APPENDIX A: INITIAL TRAFFIC STUDY

Executive Summary

The Texas Department of Transportation (TxDOT), at the request of Kendall County and the City of Boerne, with the assistance of BGE, Inc. is performing a relief route feasibility study for SH 46 through the City of Boerne. As a part of that process, BGE is conducting an area-wide traffic study, including crash analysis and origin and destination (O/D) analysis along the two major arterials, SH 46 and IH 10. The purpose of this traffic study is to determine the relief route or routes with the most potential to reduce traffic through the downtown Boerne area, especially during regular weekday and weekend business hours.

Traffic data was collected at more than 40 locations along IH-10, SH 46, FM 3351, BUS 87 (Main Street), and FM 474 (N. Esser Road). The type of data collected for this study included 12-hour turning movement counts, 24-hour tube counts, and 72-hour Bluetooth surveys.

Initial Findings

Traffic volumes were collected at major intersections and major roadway segments within the City of Boerne. The collected 24-hour tube counts were grown out to 2040 with a growth rate of 3% per year. It is expected that the existing roadways will be over capacity with the projected volumes by 2040, based on methodology in the 2016 Highway Capacity Manual.

A crash analysis was conducted for the study area to identify problem areas in the region:

- The segments of SH 46 through downtown Boerne, from IH-10 to FM474 have a crash rate that significantly exceeds the state average
- The intersection of SH 46 and BUS 87 in the center of town has the highest number of crashes in the study area, with 96 crashes over a 5-year period from 2011 to 2015, an average of 19 crashes per year;
- Other intersections with an average of 10 crashes per year or more include SH 46 at IH-10 and IH-10 at Scenic Loop.

An O/D study was conducted using Bluetooth readers to study traffic patterns of vehicles approaching Boerne using SH 46 and IH 10. Traffic distributions from the raw data indicate that approximately 50% of all SH 46 traffic passes through the City of Boerne, continuing to their destination. Traffic from the east, roughly 20% of which is truck traffic, is required to pass through the congested downtown area before continuing on SH 46 or IH 10.

The analysis presented in this study indicates that a relief route for SH 46 would be beneficial for the City of Boerne for traffic bypassing the town, and traffic circulation within the town.

Table of Contents

1.0 Introduction 1

2.0 Existing Conditions 3

2.1 Land Use 3
2.2 Major Roadways 3

3.0 Traffic Data 4

3.1 Existing Traffic Volumes 4
3.2 Projected Traffic Volumes 7

4.0 Capacity Analysis 8

4.1 Existing 2016 Volumes 8
4.2 Projected 2040 Volumes 9
4.3 Capacity Analysis Findings 9

5.0 Crash Analysis 10

5.1 Introduction 10
5.2 Types of Crashes 10
5.3 Corridor Crash Analysis 12
5.4 Intersection Crash Analysis 15

6.0 Origin-Destination (O/D) Analysis 18

6.1 Study Methodology 18
6.2 O/D Study Findings 20

7.0 Conclusion and Recommendations 26

List of Figures

Figure 1-1. Location Map 2
Figure 3-1. 24-hr Traffic Volumes 6
Figure 4-1. Crash Type (2011-2015) 10
Figure 4-2. Roadway Segments 13
Figure 4-3. Corridor Crash Rates (2011-2015) 14
Figure 4-4. SH 46 Boerne Relief Route Total Crash Accidents at Hotspots 17
Figure 5-1. SH 46 Bluetooth Reader Location Map 19
Figure 5-2. SH 46 from the East O/D Analysis Results 22
Figure 5-3. SH 46 from the West O/D Analysis Results 23
Figure 5-4. SH 46 from the North O/D Analysis Results 24
Figure 5-5. SH 46 from the South O/D Analysis Results 25

List of Tables

Table 3-1. AM Peak Intersection Volume Summary 4
Table 3-2. PM Peak Intersection Volume Summary 5
Table 3-3. 24-hour Volume Summary 5
Table 3-4: TxDOT Growth Rate and Volumes 7
Table 3-5. Projected Traffic Volume Summary 7
Table 4-1: Existing 2016 Capacity Analysis Summary 8
Table 4-2: Projected 2040 Capacity Analysis Summary 9
Table 5-1. Crash Type Summary 11
Table 5-2. Intersection Crash Rates 15
Table 5-3. Accident Hotspots 16

List of Appendices

Appendix A: Existing Traffic Volumes
Appendix B: Crash Study Summary Tables
Appendix C: O/D Study Bluetooth Volumes

1.0 Introduction

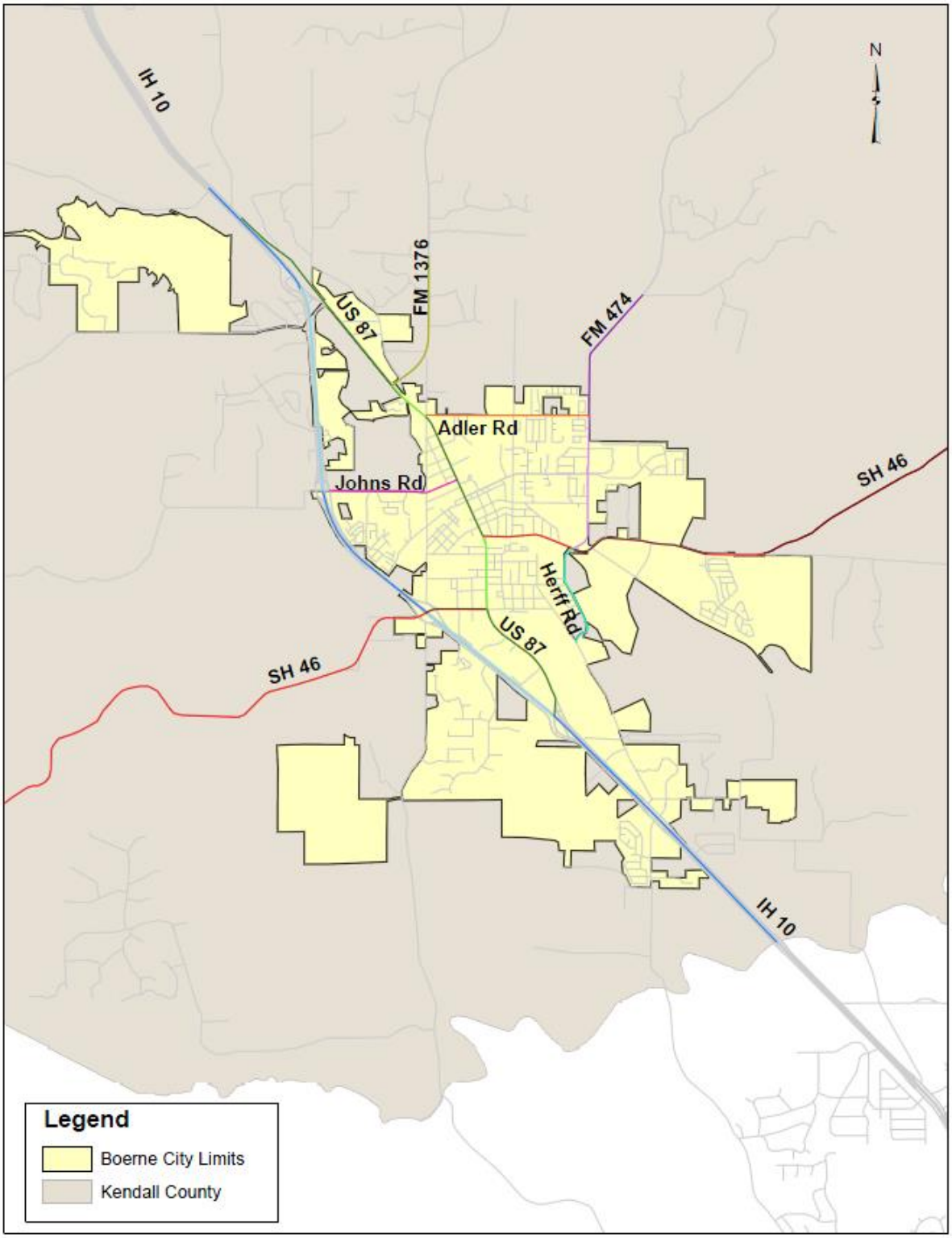
This report documents the *Kendall Gateway* Study for SH 46 through the City of Boerne at the request of The Texas Department of Transportation (TxDOT), Kendall County and the City of Boerne. The purpose of this traffic study is to develop a recommended alternative alignment corridor for a new location relief route to SH 46 in the City of Boerne, Kendall County, Texas.

The study comprised the following tasks:

- Evaluate the existing roadway characteristics, including lane configuration and intersection geometry.
- Evaluate the existing traffic characteristics, including turning movements and crash data
- Review previous traffic studies
- Analyze historical traffic volumes and calculate growth rates to be used in traffic projections; develop traffic projections for the roadways in the Study Area
- Analyze crash data for a 5-year period, 2011 to 2015
- Perform origin/destination (O/D) studies using Bluetooth readers for the SH 46 corridor.
- Recommend potential improvements.

The study location map is shown in **Figure 1-1**.

Figure 1-1. Location Map



2.0 Existing Conditions

The City of Boerne is a town located in Kendall County, Texas and is primarily served by IH 10 which runs from northwest to southeast and SH 46 which runs from southwest to northeast. BUS 87 gives interstate traffic access to the city. Previous studies and surveys have concluded that the existing roadway network within downtown Boerne is nearing capacity, and any improvement projects on existing roadways will only provide temporary relief. Furthermore, expanding the existing facilities is expected to negatively affect the culture and the desired appearance of the downtown area which would be associated with added traffic.

2.1 Land Use

The City of Boerne is mostly residential. The downtown area consists of small shops and restaurants. Along BUS 87 and IH-10, south of SH 46, there are some shopping centers and industrial areas.

2.2 Major Roadways

2.2.1 State Highway 46

State Highway 46 (SH 46) is an east-west arterial. It separates at BUS 87 in the City of Boerne. To the west of BUS 87, the SH 46 arterial is a four-lane road with two-way-left-turn-lanes (TWLTL). The posted speed limit to the east of IH-10 is 35 miles per hour (mph) and to the west of IH-10 is 55 mph.

To the east of BUS 87, the SH 46 arterial is a two-lane undivided road with shoulders. From the east of Herff Road to the west of Charger Road, SH 46 has two eastbound lanes and one westbound lane with TWLTL. To the east of Ammann Road, it becomes a two-lane undivided road with shoulders. The posted speed limit within the city is 35 mph and it increase to 65 mph to the east of Ammann Rd.

2.2.2 Interstate Highway 10

Interstate Highway 10 (IH-10) is a limited access four-lane divided freeway with a wide median. The posted speed limit is 75 mph. IH-10 intersects with SH 46 and BUS 87.

2.2.3 Business U.S. Highway 87 (Main Street)

Business U.S. Highway 87 (BUS 87) is a north-south arterial. In the City of Boerne limits, BUS 87 is a four-lane road with TWLTL from IH-10 to SH 46. North of SH 46 it becomes a four-lane undivided road. North of Sisterdale Road, it becomes a two-lane undivided road.

The speed limit varies along BUS 87. South of SH 46, the posted speed limit is 55 mph. North of SH 46, the posted speed limit is 35 mph. Then it increases to 45 mph and 50 mph north of FM 1376.

3.0 Traffic Data

3.1 Existing Traffic Volumes

Turning movement counts were collected on Wednesday, September 21, 2016 from 6:00 AM to 6:00 PM for sixteen intersections within the study limits. The AM and PM peak intersection volumes are summarized in **Table 3-1** and **Table 3-2**.

Table 3-1. AM Peak Intersection Volume Summary

Location	Total AM Peak Intersection Volume				
	NB	SB	EB	WB	Total
SH 46 at FM 3351	176	200	282	457	**1,115**
SH 46 at Herff Rd.	747	429	568	1090	**2,834**
SH 46 (River Rd.) at BUS 87	528	660	-	508	**1,696**
SH 46 (River Rd.) at BUS 87 right turn	327	-	513	156	**996**
SH 46 (Bandera Rd.) at BUS 87	672	762	688	184	**2,306**
IH-10 WBFR at BUS 87	714	756	-	223	**1,693**
IH-10 NBFR at SH 46	431	192	804	519	**1,946**
IH-10 SBFR at SH 46	217	310	632	659	**1,818**
IH-10 SBFR at Johns Rd.	30	174	119	356	**679**
IH-10 WBFR at Johns Rd.	197	38	186	286	**707**
IH-10 SBFT at Main St.	161	155	302	404	**1,022**
IH-10 WBFR at S. School Rd.	-	158	-	440	**598**
IH-10 EBFR at Upper Balcones Rd.	224	-	662	92	**978**
BUS 87 at Herff Rd.	920	602	30	280	**1,832**
BUS 87 at Sisterdale Rd.	377	425	-	120	**922**
FM 474 at Adler Rd.	320	398	240	-	**958**

Table 3-2. PM Peak Intersection Volume Summary

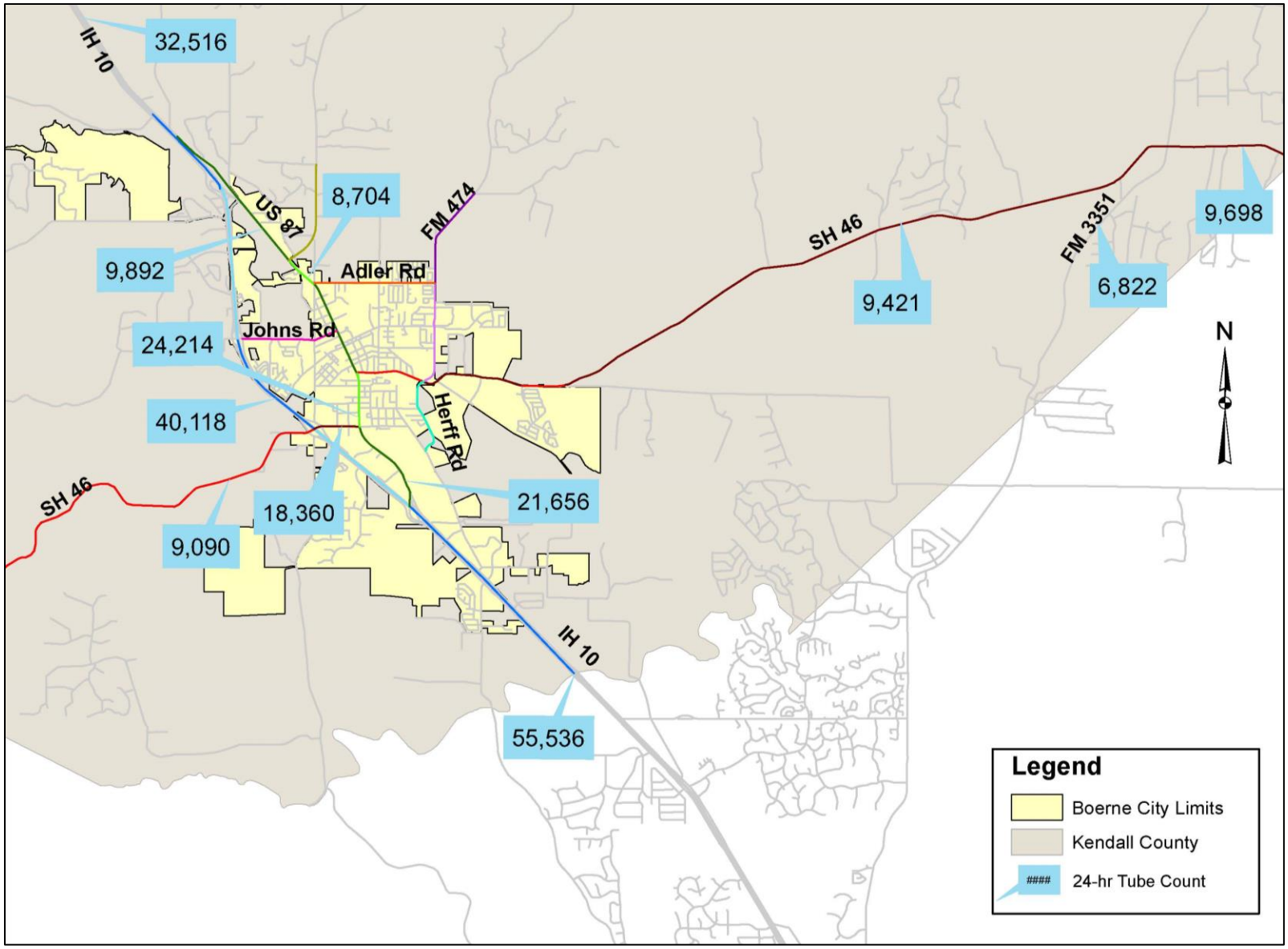
Location	Total PM Peak Intersection Volume				
	NB	SB	EB	WB	Total
SH 46 at FM 3351	367	169	471	362	**1,369**
SH 46 at Herff Rd.	706	499	483	822	**2,510**
SH 46 (River Rd.) at BUS 87	617	-	846	540	**2,003**
SH 46 (River Rd.) at BUS 87 right turn	403	-	542	192	**1,137**
SH 46 (Bandera Rd.) at BUS 87	983	980	757	285	**3,005**
IH-10 WBFR at BUS 87	675	641	-	298	**1,614**
IH-10 NBFR at SH 46	543	213	737	876	**2,369**
IH-10 SBFR at SH 46	273	340	434	949	**1,996**
IH-10 SBFR at Johns Rd.	52	237	101	428	**818**
IH-10 WBFR at Johns Rd.	353	24	200	298	**875**
IH-10 SBFT at Main St.	128	158	297	478	**1,061**
IH-10 WBFR at S. School Rd.	-	168	-	642	**810**
IH-10 EBFR at Upper Balcones Rd.	162	-	546	156	**864**
BUS 87 at Herff Rd.	979	798	82	242	**2,101**
BUS 87 at Sisterdale Rd.	349	469	-	130	**948**
FM 474 at Adler Rd.	407	159	206		**772**

24-hour volumes were collected at twelve locations within the study limits in the City of Boerne. The counts were collected on Wednesday, September 21, 2016. **Table 3-3** summarizes the 24-hr data and the truck percentages. The 24-hour volume locations are shown in **Figure 3-1**. The complete traffic count data is included in **Appendix A**.

Table 3-3. 24-hour Volume Summary

Location	TxDOT 2015 AADT	2016 24-hr Traffic Count	2016 Truck Percentage (%)
SH 46 east of FM 3351	6,440	9,698	17.9
SH 46 west of IH-10	8,168	9,090	16.3
SH 46 (Bandera Rd.) east of IH-10	16,290	18,360	28.5
SH 46 east of Los Indios Ranch Rd.	5,785	9,421	19.0
IH-10 east of Jennifer Dr.	21,439	32,516	10.6
IH-10 north of Bandera	30,370	40,118	11.3
IH-10 east of Scenic Loop	52,353	54,312	6.7
BUS 87 south of Bess St.	22,706	24,214	14.4
BUS 87 north of School St.	6,219	8,704	17.5
BUS 87 north of Cross Point Rd.	17,137	21,656	21.3
BUS 87 north of Commerce Ave.	6,797	9,892	22.6
FM 3351 south of SH 46	3,357	6,822	14.8

Figure 3-1. 24-hr Traffic Volumes



3.2 Projected Traffic Volumes

The TxDOT Statewide Planning Map provides future traffic volumes and 24-hour truck percentage. The most recent projected volumes and truck percentages are for 2035. Data was gathered for the corridors within the study limits. Based on the 2015 and the 2035 volumes provided by TxDOT, a growth rate was calculated for the following corridors:

Table 3-4: TxDOT Growth Rate and Volumes

Location	TXDOT 2015 AADT	TxDOT 2035 Projected AADT	TxDOT 2035 Truck Percentage (%)	TxDOT Growth Rate (%)
SH 46 east of FM 3351	6,440	11,980	20.6	3.152
SH 46 west of IH-10	8,168	15,190	4.9	3.151
SH 46 (Bandera Rd.) east of IH-10	16,290	30,300	4.8	3.152
SH 46 east of Los Indios Ranch Rd.	5,785	10,760	21.5	3.152
IH-10 east of Jennifer Dr.	21,439	39,880	12.8	3.152
IH-10 north of Bandera	30,370	56,490	13.5	3.152
IH-10 east of Scenic Loop	52,353	97,380	9.7	3.152
BUS 87 south of Bess St.	22,706	42,230	2.1	3.151
BUS 87 north of School St.	6,219	11,570	4.0	3.153
BUS 87 north of Cross Point Rd.	17,137	31,880	2.4	3.152
BUS 87 south of Commerce Ave.	6,797	12,640	3.7	3.151
FM 3351 south of SH 46	3,357	4,500	7.9	1.476

Based on the calculated TxDOT growth rates, an average growth for the study limit is projected to be 3.0%.

City of Boerne's local government estimates an annual population growth of approximately 2.7%. This data was collected from their city website based on their Nielsen database.

The projected 2040 volumes for the study area are summarized in **Table 3-4**.

Table 3-5. Projected Traffic Volume Summary

Location	2016 Volume	Projected 2040 Volume
SH 46 east of FM 3351	9,698	19,100
SH 46 west of IH-10	9,090	17,900
SH 46 (Bandera Rd.) east of IH-10	18,360	36,200
SH 46 east of Los Indios Ranch Rd.	9,421	18,600
IH-10 east of Jennifer Dr.	32,516	64,200
IH-10 north of Bandera	40,118	79,200
IH-10 east of Scenic Loop	55,536	109,600
BUS 87 south of Bess St.	24,214	47,800
BUS 87 north of School St.	8,704	17,200
BUS 87 north of Cross Point Rd.	21,656	42,700
BUS 87 south of Commerce Ave.	9,892	19,500
FM 3351 south of SH 46	6,822	13,500

4.0 Capacity Analysis

In order to understand the feasibility for a potential relief route, a capacity analysis was conducted using the existing and projected 24-hour traffic volumes to determine if the existing roadway facilities are able to handle the capacity needs for the region presently and in 2040. The 24-hour volumes collected for this study were analyzed based on methodology in the 2016 Highway Capacity Manual (HCM) to determine if the major roadways in the region are currently or expected to be over capacity.

The HCM stipulates that the capacity of a roadway facility is dependent on several factors including speed, number of lanes, terrain, and type of facility. There are three types of facilities within the study region:

- Freeway
- Two-lane Highway
- Urban Street (2-lane & 4-lane)

The HCM contains generalized daily service volume tables, containing the approximate level of service (LOS) thresholds for a roadway before it becomes over capacity. The existing and proposed 24-hour volumes were analyzed to determine capacity. For this study, LOS D is the threshold.

4.1 Existing 2016 Volumes

The existing 24-hour volumes were compared against the HCM threshold to govern whether or not the roadway is defined as over-capacity. A summary of the analysis is shown in **Table 4-1**.

Table 4-1: Existing 2016 Capacity Analysis Summary

Location	HCM LOS D Threshold (veh/day)	2016 Volume (veh/day)	Over/ Under Capacity
Freeway			
IH-10 east of Jennifer Dr.	63,000	32,516	Under
IH-10 north of Bandera	63,000	40,118	Under
IH-10 east of Scenic Loop	63,000	55,536	Under
Two-lane Freeway			
SH 46 east of FM 3351	12,500	9,698	Under
SH 46 west of IH-10	12,500	9,090	Under
SH 46 east of Los Indios Ranch Rd.	12,500	9,421	Under
FM 3351 south of SH 46	12,500	6,822	Under
Urban Street			
SH 46 (Bandera Rd.) east of IH-10	20,400	18,360	Under
BUS 87 south of Bess St.	20,400	24,214	Over
BUS 87 north of School St.	27,700	8,704	Under
BUS 87 north of Cross Point Rd.	27,700	21,656	Under
BUS 87 south of Commerce Ave.	27,700	9,892	Under

4.2 Projected 2040 Volumes

The projected 2040 24-hour volumes were similarly compared against the HCM threshold to determine whether or not the roadway is expected to be over capacity. A summary of the analysis is shown in **Table 4-2**.

Table 4-2: Projected 2040 Capacity Analysis Summary

Location	HCM LOS D Threshold (veh/day)	2040 Volume (veh/day)	Over/ Under Capacity
Freeway			
IH-10 east of Jennifer Dr.	63,000	64,200	Over
IH-10 north of Bandera	63,000	79,200	Over
IH-10 east of Scenic Loop	63,000	109,600	Over
Two-lane Freeway			
SH 46 east of FM 3351	12,500	19,100	Over
SH 46 west of IH-10	12,500	17,900	Over
SH 46 east of Los Indios Ranch Rd.	12,500	18,600	Over
FM 3351 south of SH 46	12,500	13,500	Over
Urban Street			
SH 46 (Bandera Rd.) east of IH-10	20,400	36,200	Over
BUS 87 south of Bess St.	20,400	47,800	Over
BUS 87 north of School St.	27,700	17,200	Under
BUS 87 north of Cross Point Rd.	27,700	42,700	Over
BUS 87 south of Commerce Ave.	27,700	19,500	Over

4.3 Capacity Analysis Findings

The major roadways which carry the majority of vehicular traffic through the City of Boerne and the surrounding areas are generally under or near capacity and are capable of handling the existing traffic demand. However, when considering the projected volume growth of traffic, it is expected that almost every major roadway within the region will be over capacity by 2040.

There are limited opportunities for capacity to be expanded on existing roadway facilities. The construction of a new roadway with a separate alignment would increase the capacity of the roadway network and limit the growth of traffic in the already-congested downtown area.

5.0 Crash Analysis

5.1 Introduction

The *Kendall Gateway Study* aims at improving traffic efficiency within the City of Boerne and the surrounding vicinity. As part of this effort, a crash analysis was performed to capture the recent crash history and identify locations with higher than normal crash rates.

Data from the Crash Records Information System (CRIS) from 2011 to 2015 was obtained for the 8 study corridors and 10 study intersections in the City of Boerne area. The data includes specific information for all recorded crashes including location, date & time, crash severity, crash type, crash injury classification, as well as various roadway and environmental factors.

5.2 Types of Crashes

Figure 4-1 shows the type of crashes within the study area. The most common type of crash was rear-end collisions, representing approximately 30% of the total number of crashes. Single-vehicle crashes represented the second highest percentage of crashes at approximately 29%. A summary of this data is broken down by year and shown in **Table 4-1.**

Figure 5-1. Crash Type (2011-2015)

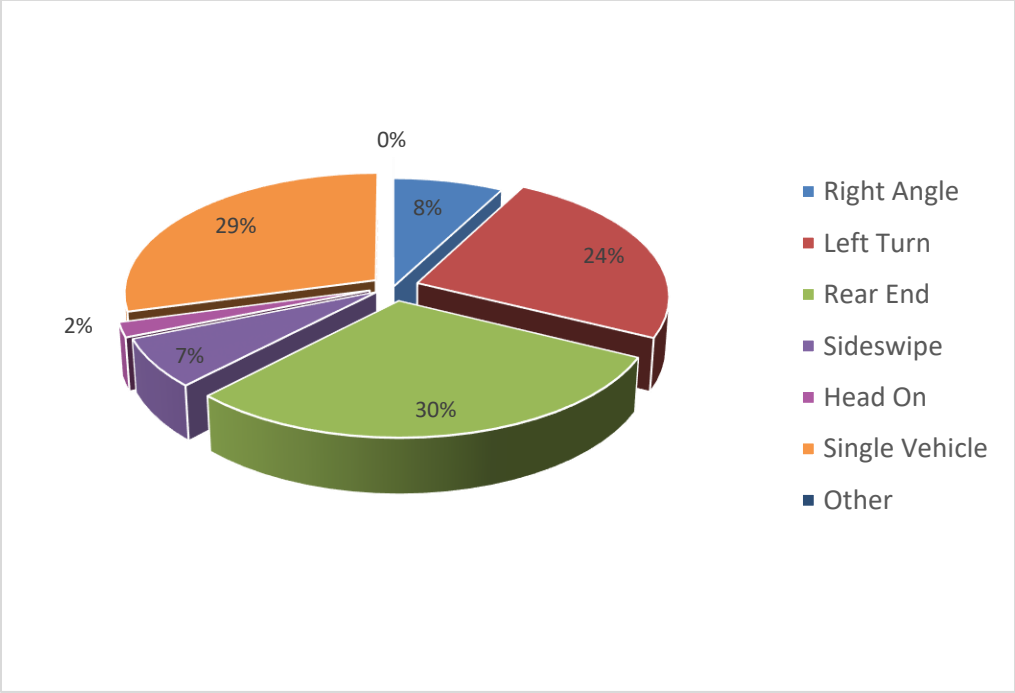


Table 5-1. Crash Type Summary

Year	Right Angle	Left Turn	Rear End	Sideswipe	Head On	Single Vehicle	Other	TOTAL
2011	20	63	77	17	5	75	0	**257**
2012	30	56	87	21	8	83	0	**285**
2013	32	60	68	7	4	73	1	**245**
2014	30	80	105	16	6	90	1	**328**
2015	44	77	168	19	5	92	0	**405**
TOTAL	**156**	**336**	**505**	**80**	**28**	**413**	**2**	**1520**

Table 4-1 similarly shows that over the five-year study period, all types of crashes within the study area have increased each year, while sideswipe, head on, and single vehicle collisions have remained relatively the same.

The crash data for the corridors is summarized in **Appendix B.**

5.3 Corridor Crash Analysis

Crash rates were calculated for the roadway segments using the daily traffic volumes combined with the obtained crash frequencies.

Crash rates for roadway segments are normally expressed in crashes per 100 million vehicle miles using the following equation:

$R_{sec} = A \times 10^8 / (365 \times T \times V \times L)$

where:
R_{sec} = crash rate for the roadway section
A = number of reported crashes
T = time period of the analysis (years)
V = annual average daily traffic volume, AADT (veh/day)
L = length of the segment (miles)

Crash rates for each of the study corridors, SH 46 and BUS 87, for 2011 through 2015 were compared to statewide averages for each of the respective urban/rural roadway cross sections while IH 10 was compared to the state averages using the interstate statewide averages for each of the respective rural/urban roadway cross sections according to the TxDOT Statewide Crash Rates worksheet criteria. As a general trend, from 2011 to 2015, both the statewide averages and reported crashes increased from year to year.

Figure 4-2 illustrates the locations of the roadway segments along the study corridors. **Figure 4-3** shows the comparison of the yearly crash rates for each corridor to the corresponding yearly statewide average for that roadway type. As shown in the figures, the crash rates along the following three corridors exceed that of statewide averages for the roadway types throughout all study years:

- SH 46 Segment 3—from IH 10 to BUS 87
- SH 46 Segment 4—from BUS 87 to FM 474
- FM 474 Segment 2—north of Adler Road

The two SH 46 segments are critical in carrying traffic through the City of Boerne. A relief route would provide a safer alternative for the SH 46 corridor.

