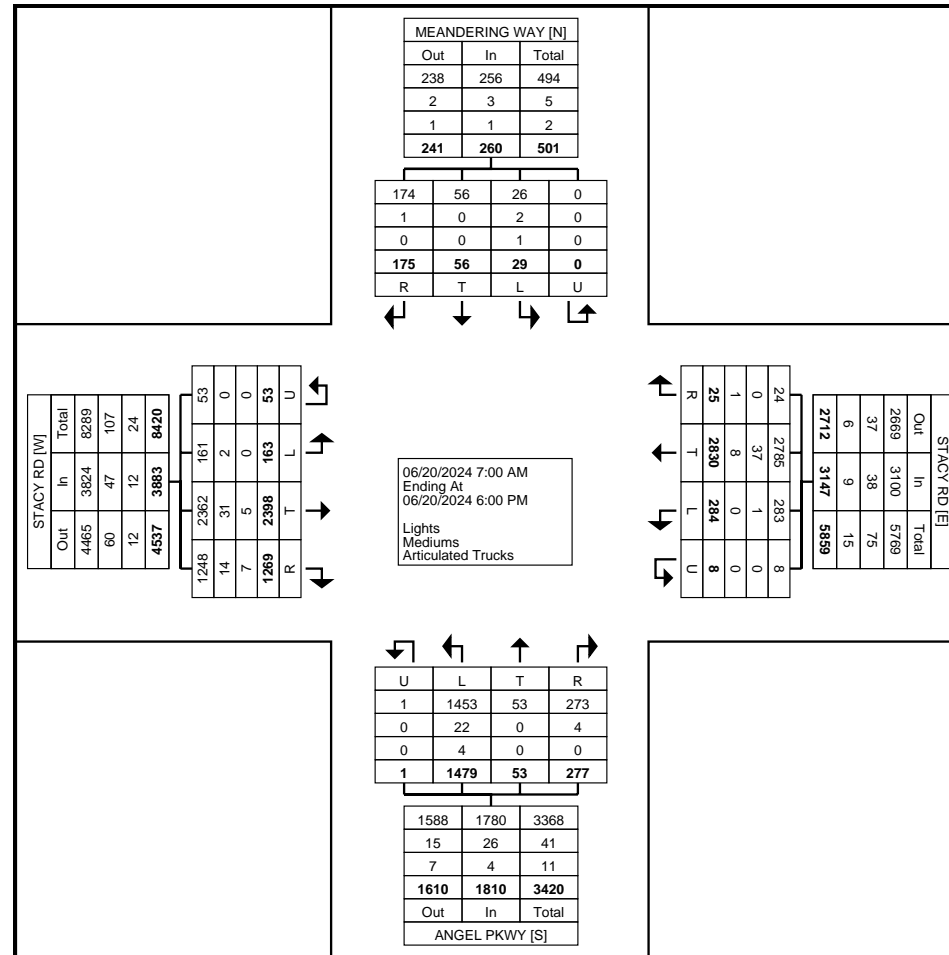
Turning Movement Peak Hour Data Plot (5:00 PM)

Turning Movement Data

Start Time	MEANDERING WAY Southbound					STACY RD Westbound					ANGEL PKWY Northbound					STACY RD Eastbound					Int. Total
	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	
7:00 AM	0	1	8	0	9	8	173	3	0	184	68	1	7	0	76	1	76	36	0	113	382
7:15 AM	2	1	10	0	13	14	163	0	0	177	95	1	5	0	101	3	68	37	1	109	400
7:30 AM	0	2	12	0	14	11	149	0	0	160	112	1	5	0	118	6	89	64	2	161	453
7:45 AM	1	4	7	0	12	8	174	0	3	185	106	1	9	0	116	6	107	58	1	172	485
Hourly Total	3	8	37	0	48	41	659	3	3	706	381	4	26	0	411	16	340	195	4	555	1720
8:00 AM	1	4	12	0	17	23	204	0	1	228	103	2	17	0	122	5	106	66	2	179	546
8:15 AM	1	2	9	0	12	17	210	1	0	228	95	3	8	0	106	7	108	63	1	179	525
8:30 AM	2	4	15	0	21	19	232	0	0	251	121	1	10	0	132	4	115	63	0	182	586
8:45 AM	1	2	16	0	19	32	223	2	0	257	101	3	22	0	126	8	127	53	2	190	592
Hourly Total	5	12	52	0	69	91	869	3	1	964	420	9	57	0	486	24	456	245	5	730	2249
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hourly Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	3	4	7	0	14	23	135	3	0	161	70	5	17	0	92	12	199	80	6	297	564
4:15 PM	2	4	8	0	14	20	132	2	0	154	87	5	25	0	117	16	182	100	7	305	590
4:30 PM	1	2	8	0	11	23	186	2	0	211	90	3	37	0	130	16	186	119	4	325	677
4:45 PM	3	6	14	0	23	20	185	2	1	208	94	7	20	0	121	16	216	108	5	345	697
Hourly Total	9	16	37	0	62	86	638	9	1	734	341	20	99	0	460	60	783	407	22	1272	2528
5:00 PM	3	4	13	0	20	22	165	4	0	191	81	3	29	0	113	19	202	102	8	331	655
5:15 PM	2	10	11	0	23	13	182	3	2	200	65	8	26	0	99	18	231	104	4	357	679
5:30 PM	3	3	15	0	21	15	153	1	1	170	95	6	16	0	117	13	193	102	5	313	621
5:45 PM	4	3	10	0	17	16	164	2	0	182	96	3	24	1	124	13	193	114	5	325	648
Hourly Total	12	20	49	0	81	66	664	10	3	743	337	20	95	1	453	63	819	422	22	1326	2603
Grand Total	29	56	175	0	260	284	2830	25	8	3147	1479	53	277	1	1810	163	2398	1269	53	3883	9100
Approach %	11.2	21.5	67.3	0.0	-	9.0	89.9	0.8	0.3	-	81.7	2.9	15.3	0.1	-	4.2	61.8	32.7	1.4	-	-
Total %	0.3	0.6	1.9	0.0	2.9	3.1	31.1	0.3	0.1	34.6	16.3	0.6	3.0	0.0	19.9	1.8	26.4	13.9	0.6	42.7	-
Lights	26	56	174	0	256	283	2785	24	8	3100	1453	53	273	1	1780	161	2362	1248	53	3824	8960
% Lights	89.7	100.0	99.4	-	98.5	99.6	98.4	96.0	100.0	98.5	98.2	100.0	98.6	100.0	98.3	98.8	98.5	98.3	100.0	98.5	98.5
Mediums	2	0	1	0	3	1	37	0	0	38	22	0	4	0	26	2	31	14	0	47	114
% Mediums	6.9	0.0	0.6	-	1.2	0.4	1.3	0.0	0.0	1.2	1.5	0.0	1.4	0.0	1.4	1.2	1.3	1.1	0.0	1.2	1.3
Articulated Trucks	1	0	0	0	1	0	8	1	0	9	4	0	0	0	4	0	5	7	0	12	26
% Articulated Trucks	3.4	0.0	0.0	-	0.4	0.0	0.3	4.0	0.0	0.3	0.3	0.0	0.0	0.0	0.2	0.0	0.2	0.6	0.0	0.3	0.3

GRAM Traffic NTX Inc.
 1120 W. Lovers Lane
 Arlington, Texas, United States 76013
 817.265.8968 connor@gramntx.com

Count Name: STACY RD @ ANGEL PKWY
 Site Code:
 Start Date: 06/20/2024
 Page No: 2



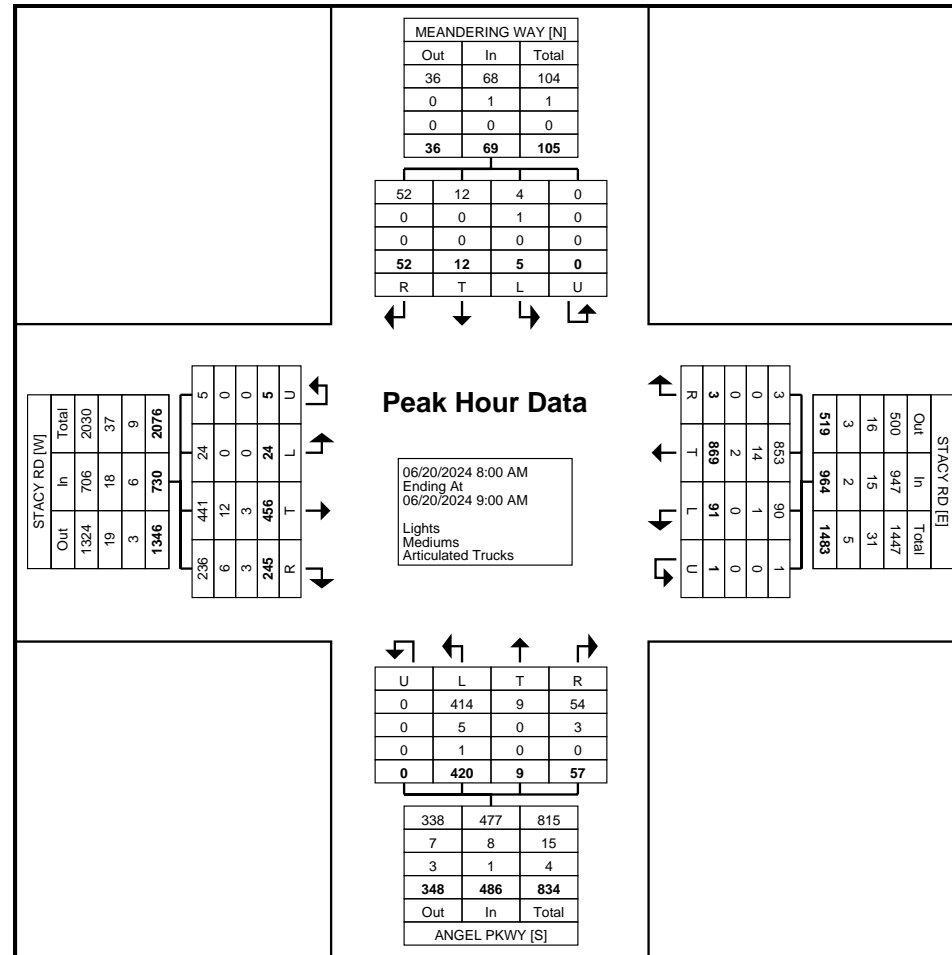
Turning Movement Data Plot

GRAM Traffic NTX Inc.
 1120 W. Lovers Lane
 Arlington, Texas, United States 76013
 817.265.8968 connor@gramntx.com

Count Name: STACY RD @ ANGEL PKWY
 Site Code:
 Start Date: 06/20/2024
 Page No: 3

Turning Movement Peak Hour Data (8:00 AM)

Start Time	MEANDERING WAY Southbound					STACY RD Westbound					ANGEL PKWY Northbound					STACY RD Eastbound					Int. Total
	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	
8:00 AM	1	4	12	0	17	23	204	0	1	228	103	2	17	0	122	5	106	66	2	179	546
8:15 AM	1	2	9	0	12	17	210	1	0	228	95	3	8	0	106	7	108	63	1	179	525
8:30 AM	2	4	15	0	21	19	232	0	0	251	121	1	10	0	132	4	115	63	0	182	586
8:45 AM	1	2	16	0	19	32	223	2	0	257	101	3	22	0	126	8	127	53	2	190	592
Total	5	12	52	0	69	91	869	3	1	964	420	9	57	0	486	24	456	245	5	730	2249
Approach %	7.2	17.4	75.4	0.0	-	9.4	90.1	0.3	0.1	-	86.4	1.9	11.7	0.0	-	3.3	62.5	33.6	0.7	-	-
Total %	0.2	0.5	2.3	0.0	3.1	4.0	38.6	0.1	0.0	42.9	18.7	0.4	2.5	0.0	21.6	1.1	20.3	10.9	0.2	32.5	-
PHF	0.625	0.750	0.813	0.000	0.821	0.711	0.936	0.375	0.250	0.938	0.868	0.750	0.648	0.000	0.920	0.750	0.898	0.928	0.625	0.961	0.950
Lights	4	12	52	0	68	90	853	3	1	947	414	9	54	0	477	24	441	236	5	706	2198
% Lights	80.0	100.0	100.0	-	98.6	98.9	98.2	100.0	100.0	98.2	98.6	100.0	94.7	-	98.1	100.0	96.7	96.3	100.0	96.7	97.7
Mediums	1	0	0	0	1	1	14	0	0	15	5	0	3	0	8	0	12	6	0	18	42
% Mediums	20.0	0.0	0.0	-	1.4	1.1	1.6	0.0	0.0	1.6	1.2	0.0	5.3	-	1.6	0.0	2.6	2.4	0.0	2.5	1.9
Articulated Trucks	0	0	0	0	0	0	2	0	0	2	1	0	0	0	1	0	3	3	0	6	9
% Articulated Trucks	0.0	0.0	0.0	-	0.0	0.0	0.2	0.0	0.0	0.2	0.2	0.0	0.0	-	0.2	0.0	0.7	1.2	0.0	0.8	0.4



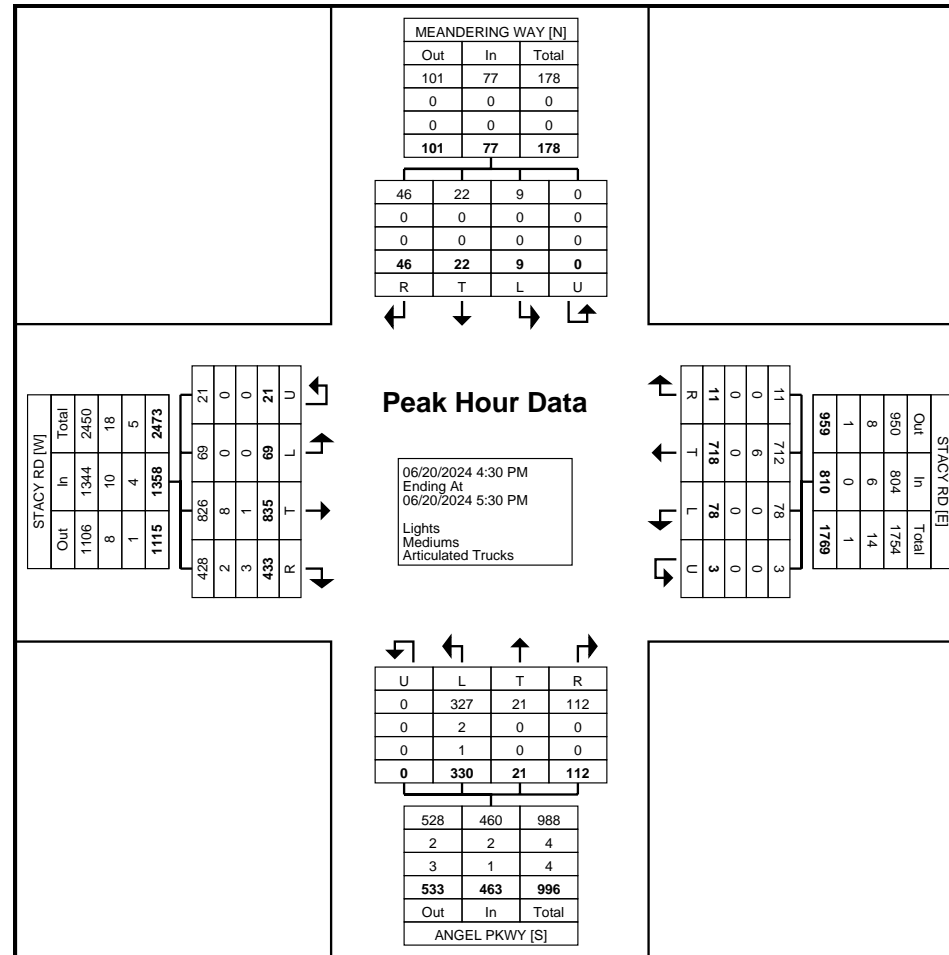
Turning Movement Peak Hour Data Plot (8:00 AM)

GRAM Traffic NTX Inc.
 1120 W. Lovers Lane
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 817.265.8968 connor@gramntx.com

Count Name: STACY RD @ ANGEL PKWY
 Site Code:
 Start Date: 06/20/2024
 Page No: 5

Turning Movement Peak Hour Data (4:30 PM)

Start Time	MEANDERING WAY Southbound					STACY RD Westbound					ANGEL PKWY Northbound					STACY RD Eastbound					Int. Total
	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	
4:30 PM	1	2	8	0	11	23	186	2	0	211	90	3	37	0	130	16	186	119	4	325	677
4:45 PM	3	6	14	0	23	20	185	2	1	208	94	7	20	0	121	16	216	108	5	345	697
5:00 PM	3	4	13	0	20	22	165	4	0	191	81	3	29	0	113	19	202	102	8	331	655
5:15 PM	2	10	11	0	23	13	182	3	2	200	65	8	26	0	99	18	231	104	4	357	679
Total	9	22	46	0	77	78	718	11	3	810	330	21	112	0	463	69	835	433	21	1358	2708
Approach %	11.7	28.6	59.7	0.0	-	9.6	88.6	1.4	0.4	-	71.3	4.5	24.2	0.0	-	5.1	61.5	31.9	1.5	-	-
Total %	0.3	0.8	1.7	0.0	2.8	2.9	26.5	0.4	0.1	29.9	12.2	0.8	4.1	0.0	17.1	2.5	30.8	16.0	0.8	50.1	-
PHF	0.750	0.550	0.821	0.000	0.837	0.848	0.965	0.688	0.375	0.960	0.878	0.656	0.757	0.000	0.890	0.908	0.904	0.910	0.656	0.951	0.971
Lights	9	22	46	0	77	78	712	11	3	804	327	21	112	0	460	69	826	428	21	1344	2685
% Lights	100.0	100.0	100.0	-	100.0	100.0	99.2	100.0	100.0	99.3	99.1	100.0	100.0	-	99.4	100.0	98.9	98.8	100.0	99.0	99.2
Mediums	0	0	0	0	0	0	6	0	0	6	2	0	0	0	2	0	8	2	0	10	18
% Mediums	0.0	0.0	0.0	-	0.0	0.0	0.8	0.0	0.0	0.7	0.6	0.0	0.0	-	0.4	0.0	1.0	0.5	0.0	0.7	0.7
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	1	3	0	4	5
% Articulated Trucks	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	-	0.2	0.0	0.1	0.7	0.0	0.3	0.2



Turning Movement Peak Hour Data Plot (4:30 PM)

GRAM Traffic NTX Inc.
1120 W. Lovers Lane

Arlington, Texas, United States 76013
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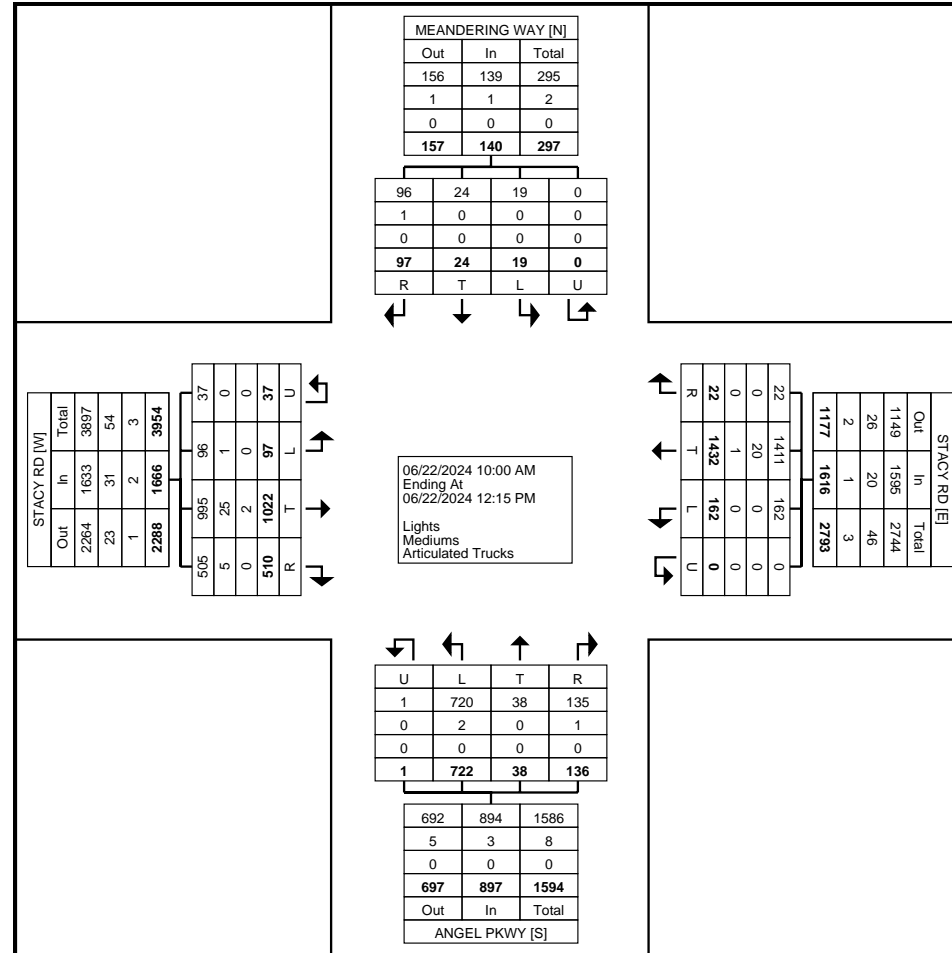
Count Name: STACY RD @ ANGEL PKWY -
SAT
Site Code:
Start Date: 06/22/2024
Page No: 1

Turning Movement Data

Start Time	MEANDERING WAY Southbound					STACY RD Westbound					ANGEL PKWY Northbound					STACY RD Eastbound					Int. Total
	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	
10:00 AM	1	1	9	0	11	18	159	4	0	181	94	4	18	1	117	11	101	49	4	165	474
10:15 AM	1	2	10	0	13	24	171	2	0	197	86	4	13	0	103	17	126	77	3	223	536
10:30 AM	9	4	14	0	27	15	209	3	0	227	102	4	17	0	123	14	115	57	7	193	570
10:45 AM	2	1	12	0	15	23	196	3	0	222	97	5	14	0	116	6	128	73	4	211	564
Hourly Total	13	8	45	0	66	80	735	12	0	827	379	17	62	1	459	48	470	256	18	792	2144
11:00 AM	2	4	12	0	18	22	146	4	0	172	84	5	27	0	116	13	147	68	4	232	538
11:15 AM	1	7	13	0	21	23	179	1	0	203	89	3	17	0	109	16	131	51	2	200	533
11:30 AM	2	3	13	0	18	16	188	4	0	208	86	5	14	0	105	12	136	66	4	218	549
11:45 AM	1	2	14	0	17	21	184	1	0	206	84	8	16	0	108	8	138	69	9	224	555
Hourly Total	6	16	52	0	74	82	697	10	0	789	343	21	74	0	438	49	552	254	19	874	2175
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	19	24	97	0	140	162	1432	22	0	1616	722	38	136	1	897	97	1022	510	37	1666	4319
Approach %	13.6	17.1	69.3	0.0	-	10.0	88.6	1.4	0.0	-	80.5	4.2	15.2	0.1	-	5.8	61.3	30.6	2.2	-	-
Total %	0.4	0.6	2.2	0.0	3.2	3.8	33.2	0.5	0.0	37.4	16.7	0.9	3.1	0.0	20.8	2.2	23.7	11.8	0.9	38.6	-
Lights	19	24	96	0	139	162	1411	22	0	1595	720	38	135	1	894	96	995	505	37	1633	4261
% Lights	100.0	100.0	99.0	-	99.3	100.0	98.5	100.0	-	98.7	99.7	100.0	99.3	100.0	99.7	99.0	97.4	99.0	100.0	98.0	98.7
Mediums	0	0	1	0	1	0	20	0	0	20	2	0	1	0	3	1	25	5	0	31	55
% Mediums	0.0	0.0	1.0	-	0.7	0.0	1.4	0.0	-	1.2	0.3	0.0	0.7	0.0	0.3	1.0	2.4	1.0	0.0	1.9	1.3
Articulated Trucks	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	3
% Articulated Trucks	0.0	0.0	0.0	-	0.0	0.0	0.1	0.0	-	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.1	0.1

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Count Name: STACY RD @ ANGEL PKWY - SAT
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 Start Date: 06/22/2024
 Page No: 2



Turning Movement Data Plot

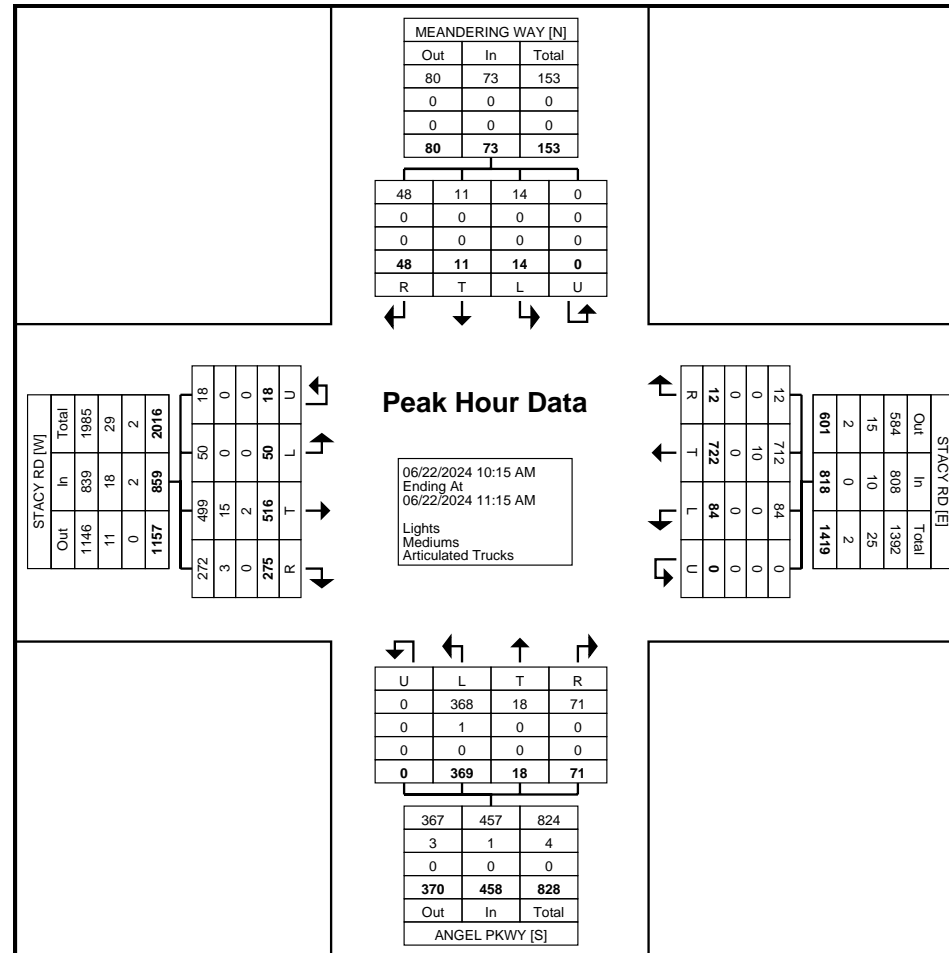
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817.265.8968 connor@gramntx.com

Count Name: STACY RD @ ANGEL PKWY -
SAT
Site Code:
Start Date: 06/22/2024
Page No: 3

Turning Movement Peak Hour Data (10:15 AM)

Start Time	MEANDERING WAY Southbound					STACY RD Westbound					ANGEL PKWY Northbound					STACY RD Eastbound					Int. Total
	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	
10:15 AM	1	2	10	0	13	24	171	2	0	197	86	4	13	0	103	17	126	77	3	223	536
10:30 AM	9	4	14	0	27	15	209	3	0	227	102	4	17	0	123	14	115	57	7	193	570
10:45 AM	2	1	12	0	15	23	196	3	0	222	97	5	14	0	116	6	128	73	4	211	564
11:00 AM	2	4	12	0	18	22	146	4	0	172	84	5	27	0	116	13	147	68	4	232	538
Total	14	11	48	0	73	84	722	12	0	818	369	18	71	0	458	50	516	275	18	859	2208
Approach %	19.2	15.1	65.8	0.0	-	10.3	88.3	1.5	0.0	-	80.6	3.9	15.5	0.0	-	5.8	60.1	32.0	2.1	-	-
Total %	0.6	0.5	2.2	0.0	3.3	3.8	32.7	0.5	0.0	37.0	16.7	0.8	3.2	0.0	20.7	2.3	23.4	12.5	0.8	38.9	-
PHF	0.389	0.688	0.857	0.000	0.676	0.875	0.864	0.750	0.000	0.901	0.904	0.900	0.657	0.000	0.931	0.735	0.878	0.893	0.643	0.926	0.968
Lights	14	11	48	0	73	84	712	12	0	808	368	18	71	0	457	50	499	272	18	839	2177
% Lights	100.0	100.0	100.0	-	100.0	100.0	98.6	100.0	-	98.8	99.7	100.0	100.0	-	99.8	100.0	96.7	98.9	100.0	97.7	98.6
Mediums	0	0	0	0	0	0	10	0	0	10	1	0	0	0	1	0	15	3	0	18	29
% Mediums	0.0	0.0	0.0	-	0.0	0.0	1.4	0.0	-	1.2	0.3	0.0	0.0	-	0.2	0.0	2.9	1.1	0.0	2.1	1.3
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	2
% Articulated Trucks	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	0.0	-	0.0	0.0	0.4	0.0	0.0	0.2	0.1



Turning Movement Peak Hour Data Plot (10:15 AM)

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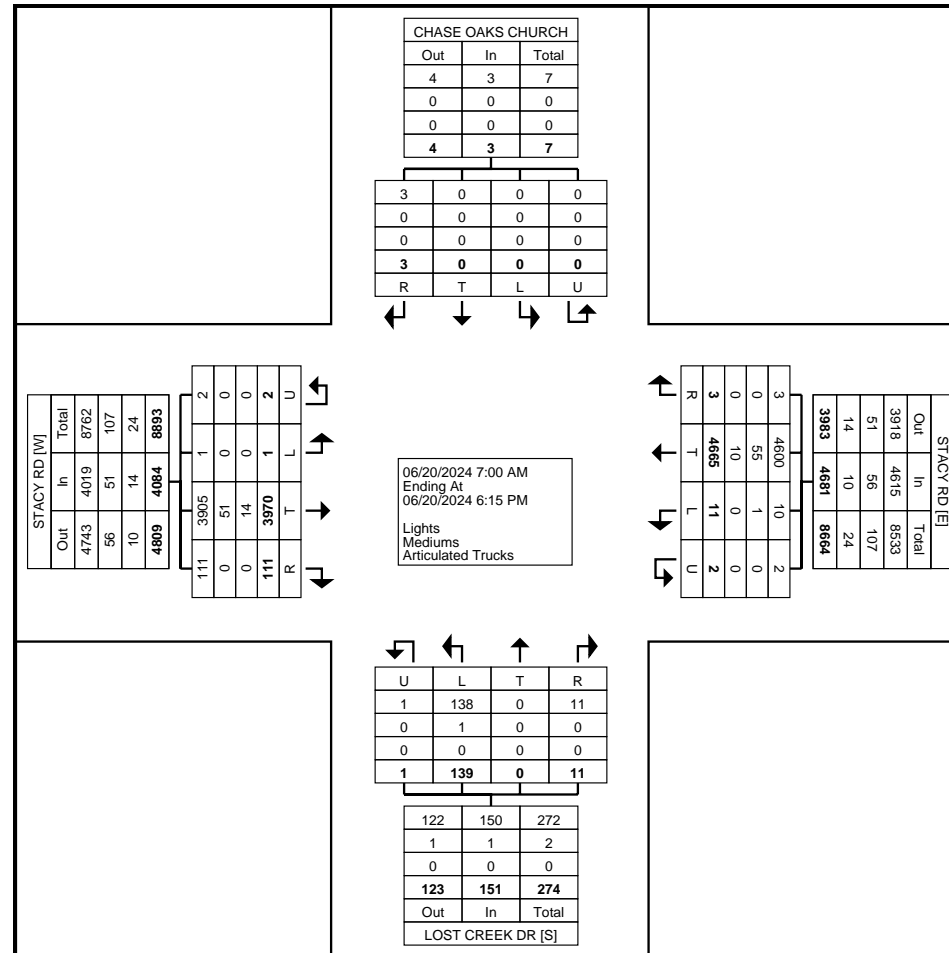
Count Name: STACY RD @ LOST CREEK-
CHASE OAKS CHURCH DR
Site Code:
Start Date: 06/20/2024
Page No: 1

Turning Movement Data

Start Time	CHASE OAKS CHURCH DR Southbound					STACY RD Westbound					LOST CREEK DR Northbound					STACY RD Eastbound					Int. Total
	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	
7:00 AM	0	0	0	0	0	0	247	0	0	247	6	0	0	0	6	0	114	2	0	116	369
7:15 AM	0	0	0	0	0	0	283	0	0	283	5	0	0	0	5	0	109	1	0	110	398
7:30 AM	0	0	0	0	0	0	283	0	0	283	8	0	0	0	8	0	163	4	0	167	458
7:45 AM	0	0	0	0	0	0	286	0	0	286	13	0	1	0	14	0	182	2	0	184	484
Hourly Total	0	0	0	0	0	0	1099	0	0	1099	32	0	1	0	33	0	568	9	0	577	1709
8:00 AM	0	0	0	0	0	0	335	0	0	335	12	0	0	0	12	1	191	4	0	196	543
8:15 AM	0	0	0	0	0	0	298	1	0	299	17	0	0	0	17	0	189	4	0	193	509
8:30 AM	0	0	0	0	0	0	398	0	0	398	10	0	1	0	11	0	188	2	0	190	599
8:45 AM	0	0	0	0	0	1	349	1	0	351	10	0	1	0	11	0	198	6	0	204	566
Hourly Total	0	0	0	0	0	1	1380	2	0	1383	49	0	2	0	51	1	766	16	0	783	2217
9:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hourly Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	3	236	0	0	239	4	0	1	0	5	0	299	12	0	311	555
4:15 PM	0	0	0	0	0	1	236	0	0	237	7	0	2	0	9	0	320	11	0	331	577
4:30 PM	0	0	0	0	0	0	284	0	0	284	6	0	2	0	8	0	316	17	0	333	625
4:45 PM	0	0	1	0	1	0	286	0	1	287	7	0	1	0	8	0	346	12	0	358	654
Hourly Total	0	0	1	0	1	4	1042	0	1	1047	24	0	6	0	30	0	1281	52	0	1333	2411
5:00 PM	0	0	0	0	0	2	288	0	0	290	6	0	1	0	7	0	332	8	0	340	637
5:15 PM	0	0	1	0	1	3	284	1	1	289	8	0	1	1	10	0	359	6	0	365	665
5:30 PM	0	0	1	0	1	1	273	0	0	274	13	0	0	0	13	0	327	13	0	340	628
5:45 PM	0	0	0	0	0	0	299	0	0	299	7	0	0	0	7	0	337	7	2	346	652
Hourly Total	0	0	2	0	2	6	1144	1	1	1152	34	0	2	1	37	0	1355	34	2	1391	2582
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	3	0	3	11	4665	3	2	4681	139	0	11	1	151	1	3970	111	2	4084	8919
Approach %	0.0	0.0	100.0	0.0	-	0.2	99.7	0.1	0.0	-	92.1	0.0	7.3	0.7	-	0.0	97.2	2.7	0.0	-	-
Total %	0.0	0.0	0.0	0.0	0.0	0.1	52.3	0.0	0.0	52.5	1.6	0.0	0.1	0.0	1.7	0.0	44.5	1.2	0.0	45.8	-
Lights	0	0	3	0	3	10	4600	3	2	4615	138	0	11	1	150	1	3905	111	2	4019	8787
% Lights	-	-	100.0	-	100.0	90.9	98.6	100.0	100.0	98.6	99.3	-	100.0	100.0	99.3	100.0	98.4	100.0	100.0	98.4	98.5
Mediums	0	0	0	0	0	1	55	0	0	56	1	0	0	0	1	0	51	0	0	51	108
% Mediums	-	-	0.0	-	0.0	9.1	1.2	0.0	0.0	1.2	0.7	-	0.0	0.0	0.7	0.0	1.3	0.0	0.0	1.2	1.2
Articulated Trucks	0	0	0	0	0	0	10	0	0	10	0	0	0	0	0	0	14	0	0	14	24
% Articulated Trucks	-	-	0.0	-	0.0	0.0	0.2	0.0	0.0	0.2	0.0	-	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.3	0.3