Figure 5-2. Roadway Segments

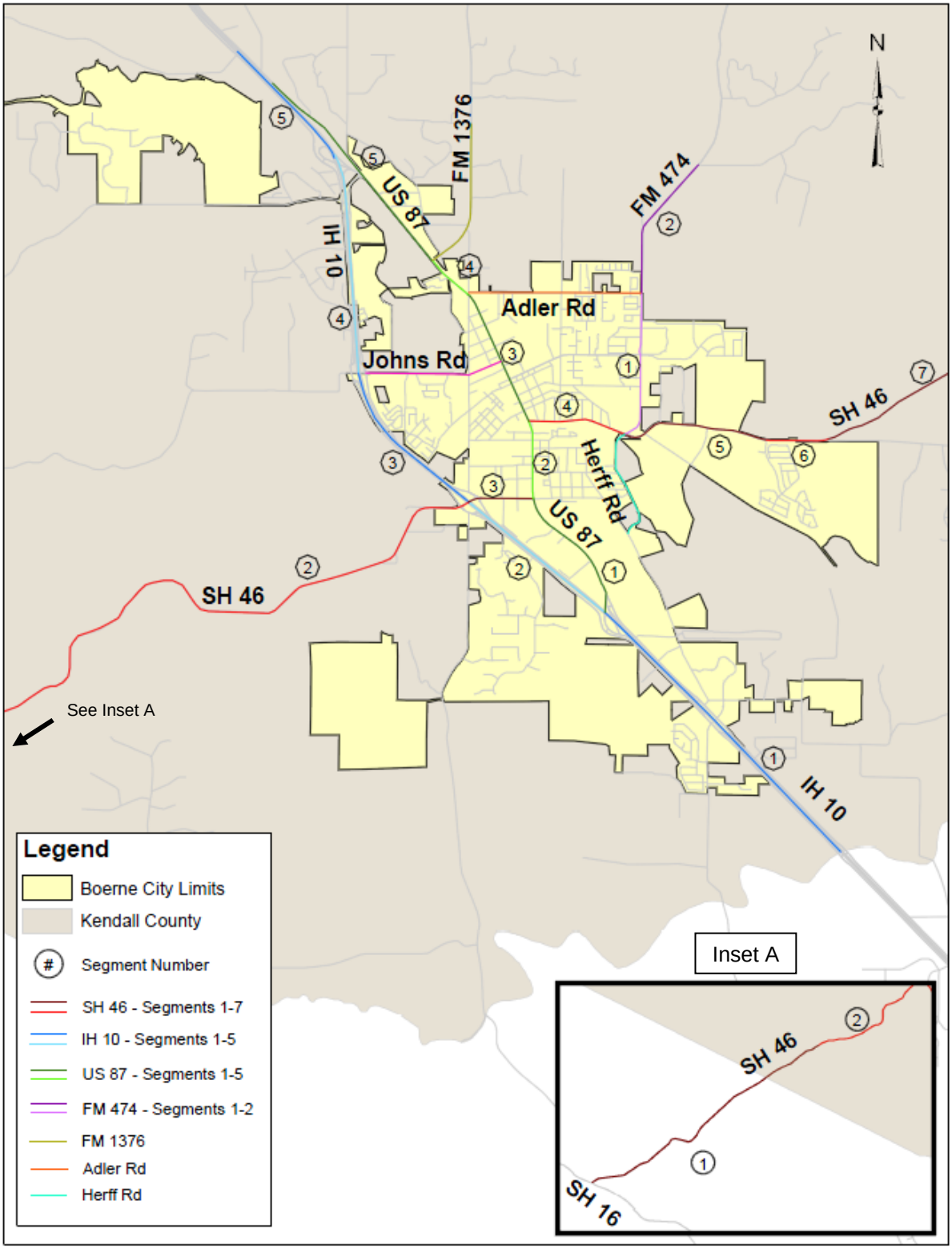
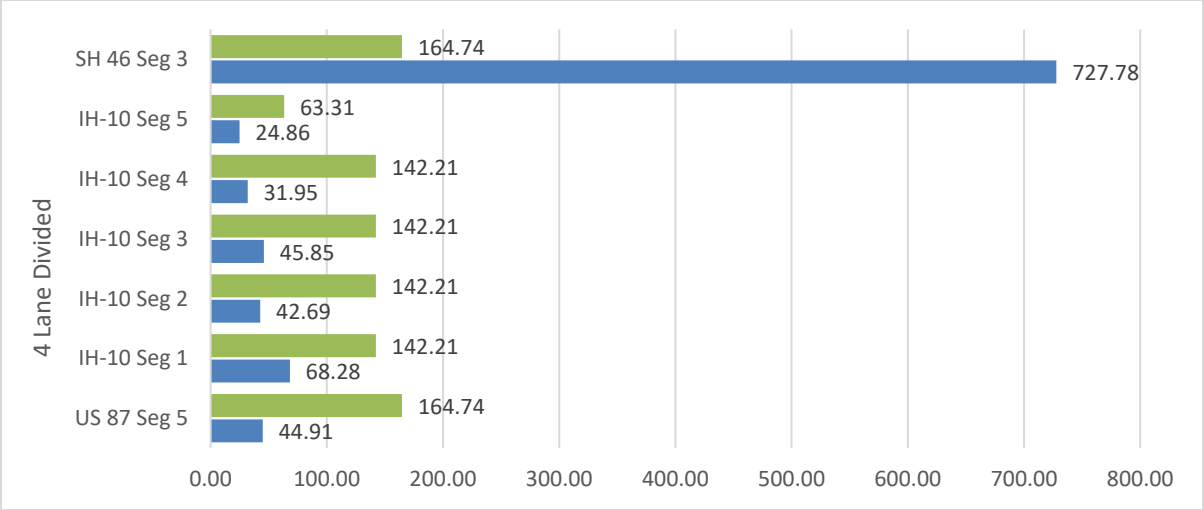
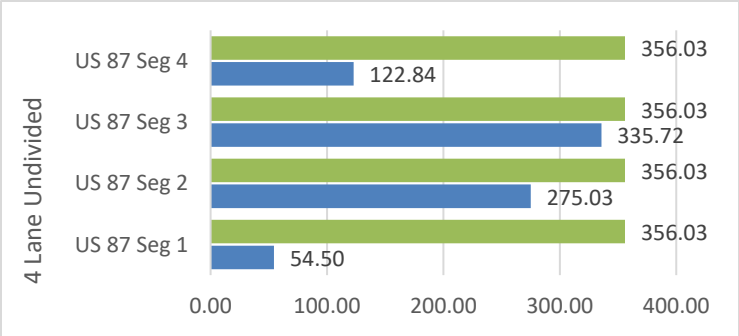
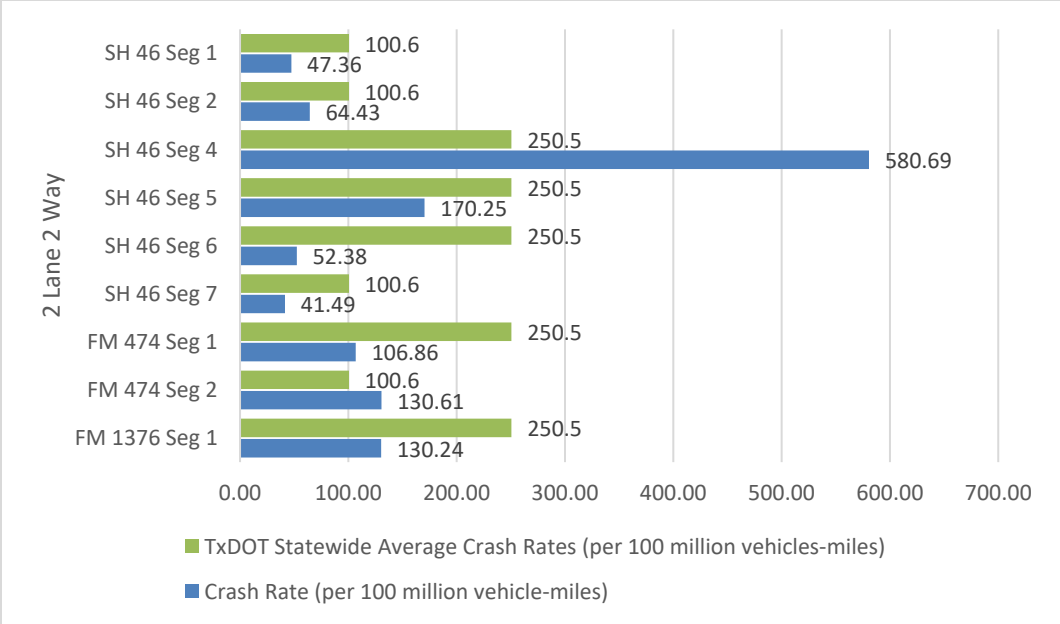


Figure 5-3. Corridor Crash Rates (2011-2015)







5.4 Intersection Crash Analysis

The intersection crash analysis focused on the most critical locations within the study area. PM peak hour volumes from the turning movement counts were used in calculating the daily entering volumes to obtain crash rates for the intersections.

Crash rates for intersections are normally expressed in crashes per million entering vehicles using the following equation:

$R_{intersection} = A \times 10^6 / (365 \times T \times V)$

where:
$R_{intersection}$ = crash rate for the intersection
A = number of reported crashes
T = time period of the analysis (years)
V = annual average daily traffic volume, AADT, entering the intersection (veh/day)
L = length of the segment (miles)

A crash analysis was performed for multiple intersections in the study area. According to the analysis, the intersection of SH 46 at BUS 87 had the highest crash rate at 2.55 crashes per million entering vehicles while the intersection at SH 46 and IH-10 had the second highest crash rate at 1.50 crashes per million entering vehicles. The intersection at IH-10 and Johns Road had the third highest crash rate of 1.21 crashes per million entering vehicles. **Table 4-2** summarizes these results for the seven intersections exhibiting the highest crash rates.

Table 5-2. Intersection Crash Rates

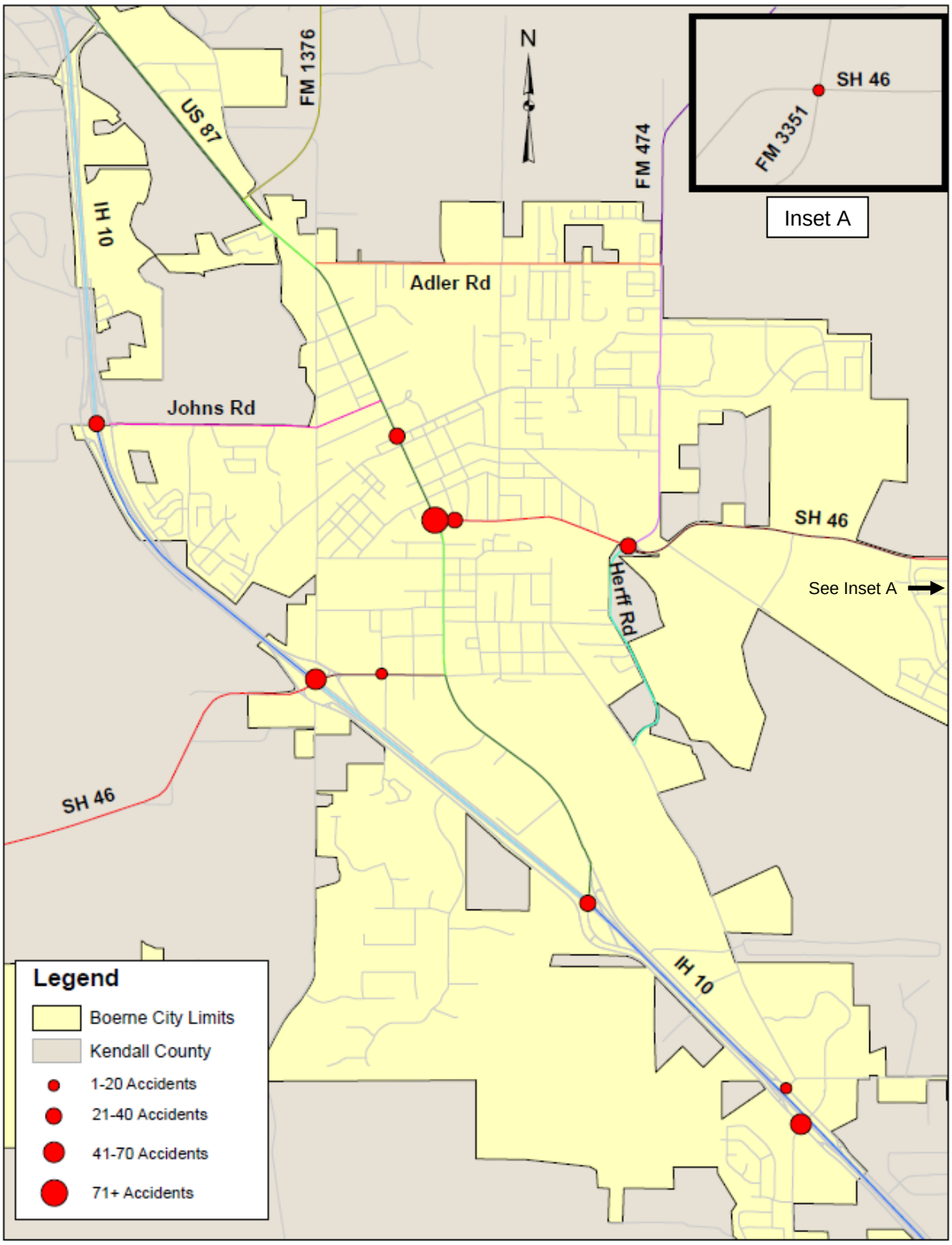
Rank	Intersection	2016 Volumes (veh/day)	Number of Crashes	Crash Rate (per million entering vehicles)
1	BUS 87 at SH 46 (River Rd)	20,590	96	2.55
2	IH-10 at SH 46	24,050	66	1.50
3	IH-10 at Johns Rd	9,520	21	1.21
4	IH-10 at BUS 87 (S Main St)	19,180	23	0.66
5	SH 46 at Esser Rd	27,240	31	0.62
6	SH 46 at FM 3351	14,240	16	0.62
7	IH-10 at BUS 87 (N Main St)	10,950	10	0.50

Additionally, crashes at intersections were ranked by total collisions and categorized by type and severity. Throughout the study period (2011-2015) the number of reported crashes within the study area experienced an increasing trend. However, while the total number of crashes increased, the number of fatal and incapacitating injury collisions remained approximately the same. The eleven worst intersections are summarized in **Table 4-3** to demonstrate the nature of the accidents, while **Figure 4-4** illustrates the locations of accident hotspots, with many of the hotspots located on the SH 46 corridor. This crash information will be considered as a part of the ultimate improvements and recommendations for the *Kendall Gateway Study*.

Table 5-3. Accident Hotspots

Rank	Intersection	Total Accidents	Most Frequent	
			Type	No.
1	BUS 87 at SH 46 (River Rd)	96	Rear End	44
2	IH-10 at SH 46	66	Rear End	43
3	IH-10 at Scenic Loop	65	Rear End	38
4	SH 46 at FM 474 (S Esser Rd)	31	Rear End	22
5	IH-10 at BUS 87 (S Main St)	23	Angle	9
6	BUS 87 at FM 474 (Blanco Rd)	22	Rear End	9
7	SH 46 at Pecan	22	Rear End	14
8	IH-10 at Johns Rd	21	Angle	10
9	SH 46 at Wanda St	18	Rear End	12
10	IH-10 at Cascade Cavern	16	Left Turn	9
11	SH 46 at FM 3351	16	Rear End	8

Figure 5-4. SH 46 Boerne Relief Route Total Crash Accidents at Hotspots



6.0 Origin-Destination (O/D) Analysis

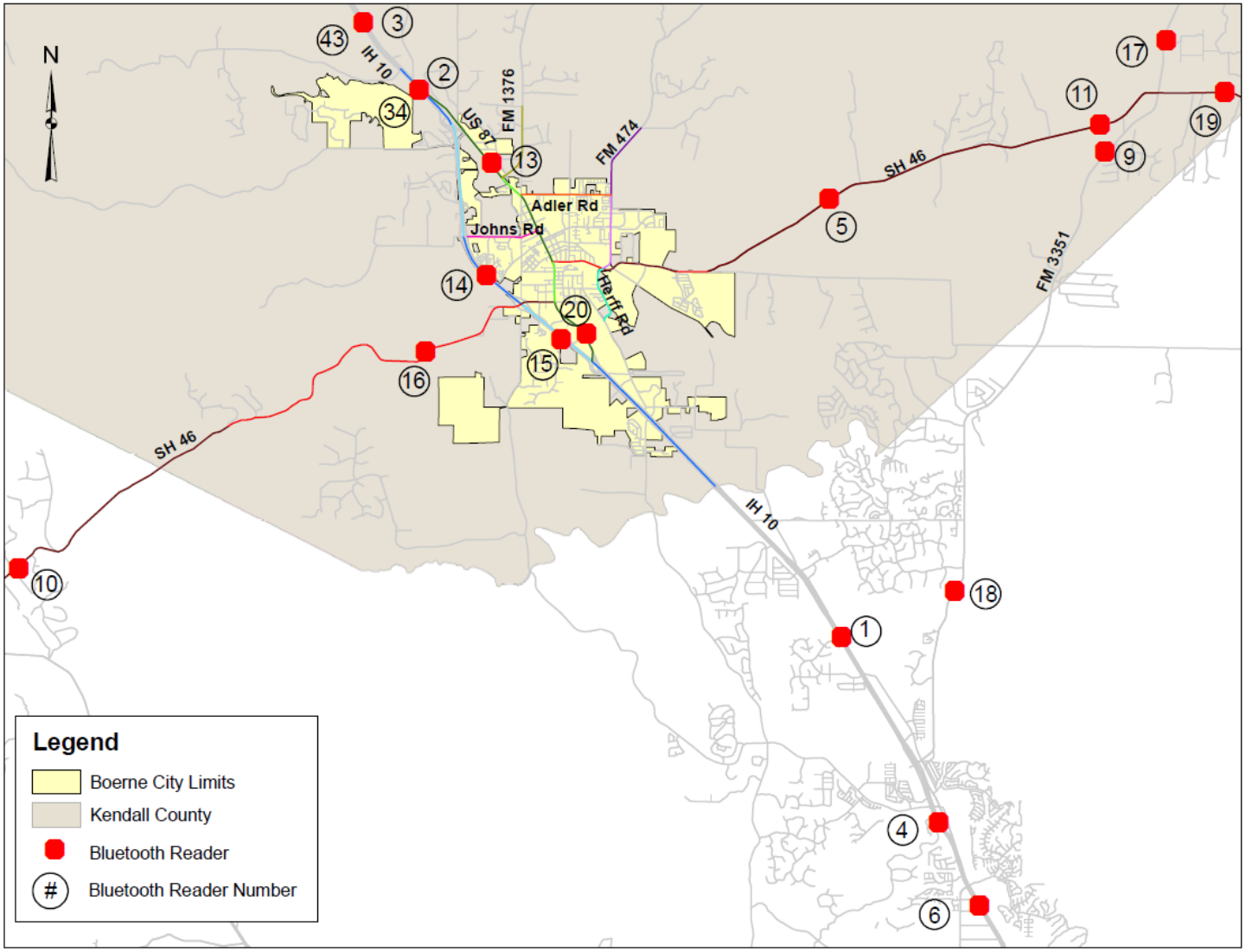
An origin and destination (O/D) analysis was conducted within the study area. The analysis focused primarily on the major corridors of SH 46 and IH 10. Bluetooth readers were installed at locations on major roadways within the study area and were used to measure the travel time for vehicles traveling between two readers.

6.1 Study Methodology

A minimum of two stations must be established in order to produce the travel time, 1-hour trip. For this study, one reader was placed on each site to avoid interference between readers. However, due to erroneous data, an additional two readers had to be placed on the north section of IH-10.

Bluetooth data was collected at nineteen locations along IH-10, SH 46, and BUS 87 (Main Street) over a 72-hour period (Tuesday-Thursday) to capture traffic on a typical workweek. A map showing the Bluetooth reader locations are shown in **Figure 5-1**. A table showing the volumes at each Bluetooth location is shown in **Appendix C**.

Figure 6-1. SH 46 Bluetooth Reader Location Map



6.2 O/D Study Findings

The data collected in the 72-hour period for the O/D study gives an indication of traffic behavior coming into town from the east, west, north, and south. The distribution of traffic was determined from the data collected for traffic approaching Boerne from the following directions:

- SH 46 from the East
- SH 46 from the West
- IH 10 from the North
- IH 10 from the South

6.2.1 SH 46 from the East

For traffic traveling into Boerne from the east along SH 46, the following distribution was observed:

- 10% of traffic passes through town heading west
- 10% of traffic passes through town heading south
- 30% of traffic passes through town heading north
- 50% of traffic terminates in Boerne and returns to the east

The traffic distribution and associated volumes from the east is shown in **Figure 5-2**.

6.2.2 SH 46 from the West

For traffic traveling into Boerne from the west along SH 46, the following distribution was observed:

- 10% of traffic passes through town heading east
- 10% of traffic passes through town heading north
- 30% of traffic passes through town heading south
- 50% of traffic terminates in Boerne and returns to the west

The traffic distribution and associated volumes from the west is shown in **Figure 5-3**.

6.2.3 IH 10 from the North

For traffic traveling into Boerne from the north along IH 10, the following distribution was observed:

- 75% of traffic passes through town heading south
- 20% of traffic passes through town heading east
- 2.5% of traffic passes through town heading west
- 2.5% of traffic terminates in Boerne and returns to the north

The traffic distribution and associated volumes from the north is shown in **Figure 5-4**.

6.2.4 IH 10 from the South

For traffic traveling into Boerne from the south along IH 10, the following distribution was observed:

- 50% of traffic passes through town heading north
- 2% of traffic passes through town heading east
- 2% of traffic passes through town heading west
- 46% of traffic terminates in Boerne and returns to the south

The traffic distribution and associated volumes from the south is shown in **Figure 5-5**.

Figure 6-2. SH 46 from the East O/D Analysis Results

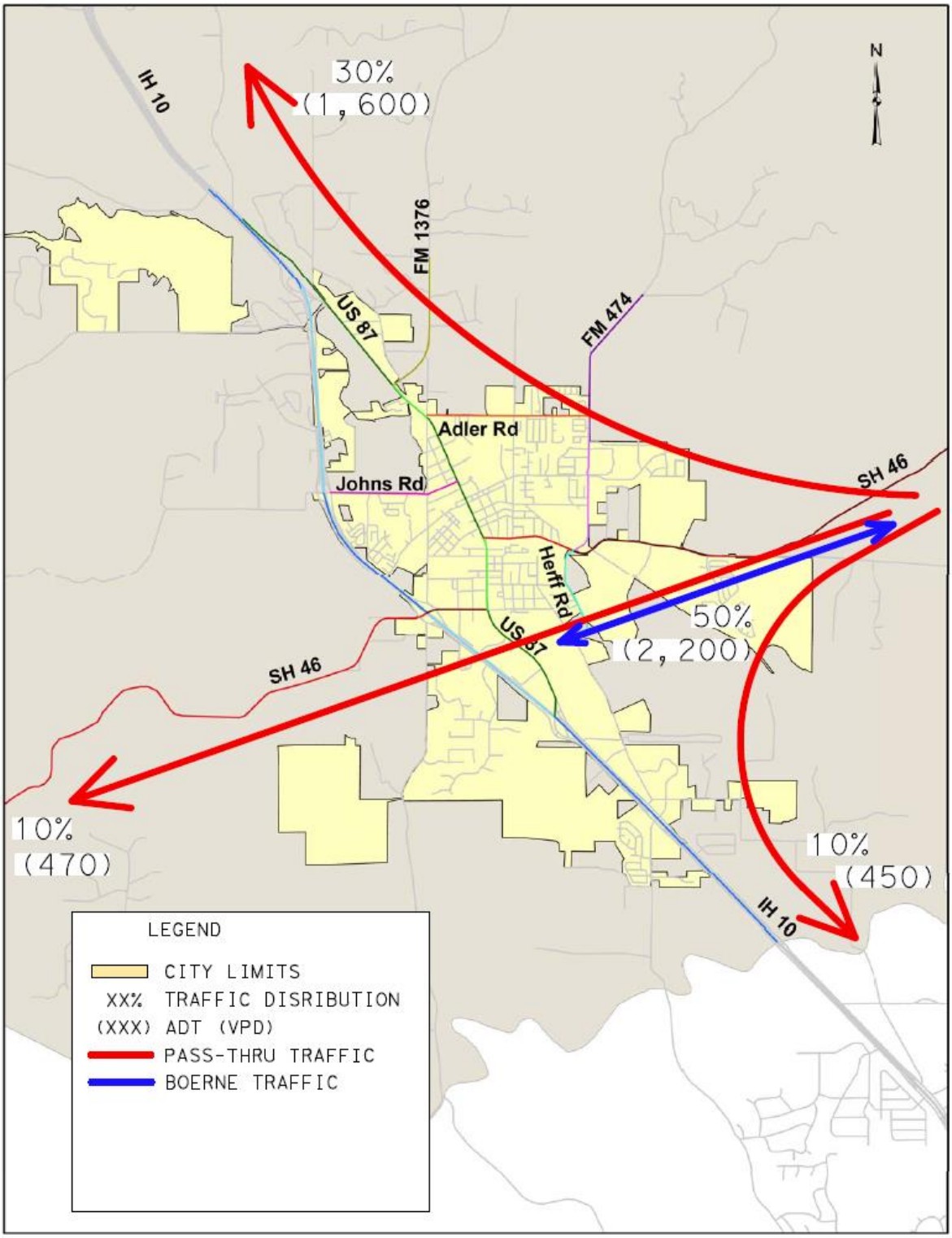


Figure 6-3. SH 46 from the West O/D Analysis Results

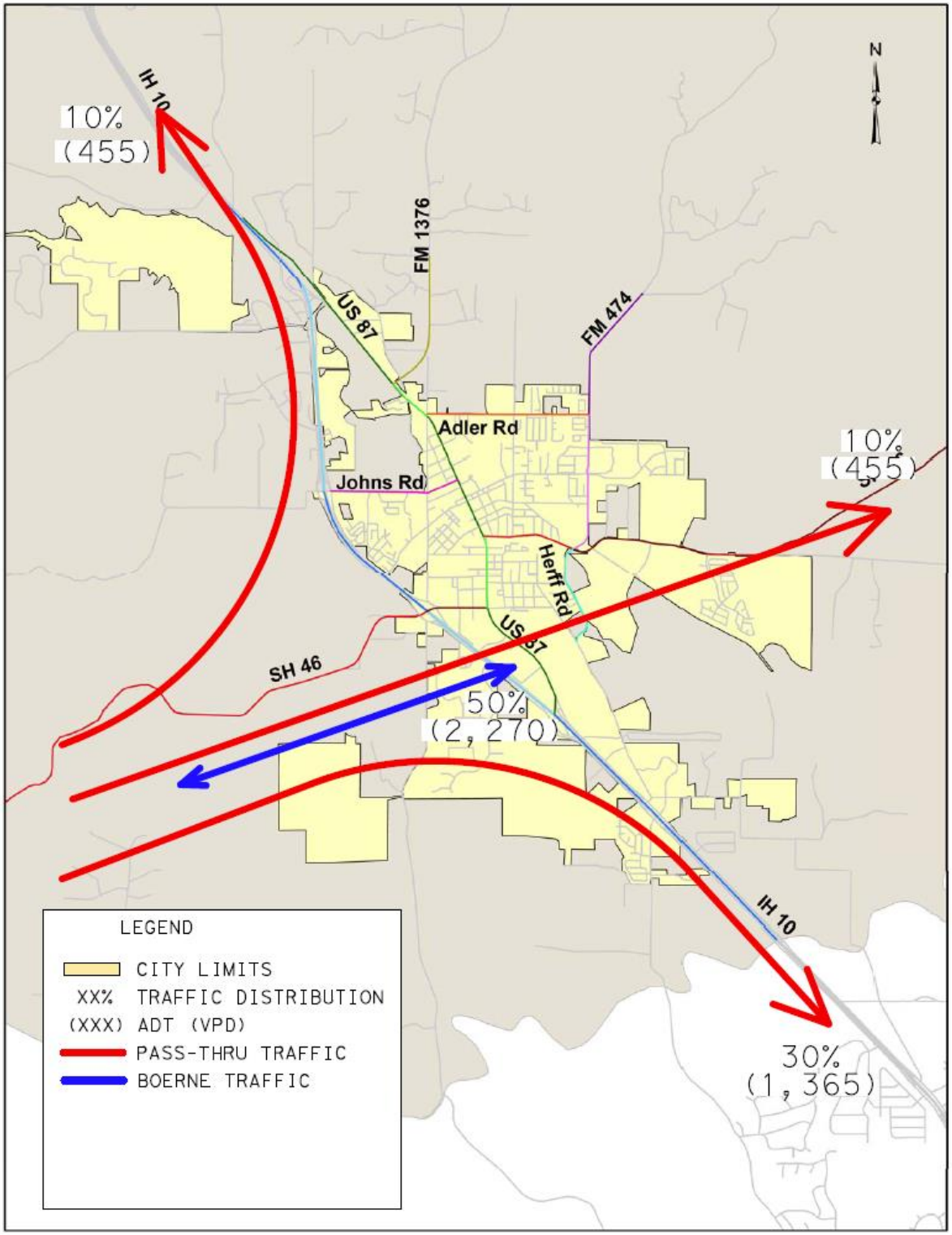


Figure 6-4. SH 46 from the North O/D Analysis Results

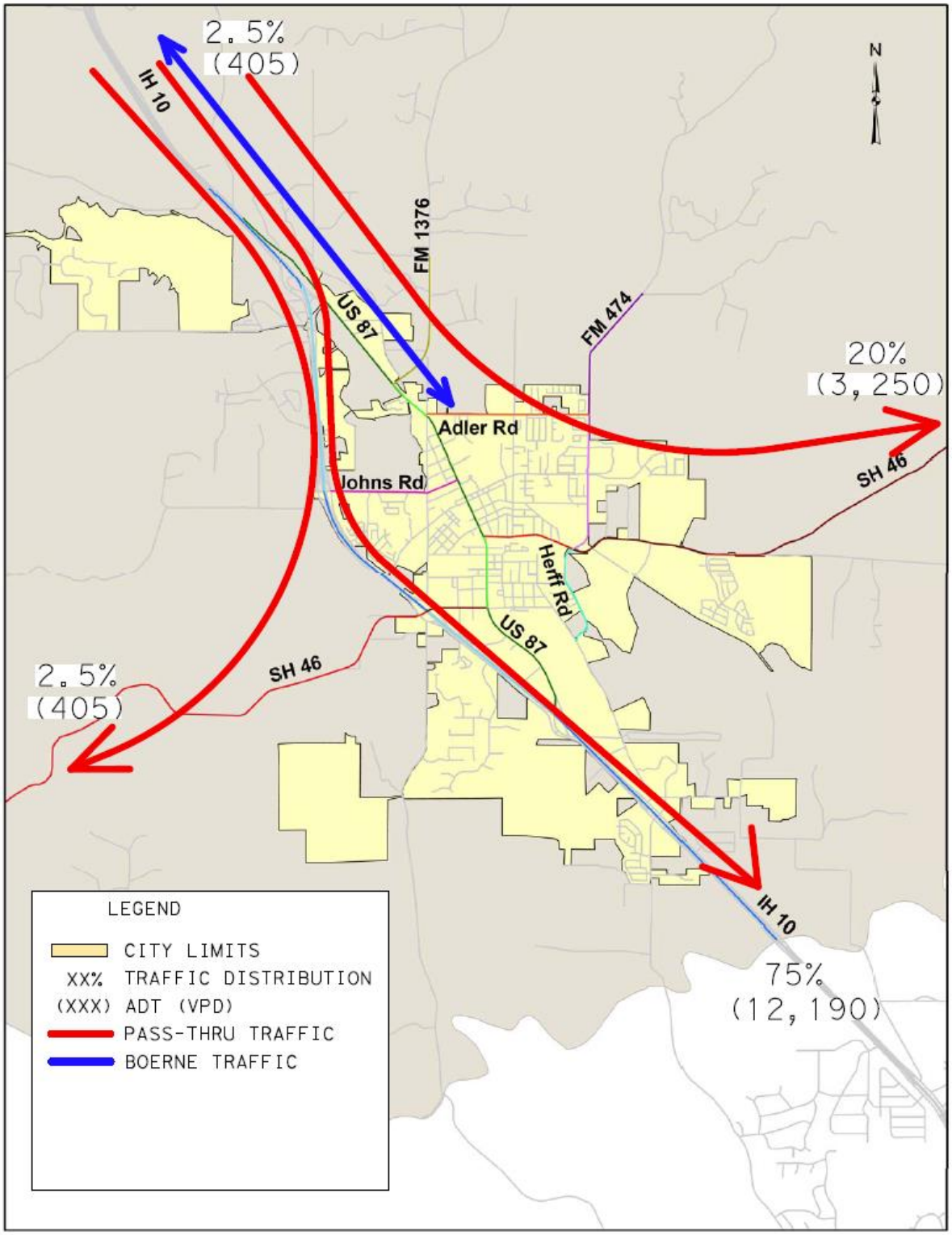
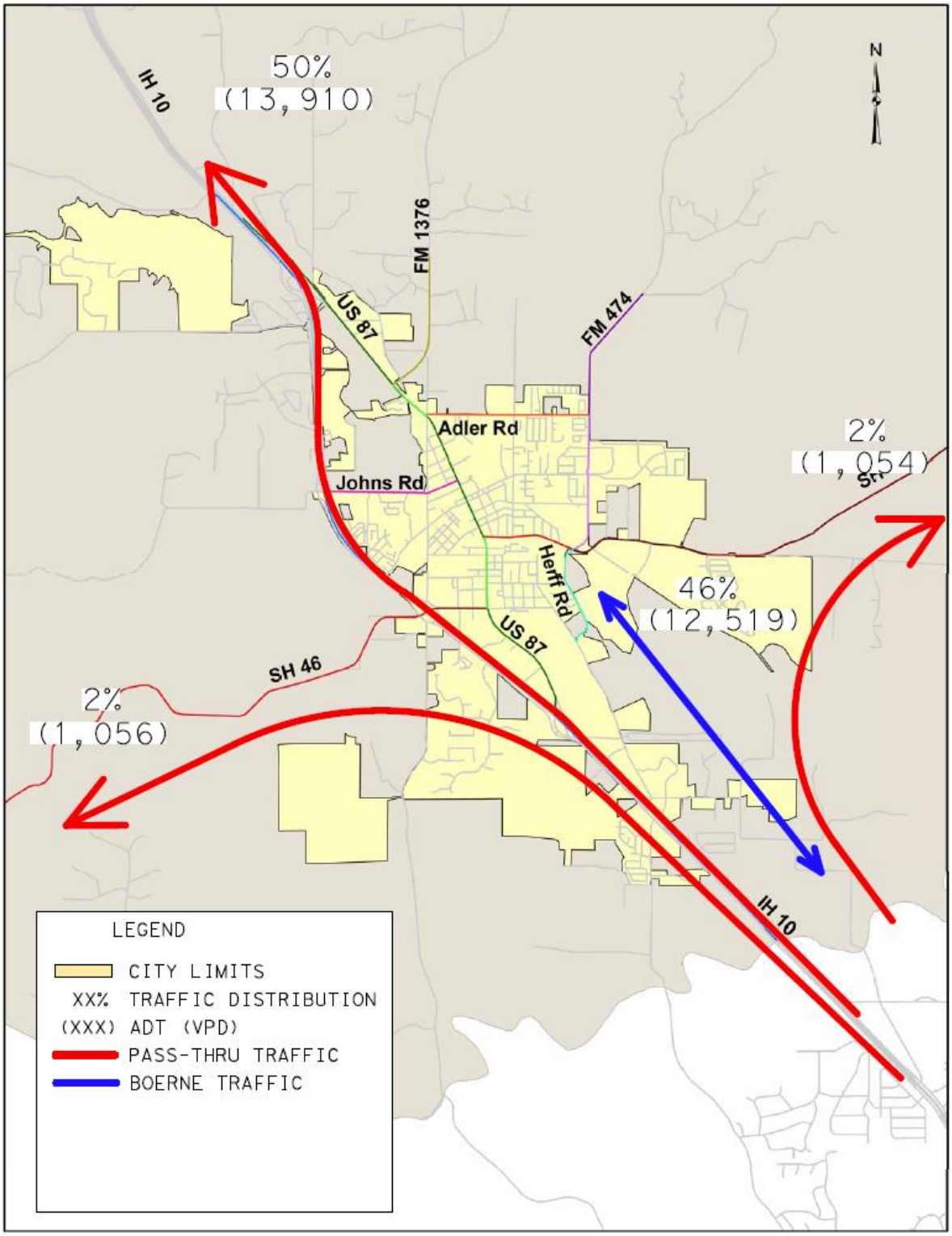


Figure 6-5. SH 46 from the South O/D Analysis Results



7.0 Conclusion and Recommendations

This report summarizes the *Kendall Gateway Study* for the SH 46 corridor in the City of Boerne in Kendall County, Texas.

As indicated by the traffic volume projections and crash data, the traffic inefficiencies are concentrated in the downtown Boerne area, from IH 10 to FM 474, primarily on the SH 46 corridor. Approximately 50% of the traffic travelling on SH 46 is considered pass-through traffic, as indicated by the O/D study. As the traffic volumes grow, the internal roadways are expected to become increasingly congested, and be over capacity by 2040. Additional capacity will be needed to handle the future volumes.

Several additional alternatives were considered. Improving and widening the existing roadways within Boerne would only temporarily provide the required capacity for the projected volumes, but this alternative is expected to have a negative impact on the downtown area's culture and appearance. Signal timing adjustments and innovative intersections could improve flow, but these improvements are not designed to address the capacity needs of the major roadway segments. Mass transit (bus or light rail) can be an effective alternative method of transportation, but is generally more applicable to larger, denser urban locations.

A relief route with an alignment away from the city's center is the most effective alternative in addressing the capacity needs, along with providing a safer facility for vehicles bypassing the City of Boerne. The addition of lanes with a potential relief route is expected to carry the anticipated traffic volumes at an acceptable capacity.

As a result of this analysis, the following recommendations were developed regarding the proposed relief route:

- Provide the new lane added capacity with a new location road. This new location road will serve as a relief route of the pass-thru traffic currently going through downtown.
- Initial need would only require a 2-lane road (1 lane in each direction) until growth warrants the need for the additional lanes.
- Based on projected traffic volumes, the facility should be designed as a 4-lane (2 lanes in each direction) facility to provide a high LOS.
- A more focused analysis on the inner-city circulation of Boerne would benefit from the removal of the pass-thru traffic.

Appendix A

Existing Traffic Counts

CJ Hensch & Associates, Inc.

bg@cjhensch.com
5215 Sycamore Ave

Pasadena, Texas, United States 77503
281-487-5417 cwood@browngay.com

Count Name: 1. FM 3351 at SH 46
Site Code: 1
Start Date: 09/21/2016
Page No: 1

Turning Movement Data

Start Time	FM 3351 Southbound						SH 6 Westbound						FM 3351 Northbound						SH 6 Eastbound						Int. Total
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	
6:00 AM	5	25	6	0	0	36	17	33	0	0	0	50	0	1	2	0	0	3	3	15	1	0	0	19	108
6:15 AM	7	27	6	0	0	40	31	20	0	0	0	51	0	5	5	0	0	10	1	29	4	0	0	34	135
6:30 AM	14	17	16	0	0	47	36	41	1	0	0	78	5	7	8	0	0	20	3	23	0	0	0	26	171
6:45 AM	11	17	20	0	0	48	34	54	4	0	0	92	9	6	13	0	0	28	2	47	6	0	0	55	223
Hourly Total	37	86	48	0	0	171	118	148	5	0	0	271	14	19	28	0	0	61	9	114	11	0	0	134	637
7:00 AM	16	11	23	0	0	50	34	72	7	0	0	113	3	9	23	0	0	35	6	40	2	0	0	48	246
7:15 AM	10	18	22	0	0	50	46	70	8	0	0	124	7	5	31	0	0	43	8	57	1	0	0	66	283
7:30 AM	8	20	28	0	0	56	38	89	10	0	0	137	17	9	24	0	0	50	11	61	8	0	0	80	323
7:45 AM	12	27	20	0	0	59	56	74	12	0	0	142	9	15	18	0	0	42	11	58	6	0	0	75	318
Hourly Total	46	76	93	0	0	215	174	305	37	0	0	516	36	38	96	0	0	170	36	216	17	0	0	269	1170
8:00 AM	10	18	24	0	0	52	29	68	14	0	0	111	6	15	17	0	0	38	13	47	1	0	0	61	262
8:15 AM	17	9	24	0	0	50	32	68	13	0	0	113	10	15	20	0	0	45	22	60	6	0	0	88	296
8:30 AM	10	17	12	0	0	39	24	63	7	0	0	94	12	16	23	0	0	51	6	45	7	0	0	58	242
8:45 AM	8	14	25	0	0	47	32	85	6	0	0	123	11	9	14	0	0	34	8	42	7	0	0	57	261
Hourly Total	45	58	85	0	0	188	117	284	40	0	0	441	39	55	74	0	0	168	49	194	21	0	0	264	1061
9:00 AM	13	14	18	0	0	45	20	50	6	0	0	76	7	13	11	0	0	31	11	43	4	0	0	58	210
9:15 AM	6	7	9	0	0	22	19	47	8	0	0	74	8	21	16	0	0	45	19	48	3	0	0	70	211
9:30 AM	6	18	24	0	0	48	21	75	14	0	0	110	9	10	15	0	0	34	13	42	5	0	0	60	252
9:45 AM	7	13	14	0	0	34	22	48	12	0	0	82	7	13	11	0	0	31	10	37	2	0	0	49	196
Hourly Total	32	52	65	0	0	149	82	220	40	0	0	342	31	57	53	0	0	141	53	170	14	0	0	237	869
10:00 AM	8	12	14	0	0	34	16	46	4	0	0	66	14	13	18	0	0	45	9	29	3	0	0	41	186
10:15 AM	7	7	16	0	0	30	19	40	7	0	0	66	12	7	19	0	0	38	9	45	3	0	0	57	191
10:30 AM	10	14	17	0	0	41	14	57	8	0	0	79	6	11	20	0	0	37	17	45	4	0	0	66	223
10:45 AM	16	5	16	0	0	37	21	26	4	0	0	51	9	13	14	0	0	36	10	42	3	0	0	55	179
Hourly Total	41	38	63	0	0	142	70	169	23	0	0	262	41	44	71	0	0	156	45	161	13	0	0	219	779
11:00 AM	12	8	12	0	0	32	7	28	10	0	0	45	9	10	11	0	0	30	16	48	1	0	0	65	172
11:15 AM	4	12	20	0	0	36	9	39	5	0	0	53	4	14	19	0	0	37	13	45	3	0	0	61	187
11:30 AM	7	14	15	0	0	36	15	44	7	0	0	66	4	12	12	0	0	28	16	53	5	0	0	74	204
11:45 AM	11	15	13	0	0	39	15	43	13	0	0	71	3	6	14	0	0	23	11	33	4	0	0	48	181
Hourly Total	34	49	60	0	0	143	46	154	35	0	0	235	20	42	56	0	0	118	56	179	13	0	0	248	744
12:00 PM	4	14	15	0	0	33	24	49	6	0	0	79	9	19	11	0	0	39	16	41	2	0	0	59	210
12:15 PM	9	6	8	0	0	23	17	42	9	0	0	68	17	11	5	0	0	33	13	47	15	0	0	75	199
12:30 PM	14	8	15	0	0	37	19	43	10	0	0	72	10	9	23	0	0	42	16	53	4	0	0	73	224
12:45 PM	10	8	10	0	0	28	18	44	16	0	0	78	11	11	18	0	0	40	14	60	5	0	0	79	225
Hourly Total	37	36	48	0	0	121	78	178	41	0	0	297	47	50	57	0	0	154	59	201	26	0	0	286	858
1:00 PM	5	14	16	0	0	35	16	39	6	0	0	61	7	11	11	0	0	29	17	67	6	0	0	90	215
1:15 PM	1	12	10	0	0	23	10	44	12	0	0	66	7	12	20	0	0	39	16	55	2	0	0	73	201

1:30 PM	10	6	12	0	0	28	18	36	8	0	0	62	11	7	21	0	0	39	13	45	8	0	0	66	195
1:45 PM	10	14	19	0	0	43	12	41	8	0	0	61	11	18	9	0	0	38	16	57	13	0	0	86	228
Hourly Total	26	46	57	0	0	129	56	160	34	0	0	250	36	48	61	0	0	145	62	224	29	0	0	315	839
2:00 PM	10	7	16	0	0	33	12	37	10	0	0	59	8	18	21	0	0	47	16	48	5	0	0	69	208
2:15 PM	17	15	25	0	0	57	13	34	8	0	0	55	6	10	20	0	0	36	15	66	4	0	0	85	233
2:30 PM	8	11	14	0	0	33	11	46	9	0	0	66	4	10	22	0	0	36	22	47	2	0	0	71	206
2:45 PM	6	9	17	0	0	32	30	39	11	0	0	80	7	13	32	0	0	52	25	48	7	0	0	80	244
Hourly Total	41	42	72	0	0	155	66	156	38	0	0	260	25	51	95	0	0	171	78	209	18	0	0	305	891
3:00 PM	13	8	14	0	0	35	17	47	10	0	0	74	9	17	29	0	0	55	20	73	6	0	0	99	263
3:15 PM	12	14	25	0	0	51	14	43	13	0	0	70	3	17	32	0	0	52	9	50	3	0	0	62	235
3:30 PM	10	15	22	0	0	47	17	34	14	0	0	65	6	17	43	0	0	66	22	80	11	0	0	113	291
3:45 PM	6	8	21	0	0	35	10	54	14	0	0	78	7	22	37	0	0	66	21	60	6	0	0	87	266
Hourly Total	41	45	82	0	0	168	58	178	51	0	0	287	25	73	141	0	0	239	72	263	26	0	0	361	1055
4:00 PM	11	8	18	0	0	37	11	44	11	0	0	66	9	10	42	0	0	61	21	82	9	0	0	112	276
4:15 PM	8	11	19	0	0	38	21	50	10	0	0	81	10	35	46	0	0	91	31	76	6	0	0	113	323
4:30 PM	8	20	13	0	0	41	26	60	7	0	0	93	12	24	48	0	0	84	22	83	10	0	0	115	333
4:45 PM	11	12	15	0	0	38	21	45	17	0	0	83	9	21	51	0	0	81	22	97	8	0	0	127	329
Hourly Total	38	51	65	0	0	154	79	199	45	0	0	323	40	90	187	0	0	317	96	338	33	0	0	467	1261
5:00 PM	6	8	20	0	0	34	29	56	13	0	0	98	6	27	62	0	0	95	21	85	4	0	0	110	337
5:15 PM	9	25	22	0	0	56	15	62	11	0	0	88	10	22	75	0	0	107	28	85	6	0	0	119	370
5:30 PM	8	24	12	0	0	44	22	64	16	0	0	102	10	24	59	0	0	93	31	105	13	0	0	149	388
5:45 PM	13	13	15	0	0	41	30	58	9	0	0	97	5	16	37	0	0	58	13	71	7	0	0	91	287
Hourly Total	36	70	69	0	0	175	96	240	49	0	0	385	31	89	233	0	0	353	93	346	30	0	0	469	1382
Grand Total	454	649	807	0	0	1910	1040	2391	438	0	0	3869	385	656	1152	0	0	2193	708	2615	251	0	0	3574	11546
Approach %	23.8	34.0	42.3	0.0	-	-	26.9	61.8	11.3	0.0	-	-	17.6	29.9	52.5	0.0	-	-	19.8	73.2	7.0	0.0	-	-	-
Total %	3.9	5.6	7.0	0.0	-	16.5	9.0	20.7	3.8	0.0	-	33.5	3.3	5.7	10.0	0.0	-	19.0	6.1	22.6	2.2	0.0	-	31.0	-
All Vehicles (no classification)	454	649	807	0	-	1910	1040	2391	438	0	-	3869	385	656	1152	0	-	2193	708	2615	251	0	-	3574	11546
% All Vehicles (no classification)	100.0	100.0	100.0	-	-	100.0	100.0	100.0	100.0	-	-	100.0	100.0	100.0	100.0	-	-	100.0	100.0	100.0	100.0	-	-	100.0	100.0
Pedestrians	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

CJ Hensch & Associates, Inc.

bg@cjhensch.com
5215 Sycamore Ave

Pasadena, Texas, United States 77503
281-487-5417 cwood@browngay.com

Count Name: 2. Herf Rd at SH 46 E
Site Code: 2
Start Date: 09/21/2016
Page No: 1

Turning Movement Data

Start Time	Esser Rd Southbound						SH 46 E Westbound						Herf Rd Northbound						SH 46 E Eastbound						Int. Total
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	
6:00 AM	13	26	5	0	0	44	35	20	14	0	0	69	0	6	21	0	0	27	4	25	4	0	0	33	173
6:15 AM	12	50	9	0	0	71	46	35	16	0	0	97	4	16	27	0	1	47	4	20	1	0	0	25	240
6:30 AM	23	53	6	0	0	82	64	39	29	0	0	132	2	11	28	0	1	41	9	39	6	0	0	54	309
6:45 AM	44	69	12	0	0	125	93	66	29	0	0	188	2	26	51	0	1	79	15	53	2	0	0	70	462
Hourly Total	92	198	32	0	0	322	238	160	88	0	0	486	8	59	127	0	3	194	32	137	13	0	0	182	1184
7:00 AM	34	58	10	0	0	102	104	75	35	0	0	214	2	23	105	0	23	130	3	54	10	0	0	67	513
7:15 AM	64	55	12	0	0	131	132	113	48	0	0	293	3	23	119	1	8	146	8	72	5	0	8	85	655
7:30 AM	43	70	18	0	0	131	114	110	57	0	0	281	6	31	84	0	15	121	13	83	7	0	15	103	636
7:45 AM	46	43	17	0	0	106	115	109	85	0	0	309	5	54	100	0	0	159	11	94	5	0	0	110	684
Hourly Total	187	226	57	0	0	470	465	407	225	0	0	1097	16	131	408	1	46	556	35	303	27	0	23	365	2488
8:00 AM	46	61	5	0	0	112	96	96	54	0	0	246	6	30	140	0	0	176	15	100	8	0	2	123	657
8:15 AM	52	50	17	0	0	119	113	103	63	0	0	279	9	36	133	0	1	178	9	76	3	0	1	88	664
8:30 AM	42	41	9	0	0	92	100	100	56	0	0	256	5	58	171	0	0	234	15	85	11	0	3	111	693
8:45 AM	36	56	16	0	0	108	72	115	56	0	0	243	7	34	61	0	2	102	9	52	0	0	4	61	514
Hourly Total	176	208	47	0	0	431	381	414	229	0	0	1024	27	158	505	0	3	690	48	313	22	0	10	383	2528
9:00 AM	21	50	14	0	0	85	44	82	30	0	0	156	5	33	32	0	0	70	7	57	4	0	0	68	379
9:15 AM	28	42	5	0	0	75	50	88	28	0	0	166	2	41	52	0	3	95	8	65	3	0	0	76	412
9:30 AM	24	39	13	0	0	76	42	59	26	0	0	127	1	22	44	0	0	67	10	56	7	0	0	73	343
9:45 AM	21	44	14	0	0	79	51	79	40	0	0	170	4	31	49	0	0	84	13	58	7	0	1	78	411
Hourly Total	94	175	46	0	0	315	187	308	124	0	0	619	12	127	177	0	3	316	38	236	21	0	1	295	1545
10:00 AM	29	30	10	0	0	69	52	57	26	0	0	135	3	33	51	0	1	87	14	67	8	0	0	89	380
10:15 AM	20	29	11	0	0	60	44	81	24	0	0	149	10	27	49	0	0	86	6	73	3	0	0	82	377
10:30 AM	20	31	8	0	0	59	51	59	20	0	1	130	4	31	39	0	0	74	11	57	9	0	0	77	340
10:45 AM	15	26	15	0	0	56	43	60	22	0	0	125	5	18	43	0	0	66	10	63	3	0	0	76	323
Hourly Total	84	116	44	0	0	244	190	257	92	0	1	539	22	109	182	0	1	313	41	260	23	0	0	324	1420
11:00 AM	17	40	10	0	0	67	38	52	28	0	0	118	3	42	35	0	0	80	12	49	4	0	0	65	330
11:15 AM	27	36	12	0	0	75	40	61	27	0	0	128	7	34	38	0	0	79	13	65	11	0	0	89	371
11:30 AM	24	36	12	0	0	72	44	64	22	0	0	130	3	46	58	1	0	108	18	55	4	0	0	77	387
11:45 AM	23	39	6	0	0	68	47	78	32	0	0	157	6	45	53	2	0	106	12	66	5	0	0	83	414
Hourly Total	91	151	40	0	0	282	169	255	109	0	0	533	19	167	184	3	0	373	55	235	24	0	0	314	1502
12:00 PM	44	42	23	0	0	109	56	82	32	0	0	170	13	31	42	1	1	87	11	58	12	0	0	81	447
12:15 PM	31	37	9	0	0	77	52	67	26	0	0	145	2	46	48	0	0	96	15	77	3	0	0	95	413
12:30 PM	28	37	15	0	0	80	50	61	26	0	0	137	5	46	66	0	2	117	10	55	4	0	0	69	403
12:45 PM	21	36	10	0	0	67	41	78	38	0	0	157	8	54	59	0	0	121	11	84	10	0	0	105	450
Hourly Total	124	152	57	0	0	333	199	288	122	0	0	609	28	177	215	1	3	421	47	274	29	0	0	350	1713
1:00 PM	39	43	8	0	0	90	45	68	24	0	0	137	7	41	40	0	0	88	9	66	10	0	0	85	400
1:15 PM	30	30	19	0	0	79	37	59	25	0	0	121	9	39	48	0	0	96	9	65	6	0	0	80	376

1:30 PM	25	46	10	0	0	81	65	75	35	0	0	175	4	47	59	0	0	110	14	66	4	0	0	84	450
1:45 PM	23	35	8	0	0	66	42	108	47	0	0	197	8	46	53	0	0	107	7	78	7	0	0	92	462
Hourly Total	117	154	45	0	0	316	189	310	131	0	0	630	28	173	200	0	0	401	39	275	27	0	0	341	1688
2:00 PM	37	27	9	0	0	73	34	69	28	0	0	131	4	45	54	0	0	103	14	88	6	0	0	108	415
2:15 PM	48	50	8	0	0	106	51	60	28	0	0	139	7	26	70	0	0	103	11	79	7	0	0	97	445
2:30 PM	41	46	5	0	0	92	61	76	26	0	0	163	6	50	76	0	0	132	16	93	6	0	0	115	502
2:45 PM	36	45	16	0	0	97	72	83	40	0	0	195	2	55	88	0	0	145	10	76	6	0	0	92	529
Hourly Total	162	168	38	0	0	368	218	288	122	0	0	628	19	176	288	0	0	483	51	336	25	0	0	412	1891
3:00 PM	30	41	11	0	0	82	51	74	37	0	0	162	8	53	59	0	0	120	12	65	9	0	0	86	450
3:15 PM	35	44	11	0	0	90	70	84	30	0	0	184	6	56	66	0	0	128	7	86	10	0	0	103	505
3:30 PM	39	32	6	0	0	77	81	62	38	0	0	181	3	40	82	0	0	125	12	72	5	0	0	89	472
3:45 PM	35	49	12	0	0	96	73	81	38	0	0	192	2	58	117	0	0	177	19	94	10	0	0	123	588
Hourly Total	139	166	40	0	0	345	275	301	143	0	0	719	19	207	324	0	0	550	50	317	34	0	0	401	2015
4:00 PM	45	61	19	0	0	125	117	135	60	0	0	312	6	51	125	0	0	182	21	89	8	0	0	118	737
4:15 PM	64	59	13	0	0	136	89	125	56	0	0	270	10	62	122	0	6	194	18	92	6	0	4	116	716
4:30 PM	74	44	9	0	0	127	86	95	39	0	0	220	5	69	87	0	0	161	19	99	6	0	1	124	632
4:45 PM	35	40	16	0	0	91	92	80	40	0	0	212	10	73	81	0	0	164	12	105	4	0	3	121	588
Hourly Total	218	204	57	0	0	479	384	435	195	0	0	1014	31	255	415	0	6	701	70	385	24	0	8	479	2673
5:00 PM	60	60	14	0	0	134	54	76	51	0	0	181	7	64	121	0	0	192	21	105	4	0	0	130	637
5:15 PM	76	49	22	0	0	147	70	92	47	0	0	209	10	77	102	0	0	189	23	79	6	0	0	108	653
5:30 PM	48	47	19	0	0	114	82	105	56	0	0	243	13	70	135	1	0	219	16	118	7	0	0	141	717
5:45 PM	58	66	15	0	0	139	94	78	61	0	0	233	9	72	147	0	2	228	14	90	13	0	0	117	717
Hourly Total	242	222	70	0	0	534	300	351	215	0	0	866	39	283	505	1	2	828	74	392	30	0	0	496	2724
Grand Total	1726	2140	573	0	0	4439	3195	3774	1795	0	1	8764	268	2022	3530	6	67	5826	580	3463	299	0	42	4342	23371
Approach %	38.9	48.2	12.9	0.0	-	-	36.5	43.1	20.5	0.0	-	-	4.6	34.7	60.6	0.1	-	-	13.4	79.8	6.9	0.0	-	-	-
Total %	7.4	9.2	2.5	0.0	-	19.0	13.7	16.1	7.7	0.0	-	37.5	1.1	8.7	15.1	0.0	-	24.9	2.5	14.8	1.3	0.0	-	18.6	-
All Vehicles (no classification)	1726	2140	573	0	-	4439	3195	3774	1795	0	-	8764	268	2022	3530	6	-	5826	580	3463	299	0	-	4342	23371
% All Vehicles (no classification)	100.0	100.0	100.0	-	-	100.0	100.0	100.0	100.0	-	-	100.0	100.0	100.0	100.0	100.0	-	100.0	100.0	100.0	100.0	-	-	100.0	100.0
Pedestrians	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	67	-	-	-	-	-	42	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-

CJ Hensch & Associates, Inc.

bg@cjhensch.com
5215 Sycamore Ave

Pasadena, Texas, United States 77503
281-487-5417 cwood@browngay.com

Count Name: 3. Main St (US 87) right turn at River Rd (SH 46)
Site Code: 3
Start Date: 09/21/2016
Page No: 1

Turning Movement Data

Start Time	Shell Gas Station Drwy Southbound						SH 46 (River Rd) Westbound						Main St (US 87) right turn Northbound						SH 46 (River Rd) Eastbound						Int. Total
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	
6:00 AM	0	0	0	0	0	0	0	33	1	0	0	34	0	0	23	0	0	23	0	9	0	0	0	9	66
6:15 AM	0	0	0	0	0	0	0	49	0	0	0	49	0	0	10	0	0	10	0	11	0	0	0	11	70
6:30 AM	0	0	1	0	0	1	0	52	0	0	0	52	0	0	24	0	0	24	0	14	0	0	0	14	91
6:45 AM	0	0	1	0	0	1	0	90	2	0	0	92	0	0	33	0	1	33	0	35	0	0	0	35	161
Hourly Total	0	0	2	0	0	2	0	224	3	0	0	227	0	0	90	0	1	90	0	69	0	0	0	69	388
7:00 AM	0	0	0	0	0	0	0	99	0	0	0	99	0	0	39	0	0	39	0	24	0	0	0	24	162
7:15 AM	0	0	1	0	0	1	0	146	1	0	0	147	0	0	53	0	0	53	1	35	0	0	0	36	237
7:30 AM	0	0	0	0	0	0	0	134	1	0	0	135	1	0	65	0	0	66	0	38	0	0	0	38	239
7:45 AM	0	0	0	0	0	0	0	158	3	0	0	161	0	0	77	0	0	77	0	49	0	0	0	49	287
Hourly Total	0	0	1	0	0	1	0	537	5	0	0	542	1	0	234	0	0	235	1	146	0	0	0	147	925
8:00 AM	0	0	1	0	0	1	0	114	1	0	0	115	0	0	88	0	0	88	0	47	0	0	0	47	251
8:15 AM	0	0	0	0	0	0	0	123	3	0	0	126	0	0	78	0	0	78	0	29	0	0	0	29	233
8:30 AM	1	0	1	0	0	2	0	118	1	0	0	119	0	0	84	0	0	84	0	31	0	0	0	31	236
8:45 AM	0	0	1	0	0	1	0	127	2	0	0	129	0	0	61	0	0	61	0	22	0	0	0	22	213
Hourly Total	1	0	3	0	0	4	0	482	7	0	0	489	0	0	311	0	0	311	0	129	0	0	0	129	933
9:00 AM	0	0	0	0	0	0	0	121	0	0	0	121	0	0	60	0	0	60	0	26	0	0	0	26	207
9:15 AM	0	0	0	0	0	0	0	105	2	0	0	107	0	0	72	0	0	72	0	21	0	0	0	21	200
9:30 AM	0	0	0	0	0	0	0	82	1	0	1	83	0	0	60	0	0	60	0	18	0	0	1	18	161
9:45 AM	1	0	1	0	0	2	0	105	0	0	0	105	0	1	67	0	0	68	0	21	0	0	0	21	196
Hourly Total	1	0	1	0	0	2	0	413	3	0	1	416	0	1	259	0	0	260	0	86	0	0	1	86	764
10:00 AM	1	0	2	0	0	3	0	102	3	0	0	105	0	0	79	0	0	79	0	17	0	0	0	17	204
10:15 AM	0	0	0	0	0	0	0	105	1	0	0	106	0	0	68	0	0	68	0	28	0	0	0	28	202
10:30 AM	0	0	0	0	0	0	0	96	0	0	0	96	0	0	73	0	0	73	0	16	0	0	0	16	185
10:45 AM	0	0	0	0	0	0	0	104	0	0	0	104	0	0	65	0	0	65	0	24	0	0	0	24	193
Hourly Total	1	0	2	0	0	3	0	407	4	0	0	411	0	0	285	0	0	285	0	85	0	0	0	85	784
11:00 AM	0	0	0	0	0	0	0	102	1	0	0	103	0	0	63	0	0	63	0	12	0	0	0	12	178
11:15 AM	1	0	1	0	0	2	0	85	1	0	0	86	0	1	65	0	0	66	0	21	0	0	0	21	175
11:30 AM	1	0	0	0	0	1	0	113	1	0	0	114	1	0	75	0	0	76	0	29	0	0	0	29	220
11:45 AM	2	0	0	0	0	2	0	134	3	0	0	137	0	0	74	0	0	74	0	31	0	0	0	31	244
Hourly Total	4	0	1	0	0	5	0	434	6	0	0	440	1	1	277	0	0	279	0	93	0	0	0	93	817
12:00 PM	0	0	1	0	0	1	0	131	3	0	0	134	0	0	64	0	0	64	0	27	0	0	0	27	226
12:15 PM	0	0	2	0	0	2	0	107	3	0	0	110	0	1	90	0	0	91	0	22	0	0	0	22	225
12:30 PM	0	0	1	0	0	1	0	97	0	0	0	97	0	0	89	0	0	89	0	23	0	0	0	23	210
12:45 PM	0	0	1	0	0	1	0	139	1	0	0	140	0	0	102	0	0	102	0	21	0	0	0	21	264
Hourly Total	0	0	5	0	0	5	0	474	7	0	0	481	0	1	345	0	0	346	0	93	0	0	0	93	925
1:00 PM	1	0	0	0	0	1	0	91	0	0	0	91	0	1	58	0	1	59	0	35	0	0	0	35	186
1:15 PM	1	0	2	0	0	3	0	109	0	0	0	109	0	0	63	0	0	63	0	27	0	0	0	27	202

1:30 PM	1	0	1	0	0	2	0	118	2	0	0	120	0	0	58	0	2	58	0	28	0	0	0	28	208
1:45 PM	0	0	0	0	0	0	0	148	0	0	0	148	0	1	91	0	0	92	0	29	0	0	0	29	269
Hourly Total	3	0	3	0	0	6	0	466	2	0	0	468	0	2	270	0	3	272	0	119	0	0	0	119	865
2:00 PM	0	0	3	0	0	3	0	112	3	0	0	115	0	0	80	0	0	80	0	38	0	0	0	38	236
2:15 PM	0	0	2	0	0	2	0	94	0	0	0	94	0	0	86	0	1	86	0	36	0	0	0	36	218
2:30 PM	0	0	0	0	0	0	0	112	0	0	0	112	0	0	88	0	0	88	0	31	0	0	0	31	231
2:45 PM	1	0	3	0	0	4	0	95	6	0	0	101	0	0	88	0	0	88	0	43	0	0	0	43	236
Hourly Total	1	0	8	0	0	9	0	413	9	0	0	422	0	0	342	0	1	342	0	148	0	0	0	148	921
3:00 PM	1	0	4	0	0	5	0	111	1	0	0	112	1	2	70	0	0	73	0	24	0	0	0	24	214
3:15 PM	1	0	2	0	0	3	0	119	0	0	0	119	0	1	89	0	0	90	0	37	0	0	0	37	249
3:30 PM	0	0	1	0	0	1	0	96	0	0	0	96	0	0	81	0	0	81	0	37	0	0	0	37	215
3:45 PM	1	0	0	0	0	1	0	110	1	0	0	111	0	1	85	0	0	86	0	41	0	0	0	41	239
Hourly Total	3	0	7	0	0	10	0	436	2	0	0	438	1	4	325	0	0	330	0	139	0	0	0	139	917
4:00 PM	0	0	3	0	0	3	0	135	1	0	0	136	0	0	80	0	1	80	0	45	0	0	0	45	264
4:15 PM	0	0	1	0	0	1	0	158	2	0	0	160	0	0	90	0	0	90	0	52	0	0	0	52	303
4:30 PM	0	0	0	0	0	0	0	140	2	0	0	142	0	0	116	0	0	116	0	44	0	0	0	44	302
4:45 PM	0	0	2	0	0	2	0	128	2	0	0	130	0	0	101	0	0	101	0	38	0	0	0	38	271
Hourly Total	0	0	6	0	0	6	0	561	7	0	0	568	0	0	387	0	1	387	0	179	0	0	0	179	1140
5:00 PM	0	0	2	0	0	2	0	122	2	0	2	124	0	0	100	0	0	100	0	61	0	0	0	61	287
5:15 PM	1	0	1	0	0	2	0	152	2	0	0	154	0	0	86	0	0	86	0	49	0	0	0	49	291
5:30 PM	0	0	4	0	0	4	0	130	3	0	0	133	0	0	117	0	1	117	0	45	0	0	0	45	299
5:45 PM	0	0	1	0	1	1	0	125	5	0	1	130	0	0	101	0	0	101	0	47	0	0	0	47	279
Hourly Total	1	0	8	0	1	9	0	529	12	0	3	541	0	0	404	0	1	404	0	202	0	0	0	202	1156
Grand Total	15	0	47	0	1	62	0	5376	67	0	4	5443	3	9	3529	0	7	3541	1	1488	0	0	1	1489	10535
Approach %	24.2	0.0	75.8	0.0	-	-	0.0	98.8	1.2	0.0	-	-	0.1	0.3	99.7	0.0	-	-	0.1	99.9	0.0	0.0	-	-	-
Total %	0.1	0.0	0.4	0.0	-	0.6	0.0	51.0	0.6	0.0	-	51.7	0.0	0.1	33.5	0.0	-	33.6	0.0	14.1	0.0	0.0	-	14.1	-
All Vehicles (no classification)	15	0	47	0	-	62	0	5376	67	0	-	5443	3	9	3529	0	-	3541	1	1488	0	0	-	1489	10535
% All Vehicles (no classification)	100.0	-	100.0	-	-	100.0	-	100.0	100.0	-	-	100.0	100.0	100.0	100.0	-	-	100.0	100.0	100.0	-	-	-	100.0	100.0
Pedestrians	-	-	-	-	1	-	-	-	-	-	4	-	-	-	-	-	7	-	-	-	-	-	1	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-

CJ Hensch & Associates, Inc.

bg@cjhensch.com
5215 Sycamore Ave

Pasadena, Texas, United States 77503
281-487-5417 cwood@browngay.com

Count Name: 4. Main St (US 87) at River Rd (SH 46)
Site Code: 4
Start Date: 09/21/2016