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Count Name: STACY RD @ LOST CREEK-
 CHASE OAKS CHURCH DR
 Site Code:
 Start Date: 06/20/2024
 Page No: 2



Turning Movement Data Plot

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Count Name: STACY RD @ LOST CREEK-
CHASE OAKS CHURCH DR
Site Code:
Start Date: 06/20/2024
Page No: 3

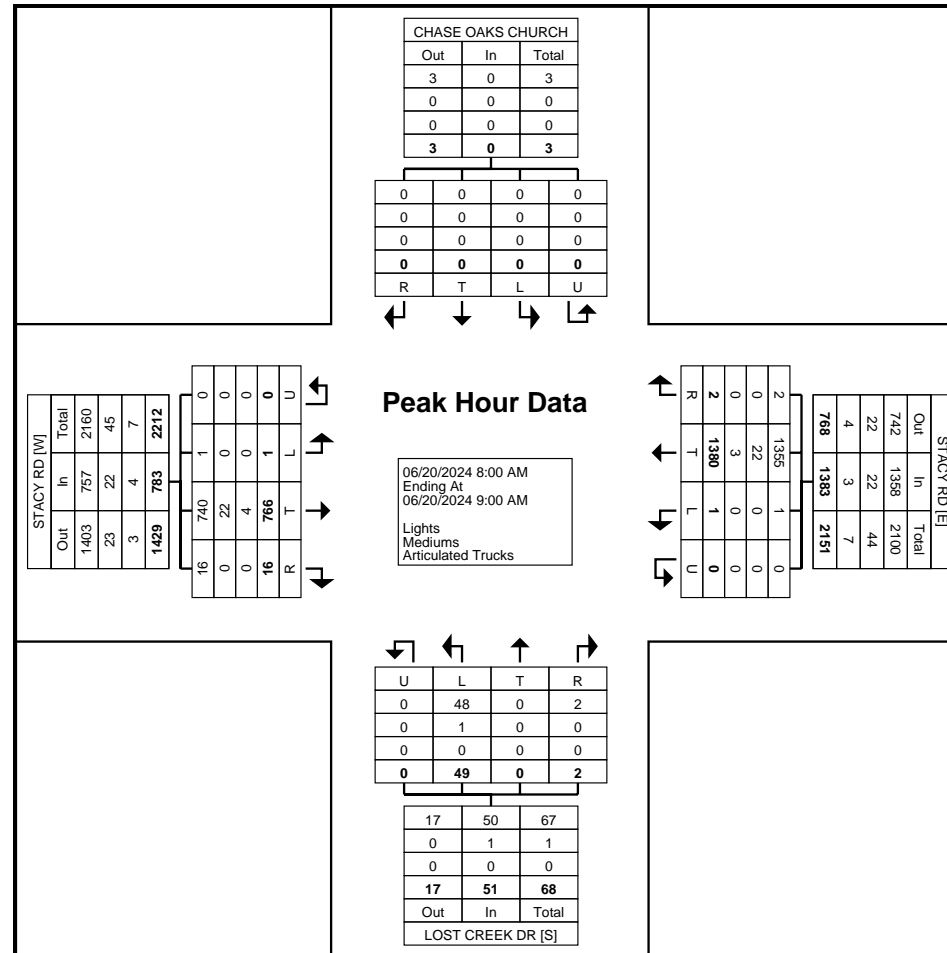
Turning Movement Peak Hour Data (8:00 AM)

Start Time	CHASE OAKS CHURCH DR Southbound					STACY RD Westbound					LOST CREEK DR Northbound					STACY RD Eastbound					Int. Total
	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	
8:00 AM	0	0	0	0	0	0	335	0	0	335	12	0	0	0	12	1	191	4	0	196	543
8:15 AM	0	0	0	0	0	0	298	1	0	299	17	0	0	0	17	0	189	4	0	193	509
8:30 AM	0	0	0	0	0	0	398	0	0	398	10	0	1	0	11	0	188	2	0	190	599
8:45 AM	0	0	0	0	0	1	349	1	0	351	10	0	1	0	11	0	198	6	0	204	566
Total	0	0	0	0	0	1	1380	2	0	1383	49	0	2	0	51	1	766	16	0	783	2217
Approach %	0.0	0.0	0.0	0.0	-	0.1	99.8	0.1	0.0	-	96.1	0.0	3.9	0.0	-	0.1	97.8	2.0	0.0	-	-
Total %	0.0	0.0	0.0	0.0	0.0	0.0	62.2	0.1	0.0	62.4	2.2	0.0	0.1	0.0	2.3	0.0	34.6	0.7	0.0	35.3	-
PHF	0.000	0.000	0.000	0.000	0.000	0.250	0.867	0.500	0.000	0.869	0.721	0.000	0.500	0.000	0.750	0.250	0.967	0.667	0.000	0.960	0.925
Lights	0	0	0	0	0	1	1355	2	0	1358	48	0	2	0	50	1	740	16	0	757	2165
% Lights	-	-	-	-	-	100.0	98.2	100.0	-	98.2	98.0	-	100.0	-	98.0	100.0	96.6	100.0	-	96.7	97.7
Mediums	0	0	0	0	0	0	22	0	0	22	1	0	0	0	1	0	22	0	0	22	45
% Mediums	-	-	-	-	-	0.0	1.6	0.0	-	1.6	2.0	-	0.0	-	2.0	0.0	2.9	0.0	-	2.8	2.0
Articulated Trucks	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	4	0	0	4	7
% Articulated Trucks	-	-	-	-	-	0.0	0.2	0.0	-	0.2	0.0	-	0.0	-	0.0	0.0	0.5	0.0	-	0.5	0.3

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Count Name: STACY RD @ LOST CREEK-
CHASE OAKS CHURCH DR
Site Code:
Start Date: 06/20/2024
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Turning Movement Peak Hour Data Plot (8:00 AM)

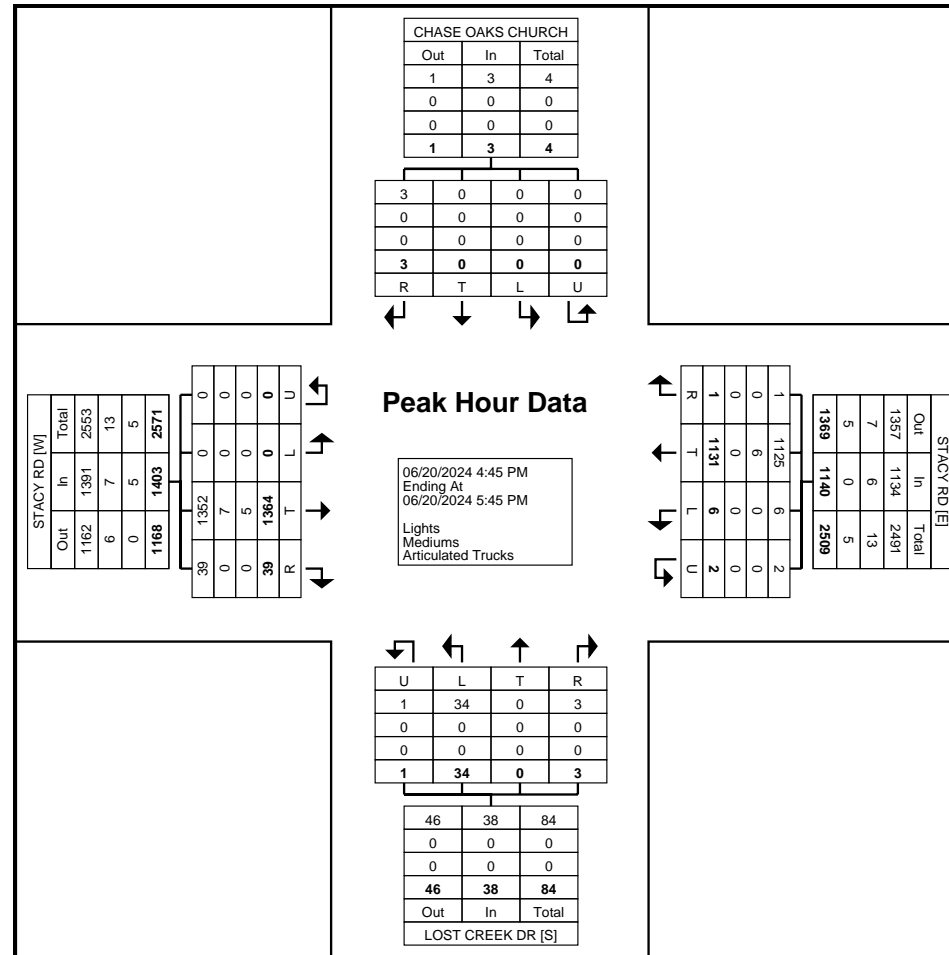
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Count Name: STACY RD @ LOST CREEK-
CHASE OAKS CHURCH DR
Site Code:
Start Date: 06/20/2024
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Turning Movement Peak Hour Data (4:45 PM)

Start Time	CHASE OAKS CHURCH DR Southbound					STACY RD Westbound					LOST CREEK DR Northbound					STACY RD Eastbound					Int. Total
	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	
4:45 PM	0	0	1	0	1	0	286	0	1	287	7	0	1	0	8	0	346	12	0	358	654
5:00 PM	0	0	0	0	0	2	288	0	0	290	6	0	1	0	7	0	332	8	0	340	637
5:15 PM	0	0	1	0	1	3	284	1	1	289	8	0	1	1	10	0	359	6	0	365	665
5:30 PM	0	0	1	0	1	1	273	0	0	274	13	0	0	0	13	0	327	13	0	340	628
Total	0	0	3	0	3	6	1131	1	2	1140	34	0	3	1	38	0	1364	39	0	1403	2584
Approach %	0.0	0.0	100.0	0.0	-	0.5	99.2	0.1	0.2	-	89.5	0.0	7.9	2.6	-	0.0	97.2	2.8	0.0	-	-
Total %	0.0	0.0	0.1	0.0	0.1	0.2	43.8	0.0	0.1	44.1	1.3	0.0	0.1	0.0	1.5	0.0	52.8	1.5	0.0	54.3	-
PHF	0.000	0.000	0.750	0.000	0.750	0.500	0.982	0.250	0.500	0.983	0.654	0.000	0.750	0.250	0.731	0.000	0.950	0.750	0.000	0.961	0.971
Lights	0	0	3	0	3	6	1125	1	2	1134	34	0	3	1	38	0	1352	39	0	1391	2566
% Lights	-	-	100.0	-	100.0	100.0	99.5	100.0	100.0	99.5	100.0	-	100.0	100.0	100.0	-	99.1	100.0	-	99.1	99.3
Mediums	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	0	7	0	0	7	13
% Mediums	-	-	0.0	-	0.0	0.0	0.5	0.0	0.0	0.5	0.0	-	0.0	0.0	0.0	-	0.5	0.0	-	0.5	0.5
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	5	5
% Articulated Trucks	-	-	0.0	-	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.4	0.0	-	0.4	0.2



Turning Movement Peak Hour Data Plot (4:45 PM)

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Count Name: STACY RD @ LOST CREEK-
CHASE OAKS CHURCH DR - SAT
Site Code:
Start Date: 06/22/2024
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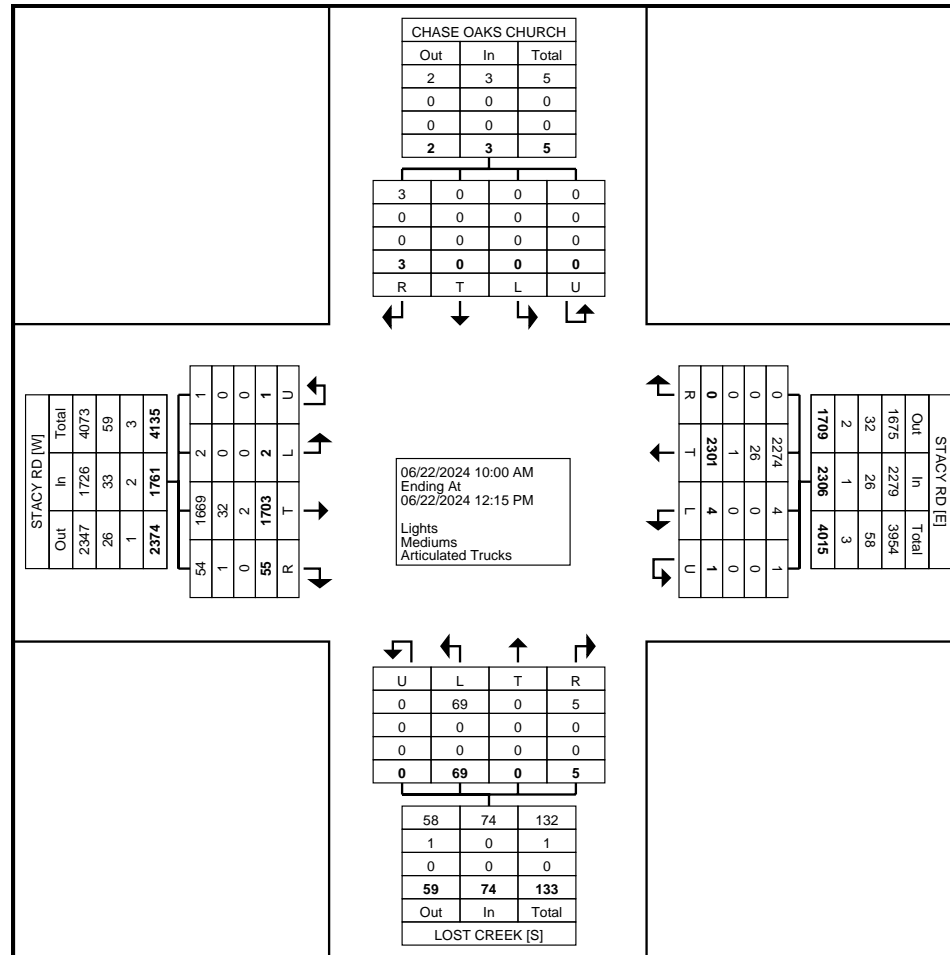
Turning Movement Data

Start Time	CHASE OAKS CHURCH DR Southbound					STACY RD Westbound					LOST CREEK Northbound					STACY RD Eastbound					Int. Total
	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	
10:00 AM	0	0	0	0	0	1	268	0	0	269	4	0	2	0	6	0	159	2	0	161	436
10:15 AM	0	0	1	0	1	0	265	0	0	265	6	0	0	0	6	0	240	6	0	246	518
10:30 AM	0	0	0	0	0	0	326	0	0	326	6	0	0	0	6	0	194	3	0	197	529
10:45 AM	0	0	0	0	0	1	327	0	0	328	9	0	1	0	10	1	210	6	0	217	555
Hourly Total	0	0	1	0	1	2	1186	0	0	1188	25	0	3	0	28	1	803	17	0	821	2038
11:00 AM	0	0	0	0	0	0	248	0	0	248	5	0	1	0	6	1	243	5	1	250	504
11:15 AM	0	0	0	0	0	0	280	0	1	281	12	0	0	0	12	0	218	12	0	230	523
11:30 AM	0	0	2	0	2	1	286	0	0	287	14	0	1	0	15	0	218	13	0	231	535
11:45 AM	0	0	0	0	0	1	301	0	0	302	13	0	0	0	13	0	221	8	0	229	544
Hourly Total	0	0	2	0	2	2	1115	0	1	1118	44	0	2	0	46	1	900	38	1	940	2106
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	3	0	3	4	2301	0	1	2306	69	0	5	0	74	2	1703	55	1	1761	4144
Approach %	0.0	0.0	100.0	0.0	-	0.2	99.8	0.0	0.0	-	93.2	0.0	6.8	0.0	-	0.1	96.7	3.1	0.1	-	-
Total %	0.0	0.0	0.1	0.0	0.1	0.1	55.5	0.0	0.0	55.6	1.7	0.0	0.1	0.0	1.8	0.0	41.1	1.3	0.0	42.5	-
Lights	0	0	3	0	3	4	2274	0	1	2279	69	0	5	0	74	2	1669	54	1	1726	4082
% Lights	-	-	100.0	-	100.0	100.0	98.8	-	100.0	98.8	100.0	-	100.0	-	100.0	100.0	98.0	98.2	100.0	98.0	98.5
Mediums	0	0	0	0	0	0	26	0	0	26	0	0	0	0	0	0	32	1	0	33	59
% Mediums	-	-	0.0	-	0.0	0.0	1.1	-	0.0	1.1	0.0	-	0.0	-	0.0	0.0	1.9	1.8	0.0	1.9	1.4
Articulated Trucks	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	3
% Articulated Trucks	-	-	0.0	-	0.0	0.0	0.0	-	0.0	0.0	0.0	-	0.0	-	0.0	0.0	0.1	0.0	0.0	0.1	0.1

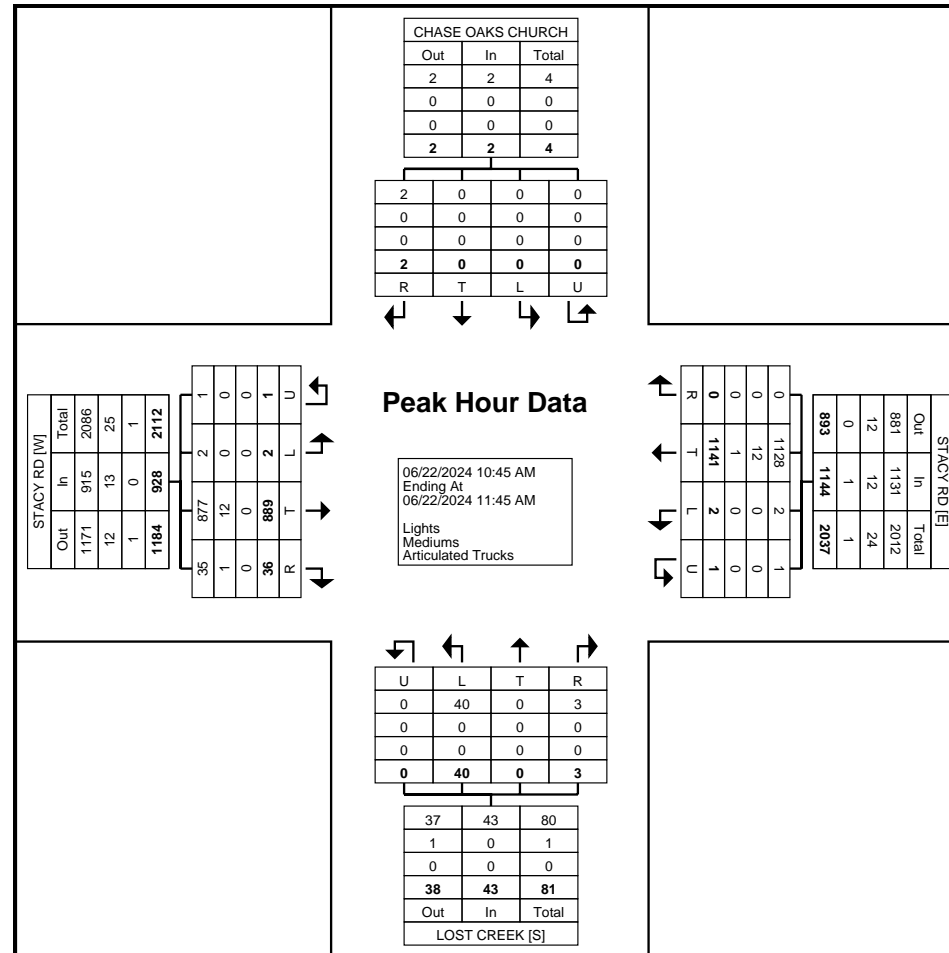
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Count Name: STACY RD @ LOST CREEK-
CHASE OAKS CHURCH DR - SAT
Site Code:
Start Date: 06/22/2024
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Turning Movement Data Plot



Turning Movement Peak Hour Data Plot (10:45 AM)

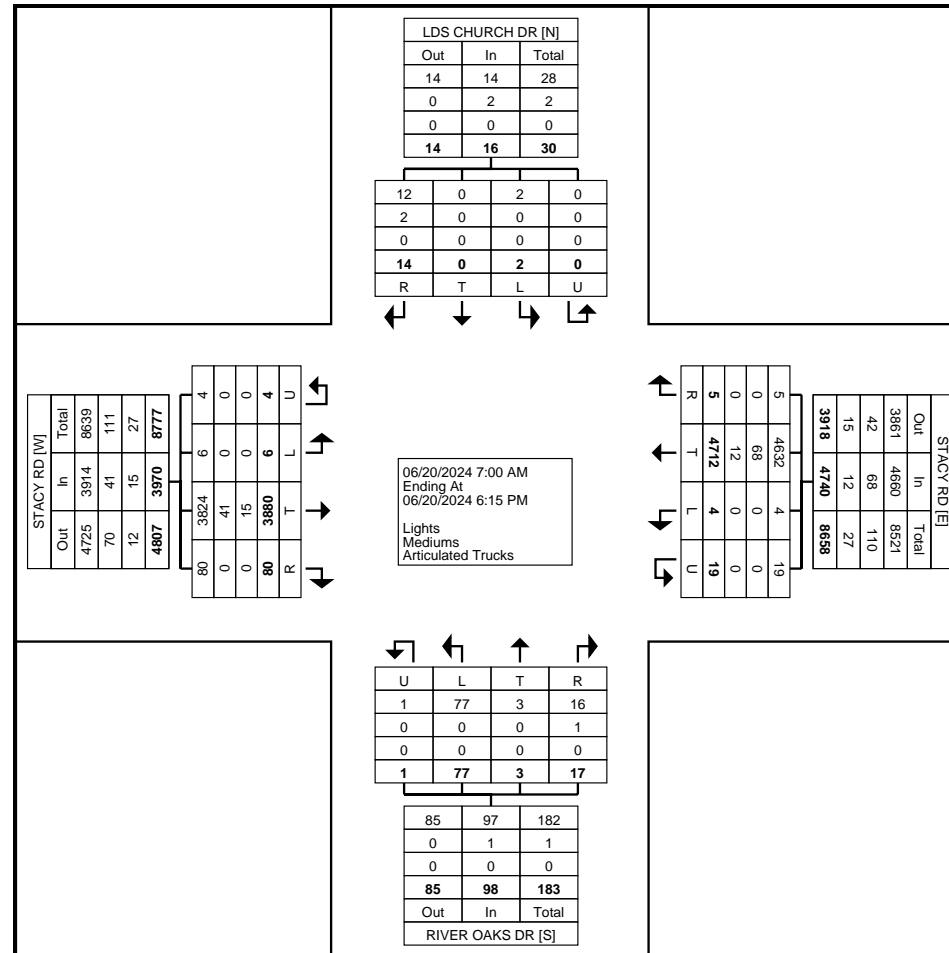
GRAM Traffic NTX Inc.
1120 W. Lovers Lane

Arlington, Texas, United States 76013
817.265.8968 connor@gramntx.com

Count Name: STACY RD @ RIVER OAKS DR
LDS CHURCH DR
Site Code:
Start Date: 06/20/2024
Page No: 1

Turning Movement Data

Start Time	LDS CHURCH DR Southbound					STACY RD Westbound					RIVER OAKS DR Northbound					STACY RD Eastbound					Int. Total
	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	
7:00 AM	0	0	0	0	0	0	261	0	0	261	4	0	0	0	4	0	117	0	0	117	382
7:15 AM	0	0	0	0	0	0	289	0	0	289	5	0	0	0	5	0	110	2	0	112	406
7:30 AM	0	0	0	0	0	0	298	0	0	298	7	1	1	0	9	0	160	1	0	161	468
7:45 AM	0	0	0	0	0	0	332	0	0	332	4	0	0	0	4	0	178	5	0	183	519
Hourly Total	0	0	0	0	0	0	1180	0	0	1180	20	1	1	0	22	0	565	8	0	573	1775
8:00 AM	0	0	0	0	0	0	329	0	1	330	8	0	2	0	10	1	181	3	0	185	525
8:15 AM	0	0	2	0	2	1	313	0	2	316	6	0	2	0	8	0	184	5	0	189	515
8:30 AM	0	0	2	0	2	1	371	0	1	373	6	0	0	1	7	0	178	4	0	182	564
8:45 AM	0	0	0	0	0	0	346	1	2	349	10	1	1	0	12	0	198	3	0	201	562
Hourly Total	0	0	4	0	4	2	1359	1	6	1368	30	1	5	1	37	1	741	15	0	757	2166
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	1	0	0	0	1	0	227	1	1	229	6	0	1	0	7	1	297	5	1	304	541
4:15 PM	0	0	0	0	0	0	239	1	0	240	3	0	3	0	6	0	307	9	0	316	562
4:30 PM	1	0	2	0	3	0	287	0	3	290	4	0	1	0	5	1	311	7	0	319	617
4:45 PM	0	0	0	0	0	1	293	0	3	297	2	0	0	0	2	1	340	8	0	349	648
Hourly Total	2	0	2	0	4	1	1046	2	7	1056	15	0	5	0	20	3	1255	29	1	1288	2368
5:00 PM	0	0	4	0	4	0	281	0	1	282	3	1	1	0	5	1	330	5	0	336	627
5:15 PM	0	0	2	0	2	1	281	1	0	283	2	0	3	0	5	1	346	7	1	355	645
5:30 PM	0	0	1	0	1	0	272	1	3	276	3	0	1	0	4	0	316	10	0	326	607
5:45 PM	0	0	1	0	1	0	293	0	2	295	4	0	1	0	5	0	327	6	2	335	636
Hourly Total	0	0	8	0	8	1	1127	2	6	1136	12	1	6	0	19	2	1319	28	3	1352	2515
6:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	2	0	14	0	16	4	4712	5	19	4740	77	3	17	1	98	6	3880	80	4	3970	8824
Approach %	12.5	0.0	87.5	0.0	-	0.1	99.4	0.1	0.4	-	78.6	3.1	17.3	1.0	-	0.2	97.7	2.0	0.1	-	-
Total %	0.0	0.0	0.2	0.0	0.2	0.0	53.4	0.1	0.2	53.7	0.9	0.0	0.2	0.0	1.1	0.1	44.0	0.9	0.0	45.0	-
Lights	2	0	12	0	14	4	4632	5	19	4660	77	3	16	1	97	6	3824	80	4	3914	8685
% Lights	100.0	-	85.7	-	87.5	100.0	98.3	100.0	100.0	98.3	100.0	100.0	94.1	100.0	99.0	100.0	98.6	100.0	100.0	98.6	98.4
Mediums	0	0	2	0	2	0	68	0	0	68	0	0	1	0	1	0	41	0	0	41	112
% Mediums	0.0	-	14.3	-	12.5	0.0	1.4	0.0	0.0	1.4	0.0	0.0	5.9	0.0	1.0	0.0	1.1	0.0	0.0	1.0	1.3
Articulated Trucks	0	0	0	0	0	0	12	0	0	12	0	0	0	0	0	0	15	0	0	15	27
% Articulated Trucks	0.0	-	0.0	-	0.0	0.0	0.3	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.4	0.3



Turning Movement Data Plot

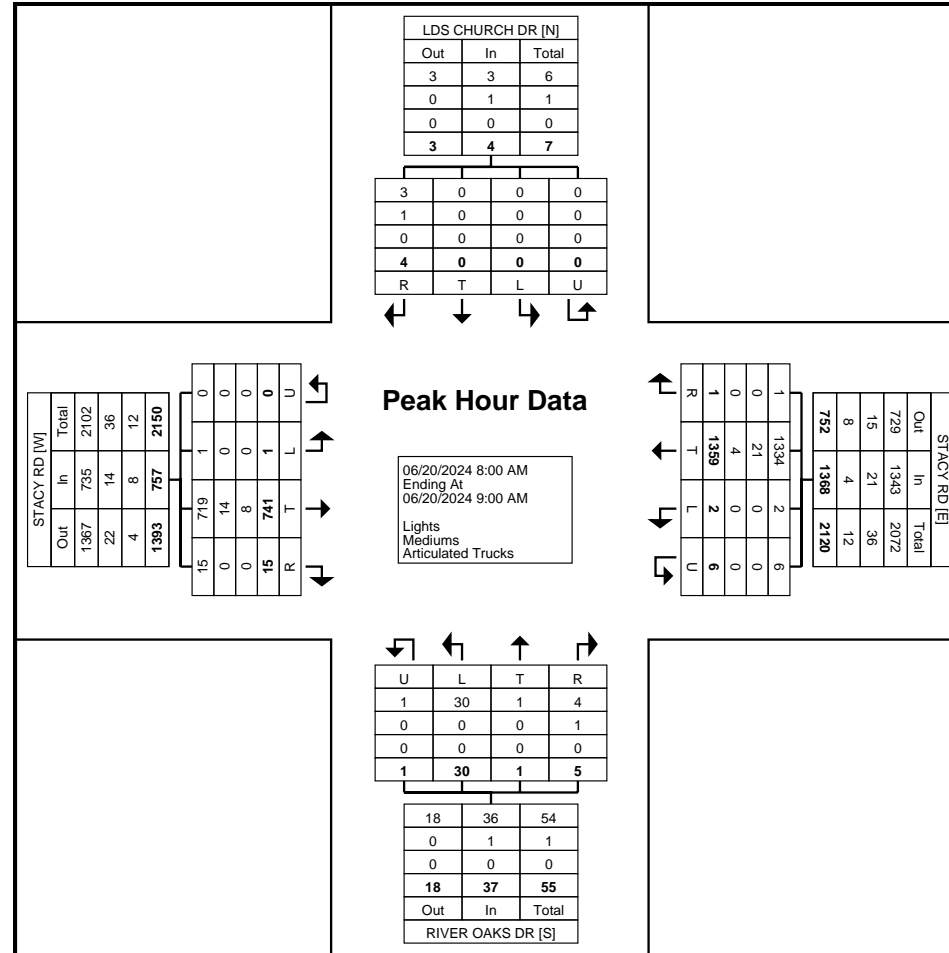
GRAM Traffic NTX Inc.
1120 W. Lovers Lane

Arlington, Texas, United States 76013
817.265.8968 connor@gramntx.com

Count Name: STACY RD @ RIVER OAKS DR
LDS CHURCH DR
Site Code:
Start Date: 06/20/2024
Page No: 3

Turning Movement Peak Hour Data (8:00 AM)

Start Time	LDS CHURCH DR Southbound					STACY RD Westbound					RIVER OAKS DR Northbound					STACY RD Eastbound					Int. Total
	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	
8:00 AM	0	0	0	0	0	0	329	0	1	330	8	0	2	0	10	1	181	3	0	185	525
8:15 AM	0	0	2	0	2	1	313	0	2	316	6	0	2	0	8	0	184	5	0	189	515
8:30 AM	0	0	2	0	2	1	371	0	1	373	6	0	0	1	7	0	178	4	0	182	564
8:45 AM	0	0	0	0	0	0	346	1	2	349	10	1	1	0	12	0	198	3	0	201	562
Total	0	0	4	0	4	2	1359	1	6	1368	30	1	5	1	37	1	741	15	0	757	2166
Approach %	0.0	0.0	100.0	0.0	-	0.1	99.3	0.1	0.4	-	81.1	2.7	13.5	2.7	-	0.1	97.9	2.0	0.0	-	-
Total %	0.0	0.0	0.2	0.0	0.2	0.1	62.7	0.0	0.3	63.2	1.4	0.0	0.2	0.0	1.7	0.0	34.2	0.7	0.0	34.9	-
PHF	0.000	0.000	0.500	0.000	0.500	0.500	0.916	0.250	0.750	0.917	0.750	0.250	0.625	0.250	0.771	0.250	0.936	0.750	0.000	0.942	0.960
Lights	0	0	3	0	3	2	1334	1	6	1343	30	1	4	1	36	1	719	15	0	735	2117
% Lights	-	-	75.0	-	75.0	100.0	98.2	100.0	100.0	98.2	100.0	100.0	80.0	100.0	97.3	100.0	97.0	100.0	-	97.1	97.7
Mediums	0	0	1	0	1	0	21	0	0	21	0	0	1	0	1	0	14	0	0	14	37
% Mediums	-	-	25.0	-	25.0	0.0	1.5	0.0	0.0	1.5	0.0	0.0	20.0	0.0	2.7	0.0	1.9	0.0	-	1.8	1.7
Articulated Trucks	0	0	0	0	0	0	4	0	0	4	0	0	0	0	0	0	8	0	0	8	12
% Articulated Trucks	-	-	0.0	-	0.0	0.0	0.3	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.0	-	1.1	0.6