Turning Movement Data

Start Time	Main St (US 87) Southbound					River Rd (SH 46) Westbound					Main St (US 87) Northbound					
	Left	Thru	U-Turn	Peds	App. Total	Left	Right	U-Turn	Peds	App. Total	Thru	Right	U-Turn	Peds	App. Total	Int. Total
6:00 AM	11	44	0	0	55	20	11	0	0	31	34	0	0	0	34	120
6:15 AM	9	61	0	0	70	31	18	0	0	49	38	0	0	0	38	157
6:30 AM	19	69	0	0	88	37	24	0	0	61	38	0	0	0	38	187
6:45 AM	33	85	0	0	118	52	35	0	1	87	59	0	0	0	59	264
Hourly Total	72	259	0	0	331	140	88	0	1	228	169	0	0	0	169	728
7:00 AM	29	96	0	0	125	57	41	0	0	98	63	0	0	0	63	286
7:15 AM	33	102	0	0	135	100	48	0	0	148	78	0	0	0	78	361
7:30 AM	37	119	0	0	156	89	49	0	0	138	112	0	0	0	112	406
7:45 AM	46	123	0	0	169	93	63	0	0	156	135	0	0	0	135	460
Hourly Total	145	440	0	0	585	339	201	0	0	540	388	0	0	0	388	1513
8:00 AM	48	121	0	0	169	78	40	0	0	118	122	1	0	0	123	410
8:15 AM	27	126	0	0	153	71	42	0	0	113	132	0	0	0	132	398
8:30 AM	33	136	0	1	169	79	39	0	0	118	139	0	0	0	139	426
8:45 AM	24	135	0	0	159	93	35	0	0	128	136	0	0	0	136	423
Hourly Total	132	518	0	1	650	321	156	0	0	477	529	1	0	0	530	1657
9:00 AM	24	124	0	0	148	76	45	0	0	121	114	0	0	0	114	383
9:15 AM	20	128	0	0	148	71	29	0	0	100	120	0	0	0	120	368
9:30 AM	16	136	0	1	152	60	22	0	0	82	109	1	0	0	110	344
9:45 AM	22	135	0	2	157	74	30	0	0	104	133	0	0	0	133	394
Hourly Total	82	523	0	3	605	281	126	0	0	407	476	1	0	0	477	1489
10:00 AM	19	118	0	0	137	78	27	0	0	105	91	0	0	0	91	333
10:15 AM	32	142	0	0	174	77	31	0	0	108	110	0	0	0	110	392
10:30 AM	15	143	0	0	158	72	25	0	0	97	114	0	0	0	114	369
10:45 AM	21	138	0	0	159	72	28	0	1	100	137	1	0	0	138	397
Hourly Total	87	541	0	0	628	299	111	0	1	410	452	1	0	0	453	1491
11:00 AM	12	170	0	0	182	79	28	0	0	107	136	0	0	0	136	425
11:15 AM	27	167	0	0	194	52	30	0	1	82	128	0	0	0	128	404
11:30 AM	24	145	0	2	169	91	33	0	0	124	135	0	0	0	135	428
11:45 AM	32	184	0	2	216	86	33	0	0	119	150	0	0	0	150	485
Hourly Total	95	666	0	4	761	308	124	0	1	432	549	0	0	0	549	1742
12:00 PM	27	192	0	0	219	106	30	0	0	136	168	0	0	0	168	523
12:15 PM	22	167	0	1	189	94	12	0	0	106	139	0	0	0	139	434
12:30 PM	21	170	0	1	191	64	38	0	0	102	177	0	0	0	177	470
12:45 PM	21	170	0	1	191	87	49	0	0	136	168	0	0	0	168	495
Hourly Total	91	699	0	3	790	351	129	0	0	480	652	0	0	0	652	1922
1:00 PM	33	161	0	0	194	62	24	0	1	86	164	1	0	0	165	445
1:15 PM	27	171	0	0	198	94	23	0	0	117	146	0	0	0	146	461
1:30 PM	30	136	0	1	166	90	28	0	2	118	152	0	0	0	152	436

1:45 PM	28	156	0	0	184	113	33	0	0	146	150	0	0	0	150	480
Hourly Total	118	624	0	1	742	359	108	0	3	467	612	1	0	0	613	1822
2:00 PM	38	158	0	0	196	83	27	0	0	110	139	0	0	0	139	445
2:15 PM	33	178	0	1	211	79	22	0	1	101	142	0	0	0	142	454
2:30 PM	34	155	0	0	189	86	25	0	0	111	156	0	0	0	156	456
2:45 PM	39	151	0	0	190	82	19	0	0	101	173	0	0	0	173	464
Hourly Total	144	642	0	1	786	330	93	0	1	423	610	0	0	0	610	1819
3:00 PM	23	176	0	0	199	75	36	0	0	111	157	0	0	0	157	467
3:15 PM	42	138	0	0	180	86	36	0	0	122	156	0	0	0	156	458
3:30 PM	32	152	0	0	184	60	36	0	0	96	144	0	0	0	144	424
3:45 PM	49	154	0	0	203	81	29	0	0	110	160	0	0	0	160	473
Hourly Total	146	620	0	0	766	302	137	0	0	439	617	0	0	0	617	1822
4:00 PM	48	170	0	0	218	87	43	0	0	130	184	0	0	0	184	532
4:15 PM	48	180	0	0	228	137	29	0	0	166	172	0	0	0	172	566
4:30 PM	44	150	0	3	194	102	37	0	0	139	152	0	0	0	152	485
4:45 PM	42	151	0	1	193	91	39	0	0	130	153	0	0	0	153	476
Hourly Total	182	651	0	4	833	417	148	0	0	565	661	0	0	0	661	2059
5:00 PM	56	176	0	0	232	95	35	0	0	130	140	1	0	0	141	503
5:15 PM	47	180	0	0	227	106	35	0	0	141	172	1	0	0	173	541
5:30 PM	46	155	0	0	201	90	41	0	0	131	159	0	0	0	159	491
5:45 PM	44	136	0	0	180	95	32	0	0	127	147	0	0	0	147	454
Hourly Total	193	647	0	0	840	386	143	0	0	529	618	2	0	0	620	1989
Grand Total	1487	6830	0	17	8317	3833	1564	0	7	5397	6333	6	0	0	6339	20053
Approach %	17.9	82.1	0.0	-	-	71.0	29.0	0.0	-	-	99.9	0.1	0.0	-	-	-
Total %	7.4	34.1	0.0	-	41.5	19.1	7.8	0.0	-	26.9	31.6	0.0	0.0	-	31.6	-
All Vehicles (no classification)	1487	6830	0	-	8317	3833	1564	0	-	5397	6333	6	0	-	6339	20053
% All Vehicles (no classification)	100.0	100.0	-	-	100.0	100.0	100.0	-	-	100.0	100.0	100.0	-	-	100.0	100.0
Pedestrians	-	-	-	17	-	-	-	-	7	-	-	-	-	0	-	-
% Pedestrians	-	-	-	100.0	-	-	-	-	100.0	-	-	-	-	-	-	-

CJ Hensch & Associates, Inc.

bg@cjhensch.com
5215 Sycamore Ave

Pasadena, Texas, United States 77503
281-487-5417 cwood@browngay.com

Count Name: 5. S. Main St at W. Bandera Rd
Site Code: 5
Start Date: 09/21/2016
Page No: 1

Turning Movement Data

Start Time	S. Main St Southbound						W. Bandera Rd Westbound						S. Main St Northbound						W. Bandera Rd Eastbound						
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Int. Total
6:00 AM	2	37	21	0	0	60	1	7	1	0	0	9	2	26	1	0	0	29	23	6	8	0	0	37	135
6:15 AM	4	61	40	0	0	105	3	6	0	0	0	9	17	32	1	0	0	50	16	6	14	0	0	36	200
6:30 AM	6	67	27	0	0	100	4	7	3	0	0	14	13	29	2	0	0	44	35	15	18	0	0	68	226
6:45 AM	1	87	43	0	0	131	7	19	3	0	0	29	14	46	2	0	0	62	32	9	25	0	0	66	288
Hourly Total	13	252	131	0	0	396	15	39	7	0	0	61	46	133	6	0	0	185	106	36	65	0	0	207	849
7:00 AM	4	90	56	0	0	150	6	11	4	0	0	21	11	63	4	0	0	78	42	12	31	0	0	85	334
7:15 AM	10	112	68	0	0	190	5	23	9	0	0	37	24	69	9	0	0	102	52	25	67	0	0	144	473
7:30 AM	9	131	57	0	0	197	10	25	10	0	0	45	30	107	10	0	0	147	79	28	56	0	0	163	552
7:45 AM	7	116	70	0	0	193	8	30	6	0	0	44	32	115	10	0	0	157	88	21	61	0	0	170	564
Hourly Total	30	449	251	0	0	730	29	89	29	0	0	147	97	354	33	0	0	484	261	86	215	0	0	562	1923
8:00 AM	16	114	68	0	0	198	10	22	14	0	0	46	37	108	12	0	0	157	81	34	51	0	0	166	567
8:15 AM	15	86	75	0	0	176	12	19	12	0	0	43	29	124	10	0	0	163	94	31	47	0	0	172	554
8:30 AM	10	113	72	0	0	195	14	29	8	0	0	51	44	136	15	0	0	195	92	30	58	0	0	180	621
8:45 AM	8	117	75	0	0	200	12	12	14	0	0	38	34	99	20	0	0	153	74	22	60	0	0	156	547
Hourly Total	49	430	290	0	0	769	48	82	48	0	0	178	144	467	57	0	0	668	341	117	216	0	0	674	2289
9:00 AM	19	106	66	0	0	191	20	27	7	0	0	54	33	116	16	0	0	165	80	24	60	0	0	164	574
9:15 AM	11	102	68	0	0	181	6	33	8	0	0	47	44	120	15	0	0	179	75	31	58	0	0	164	571
9:30 AM	14	100	71	0	0	185	12	24	14	0	0	50	44	108	10	0	0	162	70	20	63	0	0	153	550
9:45 AM	14	101	88	0	0	203	19	16	11	0	0	46	45	125	21	0	0	191	82	17	68	0	0	167	607
Hourly Total	58	409	293	0	0	760	57	100	40	0	0	197	166	469	62	0	0	697	307	92	249	0	0	648	2302
10:00 AM	11	107	82	0	0	200	7	28	10	0	0	45	61	104	15	0	0	180	48	17	57	0	0	122	547
10:15 AM	13	97	75	0	0	185	17	38	13	0	0	68	61	101	8	0	0	170	70	23	57	0	0	150	573
10:30 AM	11	102	94	0	0	207	13	37	18	0	0	68	41	119	16	0	0	176	78	16	61	0	0	155	606
10:45 AM	14	101	78	0	0	193	17	37	15	0	0	69	55	118	4	0	0	177	83	28	55	0	0	166	605
Hourly Total	49	407	329	0	0	785	54	140	56	0	0	250	218	442	43	0	0	703	279	84	230	0	0	593	2331
11:00 AM	15	123	80	0	0	218	15	43	18	0	0	76	66	95	11	0	0	172	69	35	74	0	0	178	644
11:15 AM	6	137	85	0	1	228	12	32	13	0	0	57	68	105	15	0	0	188	70	38	71	0	0	179	652
11:30 AM	12	127	85	0	0	224	12	50	15	0	0	77	71	137	4	0	0	212	77	35	82	0	0	194	707
11:45 AM	15	145	97	0	0	257	14	39	7	0	1	60	83	149	10	0	0	242	69	24	86	0	0	179	738
Hourly Total	48	532	347	0	1	927	53	164	53	0	1	270	288	486	40	0	0	814	285	132	313	0	0	730	2741
12:00 PM	19	135	120	0	0	274	17	47	22	0	0	86	63	125	10	0	0	198	72	26	79	0	0	177	735
12:15 PM	13	142	92	0	0	247	23	55	19	0	0	97	79	124	19	0	0	222	90	36	80	0	0	206	772
12:30 PM	9	129	81	0	0	219	11	51	17	0	0	79	89	162	13	0	0	264	112	33	92	0	0	237	799
12:45 PM	14	126	90	0	0	230	14	46	17	0	0	77	84	131	14	0	0	229	97	44	82	0	0	223	759
Hourly Total	55	532	383	0	0	970	65	199	75	0	0	339	315	542	56	0	0	913	371	139	333	0	0	843	3065
1:00 PM	15	137	87	0	0	239	7	53	16	0	0	76	73	127	11	0	0	211	79	28	84	0	0	191	717
1:15 PM	16	115	79	0	0	210	11	35	18	0	0	64	74	107	6	0	0	187	82	28	84	0	0	194	655

1:30 PM	17	103	86	0	0	206	6	38	12	0	0	56	75	102	11	0	0	188	83	22	66	0	0	171	621
1:45 PM	15	122	110	0	0	247	12	37	16	0	0	65	74	116	11	0	0	201	90	31	62	0	0	183	696
Hourly Total	63	477	362	0	0	902	36	163	62	0	0	261	296	452	39	0	0	787	334	109	296	0	0	739	2689
2:00 PM	9	133	77	0	0	219	14	44	6	0	0	64	88	99	10	0	0	197	93	36	72	0	0	201	681
2:15 PM	14	150	84	0	0	248	6	39	11	0	0	56	63	120	10	0	0	193	82	34	79	0	0	195	692
2:30 PM	19	141	103	0	0	263	12	47	14	0	0	73	71	155	11	0	0	237	81	31	83	0	0	195	768
2:45 PM	14	118	98	0	0	230	12	40	15	0	0	67	63	135	11	0	0	209	103	30	84	0	0	217	723
Hourly Total	56	542	362	0	0	960	44	170	46	0	0	260	285	509	42	0	0	836	359	131	318	0	0	808	2864
3:00 PM	14	133	90	0	0	237	16	34	13	0	0	63	89	141	17	0	0	247	70	28	70	0	0	168	715
3:15 PM	11	112	92	0	0	215	17	48	13	0	0	78	79	129	8	0	0	216	96	19	101	0	0	216	725
3:30 PM	12	111	65	0	0	188	11	40	18	0	0	69	82	114	13	0	0	209	91	34	91	0	0	216	682
3:45 PM	19	112	80	0	0	211	14	31	9	0	0	54	88	163	10	0	0	261	86	25	86	0	0	197	723
Hourly Total	56	468	327	0	0	851	58	153	53	0	0	264	338	547	48	0	0	933	343	106	348	0	0	797	2845
4:00 PM	10	119	83	0	0	212	17	44	9	0	0	70	84	131	12	0	0	227	101	25	87	0	0	213	722
4:15 PM	14	154	108	0	0	276	15	54	11	0	0	80	82	152	12	0	0	246	86	28	76	0	0	190	792
4:30 PM	17	143	96	0	0	256	13	34	17	0	0	64	92	167	6	0	0	265	86	30	66	0	0	182	767
4:45 PM	22	119	74	0	0	215	18	45	14	0	0	77	58	149	3	0	0	210	88	27	71	0	0	186	688
Hourly Total	63	535	361	0	0	959	63	177	51	0	0	291	316	599	33	0	0	948	361	110	300	0	0	771	2969
5:00 PM	15	151	89	0	1	255	24	39	15	0	0	78	86	141	13	0	0	240	92	28	76	0	0	196	769
5:15 PM	14	147	93	0	1	254	18	31	17	0	0	66	86	170	12	0	0	268	72	36	80	0	0	188	776
5:30 PM	8	141	85	0	1	234	22	35	18	0	0	75	81	167	20	0	0	268	82	37	62	0	0	181	758
5:45 PM	12	124	81	0	0	217	9	44	15	0	0	68	89	123	12	0	0	224	99	21	67	0	0	187	696
Hourly Total	49	563	348	0	3	960	73	149	65	0	0	287	342	601	57	0	0	1000	345	122	285	0	0	752	2999
Grand Total	589	5596	3784	0	4	9969	595	1625	585	0	1	2805	2851	5601	516	0	0	8968	3692	1264	3168	0	0	8124	29866
Approach %	5.9	56.1	38.0	0.0	-	-	21.2	57.9	20.9	0.0	-	-	31.8	62.5	5.8	0.0	-	-	45.4	15.6	39.0	0.0	-	-	-
Total %	2.0	18.7	12.7	0.0	-	33.4	2.0	5.4	2.0	0.0	-	9.4	9.5	18.8	1.7	0.0	-	30.0	12.4	4.2	10.6	0.0	-	27.2	-
All Vehicles (no classification)	589	5596	3784	0	-	9969	595	1625	585	0	-	2805	2851	5601	516	0	-	8968	3692	1264	3168	0	-	8124	29866
% All Vehicles (no classification)	100.0	100.0	100.0	-	-	100.0	100.0	100.0	100.0	-	-	100.0	100.0	100.0	100.0	-	-	100.0	100.0	100.0	100.0	-	-	100.0	100.0
Pedestrians	-	-	-	-	4	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-

CJ Hensch & Associates, Inc.

bg@cjhensch.com
5215 Sycamore Ave

Pasadena, Texas, United States 77503
281-487-5417 cwood@browngay.com

Count Name: 6. S. Main St at Herff Rd
Site Code: 6
Start Date: 09/21/2016

Turning Movement Data

Start Time	S. Main St Southbound						Herff Rd Westbound						S. Main St Northbound						Herff Rd Eastbound						Int. Total
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	
6:00 AM	4	39	0	0	0	43	26	0	3	0	0	29	0	34	10	0	0	44	0	0	0	0	0	0	116
6:15 AM	1	68	0	0	0	69	44	0	4	0	0	48	0	37	17	0	0	54	0	0	0	0	0	0	171
6:30 AM	3	70	2	0	0	75	70	0	1	0	0	71	0	34	20	0	0	54	0	0	2	0	0	2	202
6:45 AM	4	93	0	0	0	97	68	0	5	0	0	73	1	73	26	0	0	100	0	1	1	0	0	2	272
Hourly Total	12	270	2	0	0	284	208	0	13	0	0	221	1	178	73	0	0	252	0	1	3	0	0	4	761
7:00 AM	2	95	5	0	0	102	79	0	5	0	0	84	2	78	51	0	0	131	2	1	2	0	0	5	322
7:15 AM	14	148	3	0	0	165	90	0	10	0	0	100	1	91	63	0	0	155	0	0	4	0	0	4	424
7:30 AM	13	148	7	0	0	168	67	0	8	0	0	75	4	123	37	0	0	164	2	3	1	0	0	6	413
7:45 AM	11	186	1	0	0	198	61	1	8	0	0	70	4	135	51	0	0	190	3	2	1	0	0	6	464
Hourly Total	40	577	16	0	0	633	297	1	31	0	0	329	11	427	202	0	0	640	7	6	8	0	0	21	1623
8:00 AM	12	122	5	0	0	139	53	2	15	0	0	70	4	151	88	0	0	243	3	1	5	0	0	9	461
8:15 AM	7	122	2	0	0	131	55	4	14	0	0	73	7	167	64	0	0	238	3	1	1	0	0	5	447
8:30 AM	9	120	5	0	0	134	54	1	12	0	0	67	5	176	68	0	0	249	1	3	6	0	0	10	460
8:45 AM	10	149	4	0	0	163	56	3	14	0	0	73	4	150	21	0	0	175	3	1	4	0	0	8	419
Hourly Total	38	513	16	0	0	567	218	10	55	0	0	283	20	644	241	0	0	905	10	6	16	0	0	32	1787
9:00 AM	3	129	1	0	0	133	27	4	8	0	0	39	3	135	14	0	0	152	2	0	2	0	0	4	328
9:15 AM	9	147	6	0	0	162	21	1	7	0	0	29	2	173	13	0	0	188	4	2	6	0	0	12	391
9:30 AM	11	140	8	0	0	159	31	0	6	0	0	37	7	134	19	0	0	160	4	0	3	0	0	7	363
9:45 AM	6	144	6	0	1	156	19	4	10	0	0	33	10	174	24	0	0	208	3	0	5	0	1	8	405
Hourly Total	29	560	21	0	1	610	98	9	31	0	0	138	22	616	70	0	0	708	13	2	16	0	1	31	1487
10:00 AM	10	118	6	0	0	134	28	0	10	0	0	38	6	142	18	0	0	166	6	2	4	0	0	12	350
10:15 AM	5	129	5	0	0	139	34	1	9	0	0	44	7	134	20	0	0	161	5	3	4	0	0	12	356
10:30 AM	7	132	6	0	0	145	17	3	5	0	0	25	8	162	13	0	0	183	6	0	3	0	0	9	362
10:45 AM	11	156	5	0	0	172	20	1	9	0	0	30	5	136	14	0	0	155	5	1	6	0	0	12	369
Hourly Total	33	535	22	0	0	590	99	5	33	0	0	137	26	574	65	0	0	665	22	6	17	0	0	45	1437
11:00 AM	4	134	8	0	0	146	24	1	16	0	0	41	7	135	20	0	0	162	5	3	7	0	0	15	364
11:15 AM	12	166	14	0	0	192	25	4	7	0	0	36	6	165	12	0	0	183	8	4	5	0	0	17	428
11:30 AM	13	141	8	0	0	162	19	1	21	0	0	41	9	186	16	0	0	211	9	2	4	0	0	15	429
11:45 AM	12	162	9	0	0	183	22	7	15	0	0	44	4	191	20	0	0	215	8	1	10	0	0	19	461
Hourly Total	41	603	39	0	0	683	90	13	59	0	0	162	26	677	68	0	0	771	30	10	26	0	0	66	1682
12:00 PM	8	151	13	0	0	172	23	5	18	0	0	46	14	172	17	0	0	203	14	3	6	0	0	23	444
12:15 PM	9	193	12	0	0	214	23	1	17	0	0	41	5	178	10	0	0	193	11	5	8	0	0	24	472
12:30 PM	17	196	9	0	0	222	18	0	12	0	0	30	13	214	39	1	0	267	10	3	6	0	0	19	538
12:45 PM	14	168	9	0	0	191	25	0	11	0	0	36	13	150	19	0	0	182	14	9	13	0	0	36	445
Hourly Total	48	708	43	0	0	799	89	6	58	0	0	153	45	714	85	1	0	845	49	20	33	0	0	102	1899
1:00 PM	13	167	11	0	0	191	25	3	10	0	0	38	11	157	16	0	0	184	9	5	22	0	0	36	449
1:15 PM	11	163	8	1	0	183	23	4	7	0	0	34	6	134	20	0	0	160	3	3	8	0	0	14	391

1:30 PM	12	155	11	0	0	178	21	2	14	0	0	37	7	154	14	0	0	175	7	2	9	0	0	18	408
1:45 PM	11	150	4	0	0	165	25	4	11	0	0	40	9	155	23	0	0	187	16	3	4	0	0	23	415
Hourly Total	47	635	34	1	0	717	94	13	42	0	0	149	33	600	73	0	0	706	35	13	43	0	0	91	1663
2:00 PM	7	154	11	0	0	172	18	5	12	0	0	35	5	163	22	0	0	190	9	6	11	0	0	26	423
2:15 PM	8	159	2	0	0	169	21	2	5	0	0	28	6	155	27	0	0	188	8	7	5	0	0	20	405
2:30 PM	12	162	3	0	0	177	30	3	10	0	0	43	5	181	47	0	0	233	7	0	3	0	0	10	463
2:45 PM	10	156	11	0	0	177	28	0	20	0	0	48	3	203	39	0	0	245	4	2	4	0	0	10	480
Hourly Total	37	631	27	0	0	695	97	10	47	0	0	154	19	702	135	0	0	856	28	15	23	0	0	66	1771
3:00 PM	13	167	13	0	0	193	30	0	18	0	0	48	7	187	38	0	0	232	11	2	4	0	0	17	490
3:15 PM	13	166	8	0	0	187	29	4	13	0	0	46	6	162	32	0	0	200	12	3	4	0	0	19	452
3:30 PM	27	180	2	0	0	209	19	2	14	1	0	36	3	172	44	0	0	219	6	1	4	0	0	11	475
3:45 PM	22	126	11	0	0	159	29	3	18	0	0	50	7	169	73	0	0	249	14	3	5	0	0	22	480
Hourly Total	75	639	34	0	0	748	107	9	63	1	0	180	23	690	187	0	0	900	43	9	17	0	0	69	1897
4:00 PM	16	164	5	0	0	185	46	1	28	0	0	75	9	180	35	0	0	224	9	2	2	0	0	13	497
4:15 PM	9	195	8	0	0	212	48	2	21	0	0	71	7	195	55	0	0	257	9	2	8	0	0	19	559
4:30 PM	9	166	13	0	0	188	63	4	14	0	0	81	7	178	39	0	0	224	13	4	6	0	1	23	516
4:45 PM	13	178	9	0	1	200	37	2	11	0	0	50	7	181	56	0	0	244	12	4	8	0	0	24	518
Hourly Total	47	703	35	0	1	785	194	9	74	0	0	277	30	734	185	0	0	949	43	12	24	0	1	79	2090
5:00 PM	13	206	9	0	0	228	34	2	13	0	1	49	7	183	58	0	0	248	10	3	4	0	0	17	542
5:15 PM	14	163	5	0	0	182	47	0	15	0	0	62	7	199	57	0	0	263	12	1	5	0	0	18	525
5:30 PM	30	192	7	0	0	229	43	2	10	0	0	55	6	204	53	0	0	263	5	6	5	0	0	16	563
5:45 PM	15	130	11	0	0	156	43	4	12	0	0	59	5	176	61	0	0	242	9	6	5	0	0	20	477
Hourly Total	72	691	32	0	0	795	167	8	50	0	1	225	25	762	229	0	0	1016	36	16	19	0	0	71	2107
Grand Total	519	7065	321	1	2	7906	1758	93	556	1	1	2408	281	7318	1613	1	0	9213	316	116	245	0	2	677	20204
Approach %	6.6	89.4	4.1	0.0	-	-	73.0	3.9	23.1	0.0	-	-	3.1	79.4	17.5	0.0	-	-	46.7	17.1	36.2	0.0	-	-	-
Total %	2.6	35.0	1.6	0.0	-	39.1	8.7	0.5	2.8	0.0	-	11.9	1.4	36.2	8.0	0.0	-	45.6	1.6	0.6	1.2	0.0	-	3.4	-
All Vehicles (no classification)	519	7065	321	1	-	7906	1758	93	556	1	-	2408	281	7318	1613	1	-	9213	316	116	245	0	-	677	20204
% All Vehicles (no classification)	100.0	100.0	100.0	100.0	-	100.0	100.0	100.0	100.0	100.0	-	100.0	100.0	100.0	100.0	100.0	-	100.0	100.0	100.0	100.0	-	-	100.0	100.0
Pedestrians	-	-	-	-	2	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	2	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-

CJ Hensch & Associates, Inc.

bg@cjhensch.com
5215 Sycamore Ave

Pasadena, Texas, United States 77503
281-487-5417 cwood@browngay.com

Count Name: 7. Bus. 87 at IH 10 WBFR
Site Code:
Start Date: 09/21/2016
Page No: 1

Turning Movement Data

Start Time	Bus. 87 Southbound				IH 10 WBFR Westbound			Bus. 87 Northbound				
	Left	Thru	Peds	App. Total	Right	Peds	App. Total	Thru	Right	Peds	App. Total	Int. Total
6:00 AM	1	66	0	67	11	0	11	27	0	0	27	105
6:15 AM	12	97	0	109	13	0	13	40	0	0	40	162
6:30 AM	12	132	0	144	14	0	14	51	0	0	51	209
6:45 AM	24	136	0	160	31	0	31	83	0	0	83	274
Hourly Total	49	431	0	480	69	0	69	201	0	0	201	750
7:00 AM	28	157	0	185	36	0	36	103	0	0	103	324
7:15 AM	72	167	0	239	34	0	34	130	0	0	130	403
7:30 AM	65	151	0	216	48	0	48	119	0	0	119	383
7:45 AM	92	151	0	243	50	0	50	150	0	0	150	443
Hourly Total	257	626	0	883	168	0	168	502	0	0	502	1553
8:00 AM	44	138	0	182	50	0	50	201	0	0	201	433
8:15 AM	37	117	0	154	64	0	64	182	1	0	183	401
8:30 AM	34	143	0	177	59	0	59	181	2	0	183	419
8:45 AM	42	145	0	187	43	0	43	120	0	0	120	350
Hourly Total	157	543	0	700	216	0	216	684	3	0	687	1603
9:00 AM	37	108	0	145	51	0	51	115	0	0	115	311
9:15 AM	38	125	0	163	54	0	54	117	0	0	117	334
9:30 AM	40	130	0	170	45	0	45	115	0	0	115	330
9:45 AM	35	106	0	141	69	0	69	130	1	0	131	341
Hourly Total	150	469	0	619	219	0	219	477	1	0	478	1316
10:00 AM	36	116	0	152	57	0	57	99	0	0	99	308
10:15 AM	55	114	0	169	45	0	45	106	0	0	106	320
10:30 AM	38	103	0	141	53	0	53	123	0	0	123	317
10:45 AM	33	122	0	155	50	0	50	97	0	0	97	302
Hourly Total	162	455	0	617	205	0	205	425	0	0	425	1247
11:00 AM	39	127	0	166	61	0	61	90	0	0	90	317
11:15 AM	45	128	0	173	58	0	58	104	0	0	104	335
11:30 AM	41	107	0	148	90	0	90	109	0	0	109	347
11:45 AM	51	129	0	180	66	0	66	138	0	0	138	384
Hourly Total	176	491	0	667	275	0	275	441	0	0	441	1383
12:00 PM	43	135	0	178	78	0	78	115	0	0	115	371
12:15 PM	65	135	0	200	81	0	81	110	0	0	110	391
12:30 PM	78	133	0	211	84	0	84	171	0	0	171	466
12:45 PM	56	143	0	199	59	0	59	113	0	0	113	371
Hourly Total	242	546	0	788	302	0	302	509	0	0	509	1599
1:00 PM	56	139	0	195	48	0	48	112	0	0	112	355
1:15 PM	39	134	0	173	60	0	60	89	0	0	89	322
1:30 PM	48	127	0	175	58	0	58	98	1	0	99	332

1:45 PM	53	123	0	176	67	0	67	106	0	0	106	349
Hourly Total	196	523	0	719	233	0	233	405	1	0	406	1358
2:00 PM	43	133	0	176	74	0	74	118	1	0	119	369
2:15 PM	39	138	0	177	65	0	65	106	0	0	106	348
2:30 PM	56	132	0	188	65	0	65	145	0	0	145	398
2:45 PM	54	126	1	180	80	0	80	149	0	0	149	409
Hourly Total	192	529	1	721	284	0	284	518	1	0	519	1524
3:00 PM	60	117	0	177	68	0	68	151	0	0	151	396
3:15 PM	69	122	0	191	63	0	63	131	0	0	131	385
3:30 PM	60	142	0	202	55	0	55	158	0	0	158	415
3:45 PM	57	101	0	158	76	0	76	169	0	0	169	403
Hourly Total	246	482	0	728	262	0	262	609	0	0	609	1599
4:00 PM	47	165	0	212	105	0	105	122	0	0	122	439
4:15 PM	67	191	0	258	76	0	76	173	0	0	173	507
4:30 PM	50	187	0	237	85	0	85	154	0	0	154	476
4:45 PM	43	183	0	226	71	0	71	148	0	0	148	445
Hourly Total	207	726	0	933	337	0	337	597	0	0	597	1867
5:00 PM	34	204	0	238	74	0	74	178	0	0	178	490
5:15 PM	42	168	0	210	68	0	68	195	0	0	195	473
5:30 PM	36	191	0	227	81	0	81	183	1	0	184	492
5:45 PM	36	129	0	165	48	0	48	166	0	0	166	379
Hourly Total	148	692	0	840	271	0	271	722	1	0	723	1834
Grand Total	2182	6513	1	8695	2841	0	2841	6090	7	0	6097	17633
Approach %	25.1	74.9	-	-	100.0	-	-	99.9	0.1	-	-	-
Total %	12.4	36.9	-	49.3	16.1	-	16.1	34.5	0.0	-	34.6	-
All Vehicles (no classification)	2182	6513	-	8695	2841	-	2841	6090	7	-	6097	17633
% All Vehicles (no classification)	100.0	100.0	-	100.0	100.0	-	100.0	100.0	100.0	-	100.0	100.0
Pedestrians	-	-	1	-	-	0	-	-	-	0	-	-
% Pedestrians	-	-	100.0	-	-	-	-	-	-	-	-	-

CJ Hensch & Associates, Inc.

bg@cjhensch.com
5215 Sycamore Ave

Pasadena, Texas, United States 77503
281-487-5417 cwood@browngay.com

Count Name: 8. IH 10 NBFR at SH 46
Site Code: 8
Start Date: 09/21/2016

Turning Movement Data

Start Time	IH 10 NBFR Southbound						SH 46 Westbound						IH 10 NBFR Northbound						SH 46 Eastbound						
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Int. Total
6:00 AM	2	0	10	0	0	12	0	29	15	0	0	44	7	1	16	0	0	24	18	46	0	0	0	64	144
6:15 AM	5	0	23	0	0	28	0	45	21	0	0	66	17	1	15	0	0	33	22	44	0	0	0	66	193
6:30 AM	6	0	15	0	0	21	0	49	18	0	0	67	21	4	23	0	0	48	24	58	0	0	0	82	218
6:45 AM	2	0	23	0	0	25	0	44	26	0	0	70	33	5	19	0	0	57	26	73	0	0	0	99	251
Hourly Total	15	0	71	0	0	86	0	167	80	0	0	247	78	11	73	0	0	162	90	221	0	0	0	311	806
7:00 AM	9	0	40	0	0	49	0	63	29	0	0	92	22	13	20	0	0	55	35	92	0	0	0	127	323
7:15 AM	7	0	37	0	0	44	0	69	41	0	0	110	43	14	30	0	0	87	50	144	0	0	0	194	435
7:30 AM	10	0	37	0	0	47	0	71	54	0	0	125	44	15	35	0	0	94	51	139	0	0	0	190	456
7:45 AM	16	0	36	0	0	52	0	86	49	0	0	135	53	19	40	0	0	112	54	153	0	0	1	207	506
Hourly Total	42	0	150	0	0	192	0	289	173	0	0	462	162	61	125	0	0	348	190	528	0	0	1	718	1720
8:00 AM	9	0	35	0	0	44	0	71	46	0	0	117	45	14	40	0	0	99	53	153	0	0	0	206	466
8:15 AM	10	0	24	0	0	34	0	84	46	0	1	130	57	14	42	0	0	113	48	153	0	0	0	201	478
8:30 AM	9	0	53	0	0	62	0	94	43	0	0	137	47	15	45	0	0	107	38	152	0	0	0	190	496
8:45 AM	9	0	32	0	0	41	0	91	26	0	0	117	29	22	30	0	0	81	53	133	0	0	0	186	425
Hourly Total	37	0	144	0	0	181	0	340	161	0	1	501	178	65	157	0	0	400	192	591	0	0	0	783	1865
9:00 AM	7	0	24	0	0	31	0	104	30	0	1	134	37	12	30	0	0	79	43	142	0	0	0	185	429
9:15 AM	7	0	34	0	0	41	0	86	35	0	0	121	43	13	46	0	0	102	49	137	0	0	0	186	450
9:30 AM	7	0	26	0	0	33	0	78	32	0	0	110	32	14	34	0	0	80	41	101	0	0	0	142	365
9:45 AM	14	0	25	0	0	39	0	97	39	0	2	136	43	14	30	0	0	87	38	133	0	0	0	171	433
Hourly Total	35	0	109	0	0	144	0	365	136	0	3	501	155	53	140	0	0	348	171	513	0	0	0	684	1677
10:00 AM	10	0	22	0	0	32	0	97	51	0	0	148	42	5	32	0	0	79	34	115	0	0	0	149	408
10:15 AM	9	0	25	0	0	34	0	116	41	0	0	157	40	8	30	0	0	78	42	130	0	0	0	172	441
10:30 AM	13	0	21	0	0	34	0	113	43	0	1	156	28	10	34	0	1	72	29	109	0	0	0	138	400
10:45 AM	12	0	19	0	0	31	0	115	49	0	0	164	38	11	47	0	0	96	34	131	0	0	0	165	456
Hourly Total	44	0	87	0	0	131	0	441	184	0	1	625	148	34	143	0	1	325	139	485	0	0	0	624	1705
11:00 AM	10	0	31	0	0	41	0	121	66	0	0	187	35	7	42	0	0	84	49	128	0	0	0	177	489
11:15 AM	10	0	24	0	0	34	0	136	54	0	0	190	29	1	31	0	0	61	44	135	0	0	0	179	464
11:30 AM	18	0	32	0	0	50	0	120	73	0	0	193	31	10	42	0	0	83	47	137	0	0	0	184	510
11:45 AM	14	0	32	0	0	46	0	118	71	0	0	189	26	18	54	0	0	98	67	143	0	0	0	210	543
Hourly Total	52	0	119	0	0	171	0	495	264	0	0	759	121	36	169	0	0	326	207	543	0	0	0	750	2006
12:00 PM	27	0	43	0	0	70	0	145	55	0	0	200	32	13	41	0	0	86	41	127	0	0	0	168	524
12:15 PM	26	0	32	0	0	58	0	150	74	0	0	224	33	17	59	0	0	109	58	152	0	0	0	210	601
12:30 PM	19	0	50	0	0	69	1	146	71	0	0	218	52	12	48	0	0	112	48	112	0	0	0	160	559
12:45 PM	10	0	44	0	0	54	0	146	73	0	2	219	33	10	47	0	0	90	45	144	0	0	0	189	552
Hourly Total	82	0	169	0	0	251	1	587	273	0	2	861	150	52	195	0	0	397	192	535	0	0	0	727	2236
1:00 PM	15	0	41	0	0	56	0	123	79	0	0	202	36	10	23	0	0	69	49	129	0	0	0	178	505
1:15 PM	12	0	36	0	0	48	0	136	59	0	0	195	36	18	41	0	0	95	38	129	0	0	0	167	505

1:30 PM	10	0	30	0	0	40	0	112	64	0	0	176	23	13	35	0	0	71	55	139	0	0	0	194	481
1:45 PM	13	0	32	0	0	45	0	134	71	0	0	205	41	9	47	0	0	97	36	129	0	0	0	165	512
Hourly Total	50	0	139	0	0	189	0	505	273	0	0	778	136	50	146	0	0	332	178	526	0	0	0	704	2003
2:00 PM	9	0	30	0	0	39	0	120	59	0	0	179	40	9	34	0	0	83	41	125	0	0	0	166	467
2:15 PM	9	0	31	0	0	40	0	115	68	0	0	183	35	11	52	0	0	98	65	120	0	0	0	185	506
2:30 PM	9	0	34	0	0	43	0	130	81	0	0	211	45	14	52	0	0	111	41	164	0	0	0	205	570
2:45 PM	11	0	23	0	0	34	0	133	75	0	0	208	46	12	65	0	0	123	36	130	0	0	0	166	531
Hourly Total	38	0	118	0	0	156	0	498	283	0	0	781	166	46	203	0	0	415	183	539	0	0	0	722	2074
3:00 PM	23	0	34	0	0	57	0	111	89	0	0	200	48	17	57	0	0	122	29	110	0	0	0	139	518
3:15 PM	11	0	24	0	0	35	0	125	89	0	0	214	44	14	60	0	0	118	38	117	0	0	0	155	522
3:30 PM	7	0	35	0	0	42	0	129	60	1	0	190	53	15	54	0	0	122	48	133	0	0	0	181	535
3:45 PM	9	0	35	0	0	44	0	131	59	0	0	190	51	17	81	0	0	149	44	123	0	0	0	167	550
Hourly Total	50	0	128	0	0	178	0	496	297	1	0	794	196	63	252	0	0	511	159	483	0	0	0	642	2125
4:00 PM	17	0	45	0	0	62	0	136	80	0	0	216	55	14	57	0	0	126	38	132	0	0	0	170	574
4:15 PM	17	0	53	0	0	70	0	137	79	0	0	216	61	16	56	0	0	133	36	120	0	0	0	156	575
4:30 PM	16	0	51	0	0	67	0	145	81	0	0	226	66	17	37	0	0	120	45	126	0	0	0	171	584
4:45 PM	8	0	32	0	0	40	0	130	82	0	0	212	69	20	56	0	0	145	55	123	0	0	0	178	575
Hourly Total	58	0	181	0	0	239	0	548	322	0	0	870	251	67	206	0	0	524	174	501	0	0	0	675	2308
5:00 PM	11	0	39	0	0	50	0	119	96	0	0	215	59	19	56	0	0	134	53	142	0	0	0	195	594
5:15 PM	14	0	42	0	0	56	0	140	83	0	0	223	58	27	59	0	0	144	56	137	0	0	0	193	616
5:30 PM	11	0	48	0	0	59	0	132	97	0	0	229	61	23	63	0	0	147	45	140	0	0	0	185	620
5:45 PM	9	0	24	0	0	33	0	125	112	0	0	237	43	25	55	0	0	123	45	127	0	0	0	172	565
Hourly Total	45	0	153	0	0	198	0	516	388	0	0	904	221	94	233	0	0	548	199	546	0	0	0	745	2395
Grand Total	548	0	1568	0	0	2116	1	5247	2834	1	7	8083	1962	632	2042	0	1	4636	2074	6011	0	0	1	8085	22920
Approach %	25.9	0.0	74.1	0.0	-	-	0.0	64.9	35.1	0.0	-	-	42.3	13.6	44.0	0.0	-	-	25.7	74.3	0.0	0.0	-	-	-
Total %	2.4	0.0	6.8	0.0	-	9.2	0.0	22.9	12.4	0.0	-	35.3	8.6	2.8	8.9	0.0	-	20.2	9.0	26.2	0.0	0.0	-	35.3	-
All Vehicles (no classification)	548	0	1568	0	-	2116	1	5247	2834	1	-	8083	1962	632	2042	0	-	4636	2074	6011	0	0	-	8085	22920
% All Vehicles (no classification)	100.0	-	100.0	-	-	100.0	100.0	100.0	100.0	100.0	-	100.0	100.0	100.0	100.0	-	-	100.0	100.0	100.0	-	-	-	100.0	100.0
Pedestrians	-	-	-	-	0	-	-	-	-	-	7	-	-	-	-	-	1	-	-	-	-	-	1	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-

CJ Hensch & Associates, Inc.

bg@cjhensch.com
5215 Sycamore Ave

Pasadena, Texas, United States 77503
281-487-5417 cwood@browngay.com

Count Name: 9. IH 10 SBFR at SH 46
Site Code: 9
Start Date: 09/21/2016
Page No: 1

Turning Movement Data

Start Time	IH 10 NBFR Southbound						Johns Rd Westbound						IH 10 NBFR Northbound						Johns Rd Eastbound						
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Int. Total
6:00 AM	9	6	3	0	0	18	32	14	0	0	0	46	1	0	18	0	0	19	0	35	44	0	0	79	162
6:15 AM	14	4	1	0	0	19	58	28	0	0	0	86	1	0	16	0	0	17	0	31	59	0	0	90	212
6:30 AM	21	14	10	0	0	45	57	29	0	0	0	86	0	0	16	0	0	16	0	47	78	0	0	125	272
6:45 AM	24	12	9	0	0	45	74	25	0	0	0	99	2	0	22	0	0	24	0	60	90	0	0	150	318
Hourly Total	68	36	23	0	0	127	221	96	0	0	0	317	4	0	72	0	0	76	0	173	271	0	0	444	964
7:00 AM	32	6	14	0	0	52	79	46	0	0	0	125	5	0	36	0	0	41	0	63	62	0	0	125	343
7:15 AM	59	13	23	0	0	95	94	54	0	0	0	148	4	0	41	0	0	45	0	95	65	0	0	160	448
7:30 AM	65	17	17	0	0	99	89	57	0	0	0	146	3	0	47	0	0	50	0	85	61	0	0	146	441
7:45 AM	62	12	17	0	0	91	96	82	0	0	3	178	2	0	47	0	0	49	0	94	44	0	0	138	456
Hourly Total	218	48	71	0	0	337	358	239	0	0	3	597	14	0	171	0	0	185	0	337	232	0	0	569	1688
8:00 AM	45	12	12	0	0	69	89	53	0	0	0	142	3	0	57	0	0	60	0	113	75	0	0	188	459
8:15 AM	43	16	16	0	0	75	98	70	0	0	0	168	3	0	52	0	0	55	0	96	59	0	0	155	453
8:30 AM	44	16	15	0	0	75	98	73	0	0	0	171	7	0	46	0	0	53	0	103	48	0	0	151	450
8:45 AM	59	5	21	0	0	85	82	69	0	0	0	151	7	0	38	0	0	45	0	86	38	0	0	124	405
Hourly Total	191	49	64	0	0	304	367	265	0	0	0	632	20	0	193	0	0	213	0	398	220	0	0	618	1767
9:00 AM	48	9	20	0	0	77	95	72	0	0	0	167	2	0	41	0	0	43	0	91	53	0	0	144	431
9:15 AM	55	13	9	0	0	77	91	69	0	0	0	160	5	0	52	0	0	57	0	84	52	0	0	136	430
9:30 AM	36	14	15	0	0	65	81	59	0	0	0	140	5	0	41	0	0	46	0	68	42	0	0	110	361
9:45 AM	55	6	10	0	0	71	92	71	0	0	0	163	3	0	45	0	0	48	0	71	29	0	0	100	382
Hourly Total	194	42	54	0	0	290	359	271	0	0	0	630	15	0	179	0	0	194	0	314	176	0	0	490	1604
10:00 AM	36	4	9	0	0	49	88	66	0	0	0	154	7	0	41	0	0	48	0	77	45	0	0	122	373
10:15 AM	38	7	12	0	0	57	89	82	0	0	0	171	13	0	42	0	0	55	0	82	40	0	0	122	405
10:30 AM	36	13	14	0	0	63	86	76	0	0	0	162	5	0	39	0	0	44	0	74	40	0	0	114	383
10:45 AM	31	9	13	0	0	53	83	80	0	0	0	163	6	1	42	0	0	49	0	84	47	0	0	131	396
Hourly Total	141	33	48	0	0	222	346	304	0	0	0	650	31	1	164	0	0	196	0	317	172	0	0	489	1557
11:00 AM	45	7	18	0	0	70	112	81	0	0	0	193	11	0	48	0	0	59	0	74	22	0	0	96	418
11:15 AM	51	11	15	0	0	77	103	85	0	0	0	188	5	0	39	0	0	44	0	87	42	0	0	129	438
11:30 AM	65	15	30	0	0	110	96	76	0	0	0	172	7	0	39	0	0	46	0	85	46	0	0	131	459
11:45 AM	51	8	13	0	1	72	101	85	0	0	0	186	7	0	41	0	0	48	0	107	29	0	1	136	442
Hourly Total	212	41	76	0	1	329	412	327	0	0	0	739	30	0	167	0	0	197	0	353	139	0	1	492	1757
12:00 PM	43	9	18	0	0	70	102	110	0	0	0	212	8	0	49	0	0	57	0	87	44	0	0	131	470
12:15 PM	53	16	20	0	0	89	119	94	0	0	0	213	9	0	44	0	0	53	0	95	39	0	0	134	489
12:30 PM	42	15	14	0	0	71	137	109	0	0	0	246	6	0	47	0	0	53	0	86	52	0	0	138	508
12:45 PM	46	9	27	0	0	82	119	102	0	0	0	221	6	0	37	0	0	43	0	98	37	0	0	135	481
Hourly Total	184	49	79	0	0	312	477	415	0	0	0	892	29	0	177	0	0	206	0	366	172	0	0	538	1948
1:00 PM	40	9	7	0	0	56	99	110	0	0	0	209	8	0	43	0	0	51	0	87	31	0	0	118	434
1:15 PM	54	12	16	0	0	82	110	98	0	0	0	208	8	0	48	0	0	56	0	83	45	0	0	128	474

1:30 PM	49	9	22	0	0	80	85	75	0	0	0	160	9	0	38	0	0	47	0	104	51	0	0	155	442
1:45 PM	46	6	15	0	0	67	97	100	0	0	0	197	15	0	45	0	0	60	0	81	42	0	0	123	447
Hourly Total	189	36	60	0	0	285	391	383	0	0	0	774	40	0	174	0	0	214	0	355	169	0	0	524	1797
2:00 PM	29	5	22	0	0	56	97	104	0	0	0	201	9	0	56	0	0	65	0	67	38	0	0	105	427
2:15 PM	36	11	21	0	0	68	88	92	0	0	0	180	7	0	55	0	0	62	0	83	36	0	0	119	429
2:30 PM	63	7	9	0	0	79	94	108	0	0	0	202	7	0	41	0	0	48	0	99	47	0	0	146	475
2:45 PM	51	11	15	0	0	77	104	102	0	0	0	206	6	0	49	0	0	55	0	67	31	0	0	98	436
Hourly Total	179	34	67	0	0	280	383	406	0	0	0	789	29	0	201	0	0	230	0	316	152	0	0	468	1767
3:00 PM	42	14	18	0	0	74	91	87	0	0	0	178	4	0	40	0	0	44	0	59	30	0	0	89	385
3:15 PM	43	12	18	0	0	73	77	113	0	0	0	190	3	0	43	0	0	46	0	71	33	0	0	104	413
3:30 PM	48	5	16	0	0	69	89	131	0	0	0	220	3	0	51	0	0	54	0	82	29	0	0	111	454
3:45 PM	42	7	9	0	0	58	101	111	0	0	0	212	11	0	50	0	0	61	0	74	21	0	0	95	426
Hourly Total	175	38	61	0	0	274	358	442	0	0	0	800	21	0	184	0	0	205	0	286	113	0	0	399	1678
4:00 PM	53	13	21	0	0	87	107	128	0	0	0	235	9	0	42	0	0	51	0	64	35	0	0	99	472
4:15 PM	45	9	20	0	0	74	118	123	0	0	0	241	9	0	42	0	0	51	0	68	51	0	0	119	485
4:30 PM	52	7	28	0	0	87	108	157	0	0	0	265	12	0	41	0	0	53	0	80	26	0	0	106	511
4:45 PM	43	8	22	0	0	73	96	137	0	0	0	233	7	0	51	0	0	58	0	65	33	0	0	98	462
Hourly Total	193	37	91	0	0	321	429	545	0	0	0	974	37	0	176	0	0	213	0	277	145	0	0	422	1930
5:00 PM	52	13	34	0	0	99	90	125	0	0	0	215	16	0	73	0	0	89	0	64	38	0	0	102	505
5:15 PM	47	10	24	0	1	81	95	141	0	0	0	236	14	0	59	0	0	73	0	89	39	0	1	128	518
5:30 PM	65	10	19	0	0	94	91	153	0	0	0	244	17	0	40	0	0	57	0	78	29	0	0	107	502
5:45 PM	49	20	6	0	0	75	83	112	0	0	0	195	8	0	48	0	0	56	0	78	40	0	0	118	444
Hourly Total	213	53	83	0	1	349	359	531	0	0	0	890	55	0	220	0	0	275	0	309	146	0	1	455	1969
Grand Total	2157	496	777	0	2	3430	4460	4224	0	0	3	8684	325	1	2078	0	0	2404	0	3801	2107	0	2	5908	20426
Approach %	62.9	14.5	22.7	0.0	-	-	51.4	48.6	0.0	0.0	-	-	13.5	0.0	86.4	0.0	-	-	0.0	64.3	35.7	0.0	-	-	-
Total %	10.6	2.4	3.8	0.0	-	16.8	21.8	20.7	0.0	0.0	-	42.5	1.6	0.0	10.2	0.0	-	11.8	0.0	18.6	10.3	0.0	-	28.9	-
All Vehicles (no classification)	2157	496	777	0	-	3430	4460	4224	0	0	-	8684	325	1	2078	0	-	2404	0	3801	2107	0	-	5908	20426
% All Vehicles (no classification)	100.0	100.0	100.0	-	-	100.0	100.0	100.0	-	-	-	100.0	100.0	100.0	100.0	-	-	100.0	-	100.0	100.0	-	-	100.0	100.0
Pedestrians	-	-	-	-	2	-	-	-	-	-	3	-	-	-	-	-	0	-	-	-	-	-	2	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-

CJ Hensch & Associates, Inc.

bg@cjhensch.com
5215 Sycamore Ave

Pasadena, Texas, United States 77503
281-487-5417 cwood@browngay.com

Count Name: 10. IH 10 SBFR at Johns Rd
Site Code: 10
Start Date: 09/21/2016

Turning Movement Data

Start Time	IH 10 NBFR Southbound						Johns Rd Westbound						IH 10 NBFR Northbound						Johns Rd Eastbound						
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Int. Total
6:00 AM	6	8	1	0	0	15	26	8	10	0	0	44	0	0	6	0	0	6	1	5	6	0	0	12	77
6:15 AM	14	5	6	0	0	25	34	6	9	0	0	49	0	0	1	0	0	1	1	7	6	0	0	14	89
6:30 AM	13	20	2	0	0	35	40	15	12	0	0	67	0	0	7	0	0	7	1	8	14	0	0	23	132
6:45 AM	31	17	3	0	0	51	48	15	12	0	0	75	1	0	5	0	0	6	1	12	8	0	0	21	153
Hourly Total	64	50	12	0	0	126	148	44	43	0	0	235	1	0	19	0	0	20	4	32	34	0	0	70	451
7:00 AM	35	20	3	0	0	58	54	22	12	0	0	88	0	1	9	0	0	10	1	19	15	0	0	35	191
7:15 AM	65	9	5	0	0	79	76	19	21	0	0	116	0	1	10	0	0	11	4	24	10	0	0	38	244
7:30 AM	24	15	5	0	0	44	68	16	19	0	0	103	1	1	14	0	0	16	0	17	13	0	0	30	193
7:45 AM	16	12	5	0	0	33	51	15	24	0	0	90	0	0	10	0	0	10	0	17	7	0	0	24	157
Hourly Total	140	56	18	0	0	214	249	72	76	0	0	397	1	3	43	0	0	47	5	77	45	0	0	127	785
8:00 AM	30	20	7	0	0	57	45	21	17	0	0	83	0	0	9	0	0	9	0	16	15	0	0	31	180
8:15 AM	28	15	2	0	0	45	57	17	20	0	0	94	0	1	7	0	0	8	0	21	14	0	0	35	182
8:30 AM	14	12	13	0	0	39	51	26	12	0	0	89	0	0	2	0	0	2	0	11	13	0	0	24	154
8:45 AM	18	14	5	0	0	37	37	19	16	0	0	72	0	2	4	0	0	6	2	14	7	0	0	23	138
Hourly Total	90	61	27	0	0	178	190	83	65	0	0	338	0	3	22	0	0	25	2	62	49	0	0	113	654
9:00 AM	12	17	9	0	0	38	34	15	12	0	0	61	0	2	8	0	0	10	1	14	10	0	0	25	134
9:15 AM	17	18	3	0	0	38	19	12	20	0	0	51	0	3	3	0	0	6	1	8	14	0	0	23	118
9:30 AM	12	18	9	0	0	39	36	14	13	0	0	63	0	1	5	0	0	6	2	9	6	0	0	17	125
9:45 AM	13	20	5	0	0	38	32	18	15	0	0	65	0	1	5	0	0	6	1	10	8	0	0	19	128
Hourly Total	54	73	26	0	0	153	121	59	60	0	0	240	0	7	21	0	0	28	5	41	38	0	0	84	505
10:00 AM	17	8	4	0	0	29	25	15	11	0	1	51	0	1	8	0	0	9	1	7	11	0	0	19	108
10:15 AM	8	12	4	0	0	24	30	25	13	0	2	68	0	1	4	0	0	5	0	4	12	0	0	16	113
10:30 AM	9	15	9	0	0	33	42	18	14	0	0	74	0	0	10	0	0	10	1	12	9	0	0	22	139
10:45 AM	12	13	10	0	0	35	30	16	14	0	0	60	1	1	4	0	0	6	1	8	10	0	0	19	120
Hourly Total	46	48	27	0	0	121	127	74	52	0	3	253	1	3	26	0	0	30	3	31	42	0	0	76	480
11:00 AM	26	17	6	0	0	49	44	19	13	0	0	76	0	0	9	0	0	9	2	14	10	0	0	26	160
11:15 AM	18	20	10	0	0	48	27	18	19	0	0	64	0	1	6	0	0	7	1	13	15	0	0	29	148
11:30 AM	19	20	3	0	0	42	36	21	24	0	0	81	0	1	7	0	0	8	1	9	16	0	0	26	157
11:45 AM	19	12	10	0	0	41	40	28	27	0	0	95	0	1	8	0	0	9	2	17	9	0	0	28	173
Hourly Total	82	69	29	0	0	180	147	86	83	0	0	316	0	3	30	0	0	33	6	53	50	0	0	109	638
12:00 PM	17	9	7	0	0	33	33	20	20	0	0	73	0	3	4	0	0	7	1	17	9	0	0	27	140
12:15 PM	22	19	3	0	0	44	32	13	18	0	0	63	0	3	10	0	0	13	2	10	10	0	0	22	142
12:30 PM	14	20	7	0	0	41	34	23	26	0	0	83	0	2	8	0	0	10	1	13	11	0	0	25	159
12:45 PM	21	15	5	0	0	41	33	25	18	0	0	76	3	2	8	0	0	13	1	7	13	0	0	21	151
Hourly Total	74	63	22	0	0	159	132	81	82	0	0	295	3	10	30	0	0	43	5	47	43	0	0	95	592
1:00 PM	10	14	3	0	0	27	24	20	19	0	0	63	0	0	2	0	0	2	0	6	15	0	0	21	113
1:15 PM	13	16	5	0	0	34	33	17	17	0	0	67	0	0	4	0	0	4	0	9	16	0	0	25	130

1:30 PM	18	23	7	0	0	48	31	23	21	0	0	75	0	0	4	0	0	4	1	13	16	0	0	30	157
1:45 PM	14	10	4	0	0	28	24	25	29	0	0	78	0	0	4	0	0	4	4	21	7	0	0	32	142
Hourly Total	55	63	19	0	0	137	112	85	86	0	0	283	0	0	14	0	0	14	5	49	54	0	0	108	542
2:00 PM	16	10	8	0	0	34	40	16	26	0	0	82	0	2	7	0	0	9	2	17	7	0	0	26	151
2:15 PM	15	13	2	0	0	30	32	13	15	0	0	60	1	0	1	0	0	2	0	12	17	0	0	29	121
2:30 PM	17	14	4	0	0	35	27	23	20	0	0	70	0	2	5	0	0	7	0	9	11	0	0	20	132
2:45 PM	14	11	5	0	0	30	36	25	21	0	0	82	1	1	2	0	0	4	1	13	12	0	0	26	142
Hourly Total	62	48	19	0	0	129	135	77	82	0	0	294	2	5	15	0	0	22	3	51	47	0	0	101	546
3:00 PM	18	11	5	0	0	34	35	20	17	0	0	72	0	0	5	0	0	5	2	13	10	0	0	25	136
3:15 PM	21	17	4	0	0	42	32	25	30	0	0	87	0	2	5	0	0	7	2	9	7	0	0	18	154
3:30 PM	21	14	9	0	0	44	41	35	21	0	0	97	0	0	9	0	0	9	1	16	7	0	0	24	174
3:45 PM	24	13	7	0	0	44	47	23	19	0	0	89	0	1	5	0	0	6	3	19	8	0	0	30	169
Hourly Total	84	55	25	0	0	164	155	103	87	0	0	345	0	3	24	0	0	27	8	57	32	0	0	97	633
4:00 PM	25	16	5	0	0	46	59	35	45	0	0	139	0	2	8	0	0	10	4	15	12	0	0	31	226
4:15 PM	31	20	8	0	0	59	59	34	48	0	0	141	1	2	12	0	0	15	1	17	6	0	0	24	239
4:30 PM	31	22	9	0	0	62	47	30	31	0	0	108	1	5	4	0	0	10	3	14	9	0	0	26	206
4:45 PM	18	19	6	0	0	43	42	28	49	0	0	119	0	1	15	0	0	16	4	15	8	0	0	27	205
Hourly Total	105	77	28	0	0	210	207	127	173	0	0	507	2	10	39	0	0	51	12	61	35	0	0	108	876
5:00 PM	28	27	8	0	0	63	42	25	32	0	0	99	2	2	6	1	0	11	2	10	10	0	0	22	195
5:15 PM	33	32	4	0	0	69	45	25	32	0	0	102	1	1	14	0	0	16	1	10	15	0	0	26	213
5:30 PM	32	16	5	0	0	53	51	24	48	0	0	123	0	0	12	0	1	12	1	19	13	0	0	33	221
5:45 PM	33	23	8	0	0	64	48	37	51	0	0	136	0	2	5	0	0	7	2	11	8	0	0	21	228
Hourly Total	126	98	25	0	0	249	186	111	163	0	0	460	3	5	37	1	1	46	6	50	46	0	0	102	857
Grand Total	982	761	277	0	0	2020	1909	1002	1052	0	3	3963	13	52	320	1	1	386	64	611	515	0	0	1190	7559
Approach %	48.6	37.7	13.7	0.0	-	-	48.2	25.3	26.5	0.0	-	-	3.4	13.5	82.9	0.3	-	-	5.4	51.3	43.3	0.0	-	-	-
Total %	13.0	10.1	3.7	0.0	-	26.7	25.3	13.3	13.9	0.0	-	52.4	0.2	0.7	4.2	0.0	-	5.1	0.8	8.1	6.8	0.0	-	15.7	-
All Vehicles (no classification)	982	761	277	0	-	2020	1909	1002	1052	0	-	3963	13	52	320	1	-	386	64	611	515	0	-	1190	7559
% All Vehicles (no classification)	100.0	100.0	100.0	-	-	100.0	100.0	100.0	100.0	-	-	100.0	100.0	100.0	100.0	100.0	-	100.0	100.0	100.0	100.0	-	-	100.0	100.0
Pedestrians	-	-	-	-	0	-	-	-	-	-	3	-	-	-	-	-	1	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-

CJ Hensch & Associates, Inc.

bg@cjhensch.com
5215 Sycamore Ave

Pasadena, Texas, United States 77503
281-487-5417 cwood@browngay.com

Count Name: 11. IH 10 WBFR at Johns Rd
Site Code: 11
Start Date: 09/21/2016

Turning Movement Data

Start Time	IH 10 NBFR Southbound						Johns Rd Westbound						IH 10 NBFR Northbound						Johns Rd Eastbound						
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Int. Total
6:00 AM	1	0	0	0	0	1	0	30	2	0	0	32	15	3	8	0	0	26	5	12	0	0	0	17	76
6:15 AM	0	0	1	0	0	1	0	27	5	0	0	32	17	9	5	0	0	31	5	16	0	0	0	21	85
6:30 AM	0	0	4	0	0	4	0	45	12	0	0	57	24	7	13	0	0	44	9	19	0	0	0	28	133
6:45 AM	0	0	2	0	0	2	0	51	15	0	0	66	23	14	22	0	0	59	15	34	0	0	0	49	176
Hourly Total	1	0	7	0	0	8	0	153	34	0	0	187	79	33	48	0	0	160	34	81	0	0	0	115	470
7:00 AM	2	0	0	0	0	2	0	60	19	0	0	79	23	12	24	0	0	59	9	55	0	0	0	64	204
7:15 AM	11	0	0	0	0	11	0	86	26	0	0	112	31	4	41	0	0	76	18	74	0	0	0	92	291
7:30 AM	3	0	5	0	0	8	0	67	9	0	0	76	33	4	20	1	0	58	12	46	0	0	0	58	200
7:45 AM	3	0	2	0	0	5	0	55	14	0	0	69	27	7	16	0	0	50	11	37	0	0	0	48	172
Hourly Total	19	0	7	0	0	26	0	268	68	0	0	336	114	27	101	1	0	243	50	212	0	0	0	262	867
8:00 AM	5	0	7	0	0	12	0	55	6	0	0	61	28	6	18	0	0	52	7	48	0	0	0	55	180
8:15 AM	6	0	8	0	0	14	0	63	11	0	0	74	30	3	28	0	0	61	11	36	0	0	0	47	196
8:30 AM	3	0	4	0	0	7	0	69	11	0	0	80	20	1	13	0	0	34	6	30	0	0	0	36	157
8:45 AM	1	0	2	0	0	3	0	52	1	0	0	53	15	2	13	0	0	30	12	21	0	0	0	33	119
Hourly Total	15	0	21	0	0	36	0	239	29	0	0	268	93	12	72	0	0	177	36	135	0	0	0	171	652
9:00 AM	1	0	5	0	0	6	0	39	4	0	0	43	22	2	15	0	0	39	8	29	0	0	0	37	125
9:15 AM	0	0	1	0	0	1	0	22	5	0	0	27	27	3	13	0	0	43	9	21	0	0	0	30	101
9:30 AM	1	0	6	0	1	7	0	29	6	0	0	35	27	1	14	0	0	42	7	18	0	0	0	25	109
9:45 AM	5	0	6	0	0	11	0	34	9	0	0	43	25	3	19	0	0	47	5	23	0	0	0	28	129
Hourly Total	7	0	18	0	1	25	0	124	24	0	0	148	101	9	61	0	0	171	29	91	0	0	0	120	464
10:00 AM	2	0	1	0	0	3	0	19	4	0	0	23	28	2	16	0	2	46	8	24	0	0	0	32	104
10:15 AM	1	0	2	0	0	3	0	37	4	0	0	41	27	0	14	0	0	41	2	17	0	0	0	19	104
10:30 AM	3	0	2	0	0	5	0	47	3	0	0	50	27	0	12	0	0	39	10	18	0	0	0	28	122
10:45 AM	3	0	2	0	0	5	0	35	7	0	0	42	23	3	14	0	0	40	4	19	0	0	0	23	110
Hourly Total	9	0	7	0	0	16	0	138	18	0	0	156	105	5	56	0	2	166	24	78	0	0	0	102	440
11:00 AM	2	0	9	0	0	11	0	38	5	0	0	43	31	2	14	0	0	47	18	33	0	0	0	51	152
11:15 AM	1	0	6	0	0	7	0	33	11	0	0	44	27	7	12	0	0	46	14	21	0	0	0	35	132
11:30 AM	1	0	3	0	0	4	0	46	13	0	0	59	32	6	19	0	0	57	8	27	0	0	0	35	155
11:45 AM	5	0	5	0	0	10	0	44	8	0	0	52	40	11	20	0	0	71	13	33	0	0	0	46	179
Hourly Total	9	0	23	0	0	32	0	161	37	0	0	198	130	26	65	0	0	221	53	114	0	0	0	167	618
12:00 PM	4	0	6	0	0	10	0	43	18	0	0	61	28	5	11	0	0	44	11	25	0	0	0	36	151
12:15 PM	1	0	3	0	0	4	0	34	9	0	0	43	26	8	28	0	0	62	11	33	0	0	0	44	153
12:30 PM	4	0	2	0	0	6	0	42	6	0	0	48	42	1	28	0	0	71	9	25	0	0	0	34	159
12:45 PM	2	0	2	0	0	4	0	48	16	0	0	64	24	3	23	0	0	50	12	24	0	0	0	36	154
Hourly Total	11	0	13	0	0	24	0	167	49	0	0	216	120	17	90	0	0	227	43	107	0	0	0	150	617
1:00 PM	5	0	0	0	0	5	0	38	9	0	0	47	26	2	25	0	0	53	4	18	0	0	0	22	127
1:15 PM	9	0	2	0	0	11	0	40	8	0	0	48	24	4	21	0	0	49	4	18	0	0	0	22	130