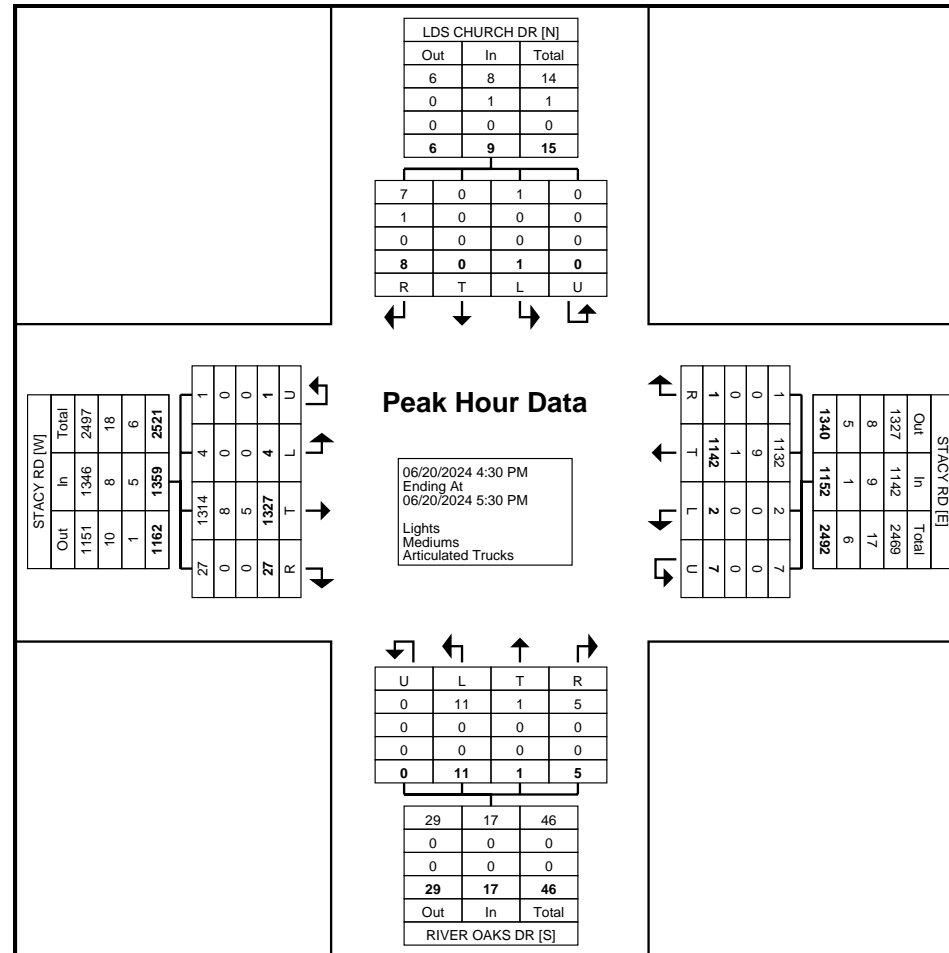
Turning Movement Peak Hour Data Plot (8:00 AM)

GRAM Traffic NTX Inc.
 1120 W. Lovers Lane
 Arlington, Texas, United States 76013
 817.265.8968 connor@gramntx.com

Count Name: STACY RD @ RIVER OAKS DR
 LDS CHURCH DR
 Site Code:
 Start Date: 06/20/2024
 Page No: 5

Turning Movement Peak Hour Data (4:30 PM)

Start Time	LDS CHURCH DR Southbound					STACY RD Westbound					RIVER OAKS DR Northbound					STACY RD Eastbound					Int. Total
	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	
4:30 PM	1	0	2	0	3	0	287	0	3	290	4	0	1	0	5	1	311	7	0	319	617
4:45 PM	0	0	0	0	0	1	293	0	3	297	2	0	0	0	2	1	340	8	0	349	648
5:00 PM	0	0	4	0	4	0	281	0	1	282	3	1	1	0	5	1	330	5	0	336	627
5:15 PM	0	0	2	0	2	1	281	1	0	283	2	0	3	0	5	1	346	7	1	355	645
Total	1	0	8	0	9	2	1142	1	7	1152	11	1	5	0	17	4	1327	27	1	1359	2537
Approach %	11.1	0.0	88.9	0.0	-	0.2	99.1	0.1	0.6	-	64.7	5.9	29.4	0.0	-	0.3	97.6	2.0	0.1	-	-
Total %	0.0	0.0	0.3	0.0	0.4	0.1	45.0	0.0	0.3	45.4	0.4	0.0	0.2	0.0	0.7	0.2	52.3	1.1	0.0	53.6	-
PHF	0.250	0.000	0.500	0.000	0.563	0.500	0.974	0.250	0.583	0.970	0.688	0.250	0.417	0.000	0.850	1.000	0.959	0.844	0.250	0.957	0.979
Lights	1	0	7	0	8	2	1132	1	7	1142	11	1	5	0	17	4	1314	27	1	1346	2513
% Lights	100.0	-	87.5	-	88.9	100.0	99.1	100.0	100.0	99.1	100.0	100.0	100.0	-	100.0	100.0	99.0	100.0	100.0	99.0	99.1
Mediums	0	0	1	0	1	0	9	0	0	9	0	0	0	0	0	0	8	0	0	8	18
% Mediums	0.0	-	12.5	-	11.1	0.0	0.8	0.0	0.0	0.8	0.0	0.0	0.0	-	0.0	0.0	0.6	0.0	0.0	0.6	0.7
Articulated Trucks	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	5	0	0	5	6
% Articulated Trucks	0.0	-	0.0	-	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0	-	0.0	0.0	0.4	0.0	0.0	0.4	0.2



Turning Movement Peak Hour Data Plot (4:30 PM)

GRAM Traffic NTX Inc.
1120 W. Lovers Lane

Arlington, Texas, United States 76013
817.265.8968 connor@gramntx.com

Count Name: STACY RD @ RIVER OAKS DR
LDS CHURCH DR - SAT
Site Code:
Start Date: 06/22/2024
Page No: 1

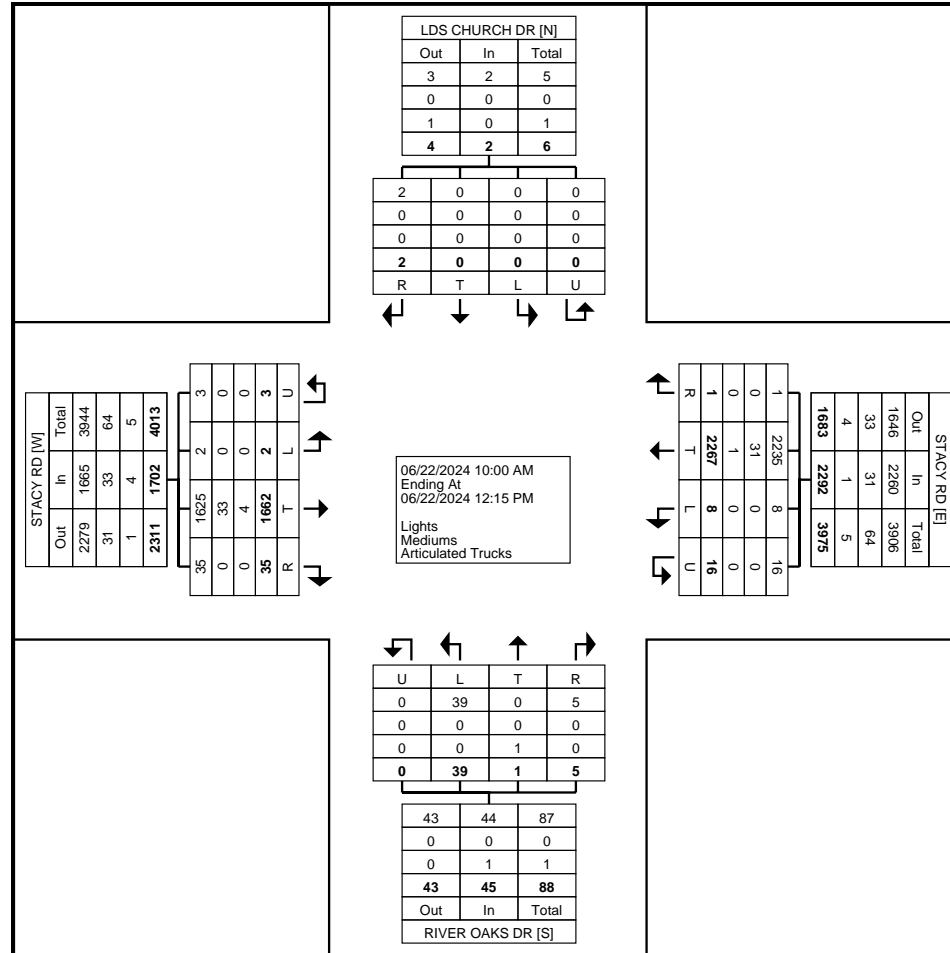
Turning Movement Data

Start Time	LDS CHURCH DR Southbound					STACY RD Westbound					RIVER OAKS DR Northbound					STACY RD Eastbound					Int. Total
	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	
10:00 AM	0	0	0	0	0	0	268	0	1	269	3	0	2	0	5	1	159	2	0	162	436
10:15 AM	0	0	0	0	0	3	253	0	1	257	2	0	1	0	3	1	234	3	1	239	499
10:30 AM	0	0	0	0	0	0	338	0	3	341	5	0	0	0	5	0	189	4	0	193	539
10:45 AM	0	0	0	0	0	0	313	1	2	316	8	0	0	0	8	0	204	3	0	207	531
Hourly Total	0	0	0	0	0	3	1172	1	7	1183	18	0	3	0	21	2	786	12	1	801	2005
11:00 AM	0	0	1	0	1	4	233	0	3	240	6	1	0	0	7	0	235	5	0	240	488
11:15 AM	0	0	0	0	0	1	277	0	2	280	6	0	1	0	7	0	204	7	0	211	498
11:30 AM	0	0	1	0	1	0	285	0	2	287	3	0	0	0	3	0	214	6	2	222	513
11:45 AM	0	0	0	0	0	0	300	0	2	302	6	0	1	0	7	0	223	5	0	228	537
Hourly Total	0	0	2	0	2	5	1095	0	9	1109	21	1	2	0	24	0	876	23	2	901	2036
12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	2	0	2	8	2267	1	16	2292	39	1	5	0	45	2	1662	35	3	1702	4041
Approach %	0.0	0.0	100.0	0.0	-	0.3	98.9	0.0	0.7	-	86.7	2.2	11.1	0.0	-	0.1	97.6	2.1	0.2	-	-
Total %	0.0	0.0	0.0	0.0	0.0	0.2	56.1	0.0	0.4	56.7	1.0	0.0	0.1	0.0	1.1	0.0	41.1	0.9	0.1	42.1	-
Lights	0	0	2	0	2	8	2235	1	16	2260	39	0	5	0	44	2	1625	35	3	1665	3971
% Lights	-	-	100.0	-	100.0	100.0	98.6	100.0	100.0	98.6	100.0	0.0	100.0	-	97.8	100.0	97.8	100.0	100.0	97.8	98.3
Mediums	0	0	0	0	0	0	31	0	0	31	0	0	0	0	0	0	33	0	0	33	64
% Mediums	-	-	0.0	-	0.0	0.0	1.4	0.0	0.0	1.4	0.0	0.0	0.0	-	0.0	0.0	2.0	0.0	0.0	1.9	1.6
Articulated Trucks	0	0	0	0	0	0	1	0	0	1	0	1	0	0	1	0	4	0	0	4	6
% Articulated Trucks	-	-	0.0	-	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	-	2.2	0.0	0.2	0.0	0.0	0.2	0.1

GRAM Traffic NTX Inc.
1120 W. Lovers Lane

Arlington, Texas, United States 76013
817.265.8968 connor@gramntx.com

Count Name: STACY RD @ RIVER OAKS DR
LDS CHURCH DR - SAT
Site Code:
Start Date: 06/22/2024
Page No: 2



Turning Movement Data Plot

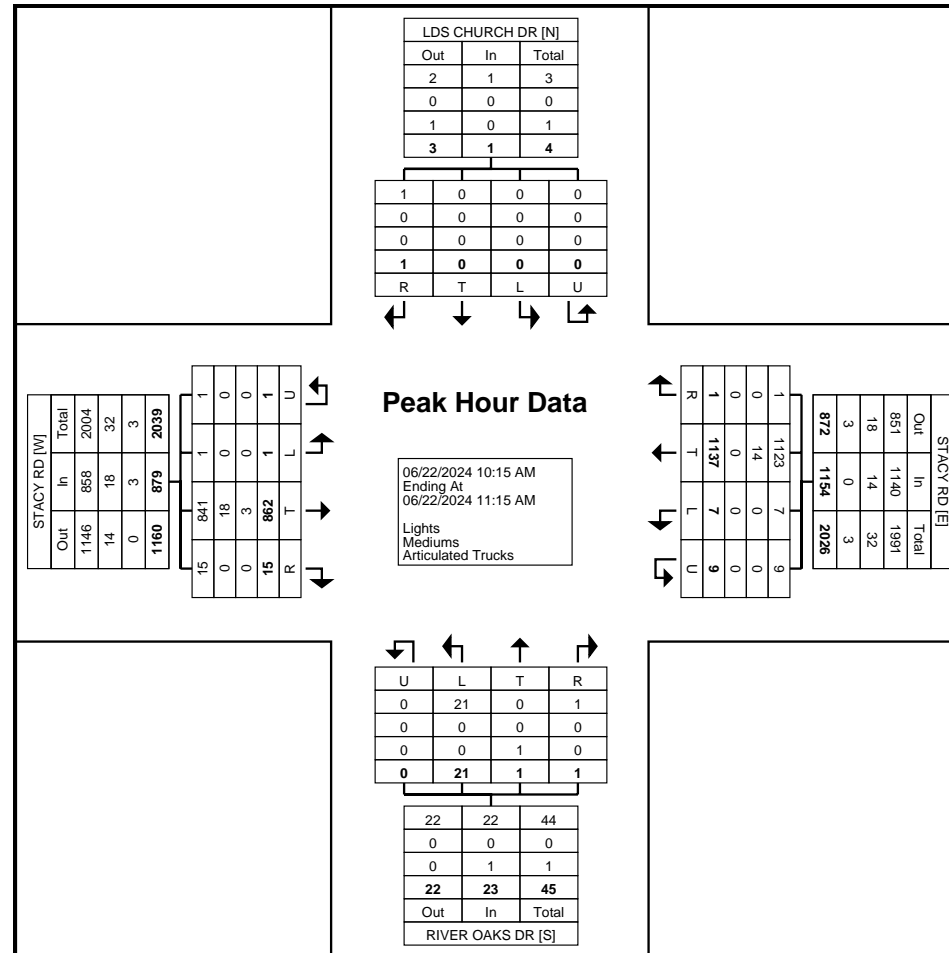
GRAM Traffic NTX Inc.
1120 W. Lovers Lane

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817.265.8968 connor@gramntx.com

Count Name: STACY RD @ RIVER OAKS DR
LDS CHURCH DR - SAT
Site Code:
Start Date: 06/22/2024
Page No: 3

Turning Movement Peak Hour Data (10:15 AM)

Start Time	LDS CHURCH DR Southbound					STACY RD Westbound					RIVER OAKS DR Northbound					STACY RD Eastbound					Int. Total
	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	Left	Thru	Right	U-Turn	App. Total	
10:15 AM	0	0	0	0	0	3	253	0	1	257	2	0	1	0	3	1	234	3	1	239	499
10:30 AM	0	0	0	0	0	0	338	0	3	341	5	0	0	0	5	0	189	4	0	193	539
10:45 AM	0	0	0	0	0	0	313	1	2	316	8	0	0	0	8	0	204	3	0	207	531
11:00 AM	0	0	1	0	1	4	233	0	3	240	6	1	0	0	7	0	235	5	0	240	488
Total	0	0	1	0	1	7	1137	1	9	1154	21	1	1	0	23	1	862	15	1	879	2057
Approach %	0.0	0.0	100.0	0.0	-	0.6	98.5	0.1	0.8	-	91.3	4.3	4.3	0.0	-	0.1	98.1	1.7	0.1	-	-
Total %	0.0	0.0	0.0	0.0	0.0	0.3	55.3	0.0	0.4	56.1	1.0	0.0	0.0	0.0	1.1	0.0	41.9	0.7	0.0	42.7	-
PHF	0.000	0.000	0.250	0.000	0.250	0.438	0.841	0.250	0.750	0.846	0.656	0.250	0.250	0.000	0.719	0.250	0.917	0.750	0.250	0.916	0.954
Lights	0	0	1	0	1	7	1123	1	9	1140	21	0	1	0	22	1	841	15	1	858	2021
% Lights	-	-	100.0	-	100.0	100.0	98.8	100.0	100.0	98.8	100.0	0.0	100.0	-	95.7	100.0	97.6	100.0	100.0	97.6	98.2
Mediums	0	0	0	0	0	0	14	0	0	14	0	0	0	0	0	0	18	0	0	18	32
% Mediums	-	-	0.0	-	0.0	0.0	1.2	0.0	0.0	1.2	0.0	0.0	0.0	-	0.0	0.0	2.1	0.0	0.0	2.0	1.6
Articulated Trucks	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	3	0	0	3	4
% Articulated Trucks	-	-	0.0	-	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	-	4.3	0.0	0.3	0.0	0.0	0.3	0.2



Turning Movement Peak Hour Data Plot (10:15 AM)

Count Name STACY RD BTWN RIVER OAKS DR & ANGEL PKWY
 Start Date 6/20/2024
 Start Time 12:00 AM
 Site Code 119

Date	Time	EB	WB	TOTAL
6/20/2024	12:00 AM	26	23	49
6/20/2024	12:15 AM	36	13	49
6/20/2024	12:30 AM	25	10	35
6/20/2024	12:45 AM	20	7	27
6/20/2024	1:00 AM	14	9	23
6/20/2024	1:15 AM	11	14	25
6/20/2024	1:30 AM	8	6	14
6/20/2024	1:45 AM	10	5	15
6/20/2024	2:00 AM	10	6	16
6/20/2024	2:15 AM	6	3	9
6/20/2024	2:30 AM	9	2	11
6/20/2024	2:45 AM	11	8	19
6/20/2024	3:00 AM	3	6	9
6/20/2024	3:15 AM	8	7	15
6/20/2024	3:30 AM	4	4	8
6/20/2024	3:45 AM	5	10	15
6/20/2024	4:00 AM	5	14	19
6/20/2024	4:15 AM	1	16	17
6/20/2024	4:30 AM	5	29	34
6/20/2024	4:45 AM	5	42	47
6/20/2024	5:00 AM	9	36	45
6/20/2024	5:15 AM	13	69	82
6/20/2024	5:30 AM	22	88	110
6/20/2024	5:45 AM	36	104	140
6/20/2024	6:00 AM	40	127	167
6/20/2024	6:15 AM	75	141	216
6/20/2024	6:30 AM	84	190	274
6/20/2024	6:45 AM	102	240	342
6/20/2024	7:00 AM	126	272	398
6/20/2024	7:15 AM	110	299	409
6/20/2024	7:30 AM	166	308	474
6/20/2024	7:45 AM	178	332	510
6/20/2024	8:00 AM	194	318	512
6/20/2024	8:15 AM	200	322	522
6/20/2024	8:30 AM	182	372	554
6/20/2024	8:45 AM	202	352	554
6/20/2024	9:00 AM	234	290	524
6/20/2024	9:15 AM	188	282	470
6/20/2024	9:30 AM	208	300	508
6/20/2024	9:45 AM	178	298	476
6/20/2024	10:00 AM	174	260	434
6/20/2024	10:15 AM	200	261	461
6/20/2024	10:30 AM	180	274	454
6/20/2024	10:45 AM	200	292	492
6/20/2024	11:00 AM	183	248	431
6/20/2024	11:15 AM	193	281	474
6/20/2024	11:30 AM	245	308	553
6/20/2024	11:45 AM	248	312	560
6/20/2024	12:00 PM	273	307	580
6/20/2024	12:15 PM	286	334	620
6/20/2024	12:30 PM	284	262	546
6/20/2024	12:45 PM	282	270	552
6/20/2024	1:00 PM	262	258	520
6/20/2024	1:15 PM	268	256	524
6/20/2024	1:30 PM	247	268	515
6/20/2024	1:45 PM	229	242	471
6/20/2024	2:00 PM	259	235	494
6/20/2024	2:15 PM	247	276	523
6/20/2024	2:30 PM	228	256	484
6/20/2024	2:45 PM	245	259	504
6/20/2024	3:00 PM	263	256	519
6/20/2024	3:15 PM	282	262	544
6/20/2024	3:30 PM	266	286	552
6/20/2024	3:45 PM	260	286	546
6/20/2024	4:00 PM	288	221	509
6/20/2024	4:15 PM	306	244	550
6/20/2024	4:30 PM	315	290	605
6/20/2024	4:45 PM	336	288	624
6/20/2024	5:00 PM	335	287	622
6/20/2024	5:15 PM	328	276	604
6/20/2024	5:30 PM	310	283	593
6/20/2024	5:45 PM	322	292	614
6/20/2024	6:00 PM	342	296	638
6/20/2024	6:15 PM	300	292	592
6/20/2024	6:30 PM	270	282	552
6/20/2024	6:45 PM	312	220	532
6/20/2024	7:00 PM	267	210	477
6/20/2024	7:15 PM	243	204	447
6/20/2024	7:30 PM	228	173	401
6/20/2024	7:45 PM	218	152	370
6/20/2024	8:00 PM	214	163	377
6/20/2024	8:15 PM	208	148	356
6/20/2024	8:30 PM	197	115	312
6/20/2024	8:45 PM	212	146	358
6/20/2024	9:00 PM	186	118	304
6/20/2024	9:15 PM	195	100	295
6/20/2024	9:30 PM	156	105	261
6/20/2024	9:45 PM	158	85	243
6/20/2024	10:00 PM	138	75	213
6/20/2024	10:15 PM	95	62	157
6/20/2024	10:30 PM	99	50	149
6/20/2024	10:45 PM	80	49	129
6/20/2024	11:00 PM	86	35	121
6/20/2024	11:15 PM	66	35	101
6/20/2024	11:30 PM	52	30	82
6/20/2024	11:45 PM	52	27	79
6/20/2024		15487	16876	32363

818 1336

1302 1147

EXISTING SYNCHRO ANALYSIS

HCM 6th TWSC
1: Allen Heights Dr/Hawks Wood Dr & Stacy Rd

Existing AM
McKinney LDS Temple TIA

Intersection												
Int Delay, s/veh	0.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↗	↗	↘	↗	↗	↘	↗	↗	↘	↗	↗
Traffic Vol, veh/h	7	801	38	8	1486	5	36	0	5	0	2	11
Future Vol, veh/h	7	801	38	8	1486	5	36	0	5	0	2	11
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	175	-	175	335	-	-	155	-	0	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	8	861	41	9	1598	5	39	0	5	0	2	12

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1603	0	0	902	0	0	1695	2498	431	2066	2537	802
Stage 1	-	-	-	-	-	-	877	877	-	1619	1619	-
Stage 2	-	-	-	-	-	-	818	1621	-	447	918	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	404	-	-	749	-	-	60	28	573	31	27	327
Stage 1	-	-	-	-	-	-	310	364	-	108	160	-
Stage 2	-	-	-	-	-	-	336	160	-	560	349	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	404	-	-	749	-	-	56	27	573	30	26	327
Mov Cap-2 Maneuver	-	-	-	-	-	-	165	106	-	88	108	-
Stage 1	-	-	-	-	-	-	304	357	-	106	158	-
Stage 2	-	-	-	-	-	-	316	158	-	544	342	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s/v	0.1			0.1			30.7			20.3		
HCM LOS							D			C		

Minor Lane/Major Mvmt	NBLn1	NBLn2	NBLn3	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	165	-	573	404	-	-	749	-	-	-	249
HCM Lane V/C Ratio	0.235	-	0.009	0.019	-	-	0.011	-	-	-	0.056
HCM Control Delay (s/veh)	33.4	0	11.3	14.1	-	-	9.9	-	-	0	20.3
HCM Lane LOS	D	A	B	B	-	-	A	-	-	A	C
HCM 95th %tile Q (veh)	0.9	-	0	0.1	-	-	0	-	-	-	0.2

HCM 6th TWSC
 2: Lost Creek Dr/Chase Oaks Church Dr & Stacy Rd

Existing AM
 McKinney LDS Temple TIA

Intersection												
Int Delay, s/veh	0.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		←↑		↑	↑↑			↓	↑		↓	↑
Traffic Vol, veh/h	1	797	17	1	1435	2	51	0	2	0	0	0
Future Vol, veh/h	1	797	17	1	1435	2	51	0	2	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	325	-	-	-	-	150	-	-	75
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	866	18	1	1560	2	55	0	2	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1562	0	0	884	0	0	1659	2441	442	1998	2449	781
Stage 1	-	-	-	-	-	-	877	877	-	1563	1563	-
Stage 2	-	-	-	-	-	-	782	1564	-	435	886	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	419	-	-	761	-	-	64	31	563	35	31	338
Stage 1	-	-	-	-	-	-	310	364	-	117	171	-
Stage 2	-	-	-	-	-	-	353	171	-	570	361	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	419	-	-	761	-	-	64	31	563	35	31	338
Mov Cap-2 Maneuver	-	-	-	-	-	-	179	118	-	96	118	-
Stage 1	-	-	-	-	-	-	308	362	-	116	171	-
Stage 2	-	-	-	-	-	-	353	171	-	565	359	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s/v	0			0			33.1			0		
HCM LOS							D			A		

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	179	563	419	-	-	761	-	-	-	-
HCM Lane V/C Ratio	0.31	0.004	0.003	-	-	0.001	-	-	-	-
HCM Control Delay (s/veh)	33.9	11.4	13.6	0	-	9.7	-	-	0	0
HCM Lane LOS	D	B	B	A	-	A	-	-	A	A
HCM 95th %tile Q (veh)	1.2	0	0	-	-	0	-	-	-	-

HCM 6th TWSC
3: River Oaks Dr/Drive 1 & Stacy Rd

Existing AM
McKinney LDS Temple TIA

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	1	771	16	8	1413	1	32	1	5	0	0	4
Future Vol, veh/h	1	771	16	8	1413	1	32	1	5	0	0	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	350	-	-	275	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	803	17	8	1472	1	33	1	5	0	0	4

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1473	0	0	820	0	0	1566	2303	410	1893	2311	737
Stage 1	-	-	-	-	-	-	814	814	-	1489	1489	-
Stage 2	-	-	-	-	-	-	752	1489	-	404	822	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	454	-	-	805	-	-	75	38	591	43	38	361
Stage 1	-	-	-	-	-	-	338	390	-	130	186	-
Stage 2	-	-	-	-	-	-	368	186	-	594	386	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	454	-	-	805	-	-	73	38	591	42	38	361
Mov Cap-2 Maneuver	-	-	-	-	-	-	192	128	-	107	128	-
Stage 1	-	-	-	-	-	-	337	389	-	130	184	-
Stage 2	-	-	-	-	-	-	360	184	-	586	385	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s/v	0			0.1			26.3			15.1		
HCM LOS							D			C		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	208	454	-	-	805	-	-	361
HCM Lane V/C Ratio	0.19	0.002	-	-	0.01	-	-	0.012
HCM Control Delay (s/veh)	26.3	12.9	-	-	9.5	-	-	15.1
HCM Lane LOS		D	B	-	-	A	-	C
HCM 95th %tile Q (veh)	0.7	0	-	-	0	-	-	0

Lanes, Volumes, Timings
5: Angel Pkwy/Wandering Way & Stacy Rd

Existing AM
McKinney LDS Temple TIA



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	474	255	96	904	3	437	9	59	5	12	54
Future Volume (vph)	30	474	255	96	904	3	437	9	59	5	12	54
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250		250	335		0	0		100	185		130
Storage Lanes	1		1	1		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00
Frt			0.850						0.850			0.850
Flt Protected	0.950			0.950			0.950	0.954		0.950		
Satd. Flow (prot)	1770	3539	1583	1770	3539	0	1681	1688	1583	1770	1863	1583
Flt Permitted	0.174			0.419			0.950	0.954		0.950		
Satd. Flow (perm)	324	3539	1583	780	3539	0	1681	1688	1583	1770	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			268						104			104
Link Speed (mph)		50		50			40			30		
Link Distance (ft)		903		966			845			943		
Travel Time (s)		12.3		13.2			14.4			21.4		
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
Adj. Flow (vph)	32	499	268	101	952	3	460	9	62	5	13	57
Shared Lane Traffic (%)							49%					
Lane Group Flow (vph)	32	499	268	101	955	0	235	234	62	5	13	57
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24		24			24			12		
Link Offset(ft)		0		0			0			0		
Crosswalk Width(ft)		16		16			16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100		20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6		20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94		94			94			94		94
Detector 2 Size(ft)		6		6			6			6		6
Detector 2 Type		Cl+Ex		Cl+Ex			Cl+Ex			Cl+Ex		Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)		0.0		0.0			0.0			0.0		0.0
Turn Type	D.P+P	NA	Perm	D.P+P	NA		Split	NA	Perm	Split	NA	Perm
Protected Phases	5	2		1	6		8	8		4	4	
Permitted Phases	6		2	2					8			4

Lanes, Volumes, Timings
5: Angel Pkwy/Wandering Way & Stacy Rd

Existing AM
McKinney LDS Temple TIA



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	5	2	2	1	6		8	8	8	4	4	4
Switch Phase												
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0		6.0	6.0	6.0	6.0	6.0	6.0
Minimum Split (s)	25.0	40.0	40.0	25.0	40.0		38.1	38.1	38.1	38.1	38.1	38.1
Total Split (s)	18.0	61.0	61.0	18.0	61.0		45.0	45.0	45.0	20.0	20.0	20.0
Total Split (%)	12.5%	42.4%	42.4%	12.5%	42.4%		31.3%	31.3%	31.3%	13.9%	13.9%	13.9%
Maximum Green (s)	11.9	55.5	55.5	11.9	55.5		39.9	39.9	39.9	14.9	14.9	14.9
Yellow Time (s)	3.6	4.5	4.5	3.6	4.5		4.1	4.1	4.1	4.1	4.1	4.1
All-Red Time (s)	2.5	1.0	1.0	2.5	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.1	5.5	5.5	6.1	5.5		5.1	5.1	5.1	5.1	5.1	5.1
Lead/Lag	Lead	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes							
Vehicle Extension (s)	2.0	3.0	3.0	2.0	3.0		2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	None	Min	Min	None	Min		None	None	None	None	None	None
Walk Time (s)		7.0	7.0		7.0		7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)		21.0	21.0		22.0		26.0	26.0	26.0	26.0	26.0	26.0
Pedestrian Calls (#/hr)		0	0		0		0	0	0	0	0	0
Act Effct Green (s)	32.0	25.7	25.7	30.6	29.9		17.3	17.3	17.3	7.2	7.2	7.2
Actuated g/C Ratio	0.43	0.35	0.35	0.41	0.41		0.23	0.23	0.23	0.10	0.10	0.10
v/c Ratio	0.12	0.40	0.36	0.23	0.66		0.59	0.59	0.13	0.02	0.07	0.22
Control Delay (s/veh)	12.6	21.5	4.5	13.3	22.7		36.3	36.2	2.2	43.4	43.5	3.6
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	12.6	21.5	4.5	13.3	22.7		36.3	36.2	2.2	43.4	43.5	3.6
LOS	B	C	A	B	C		D	D	A	D	D	A
Approach Delay (s/veh)		15.5			21.9			32.3			13.2	
Approach LOS		B			C			C			B	
Queue Length 50th (ft)	8	97	0	25	211		113	112	0	2	6	0
Queue Length 95th (ft)	25	174	52	62	346		229	228	10	15	28	8
Internal Link Dist (ft)		823			886			765			863	
Turn Bay Length (ft)	250		250	335					100	185		130
Base Capacity (vph)	428	2718	1278	544	2718		1001	1005	984	422	444	456
Starvation Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.07	0.18	0.21	0.19	0.35		0.23	0.23	0.06	0.01	0.03	0.13


Intersection Summary

Area Type:	Other
Cycle Length:	144
Actuated Cycle Length:	73.8
Natural Cycle:	145
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	0.67
Intersection Signal Delay (s/veh):	21.8
Intersection LOS:	C
Intersection Capacity Utilization:	62.2%
ICU Level of Service:	B
Analysis Period (min):	15

Lanes, Volumes, Timings
 5: Angel Pkwy/Wandering Way & Stacy Rd

Existing AM
 McKinney LDS Temple TIA

Splits and Phases: 5: Angel Pkwy/Wandering Way & Stacy Rd

 Ø1 18 s	 Ø2 61 s	 Ø4 20 s	 Ø8 45 s
 Ø5 18 s	 Ø6 61 s		

HCM 6th TWSC
1: Allen Heights Dr/Hawks Wood Dr & Stacy Rd

Existing PM
McKinney LDS Temple TIA

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	14	1363	69	10	1203	7	37	0	51	6	11	16
Future Vol, veh/h	14	1363	69	10	1203	7	37	0	51	6	11	16
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	175	-	175	335	-	-	155	-	0	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	99	99	99	99	99	99	99	99	99	99	99	99
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	14	1377	70	10	1215	7	37	0	52	6	11	16

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1222	0	0	1447	0	0	2038	2647	689	1956	2714	611
Stage 1	-	-	-	-	-	-	1405	1405	-	1239	1239	-
Stage 2	-	-	-	-	-	-	633	1242	-	717	1475	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	566	-	-	464	-	-	~ 33	23	388	38	21	437
Stage 1	-	-	-	-	-	-	147	204	-	186	246	-
Stage 2	-	-	-	-	-	-	434	245	-	387	189	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	566	-	-	464	-	-	~ 28	22	388	32	20	437
Mov Cap-2 Maneuver	-	-	-	-	-	-	104	107	-	119	101	-
Stage 1	-	-	-	-	-	-	143	199	-	181	241	-
Stage 2	-	-	-	-	-	-	390	240	-	327	184	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s/v	0.1			0.1			33.4			29.4		
HCM LOS							D			D		

Minor Lane/Major Mvmt	NBLn1	NBLn2	NBLn3	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	104	-	388	566	-	-	464	-	-	119	186
HCM Lane V/C Ratio	0.359	-	0.133	0.025	-	-	0.022	-	-	0.051	0.147
HCM Control Delay (s/veh)	57.9	0	15.7	11.5	-	-	12.9	-	-	36.9	27.7
HCM Lane LOS	F	A	C	B	-	-	B	-	-	E	D
HCM 95th %tile Q (veh)	1.4	-	0.5	0.1	-	-	0.1	-	-	0.2	0.5

Notes
 -: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

HCM 6th TWSC
 2: Lost Creek Dr/Chase Oaks Church Dr & Stacy Rd

Existing PM
 McKinney LDS Temple TIA

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	0	1398	40	8	1159	1	36	0	3	0	0	3
Future Vol, veh/h	0	1398	40	8	1159	1	36	0	3	0	0	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	325	-	-	-	-	150	-	-	75
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	1441	41	8	1195	1	37	0	3	0	0	3

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1196	0	0	1482	0	0	2076	2674	741	1933	2694	598
Stage 1	-	-	-	-	-	-	1462	1462	-	1212	1212	-
Stage 2	-	-	-	-	-	-	614	1212	-	721	1482	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	579	-	-	450	-	-	~ 31	22	359	40	21	445
Stage 1	-	-	-	-	-	-	135	192	-	193	253	-
Stage 2	-	-	-	-	-	-	446	253	-	385	187	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	579	-	-	450	-	-	~ 30	22	359	39	21	445
Mov Cap-2 Maneuver	-	-	-	-	-	-	103	109	-	132	104	-
Stage 1	-	-	-	-	-	-	135	192	-	193	248	-
Stage 2	-	-	-	-	-	-	435	248	-	382	187	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s/v	0			0.1			55.2			13.1		
HCM LOS							F			B		

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	103	359	579	-	-	450	-	-	-	445
HCM Lane V/C Ratio	0.36	0.009	-	-	-	0.018	-	-	-	0.007
HCM Control Delay (s/veh)	58.5	15.1	0	-	-	13.1	-	-	0	13.1
HCM Lane LOS	F	C	A	-	-	B	-	-	A	B
HCM 95th %tile Q (veh)	1.4	0	0	-	-	0.1	-	-	-	0

Notes
 -: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

HCM 6th TWSC
3: River Oaks Dr/Drive 1 & Stacy Rd

Existing PM
McKinney LDS Temple TIA

Intersection												
Int Delay, s/veh	0.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↖↗		↖	↖↗			↕			↕	
Traffic Vol, veh/h	5	1360	28	9	1171	1	11	1	5	1	0	8
Future Vol, veh/h	5	1360	28	9	1171	1	11	1	5	1	0	8
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	350	-	-	275	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	1388	29	9	1195	1	11	1	5	1	0	8

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1196	0	0	1417	0	0	2029	2627	709	1919	2641	598
Stage 1	-	-	-	-	-	-	1413	1413	-	1214	1214	-
Stage 2	-	-	-	-	-	-	616	1214	-	705	1427	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	579	-	-	477	-	-	34	23	377	41	23	445
Stage 1	-	-	-	-	-	-	145	202	-	193	253	-
Stage 2	-	-	-	-	-	-	445	253	-	393	199	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	579	-	-	477	-	-	33	22	377	39	22	445
Mov Cap-2 Maneuver	-	-	-	-	-	-	109	110	-	131	107	-
Stage 1	-	-	-	-	-	-	144	200	-	191	248	-
Stage 2	-	-	-	-	-	-	429	248	-	382	197	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s/v	0			0.1			34.8			15.5		
HCM LOS							D			C		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	138	579	-	-	477	-	-	351
HCM Lane V/C Ratio	0.126	0.009	-	-	0.019	-	-	0.026
HCM Control Delay (s/veh)	34.8	11.3	-	-	12.7	-	-	15.5
HCM Lane LOS	D	B	-	-	B	-	-	C
HCM 95th %tile Q (veh)	0.4	0	-	-	0.1	-	-	0.1

Lanes, Volumes, Timings
5: Angel Pkwy/Wandering Way & Stacy Rd

Existing PM
McKinney LDS Temple TIA



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	92	856	444	83	736	11	338	22	115	9	23	47
Future Volume (vph)	92	856	444	83	736	11	338	22	115	9	23	47
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250		250	335		0	0		100	185		130
Storage Lanes	1		1	1		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00
Frt			0.850		0.998				0.850			0.850
Flt Protected	0.950			0.950			0.950	0.958		0.950		
Satd. Flow (prot)	1770	3539	1583	1770	3532	0	1681	1695	1583	1770	1863	1583
Flt Permitted	0.267			0.213			0.950	0.958		0.950		
Satd. Flow (perm)	497	3539	1583	397	3532	0	1681	1695	1583	1770	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			447		1				94			93
Link Speed (mph)		50		50			40			30		
Link Distance (ft)		903		966			845			943		
Travel Time (s)		12.3		13.2			14.4			21.4		
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	95	882	458	86	759	11	348	23	119	9	24	48
Shared Lane Traffic (%)							47%					
Lane Group Flow (vph)	95	882	458	86	770	0	184	187	119	9	24	48
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24		24			24			12		
Link Offset(ft)		0		0			0			0		
Crosswalk Width(ft)		16		16			16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100		20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6		20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94		94			94			94		
Detector 2 Size(ft)		6		6			6			6		
Detector 2 Type		Cl+Ex		Cl+Ex			Cl+Ex			Cl+Ex		
Detector 2 Channel												
Detector 2 Extend (s)		0.0		0.0			0.0			0.0		
Turn Type	D.P+P	NA	Perm	D.P+P	NA		Split	NA	Perm	Split	NA	Perm
Protected Phases	5	2		1	6		8	8		4	4	
Permitted Phases	6		2	2					8			4

Lanes, Volumes, Timings
5: Angel Pkwy/Wandering Way & Stacy Rd

Existing PM
McKinney LDS Temple TIA



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	5	2	2	1	6		8	8	8	4	4	4
Switch Phase												
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0		6.0	6.0	6.0	6.0	6.0	6.0
Minimum Split (s)	25.0	40.0	40.0	25.0	40.0		38.1	38.1	38.1	38.1	38.1	38.1
Total Split (s)	18.0	78.0	78.0	18.0	78.0		43.0	43.0	43.0	21.0	21.0	21.0
Total Split (%)	11.3%	48.8%	48.8%	11.3%	48.8%		26.9%	26.9%	26.9%	13.1%	13.1%	13.1%
Maximum Green (s)	11.9	72.5	72.5	11.9	72.5		37.9	37.9	37.9	15.9	15.9	15.9
Yellow Time (s)	3.6	4.5	4.5	3.6	4.5		4.1	4.1	4.1	4.1	4.1	4.1
All-Red Time (s)	2.5	1.0	1.0	2.5	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.1	5.5	5.5	6.1	5.5		5.1	5.1	5.1	5.1	5.1	5.1
Lead/Lag	Lead	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes							
Vehicle Extension (s)	2.0	3.0	3.0	2.0	3.0		2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	None	Min	Min	None	Min		None	None	None	None	None	None
Walk Time (s)		7.0	7.0		7.0		7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)		21.0	21.0		22.0		26.0	26.0	26.0	26.0	26.0	26.0
Pedestrian Calls (#/hr)		0	0		0		0	0	0	0	0	0
Act Effct Green (s)	36.1	31.7	31.7	36.1	31.5		15.1	15.1	15.1	7.2	7.2	7.2
Actuated g/C Ratio	0.47	0.41	0.41	0.47	0.41		0.20	0.20	0.20	0.09	0.09	0.09
v/c Ratio	0.26	0.60	0.50	0.27	0.53		0.55	0.56	0.30	0.05	0.13	0.20
Control Delay (s/veh)	12.2	21.9	4.3	12.5	20.8		39.9	39.9	13.4	43.2	43.6	3.1
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	12.2	21.9	4.3	12.5	20.8		39.9	39.9	13.4	43.2	43.6	3.1
LOS	B	C	A	B	C		D	D	B	D	D	A
Approach Delay (s/veh)		15.7			20.0			33.5				19.6
Approach LOS		B			C			C				B
Queue Length 50th (ft)	21	183	3	19	155		89	91	10	4	11	0
Queue Length 95th (ft)	54	308	64	50	263		194	196	62	22	43	7
Internal Link Dist (ft)		823			886			765				863
Turn Bay Length (ft)	250		250	335					100	185		130
Base Capacity (vph)	480	3107	1444	448	3101		936	944	923	419	441	446
Starvation Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.20	0.28	0.32	0.19	0.25		0.20	0.20	0.13	0.02	0.05	0.11






Intersection Summary

Area Type:	Other
Cycle Length:	160
Actuated Cycle Length:	76.9
Natural Cycle:	145
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	0.61
Intersection Signal Delay (s/veh):	20.1
Intersection LOS:	C
Intersection Capacity Utilization:	58.8%
ICU Level of Service:	B
Analysis Period (min):	15

Lanes, Volumes, Timings
 5: Angel Pkwy/Wandering Way & Stacy Rd

Existing PM
 McKinney LDS Temple TIA

Splits and Phases: 5: Angel Pkwy/Wandering Way & Stacy Rd

 Ø1 18 s	 Ø2 78 s	 Ø4 21 s	 Ø8 43 s
 Ø5 18 s	 Ø6 78 s		

HCM 6th TWSC
1: Allen Heights Dr/Hawks Wood Dr & Stacy Rd

Existing Saturday
McKinney LDS Temple TIA

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	22	921	52	6	1155	5	36	2	9	4	5	8
Future Vol, veh/h	22	921	52	6	1155	5	36	2	9	4	5	8
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	175	-	175	335	-	-	155	-	0	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	23	969	55	6	1216	5	38	2	9	4	5	8

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1221	0	0	1024	0	0	1638	2248	485	1763	2301	611
Stage 1	-	-	-	-	-	-	1015	1015	-	1231	1231	-
Stage 2	-	-	-	-	-	-	623	1233	-	532	1070	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	567	-	-	674	-	-	66	41	528	53	38	437
Stage 1	-	-	-	-	-	-	255	314	-	188	248	-
Stage 2	-	-	-	-	-	-	440	247	-	499	296	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	567	-	-	674	-	-	60	39	528	50	36	437
Mov Cap-2 Maneuver	-	-	-	-	-	-	164	134	-	136	135	-
Stage 1	-	-	-	-	-	-	245	301	-	180	246	-
Stage 2	-	-	-	-	-	-	419	245	-	467	284	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s/v	0.3			0.1			29.2			23.9		
HCM LOS							D			C		

Minor Lane/Major Mvmt	NBLn1	NBLn2	NBLn3	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	164	134	528	567	-	-	674	-	-	136	235
HCM Lane V/C Ratio	0.231	0.016	0.018	0.041	-	-	0.009	-	-	0.031	0.058
HCM Control Delay (s/veh)	33.4	32.3	11.9	11.6	-	-	10.4	-	-	32.3	21.3
HCM Lane LOS	D	D	B	B	-	-	B	-	-	D	C
HCM 95th %tile Q (veh)	0.9	0	0.1	0.1	-	-	0	-	-	0.1	0.2

HCM 6th TWSC
 2: Lost Creek Dr/Chase Oaks Church Dr & Stacy Rd

Existing Saturday
 McKinney LDS Temple TIA

Intersection												
Int Delay, s/veh	0.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		←↑		↑	↑↑			↓	↑		↓	↑
Traffic Vol, veh/h	3	889	36	3	1141	0	40	0	3	0	0	2
Future Vol, veh/h	3	889	36	3	1141	0	40	0	3	0	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	325	-	-	-	-	150	-	-	75
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	936	38	3	1201	0	42	0	3	0	0	2

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1201	0	0	974	0	0	1568	2168	487	1681	2187	601
Stage 1	-	-	-	-	-	-	961	961	-	1207	1207	-
Stage 2	-	-	-	-	-	-	607	1207	-	474	980	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	577	-	-	704	-	-	75	46	526	62	45	443
Stage 1	-	-	-	-	-	-	275	333	-	194	254	-
Stage 2	-	-	-	-	-	-	450	254	-	540	326	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	577	-	-	704	-	-	74	45	526	61	44	443
Mov Cap-2 Maneuver	-	-	-	-	-	-	185	150	-	149	149	-
Stage 1	-	-	-	-	-	-	272	329	-	192	253	-
Stage 2	-	-	-	-	-	-	446	253	-	531	322	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s/v	0.1			0			28.8			13.2		
HCM LOS							D			B		

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	185	526	577	-	-	704	-	-	-	443
HCM Lane V/C Ratio	0.228	0.006	0.005	-	-	0.004	-	-	-	0.005
HCM Control Delay (s/veh)	30.1	11.9	11.3	0.1	-	10.1	-	-	0	13.2
HCM Lane LOS	D	B	B	A	-	B	-	-	A	B
HCM 95th %tile Q (veh)	0.8	0	0	-	-	0	-	-	-	0

HCM 6th TWSC
3: River Oaks Dr/Drive 1 & Stacy Rd

Existing Saturday
McKinney LDS Temple TIA

Intersection												
Int Delay, s/veh	0.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↖↗		↖	↖↗			↕			↕	
Traffic Vol, veh/h	2	862	15	16	1137	1	21	1	1	0	0	1
Future Vol, veh/h	2	862	15	16	1137	1	21	1	1	0	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	350	-	-	275	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	2	907	16	17	1197	1	22	1	1	0	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1198	0	0	923	0	0	1552	2151	462	1690	2159	599
Stage 1	-	-	-	-	-	-	919	919	-	1232	1232	-
Stage 2	-	-	-	-	-	-	633	1232	-	458	927	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	578	-	-	736	-	-	77	48	547	61	47	445
Stage 1	-	-	-	-	-	-	292	348	-	188	248	-
Stage 2	-	-	-	-	-	-	434	248	-	552	345	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	578	-	-	736	-	-	75	47	547	59	46	445
Mov Cap-2 Maneuver	-	-	-	-	-	-	190	150	-	146	147	-
Stage 1	-	-	-	-	-	-	291	347	-	187	242	-
Stage 2	-	-	-	-	-	-	423	242	-	547	344	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s/v	0			0.1			26.3			13.1		
HCM LOS							D			B		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	193	578	-	-	736	-	-	445
HCM Lane V/C Ratio	0.125	0.004	-	-	0.023	-	-	0.002
HCM Control Delay (s/veh)	26.3	11.3	-	-	10	-	-	13.1
HCM Lane LOS	D	B	-	-	B	-	-	B
HCM 95th %tile Q (veh)	0.4	0	-	-	0.1	-	-	0

Lanes, Volumes, Timings
5: Angel Pkwy/Wandering Way & Stacy Rd

Existing Saturday
McKinney LDS Temple TIA



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	68	516	275	84	722	12	369	18	71	14	11	48
Future Volume (vph)	68	516	275	84	722	12	369	18	71	14	11	48
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250		250	335		0	0		100	185		130
Storage Lanes	1		1	1		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00
Frt			0.850		0.998				0.850			0.850
Flt Protected	0.950			0.950			0.950	0.957		0.950		
Satd. Flow (prot)	1770	3539	1583	1770	3532	0	1681	1694	1583	1770	1863	1583
Flt Permitted	0.251			0.401			0.950	0.957		0.950		
Satd. Flow (perm)	468	3539	1583	747	3532	0	1681	1694	1583	1770	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			284		2				125			125
Link Speed (mph)		50		50			40		30			
Link Distance (ft)		903		966			845		943			
Travel Time (s)		12.3		13.2			14.4		21.4			
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	70	532	284	87	744	12	380	19	73	14	11	49
Shared Lane Traffic (%)							48%					
Lane Group Flow (vph)	70	532	284	87	756	0	198	201	73	14	11	49
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24		24			24		12			
Link Offset(ft)		0		0			0		0			
Crosswalk Width(ft)		16		16			16		16			
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100		20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6		20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94		94			94		94			94
Detector 2 Size(ft)		6		6			6		6			6
Detector 2 Type		Cl+Ex		Cl+Ex			Cl+Ex		Cl+Ex			Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)		0.0		0.0			0.0		0.0			0.0
Turn Type	D.P+P	NA	Perm	D.P+P	NA		Split	NA	Perm	Split	NA	Perm
Protected Phases	5	2		1	6		8	8		4	4	
Permitted Phases	6		2	2					8			4

Lanes, Volumes, Timings
5: Angel Pkwy/Wandering Way & Stacy Rd

Existing Saturday
McKinney LDS Temple TIA



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	5	2	2	1	6		8	8	8	4	4	4
Switch Phase												
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0		6.0	6.0	6.0	6.0	6.0	6.0
Minimum Split (s)	25.0	40.0	40.0	25.0	40.0		38.1	38.1	38.1	38.1	38.1	38.1
Total Split (s)	15.0	54.0	54.0	15.0	54.0		36.0	36.0	36.0	15.0	15.0	15.0
Total Split (%)	12.5%	45.0%	45.0%	12.5%	45.0%		30.0%	30.0%	30.0%	12.5%	12.5%	12.5%
Maximum Green (s)	8.9	48.5	48.5	8.9	48.5		30.9	30.9	30.9	9.9	9.9	9.9
Yellow Time (s)	3.6	4.5	4.5	3.6	4.5		4.1	4.1	4.1	4.1	4.1	4.1
All-Red Time (s)	2.5	1.0	1.0	2.5	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.1	5.5	5.5	6.1	5.5		5.1	5.1	5.1	5.1	5.1	5.1
Lead/Lag	Lead	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes							
Vehicle Extension (s)	2.0	3.0	3.0	2.0	3.0		2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	None	Min	Min	None	Min		None	None	None	None	None	None
Walk Time (s)		7.0	7.0		7.0		7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)		21.0	21.0		22.0		26.0	26.0	26.0	26.0	26.0	26.0
Pedestrian Calls (#/hr)		0	0		0		0	0	0	0	0	0
Act Effct Green (s)	25.6	21.3	21.3	25.6	21.6		13.7	13.7	13.7	7.2	7.2	7.2
Actuated g/C Ratio	0.41	0.34	0.34	0.41	0.35		0.22	0.22	0.22	0.12	0.12	0.12
v/c Ratio	0.20	0.44	0.39	0.20	0.61		0.54	0.54	0.16	0.06	0.05	0.16
Control Delay (s/veh)	11.9	19.6	4.5	11.6	21.6		32.2	32.2	2.0	36.4	36.2	1.2
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	11.9	19.6	4.5	11.6	21.6		32.2	32.2	2.0	36.4	36.2	1.2
LOS	B	B	A	B	C		C	C	A	D	D	A
Approach Delay (s/veh)		14.2			20.7			27.6			13.1	
Approach LOS		B			C			C			B	
Queue Length 50th (ft)	15	94	0	19	143		80	82	0	6	4	0
Queue Length 95th (ft)	41	167	51	49	244		175	176	9	27	23	0
Internal Link Dist (ft)		823			886			765			863	
Turn Bay Length (ft)	250		250	335					100	185		130
Base Capacity (vph)	425	2714	1280	497	2709		943	950	943	334	351	400
Starvation Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.16	0.20	0.22	0.18	0.28		0.21	0.21	0.08	0.04	0.03	0.12

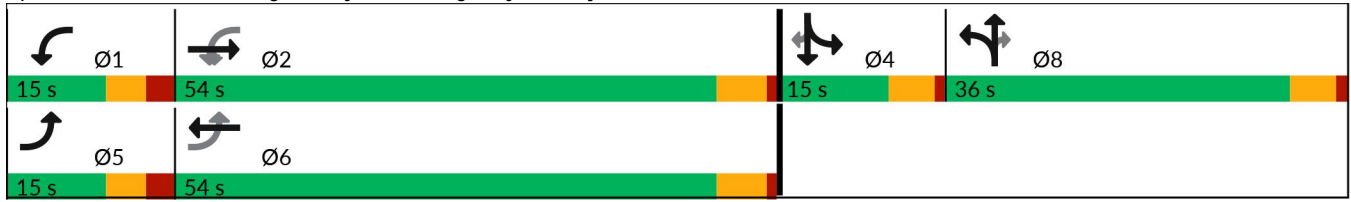
Intersection Summary

Area Type:	Other
Cycle Length:	120
Actuated Cycle Length:	62.6
Natural Cycle:	145
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	0.62
Intersection Signal Delay (s/veh):	19.3
Intersection Capacity Utilization:	55.8%
Analysis Period (min):	15
Intersection LOS:	B
ICU Level of Service:	B

Lanes, Volumes, Timings
 5: Angel Pkwy/Wandering Way & Stacy Rd

Existing Saturday
 McKinney LDS Temple TIA

Splits and Phases: 5: Angel Pkwy/Wandering Way & Stacy Rd



BUILDOUT SYNCHRO ANALYSIS

HCM 6th TWSC
1: Allen Heights Dr/Hawks Wood Dr & Stacy Rd

Buildout AM
McKinney LDS Temple TIA

Intersection												
Int Delay, s/veh	0.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑↑	↗	↘	↑↑		↘	↑	↗	↘	↗	
Traffic Vol, veh/h	7	892	40	11	1611	5	38	0	9	0	2	12
Future Vol, veh/h	7	892	40	11	1611	5	38	0	9	0	2	12
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	175	-	175	335	-	-	155	-	0	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	8	959	43	12	1732	5	41	0	10	0	2	13

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1737	0	0	1002	0	0	1866	2736	480	2255	2777	869
Stage 1	-	-	-	-	-	-	975	975	-	1759	1759	-
Stage 2	-	-	-	-	-	-	891	1761	-	496	1018	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	358	-	-	687	-	-	45	20	532	23	19	295
Stage 1	-	-	-	-	-	-	270	328	-	88	137	-
Stage 2	-	-	-	-	-	-	304	136	-	524	313	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	358	-	-	687	-	-	41	19	532	22	18	295
Mov Cap-2 Maneuver	-	-	-	-	-	-	141	89	-	71	91	-
Stage 1	-	-	-	-	-	-	264	321	-	86	135	-
Stage 2	-	-	-	-	-	-	281	134	-	503	306	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s/v	0.1			0.1			35.1			22.3		
HCM LOS							E			C		

Minor Lane/Major Mvmt	NBLn1	NBLn2	NBLn3	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	141	-	532	358	-	-	687	-	-	-	223
HCM Lane V/C Ratio	0.29	-	0.018	0.021	-	-	0.017	-	-	-	0.068
HCM Control Delay (s/veh)	40.6	0	11.9	15.3	-	-	10.3	-	-	0	22.3
HCM Lane LOS	E	A	B	C	-	-	B	-	-	A	C
HCM 95th %tile Q (veh)	1.1	-	0.1	0.1	-	-	0.1	-	-	-	0.2

HCM 6th TWSC
 2: Lost Creek Dr/Chase Oaks Church Dr & Stacy Rd

Buildout AM
 McKinney LDS Temple TIA

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	1	892	18	1	1560	2	54	0	2	0	0	0
Future Vol, veh/h	1	892	18	1	1560	2	54	0	2	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	325	-	-	-	-	150	-	-	75
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	970	20	1	1696	2	59	0	2	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1698	0	0	990	0	0	1832	2682	495	2186	2691	849
Stage 1	-	-	-	-	-	-	982	982	-	1699	1699	-
Stage 2	-	-	-	-	-	-	850	1700	-	487	992	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	371	-	-	694	-	-	~ 47	22	520	25	21	304
Stage 1	-	-	-	-	-	-	267	325	-	96	146	-
Stage 2	-	-	-	-	-	-	322	146	-	531	322	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	371	-	-	694	-	-	~ 47	22	520	25	21	304
Mov Cap-2 Maneuver	-	-	-	-	-	-	154	100	-	79	100	-
Stage 1	-	-	-	-	-	-	265	323	-	95	146	-
Stage 2	-	-	-	-	-	-	322	146	-	526	320	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s/v	0			0			41			0		
HCM LOS							E			A		

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	154	520	371	-	-	694	-	-	-	-
HCM Lane V/C Ratio	0.381	0.004	0.003	-	-	0.002	-	-	-	-
HCM Control Delay (s/veh)	42.1	12	14.7	0	-	10.2	-	-	0	0
HCM Lane LOS	E	B	B	A	-	B	-	-	A	A
HCM 95th %tile Q (veh)	1.6	0	0	-	-	0	-	-	-	-

Notes
 -: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

HCM 6th TWSC
3: River Oaks Dr/Drive 1 & Stacy Rd

Buildout AM
McKinney LDS Temple TIA

Intersection												
Int Delay, s/veh	1.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↖↗		↖	↖↗			↕			↕	
Traffic Vol, veh/h	47	818	17	8	1511	8	34	1	5	21	0	31
Future Vol, veh/h	47	818	17	8	1511	8	34	1	5	21	0	31
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	350	-	-	275	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	49	852	18	8	1574	8	35	1	5	22	0	32

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1582	0	0	870	0	0	1762	2557	435	2119	2562	791
Stage 1	-	-	-	-	-	-	959	959	-	1594	1594	-
Stage 2	-	-	-	-	-	-	803	1598	-	525	968	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	412	-	-	770	-	-	54	26	569	29	26	332
Stage 1	-	-	-	-	-	-	276	334	-	112	165	-
Stage 2	-	-	-	-	-	-	343	164	-	504	330	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	412	-	-	770	-	-	44	23	569	26	23	332
Mov Cap-2 Maneuver	-	-	-	-	-	-	134	83	-	80	104	-
Stage 1	-	-	-	-	-	-	243	294	-	99	163	-
Stage 2	-	-	-	-	-	-	306	162	-	438	291	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s/v	0.8			0.1			39.2			43.5		
HCM LOS							E			E		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	146	412	-	-	770	-	-	146
HCM Lane V/C Ratio	0.285	0.119	-	-	0.011	-	-	0.371
HCM Control Delay (s/veh)	39.2	14.9	-	-	9.7	-	-	43.5
HCM Lane LOS	E	B	-	-	A	-	-	E
HCM 95th %tile Q (veh)	1.1	0.4	-	-	0	-	-	1.6

Intersection						
Int Delay, s/veh	0.1					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑			↑
Traffic Vol, veh/h	0	924	1481	18	0	12
Future Vol, veh/h	0	924	1481	18	0	12
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	1004	1610	20	0	13

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	-	0	-	0	- 815
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	-	0 321
Stage 1	0	-	-	-	0 -
Stage 2	0	-	-	-	0 -
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	-	- 321
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0	16.7
HCM LOS			C

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	321
HCM Lane V/C Ratio	-	-	-	0.041
HCM Control Delay (s/veh)	-	-	-	16.7
HCM Lane LOS	-	-	-	C
HCM 95th %tile Q (veh)	-	-	-	0.1

Lanes, Volumes, Timings
5: Angel Pkwy/Wandering Way & Stacy Rd

Buildout AM
McKinney LDS Temple TIA



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	35	512	280	102	970	3	475	10	63	5	13	61
Future Volume (vph)	35	512	280	102	970	3	475	10	63	5	13	61
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250		250	335		0	0		100	185		130
Storage Lanes	1		1	1		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00
Frt			0.850						0.850			0.850
Flt Protected	0.950			0.950			0.950	0.954		0.950		
Satd. Flow (prot)	1770	3539	1583	1770	3539	0	1681	1688	1583	1770	1863	1583
Flt Permitted	0.150			0.389			0.950	0.954		0.950		
Satd. Flow (perm)	279	3539	1583	725	3539	0	1681	1688	1583	1770	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			295						104			104
Link Speed (mph)		50			50			40				30
Link Distance (ft)		500			966			845				943
Travel Time (s)		6.8			13.2			14.4				21.4
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
Adj. Flow (vph)	37	539	295	107	1021	3	500	11	66	5	14	64
Shared Lane Traffic (%)							49%					
Lane Group Flow (vph)	37	539	295	107	1024	0	255	256	66	5	14	64
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			24				12
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100		20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6		20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94				94
Detector 2 Size(ft)		6			6			6				6
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				0.0
Turn Type	D.P+P	NA	Perm	D.P+P	NA		Split	NA	Perm	Split	NA	Perm
Protected Phases	5	2		1	6		8	8		4	4	
Permitted Phases	6		2	2					8			4

Lanes, Volumes, Timings
5: Angel Pkwy/Wandering Way & Stacy Rd

Buildout AM
McKinney LDS Temple TIA



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	5	2	2	1	6		8	8	8	4	4	4
Switch Phase												
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0		6.0	6.0	6.0	6.0	6.0	6.0
Minimum Split (s)	25.0	40.0	40.0	25.0	40.0		38.1	38.1	38.1	38.1	38.1	38.1
Total Split (s)	18.0	61.0	61.0	18.0	61.0		45.0	45.0	45.0	20.0	20.0	20.0
Total Split (%)	12.5%	42.4%	42.4%	12.5%	42.4%		31.3%	31.3%	31.3%	13.9%	13.9%	13.9%
Maximum Green (s)	11.9	55.5	55.5	11.9	55.5		39.9	39.9	39.9	14.9	14.9	14.9
Yellow Time (s)	3.6	4.5	4.5	3.6	4.5		4.1	4.1	4.1	4.1	4.1	4.1
All-Red Time (s)	2.5	1.0	1.0	2.5	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.1	5.5	5.5	6.1	5.5		5.1	5.1	5.1	5.1	5.1	5.1
Lead/Lag	Lead	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes							
Vehicle Extension (s)	2.0	3.0	3.0	2.0	3.0		2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	None	Min	Min	None	Min		None	None	None	None	None	None
Walk Time (s)		7.0	7.0		7.0		7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)		21.0	21.0		22.0		26.0	26.0	26.0	26.0	26.0	26.0
Pedestrian Calls (#/hr)		0	0		0		0	0	0	0	0	0
Act Effct Green (s)	35.6	29.0	29.0	34.1	33.4		19.8	19.8	19.8	7.2	7.2	7.2
Actuated g/C Ratio	0.45	0.36	0.36	0.43	0.42		0.25	0.25	0.25	0.09	0.09	0.09
v/c Ratio	0.15	0.42	0.38	0.25	0.69		0.61	0.61	0.14	0.03	0.08	0.27
Control Delay (s/veh)	13.5	22.5	4.3	14.1	24.1		38.2	38.2	2.6	47.6	47.8	5.6
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	13.5	22.5	4.3	14.1	24.1		38.2	38.2	2.6	47.6	47.8	5.6
LOS	B	C	A	B	C		D	D	A	D	D	A
Approach Delay (s/veh)		16.0			23.2			34.2			15.3	
Approach LOS		B			C			C			B	
Queue Length 50th (ft)	9	112	0	28	243		131	132	0	3	7	0
Queue Length 95th (ft)	30	197	54	68	396		266	267	12	17	32	14
Internal Link Dist (ft)		420			886			765			863	
Turn Bay Length (ft)	250		250	335					100	185		130
Base Capacity (vph)	396	2513	1209	519	2513		952	956	942	389	410	429
Starvation Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.09	0.21	0.24	0.21	0.41		0.27	0.27	0.07	0.01	0.03	0.15

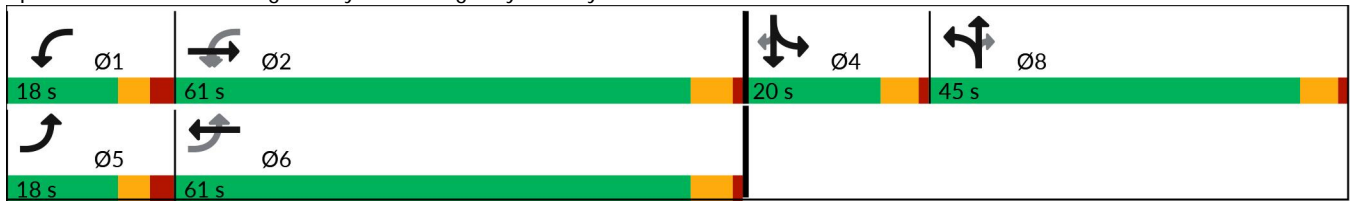
Intersection Summary

Area Type:	Other
Cycle Length:	144
Actuated Cycle Length:	79.9
Natural Cycle:	145
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	0.69
Intersection Signal Delay (s/veh):	23.0
Intersection LOS:	C
Intersection Capacity Utilization:	65.1%
ICU Level of Service:	C
Analysis Period (min):	15

Lanes, Volumes, Timings
 5: Angel Pkwy/Wandering Way & Stacy Rd

Buildout AM
 McKinney LDS Temple TIA

Splits and Phases: 5: Angel Pkwy/Wandering Way & Stacy Rd



HCM 6th TWSC
1: Allen Heights Dr/Hawks Wood Dr & Stacy Rd

Intersection												
Int Delay, s/veh	0.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑↑	↗	↘	↑↑		↘	↑	↗	↘	↗	
Traffic Vol, veh/h	7	850	40	8	1576	5	38	0	5	0	2	12
Future Vol, veh/h	7	850	40	8	1576	5	38	0	5	0	2	12
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	175	-	175	335	-	-	155	-	0	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	8	914	43	9	1695	5	41	0	5	0	2	13

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1700	0	0	957	0	0	1797	2648	457	2189	2689	850
Stage 1	-	-	-	-	-	-	930	930	-	1716	1716	-
Stage 2	-	-	-	-	-	-	867	1718	-	473	973	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	371	-	-	714	-	-	50	23	551	25	21	304
Stage 1	-	-	-	-	-	-	287	344	-	93	143	-
Stage 2	-	-	-	-	-	-	314	143	-	541	329	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	371	-	-	714	-	-	46	22	551	24	20	304
Mov Cap-2 Maneuver	-	-	-	-	-	-	150	95	-	76	96	-
Stage 1	-	-	-	-	-	-	281	336	-	91	141	-
Stage 2	-	-	-	-	-	-	292	141	-	524	322	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s/v	0.1			0.1			34.8			21.6		
HCM LOS							D			C		

Minor Lane/Major Mvmt	NBLn1	NBLn2	NBLn3	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	150	-	551	371	-	-	714	-	-	-	232
HCM Lane V/C Ratio	0.272	-	0.01	0.02	-	-	0.012	-	-	-	0.065
HCM Control Delay (s/veh)	37.8	0	11.6	14.9	-	-	10.1	-	-	0	21.6
HCM Lane LOS	E	A	B	B	-	-	B	-	-	A	C
HCM 95th %tile Q (veh)	1	-	0	0.1	-	-	0	-	-	-	0.2

HCM 6th TWSC
 2: Lost Creek Dr/Chase Oaks Church Dr & Stacy Rd

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	1	846	18	1	1522	2	54	0	2	0	0	0
Future Vol, veh/h	1	846	18	1	1522	2	54	0	2	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	325	-	-	-	-	150	-	-	75
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	920	20	1	1654	2	59	0	2	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1656	0	0	940	0	0	1761	2590	470	2119	2599	828
Stage 1	-	-	-	-	-	-	932	932	-	1657	1657	-
Stage 2	-	-	-	-	-	-	829	1658	-	462	942	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	385	-	-	725	-	-	~ 54	25	540	29	24	314
Stage 1	-	-	-	-	-	-	287	343	-	102	154	-
Stage 2	-	-	-	-	-	-	331	153	-	549	340	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	385	-	-	725	-	-	~ 54	25	540	29	24	314
Mov Cap-2 Maneuver	-	-	-	-	-	-	164	106	-	84	106	-
Stage 1	-	-	-	-	-	-	286	341	-	101	154	-
Stage 2	-	-	-	-	-	-	331	153	-	544	338	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s/v	0			0			37.7			0		
HCM LOS							E			A		

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	164	540	385	-	-	725	-	-	-	-
HCM Lane V/C Ratio	0.358	0.004	0.003	-	-	0.001	-	-	-	-
HCM Control Delay (s/veh)	38.7	11.7	14.4	0	-	10	-	-	0	0
HCM Lane LOS	E	B	B	A	-	A	-	-	A	A
HCM 95th %tile Q (veh)	1.5	0	0	-	-	0	-	-	-	-

Notes
 -: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection												
Int Delay, s/veh	0.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↖↗		↖	↖↗			↕			↕	
Traffic Vol, veh/h	1	818	17	8	1499	1	34	1	5	0	0	4
Future Vol, veh/h	1	818	17	8	1499	1	34	1	5	0	0	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	350	-	-	275	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	852	18	8	1561	1	35	1	5	0	0	4

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1562	0	0	870	0	0	1660	2441	435	2007	2450	781
Stage 1	-	-	-	-	-	-	863	863	-	1578	1578	-
Stage 2	-	-	-	-	-	-	797	1578	-	429	872	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	419	-	-	770	-	-	64	31	569	35	31	338
Stage 1	-	-	-	-	-	-	316	370	-	114	168	-
Stage 2	-	-	-	-	-	-	346	168	-	574	366	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	419	-	-	770	-	-	63	31	569	34	31	338
Mov Cap-2 Maneuver	-	-	-	-	-	-	177	116	-	94	115	-
Stage 1	-	-	-	-	-	-	315	369	-	114	166	-
Stage 2	-	-	-	-	-	-	338	166	-	566	365	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s/v	0			0.1			29			15.8		
HCM LOS							D			C		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	191	419	-	-	770	-	-	338
HCM Lane V/C Ratio	0.218	0.002	-	-	0.011	-	-	0.012
HCM Control Delay (s/veh)	29	13.6	-	-	9.7	-	-	15.8
HCM Lane LOS	D	B	-	-	A	-	-	C
HCM 95th %tile Q (veh)	0.8	0	-	-	0	-	-	0