1:30 PM	3	0	7	0	0	10	0	31	8	0	0	39	32	4	21	0	0	57	8	26	0	0	0	34	140
1:45 PM	1	0	2	0	0	3	0	41	7	0	0	48	39	3	26	0	0	68	4	35	0	0	0	39	158
Hourly Total	18	0	11	0	0	29	0	150	32	0	0	182	121	13	93	0	0	227	20	97	0	0	0	117	555
2:00 PM	1	0	2	0	0	3	0	44	1	0	0	45	32	1	20	0	0	53	4	30	0	0	0	34	135
2:15 PM	1	0	2	0	0	3	0	35	6	0	0	41	26	2	34	0	0	62	7	26	0	0	0	33	139
2:30 PM	1	0	1	0	0	2	0	34	3	0	0	37	32	3	22	0	0	57	5	24	0	0	0	29	125
2:45 PM	0	0	1	0	0	1	0	40	13	0	0	53	40	2	29	0	0	71	5	27	0	0	0	32	157
Hourly Total	3	0	6	0	0	9	0	153	23	0	0	176	130	8	105	0	0	243	21	107	0	0	0	128	556
3:00 PM	0	0	3	0	0	3	0	38	14	0	0	52	37	6	19	0	0	62	9	26	0	0	0	35	152
3:15 PM	0	0	4	0	0	4	0	38	6	0	0	44	42	1	13	0	0	56	5	31	0	0	0	36	140
3:30 PM	0	0	0	0	0	0	0	54	11	0	0	65	44	2	13	0	0	59	12	31	0	0	0	43	167
3:45 PM	0	0	10	0	0	10	0	35	6	0	0	41	40	5	29	0	0	74	11	39	0	0	0	50	175
Hourly Total	0	0	17	0	0	17	0	165	37	0	0	202	163	14	74	0	0	251	37	127	0	0	0	164	634
4:00 PM	12	0	15	0	0	27	0	64	13	0	0	77	49	0	25	0	0	74	5	40	0	0	0	45	223
4:15 PM	0	0	5	0	0	5	0	83	16	0	0	99	56	2	29	0	0	87	13	43	0	0	0	56	247
4:30 PM	5	0	6	0	0	11	0	55	12	0	0	67	46	4	26	0	0	76	13	37	0	0	0	50	204
4:45 PM	3	0	5	0	0	8	0	59	10	0	0	69	51	9	25	0	0	85	16	32	0	0	0	48	210
Hourly Total	20	0	31	0	0	51	0	261	51	0	0	312	202	15	105	0	0	322	47	152	0	0	0	199	884
5:00 PM	3	0	0	0	0	3	0	55	15	0	0	70	46	15	38	0	0	99	15	32	0	0	0	47	219
5:15 PM	0	0	2	0	0	2	0	61	31	0	0	92	39	18	36	0	0	93	15	40	0	0	0	55	242
5:30 PM	1	0	1	0	0	2	0	65	12	0	0	77	58	9	27	0	2	94	17	45	0	0	0	62	235
5:45 PM	3	0	4	0	0	7	0	69	13	0	0	82	61	23	31	0	0	115	7	45	0	0	0	52	256
Hourly Total	7	0	7	0	0	14	0	250	71	0	0	321	204	65	132	0	2	401	54	162	0	0	0	216	952
Grand Total	119	0	168	0	1	287	0	2229	473	0	0	2702	1562	244	1002	1	4	2809	448	1463	0	0	0	1911	7709
Approach %	41.5	0.0	58.5	0.0	-	-	0.0	82.5	17.5	0.0	-	-	55.6	8.7	35.7	0.0	-	-	23.4	76.6	0.0	0.0	-	-	-
Total %	1.5	0.0	2.2	0.0	-	3.7	0.0	28.9	6.1	0.0	-	35.0	20.3	3.2	13.0	0.0	-	36.4	5.8	19.0	0.0	0.0	-	24.8	-
All Vehicles (no classification)	119	0	168	0	-	287	0	2229	473	0	-	2702	1562	244	1002	1	-	2809	448	1463	0	0	-	1911	7709
% All Vehicles (no classification)	100.0	-	100.0	-	-	100.0	-	100.0	100.0	-	-	100.0	100.0	100.0	100.0	100.0	-	100.0	100.0	100.0	-	-	-	100.0	100.0
Pedestrians	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	4	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-

CJ Hensch & Associates, Inc.

bg@cjhensch.com
5215 Sycamore Ave

Pasadena, Texas, United States 77503
281-487-5417 cwood@browngay.com

Count Name: 12. N. Main St at SBFR IH 10
Site Code: 12
Start Date: 09/21/2016

Turning Movement Data

Start Time	N. Main St Southbound						IH 10 FR Westbound						N. Main St Northbound						IH 10 FR Eastbound						
	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	Right	U-Turn	Peds	App. Total	Int. Total
6:00 AM	7	1	6	0	0	14	6	29	1	0	0	36	0	0	12	0	0	12	0	12	0	0	0	12	74
6:15 AM	7	0	11	0	0	18	3	46	4	0	0	53	1	1	9	0	0	11	2	14	0	0	0	16	98
6:30 AM	9	1	13	0	0	23	3	46	8	0	0	57	1	0	28	0	0	29	3	39	0	0	0	42	151
6:45 AM	11	2	14	0	0	27	5	57	15	0	0	77	3	2	20	0	0	25	4	45	1	0	0	50	179
Hourly Total	34	4	44	0	0	82	17	178	28	0	0	223	5	3	69	0	0	77	9	110	1	0	0	120	502
7:00 AM	11	1	18	0	0	30	6	74	10	0	0	90	6	5	25	0	0	36	14	43	0	0	0	57	213
7:15 AM	21	3	13	0	0	37	3	74	19	0	0	96	12	0	32	0	0	44	14	49	0	0	0	63	240
7:30 AM	12	2	19	0	0	33	2	72	14	0	0	88	1	2	26	0	0	29	14	56	0	0	0	70	220
7:45 AM	28	1	10	0	0	39	3	79	20	0	0	102	2	5	48	0	0	55	18	99	1	0	0	118	314
Hourly Total	72	7	60	0	0	139	14	299	63	0	0	376	21	12	131	0	0	164	60	247	1	0	0	308	987
8:00 AM	22	0	17	0	0	39	6	81	16	0	0	103	4	1	26	0	0	31	11	61	0	0	0	72	245
8:15 AM	28	0	17	0	0	45	6	67	23	0	0	96	2	6	33	0	0	41	18	44	0	0	0	62	244
8:30 AM	17	2	13	0	0	32	14	65	24	0	0	103	4	0	30	0	0	34	12	38	0	0	0	50	219
8:45 AM	23	2	15	0	0	40	8	55	20	0	0	83	2	8	23	0	0	33	11	42	0	0	0	53	209
Hourly Total	90	4	62	0	0	156	34	268	83	0	0	385	12	15	112	0	0	139	52	185	0	0	0	237	917
9:00 AM	26	2	18	0	0	46	6	50	18	0	0	74	3	12	17	0	0	32	13	48	0	0	0	61	213
9:15 AM	24	3	16	0	0	43	7	62	9	0	0	78	1	7	12	0	0	20	6	40	1	0	0	47	188
9:30 AM	21	0	5	0	0	26	6	34	12	0	0	52	1	7	21	0	0	29	11	31	2	0	0	44	151
9:45 AM	13	3	12	0	0	28	6	49	20	0	0	75	5	8	19	0	0	32	10	47	1	0	0	58	193
Hourly Total	84	8	51	0	0	143	25	195	59	0	0	279	10	34	69	0	0	113	40	166	4	0	0	210	745
10:00 AM	15	2	12	0	0	29	8	45	10	0	0	63	3	6	12	0	0	21	16	38	0	0	0	54	167
10:15 AM	21	2	11	0	0	34	10	38	9	0	0	57	1	3	11	0	0	15	12	29	0	0	0	41	147
10:30 AM	16	3	9	0	0	28	5	57	12	0	0	74	2	4	9	0	0	15	9	29	0	0	0	38	155
10:45 AM	16	2	15	0	0	33	6	48	12	0	0	66	1	5	17	0	0	23	11	33	0	1	0	45	167
Hourly Total	68	9	47	0	0	124	29	188	43	0	0	260	7	18	49	0	0	74	48	129	0	1	0	178	636
11:00 AM	23	1	20	0	0	44	8	57	13	0	0	78	2	4	26	0	0	32	7	42	0	0	0	49	203
11:15 AM	27	0	18	0	0	45	10	40	17	0	0	67	3	5	14	0	0	22	13	39	0	0	0	52	186
11:30 AM	17	3	16	0	0	36	7	36	16	0	0	59	6	1	26	0	0	33	9	38	0	1	0	48	176
11:45 AM	16	1	16	0	0	33	14	67	18	0	0	99	4	1	26	0	0	31	14	50	0	0	0	64	227
Hourly Total	83	5	70	0	0	158	39	200	64	0	0	303	15	11	92	0	0	118	43	169	0	1	0	213	792
12:00 PM	23	2	6	0	0	31	7	50	21	0	0	78	1	1	23	0	0	25	12	41	1	0	0	54	188
12:15 PM	15	2	10	0	0	27	22	52	19	0	0	93	0	3	22	0	0	25	9	23	0	0	0	32	177
12:30 PM	21	1	17	0	1	39	9	46	10	0	0	65	1	5	16	0	0	22	15	28	0	0	0	43	169
12:45 PM	20	3	10	0	0	33	7	56	17	0	0	80	1	5	19	0	0	25	13	30	0	0	0	43	181
Hourly Total	79	8	43	0	1	130	45	204	67	0	0	316	3	14	80	0	0	97	49	122	1	0	0	172	715
1:00 PM	9	2	12	0	0	23	13	53	22	0	0	88	0	3	20	0	0	23	12	31	1	0	0	44	178
1:15 PM	16	3	14	0	0	33	8	50	14	0	0	72	2	2	17	0	0	21	13	30	0	0	0	43	169

1:30 PM	20	3	10	0	0	33	7	48	14	0	0	69	3	3	14	0	0	20	9	26	0	0	0	35	157
1:45 PM	14	0	7	0	0	21	5	42	22	0	0	69	4	3	20	0	0	27	16	27	0	0	0	43	160
Hourly Total	59	8	43	0	0	110	33	193	72	0	0	298	9	11	71	0	0	91	50	114	1	0	0	165	664
2:00 PM	23	1	9	0	0	33	5	44	12	1	0	62	0	2	12	0	0	14	9	38	0	0	0	47	156
2:15 PM	21	0	7	0	0	28	9	42	11	0	0	62	1	3	22	0	0	26	8	38	0	0	0	46	162
2:30 PM	17	1	12	0	0	30	6	53	13	0	0	72	3	3	29	0	0	35	11	39	0	0	0	50	187
2:45 PM	9	0	8	0	0	17	7	49	11	0	0	67	1	5	35	0	0	41	10	56	0	0	0	66	191
Hourly Total	70	2	36	0	0	108	27	188	47	1	0	263	5	13	98	0	0	116	38	171	0	0	0	209	696
3:00 PM	10	4	9	0	0	23	6	61	21	2	0	90	3	4	14	0	0	21	13	34	1	1	0	49	183
3:15 PM	19	3	10	0	0	32	10	68	22	0	0	100	1	2	12	0	0	15	9	39	0	0	0	48	195
3:30 PM	18	2	11	0	0	31	4	66	19	0	0	89	3	2	31	0	0	36	20	35	0	0	0	55	211
3:45 PM	21	1	10	0	0	32	10	65	21	1	0	97	4	5	16	0	0	25	11	49	0	0	0	60	214
Hourly Total	68	10	40	0	0	118	30	260	83	3	0	376	11	13	73	0	0	97	53	157	1	1	0	212	803
4:00 PM	17	1	14	0	0	32	23	81	23	0	0	127	8	3	27	0	0	38	14	36	0	0	0	50	247
4:15 PM	18	0	17	0	0	35	14	85	27	0	0	126	4	6	35	0	0	45	12	60	0	1	0	73	279
4:30 PM	15	0	16	0	0	31	11	91	19	0	0	121	4	4	26	0	0	34	17	57	1	0	0	75	261
4:45 PM	13	0	17	0	0	30	13	64	21	0	0	98	5	3	24	0	0	32	17	59	1	0	0	77	237
Hourly Total	63	1	64	0	0	128	61	321	90	0	0	472	21	16	112	0	0	149	60	212	2	1	0	275	1024
5:00 PM	29	2	30	0	0	61	22	103	16	0	0	141	1	2	33	0	0	36	13	67	0	0	0	80	318
5:15 PM	16	4	16	0	0	36	18	84	16	0	0	118	1	3	22	0	0	26	12	53	0	0	0	65	245
5:30 PM	22	1	13	0	0	36	18	79	20	0	0	117	5	3	28	0	0	36	19	65	0	0	0	84	273
5:45 PM	14	5	15	0	0	34	6	56	16	0	0	78	4	3	27	0	0	34	9	56	1	0	0	66	212
Hourly Total	81	12	74	0	0	167	64	322	68	0	0	454	11	11	110	0	0	132	53	241	1	0	0	295	1048
Grand Total	851	78	634	0	1	1563	418	2816	767	4	0	4005	130	171	1066	0	0	1367	555	2023	12	4	0	2594	9529
Approach %	54.4	5.0	40.6	0.0	-	-	10.4	70.3	19.2	0.1	-	-	9.5	12.5	78.0	0.0	-	-	21.4	78.0	0.5	0.2	-	-	-
Total %	8.9	0.8	6.7	0.0	-	16.4	4.4	29.6	8.0	0.0	-	42.0	1.4	1.8	11.2	0.0	-	14.3	5.8	21.2	0.1	0.0	-	27.2	-
All Vehicles (no classification)	851	78	634	0	-	1563	418	2816	767	4	-	4005	130	171	1066	0	-	1367	555	2023	12	4	-	2594	9529
% All Vehicles (no classification)	100.0	100.0	100.0	-	-	100.0	100.0	100.0	100.0	100.0	-	100.0	100.0	100.0	100.0	-	-	100.0	100.0	100.0	100.0	100.0	-	100.0	100.0
Pedestrians	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

CJ Hensch & Associates, Inc.

bg@cjhensch.com
5215 Sycamore Ave

Pasadena, Texas, United States 77503
281-487-5417 cwood@browngay.com

Count Name: 13. S. Main St at Sisterdale Rd
Site Code: 13
Start Date: 09/21/2016
Page No: 1

Turning Movement Data

Start Time	S. Main St Southbound					Sisterdale Rd Westbound					S. Main St Northbound					
	Left	Thru	U-Turn	Peds	App. Total	Left	Right	U-Turn	Peds	App. Total	Thru	Right	U-Turn	Peds	App. Total	Int. Total
6:00 AM	2	20	0	0	22	1	18	0	0	19	25	2	0	0	27	68
6:15 AM	2	14	0	0	16	2	24	0	1	26	42	0	0	0	42	84
6:30 AM	6	38	0	0	44	1	36	0	0	37	34	7	0	0	41	122
6:45 AM	5	44	0	0	49	1	26	0	0	27	76	4	0	0	80	156
Hourly Total	15	116	0	0	131	5	104	0	1	109	177	13	0	0	190	430
7:00 AM	11	50	0	0	61	2	32	0	0	34	67	6	0	0	73	168
7:15 AM	16	74	0	0	90	3	24	0	0	27	81	7	0	0	88	205
7:30 AM	8	70	0	0	78	7	25	0	0	32	73	8	0	0	81	191
7:45 AM	19	116	0	0	135	7	32	0	0	39	85	13	0	0	98	272
Hourly Total	54	310	0	0	364	19	113	0	0	132	306	34	0	0	340	836
8:00 AM	20	81	0	0	101	9	23	0	0	32	88	13	0	0	101	234
8:15 AM	11	80	0	0	91	6	19	0	0	25	78	11	0	0	89	205
8:30 AM	19	79	0	0	98	4	20	2	0	26	82	7	0	0	89	213
8:45 AM	19	48	0	0	67	9	21	1	0	31	68	5	0	0	73	171
Hourly Total	69	288	0	0	357	28	83	3	0	114	316	36	0	0	352	823
9:00 AM	19	69	0	0	88	4	18	0	0	22	60	6	0	0	66	176
9:15 AM	19	54	0	0	73	5	27	0	0	32	54	5	0	0	59	164
9:30 AM	14	62	0	0	76	4	8	0	0	12	44	6	0	0	50	138
9:45 AM	18	53	0	0	71	7	24	0	0	31	53	0	0	0	53	155
Hourly Total	70	238	0	0	308	20	77	0	0	97	211	17	0	0	228	633
10:00 AM	14	52	0	0	66	4	14	0	0	18	54	1	0	0	55	139
10:15 AM	7	48	0	0	55	5	10	0	0	15	58	2	0	0	60	130
10:30 AM	12	41	0	0	53	8	22	0	0	30	51	5	0	0	56	139
10:45 AM	11	66	0	0	77	8	12	0	0	20	50	3	0	0	53	150
Hourly Total	44	207	0	0	251	25	58	0	0	83	213	11	0	0	224	558
11:00 AM	8	93	0	0	101	8	15	0	0	23	51	4	0	0	55	179
11:15 AM	7	69	0	0	76	8	10	0	1	18	52	5	0	0	57	151
11:30 AM	11	80	0	0	91	9	16	0	0	25	47	7	0	0	54	170
11:45 AM	12	84	0	0	96	13	29	0	0	42	75	4	0	0	79	217
Hourly Total	38	326	0	0	364	38	70	0	1	108	225	20	0	0	245	717
12:00 PM	10	81	0	0	91	19	21	0	1	40	69	10	0	0	79	210
12:15 PM	6	62	0	0	68	13	10	0	0	23	92	6	0	0	98	189
12:30 PM	9	47	0	0	56	11	16	0	0	27	62	9	0	0	71	154
12:45 PM	15	63	0	0	78	13	14	0	0	27	80	7	0	0	87	192
Hourly Total	40	253	0	0	293	56	61	0	1	117	303	32	0	0	335	745
1:00 PM	13	54	0	0	67	7	7	0	0	14	84	12	0	0	96	177
1:15 PM	5	45	0	0	50	6	14	0	0	20	62	13	0	0	75	145
1:30 PM	12	48	0	0	60	11	7	0	0	18	63	9	0	0	72	150

1:45 PM	11	46	0	0	57	13	11	0	0	24	61	8	0	0	69	150
Hourly Total	41	193	0	0	234	37	39	0	0	76	270	42	0	0	312	622
2:00 PM	17	62	0	0	79	7	9	0	0	16	61	5	0	0	66	161
2:15 PM	19	56	0	0	75	12	12	0	0	24	54	4	0	0	58	157
2:30 PM	24	59	0	0	83	3	10	0	0	13	53	8	0	0	61	157
2:45 PM	17	56	1	0	74	8	13	0	0	21	47	4	0	0	51	146
Hourly Total	77	233	1	0	311	30	44	0	0	74	215	21	0	0	236	621
3:00 PM	10	41	0	0	51	6	16	0	1	22	82	3	0	0	85	158
3:15 PM	14	54	0	0	68	12	24	0	0	36	72	2	0	0	74	178
3:30 PM	12	85	1	0	98	9	13	0	0	22	57	4	0	0	61	181
3:45 PM	15	82	0	0	97	10	17	0	0	27	73	5	0	0	78	202
Hourly Total	51	262	1	0	314	37	70	0	1	107	284	14	0	0	298	719
4:00 PM	19	71	0	0	90	11	18	0	0	29	106	6	0	0	112	231
4:15 PM	23	78	0	0	101	7	19	0	0	26	95	7	0	0	102	229
4:30 PM	22	89	0	0	111	6	12	0	0	18	87	3	0	0	90	219
4:45 PM	18	90	0	0	108	8	16	0	0	24	74	8	0	0	82	214
Hourly Total	82	328	0	0	410	32	65	0	0	97	362	24	0	0	386	893
5:00 PM	24	116	0	0	140	26	23	0	0	49	82	7	0	0	89	278
5:15 PM	25	85	0	0	110	22	17	0	0	39	83	5	0	0	88	237
5:30 PM	19	96	0	0	115	15	15	0	0	30	75	2	0	0	77	222
5:45 PM	25	70	0	0	95	12	15	0	0	27	60	8	0	0	68	190
Hourly Total	93	367	0	0	460	75	70	0	0	145	300	22	0	0	322	927
Grand Total	674	3121	2	0	3797	402	854	3	4	1259	3182	286	0	0	3468	8524
Approach %	17.8	82.2	0.1	-	-	31.9	67.8	0.2	-	-	91.8	8.2	0.0	-	-	-
Total %	7.9	36.6	0.0	-	44.5	4.7	10.0	0.0	-	14.8	37.3	3.4	0.0	-	40.7	-
All Vehicles (no classification)	674	3121	2	-	3797	402	854	3	-	1259	3182	286	0	-	3468	8524
% All Vehicles (no classification)	100.0	100.0	100.0	-	100.0	100.0	100.0	100.0	-	100.0	100.0	100.0	-	-	100.0	100.0
Pedestrians	-	-	-	0	-	-	-	-	4	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	-	-

CJ Hensch & Associates, Inc.

bg@cjhensch.com
5215 Sycamore Ave

Pasadena, Texas, United States 77503
281-487-5417 cwood@browngay.com

Count Name: 14. FM 474 at Adler Rd
Site Code: 14
Start Date: 09/21/2016
Page No: 1

Turning Movement Data

Start Time	FM 474 Southbound					FM 474 Northbound					Adler Rd Eastbound					
	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	U-Turn	Peds	App. Total	Left	Right	U-Turn	Peds	App. Total	Int. Total
6:00 AM	35	3	0	0	38	5	13	0	0	18	1	9	0	0	10	66
6:15 AM	57	5	0	0	62	10	9	0	0	19	0	10	0	0	10	91
6:30 AM	37	8	0	0	45	14	12	0	0	26	3	34	0	0	37	108
6:45 AM	71	18	0	0	89	30	13	0	0	43	2	42	0	0	44	176
Hourly Total	200	34	0	0	234	59	47	0	0	106	6	95	0	0	101	441
7:00 AM	66	30	0	0	96	41	19	0	0	60	4	44	0	0	48	204
7:15 AM	73	22	0	0	95	16	19	0	0	35	15	55	0	0	70	200
7:30 AM	59	12	0	0	71	28	38	0	0	66	16	46	0	0	62	199
7:45 AM	84	26	0	0	110	29	38	0	0	67	6	43	0	0	49	226
Hourly Total	282	90	0	0	372	114	114	0	0	228	41	188	0	0	229	829
8:00 AM	88	20	0	0	108	35	38	0	0	73	7	51	0	0	58	239
8:15 AM	67	23	0	0	90	32	50	0	0	82	15	53	0	0	68	240
8:30 AM	75	15	0	0	90	41	57	0	0	98	9	56	0	0	65	253
8:45 AM	51	12	0	0	63	24	45	0	0	69	7	16	0	0	23	155
Hourly Total	281	70	0	0	351	132	190	0	0	322	38	176	0	0	214	887
9:00 AM	40	11	0	0	51	22	39	0	0	61	7	14	0	0	21	133
9:15 AM	54	12	0	0	66	19	30	0	0	49	11	14	0	0	25	140
9:30 AM	33	4	0	0	37	16	26	0	0	42	12	12	0	0	24	103
9:45 AM	40	9	0	0	49	10	28	0	0	38	6	27	0	0	33	120
Hourly Total	167	36	0	0	203	67	123	0	0	190	36	67	0	0	103	496
10:00 AM	32	11	0	0	43	16	48	0	0	64	10	14	0	0	24	131
10:15 AM	32	8	0	0	40	20	28	0	0	48	5	13	0	0	18	106
10:30 AM	33	8	0	0	41	11	34	0	0	45	5	7	0	0	12	98
10:45 AM	28	8	0	0	36	7	21	0	0	28	8	12	0	0	20	84
Hourly Total	125	35	0	0	160	54	131	0	0	185	28	46	0	0	74	419
11:00 AM	36	5	0	0	41	16	26	0	0	42	4	21	0	0	25	108
11:15 AM	28	7	0	0	35	14	30	0	0	44	5	19	0	0	24	103
11:30 AM	25	6	0	0	31	18	24	0	0	42	9	26	0	0	35	108
11:45 AM	46	8	0	0	54	18	27	0	0	45	9	27	0	0	36	135
Hourly Total	135	26	0	0	161	66	107	0	0	173	27	93	0	0	120	454
12:00 PM	31	8	0	0	39	14	30	0	0	44	7	21	0	0	28	111
12:15 PM	41	15	0	0	56	25	27	0	0	52	4	15	0	0	19	127
12:30 PM	43	8	0	0	51	15	30	0	0	45	5	14	0	0	19	115
12:45 PM	23	9	0	0	32	24	39	0	0	63	8	19	0	0	27	122
Hourly Total	138	40	0	0	178	78	126	0	0	204	24	69	0	0	93	475
1:00 PM	39	5	0	0	44	18	28	0	0	46	5	17	0	0	22	112
1:15 PM	34	7	0	0	41	17	33	0	0	50	7	21	0	0	28	119
1:30 PM	19	6	0	0	25	29	32	0	0	61	3	16	0	0	19	105

1:45 PM	25	6	0	0	31	26	37	0	0	63	9	21	0	0	30	124
Hourly Total	117	24	0	0	141	90	130	0	0	220	24	75	0	0	99	460
2:00 PM	29	11	0	0	40	27	39	0	0	66	8	14	0	0	22	128
2:15 PM	26	14	0	0	40	12	37	0	0	49	6	20	0	0	26	115
2:30 PM	27	14	0	0	41	33	30	0	0	63	5	17	0	0	22	126
2:45 PM	40	13	0	0	53	26	58	0	0	84	13	45	0	0	58	195
Hourly Total	122	52	0	0	174	98	164	0	0	262	32	96	0	0	128	564
3:00 PM	32	9	0	0	41	37	31	0	0	68	18	31	0	0	49	158
3:15 PM	33	6	0	0	39	22	33	0	0	55	5	22	0	0	27	121
3:30 PM	17	12	0	0	29	17	28	0	0	45	16	29	0	0	45	119
3:45 PM	40	13	0	0	53	32	47	0	0	79	9	34	0	0	43	175
Hourly Total	122	40	0	0	162	108	139	0	0	247	48	116	0	0	164	573
4:00 PM	33	4	0	0	37	66	60	0	0	126	11	36	0	0	47	210
4:15 PM	33	5	0	0	38	75	79	0	0	154	20	40	0	0	60	252
4:30 PM	32	6	0	0	38	41	68	0	0	109	13	22	0	0	35	182
4:45 PM	31	4	0	0	35	28	65	0	0	93	11	31	0	1	42	170
Hourly Total	129	19	0	0	148	210	272	0	0	482	55	129	0	1	184	814
5:00 PM	28	11	0	0	39	42	57	0	0	99	25	44	0	0	69	207
5:15 PM	37	10	0	0	47	42	64	0	0	106	19	41	0	0	60	213
5:30 PM	31	8	0	0	39	47	66	0	0	113	14	26	0	0	40	192
5:45 PM	46	10	0	0	56	44	70	0	0	114	25	38	0	0	63	233
Hourly Total	142	39	0	0	181	175	257	0	0	432	83	149	0	0	232	845
Grand Total	1960	505	0	0	2465	1251	1800	0	0	3051	442	1299	0	1	1741	7257
Approach %	79.5	20.5	0.0	-	-	41.0	59.0	0.0	-	-	25.4	74.6	0.0	-	-	-
Total %	27.0	7.0	0.0	-	34.0	17.2	24.8	0.0	-	42.0	6.1	17.9	0.0	-	24.0	-
All Vehicles (no classification)	1960	505	0	-	2465	1251	1800	0	-	3051	442	1299	0	-	1741	7257
% All Vehicles (no classification)	100.0	100.0	-	-	100.0	100.0	100.0	-	-	100.0	100.0	100.0	-	-	100.0	100.0
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	1	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-

CJ Hensch & Associates, Inc.

bg@cjhensch.com
5215 Sycamore Ave

Pasadena, Texas, United States 77503
281-487-5417 cwood@browngay.com

Count Name: 15. S. School Rd at IH 10 WBFR
Site Code: 15
Start Date: 09/21/2016

Turning Movement Data

Start Time	S. School Rd Southbound					IH 10 WBFR Westbound					IH 10 WBFR Eastbound					
	Left	Right	U-Turn	Peds	App. Total	Thru	Right	U-Turn	Peds	App. Total	Left	Thru	U-Turn	Peds	App. Total	Int. Total
6:00 AM	10	1	0	0	11	22	7	0	0	29	0	0	0	0	0	40
6:15 AM	23	0	0	0	23	33	11	0	0	44	0	0	0	0	0	67
6:30 AM	21	0	0	0	21	35	14	0	0	49	0	0	0	0	0	70
6:45 AM	27	0	0	0	27	43	17	0	0	60	0	0	0	0	0	87
Hourly Total	81	1	0	0	82	133	49	0	0	182	0	0	0	0	0	264
7:00 AM	42	1	0	0	43	46	27	0	0	73	0	0	0	0	0	116
7:15 AM	37	5	0	0	42	77	33	0	0	110	0	0	0	0	0	152
7:30 AM	50	2	0	0	52	79	44	0	0	123	0	0	0	0	0	175
7:45 AM	40	3	0	0	43	70	48	0	0	118	0	0	0	0	0	161
Hourly Total	169	11	0	0	180	272	152	0	0	424	0	0	0	0	0	604
8:00 AM	34	4	0	0	38	69	50	0	0	119	0	0	0	0	0	157
8:15 AM	40	0	0	0	40	66	37	0	0	103	0	0	0	0	0	143
8:30 AM	36	1	0	0	37	55	45	0	0	100	0	0	0	0	0	137
8:45 AM	34	2	0	0	36	43	50	0	0	93	0	0	0	0	0	129
Hourly Total	144	7	0	0	151	233	182	0	0	415	0	0	0	0	0	566
9:00 AM	36	6	0	0	42	47	40	0	0	87	0	0	0	0	0	129
9:15 AM	30	1	0	0	31	46	53	0	0	99	0	0	0	0	0	130
9:30 AM	36	2	0	0	38	58	32	0	0	90	0	0	0	0	0	128
9:45 AM	36	2	0	0	38	59	32	0	0	91	0	0	0	0	0	129
Hourly Total	138	11	0	0	149	210	157	0	0	367	0	0	0	0	0	516
10:00 AM	27	1	0	0	28	67	30	0	0	97	0	0	0	0	0	125
10:15 AM	29	4	0	0	33	66	24	0	0	90	0	0	0	0	0	123
10:30 AM	29	2	0	0	31	50	30	0	0	80	0	0	0	0	0	111
10:45 AM	23	1	0	0	24	62	31	0	0	93	0	0	0	0	0	117
Hourly Total	108	8	0	0	116	245	115	0	0	360	0	0	0	0	0	476
11:00 AM	30	4	0	0	34	85	34	0	0	119	0	0	0	0	0	153
11:15 AM	29	3	0	0	32	74	30	0	0	104	0	0	0	0	0	136
11:30 AM	43	1	0	0	44	91	43	0	0	134	0	0	0	0	0	178
11:45 AM	48	2	0	0	50	95	58	0	0	153	0	0	0	0	0	203
Hourly Total	150	10	0	0	160	345	165	0	0	510	0	0	0	0	0	670
12:00 PM	52	4	0	0	56	72	41	0	0	113	0	0	0	0	0	169
12:15 PM	39	2	0	0	41	97	46	0	0	143	0	0	0	0	0	184
12:30 PM	54	5	0	0	59	88	45	0	0	133	0	0	0	0	0	192
12:45 PM	34	1	0	0	35	89	41	0	0	130	0	0	0	0	0	165
Hourly Total	179	12	0	0	191	346	173	0	0	519	0	0	0	0	0	710
1:00 PM	48	0	0	0	48	86	52	0	0	138	0	0	0	0	0	186
1:15 PM	44	6	0	0	50	73	47	0	0	120	0	0	0	0	0	170
1:30 PM	34	2	0	0	36	81	50	0	0	131	0	0	0	0	0	167

1:45 PM	33	5	0	0	38	80	35	0	0	115	0	0	0	0	0	153
Hourly Total	159	13	0	0	172	320	184	0	0	504	0	0	0	0	0	676
2:00 PM	29	2	0	0	31	76	39	0	0	115	0	0	0	0	0	146
2:15 PM	36	6	0	0	42	79	46	0	0	125	0	0	0	0	0	167
2:30 PM	27	3	0	0	30	109	32	0	0	141	0	0	0	0	0	171
2:45 PM	34	8	0	0	42	95	27	0	0	122	0	0	0	0	0	164
Hourly Total	126	19	0	0	145	359	144	0	0	503	0	0	0	0	0	648
3:00 PM	47	7	0	0	54	100	36	0	0	136	0	0	0	0	0	190
3:15 PM	31	2	0	0	33	96	46	0	0	142	0	0	0	0	0	175
3:30 PM	39	2	0	0	41	80	37	0	0	117	0	0	0	0	0	158
3:45 PM	30	3	0	0	33	77	48	0	0	125	0	0	0	0	0	158
Hourly Total	147	14	0	0	161	353	167	0	0	520	0	0	0	0	0	681
4:00 PM	56	5	0	0	61	101	33	0	0	134	0	0	0	0	0	195
4:15 PM	61	6	0	0	67	89	37	0	0	126	0	0	0	0	0	193
4:30 PM	50	4	0	0	54	97	54	0	0	151	0	0	0	0	0	205
4:45 PM	28	4	0	0	32	103	52	0	0	155	0	0	0	0	0	187
Hourly Total	195	19	0	0	214	390	176	0	0	566	0	0	0	0	0	780
5:00 PM	43	0	0	0	43	127	32	0	0	159	0	0	0	0	0	202
5:15 PM	39	0	0	0	39	110	67	0	0	177	0	0	0	0	0	216
5:30 PM	51	0	0	0	51	104	51	0	0	155	0	0	0	0	0	206
5:45 PM	30	0	0	0	30	134	60	0	0	194	0	0	0	0	0	224
Hourly Total	163	0	0	0	163	475	210	0	0	685	0	0	0	0	0	848
Grand Total	1759	125	0	0	1884	3681	1874	0	0	5555	0	0	0	0	0	7439
Approach %	93.4	6.6	0.0	-	-	66.3	33.7	0.0	-	-	NaN	NaN	NaN	-	-	-
Total %	23.6	1.7	0.0	-	25.3	49.5	25.2	0.0	-	74.7	0.0	0.0	0.0	-	0.0	-
All Vehicles (no classification)	1759	125	0	-	1884	3681	1874	0	-	5555	0	0	0	-	0	7439
% All Vehicles (no classification)	100.0	100.0	-	-	100.0	100.0	100.0	-	-	100.0	-	-	-	-	-	100.0
Pedestrians	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

CJ Hensch & Associates, Inc.

bg@cjhensch.com
5215 Sycamore Ave

Pasadena, Texas, United States 77503
281-487-5417 cwood@browngay.com

Count Name: 16. IH 10 EBFR at Upper Balcones Rd
Site Code: 16
Start Date: 09/21/2016

Turning Movement Data

Start Time	IH 10 EBFR Westbound					Upper Balcones Rd Northbound					IH 10 EBFR Eastbound					
	Left	Thru	U-Turn	Peds	App. Total	Left	Right	U-Turn	Peds	App. Total	Thru	Right	U-Turn	Peds	App. Total	Int. Total
6:00 AM	2	3	0	0	5	15	5	0	0	20	60	14	0	0	74	99
6:15 AM	1	6	0	0	7	13	8	0	0	21	105	18	0	0	123	151
6:30 AM	0	5	0	0	5	10	18	0	0	28	124	19	0	0	143	176
6:45 AM	2	8	0	0	10	15	13	0	0	28	144	30	0	0	174	212
Hourly Total	5	22	0	0	27	53	44	0	0	97	433	81	0	0	514	638
7:00 AM	5	17	0	0	22	23	24	0	0	47	109	43	0	0	152	221
7:15 AM	1	12	0	0	13	33	19	0	0	52	116	51	0	0	167	232
7:30 AM	2	16	0	0	18	31	17	0	0	48	138	40	1	0	179	245
7:45 AM	2	17	0	0	19	38	23	0	0	61	111	39	0	0	150	230
Hourly Total	10	62	0	0	72	125	83	0	0	208	474	173	1	0	648	928
8:00 AM	5	15	0	0	20	49	10	0	0	59	139	36	0	0	175	254
8:15 AM	4	20	0	0	24	34	20	0	0	54	132	45	0	0	177	255
8:30 AM	3	26	0	0	29	31	19	0	0	50	114	46	0	0	160	239
8:45 AM	2	20	0	0	22	24	13	0	0	37	89	42	0	0	131	190
Hourly Total	14	81	0	0	95	138	62	0	0	200	474	169	0	0	643	938
9:00 AM	1	18	0	0	19	33	13	0	0	46	118	35	0	0	153	218
9:15 AM	3	25	0	0	28	33	12	0	0	45	126	30	0	0	156	229
9:30 AM	3	20	0	0	23	25	15	0	0	40	98	45	0	0	143	206
9:45 AM	1	27	0	0	28	24	25	0	0	49	90	39	0	0	129	206
Hourly Total	8	90	0	0	98	115	65	0	0	180	432	149	0	0	581	859
10:00 AM	3	31	0	0	34	19	15	0	0	34	98	42	0	0	140	208
10:15 AM	2	27	0	0	29	29	8	0	0	37	104	34	0	0	138	204
10:30 AM	3	27	0	0	30	23	11	0	0	34	116	28	0	0	144	208
10:45 AM	5	23	0	0	28	29	18	0	0	47	117	25	0	0	142	217
Hourly Total	13	108	0	0	121	100	52	0	0	152	435	129	0	0	564	837
11:00 AM	3	40	0	0	43	25	10	0	0	35	107	26	0	0	133	211
11:15 AM	3	32	0	0	35	21	16	0	0	37	120	33	0	0	153	225
11:30 AM	3	38	0	0	41	19	8	0	0	27	132	25	0	0	157	225
11:45 AM	5	36	0	0	41	22	13	0	0	35	113	27	0	0	140	216
Hourly Total	14	146	0	0	160	87	47	0	0	134	472	111	0	0	583	877
12:00 PM	2	36	0	0	38	23	15	0	0	38	121	29	0	0	150	226
12:15 PM	2	34	0	0	36	24	13	0	0	37	137	31	0	0	168	241
12:30 PM	5	31	0	0	36	23	8	0	0	31	167	34	0	0	201	268
12:45 PM	3	25	0	0	28	22	9	0	0	31	131	43	0	0	174	233
Hourly Total	12	126	0	0	138	92	45	0	0	137	556	137	0	0	693	968
1:00 PM	5	33	0	0	38	18	12	0	0	30	108	32	0	0	140	208
1:15 PM	2	29	0	0	31	21	13	0	1	34	137	31	0	0	168	233
1:30 PM	3	30	0	0	33	20	14	0	0	34	123	34	0	0	157	224

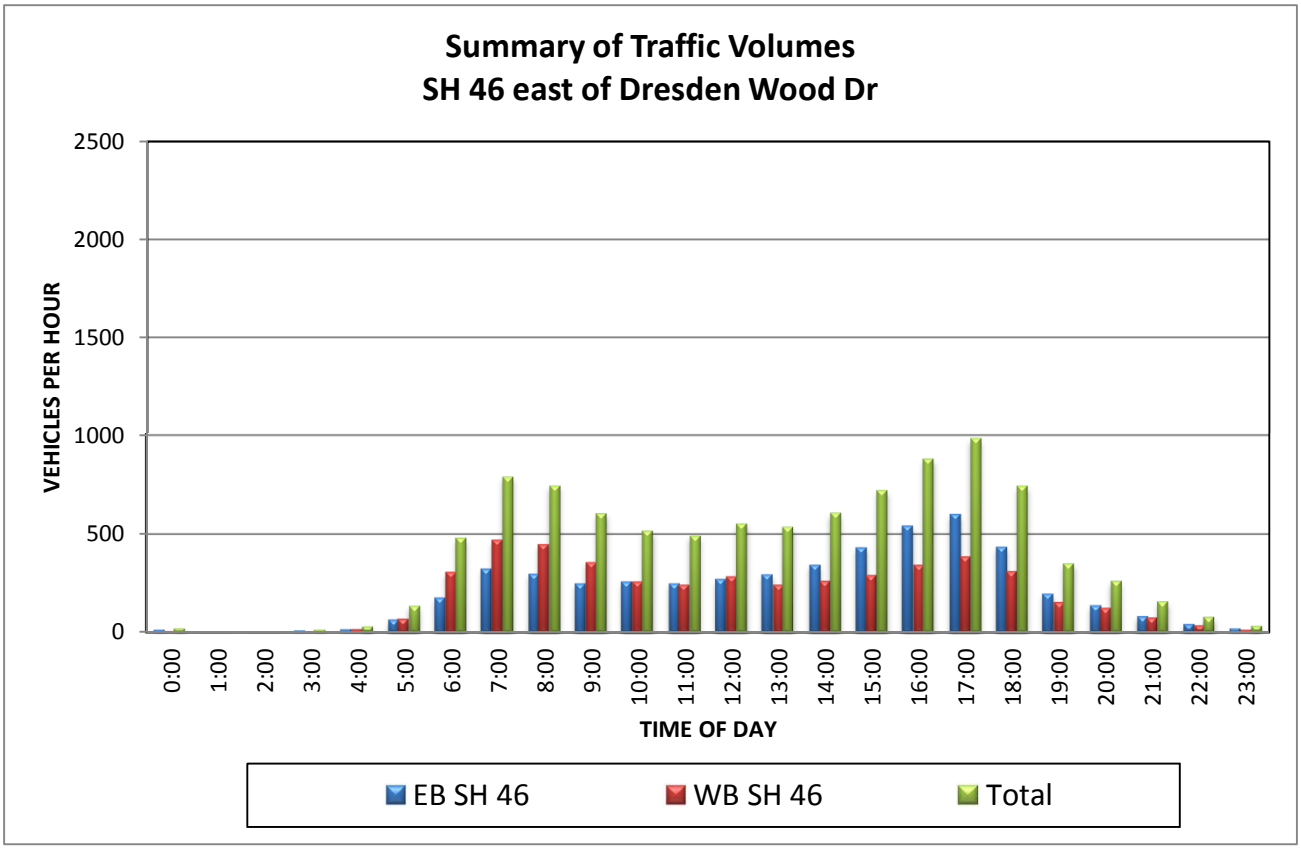
1:45 PM	2	32	0	0	34	24	13	0	0	37	105	33	0	0	138	209
Hourly Total	12	124	0	0	136	83	52	0	1	135	473	130	0	0	603	874
2:00 PM	5	36	0	0	41	29	11	0	0	40	109	28	0	0	137	218
2:15 PM	2	36	0	0	38	25	13	0	0	38	113	24	0	0	137	213
2:30 PM	3	32	0	0	35	18	10	0	0	28	116	23	0	0	139	202
2:45 PM	2	37	0	0	39	18	13	0	0	31	110	39	1	0	150	220
Hourly Total	12	141	0	0	153	90	47	0	0	137	448	114	1	0	563	853
3:00 PM	4	29	0	0	33	14	7	0	0	21	113	24	0	0	137	191
3:15 PM	1	29	0	0	30	19	7	0	0	26	93	32	0	0	125	181
3:30 PM	2	33	0	0	35	21	11	0	0	32	96	25	0	0	121	188
3:45 PM	3	32	0	0	35	25	12	0	0	37	93	39	0	0	132	204
Hourly Total	10	123	0	0	133	79	37	0	0	116	395	120	0	0	515	764
4:00 PM	6	15	0	0	21	34	10	0	0	44	111	40	0	0	151	216
4:15 PM	1	24	0	0	25	24	9	0	0	33	133	40	0	0	173	231
4:30 PM	9	22	0	0	31	32	8	0	1	40	106	44	0	0	150	221
4:45 PM	4	30	0	0	34	33	7	0	0	40	90	37	0	0	127	201
Hourly Total	20	91	0	0	111	123	34	0	1	157	440	161	0	0	601	869
5:00 PM	2	51	0	0	53	32	11	0	0	43	103	38	0	0	141	237
5:15 PM	0	38	0	0	38	31	8	0	0	39	102	26	0	0	128	205
5:30 PM	4	23	0	0	27	31	7	0	0	38	98	30	0	0	128	193
5:45 PM	4	27	0	0	31	30	9	0	0	39	86	48	0	0	134	204
Hourly Total	10	139	0	0	149	124	35	0	0	159	389	142	0	0	531	839
Grand Total	140	1253	0	0	1393	1209	603	0	2	1812	5421	1616	2	0	7039	10244
Approach %	10.1	89.9	0.0	-	-	66.7	33.3	0.0	-	-	77.0	23.0	0.0	-	-	-
Total %	1.4	12.2	0.0	-	13.6	11.8	5.9	0.0	-	17.7	52.9	15.8	0.0	-	68.7	-
All Vehicles (no classification)	140	1253	0	-	1393	1209	603	0	-	1812	5421	1616	2	-	7039	10244
% All Vehicles (no classification)	100.0	100.0	-	-	100.0	100.0	100.0	-	-	100.0	100.0	100.0	100.0	-	100.0	100.0
Pedestrians	-	-	-	0	-	-	-	-	2	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	100.0	-	-	-	-	-	-	-

SH 46 east of Dresden Wood Dr

Date Began:
9/21/2016

TIME	0:00	0:15	0:30	0:45	TOTAL
0:00	6	6	2	5	19
1:00	0	2	0	2	4
2:00	1	0	2	0	3
3:00	2	4	4	3	13
4:00	5	9	5	10	29
5:00	16	29	34	53	132
6:00	75	97	132	175	479
7:00	174	192	212	210	788
8:00	200	188	175	180	743
9:00	139	154	170	139	602
10:00	133	133	143	105	514
11:00	109	121	123	136	489
12:00	114	128	153	156	551
13:00	129	124	137	143	533
14:00	154	145	146	159	604
15:00	194	154	188	184	720
16:00	190	224	234	233	881
17:00	252	274	253	204	983
18:00	249	197	164	131	741
19:00	117	93	80	57	347
20:00	65	69	66	59	259
21:00	59	39	24	34	156
22:00	26	20	17	13	76
23:00	9	13	5	5	32
				TOTAL:	9698

The A.M. peak hour from 7:15 to 8:15 is 814
The P.M. peak hour from 16:45 to 17:45 is 1012

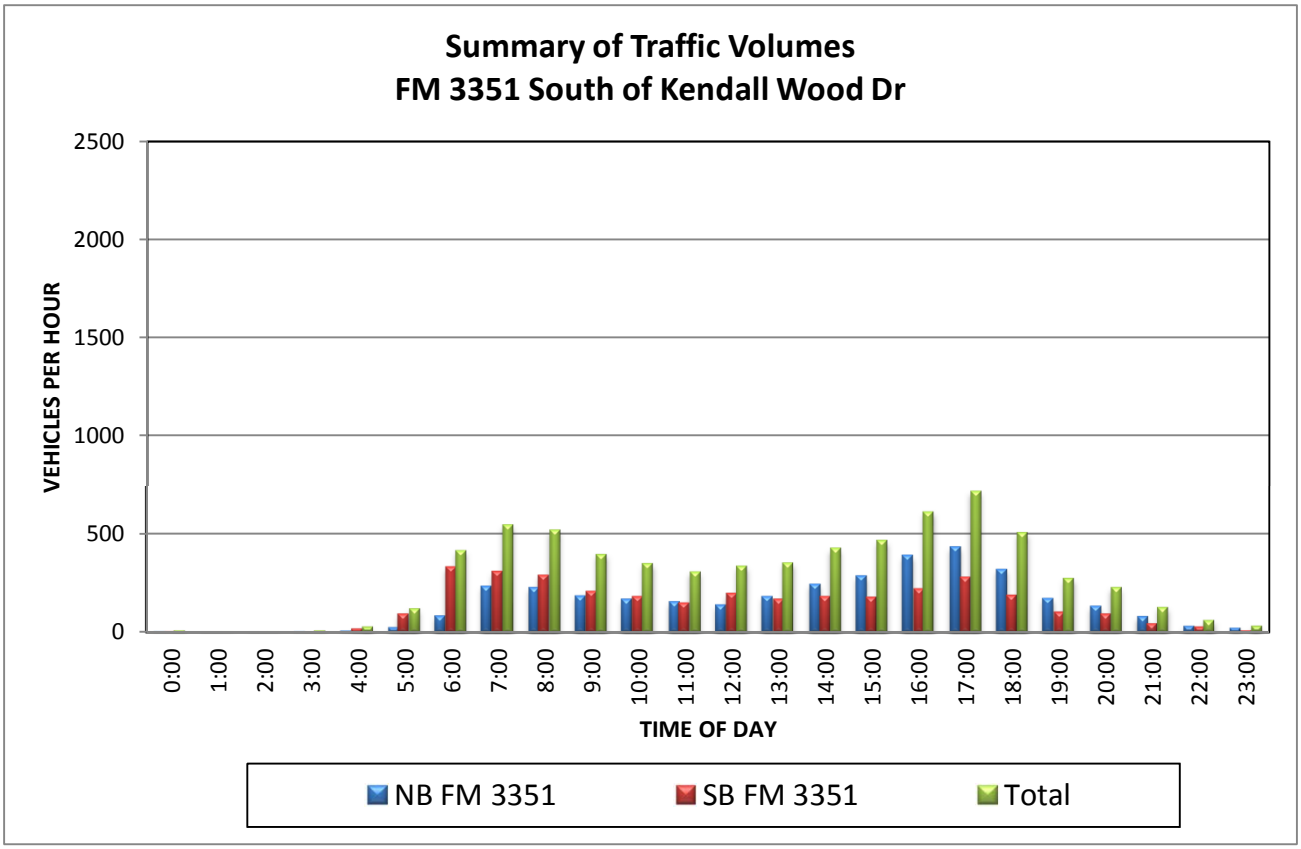


FM 3351 South of Kendall Wood Dr

Date Began:
9/21/2016

TIME	0:00	0:15	0:30	0:45	TOTAL
0:00	3	2	3	2	10
1:00	1	1	1	1	4
2:00	3	0	0	1	4
3:00	2	5	2	0	9
4:00	6	5	6	10	27
5:00	15	24	35	45	119
6:00	79	103	112	120	414
7:00	110	138	133	162	543
8:00	134	126	128	129	517
9:00	104	86	102	103	395
10:00	76	88	95	90	349
11:00	75	86	70	76	307
12:00	93	67	89	87	336
13:00	99	82	81	89	351
14:00	88	91	117	129	425
15:00	101	115	129	119	464
16:00	116	157	180	156	609
17:00	177	181	198	157	713
18:00	165	125	129	87	506
19:00	81	73	75	45	274
20:00	52	70	52	52	226
21:00	41	36	25	25	127
22:00	21	17	12	10	60
23:00	13	13	4	3	33
				TOTAL:	6822

The A.M. peak hour from 7:15 to 8:15 is 567
The P.M. peak hour from 17:00 to 18:00 is 713

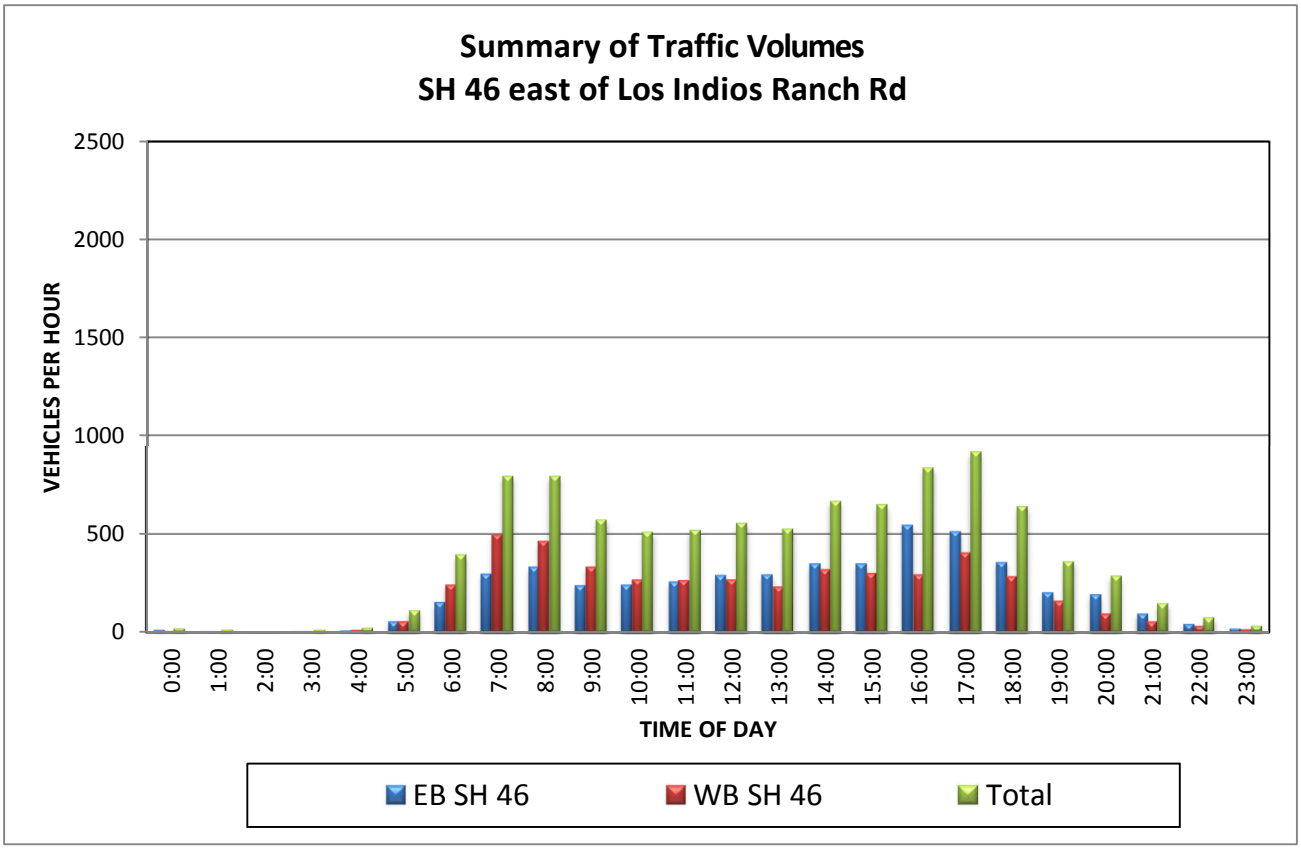


SH 46 east of Los Indios Ranch Rd

Date Began:
9/21/2016

TIME	0:00	0:15	0:30	0:45	TOTAL
0:00	8	3	5	2	18
1:00	6	4	0	2	12
2:00	0	1	1	0	2
3:00	2	2	3	4	11
4:00	2	5	9	5	21
5:00	11	27	27	46	111
6:00	51	91	119	131	392
7:00	171	196	211	214	792
8:00	223	211	188	169	791
9:00	151	154	145	120	570
10:00	115	119	127	147	508
11:00	107	137	131	143	518
12:00	127	149	135	143	554
13:00	123	127	131	144	525
14:00	147	175	159	184	665
15:00	161	138	178	171	648
16:00	206	187	232	209	834
17:00	215	239	226	236	916
18:00	199	172	138	128	637
19:00	95	95	88	81	359
20:00	66	76	82	61	285
21:00	50	41	30	26	147
22:00	28	22	14	10	74
23:00	8	11	7	5	31
				TOTAL:	9421

The A.M. peak hour from 7:30 to 8:30 is 859
The P.M. peak hour from 17:00 to 18:00 is 916

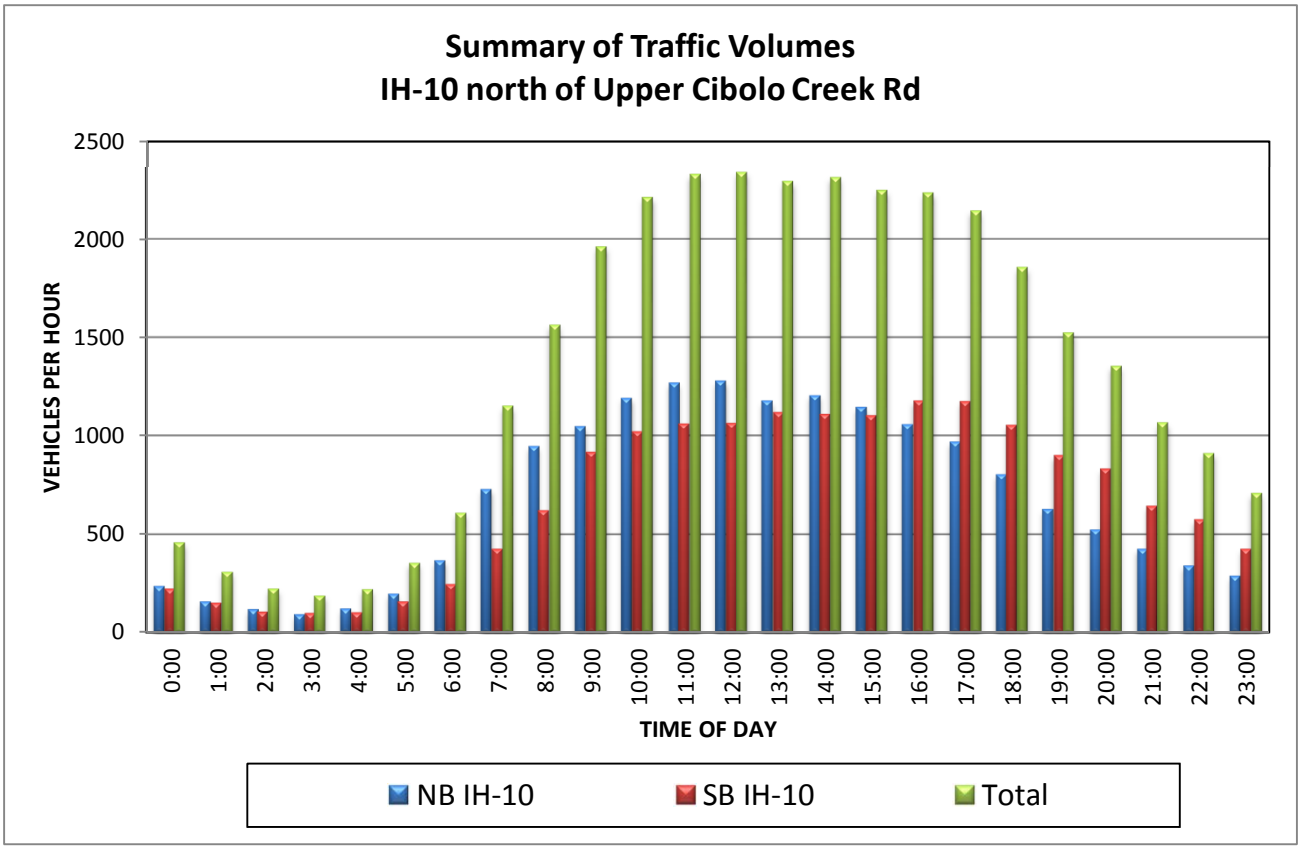


IH-10 north of Upper Cibolo Creek Rd

Date Began:
10/1/2016

TIME	0:00	0:15	0:30	0:45	TOTAL
0:00	137	130	96	92	455
1:00	87	78	70	71	306
2:00	58	54	52	56	220
3:00	49	44	47	46	186
4:00	52	47	54	65	218
5:00	69	75	98	108	350
6:00	119	152	147	189	607
7:00	200	261	338	350	1149
8:00	361	383	411	406	1561
9:00	401	445	543	571	1960
10:00	546	550	547	566	2209
11:00	515	609	579	624	2327
12:00	581	620	542	595	2338
13:00	585	577	562	567	2291
14:00	582	600	576	553	2311
15:00	565	598	533	550	2246
16:00	560	533	559	580	2232
17:00	562	512	526	541	2141
18:00	514	454	476	409	1853
19:00	400	386	361	376	1523
20:00	353	340	334	325	1352
21:00	269	317	268	210	1064
22:00	254	261	201	194	910
23:00	220	172	161	154	707
				TOTAL:	32516

The A.M. peak hour from 9:15 to 10:15 is 2105
The P.M. peak hour from 14:15 to 15:15 is 2294

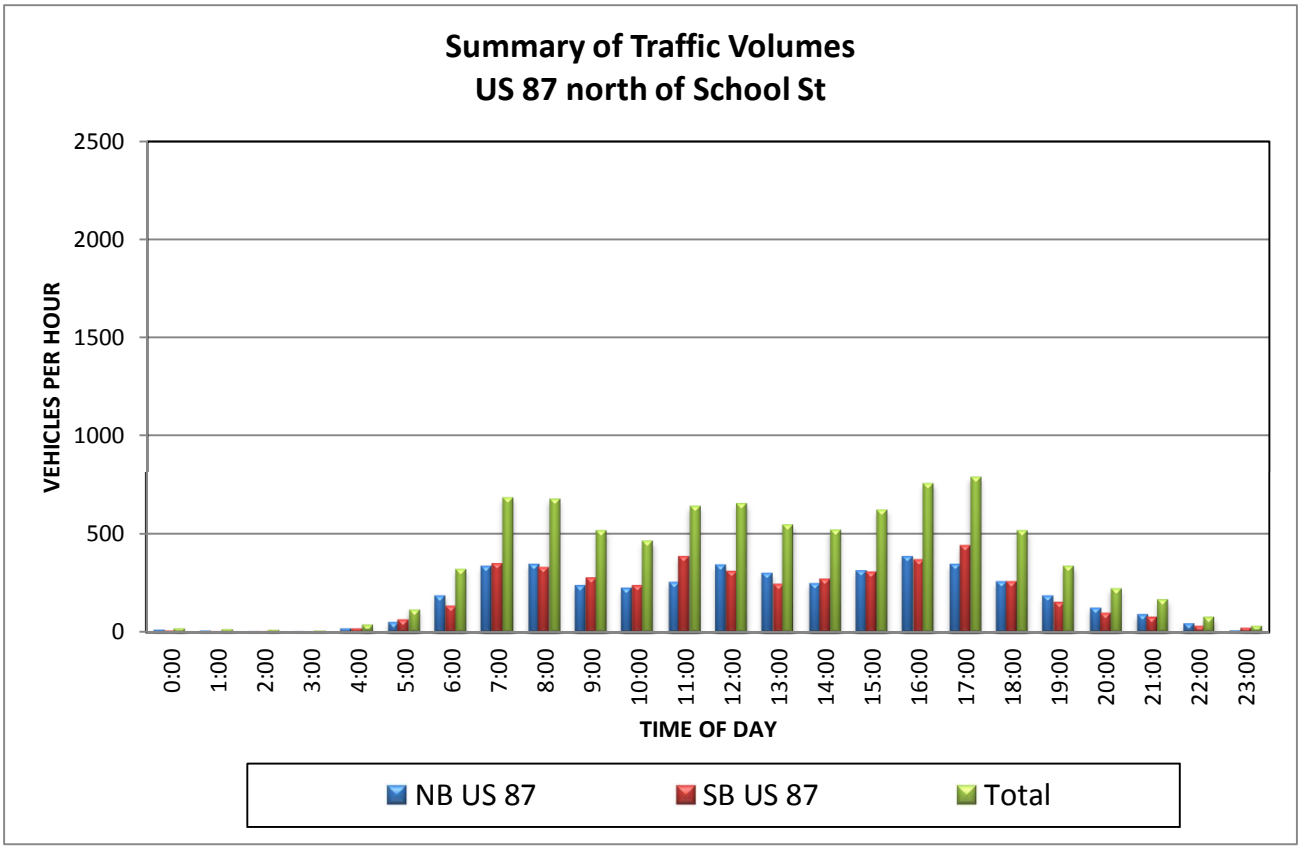


Date Began:
9/21/2016

US 87 north of School St

TIME	0:00	0:15	0:30	0:45	TOTAL
0:00	2	6	8	4	20
1:00	5	5	3	1	14
2:00	1	5	2	3	11
3:00	1	2	3	2	8
4:00	3	8	8	18	37
5:00	22	16	28	48	114
6:00	44	59	86	131	320
7:00	124	174	164	220	682
8:00	192	181	169	132	674
9:00	149	124	126	114	513
10:00	120	98	107	136	461
11:00	167	131	146	194	638
12:00	185	149	136	180	650
13:00	141	137	129	136	543
14:00	134	132	130	122	518
15:00	134	142	164	179	619
16:00	208	187	174	184	753
17:00	255	193	193	143	784
18:00	140	148	126	100	514
19:00	90	90	81	75	336
20:00	66	51	59	46	222
21:00	58	48	32	27	165
22:00	19	22	17	18	76
23:00	6	7	12	7	32
				TOTAL:	8704

The A.M. peak hour from 7:45 to 8:45 is 762
The P.M. peak hour from 16:45 to 17:45 is 825