Lanes, Volumes, Timings
5: Angel Pkwy/Wandering Way & Stacy Rd

Buildout Background AM
McKinney LDS Temple TIA



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	32	503	271	102	959	3	464	10	63	5	13	57
Future Volume (vph)	32	503	271	102	959	3	464	10	63	5	13	57
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250		250	335		0	0		100	185		130
Storage Lanes	1		1	1		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00
Frt			0.850						0.850			0.850
Flt Protected	0.950			0.950			0.950	0.954		0.950		
Satd. Flow (prot)	1770	3539	1583	1770	3539	0	1681	1688	1583	1770	1863	1583
Flt Permitted	0.154			0.396			0.950	0.954		0.950		
Satd. Flow (perm)	287	3539	1583	738	3539	0	1681	1688	1583	1770	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			285						104			104
Link Speed (mph)		50			50			40				30
Link Distance (ft)		903			966			845				943
Travel Time (s)		12.3			13.2			14.4				21.4
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
Adj. Flow (vph)	34	529	285	107	1009	3	488	11	66	5	14	60
Shared Lane Traffic (%)							49%					
Lane Group Flow (vph)	34	529	285	107	1012	0	249	250	66	5	14	60
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			24				12
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100		20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6		20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94				94
Detector 2 Size(ft)		6			6			6				6
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				0.0
Turn Type	D.P+P	NA	Perm	D.P+P	NA		Split	NA	Perm	Split	NA	Perm
Protected Phases	5	2		1	6		8	8		4	4	
Permitted Phases	6		2	2					8			4

Lanes, Volumes, Timings
5: Angel Pkwy/Wandering Way & Stacy Rd

Buildout Background AM
McKinney LDS Temple TIA



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	5	2	2	1	6		8	8	8	4	4	4
Switch Phase												
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0		6.0	6.0	6.0	6.0	6.0	6.0
Minimum Split (s)	25.0	40.0	40.0	25.0	40.0		38.1	38.1	38.1	38.1	38.1	38.1
Total Split (s)	18.0	61.0	61.0	18.0	61.0		45.0	45.0	45.0	20.0	20.0	20.0
Total Split (%)	12.5%	42.4%	42.4%	12.5%	42.4%		31.3%	31.3%	31.3%	13.9%	13.9%	13.9%
Maximum Green (s)	11.9	55.5	55.5	11.9	55.5		39.9	39.9	39.9	14.9	14.9	14.9
Yellow Time (s)	3.6	4.5	4.5	3.6	4.5		4.1	4.1	4.1	4.1	4.1	4.1
All-Red Time (s)	2.5	1.0	1.0	2.5	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.1	5.5	5.5	6.1	5.5		5.1	5.1	5.1	5.1	5.1	5.1
Lead/Lag	Lead	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes							
Vehicle Extension (s)	2.0	3.0	3.0	2.0	3.0		2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	None	Min	Min	None	Min		None	None	None	None	None	None
Walk Time (s)		7.0	7.0		7.0		7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)		21.0	21.0		22.0		26.0	26.0	26.0	26.0	26.0	26.0
Pedestrian Calls (#/hr)		0	0		0		0	0	0	0	0	0
Act Effct Green (s)	34.7	28.1	28.1	33.2	32.5		19.1	19.1	19.1	7.2	7.2	7.2
Actuated g/C Ratio	0.44	0.36	0.36	0.42	0.42		0.24	0.24	0.24	0.09	0.09	0.09
v/c Ratio	0.13	0.41	0.37	0.25	0.68		0.60	0.60	0.14	0.03	0.08	0.25
Control Delay (s/veh)	13.1	22.2	4.4	13.9	23.7		37.7	37.6	2.6	46.2	46.4	4.5
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	13.1	22.2	4.4	13.9	23.7		37.7	37.6	2.6	46.2	46.4	4.5
LOS	B	C	A	B	C		D	D	A	D	D	A
Approach Delay (s/veh)		15.9			22.9			33.6				14.6
Approach LOS		B			C			C				B
Queue Length 50th (ft)	8	108	0	28	236		126	127	0	3	7	0
Queue Length 95th (ft)	27	191	54	67	385		253	254	13	16	31	11
Internal Link Dist (ft)		823			886			765				863
Turn Bay Length (ft)	250		250	335					100	185		130
Base Capacity (vph)	403	2549	1220	525	2549		965	969	953	396	417	435
Starvation Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.08	0.21	0.23	0.20	0.40		0.26	0.26	0.07	0.01	0.03	0.14

Intersection Summary

Area Type: Other

Cycle Length: 144

Actuated Cycle Length: 78.2

Natural Cycle: 145

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.69

Intersection Signal Delay (s/veh): 22.7

Intersection LOS: C

Intersection Capacity Utilization 64.5%







ICU Level of Service C

Analysis Period (min) 15

Lanes, Volumes, Timings
 5: Angel Pkwy/Wandering Way & Stacy Rd

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Splits and Phases: 5: Angel Pkwy/Wandering Way & Stacy Rd

 Ø1 18 s	 Ø2 61 s	 Ø4 20 s	 Ø8 45 s
 Ø5 18 s	 Ø6 61 s		

HCM 6th TWSC
1: Allen Heights Dr/Hawks Wood Dr & Stacy Rd

Intersection												
Int Delay, s/veh	1.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑↑	↗	↘	↑↑		↘	↑	↗	↘	↗	
Traffic Vol, veh/h	15	1446	73	11	1276	7	39	0	54	6	12	17
Future Vol, veh/h	15	1446	73	11	1276	7	39	0	54	6	12	17
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	175	-	175	335	-	-	155	-	0	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	99	99	99	99	99	99	99	99	99	99	99	99
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	15	1461	74	11	1289	7	39	0	55	6	12	17

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1296	0	0	1535	0	0	2164	2809	731	2076	2880	648
Stage 1	-	-	-	-	-	-	1491	1491	-	1315	1315	-
Stage 2	-	-	-	-	-	-	673	1318	-	761	1565	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	531	-	-	429	-	-	~ 26	18	364	31	16	413
Stage 1	-	-	-	-	-	-	129	185	-	167	226	-
Stage 2	-	-	-	-	-	-	411	225	-	364	170	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	531	-	-	429	-	-	~ 21	17	364	25	15	413
Mov Cap-2 Maneuver	-	-	-	-	-	-	91	95	-	105	89	-
Stage 1	-	-	-	-	-	-	125	180	-	162	220	-
Stage 2	-	-	-	-	-	-	363	219	-	301	165	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s/v	0.1			0.1			39.7			33.2		
HCM LOS							E			D		

Minor Lane/Major Mvmt	NBLn1	NBLn2	NBLn3	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	91	-	364	531	-	-	429	-	-	105	165
HCM Lane V/C Ratio	0.433	-	0.15	0.029	-	-	0.026	-	-	0.058	0.178
HCM Control Delay (s/veh)	71.8	0	16.6	12	-	-	13.6	-	-	41.4	31.5
HCM Lane LOS	F	A	C	B	-	-	B	-	-	E	D
HCM 95th %tile Q (veh)	1.8	-	0.5	0.1	-	-	0.1	-	-	0.2	0.6

Notes
 -: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

HCM 6th TWSC
 2: Lost Creek Dr/Chase Oaks Church Dr & Stacy Rd

Buildout Background PM
 McKinney LDS Temple TIA

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	0	1483	42	8	1230	1	38	0	3	0	0	3
Future Vol, veh/h	0	1483	42	8	1230	1	38	0	3	0	0	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	325	-	-	-	-	150	-	-	75
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	1529	43	8	1268	1	39	0	3	0	0	3

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1269	0	0	1572	0	0	2201	2836	786	2050	2857	635
Stage 1	-	-	-	-	-	-	1551	1551	-	1285	1285	-
Stage 2	-	-	-	-	-	-	650	1285	-	765	1572	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	543	-	-	415	-	-	~ 25	17	335	32	17	421
Stage 1	-	-	-	-	-	-	119	173	-	174	233	-
Stage 2	-	-	-	-	-	-	424	233	-	362	169	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	543	-	-	415	-	-	~ 24	17	335	31	17	421
Mov Cap-2 Maneuver	-	-	-	-	-	-	92	98	-	119	94	-
Stage 1	-	-	-	-	-	-	119	173	-	174	229	-
Stage 2	-	-	-	-	-	-	413	229	-	359	169	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s/v	0			0.1			66.5			13.6		
HCM LOS							F			B		

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	92	335	543	-	-	415	-	-	-	421
HCM Lane V/C Ratio	0.426	0.009	-	-	-	0.02	-	-	-	0.007
HCM Control Delay (s/veh)	70.5	15.8	0	-	-	13.9	-	-	0	13.6
HCM Lane LOS	F	C	A	-	-	B	-	-	A	B
HCM 95th %tile Q (veh)	1.8	0	0	-	-	0.1	-	-	-	0

Notes
 -: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

HCM 6th TWSC
3: River Oaks Dr/Drive 1 & Stacy Rd

Buildout Background PM
McKinney LDS Temple TIA

Intersection												
Int Delay, s/veh	0.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗			↕			↕	
Traffic Vol, veh/h	5	1443	30	10	1242	1	12	1	5	1	0	8
Future Vol, veh/h	5	1443	30	10	1242	1	12	1	5	1	0	8
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	350	-	-	275	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	1472	31	10	1267	1	12	1	5	1	0	8

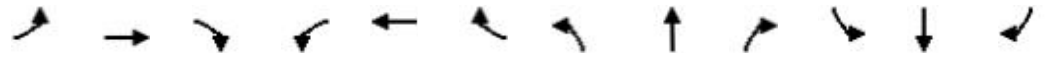
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1268	0	0	1503	0	0	2152	2786	752	2035	2801	634
Stage 1	-	-	-	-	-	-	1498	1498	-	1288	1288	-
Stage 2	-	-	-	-	-	-	654	1288	-	747	1513	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	544	-	-	442	-	-	27	18	353	33	18	422
Stage 1	-	-	-	-	-	-	128	184	-	173	233	-
Stage 2	-	-	-	-	-	-	422	233	-	371	181	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	544	-	-	442	-	-	26	17	353	31	17	422
Mov Cap-2 Maneuver	-	-	-	-	-	-	96	99	-	117	96	-
Stage 1	-	-	-	-	-	-	127	182	-	171	228	-
Stage 2	-	-	-	-	-	-	404	228	-	360	179	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s/v	0			0.1			40			16.3		
HCM LOS							E			C		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	121	544	-	-	442	-	-	327
HCM Lane V/C Ratio	0.152	0.009	-	-	0.023	-	-	0.028
HCM Control Delay (s/veh)	40	11.7	-	-	13.3	-	-	16.3
HCM Lane LOS	E	B	-	-	B	-	-	C
HCM 95th %tile Q (veh)	0.5	0	-	-	0.1	-	-	0.1

Lanes, Volumes, Timings
5: Angel Pkwy/Wandering Way & Stacy Rd

Buildout Background PM
McKinney LDS Temple TIA



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	98	908	471	88	781	12	359	23	122	10	24	50
Future Volume (vph)	98	908	471	88	781	12	359	23	122	10	24	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250		250	335		0	0		100	185		130
Storage Lanes	1		1	1		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00
Frt			0.850		0.998				0.850			0.850
Flt Protected	0.950			0.950			0.950	0.958		0.950		
Satd. Flow (prot)	1770	3539	1583	1770	3532	0	1681	1695	1583	1770	1863	1583
Flt Permitted	0.241			0.200			0.950	0.958		0.950		
Satd. Flow (perm)	449	3539	1583	373	3532	0	1681	1695	1583	1770	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			446		1				94			93
Link Speed (mph)		50		50			40		30			
Link Distance (ft)		903		966			845		943			
Travel Time (s)		12.3		13.2			14.4		21.4			
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	101	936	486	91	805	12	370	24	126	10	25	52
Shared Lane Traffic (%)							47%					
Lane Group Flow (vph)	101	936	486	91	817	0	196	198	126	10	25	52
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24		24			24		12			
Link Offset(ft)		0		0			0		0			
Crosswalk Width(ft)		16		16			16		16			
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100		20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6		20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94		94			94		94			94
Detector 2 Size(ft)		6		6			6		6			6
Detector 2 Type		Cl+Ex		Cl+Ex			Cl+Ex		Cl+Ex			Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)		0.0		0.0			0.0		0.0			0.0
Turn Type	D.P+P	NA	Perm	D.P+P	NA		Split	NA	Perm	Split	NA	Perm
Protected Phases	5	2		1	6		8	8		4	4	
Permitted Phases	6		2	2					8			4

Lanes, Volumes, Timings
5: Angel Pkwy/Wandering Way & Stacy Rd

Buildout Background PM
McKinney LDS Temple TIA



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	5	2	2	1	6		8	8	8	4	4	4
Switch Phase												
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0		6.0	6.0	6.0	6.0	6.0	6.0
Minimum Split (s)	25.0	40.0	40.0	25.0	40.0		38.1	38.1	38.1	38.1	38.1	38.1
Total Split (s)	18.0	78.0	78.0	18.0	78.0		43.0	43.0	43.0	21.0	21.0	21.0
Total Split (%)	11.3%	48.8%	48.8%	11.3%	48.8%		26.9%	26.9%	26.9%	13.1%	13.1%	13.1%
Maximum Green (s)	11.9	72.5	72.5	11.9	72.5		37.9	37.9	37.9	15.9	15.9	15.9
Yellow Time (s)	3.6	4.5	4.5	3.6	4.5		4.1	4.1	4.1	4.1	4.1	4.1
All-Red Time (s)	2.5	1.0	1.0	2.5	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.1	5.5	5.5	6.1	5.5		5.1	5.1	5.1	5.1	5.1	5.1
Lead/Lag	Lead	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes							
Vehicle Extension (s)	2.0	3.0	3.0	2.0	3.0		2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	None	Min	Min	None	Min		None	None	None	None	None	None
Walk Time (s)		7.0	7.0		7.0		7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)		21.0	21.0		22.0		26.0	26.0	26.0	26.0	26.0	26.0
Pedestrian Calls (#/hr)		0	0		0		0	0	0	0	0	0
Act Effct Green (s)	39.1	36.6	36.6	41.4	32.3		16.0	16.0	16.0	7.0	7.0	7.0
Actuated g/C Ratio	0.47	0.44	0.44	0.50	0.39		0.19	0.19	0.19	0.08	0.08	0.08
v/c Ratio	0.30	0.59	0.51	0.29	0.59		0.60	0.60	0.33	0.06	0.15	0.23
Control Delay (s/veh)	13.0	22.0	4.9	13.0	22.5		43.0	42.9	14.9	46.6	47.0	4.5
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	13.0	22.0	4.9	13.0	22.5		43.0	42.9	14.9	46.6	47.0	4.5
LOS	B	C	A	B	C		D	D	B	D	D	A
Approach Delay (s/veh)		16.0			21.6			36.2			21.6	
Approach LOS		B			C			D			C	
Queue Length 50th (ft)	24	204	13	21	172		100	101	14	5	12	0
Queue Length 95th (ft)	60	344	86	54	293		218	220	71	25	47	9
Internal Link Dist (ft)		823			886			765			863	
Turn Bay Length (ft)	250		250	335					100	185		130
Base Capacity (vph)	450	2995	1408	422	2989		849	856	846	375	394	408
Starvation Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.22	0.31	0.35	0.22	0.27		0.23	0.23	0.15	0.03	0.06	0.13

Intersection Summary

Area Type:	Other
Cycle Length:	160
Actuated Cycle Length:	82.9
Natural Cycle:	145
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	0.61
Intersection Signal Delay (s/veh):	21.3
Intersection Capacity Utilization:	61.1%
Analysis Period (min):	15
Intersection LOS:	C
ICU Level of Service:	B

Lanes, Volumes, Timings
 5: Angel Pkwy/Wandering Way & Stacy Rd

Buildout Background PM
 McKinney LDS Temple TIA

Splits and Phases: 5: Angel Pkwy/Wandering Way & Stacy Rd



HCM 6th TWSC
1: Allen Heights Dr/Hawks Wood Dr & Stacy Rd

Buildout Background Saturday
McKinney LDS Temple TIA

Intersection												
Int Delay, s/veh	1.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑↑	↗	↘	↑↑		↘	↑	↗	↘	↗	
Traffic Vol, veh/h	23	977	55	6	1225	5	38	2	10	4	5	8
Future Vol, veh/h	23	977	55	6	1225	5	38	2	10	4	5	8
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	175	-	175	335	-	-	155	-	0	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	24	1028	58	6	1289	5	40	2	11	4	5	8

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1294	0	0	1086	0	0	1735	2382	514	1867	2438	647
Stage 1	-	-	-	-	-	-	1076	1076	-	1304	1304	-
Stage 2	-	-	-	-	-	-	659	1306	-	563	1134	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	531	-	-	638	-	-	56	34	505	45	31	414
Stage 1	-	-	-	-	-	-	234	294	-	169	229	-
Stage 2	-	-	-	-	-	-	419	228	-	478	276	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	531	-	-	638	-	-	51	32	505	42	29	414
Mov Cap-2 Maneuver	-	-	-	-	-	-	149	121	-	122	123	-
Stage 1	-	-	-	-	-	-	223	281	-	161	227	-
Stage 2	-	-	-	-	-	-	397	226	-	444	264	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s/v	0.3			0.1			32.6			25.7		
HCM LOS							D			D		

Minor Lane/Major Mvmt	NBLn1	NBLn2	NBLn3	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	149	121	505	531	-	-	638	-	-	122	217
HCM Lane V/C Ratio	0.268	0.017	0.021	0.046	-	-	0.01	-	-	0.035	0.063
HCM Control Delay (s/veh)	37.8	35.3	12.3	12.1	-	-	10.7	-	-	35.6	22.7
HCM Lane LOS	E	E	B	B	-	-	B	-	-	E	C
HCM 95th %tile Q (veh)	1	0.1	0.1	0.1	-	-	0	-	-	0.1	0.2

HCM 6th TWSC
 2: Lost Creek Dr/Chase Oaks Church Dr & Stacy Rd

Intersection												
Int Delay, s/veh	0.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔		↔	↔			↔	↔		↔	↔
Traffic Vol, veh/h	3	943	38	3	1210	0	42	0	3	0	0	2
Future Vol, veh/h	3	943	38	3	1210	0	42	0	3	0	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	325	-	-	-	-	150	-	-	75
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	993	40	3	1274	0	44	0	3	0	0	2

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1274	0	0	1033	0	0	1662	2299	517	1783	2319	637
Stage 1	-	-	-	-	-	-	1019	1019	-	1280	1280	-
Stage 2	-	-	-	-	-	-	643	1280	-	503	1039	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	541	-	-	668	-	-	64	38	503	52	37	420
Stage 1	-	-	-	-	-	-	254	313	-	175	235	-
Stage 2	-	-	-	-	-	-	428	235	-	519	306	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	541	-	-	668	-	-	63	37	503	51	36	420
Mov Cap-2 Maneuver	-	-	-	-	-	-	170	137	-	134	136	-
Stage 1	-	-	-	-	-	-	251	309	-	173	234	-
Stage 2	-	-	-	-	-	-	424	234	-	509	302	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.1	0	32.1	13.6
HCM LOS			D	B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	170	503	541	-	-	668	-	-	-	420
HCM Lane V/C Ratio	0.26	0.006	0.006	-	-	0.005	-	-	-	0.005
HCM Control Delay (s/veh)	33.5	12.2	11.7	0.1	-	10.4	-	-	0	13.6
HCM Lane LOS	D	B	B	A	-	B	-	-	A	B
HCM 95th %tile Q (veh)	1	0	0	-	-	0	-	-	-	0

HCM 6th TWSC
3: River Oaks Dr/Drive 1 & Stacy Rd

Intersection												
Int Delay, s/veh	0.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↗		↖	↗			↕			↕	
Traffic Vol, veh/h	2	914	16	17	1206	1	22	1	1	0	0	1
Future Vol, veh/h	2	914	16	17	1206	1	22	1	1	0	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	350	-	-	275	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	2	962	17	18	1269	1	23	1	1	0	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1270	0	0	979	0	0	1646	2281	490	1792	2289	635
Stage 1	-	-	-	-	-	-	975	975	-	1306	1306	-
Stage 2	-	-	-	-	-	-	671	1306	-	486	983	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	543	-	-	701	-	-	65	39	524	51	39	421
Stage 1	-	-	-	-	-	-	270	328	-	169	228	-
Stage 2	-	-	-	-	-	-	412	228	-	531	325	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	543	-	-	701	-	-	63	38	524	49	38	421
Mov Cap-2 Maneuver	-	-	-	-	-	-	174	137	-	131	134	-
Stage 1	-	-	-	-	-	-	269	327	-	168	222	-
Stage 2	-	-	-	-	-	-	400	222	-	526	324	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s/v	0			0.1			28.7			13.6		
HCM LOS							D			B		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	177	543	-	-	701	-	-	421
HCM Lane V/C Ratio	0.143	0.004	-	-	0.026	-	-	0.003
HCM Control Delay (s/veh)	28.7	11.7	-	-	10.3	-	-	13.6
HCM Lane LOS	D	B	-	-	B	-	-	B
HCM 95th %tile Q (veh)	0.5	0	-	-	0.1	-	-	0

Lanes, Volumes, Timings
5: Angel Pkwy/Wandering Way & Stacy Rd

Buildout Background Saturday
McKinney LDS Temple TIA



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	72	547	292	89	766	13	391	19	75	15	12	51
Future Volume (vph)	72	547	292	89	766	13	391	19	75	15	12	51
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250		250	335		0	0		100	185		130
Storage Lanes	1		1	1		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00
Frt			0.850		0.998				0.850			0.850
Flt Protected	0.950			0.950			0.950	0.957		0.950		
Satd. Flow (prot)	1770	3539	1583	1770	3532	0	1681	1694	1583	1770	1863	1583
Flt Permitted	0.222			0.372			0.950	0.957		0.950		
Satd. Flow (perm)	414	3539	1583	693	3532	0	1681	1694	1583	1770	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			301		2				125			125
Link Speed (mph)		50		50			40			30		
Link Distance (ft)		903		966			845			943		
Travel Time (s)		12.3		13.2			14.4			21.4		
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	74	564	301	92	790	13	403	20	77	15	12	53
Shared Lane Traffic (%)							48%					
Lane Group Flow (vph)	74	564	301	92	803	0	210	213	77	15	12	53
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24		24			24			12		
Link Offset(ft)		0		0			0			0		
Crosswalk Width(ft)		16		16			16			16		
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100		20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6		20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94		94			94			94		
Detector 2 Size(ft)		6		6			6			6		
Detector 2 Type		Cl+Ex		Cl+Ex			Cl+Ex			Cl+Ex		
Detector 2 Channel												
Detector 2 Extend (s)		0.0		0.0			0.0			0.0		0.0
Turn Type	D.P+P	NA	Perm	D.P+P	NA		Split	NA	Perm	Split	NA	Perm
Protected Phases	5	2		1	6		8	8		4	4	
Permitted Phases	6		2	2					8			4

Lanes, Volumes, Timings
5: Angel Pkwy/Wandering Way & Stacy Rd

Buildout Background Saturday
McKinney LDS Temple TIA









Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	5	2	2	1	6		8	8	8	4	4	4
Switch Phase												
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0		6.0	6.0	6.0	6.0	6.0	6.0
Minimum Split (s)	25.0	40.0	40.0	25.0	40.0		38.1	38.1	38.1	38.1	38.1	38.1
Total Split (s)	15.0	54.0	54.0	15.0	54.0		36.0	36.0	36.0	15.0	15.0	15.0
Total Split (%)	12.5%	45.0%	45.0%	12.5%	45.0%		30.0%	30.0%	30.0%	12.5%	12.5%	12.5%
Maximum Green (s)	8.9	48.5	48.5	8.9	48.5		30.9	30.9	30.9	9.9	9.9	9.9
Yellow Time (s)	3.6	4.5	4.5	3.6	4.5		4.1	4.1	4.1	4.1	4.1	4.1
All-Red Time (s)	2.5	1.0	1.0	2.5	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.1	5.5	5.5	6.1	5.5		5.1	5.1	5.1	5.1	5.1	5.1
Lead/Lag	Lead	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes							
Vehicle Extension (s)	2.0	3.0	3.0	2.0	3.0		2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	None	Min	Min	None	Min		None	None	None	None	None	None
Walk Time (s)		7.0	7.0		7.0		7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)		21.0	21.0		22.0		26.0	26.0	26.0	26.0	26.0	26.0
Pedestrian Calls (#/hr)		0	0		0		0	0	0	0	0	0
Act Effct Green (s)	27.5	23.2	23.2	27.5	23.5		14.7	14.7	14.7	7.2	7.2	7.2
Actuated g/C Ratio	0.41	0.34	0.34	0.41	0.35		0.22	0.22	0.22	0.11	0.11	0.11
v/c Ratio	0.23	0.46	0.40	0.23	0.65		0.57	0.58	0.17	0.08	0.06	0.18
Control Delay (s/veh)	12.9	21.0	4.5	12.5	23.6		34.9	35.0	2.4	38.4	38.0	1.5
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	12.9	21.0	4.5	12.5	23.6		34.9	35.0	2.4	38.4	38.0	1.5
LOS	B	C	A	B	C		C	D	A	D	D	A
Approach Delay (s/veh)		15.1			22.5			30.0			13.9	
Approach LOS		B			C			C			B	
Queue Length 50th (ft)	16	104	0	20	158		90	91	0	6	5	0
Queue Length 95th (ft)	44	182	53	53	269		191	193	11	29	25	0
Internal Link Dist (ft)		823			886			765			863	
Turn Bay Length (ft)	250		250	335					100	185		130
Base Capacity (vph)	387	2518	1213	461	2514		884	891	891	304	320	375
Starvation Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.19	0.22	0.25	0.20	0.32		0.24	0.24	0.09	0.05	0.04	0.14

Intersection Summary

Area Type:	Other
Cycle Length:	120
Actuated Cycle Length:	67.8
Natural Cycle:	145
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	0.66
Intersection Signal Delay (s/veh):	20.9
Intersection LOS:	C
Intersection Capacity Utilization:	57.7%
ICU Level of Service:	B
Analysis Period (min):	15

Lanes, Volumes, Timings
 5: Angel Pkwy/Wandering Way & Stacy Rd

Splits and Phases: 5: Angel Pkwy/Wandering Way & Stacy Rd

 Ø1 15 s	 Ø2 54 s	 Ø4 15 s	 Ø8 36 s
 Ø5 15 s	 Ø6 54 s		

HCM 6th TWSC
1: Allen Heights Dr/Hawks Wood Dr & Stacy Rd

Buildout PM
McKinney LDS Temple TIA

Intersection												
Int Delay, s/veh	1.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑↑	↗	↘	↑↑		↘	↑	↗	↘	↗	
Traffic Vol, veh/h	15	1481	73	15	1318	7	39	0	57	6	12	17
Future Vol, veh/h	15	1481	73	15	1318	7	39	0	57	6	12	17
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	175	-	175	335	-	-	155	-	0	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	99	99	99	99	99	99	99	99	99	99	99	99
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	15	1496	74	15	1331	7	39	0	58	6	12	17

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1338	0	0	1570	0	0	2228	2894	748	2143	2965	669
Stage 1	-	-	-	-	-	-	1526	1526	-	1365	1365	-
Stage 2	-	-	-	-	-	-	702	1368	-	778	1600	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	511	-	-	416	-	-	~ 24	16	355	27	14	400
Stage 1	-	-	-	-	-	-	123	178	-	155	214	-
Stage 2	-	-	-	-	-	-	395	213	-	355	164	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	511	-	-	416	-	-	~ 19	15	355	22	13	400
Mov Cap-2 Maneuver	-	-	-	-	-	-	86	89	-	98	83	-
Stage 1	-	-	-	-	-	-	119	173	-	151	206	-
Stage 2	-	-	-	-	-	-	343	205	-	289	159	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s/v	0.1			0.2			41.9			35.4		
HCM LOS							E			E		

Minor Lane/Major Mvmt	NBLn1	NBLn2	NBLn3	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	86	-	355	511	-	-	416	-	-	98	155
HCM Lane V/C Ratio	0.458	-	0.162	0.03	-	-	0.036	-	-	0.062	0.189
HCM Control Delay (s/veh)	78.2	0	17.1	12.3	-	-	14	-	-	44.1	33.6
HCM Lane LOS	F	A	C	B	-	-	B	-	-	E	D
HCM 95th %tile Q (veh)	1.9	-	0.6	0.1	-	-	0.1	-	-	0.2	0.7

Notes
 -: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

HCM 6th TWSC
 2: Lost Creek Dr/Chase Oaks Church Dr & Stacy Rd

Buildout PM
 McKinney LDS Temple TIA

Intersection												
Int Delay, s/veh	1.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔		↔	↔			↔	↔		↔	↔
Traffic Vol, veh/h	0	1521	42	8	1276	1	38	0	3	0	0	3
Future Vol, veh/h	0	1521	42	8	1276	1	38	0	3	0	0	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	325	-	-	-	-	150	-	-	75
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	1568	43	8	1315	1	39	0	3	0	0	3

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1316	0	0	1611	0	0	2264	2922	806	2116	2943	658
Stage 1	-	-	-	-	-	-	1590	1590	-	1332	1332	-
Stage 2	-	-	-	-	-	-	674	1332	-	784	1611	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	521	-	-	401	-	-	~ 22	15	325	29	15	407
Stage 1	-	-	-	-	-	-	112	166	-	163	222	-
Stage 2	-	-	-	-	-	-	410	222	-	352	162	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	521	-	-	401	-	-	~ 21	15	325	28	15	407
Mov Cap-2 Maneuver	-	-	-	-	-	-	86	93	-	112	89	-
Stage 1	-	-	-	-	-	-	112	166	-	163	218	-
Stage 2	-	-	-	-	-	-	399	218	-	349	162	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s/v	0			0.1			73.4			13.9		
HCM LOS							F			B		

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	86	325	521	-	-	401	-	-	-	407
HCM Lane V/C Ratio	0.456	0.01	-	-	-	0.021	-	-	-	0.008
HCM Control Delay (s/veh)	77.9	16.2	0	-	-	14.2	-	-	0	13.9
HCM Lane LOS	F	C	A	-	-	B	-	-	A	B
HCM 95th %tile Q (veh)	1.9	0	0	-	-	0.1	-	-	-	0

Notes
 -: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

HCM 6th TWSC
3: River Oaks Dr/Drive 1 & Stacy Rd

Buildout PM
McKinney LDS Temple TIA

Intersection												
Int Delay, s/veh	1.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↖↗		↖	↖↗			↕			↕	
Traffic Vol, veh/h	43	1443	30	10	1256	7	12	1	5	26	0	40
Future Vol, veh/h	43	1443	30	10	1256	7	12	1	5	26	0	40
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	350	-	-	275	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	44	1472	31	10	1282	7	12	1	5	27	0	41

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1289	0	0	1503	0	0	2237	2885	752	2131	2897	645
Stage 1	-	-	-	-	-	-	1576	1576	-	1306	1306	-
Stage 2	-	-	-	-	-	-	661	1309	-	825	1591	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	534	-	-	442	-	-	23	16	353	28	16	415
Stage 1	-	-	-	-	-	-	115	168	-	169	228	-
Stage 2	-	-	-	-	-	-	418	227	-	333	166	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	534	-	-	442	-	-	19	14	353	~ 25	14	415
Mov Cap-2 Maneuver	-	-	-	-	-	-	79	82	-	102	85	-
Stage 1	-	-	-	-	-	-	106	154	-	155	223	-
Stage 2	-	-	-	-	-	-	368	222	-	299	152	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s/v	0.4			0.1			48.4			34.5		
HCM LOS							E			D		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	101	534	-	-	442	-	-	188
HCM Lane V/C Ratio	0.182	0.082	-	-	0.023	-	-	0.358
HCM Control Delay (s/veh)	48.4	12.3	-	-	13.3	-	-	34.5
HCM Lane LOS	E	B	-	-	B	-	-	D
HCM 95th %tile Q (veh)	0.6	0.3	-	-	0.1	-	-	1.5

Notes
 -: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection						
Int Delay, s/veh	0.1					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑			↑
Traffic Vol, veh/h	0	1441	1254	15	0	14
Future Vol, veh/h	0	1441	1254	15	0	14
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	1566	1363	16	0	15

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	-	0	-	0	690
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	0	388
Stage 1	0	-	-	0	-
Stage 2	0	-	-	0	-
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	-	388
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0	14.7
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	388
HCM Lane V/C Ratio	-	-	-	0.039
HCM Control Delay (s/veh)	-	-	-	14.7
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q (veh)	-	-	-	0.1

Lanes, Volumes, Timings
5: Angel Pkwy/Wandering Way & Stacy Rd

Buildout PM
McKinney LDS Temple TIA



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	102	919	482	88	790	12	368	23	122	10	24	53
Future Volume (vph)	102	919	482	88	790	12	368	23	122	10	24	53
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250		250	335		0	0		100	185		130
Storage Lanes	1		1	1		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00
Frt			0.850		0.998				0.850			0.850
Flt Protected	0.950			0.950			0.950	0.958		0.950		
Satd. Flow (prot)	1770	3539	1583	1770	3532	0	1681	1695	1583	1770	1863	1583
Flt Permitted	0.237			0.196			0.950	0.958		0.950		
Satd. Flow (perm)	441	3539	1583	365	3532	0	1681	1695	1583	1770	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			452		1				93			93
Link Speed (mph)		50		50			40		30			
Link Distance (ft)		500		966			845		943			
Travel Time (s)		6.8		13.2			14.4		21.4			
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	105	947	497	91	814	12	379	24	126	10	25	55
Shared Lane Traffic (%)							47%					
Lane Group Flow (vph)	105	947	497	91	826	0	201	202	126	10	25	55
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24		24			24		12			
Link Offset(ft)		0		0			0		0			
Crosswalk Width(ft)		16		16			16		16			
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100		20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6		20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94		94			94		94			94
Detector 2 Size(ft)		6		6			6		6			6
Detector 2 Type		Cl+Ex		Cl+Ex			Cl+Ex		Cl+Ex			Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)		0.0		0.0			0.0		0.0			0.0
Turn Type	D.P+P	NA	Perm	D.P+P	NA		Split	NA	Perm	Split	NA	Perm
Protected Phases	5	2		1	6		8	8		4	4	
Permitted Phases	6		2	2					8			4

Lanes, Volumes, Timings
5: Angel Pkwy/Wandering Way & Stacy Rd

Buildout PM
McKinney LDS Temple TIA



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	5	2	2	1	6		8	8	8	4	4	4
Switch Phase												
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0		6.0	6.0	6.0	6.0	6.0	6.0
Minimum Split (s)	25.0	40.0	40.0	25.0	40.0		38.1	38.1	38.1	38.1	38.1	38.1
Total Split (s)	18.0	78.0	78.0	18.0	78.0		43.0	43.0	43.0	21.0	21.0	21.0
Total Split (%)	11.3%	48.8%	48.8%	11.3%	48.8%		26.9%	26.9%	26.9%	13.1%	13.1%	13.1%
Maximum Green (s)	11.9	72.5	72.5	11.9	72.5		37.9	37.9	37.9	15.9	15.9	15.9
Yellow Time (s)	3.6	4.5	4.5	3.6	4.5		4.1	4.1	4.1	4.1	4.1	4.1
All-Red Time (s)	2.5	1.0	1.0	2.5	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.1	5.5	5.5	6.1	5.5		5.1	5.1	5.1	5.1	5.1	5.1
Lead/Lag	Lead	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes							
Vehicle Extension (s)	2.0	3.0	3.0	2.0	3.0		2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	None	Min	Min	None	Min		None	None	None	None	None	None
Walk Time (s)		7.0	7.0		7.0		7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)		21.0	21.0		22.0		26.0	26.0	26.0	26.0	26.0	26.0
Pedestrian Calls (#/hr)		0	0		0		0	0	0	0	0	0
Act Effct Green (s)	39.8	37.3	37.3	42.1	32.9		16.4	16.4	16.4	7.1	7.1	7.1
Actuated g/C Ratio	0.47	0.44	0.44	0.50	0.39		0.20	0.20	0.20	0.08	0.08	0.08
v/c Ratio	0.31	0.60	0.52	0.30	0.59		0.61	0.61	0.32	0.06	0.16	0.25
Control Delay (s/veh)	13.3	22.2	5.1	13.2	22.8		43.5	43.3	15.1	47.2	47.7	5.4
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	13.3	22.2	5.1	13.2	22.8		43.5	43.3	15.1	47.2	47.7	5.4
LOS	B	C	A	B	C		D	D	B	D	D	A
Approach Delay (s/veh)		16.2			21.9			36.7			21.8	
Approach LOS		B			C			D			C	
Queue Length 50th (ft)	25	210	14	22	176		105	106	15	5	13	0
Queue Length 95th (ft)	62	353	92	55	301		225	226	72	26	47	12
Internal Link Dist (ft)		420			886			765			863	
Turn Bay Length (ft)	250		250	335					100	185		130
Base Capacity (vph)	444	2963	1398	417	2957		838	845	835	370	389	404
Starvation Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.24	0.32	0.36	0.22	0.28		0.24	0.24	0.15	0.03	0.06	0.14





Intersection Summary

Area Type:	Other
Cycle Length:	160
Actuated Cycle Length:	84
Natural Cycle:	145
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	0.61
Intersection Signal Delay (s/veh):	21.5
Intersection Capacity Utilization:	61.7%
Analysis Period (min):	15
Intersection LOS:	C
ICU Level of Service:	B

Lanes, Volumes, Timings
 5: Angel Pkwy/Wandering Way & Stacy Rd

Buildout PM
 McKinney LDS Temple TIA

Splits and Phases: 5: Angel Pkwy/Wandering Way & Stacy Rd

 Ø1 18 s	 Ø2 78 s	 Ø4 21 s	 Ø8 43 s
 Ø5 18 s	 Ø6 78 s		

HCM 6th TWSC
1: Allen Heights Dr/Hawks Wood Dr & Stacy Rd

Buildout Saturday
McKinney LDS Temple TIA

Intersection												
Int Delay, s/veh	1.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑↑	↗	↘	↑↑		↘	↑	↗	↘	↗	
Traffic Vol, veh/h	23	1012	55	10	1267	5	38	2	13	4	5	8
Future Vol, veh/h	23	1012	55	10	1267	5	38	2	13	4	5	8
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	175	-	175	335	-	-	155	-	0	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	24	1065	58	11	1334	5	40	2	14	4	5	8

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1339	0	0	1123	0	0	1805	2474	533	1941	2530	670
Stage 1	-	-	-	-	-	-	1113	1113	-	1359	1359	-
Stage 2	-	-	-	-	-	-	692	1361	-	582	1171	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	511	-	-	618	-	-	50	29	491	39	27	399
Stage 1	-	-	-	-	-	-	222	282	-	157	215	-
Stage 2	-	-	-	-	-	-	400	215	-	466	265	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	511	-	-	618	-	-	45	27	491	36	25	399
Mov Cap-2 Maneuver	-	-	-	-	-	-	140	113	-	113	114	-
Stage 1	-	-	-	-	-	-	212	269	-	150	211	-
Stage 2	-	-	-	-	-	-	375	211	-	428	253	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s/v	0.3			0.1			33.7			27.3		
HCM LOS							D			D		

Minor Lane/Major Mvmt	NBLn1	NBLn2	NBLn3	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	140	113	491	511	-	-	618	-	-	113	203
HCM Lane V/C Ratio	0.286	0.019	0.028	0.047	-	-	0.017	-	-	0.037	0.067
HCM Control Delay (s/veh)	40.7	37.5	12.5	12.4	-	-	10.9	-	-	38.1	24
HCM Lane LOS	E	E	B	B	-	-	B	-	-	E	C
HCM 95th %tile Q (veh)	1.1	0.1	0.1	0.1	-	-	0.1	-	-	0.1	0.2

HCM 6th TWSC
 2: Lost Creek Dr/Chase Oaks Church Dr & Stacy Rd

Buildout Saturday
 McKinney LDS Temple TIA

Intersection												
Int Delay, s/veh	0.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑		↑	↑↑			↑	↑		↑	↑
Traffic Vol, veh/h	3	981	38	3	1256	0	42	0	3	0	0	2
Future Vol, veh/h	3	981	38	3	1256	0	42	0	3	0	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	325	-	-	-	-	150	-	-	75
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	1033	40	3	1322	0	44	0	3	0	0	2

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1322	0	0	1073	0	0	1726	2387	537	1851	2407	661
Stage 1	-	-	-	-	-	-	1059	1059	-	1328	1328	-
Stage 2	-	-	-	-	-	-	667	1328	-	523	1079	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	519	-	-	645	-	-	57	34	488	46	33	405
Stage 1	-	-	-	-	-	-	240	299	-	164	223	-
Stage 2	-	-	-	-	-	-	414	223	-	505	293	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	519	-	-	645	-	-	56	33	488	45	32	405
Mov Cap-2 Maneuver	-	-	-	-	-	-	160	129	-	126	128	-
Stage 1	-	-	-	-	-	-	237	295	-	162	222	-
Stage 2	-	-	-	-	-	-	410	222	-	495	289	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s/v	0.1			0			34.3			13.9		
HCM LOS							D			B		

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	160	488	519	-	-	645	-	-	-	405
HCM Lane V/C Ratio	0.276	0.006	0.006	-	-	0.005	-	-	-	0.005
HCM Control Delay (s/veh)	35.9	12.4	12	0.1	-	10.6	-	-	0	13.9
HCM Lane LOS	E	B	B	A	-	B	-	-	A	B
HCM 95th %tile Q (veh)	1.1	0	0	-	-	0	-	-	-	0

HCM 6th TWSC
3: River Oaks Dr/Drive 1 & Stacy Rd

Buildout Saturday
McKinney LDS Temple TIA

Intersection												
Int Delay, s/veh	1.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↖	↖↗		↖	↖↗			↕			↕	
Traffic Vol, veh/h	40	914	16	17	1220	7	22	1	1	25	0	33
Future Vol, veh/h	40	914	16	17	1220	7	22	1	1	25	0	33
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	350	-	-	275	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	42	962	17	18	1284	7	23	1	1	26	0	35

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1291	0	0	979	0	0	1733	2382	490	1890	2387	646
Stage 1	-	-	-	-	-	-	1055	1055	-	1324	1324	-
Stage 2	-	-	-	-	-	-	678	1327	-	566	1063	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	533	-	-	701	-	-	56	34	524	43	34	414
Stage 1	-	-	-	-	-	-	241	301	-	165	224	-
Stage 2	-	-	-	-	-	-	408	223	-	476	298	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	533	-	-	701	-	-	47	30	524	39	30	414
Mov Cap-2 Maneuver	-	-	-	-	-	-	141	111	-	115	121	-
Stage 1	-	-	-	-	-	-	222	277	-	152	218	-
Stage 2	-	-	-	-	-	-	364	217	-	436	274	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s/v	0.5			0.1			35.2			31.7		
HCM LOS							E			D		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	144	533	-	-	701	-	-	195
HCM Lane V/C Ratio	0.175	0.079	-	-	0.026	-	-	0.313
HCM Control Delay (s/veh)	35.2	12.3	-	-	10.3	-	-	31.7
HCM Lane LOS	E	B	-	-	B	-	-	D
HCM 95th %tile Q (veh)	0.6	0.3	-	-	0.1	-	-	1.3

Intersection						
Int Delay, s/veh	0.1					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑			↑
Traffic Vol, veh/h	0	936	1214	15	0	14
Future Vol, veh/h	0	936	1214	15	0	14
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	1017	1320	16	0	15

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	-	0	-
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	-	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	-	-
Pot Cap-1 Maneuver	0	-	-
Stage 1	0	-	-
Stage 2	0	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0	14.3
HCM LOS			B

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	401
HCM Lane V/C Ratio	-	-	-	0.038
HCM Control Delay (s/veh)	-	-	-	14.3
HCM Lane LOS	-	-	-	B
HCM 95th %tile Q (veh)	-	-	-	0.1

Lanes, Volumes, Timings
5: Angel Pkwy/Wandering Way & Stacy Rd

Buildout Saturday
McKinney LDS Temple TIA



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	76	558	303	89	775	13	400	19	75	15	12	54
Future Volume (vph)	76	558	303	89	775	13	400	19	75	15	12	54
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250		250	335		0	0		100	185		130
Storage Lanes	1		1	1		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00
Frt			0.850		0.998				0.850			0.850
Flt Protected	0.950			0.950			0.950	0.957		0.950		
Satd. Flow (prot)	1770	3539	1583	1770	3532	0	1681	1694	1583	1770	1863	1583
Flt Permitted	0.217			0.365			0.950	0.957		0.950		
Satd. Flow (perm)	404	3539	1583	680	3532	0	1681	1694	1583	1770	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			312		2				125			125
Link Speed (mph)		50		50			40		30			
Link Distance (ft)		530		966			845		943			
Travel Time (s)		7.2		13.2			14.4		21.4			
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	78	575	312	92	799	13	412	20	77	15	12	56
Shared Lane Traffic (%)							48%					
Lane Group Flow (vph)	78	575	312	92	812	0	214	218	77	15	12	56
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24		24			24		12			
Link Offset(ft)		0		0			0		0			
Crosswalk Width(ft)		16		16			16		16			
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100		20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6		20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94		94			94		94			94
Detector 2 Size(ft)		6		6			6		6			6
Detector 2 Type		Cl+Ex		Cl+Ex			Cl+Ex		Cl+Ex			Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)		0.0		0.0			0.0		0.0			0.0
Turn Type	D.P+P	NA	Perm	D.P+P	NA		Split	NA	Perm	Split	NA	Perm
Protected Phases	5	2		1	6		8	8		4	4	
Permitted Phases	6		2	2					8			4

Lanes, Volumes, Timings
5: Angel Pkwy/Wandering Way & Stacy Rd

Buildout Saturday
McKinney LDS Temple TIA



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	5	2	2	1	6		8	8	8	4	4	4
Switch Phase												
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0		6.0	6.0	6.0	6.0	6.0	6.0
Minimum Split (s)	25.0	40.0	40.0	25.0	40.0		38.1	38.1	38.1	38.1	38.1	38.1
Total Split (s)	15.0	54.0	54.0	15.0	54.0		36.0	36.0	36.0	15.0	15.0	15.0
Total Split (%)	12.5%	45.0%	45.0%	12.5%	45.0%		30.0%	30.0%	30.0%	12.5%	12.5%	12.5%
Maximum Green (s)	8.9	48.5	48.5	8.9	48.5		30.9	30.9	30.9	9.9	9.9	9.9
Yellow Time (s)	3.6	4.5	4.5	3.6	4.5		4.1	4.1	4.1	4.1	4.1	4.1
All-Red Time (s)	2.5	1.0	1.0	2.5	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.1	5.5	5.5	6.1	5.5		5.1	5.1	5.1	5.1	5.1	5.1
Lead/Lag	Lead	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes							
Vehicle Extension (s)	2.0	3.0	3.0	2.0	3.0		2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	None	Min	Min	None	Min		None	None	None	None	None	None
Walk Time (s)		7.0	7.0		7.0		7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)		21.0	21.0		22.0		26.0	26.0	26.0	26.0	26.0	26.0
Pedestrian Calls (#/hr)		0	0		0		0	0	0	0	0	0
Act Effct Green (s)	28.0	23.7	23.7	28.0	23.9		15.0	15.0	15.0	7.2	7.2	7.2
Actuated g/C Ratio	0.41	0.34	0.34	0.41	0.35		0.22	0.22	0.22	0.10	0.10	0.10
v/c Ratio	0.25	0.47	0.41	0.23	0.66		0.58	0.58	0.17	0.08	0.06	0.20
Control Delay (s/veh)	13.1	21.1	4.5	12.6	23.9		35.2	35.4	2.4	39.0	38.7	1.6
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	13.1	21.1	4.5	12.6	23.9		35.2	35.4	2.4	39.0	38.7	1.6
LOS	B	C	A	B	C		D	D	A	D	D	A
Approach Delay (s/veh)		15.1			22.8			30.4			13.8	
Approach LOS		B			C			C			B	
Queue Length 50th (ft)	17	107	0	21	163		93	94	0	6	5	0
Queue Length 95th (ft)	47	187	54	53	276		196	200	11	29	25	0
Internal Link Dist (ft)		450			886			765			863	
Turn Bay Length (ft)	250		250	335					100	185		130
Base Capacity (vph)	382	2495	1208	457	2491		877	883	886	301	317	373
Starvation Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.20	0.23	0.26	0.20	0.33		0.24	0.25	0.09	0.05	0.04	0.15

Intersection Summary

Area Type:	Other
Cycle Length:	120
Actuated Cycle Length:	68.7
Natural Cycle:	145
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	0.66
Intersection Signal Delay (s/veh):	21.1
Intersection LOS:	C
Intersection Capacity Utilization:	58.2%
ICU Level of Service:	B
Analysis Period (min):	15

Lanes, Volumes, Timings
 5: Angel Pkwy/Wandering Way & Stacy Rd

Buildout Saturday
 McKinney LDS Temple TIA

Splits and Phases: 5: Angel Pkwy/Wandering Way & Stacy Rd



HORIZON SYNCHRO ANALYSIS

HCM 6th TWSC
1: Allen Heights Dr/Hawks Wood Dr & Stacy Rd

Horizon AM
McKinney LDS Temple TIA

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	9	1027	47	13	1863	6	44	0	10	0	2	14
Future Vol, veh/h	9	1027	47	13	1863	6	44	0	10	0	2	14
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	175	-	175	335	-	-	155	-	0	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	10	1104	51	14	2003	6	47	0	11	0	2	15

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	2009	0	0	1155	0	0	2155	3161	552	2606	3209	1005
Stage 1	-	-	-	-	-	-	1124	1124	-	2034	2034	-
Stage 2	-	-	-	-	-	-	1031	2037	-	572	1175	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	281	-	-	601	-	-	~ 27	10	477	12	10	240
Stage 1	-	-	-	-	-	-	219	279	-	59	99	-
Stage 2	-	-	-	-	-	-	249	99	-	472	264	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	281	-	-	601	-	-	~ 24	9	477	11	9	240
Mov Cap-2 Maneuver	-	-	-	-	-	-	108	63	-	48	66	-
Stage 1	-	-	-	-	-	-	211	269	-	57	97	-
Stage 2	-	-	-	-	-	-	223	97	-	445	254	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s/v	0.2			0.1			53			27		
HCM LOS							F			D		

Minor Lane/Major Mvmt	NBLn1	NBLn2	NBLn3	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	108	-	477	281	-	-	601	-	-	-	181
HCM Lane V/C Ratio	0.438	-	0.023	0.034	-	-	0.023	-	-	-	0.095
HCM Control Delay (s/veh)	62.1	0	12.7	18.3	-	-	11.1	-	-	0	27
HCM Lane LOS	F	A	B	C	-	-	B	-	-	A	D
HCM 95th %tile Q (veh)	1.9	-	0.1	0.1	-	-	0.1	-	-	-	0.3

Notes
 -: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

HCM 6th TWSC
 2: Lost Creek Dr/Chase Oaks Church Dr & Stacy Rd

Horizon AM
 McKinney LDS Temple TIA

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	1	1026	21	1	1803	2	63	0	2	0	0	0
Future Vol, veh/h	1	1026	21	1	1803	2	63	0	2	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	325	-	-	-	-	150	-	-	75
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	1115	23	1	1960	2	68	0	2	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1962	0	0	1138	0	0	2111	3093	569	2523	3103	981
Stage 1	-	-	-	-	-	-	1129	1129	-	1963	1963	-
Stage 2	-	-	-	-	-	-	982	1964	-	560	1140	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	293	-	-	610	-	-	~ 29	12	465	14	11	249
Stage 1	-	-	-	-	-	-	217	277	-	65	108	-
Stage 2	-	-	-	-	-	-	267	108	-	480	274	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	293	-	-	610	-	-	~ 29	12	465	14	11	249
Mov Cap-2 Maneuver	-	-	-	-	-	-	122	75	-	54	75	-
Stage 1	-	-	-	-	-	-	215	275	-	64	108	-
Stage 2	-	-	-	-	-	-	267	108	-	473	272	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.1	0	65.2	0
HCM LOS			F	A

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	122	465	293	-	-	610	-	-	-	-
HCM Lane V/C Ratio	0.561	0.005	0.004	-	-	0.002	-	-	-	-
HCM Control Delay (s/veh)	66.9	12.8	17.3	0.1	-	10.9	-	-	0	0
HCM Lane LOS	F	B	C	A	-	B	-	-	A	A
HCM 95th %tile Q (veh)	2.7	0	0	-	-	0	-	-	-	-

Notes
 -: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

HCM 6th TWSC
3: River Oaks Dr/Drive 1 & Stacy Rd

Horizon AM
McKinney LDS Temple TIA

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	47	948	20	10	1750	8	39	1	6	21	0	32
Future Vol, veh/h	47	948	20	10	1750	8	39	1	6	21	0	32
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	350	-	-	275	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	49	988	21	10	1823	8	41	1	6	22	0	33

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1831	0	0	1009	0	0	2029	2948	505	2440	2954	916
Stage 1	-	-	-	-	-	-	1097	1097	-	1847	1847	-
Stage 2	-	-	-	-	-	-	932	1851	-	593	1107	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	329	-	-	683	-	-	~ 34	14	512	~ 16	14	275
Stage 1	-	-	-	-	-	-	227	287	-	77	123	-
Stage 2	-	-	-	-	-	-	287	123	-	459	284	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	329	-	-	683	-	-	~ 26	12	512	~ 14	12	275
Mov Cap-2 Maneuver	-	-	-	-	-	-	102	54	-	54	77	-
Stage 1	-	-	-	-	-	-	193	244	-	66	121	-
Stage 2	-	-	-	-	-	-	249	121	-	384	242	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s/v	0.8			0.1			60.1			72.2		
HCM LOS							F			F		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	111	329	-	-	683	-	-	105
HCM Lane V/C Ratio	0.432	0.149	-	-	0.015	-	-	0.526
HCM Control Delay (s/veh)	60.1	17.8	-	-	10.4	-	-	72.2
HCM Lane LOS	F	C	-	-	B	-	-	F
HCM 95th %tile Q (veh)	1.8	0.5	-	-	0	-	-	2.4

Notes
 -: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

HCM 6th TWSC
4: Stacy Rd & Drive 2

Horizon AM
McKinney LDS Temple TIA

Intersection						
Int Delay, s/veh	0.1					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑			↑
Traffic Vol, veh/h	0	1068	1715	18	0	12
Future Vol, veh/h	0	1068	1715	18	0	12
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	1161	1864	20	0	13

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	-	0	-	0	- 942
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	3.32
Pot Cap-1 Maneuver	0	-	-	-	0 264
Stage 1	0	-	-	-	0 -
Stage 2	0	-	-	-	0 -
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	-	-	- 264
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0	19.3
HCM LOS			C

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	264
HCM Lane V/C Ratio	-	-	-	0.049
HCM Control Delay (s/veh)	-	-	-	19.3
HCM Lane LOS	-	-	-	C
HCM 95th %tile Q (veh)	-	-	-	0.2

Lanes, Volumes, Timings
5: Angel Pkwy/Wandering Way & Stacy Rd

Horizon AM
McKinney LDS Temple TIA



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	40	592	323	118	1123	4	548	11	73	6	15	70
Future Volume (vph)	40	592	323	118	1123	4	548	11	73	6	15	70
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250		250	335		0	0		100	185		130
Storage Lanes	1		1	1		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00
Frt			0.850		0.999				0.850			0.850
Flt Protected	0.950			0.950			0.950	0.954		0.950		
Satd. Flow (prot)	1770	3539	1583	1770	3536	0	1681	1688	1583	1770	1863	1583
Flt Permitted	0.107			0.333			0.950	0.954		0.950		
Satd. Flow (perm)	199	3539	1583	620	3536	0	1681	1688	1583	1770	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			340						104			104
Link Speed (mph)		50			50			40				30
Link Distance (ft)		500			966			845				943
Travel Time (s)		6.8			13.2			14.4				21.4
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
Adj. Flow (vph)	42	623	340	124	1182	4	577	12	77	6	16	74
Shared Lane Traffic (%)							49%					
Lane Group Flow (vph)	42	623	340	124	1186	0	294	295	77	6	16	74
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			24				12
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100		20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6		20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94				94
Detector 2 Size(ft)		6			6			6				6
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				0.0
Turn Type	D.P+P	NA	Perm	D.P+P	NA		Split	NA	Perm	Split	NA	Perm
Protected Phases	5	2		1	6		8	8		4	4	
Permitted Phases	6		2	2					8			4

Lanes, Volumes, Timings
5: Angel Pkwy/Wandering Way & Stacy Rd

Horizon AM
McKinney LDS Temple TIA



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	5	2	2	1	6		8	8	8	4	4	4
Switch Phase												
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0		6.0	6.0	6.0	6.0	6.0	6.0
Minimum Split (s)	25.0	40.0	40.0	25.0	40.0		38.1	38.1	38.1	38.1	38.1	38.1
Total Split (s)	18.0	61.0	61.0	18.0	61.0		45.0	45.0	45.0	20.0	20.0	20.0
Total Split (%)	12.5%	42.4%	42.4%	12.5%	42.4%		31.3%	31.3%	31.3%	13.9%	13.9%	13.9%
Maximum Green (s)	11.9	55.5	55.5	11.9	55.5		39.9	39.9	39.9	14.9	14.9	14.9
Yellow Time (s)	3.6	4.5	4.5	3.6	4.5		4.1	4.1	4.1	4.1	4.1	4.1
All-Red Time (s)	2.5	1.0	1.0	2.5	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.1	5.5	5.5	6.1	5.5		5.1	5.1	5.1	5.1	5.1	5.1
Lead/Lag	Lead	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes							
Vehicle Extension (s)	2.0	3.0	3.0	2.0	3.0		2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	None	Min	Min	None	Min		None	None	None	None	None	None
Walk Time (s)		7.0	7.0		7.0		7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)		21.0	21.0		22.0		26.0	26.0	26.0	26.0	26.0	26.0
Pedestrian Calls (#/hr)		0	0		0		0	0	0	0	0	0
Act Effct Green (s)	46.9	36.4	36.4	44.5	43.1		24.1	24.1	24.1	6.9	6.9	6.9
Actuated g/C Ratio	0.49	0.38	0.38	0.46	0.45		0.25	0.25	0.25	0.07	0.07	0.07
v/c Ratio	0.21	0.46	0.41	0.31	0.74		0.69	0.69	0.16	0.04	0.12	0.35
Control Delay (s/veh)	15.3	24.4	4.2	15.5	28.1		45.7	45.7	3.6	54.6	55.0	9.2
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	15.3	24.4	4.2	15.5	28.1		45.7	45.7	3.6	54.6	55.0	9.2
LOS	B	C	A	B	C		D	D	A	D	E	A
Approach Delay (s/veh)		17.2			27.0			40.9			19.7	
Approach LOS		B			C			D			B	
Queue Length 50th (ft)	12	149	0	37	335		181	182	0	4	10	0
Queue Length 95th (ft)	35	252	59	85	530		330	330	21	20	38	25
Internal Link Dist (ft)		420			886			765			863	
Turn Bay Length (ft)	250		250	335					100	185		130
Base Capacity (vph)	321	2194	1110	474	2192		776	780	787	305	321	359
Starvation Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.13	0.28	0.31	0.26	0.54		0.38	0.38	0.10	0.02	0.05	0.21

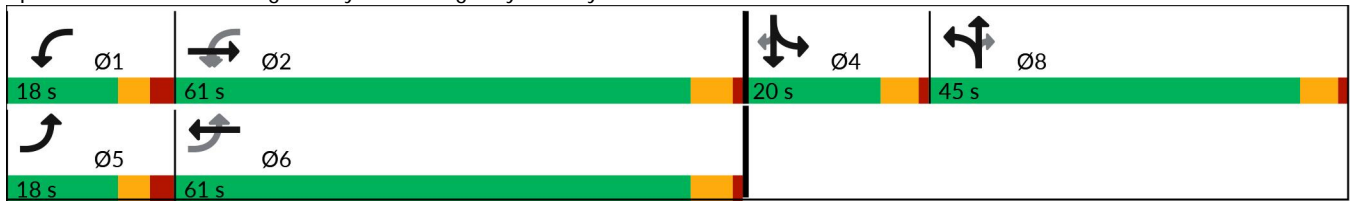
Intersection Summary

Area Type:	Other
Cycle Length:	144
Actuated Cycle Length:	96.2
Natural Cycle:	145
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	0.75
Intersection Signal Delay (s/veh):	26.6
Intersection Capacity Utilization:	71.4%
Analysis Period (min):	15
Intersection LOS:	C
ICU Level of Service:	C

Lanes, Volumes, Timings
 5: Angel Pkwy/Wandering Way & Stacy Rd

Horizon AM
 McKinney LDS Temple TIA

Splits and Phases: 5: Angel Pkwy/Wandering Way & Stacy Rd



HCM 6th TWSC
1: Allen Heights Dr/Hawks Wood Dr & Stacy Rd

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	9	985	47	10	1828	6	44	0	6	0	2	14
Future Vol, veh/h	9	985	47	10	1828	6	44	0	6	0	2	14
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	175	-	175	335	-	-	155	-	0	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	10	1059	51	11	1966	6	47	0	6	0	2	15

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1972	0	0	1110	0	0	2085	3073	530	2541	3121	986
Stage 1	-	-	-	-	-	-	1079	1079	-	1991	1991	-
Stage 2	-	-	-	-	-	-	1006	1994	-	550	1130	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	290	-	-	625	-	-	~ 30	12	493	14	11	247
Stage 1	-	-	-	-	-	-	233	293	-	62	104	-
Stage 2	-	-	-	-	-	-	258	104	-	487	277	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	290	-	-	625	-	-	~ 26	11	493	13	10	247
Mov Cap-2 Maneuver	-	-	-	-	-	-	114	67	-	51	70	-
Stage 1	-	-	-	-	-	-	225	283	-	60	102	-
Stage 2	-	-	-	-	-	-	233	102	-	464	268	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s/v	0.2			0.1			51.9			26.1		
HCM LOS							F			D		

Minor Lane/Major Mvmt	NBLn1	NBLn2	NBLn3	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	114	-	493	290	-	-	625	-	-	-	188
HCM Lane V/C Ratio	0.415	-	0.013	0.033	-	-	0.017	-	-	-	0.092
HCM Control Delay (s/veh)	57.3	0	12.4	17.8	-	-	10.9	-	-	0	26.1
HCM Lane LOS	F	A	B	C	-	-	B	-	-	A	D
HCM 95th %tile Q (veh)	1.8	-	0	0.1	-	-	0.1	-	-	-	0.3

Notes
 -: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

HCM 6th TWSC
 2: Lost Creek Dr/Chase Oaks Church Dr & Stacy Rd

Intersection												
Int Delay, s/veh	1.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑		↑	↑↑			↓	↑		↓	↑
Traffic Vol, veh/h	1	980	21	1	1765	2	63	0	2	0	0	0
Future Vol, veh/h	1	980	21	1	1765	2	63	0	2	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	325	-	-	-	-	150	-	-	75
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	1065	23	1	1918	2	68	0	2	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1920	0	0	1088	0	0	2040	3001	544	2456	3011	960
Stage 1	-	-	-	-	-	-	1079	1079	-	1921	1921	-
Stage 2	-	-	-	-	-	-	961	1922	-	535	1090	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	304	-	-	637	-	-	~ 33	13	483	16	13	257
Stage 1	-	-	-	-	-	-	233	293	-	69	113	-
Stage 2	-	-	-	-	-	-	275	113	-	497	289	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	304	-	-	637	-	-	~ 33	13	483	16	13	257
Mov Cap-2 Maneuver	-	-	-	-	-	-	129	79	-	57	79	-
Stage 1	-	-	-	-	-	-	231	291	-	68	113	-
Stage 2	-	-	-	-	-	-	275	113	-	491	287	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.1	0	59.3	0
HCM LOS			F	A

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	129	483	304	-	-	637	-	-	-	-
HCM Lane V/C Ratio	0.531	0.005	0.004	-	-	0.002	-	-	-	-
HCM Control Delay (s/veh)	60.8	12.5	16.9	0.1	-	10.7	-	-	0	0
HCM Lane LOS	F	B	C	A	-	B	-	-	A	A
HCM 95th %tile Q (veh)	2.5	0	0	-	-	0	-	-	-	-

Notes
 -: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection												
Int Delay, s/veh	0.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↗	↗↘		↗	↗↘			↕			↕	
Traffic Vol, veh/h	1	948	20	10	1738	1	39	1	6	0	0	5
Future Vol, veh/h	1	948	20	10	1738	1	39	1	6	0	0	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	350	-	-	275	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	988	21	10	1810	1	41	1	6	0	0	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1811	0	0	1009	0	0	1926	2832	505	2328	2842	906
Stage 1	-	-	-	-	-	-	1001	1001	-	1831	1831	-
Stage 2	-	-	-	-	-	-	925	1831	-	497	1011	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	335	-	-	683	-	-	~ 40	17	512	20	17	279
Stage 1	-	-	-	-	-	-	260	319	-	79	126	-
Stage 2	-	-	-	-	-	-	290	126	-	523	315	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	335	-	-	683	-	-	~ 39	17	512	19	17	279
Mov Cap-2 Maneuver	-	-	-	-	-	-	140	87	-	66	87	-
Stage 1	-	-	-	-	-	-	259	318	-	79	124	-
Stage 2	-	-	-	-	-	-	280	124	-	513	314	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s/v	0			0.1			39.2			18.1		
HCM LOS							E			C		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	152	335	-	-	683	-	-	279
HCM Lane V/C Ratio	0.315	0.003	-	-	0.015	-	-	0.019
HCM Control Delay (s/veh)	39.2	15.8	-	-	10.4	-	-	18.1
HCM Lane LOS	E	C	-	-	B	-	-	C
HCM 95th %tile Q (veh)	1.3	0	-	-	0	-	-	0.1

Notes
 -: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Lanes, Volumes, Timings
5: Angel Pkwy/Wandering Way & Stacy Rd

Horizon Background AM
McKinney LDS Temple TIA



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	37	583	314	118	1112	4	537	11	73	6	15	66
Future Volume (vph)	37	583	314	118	1112	4	537	11	73	6	15	66
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250		250	335		0	0		100	185		130
Storage Lanes	1		1	1		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00
Frt			0.850		0.999				0.850			0.850
Flt Protected	0.950			0.950			0.950	0.954		0.950		
Satd. Flow (prot)	1770	3539	1583	1770	3536	0	1681	1688	1583	1770	1863	1583
Flt Permitted	0.114			0.336			0.950	0.954		0.950		
Satd. Flow (perm)	212	3539	1583	626	3536	0	1681	1688	1583	1770	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			331						104			104
Link Speed (mph)		50			50			40				30
Link Distance (ft)		903			966			845				943
Travel Time (s)		12.3			13.2			14.4				21.4
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
Adj. Flow (vph)	39	614	331	124	1171	4	565	12	77	6	16	69
Shared Lane Traffic (%)							49%					
Lane Group Flow (vph)	39	614	331	124	1175	0	288	289	77	6	16	69
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			24				12
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100		20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6		20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94				94
Detector 2 Size(ft)		6			6			6				6
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				0.0
Turn Type	D.P+P	NA	Perm	D.P+P	NA		Split	NA	Perm	Split	NA	Perm
Protected Phases	5	2		1	6		8	8		4	4	
Permitted Phases	6		2	2					8			4

Lanes, Volumes, Timings
5: Angel Pkwy/Wandering Way & Stacy Rd

Horizon Background AM
McKinney LDS Temple TIA



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	5	2	2	1	6		8	8	8	4	4	4
Switch Phase												
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0		6.0	6.0	6.0	6.0	6.0	6.0
Minimum Split (s)	25.0	40.0	40.0	25.0	40.0		38.1	38.1	38.1	38.1	38.1	38.1
Total Split (s)	18.0	61.0	61.0	18.0	61.0		45.0	45.0	45.0	20.0	20.0	20.0
Total Split (%)	12.5%	42.4%	42.4%	12.5%	42.4%		31.3%	31.3%	31.3%	13.9%	13.9%	13.9%
Maximum Green (s)	11.9	55.5	55.5	11.9	55.5		39.9	39.9	39.9	14.9	14.9	14.9
Yellow Time (s)	3.6	4.5	4.5	3.6	4.5		4.1	4.1	4.1	4.1	4.1	4.1
All-Red Time (s)	2.5	1.0	1.0	2.5	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.1	5.5	5.5	6.1	5.5		5.1	5.1	5.1	5.1	5.1	5.1
Lead/Lag	Lead	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes							
Vehicle Extension (s)	2.0	3.0	3.0	2.0	3.0		2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	None	Min	Min	None	Min		None	None	None	None	None	None
Walk Time (s)		7.0	7.0		7.0		7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)		21.0	21.0		22.0		26.0	26.0	26.0	26.0	26.0	26.0
Pedestrian Calls (#/hr)		0	0		0		0	0	0	0	0	0
Act Effct Green (s)	44.4	32.5	32.5	40.5	42.0		23.2	23.2	23.2	7.1	7.1	7.1
Actuated g/C Ratio	0.48	0.35	0.35	0.44	0.46		0.25	0.25	0.25	0.08	0.08	0.08
v/c Ratio	0.18	0.49	0.42	0.32	0.72		0.67	0.67	0.16	0.04	0.11	0.31
Control Delay (s/veh)	14.9	24.9	4.4	15.7	26.2		43.5	43.5	3.8	53.8	54.4	7.5
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	14.9	24.9	4.4	15.7	26.2		43.5	43.5	3.8	53.8	54.4	7.5
LOS	B	C	A	B	C		D	D	A	D	D	A
Approach Delay (s/veh)		17.6			25.3			38.9			18.8	
Approach LOS		B			C			D			B	
Queue Length 50th (ft)	11	144	0	37	326		174	174	0	4	10	0
Queue Length 95th (ft)	33	245	58	84	516		322	322	21	19	38	19
Internal Link Dist (ft)		823			886			765			863	
Turn Bay Length (ft)	250		250	335					100	185		130
Base Capacity (vph)	338	2288	1140	477	2286		831	835	836	327	344	377
Starvation Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.12	0.27	0.29	0.26	0.51		0.35	0.35	0.09	0.02	0.05	0.18

Intersection Summary

Area Type: Other

Cycle Length: 144

Actuated Cycle Length: 91.8

Natural Cycle: 145

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.73

Intersection Signal Delay (s/veh): 25.5 Intersection LOS: C







Intersection Capacity Utilization 70.8% ICU Level of Service C

Analysis Period (min) 15

Lanes, Volumes, Timings
 5: Angel Pkwy/Wandering Way & Stacy Rd

Horizon Background AM
 McKinney LDS Temple TIA

Splits and Phases: 5: Angel Pkwy/Wandering Way & Stacy Rd

 Ø1 18 s	 Ø2 61 s	 Ø4 20 s	 Ø8 45 s
 Ø5 18 s	 Ø6 61 s		

HCM 6th TWSC
1: Allen Heights Dr/Hawks Wood Dr & Stacy Rd

Horizon Background PM
McKinney LDS Temple TIA

Intersection												
Int Delay, s/veh	3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑↑	↗	↘	↑↑		↘	↑	↗	↘	↗	
Traffic Vol, veh/h	17	1676	85	12	1480	9	46	0	63	7	14	20
Future Vol, veh/h	17	1676	85	12	1480	9	46	0	63	7	14	20
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	175	-	175	335	-	-	155	-	0	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	99	99	99	99	99	99	99	99	99	99	99	99
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	17	1693	86	12	1495	9	46	0	64	7	14	20

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1504	0	0	1779	0	0	2506	3255	847	2405	3337	752
Stage 1	-	-	-	-	-	-	1727	1727	-	1524	1524	-
Stage 2	-	-	-	-	-	-	779	1528	-	881	1813	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	441	-	-	345	-	-	~ 14	9	305	17	~ 8	353
Stage 1	-	-	-	-	-	-	92	142	-	123	179	-
Stage 2	-	-	-	-	-	-	355	178	-	308	128	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	441	-	-	345	-	-	~ 10	8	305	13	~ 7	353
Mov Cap-2 Maneuver	-	-	-	-	-	-	64	70	-	76	65	-
Stage 1	-	-	-	-	-	-	88	136	-	118	173	-
Stage 2	-	-	-	-	-	-	297	172	-	234	123	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s/v	0.1			0.1			74.2			46.6		
HCM LOS							F			E		

Minor Lane/Major Mvmt	NBLn1	NBLn2	NBLn3	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	64	-	305	441	-	-	345	-	-	76	125
HCM Lane V/C Ratio	0.726	-	0.209	0.039	-	-	0.035	-	-	0.093	0.275
HCM Control Delay (s/veh)	148.5	0	19.9	13.5	-	-	15.8	-	-	57.2	44.4
HCM Lane LOS	F	A	C	B	-	-	C	-	-	F	E
HCM 95th %tile Q (veh)	3.2	-	0.8	0.1	-	-	0.1	-	-	0.3	1

Notes
 -: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

HCM 6th TWSC
 2: Lost Creek Dr/Chase Oaks Church Dr & Stacy Rd

Horizon Background PM
 McKinney LDS Temple TIA

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	0	1719	49	10	1425	1	44	0	4	0	0	4
Future Vol, veh/h	0	1719	49	10	1425	1	44	0	4	0	0	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	325	-	-	-	-	150	-	-	75
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	1772	51	10	1469	1	45	0	4	0	0	4

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1470	0	0	1823	0	0	2553	3288	912	2376	3313	735
Stage 1	-	-	-	-	-	-	1798	1798	-	1490	1490	-
Stage 2	-	-	-	-	-	-	755	1490	-	886	1823	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	455	-	-	332	-	-	~ 13	9	276	18	8	362
Stage 1	-	-	-	-	-	-	83	131	-	130	186	-
Stage 2	-	-	-	-	-	-	367	186	-	306	127	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	455	-	-	332	-	-	~ 13	9	276	17	8	362
Mov Cap-2 Maneuver	-	-	-	-	-	-	65	73	-	89	68	-
Stage 1	-	-	-	-	-	-	83	131	-	130	180	-
Stage 2	-	-	-	-	-	-	352	180	-	301	127	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s/v	0			0.1			130.6			15.1		
HCM LOS							F			C		

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	65	276	455	-	-	332	-	-	-	362
HCM Lane V/C Ratio	0.698	0.015	-	-	-	0.031	-	-	-	0.011
HCM Control Delay (s/veh)	140.8	18.2	0	-	-	16.2	-	-	0	15.1
HCM Lane LOS	F	C	A	-	-	C	-	-	A	C
HCM 95th %tile Q (veh)	3.1	0	0	-	-	0.1	-	-	-	0

Notes
 -: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

HCM 6th TWSC
3: River Oaks Dr/Drive 1 & Stacy Rd

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	6	1673	34	11	1440	1	14	1	6	1	0	10
Future Vol, veh/h	6	1673	34	11	1440	1	14	1	6	1	0	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	350	-	-	275	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	6	1707	35	11	1469	1	14	1	6	1	0	10

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1470	0	0	1742	0	0	2494	3229	871	2358	3246	735
Stage 1	-	-	-	-	-	-	1737	1737	-	1492	1492	-
Stage 2	-	-	-	-	-	-	757	1492	-	866	1754	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	455	-	-	357	-	-	15	9	294	19	9	362
Stage 1	-	-	-	-	-	-	91	140	-	129	185	-
Stage 2	-	-	-	-	-	-	366	185	-	314	137	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	455	-	-	357	-	-	~ 14	9	294	18	9	362
Mov Cap-2 Maneuver	-	-	-	-	-	-	69	74	-	87	71	-
Stage 1	-	-	-	-	-	-	90	138	-	127	179	-
Stage 2	-	-	-	-	-	-	345	179	-	301	135	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s/v	0			0.1			57.8			18.3		
HCM LOS							F			C		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	89	455	-	-	357	-	-	281
HCM Lane V/C Ratio	0.241	0.013	-	-	0.031	-	-	0.04
HCM Control Delay (s/veh)	57.8	13	-	-	15.4	-	-	18.3
HCM Lane LOS	F	B	-	-	C	-	-	C
HCM 95th %tile Q (veh)	0.9	0	-	-	0.1	-	-	0.1

Notes
 -: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Lanes, Volumes, Timings
5: Angel Pkwy/Wandering Way & Stacy Rd

Horizon Background PM
McKinney LDS Temple TIA



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	113	1053	546	102	905	14	416	27	141	11	28	58
Future Volume (vph)	113	1053	546	102	905	14	416	27	141	11	28	58
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250		250	335		0	0		100	185		130
Storage Lanes	1		1	1		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00
Frt			0.850		0.998				0.850			0.850
Flt Protected	0.950			0.950			0.950	0.958		0.950		
Satd. Flow (prot)	1770	3539	1583	1770	3532	0	1681	1695	1583	1770	1863	1583
Flt Permitted	0.193			0.142			0.950	0.958		0.950		
Satd. Flow (perm)	360	3539	1583	265	3532	0	1681	1695	1583	1770	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			445		1				93			93
Link Speed (mph)		50			50			40				30
Link Distance (ft)		903			966			845				943
Travel Time (s)		12.3			13.2			14.4				21.4
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	116	1086	563	105	933	14	429	28	145	11	29	60
Shared Lane Traffic (%)							47%					
Lane Group Flow (vph)	116	1086	563	105	947	0	227	230	145	11	29	60
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			24				12
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100		20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6		20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94				94
Detector 2 Size(ft)		6			6			6				6
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				0.0
Turn Type	D.P+P	NA	Perm	D.P+P	NA		Split	NA	Perm	Split	NA	Perm
Protected Phases	5	2		1	6		8	8		4	4	
Permitted Phases	6		2	2					8			4

Lanes, Volumes, Timings
5: Angel Pkwy/Wandering Way & Stacy Rd

Horizon Background PM
McKinney LDS Temple TIA



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	5	2	2	1	6		8	8	8	4	4	4
Switch Phase												
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0		6.0	6.0	6.0	6.0	6.0	6.0
Minimum Split (s)	25.0	40.0	40.0	25.0	40.0		38.1	38.1	38.1	38.1	38.1	38.1
Total Split (s)	18.0	78.0	78.0	18.0	78.0		43.0	43.0	43.0	21.0	21.0	21.0
Total Split (%)	11.3%	48.8%	48.8%	11.3%	48.8%		26.9%	26.9%	26.9%	13.1%	13.1%	13.1%
Maximum Green (s)	11.9	72.5	72.5	11.9	72.5		37.9	37.9	37.9	15.9	15.9	15.9
Yellow Time (s)	3.6	4.5	4.5	3.6	4.5		4.1	4.1	4.1	4.1	4.1	4.1
All-Red Time (s)	2.5	1.0	1.0	2.5	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.1	5.5	5.5	6.1	5.5		5.1	5.1	5.1	5.1	5.1	5.1
Lead/Lag	Lead	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes							
Vehicle Extension (s)	2.0	3.0	3.0	2.0	3.0		2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	None	Min	Min	None	Min		None	None	None	None	None	None
Walk Time (s)		7.0	7.0		7.0		7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)		21.0	21.0		22.0		26.0	26.0	26.0	26.0	26.0	26.0
Pedestrian Calls (#/hr)		0	0		0		0	0	0	0	0	0
Act Effct Green (s)	50.8	43.6	43.6	50.8	43.3		20.0	20.0	20.0	7.3	7.3	7.3
Actuated g/C Ratio	0.51	0.44	0.44	0.51	0.44		0.20	0.20	0.20	0.07	0.07	0.07
v/c Ratio	0.38	0.69	0.59	0.41	0.61		0.66	0.67	0.36	0.08	0.21	0.29
Control Delay (s/veh)	15.2	25.9	7.7	16.4	24.1		50.3	50.3	19.2	56.5	57.4	7.3
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	15.2	25.9	7.7	16.4	24.1		50.3	50.3	19.2	56.5	57.4	7.3
LOS	B	C	A	B	C		D	D	B	E	E	A
Approach Delay (s/veh)		19.4			23.4			42.9			27.3	
Approach LOS		B			C			D			C	
Queue Length 50th (ft)	31	279	43	28	232		138	140	27	7	17	0
Queue Length 95th (ft)	76	472	169	69	396		292	294	101	31	61	17
Internal Link Dist (ft)		823			886			765			863	
Turn Bay Length (ft)	250		250	335					100	185		130
Base Capacity (vph)	388	2649	1297	348	2644		708	714	721	313	329	356
Starvation Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.30	0.41	0.43	0.30	0.36		0.32	0.32	0.20	0.04	0.09	0.17

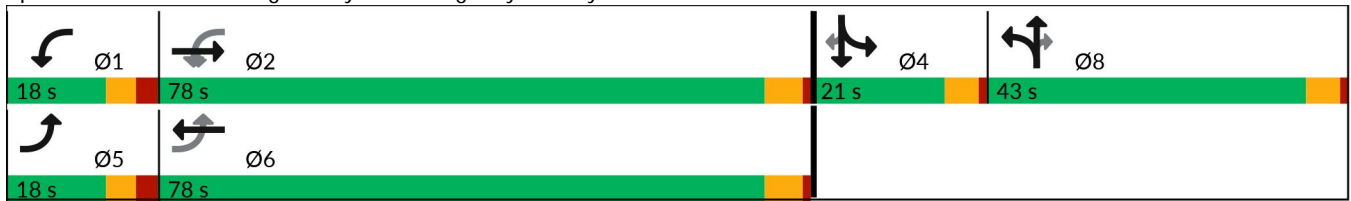
Intersection Summary

Area Type:	Other
Cycle Length:	160
Actuated Cycle Length:	98.9
Natural Cycle:	145
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	0.70
Intersection Signal Delay (s/veh):	24.8
Intersection LOS:	C
Intersection Capacity Utilization:	67.6%
ICU Level of Service:	C
Analysis Period (min):	15

Lanes, Volumes, Timings
 5: Angel Pkwy/Wandering Way & Stacy Rd

Horizon Background PM
 McKinney LDS Temple TIA

Splits and Phases: 5: Angel Pkwy/Wandering Way & Stacy Rd



HCM 6th TWSC
1: Allen Heights Dr/Hawks Wood Dr & Stacy Rd

Horizon Background Saturday
McKinney LDS Temple TIA

Intersection												
Int Delay, s/veh	1.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↗	↗	↘	↗	↘	↘	↗	↗	↘	↘	↘
Traffic Vol, veh/h	27	1133	64	7	1421	6	44	2	11	5	6	10
Future Vol, veh/h	27	1133	64	7	1421	6	44	2	11	5	6	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	175	-	175	335	-	-	155	-	0	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	28	1193	67	7	1496	6	46	2	12	5	6	11

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1502	0	0	1260	0	0	2014	2765	597	2167	2829	751
Stage 1	-	-	-	-	-	-	1249	1249	-	1513	1513	-
Stage 2	-	-	-	-	-	-	765	1516	-	654	1316	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	442	-	-	548	-	-	~ 34	19	446	26	17	353
Stage 1	-	-	-	-	-	-	183	243	-	125	181	-
Stage 2	-	-	-	-	-	-	362	180	-	422	226	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	442	-	-	548	-	-	~ 30	18	446	23	16	353
Mov Cap-2 Maneuver	-	-	-	-	-	-	113	90	-	89	94	-
Stage 1	-	-	-	-	-	-	171	228	-	117	179	-
Stage 2	-	-	-	-	-	-	334	178	-	381	212	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s/v	0.3			0.1			48.5			32.7		
HCM LOS							E			D		

Minor Lane/Major Mvmt	NBLn1	NBLn2	NBLn3	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	113	90	446	442	-	-	548	-	-	89	174
HCM Lane V/C Ratio	0.41	0.023	0.026	0.064	-	-	0.013	-	-	0.059	0.097
HCM Control Delay (s/veh)	57.4	46	13.3	13.7	-	-	11.7	-	-	48	27.9
HCM Lane LOS	F	E	B	B	-	-	B	-	-	E	D
HCM 95th %tile Q (veh)	1.7	0.1	0.1	0.2	-	-	0	-	-	0.2	0.3

Notes
 -: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

HCM 6th TWSC
 2: Lost Creek Dr/Chase Oaks Church Dr & Stacy Rd

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	4	1093	44	4	1403	0	49	0	4	0	0	2
Future Vol, veh/h	4	1093	44	4	1403	0	49	0	4	0	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	325	-	-	-	-	150	-	-	75
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	1151	46	4	1477	0	52	0	4	0	0	2

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1477	0	0	1197	0	0	1929	2667	599	2069	2690	739
Stage 1	-	-	-	-	-	-	1182	1182	-	1485	1485	-
Stage 2	-	-	-	-	-	-	747	1485	-	584	1205	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	452	-	-	579	-	-	~ 40	22	445	31	21	360
Stage 1	-	-	-	-	-	-	201	262	-	131	187	-
Stage 2	-	-	-	-	-	-	371	187	-	465	255	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	452	-	-	579	-	-	~ 39	21	445	30	20	360
Mov Cap-2 Maneuver	-	-	-	-	-	-	132	106	-	99	105	-
Stage 1	-	-	-	-	-	-	196	255	-	127	186	-
Stage 2	-	-	-	-	-	-	366	186	-	448	248	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.2	0	46.1	15.1
HCM LOS			E	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	132	445	452	-	-	579	-	-	-	360
HCM Lane V/C Ratio	0.391	0.009	0.009	-	-	0.007	-	-	-	0.006
HCM Control Delay (s/veh)	48.8	13.2	13	0.2	-	11.3	-	-	0	15.1
HCM Lane LOS	E	B	B	A	-	B	-	-	A	C
HCM 95th %tile Q (veh)	1.7	0	0	-	-	0	-	-	-	0

Notes
 -: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

HCM 6th TWSC
3: River Oaks Dr/Drive 1 & Stacy Rd

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	2	1060	18	20	1398	1	26	1	1	0	0	1
Future Vol, veh/h	2	1060	18	20	1398	1	26	1	1	0	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	350	-	-	275	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	2	1116	19	21	1472	1	27	1	1	0	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1473	0	0	1135	0	0	1908	2645	568	2078	2654	737
Stage 1	-	-	-	-	-	-	1130	1130	-	1515	1515	-
Stage 2	-	-	-	-	-	-	778	1515	-	563	1139	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	454	-	-	611	-	-	42	23	466	31	23	361
Stage 1	-	-	-	-	-	-	217	277	-	125	180	-
Stage 2	-	-	-	-	-	-	355	180	-	478	274	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	454	-	-	611	-	-	41	22	466	30	22	361
Mov Cap-2 Maneuver	-	-	-	-	-	-	138	106	-	98	104	-
Stage 1	-	-	-	-	-	-	216	276	-	125	174	-
Stage 2	-	-	-	-	-	-	342	174	-	473	273	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s/v	0			0.2			37.4			15		
HCM LOS							E			C		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	140	454	-	-	611	-	-	361
HCM Lane V/C Ratio	0.211	0.005	-	-	0.034	-	-	0.003
HCM Control Delay (s/veh)	37.4	13	-	-	11.1	-	-	15
HCM Lane LOS	E	B	-	-	B	-	-	C
HCM 95th %tile Q (veh)	0.8	0	-	-	0.1	-	-	0

Lanes, Volumes, Timings
5: Angel Pkwy/Wandering Way & Stacy Rd

Horizon Background Saturday
McKinney LDS Temple TIA



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	84	635	338	103	888	15	454	22	87	17	14	59
Future Volume (vph)	84	635	338	103	888	15	454	22	87	17	14	59
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250		250	335		0	0		100	185		130
Storage Lanes	1		1	1		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00
Frt			0.850		0.998				0.850			0.850
Flt Protected	0.950			0.950			0.950	0.957		0.950		
Satd. Flow (prot)	1770	3539	1583	1770	3532	0	1681	1694	1583	1770	1863	1583
Flt Permitted	0.169			0.315			0.950	0.957		0.950		
Satd. Flow (perm)	315	3539	1583	587	3532	0	1681	1694	1583	1770	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			348		2				125			125
Link Speed (mph)		50			50			40				30
Link Distance (ft)		903			966			845				943
Travel Time (s)		12.3			13.2			14.4				21.4
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	87	655	348	106	915	15	468	23	90	18	14	61
Shared Lane Traffic (%)							48%					
Lane Group Flow (vph)	87	655	348	106	930	0	243	248	90	18	14	61
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			24				12
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100		20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6		20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94				94
Detector 2 Size(ft)		6			6			6				6
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				0.0
Turn Type	D.P+P	NA	Perm	D.P+P	NA		Split	NA	Perm	Split	NA	Perm
Protected Phases	5	2		1	6		8	8		4	4	
Permitted Phases	6		2	2					8			4

Lanes, Volumes, Timings
5: Angel Pkwy/Wandering Way & Stacy Rd

Horizon Background Saturday
McKinney LDS Temple TIA



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	5	2	2	1	6		8	8	8	4	4	4
Switch Phase												
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0		6.0	6.0	6.0	6.0	6.0	6.0
Minimum Split (s)	25.0	40.0	40.0	25.0	40.0		38.1	38.1	38.1	38.1	38.1	38.1
Total Split (s)	15.0	54.0	54.0	15.0	54.0		36.0	36.0	36.0	15.0	15.0	15.0
Total Split (%)	12.5%	45.0%	45.0%	12.5%	45.0%		30.0%	30.0%	30.0%	12.5%	12.5%	12.5%
Maximum Green (s)	8.9	48.5	48.5	8.9	48.5		30.9	30.9	30.9	9.9	9.9	9.9
Yellow Time (s)	3.6	4.5	4.5	3.6	4.5		4.1	4.1	4.1	4.1	4.1	4.1
All-Red Time (s)	2.5	1.0	1.0	2.5	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.1	5.5	5.5	6.1	5.5		5.1	5.1	5.1	5.1	5.1	5.1
Lead/Lag	Lead	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes							
Vehicle Extension (s)	2.0	3.0	3.0	2.0	3.0		2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	None	Min	Min	None	Min		None	None	None	None	None	None
Walk Time (s)		7.0	7.0		7.0		7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)		21.0	21.0		22.0		26.0	26.0	26.0	26.0	26.0	26.0
Pedestrian Calls (#/hr)		0	0		0		0	0	0	0	0	0
Act Effct Green (s)	33.0	28.4	28.4	33.0	28.7		17.8	17.8	17.8	7.4	7.4	7.4
Actuated g/C Ratio	0.43	0.37	0.37	0.43	0.37		0.23	0.23	0.23	0.10	0.10	0.10
v/c Ratio	0.31	0.50	0.43	0.28	0.70		0.62	0.63	0.19	0.10	0.07	0.22
Control Delay (s/veh)	14.9	22.3	4.3	13.9	25.7		38.8	39.0	3.4	44.6	44.4	2.0
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	14.9	22.3	4.3	13.9	25.7		38.8	39.0	3.4	44.6	44.4	2.0
LOS	B	C	A	B	C		D	D	A	D	D	A
Approach Delay (s/veh)		16.0			24.6			33.4			16.7	
Approach LOS		B			C			C			B	
Queue Length 50th (ft)	21	134	0	26	207		117	120	0	9	7	0
Queue Length 95th (ft)	56	231	56	66	351		245	249	19	36	30	0
Internal Link Dist (ft)		823			886			765			863	
Turn Bay Length (ft)	250		250	335					100	185		130
Base Capacity (vph)	343	2308	1153	424	2305		812	818	829	274	288	350
Starvation Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.25	0.28	0.30	0.25	0.40		0.30	0.30	0.11	0.07	0.05	0.17







Intersection Summary

Area Type:	Other
Cycle Length:	120
Actuated Cycle Length:	76.8
Natural Cycle:	145
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	0.70
Intersection Signal Delay (s/veh):	22.8
Intersection LOS:	C
Intersection Capacity Utilization:	63.4%
ICU Level of Service:	B
Analysis Period (min):	15

Lanes, Volumes, Timings
 5: Angel Pkwy/Wandering Way & Stacy Rd

Horizon Background Saturday
 McKinney LDS Temple TIA

Splits and Phases: 5: Angel Pkwy/Wandering Way & Stacy Rd

 Ø1 15 s	 Ø2 54 s	 Ø4 15 s	 Ø8 36 s
 Ø5 15 s	 Ø6 54 s		

HCM 6th TWSC
1: Allen Heights Dr/Hawks Wood Dr & Stacy Rd

Horizon PM
McKinney LDS Temple TIA

Intersection												
Int Delay, s/veh	3.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑↑	↗	↘	↑↑		↘	↑	↗	↘	↗	
Traffic Vol, veh/h	17	1711	85	16	1522	9	46	0	66	7	14	20
Future Vol, veh/h	17	1711	85	16	1522	9	46	0	66	7	14	20
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	175	-	175	335	-	-	155	-	0	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	99	99	99	99	99	99	99	99	99	99	99	99
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	17	1728	86	16	1537	9	46	0	67	7	14	20

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1546	0	0	1814	0	0	2570	3340	864	2472	3422	773
Stage 1	-	-	-	-	-	-	1762	1762	-	1574	1574	-
Stage 2	-	-	-	-	-	-	808	1578	-	898	1848	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	425	-	-	335	-	-	~ 13	8	297	15	~ 7	342
Stage 1	-	-	-	-	-	-	87	136	-	115	169	-
Stage 2	-	-	-	-	-	-	341	168	-	301	123	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	425	-	-	335	-	-	~ 9	7	297	11	~ 6	342
Mov Cap-2 Maneuver	-	-	-	-	-	-	61	66	-	70	60	-
Stage 1	-	-	-	-	-	-	84	131	-	110	161	-
Stage 2	-	-	-	-	-	-	279	160	-	224	118	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s/v	0.1			0.2			78.8			50.5		
HCM LOS							F			F		

Minor Lane/Major Mvmt	NBLn1	NBLn2	NBLn3	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	61	-	297	425	-	-	335	-	-	70	117
HCM Lane V/C Ratio	0.762	-	0.224	0.04	-	-	0.048	-	-	0.101	0.294
HCM Control Delay (s/veh)	162.4	0	20.6	13.8	-	-	16.3	-	-	62.1	48.1
HCM Lane LOS	F	A	C	B	-	-	C	-	-	F	E
HCM 95th %tile Q (veh)	3.4	-	0.8	0.1	-	-	0.2	-	-	0.3	1.1

Notes
 -: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

HCM 6th TWSC
 2: Lost Creek Dr/Chase Oaks Church Dr & Stacy Rd

Horizon PM
 McKinney LDS Temple TIA

Intersection

Int Delay, s/veh 2.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑		↑	↑↑			↑	↑		↑	↑
Traffic Vol, veh/h	0	1757	49	10	1471	1	44	0	4	0	0	4
Future Vol, veh/h	0	1757	49	10	1471	1	44	0	4	0	0	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	325	-	-	-	-	150	-	-	75
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	1811	51	10	1516	1	45	0	4	0	0	4

Major/Minor	Major1	Major2	Minor1	Minor2
Conflicting Flow All	1517	0	0	1862
Stage 1	-	-	-	-
Stage 2	-	-	-	-
Critical Hdwy	4.14	-	-	4.14
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	2.22	-	-	2.22
Pot Cap-1 Maneuver	436	-	-	320
Stage 1	-	-	-	-
Stage 2	-	-	-	-
Platoon blocked, %	-	-	-	-
Mov Cap-1 Maneuver	436	-	-	320
Mov Cap-2 Maneuver	-	-	-	-
Stage 1	-	-	-	-
Stage 2	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0	0.1	146.6	15.4
HCM LOS			F	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	61	268	436	-	-	320	-	-	-	349
HCM Lane V/C Ratio	0.744	0.015	-	-	-	0.032	-	-	-	0.012
HCM Control Delay (s/veh)	158.2	18.6	0	-	-	16.6	-	-	0	15.4
HCM Lane LOS	F	C	A	-	-	C	-	-	A	C
HCM 95th %tile Q (veh)	3.3	0	0	-	-	0.1	-	-	-	0

Notes
 -: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

HCM 6th TWSC
3: River Oaks Dr/Drive 1 & Stacy Rd

Horizon PM
McKinney LDS Temple TIA

Intersection												
Int Delay, s/veh	1.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↗	↗↘		↗	↗↘			↕			↕	
Traffic Vol, veh/h	44	1673	34	11	1454	7	14	1	6	26	0	42
Future Vol, veh/h	44	1673	34	11	1454	7	14	1	6	26	0	42
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	350	-	-	275	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	45	1707	35	11	1484	7	14	1	6	27	0	43

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1491	0	0	1742	0	0	2579	3328	871	2454	3342	746
Stage 1	-	-	-	-	-	-	1815	1815	-	1510	1510	-
Stage 2	-	-	-	-	-	-	764	1513	-	944	1832	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	446	-	-	357	-	-	~ 13	8	294	~ 16	8	356
Stage 1	-	-	-	-	-	-	81	128	-	126	181	-
Stage 2	-	-	-	-	-	-	362	181	-	282	126	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	446	-	-	357	-	-	~ 10	7	294	~ 14	7	356
Mov Cap-2 Maneuver	-	-	-	-	-	-	55	59	-	75	62	-
Stage 1	-	-	-	-	-	-	73	115	-	113	175	-
Stage 2	-	-	-	-	-	-	309	175	-	246	113	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s/v	0.4			0.1			74.9			50.2		
HCM LOS							F			F		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	72	446	-	-	357	-	-	146
HCM Lane V/C Ratio	0.298	0.101	-	-	0.031	-	-	0.475
HCM Control Delay (s/veh)	74.9	14	-	-	15.4	-	-	50.2
HCM Lane LOS	F	B	-	-	C	-	-	F
HCM 95th %tile Q (veh)	1.1	0.3	-	-	0.1	-	-	2.2

Notes
 -: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

HCM 6th TWSC
4: Stacy Rd & Drive 2

Horizon PM
McKinney LDS Temple TIA

Intersection						
Int Delay, s/veh	0.1					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑			↑
Traffic Vol, veh/h	0	1667	1452	15	0	14
Future Vol, veh/h	0	1667	1452	15	0	14
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	1812	1578	16	0	15

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	-	0	-
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	-	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	-	-
Pot Cap-1 Maneuver	0	-	-
Stage 1	0	-	-
Stage 2	0	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0	16.5
HCM LOS			C

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	329
HCM Lane V/C Ratio	-	-	-	0.046
HCM Control Delay (s/veh)	-	-	-	16.5
HCM Lane LOS	-	-	-	C
HCM 95th %tile Q (veh)	-	-	-	0.1

Lanes, Volumes, Timings
5: Angel Pkwy/Wandering Way & Stacy Rd

Horizon PM
McKinney LDS Temple TIA



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	117	1064	557	102	914	14	425	27	141	11	28	61
Future Volume (vph)	117	1064	557	102	914	14	425	27	141	11	28	61
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250		250	335		0	0		100	185		130
Storage Lanes	1		1	1		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00
Frt			0.850		0.998				0.850			0.850
Flt Protected	0.950			0.950			0.950	0.958		0.950		
Satd. Flow (prot)	1770	3539	1583	1770	3532	0	1681	1695	1583	1770	1863	1583
Flt Permitted	0.190			0.140			0.950	0.958		0.950		
Satd. Flow (perm)	354	3539	1583	261	3532	0	1681	1695	1583	1770	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			450		1				93			93
Link Speed (mph)		50			50			40				30
Link Distance (ft)		500			966			845				943
Travel Time (s)		6.8			13.2			14.4				21.4
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	121	1097	574	105	942	14	438	28	145	11	29	63
Shared Lane Traffic (%)							47%					
Lane Group Flow (vph)	121	1097	574	105	956	0	232	234	145	11	29	63
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			24				12
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100		20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6		20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94				94
Detector 2 Size(ft)		6			6			6				6
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				0.0
Turn Type	D.P+P	NA	Perm	D.P+P	NA		Split	NA	Perm	Split	NA	Perm
Protected Phases	5	2		1	6		8	8		4	4	
Permitted Phases	6		2	2					8			4

Lanes, Volumes, Timings
5: Angel Pkwy/Wandering Way & Stacy Rd

Horizon PM
McKinney LDS Temple TIA



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	5	2	2	1	6		8	8	8	4	4	4
Switch Phase												
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0		6.0	6.0	6.0	6.0	6.0	6.0
Minimum Split (s)	25.0	40.0	40.0	25.0	40.0		38.1	38.1	38.1	38.1	38.1	38.1
Total Split (s)	18.0	78.0	78.0	18.0	78.0		43.0	43.0	43.0	21.0	21.0	21.0
Total Split (%)	11.3%	48.8%	48.8%	11.3%	48.8%		26.9%	26.9%	26.9%	13.1%	13.1%	13.1%
Maximum Green (s)	11.9	72.5	72.5	11.9	72.5		37.9	37.9	37.9	15.9	15.9	15.9
Yellow Time (s)	3.6	4.5	4.5	3.6	4.5		4.1	4.1	4.1	4.1	4.1	4.1
All-Red Time (s)	2.5	1.0	1.0	2.5	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.1	5.5	5.5	6.1	5.5		5.1	5.1	5.1	5.1	5.1	5.1
Lead/Lag	Lead	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes							
Vehicle Extension (s)	2.0	3.0	3.0	2.0	3.0		2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	None	Min	Min	None	Min		None	None	None	None	None	None
Walk Time (s)		7.0	7.0		7.0		7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)		21.0	21.0		22.0		26.0	26.0	26.0	26.0	26.0	26.0
Pedestrian Calls (#/hr)		0	0		0		0	0	0	0	0	0
Act Effct Green (s)	52.0	44.8	44.8	52.0	44.3		20.5	20.5	20.5	7.4	7.4	7.4
Actuated g/C Ratio	0.52	0.45	0.45	0.52	0.44		0.20	0.20	0.20	0.07	0.07	0.07
v/c Ratio	0.40	0.69	0.60	0.41	0.61		0.67	0.67	0.36	0.08	0.21	0.31
Control Delay (s/veh)	15.5	26.0	7.9	16.6	24.4		51.3	51.3	19.3	57.8	58.6	8.4
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	15.5	26.0	7.9	16.6	24.4		51.3	51.3	19.3	57.8	58.6	8.4
LOS	B	C	A	B	C		D	D	B	E	E	A
Approach Delay (s/veh)		19.5			23.7			43.8			27.9	
Approach LOS		B			C			D			C	
Queue Length 50th (ft)	33	284	46	28	236		143	144	27	7	18	0
Queue Length 95th (ft)	79	482	178	70	406		303	305	102	31	61	20
Internal Link Dist (ft)		420			886			765			863	
Turn Bay Length (ft)	250		250	335					100	185		130
Base Capacity (vph)	383	2613	1286	344	2608		697	703	711	308	324	352
Starvation Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.32	0.42	0.45	0.31	0.37		0.33	0.33	0.20	0.04	0.09	0.18







Intersection Summary

Area Type:	Other
Cycle Length:	160
Actuated Cycle Length:	100.6
Natural Cycle:	145
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	0.70
Intersection Signal Delay (s/veh):	25.2
Intersection LOS:	C
Intersection Capacity Utilization:	68.1%
ICU Level of Service:	C
Analysis Period (min):	15

Lanes, Volumes, Timings
 5: Angel Pkwy/Wandering Way & Stacy Rd

Horizon PM
 McKinney LDS Temple TIA

Splits and Phases: 5: Angel Pkwy/Wandering Way & Stacy Rd

 Ø1 18 s	 Ø2 78 s	 Ø4 21 s	 Ø8 43 s
 Ø5 18 s	 Ø6 78 s		

HCM 6th TWSC
1: Allen Heights Dr/Hawks Wood Dr & Stacy Rd

Horizon Saturday
McKinney LDS Temple TIA

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	27	1168	64	11	1463	6	44	2	14	5	6	10
Future Vol, veh/h	27	1168	64	11	1463	6	44	2	14	5	6	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	175	-	175	335	-	-	155	-	0	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	28	1229	67	12	1540	6	46	2	15	5	6	11

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1546	0	0	1296	0	0	2082	2855	615	2239	2919	773
Stage 1	-	-	-	-	-	-	1285	1285	-	1567	1567	-
Stage 2	-	-	-	-	-	-	797	1570	-	672	1352	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	425	-	-	531	-	-	~ 31	17	434	23	15	342
Stage 1	-	-	-	-	-	-	174	233	-	116	170	-
Stage 2	-	-	-	-	-	-	346	170	-	412	217	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	425	-	-	531	-	-	~ 27	16	434	20	14	342
Mov Cap-2 Maneuver	-	-	-	-	-	-	106	84	-	82	87	-
Stage 1	-	-	-	-	-	-	163	218	-	108	166	-
Stage 2	-	-	-	-	-	-	315	166	-	368	203	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s/v	0.3			0.1			51			34.9		
HCM LOS							F			D		

Minor Lane/Major Mvmt	NBLn1	NBLn2	NBLn3	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	106	84	434	425	-	-	531	-	-	82	163
HCM Lane V/C Ratio	0.437	0.025	0.034	0.067	-	-	0.022	-	-	0.064	0.103
HCM Control Delay (s/veh)	63	49	13.6	14.1	-	-	11.9	-	-	51.9	29.6
HCM Lane LOS	F	E	B	B	-	-	B	-	-	F	D
HCM 95th %tile Q (veh)	1.9	0.1	0.1	0.2	-	-	0.1	-	-	0.2	0.3

Notes
 -: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

HCM 6th TWSC
2: Lost Creek Dr/Chase Oaks Church Dr & Stacy Rd

Horizon Saturday
McKinney LDS Temple TIA

Intersection												
Int Delay, s/veh	1.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑		↑	↑↑			↑	↑		↑	↑
Traffic Vol, veh/h	4	1131	44	4	1449	0	49	0	4	0	0	2
Future Vol, veh/h	4	1131	44	4	1449	0	49	0	4	0	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	325	-	-	-	-	150	-	-	75
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	1191	46	4	1525	0	52	0	4	0	0	2

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1525	0	0	1237	0	0	1993	2755	619	2137	2778	763
Stage 1	-	-	-	-	-	-	1222	1222	-	1533	1533	-
Stage 2	-	-	-	-	-	-	771	1533	-	604	1245	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	433	-	-	559	-	-	~ 36	19	432	28	19	347
Stage 1	-	-	-	-	-	-	190	250	-	122	177	-
Stage 2	-	-	-	-	-	-	359	177	-	452	244	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	433	-	-	559	-	-	~ 35	18	432	27	18	347
Mov Cap-2 Maneuver	-	-	-	-	-	-	124	100	-	92	100	-
Stage 1	-	-	-	-	-	-	184	243	-	118	176	-
Stage 2	-	-	-	-	-	-	354	176	-	434	237	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.2	0	50.3	15.4
HCM LOS			F	C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	124	432	433	-	-	559	-	-	-	347
HCM Lane V/C Ratio	0.416	0.01	0.01	-	-	0.008	-	-	-	0.006
HCM Control Delay (s/veh)	53.3	13.4	13.4	0.2	-	11.5	-	-	0	15.4
HCM Lane LOS	F	B	B	A	-	B	-	-	A	C
HCM 95th %tile Q (veh)	1.8	0	0	-	-	0	-	-	-	0

Notes
 -: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

HCM 6th TWSC
3: River Oaks Dr/Drive 1 & Stacy Rd

Horizon Saturday
McKinney LDS Temple TIA

Intersection												
Int Delay, s/veh	1.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↗	↗↘		↗	↗↘			↕			↕	
Traffic Vol, veh/h	40	1060	18	20	1412	7	26	1	1	25	0	33
Future Vol, veh/h	40	1060	18	20	1412	7	26	1	1	25	0	33
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	350	-	-	275	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	1	-	-	1	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	42	1116	19	21	1486	7	27	1	1	26	0	35

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1493	0	0	1135	0	0	1995	2745	568	2175	2751	747
Stage 1	-	-	-	-	-	-	1210	1210	-	1532	1532	-
Stage 2	-	-	-	-	-	-	785	1535	-	643	1219	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	446	-	-	611	-	-	36	20	466	~ 26	19	355
Stage 1	-	-	-	-	-	-	194	254	-	122	177	-
Stage 2	-	-	-	-	-	-	352	176	-	428	251	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	446	-	-	611	-	-	29	18	466	~ 23	17	355
Mov Cap-2 Maneuver	-	-	-	-	-	-	109	83	-	85	93	-
Stage 1	-	-	-	-	-	-	176	230	-	111	171	-
Stage 2	-	-	-	-	-	-	307	170	-	385	227	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s/v	0.5			0.2			48.8			44.6		
HCM LOS							E			E		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	111	446	-	-	611	-	-	150
HCM Lane V/C Ratio	0.266	0.094	-	-	0.034	-	-	0.407
HCM Control Delay (s/veh)	48.8	13.9	-	-	11.1	-	-	44.6
HCM Lane LOS	E	B	-	-	B	-	-	E
HCM 95th %tile Q (veh)	1	0.3	-	-	0.1	-	-	1.8

Notes
 -: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection						
Int Delay, s/veh	0.1					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑			↑
Traffic Vol, veh/h	0	1081	1407	15	0	14
Future Vol, veh/h	0	1081	1407	15	0	14
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	1175	1529	16	0	15

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	-	0	-
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	-	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	-	-
Pot Cap-1 Maneuver	0	-	-
Stage 1	0	-	-
Stage 2	0	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0	16
HCM LOS			C

Minor Lane/Major Mvmt	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	-	-	-	342
HCM Lane V/C Ratio	-	-	-	0.044
HCM Control Delay (s/veh)	-	-	-	16
HCM Lane LOS	-	-	-	C
HCM 95th %tile Q (veh)	-	-	-	0.1

Lanes, Volumes, Timings
5: Angel Pkwy/Wandering Way & Stacy Rd

Horizon Saturday
McKinney LDS Temple TIA



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	88	646	349	103	897	15	463	22	87	17	14	62
Future Volume (vph)	88	646	349	103	897	15	463	22	87	17	14	62
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	250		250	335		0	0		100	185		130
Storage Lanes	1		1	1		0	1		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	0.95	0.95	0.95	1.00	1.00	1.00	1.00
Frt			0.850		0.998				0.850			0.850
Flt Protected	0.950			0.950			0.950	0.957		0.950		
Satd. Flow (prot)	1770	3539	1583	1770	3532	0	1681	1694	1583	1770	1863	1583
Flt Permitted	0.169			0.311			0.950	0.957		0.950		
Satd. Flow (perm)	315	3539	1583	579	3532	0	1681	1694	1583	1770	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			360		2				125			125
Link Speed (mph)		50			50			40				30
Link Distance (ft)		530			966			845				943
Travel Time (s)		7.2			13.2			14.4				21.4
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	91	666	360	106	925	15	477	23	90	18	14	64
Shared Lane Traffic (%)							48%					
Lane Group Flow (vph)	91	666	360	106	940	0	248	252	90	18	14	64
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			24				12
Link Offset(ft)		0			0			0				0
Crosswalk Width(ft)		16			16			16				16
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100		20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6		20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94				94
Detector 2 Size(ft)		6			6			6				6
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex				Cl+Ex
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0				0.0
Turn Type	D.P+P	NA	Perm	D.P+P	NA		Split	NA	Perm	Split	NA	Perm
Protected Phases	5	2		1	6		8	8		4	4	
Permitted Phases	6		2	2					8			4

Lanes, Volumes, Timings
5: Angel Pkwy/Wandering Way & Stacy Rd

Horizon Saturday
McKinney LDS Temple TIA



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector Phase	5	2	2	1	6		8	8	8	4	4	4
Switch Phase												
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0		6.0	6.0	6.0	6.0	6.0	6.0
Minimum Split (s)	25.0	40.0	40.0	25.0	40.0		38.1	38.1	38.1	38.1	38.1	38.1
Total Split (s)	15.0	54.0	54.0	15.0	54.0		36.0	36.0	36.0	15.0	15.0	15.0
Total Split (%)	12.5%	45.0%	45.0%	12.5%	45.0%		30.0%	30.0%	30.0%	12.5%	12.5%	12.5%
Maximum Green (s)	8.9	48.5	48.5	8.9	48.5		30.9	30.9	30.9	9.9	9.9	9.9
Yellow Time (s)	3.6	4.5	4.5	3.6	4.5		4.1	4.1	4.1	4.1	4.1	4.1
All-Red Time (s)	2.5	1.0	1.0	2.5	1.0		1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.1	5.5	5.5	6.1	5.5		5.1	5.1	5.1	5.1	5.1	5.1
Lead/Lag	Lead	Lag	Lag	Lead	Lag							
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes							
Vehicle Extension (s)	2.0	3.0	3.0	2.0	3.0		2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	None	Min	Min	None	Min		None	None	None	None	None	None
Walk Time (s)		7.0	7.0		7.0		7.0	7.0	7.0	7.0	7.0	7.0
Flash Dont Walk (s)		21.0	21.0		22.0		26.0	26.0	26.0	26.0	26.0	26.0
Pedestrian Calls (#/hr)		0	0		0		0	0	0	0	0	0
Act Effct Green (s)	34.5	29.8	29.8	34.5	30.0		18.1	18.1	18.1	7.2	7.2	7.2
Actuated g/C Ratio	0.44	0.38	0.38	0.44	0.38		0.23	0.23	0.23	0.09	0.09	0.09
v/c Ratio	0.32	0.49	0.43	0.28	0.69		0.63	0.64	0.19	0.11	0.08	0.24
Control Delay (s/veh)	15.2	22.2	4.2	14.0	25.7		39.6	39.7	3.4	45.2	45.0	2.2
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	15.2	22.2	4.2	14.0	25.7		39.6	39.7	3.4	45.2	45.0	2.2
LOS	B	C	A	B	C		D	D	A	D	D	A
Approach Delay (s/veh)		15.9			24.5			34.1			16.6	
Approach LOS		B			C			C			B	
Queue Length 50th (ft)	22	137	0	26	213		121	124	0	9	7	0
Queue Length 95th (ft)	58	237	57	66	357		251	255	20	36	31	0
Internal Link Dist (ft)		450			886			765			863	
Turn Bay Length (ft)	250		250	335					100	185		130
Base Capacity (vph)	336	2291	1151	420	2287		771	777	793	260	273	339
Starvation Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0		0	0	0	0	0	0
Reduced v/c Ratio	0.27	0.29	0.31	0.25	0.41		0.32	0.32	0.11	0.07	0.05	0.19

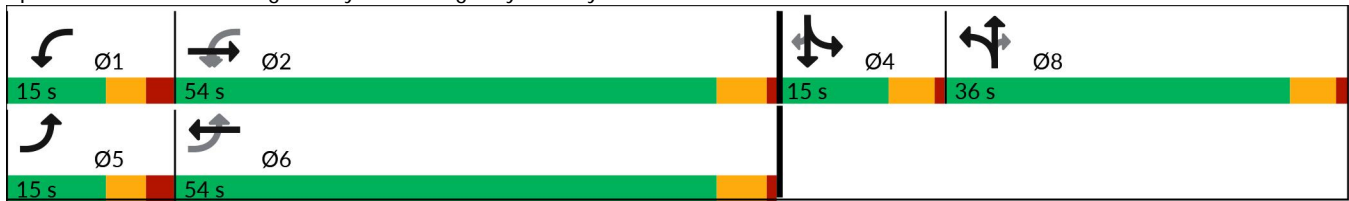
Intersection Summary

Area Type:	Other
Cycle Length:	120
Actuated Cycle Length:	78.3
Natural Cycle:	145
Control Type:	Actuated-Uncoordinated
Maximum v/c Ratio:	0.69
Intersection Signal Delay (s/veh):	22.9
Intersection LOS:	C
Intersection Capacity Utilization:	64.1%
ICU Level of Service:	C
Analysis Period (min):	15

Lanes, Volumes, Timings
 5: Angel Pkwy/Wandering Way & Stacy Rd

Horizon Saturday
 McKinney LDS Temple TIA

Splits and Phases: 5: Angel Pkwy/Wandering Way & Stacy Rd



SIGNAL WARRANT ANALYSIS

TRAFFIC SIGNAL WARRANT ANALYSIS (2011 TXMUTCD)

MAJOR STREET: Stacy Road EB WB # OF APPROACH LANES:

MINOR STREET: Allen Heights Dr NB SB # OF APPROACH LANES:

CITY, STATE: Fairview, TX

COMMENTS: _____

ISOLATED COMMUNITY WITH POPULATION LESS THAN 10,000 (Y OR N):

85TH PERCENTILE SPEED OR POSTED SPEED LIMIT GREATER THAN 40 MPH ON MAJOR STREET (Y OR N):

			Stacy Road		Total	Allen Heights Dr		Minor Street Heavy Leg
			EB Approach	WB Approach		NB Approach	SB Approach	
07:00 AM	TO	07:00 AM	1060	1882	2942	49	16	49
08:00 AM	TO	08:00 AM	0	0	0	0	0	0
09:00 AM	TO	09:00 AM	0	0	0	0	0	0
10:00 AM	TO	10:00 AM	0	0	0	0	0	0
11:00 AM	TO	11:00 AM	0	0	0	0	0	0
12:00 PM	TO	12:00 PM	0	0	0	0	0	0
01:00 PM	TO	01:00 PM	0	0	0	0	0	0
02:00 PM	TO	02:00 PM	0	0	0	0	0	0
03:00 PM	TO	03:00 PM	0	0	0	0	0	0
04:00 PM	TO	04:00 PM	1771	1547	3318	79	41	79
05:00 PM	TO	05:00 PM	0	0	0	0	0	0
06:00 PM	TO	06:00 PM	0	0	0	0	0	0
07:00 PM	TO	07:00 PM	0	0	0	0	0	0

Warrant	Description	Warrant Met?
1	Eight-Hour Volume	Warrant NOT Met
2	Four-Hour Volume	Warrant NOT Met
3	Peak Hour Volume	Warrant NOT Met
4	Pedestrian Volume	Not Evaluated
5	School Crossing	N/A
6	Coordinated Signal System	N/A
7	Crash Experience	Not Evaluated
8	Roadway Network	N/A
9	Intersection Near a Grade Crossing	N/A

TRAFFIC SIGNAL WARRANT ANALYSIS (2011 TXMUTCD)

MAJOR STREET: Stacy Road NB EB WB # OF APPROACH LANES:

MINOR STREET: Allen Heights Dr NB SB # OF APPROACH LANES:

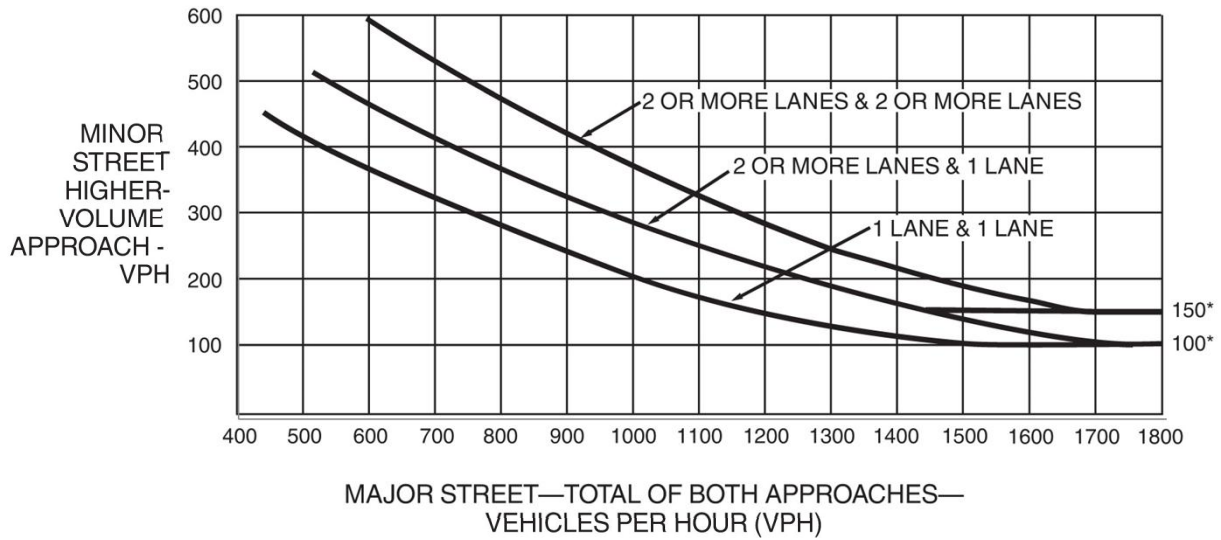
CITY, STATE: Fairview, TX

COMMENTS: _____

ISOLATED COMMUNITY WITH POPULATION LESS THAN 10,000 (Y OR N):
 85TH PERCENTILE SPEED OR POSTED SPEED LIMIT GREATER THAN 40 MPH ON MAJOR STREET (Y OR N):

	MAJOR ST TWO-WAY TRAFFIC	MINOR ST TRAFFIC HEAVY LEG	WARRANT 1 - Condition A, Part 1			WARRANT 1 - Condition B, Part 1			WARRANT 1 - Condition A, Part 2			WARRANT 1 - Condition B, Part 2			WARRANT 2 Four-Hour	WARRANT 3 Peak Hour
			MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET		
THRESHOLD VALUES			420	140		630	70		336	112		504	56			
06:00 AM TO 07:00 AM	2,942	49	Y			Y			Y			Y				
07:00 AM TO 08:00 AM	0	0														
08:00 AM TO 09:00 AM	0	0														
09:00 AM TO 10:00 AM	0	0														
10:00 AM TO 11:00 AM	0	0														
11:00 AM TO 12:00 PM	0	0														
12:00 PM TO 01:00 PM	0	0														
01:00 PM TO 02:00 PM	0	0														
02:00 PM TO 03:00 PM	0	0														
03:00 PM TO 04:00 PM	3,318	79	Y			Y	Y	Y	Y			Y	Y	Y		
04:00 PM TO 05:00 PM	0	0														
05:00 PM TO 06:00 PM	0	0														
06:00 PM TO 07:00 PM	0	0														
	6,259	128	2	0	0	2	1	1	2	0	0	2	1	1	0	0
			8 HOURS NEEDED			8 HOURS NEEDED			8 HOURS NEEDED for both Condition A & B						4 HRS NEEDED	1 HR NEEDED
			NOT SATISFIED			NOT SATISFIED			NOT SATISFIED						NOT SATISFIED	NOT SATISFIED

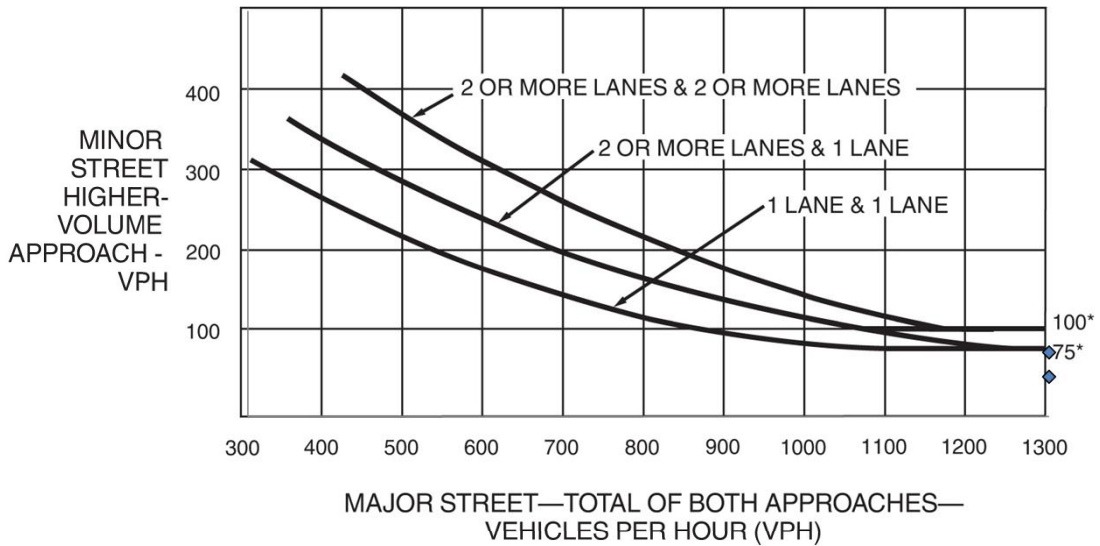
Figure 4C-3. Warrant 3, Peak Hour



*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

TRAFFIC SIGNAL WARRANT ANALYSIS (2011 TXMUTCD)

MAJOR STREET: Stacy Road EB WB # OF APPROACH LANES:

MINOR STREET: Lost Creek Dr NB SB # OF APPROACH LANES:

CITY, STATE: Fairview, TX

COMMENTS: _____

ISOLATED COMMUNITY WITH POPULATION LESS THAN 10,000 (Y OR N):

85TH PERCENTILE SPEED OR POSTED SPEED LIMIT GREATER THAN 40 MPH ON MAJOR STREET (Y OR N):

			Stacy Road		Total	Lost Creek Dr		Minor Street Heavy Leg
			EB Approach	WB Approach		NB Approach	SB Approach	
07:00 AM	TO	07:00 AM	1038	1806	2844	64	0	64
08:00 AM	TO	08:00 AM	0	0	0	0	0	0
09:00 AM	TO	09:00 AM	0	0	0	0	0	0
10:00 AM	TO	10:00 AM	0	0	0	0	0	0
11:00 AM	TO	11:00 AM	0	0	0	0	0	0
12:00 PM	TO	12:00 PM	0	0	0	0	0	0
01:00 PM	TO	01:00 PM	0	0	0	0	0	0
02:00 PM	TO	02:00 PM	0	0	0	0	0	0
03:00 PM	TO	03:00 PM	0	0	0	0	0	0
04:00 PM	TO	04:00 PM	1782	1482	3264	46	4	46
05:00 PM	TO	05:00 PM	0	0	0	0	0	0
06:00 PM	TO	06:00 PM	0	0	0	0	0	0
07:00 PM	TO	07:00 PM	0	0	0	0	0	0

Warrant	Description	Warrant Met?
1	Eight-Hour Volume	Warrant NOT Met
2	Four-Hour Volume	Warrant NOT Met
3	Peak Hour Volume	Warrant NOT Met
4	Pedestrian Volume	Not Evaluated
5	School Crossing	N/A
6	Coordinated Signal System	N/A
7	Crash Experience	Not Evaluated
8	Roadway Network	N/A
9	Intersection Near a Grade Crossing	N/A

TRAFFIC SIGNAL WARRANT ANALYSIS (2011 TXMUTCD)

MAJOR STREET: Stacy Road NB EB WB # OF APPROACH LANES:

MINOR STREET: Lost Creek Dr NB SB # OF APPROACH LANES:

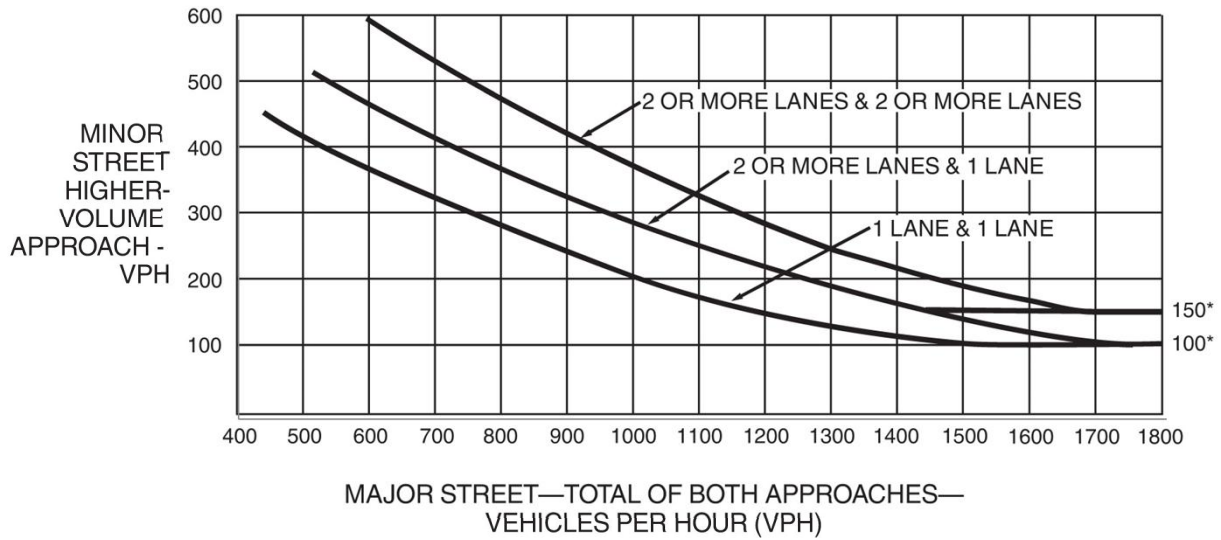
CITY, STATE: Fairview, TX

COMMENTS: _____

ISOLATED COMMUNITY WITH POPULATION LESS THAN 10,000 (Y OR N):
 85TH PERCENTILE SPEED OR POSTED SPEED LIMIT GREATER THAN 40 MPH ON MAJOR STREET (Y OR N):

	MAJOR ST TWO-WAY TRAFFIC	MINOR ST TRAFFIC HEAVY LEG	WARRANT 1 - Condition A, Part 1			WARRANT 1 - Condition B, Part 1			WARRANT 1 - Condition A, Part 2			WARRANT 1 - Condition B, Part 2			WARRANT 2 Four-Hour	WARRANT 3 Peak Hour
			MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET		
THRESHOLD VALUES			420	140		630	70		336	112		504	56			
06:00 AM TO 07:00 AM	2,844	64	Y			Y			Y			Y	Y	Y		
07:00 AM TO 08:00 AM	0	0														
08:00 AM TO 09:00 AM	0	0														
09:00 AM TO 10:00 AM	0	0														
10:00 AM TO 11:00 AM	0	0														
11:00 AM TO 12:00 PM	0	0														
12:00 PM TO 01:00 PM	0	0														
01:00 PM TO 02:00 PM	0	0														
02:00 PM TO 03:00 PM	0	0														
03:00 PM TO 04:00 PM	3,264	46	Y			Y			Y			Y				
04:00 PM TO 05:00 PM	0	0														
05:00 PM TO 06:00 PM	0	0														
06:00 PM TO 07:00 PM	0	0														
	6,107	110	2	0	0	2	0	0	2	0	0	2	1	1	0	0
			8 HOURS NEEDED			8 HOURS NEEDED			8 HOURS NEEDED for both Condition A & B						4 HRS NEEDED	1 HR NEEDED
			NOT SATISFIED			NOT SATISFIED			NOT SATISFIED						NOT SATISFIED	NOT SATISFIED

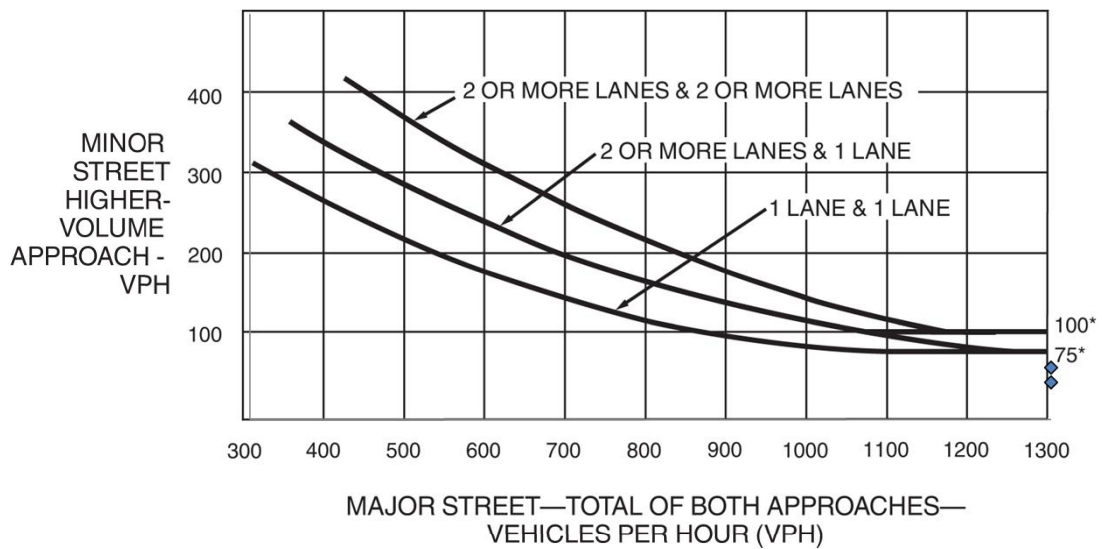
Figure 4C-3. Warrant 3, Peak Hour



*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

TRAFFIC SIGNAL WARRANT ANALYSIS (2011 TXMUTCD)

MAJOR STREET: Stacy Road EB WB # OF APPROACH LANES:

MINOR STREET: River Oaks Dr NB SB # OF APPROACH LANES:

CITY, STATE: Fairview, TX

COMMENTS: _____

ISOLATED COMMUNITY WITH POPULATION LESS THAN 10,000 (Y OR N):

85TH PERCENTILE SPEED OR POSTED SPEED LIMIT GREATER THAN 40 MPH ON MAJOR STREET (Y OR N):

			Stacy Road		Total	River Oaks Dr		Minor Street Heavy Leg
			EB Approach	WB Approach		NB Approach	SB Approach	
07:00 AM	TO	07:00 AM	1005	1768	2773	43	53	53
08:00 AM	TO	08:00 AM	0	0	0	0	0	0
09:00 AM	TO	09:00 AM	0	0	0	0	0	0
10:00 AM	TO	10:00 AM	0	0	0	0	0	0
11:00 AM	TO	11:00 AM	0	0	0	0	0	0
12:00 PM	TO	12:00 PM	0	0	0	0	0	0
01:00 PM	TO	01:00 PM	0	0	0	0	0	0
02:00 PM	TO	02:00 PM	0	0	0	0	0	0
03:00 PM	TO	03:00 PM	0	0	0	0	0	0
04:00 PM	TO	04:00 PM	1734	1472	3206	18	68	68
05:00 PM	TO	05:00 PM	0	0	0	0	0	0
06:00 PM	TO	06:00 PM	0	0	0	0	0	0
07:00 PM	TO	07:00 PM	0	0	0	0	0	0

Warrant	Description	Warrant Met?
1	Eight-Hour Volume	Warrant NOT Met
2	Four-Hour Volume	Warrant NOT Met
3	Peak Hour Volume	Warrant NOT Met
4	Pedestrian Volume	Not Evaluated
5	School Crossing	N/A
6	Coordinated Signal System	N/A
7	Crash Experience	Not Evaluated
8	Roadway Network	N/A
9	Intersection Near a Grade Crossing	N/A

TRAFFIC SIGNAL WARRANT ANALYSIS (2011 TXMUTCD)

MAJOR STREET: Stacy Road NB EB WB # OF APPROACH LANES:

MINOR STREET: River Oaks Dr NB SB # OF APPROACH LANES:

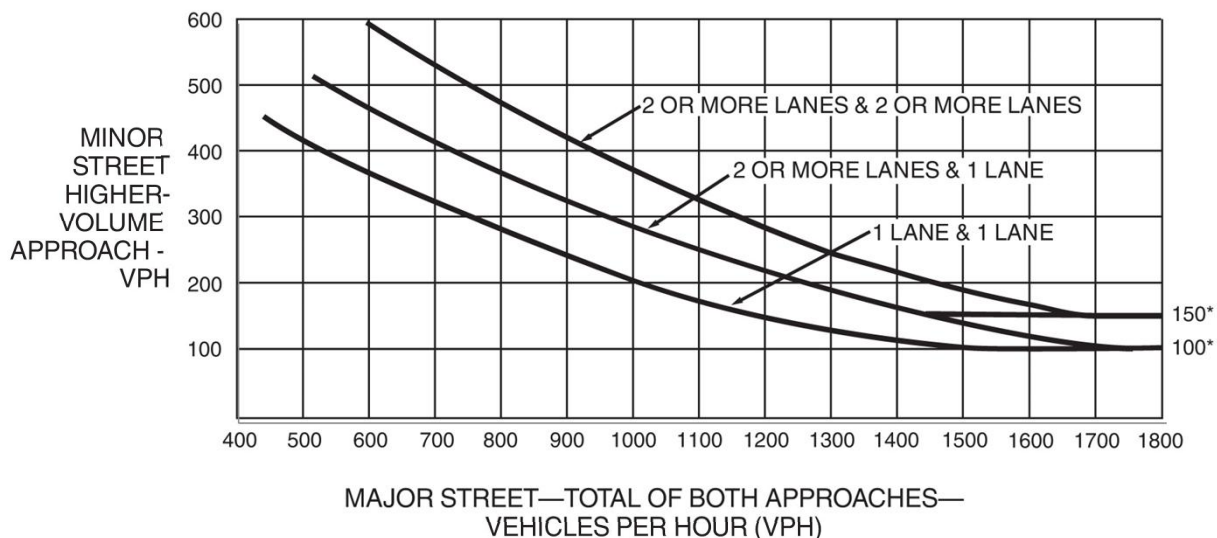
CITY, STATE: Fairview, TX

COMMENTS: _____

ISOLATED COMMUNITY WITH POPULATION LESS THAN 10,000 (Y OR N):
 85TH PERCENTILE SPEED OR POSTED SPEED LIMIT GREATER THAN 40 MPH ON MAJOR STREET (Y OR N):

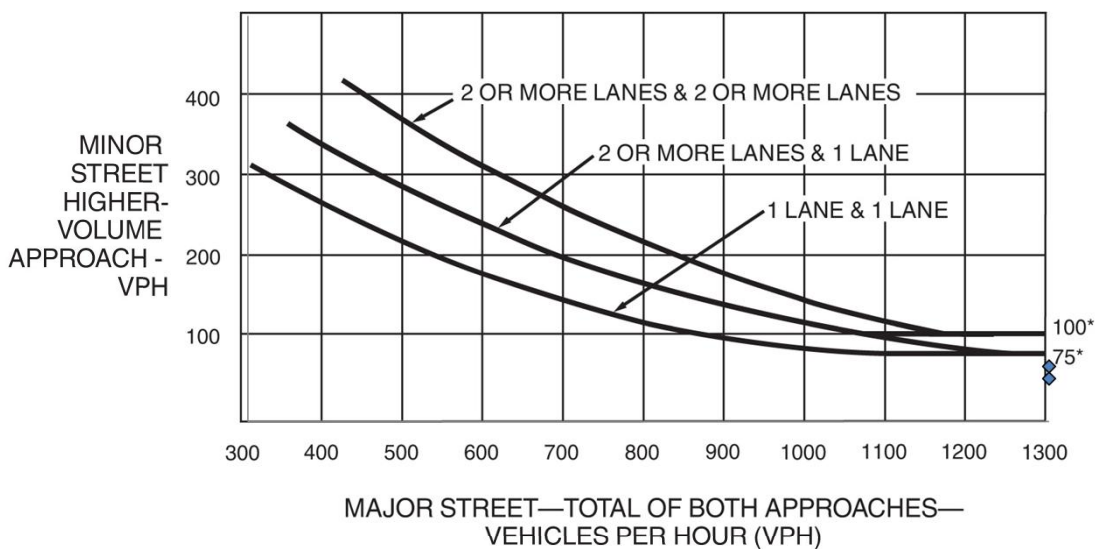
	MAJOR ST TWO-WAY TRAFFIC	MINOR ST TRAFFIC HEAVY LEG	WARRANT 1 - Condition A, Part 1			WARRANT 1 - Condition B, Part 1			WARRANT 1 - Condition A, Part 2			WARRANT 1 - Condition B, Part 2			WARRANT 2 Four-Hour	WARRANT 3 Peak Hour
			MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET	MAIN LINE	SIDE STREET	BOTH MET		
THRESHOLD VALUES			420	105		630	53		336	84		504	42			
06:00 AM TO 07:00 AM	2,773	53	Y			Y	Y	Y	Y			Y	Y	Y		
07:00 AM TO 08:00 AM	0	0														
08:00 AM TO 09:00 AM	0	0														
09:00 AM TO 10:00 AM	0	0														
10:00 AM TO 11:00 AM	0	0														
11:00 AM TO 12:00 PM	0	0														
12:00 PM TO 01:00 PM	0	0														
01:00 PM TO 02:00 PM	0	0														
02:00 PM TO 03:00 PM	0	0														
03:00 PM TO 04:00 PM	3,206	68	Y			Y	Y	Y	Y			Y	Y	Y	Y	
04:00 PM TO 05:00 PM	0	0														
05:00 PM TO 06:00 PM	0	0														
06:00 PM TO 07:00 PM	0	0														
	5,979	121	2	0	0	2	2	2	2	0	0	2	2	2	1	0
			8 HOURS NEEDED			8 HOURS NEEDED			8 HOURS NEEDED for both Condition A & B						4 HRS NEEDED	1 HR NEEDED
			NOT SATISFIED			NOT SATISFIED			NOT SATISFIED						NOT SATISFIED	NOT SATISFIED

Figure 4C-3. Warrant 3, Peak Hour



*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)
(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.