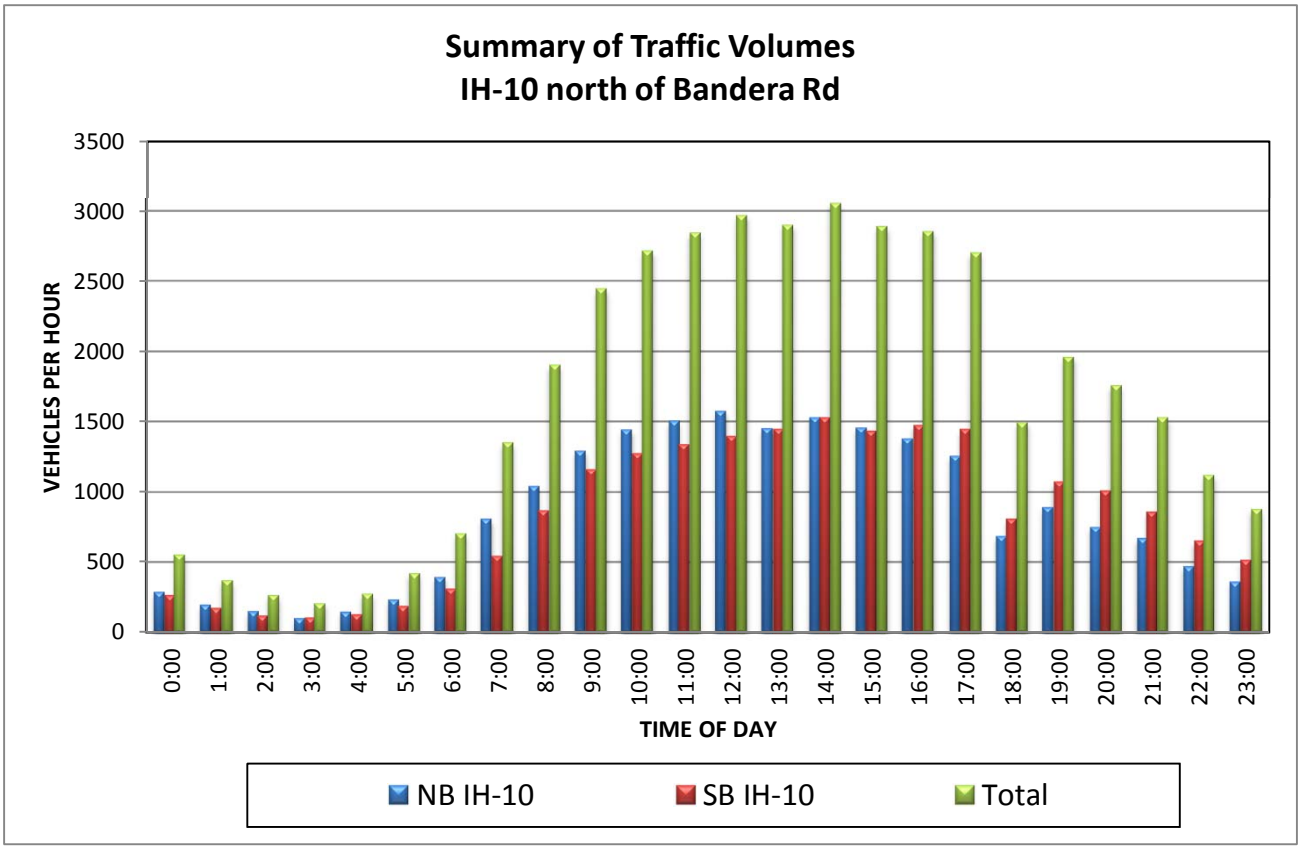


IH-10 north of Bandera Rd

Date Began:
10/1/2016

TIME	0:00	0:15	0:30	0:45	TOTAL
0:00	180	148	118	106	552
1:00	100	102	81	86	369
2:00	72	73	64	55	264
3:00	56	53	46	48	203
4:00	59	67	61	85	272
5:00	74	92	111	140	417
6:00	125	171	181	224	701
7:00	260	307	369	412	1348
8:00	431	464	516	491	1902
9:00	551	563	640	692	2446
10:00	686	658	660	710	2714
11:00	641	734	721	745	2841
12:00	771	753	692	751	2967
13:00	717	721	729	731	2898
14:00	771	769	772	743	3055
15:00	736	751	677	726	2890
16:00	681	716	746	710	2853
17:00	717	678	664	642	2701
18:00	643	176	150	523	1492
19:00	518	508	467	466	1959
20:00	494	464	398	401	1757
21:00	388	409	402	327	1526
22:00	280	324	258	255	1117
23:00	265	221	212	176	874
				TOTAL:	40118

The A.M. peak hour from 9:15 to 10:15 is 2581
The P.M. peak hour from 14:15 to 15:15 is 3020

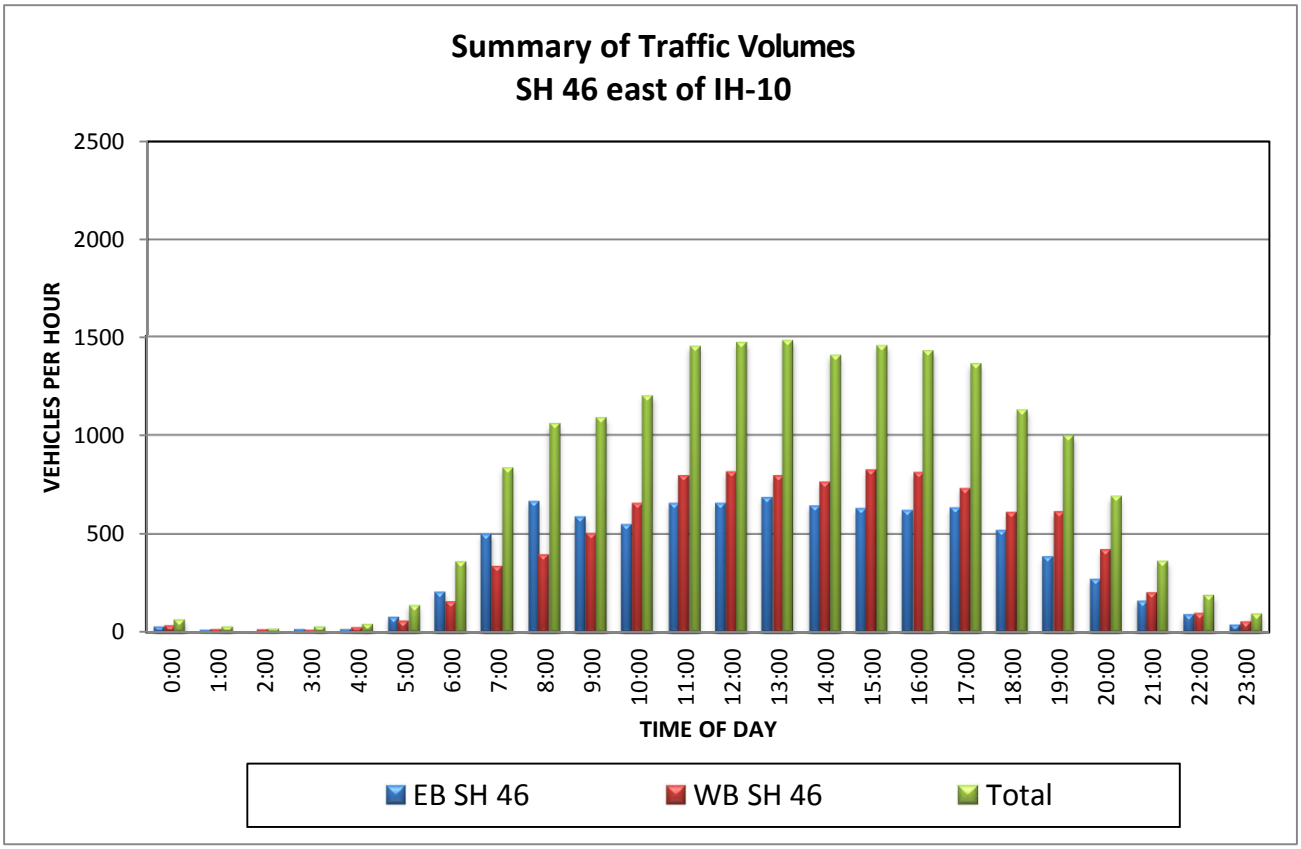


SH 46 east of IH 10

Date Began:
10/11/2016

TIME	0:00	0:15	0:30	0:45	TOTAL
0:00	17	15	17	14	63
1:00	8	11	1	9	29
2:00	6	5	2	4	17
3:00	6	8	6	8	28
4:00	5	7	10	20	42
5:00	19	31	30	56	136
6:00	62	71	106	120	359
7:00	158	203	229	244	834
8:00	275	269	236	279	1059
9:00	248	280	282	278	1088
10:00	275	310	301	314	1200
11:00	332	347	376	396	1451
12:00	353	390	361	365	1469
13:00	382	373	367	358	1480
14:00	340	351	362	351	1404
15:00	373	342	382	358	1455
16:00	368	353	357	351	1429
17:00	330	357	353	323	1363
18:00	316	274	286	252	1128
19:00	242	242	239	273	996
20:00	219	186	158	126	689
21:00	122	98	83	58	361
22:00	65	56	38	28	187
23:00	28	27	15	23	93
				TOTAL:	18360

The A.M. peak hour from 9:15 to 10:15 is 1115
The P.M. peak hour from 15:30 to 16:30 is 1461

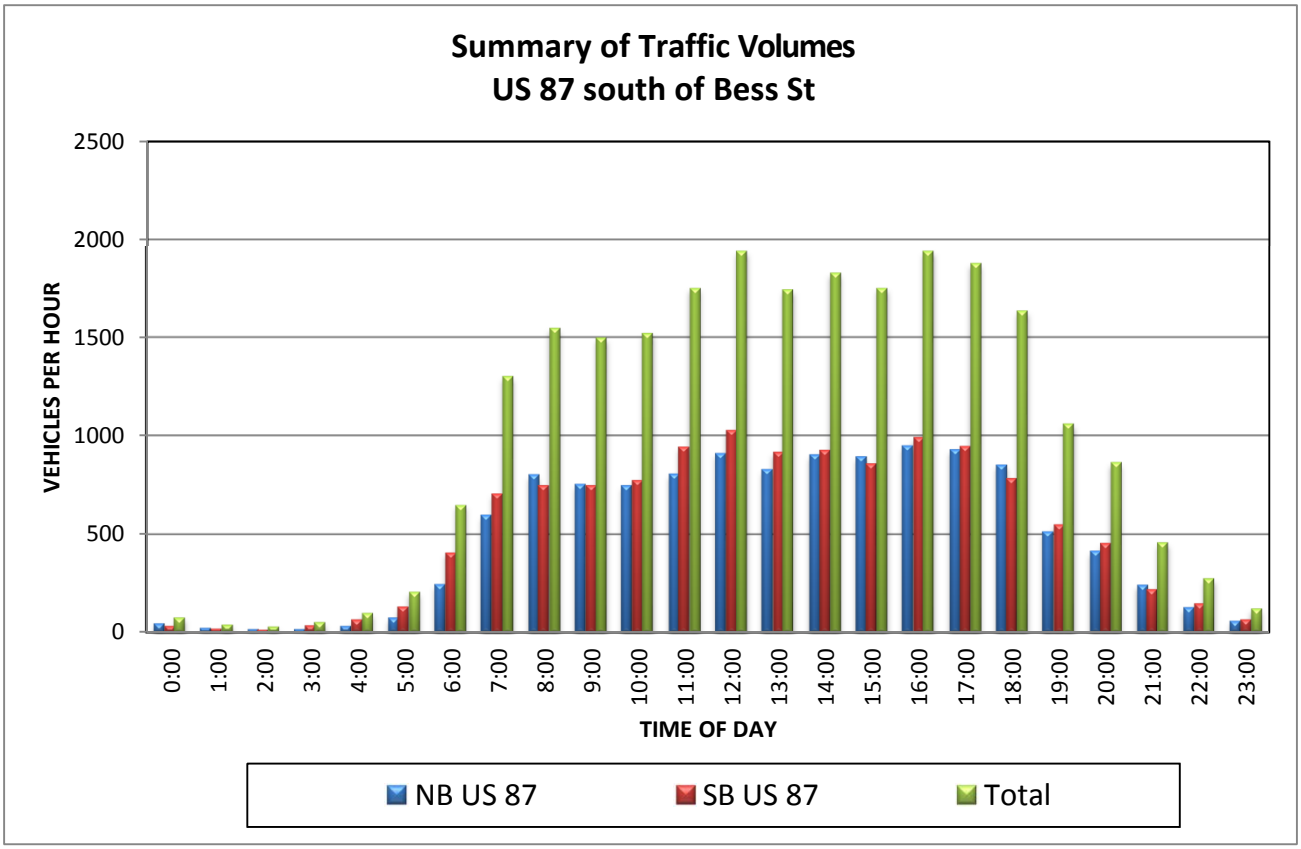


Date Began:
9/21/2016

US 87 south of Bess St

TIME	0:00	0:15	0:30	0:45	TOTAL
0:00	20	15	21	19	75
1:00	6	12	14	6	38
2:00	7	7	5	9	28
3:00	3	7	22	18	50
4:00	14	17	26	39	96
5:00	26	36	49	93	204
6:00	112	146	171	217	646
7:00	248	307	360	384	1299
8:00	382	398	396	370	1546
9:00	367	374	362	394	1497
10:00	336	395	393	396	1520
11:00	425	383	464	476	1748
12:00	491	453	515	476	1935
13:00	426	427	415	474	1742
14:00	425	455	475	471	1826
15:00	462	432	405	449	1748
16:00	465	508	498	466	1937
17:00	487	484	486	417	1874
18:00	424	431	398	381	1634
19:00	268	271	259	261	1059
20:00	257	222	218	166	863
21:00	149	120	109	78	456
22:00	84	71	76	41	272
23:00	50	27	28	16	121
				TOTAL:	24214

The A.M. peak hour from 7:45 to 8:45 is 1560
The P.M. peak hour from 16:15 to 17:15 is 1959

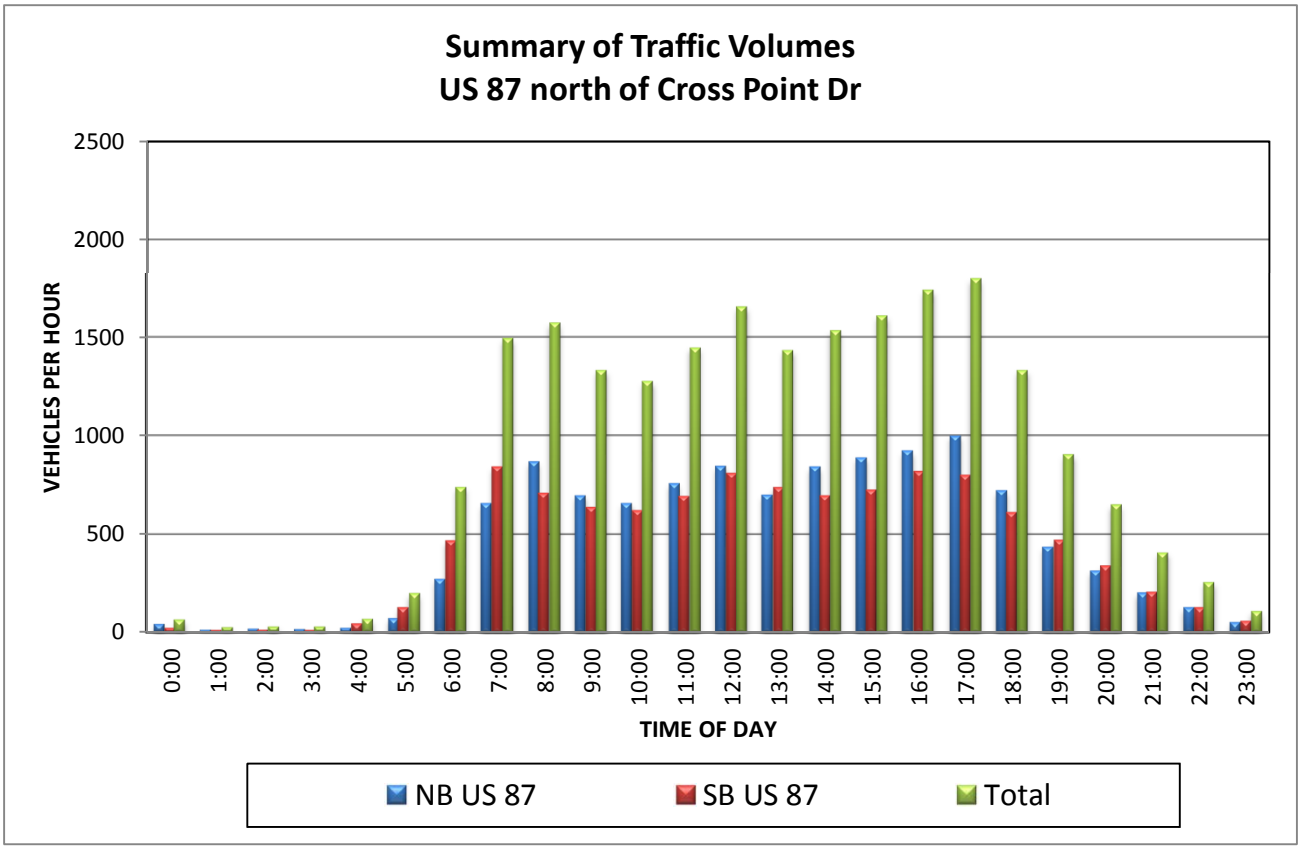


US 87 north of Cross Point Dr

Date Began:
9/21/2016

TIME	0:00	0:15	0:30	0:45	TOTAL
0:00	10	19	13	21	63
1:00	2	8	9	5	24
2:00	11	6	7	5	29
3:00	6	6	8	7	27
4:00	10	17	17	22	66
5:00	33	37	42	85	197
6:00	105	166	199	265	735
7:00	307	382	369	434	1492
8:00	411	409	401	351	1572
9:00	318	330	331	352	1331
10:00	324	305	320	324	1273
11:00	326	366	354	398	1444
12:00	379	415	473	386	1653
13:00	374	341	350	366	1431
14:00	367	351	408	406	1532
15:00	416	401	400	391	1608
16:00	394	458	448	437	1737
17:00	449	455	484	408	1796
18:00	375	356	314	285	1330
19:00	243	230	228	201	902
20:00	198	152	146	153	649
21:00	107	117	100	81	405
22:00	84	74	51	43	252
23:00	27	36	26	19	108
				TOTAL:	21656

The A.M. peak hour from 7:45 to 8:45 is 1655
The P.M. peak hour from 16:45 to 17:45 is 1825

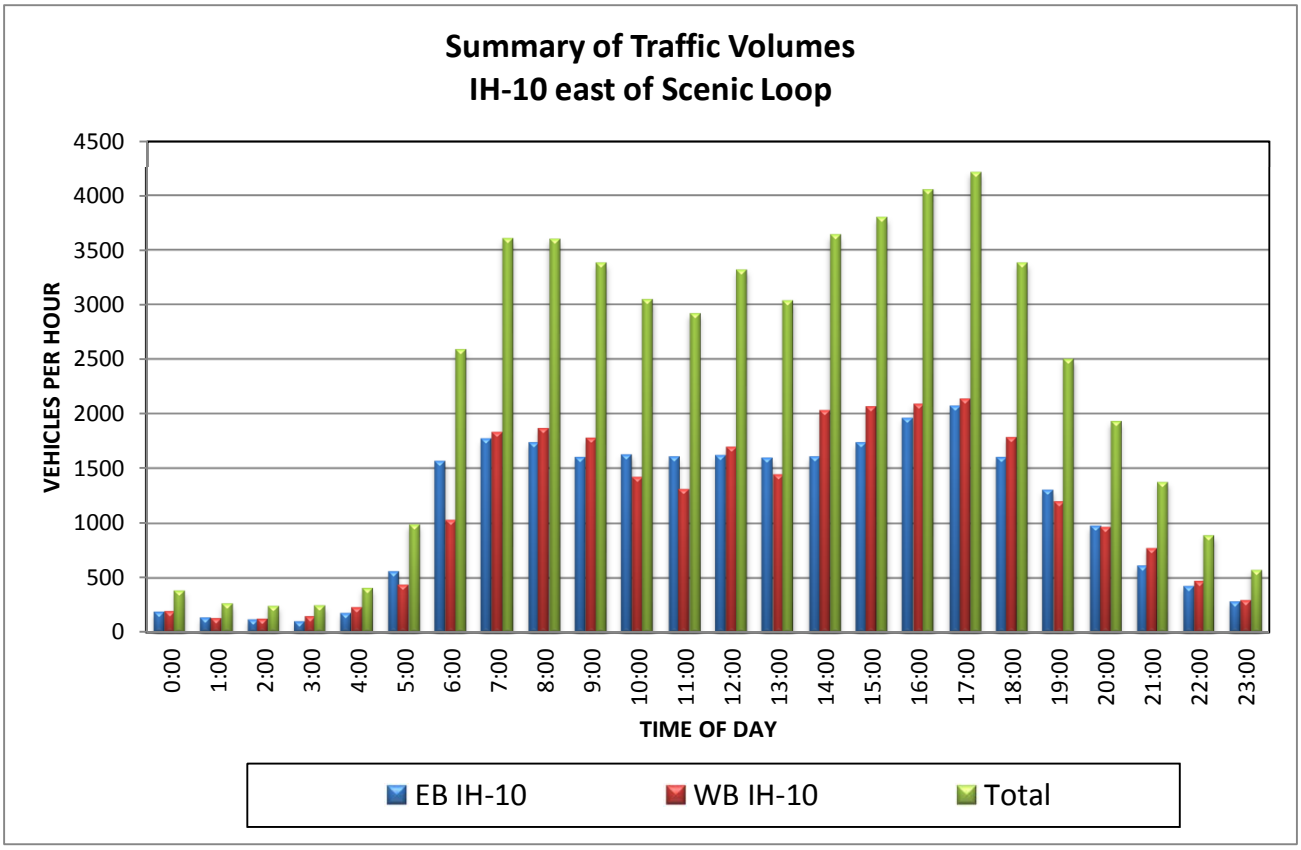


IH-10 east of Scenic Loop

Date Began:
9/21/2016

TIME	0:00	0:15	0:30	0:45	TOTAL
0:00	105	95	91	89	380
1:00	80	54	69	57	260
2:00	55	71	56	57	239
3:00	45	72	60	66	243
4:00	57	92	107	146	402
5:00	158	217	264	346	985
6:00	419	563	743	864	2589
7:00	898	905	908	891	3602
8:00	909	967	918	804	3598
9:00	811	858	833	875	3377
10:00	798	793	726	726	3043
11:00	689	723	766	737	2915
12:00	748	854	974	741	3317
13:00	705	781	776	774	3036
14:00	795	896	995	949	3635
15:00	928	897	989	982	3796
16:00	979	1022	1065	982	4048
17:00	1088	1074	1081	964	4207
18:00	908	893	811	766	3378
19:00	689	642	557	612	2500
20:00	509	528	455	439	1931
21:00	365	383	326	300	1374
22:00	249	240	215	183	887
23:00	172	142	152	104	570
				TOTAL:	54312

The A.M. peak hour from 7:45 to 8:45 is 3685
The P.M. peak hour from 16:45 to 17:45 is 4225

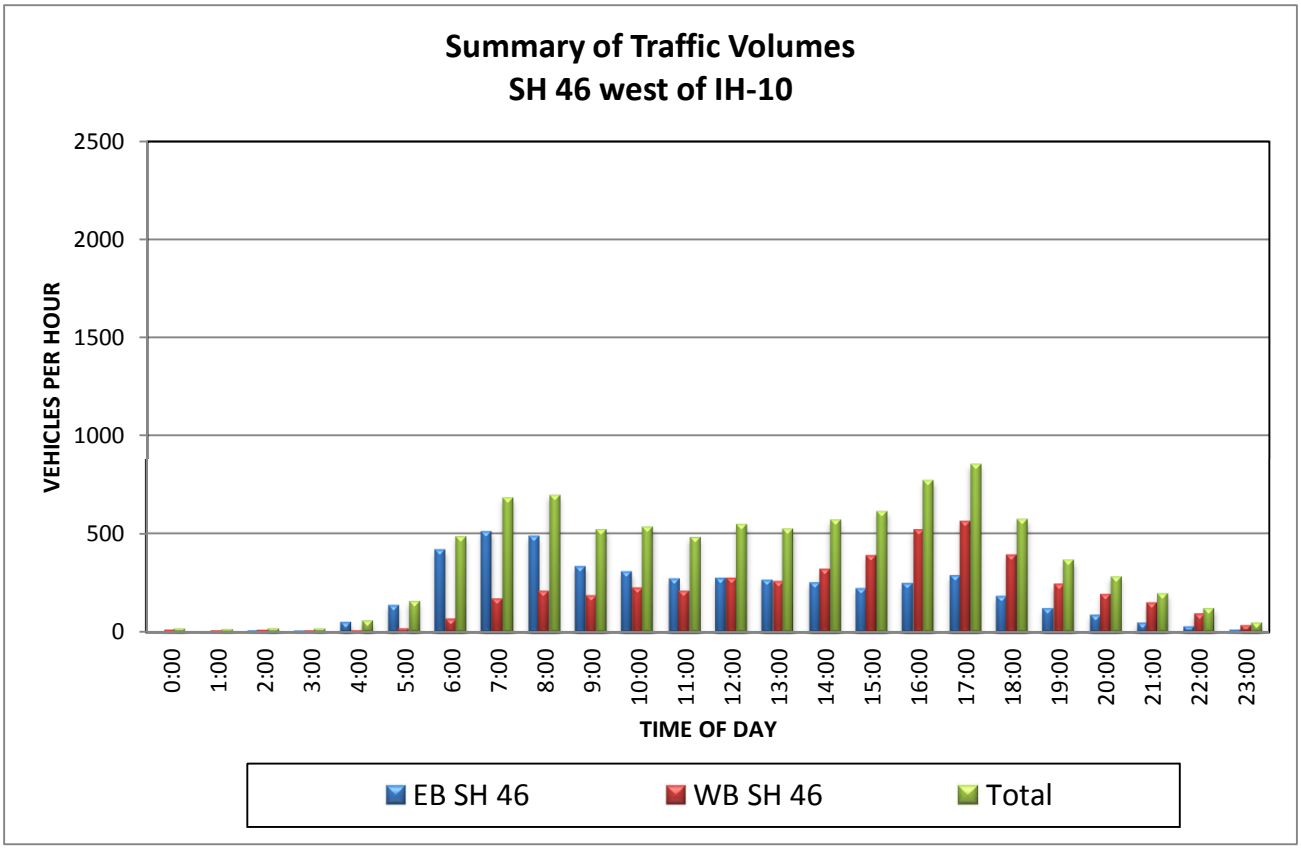


SH 46 west of IH-10

Date Began:
9/21/2016

TIME	0:00	0:15	0:30	0:45	TOTAL
0:00	7	4	4	2	17
1:00	2	3	5	4	14
2:00	8	7	1	4	20
3:00	4	7	1	5	17
4:00	9	14	13	23	59
5:00	17	28	38	71	154
6:00	81	105	142	154	482
7:00	147	178	168	183	676
8:00	215	168	177	131	691
9:00	151	131	118	119	519
10:00	133	146	122	128	529
11:00	110	119	140	110	479
12:00	145	126	141	133	545
13:00	128	123	134	136	521
14:00	135	130	157	145	567
15:00	134	147	165	164	610
16:00	173	186	206	200	765
17:00	195	228	233	191	847
18:00	162	159	122	128	571
19:00	103	93	82	85	363
20:00	68	86	66	60	280
21:00	54	58	39	44	195
22:00	33	33	32	23	121
23:00	10	15	15	8	48
				TOTAL:	9090

The A.M. peak hour from 7:15 to 8:15 is 744
The P.M. peak hour from 16:45 to 17:45 is 856

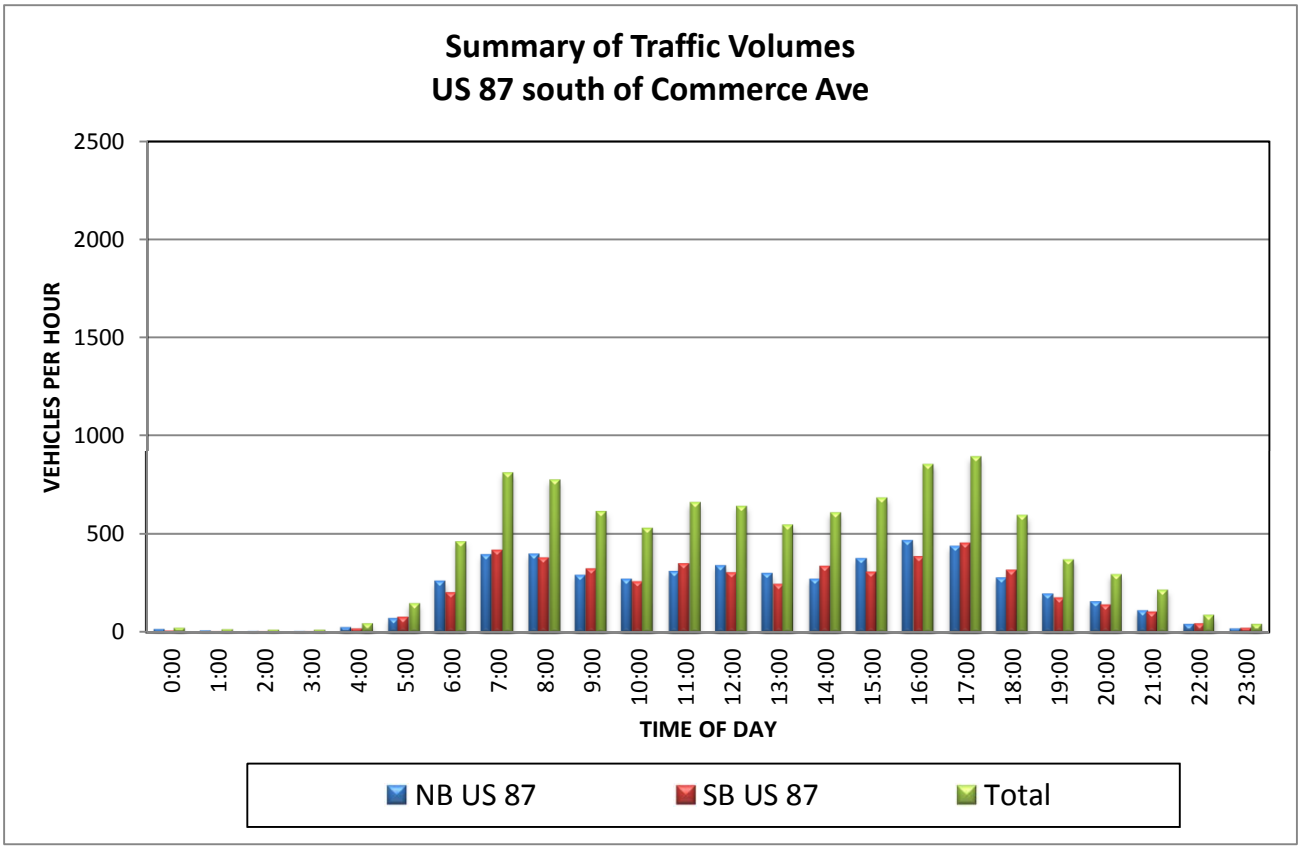


Date Began:
9/21/2016

US 87 south of Commerce Ave

TIME	0:00	0:15	0:30	0:45	TOTAL
0:00	9	4	8	2	23
1:00	2	6	4	2	14
2:00	1	6	2	4	13
3:00	2	3	4	3	12
4:00	5	3	14	22	44
5:00	22	24	41	59	146
6:00	70	91	133	166	460
7:00	165	196	179	268	808
8:00	212	199	185	177	773
9:00	173	157	126	156	612
10:00	130	131	135	132	528
11:00	168	146	147	196	657
12:00	177	161	141	160	639
13:00	149	134	132	127	542
14:00	145	148	156	156	605
15:00	154	169	181	178	682
16:00	206	232	218	195	851
17:00	270	209	232	178	889
18:00	160	161	146	124	591
19:00	91	98	97	83	369
20:00	77	67	79	71	294
21:00	73	52	44	45	214
22:00	24	23	21	18	86
23:00	7	10	14	9	40
				TOTAL:	9892

The A.M. peak hour from 7:45 to 8:45 is 864
The P.M. peak hour from 16:15 to 17:15 is 915



Appendix B

Crash Data Summary Tables

SUMMARY TABLE 1

Crash Summary for SH 46 Segment 1 (between SH 16 and US 87 Deep Hollow Creek)

		Crashes Per Year					
		2011	2012	2013	2014	2015	Total
Severity	Not Injured	3	5	4	10	5	27
	Non-Incapacitating	1	0	1	2	6	10
	Incapacitating	1	0	1	1	2	5
	Fatal	0	2	0	0	0	2
Type	Right Angle	0	0	0	0	0	0
	Left Turn	0	0	0	0	1	1
	Rear End	2	0	0	0	1	3
	Sideswipe	0	0	0	0	0	0
	Head On	0	2	0	0	2	4
	One Motor Vehicle	3	5	6	13	9	36
	Other	0	0	0	0	0	0
Weather Conditions	Dry	3	5	5	9	8	30
	Wet	2	2	1	4	5	14
Light Conditions	Daytime	3	5	3	6	9	26
	Nighttime	2	2	3	7	4	18
Total crashes per year		**5**	**7**	**6**	**13**	**13**	**44**

This segment has a crash rate of 47.36 crashes per 100 million vehicles miles in the corridor.

SUMMARY TABLE 2

Crash Summary for SH 46 Segment 2 (between Deep Hollow Drive and IH-10)

		Crashes Per Year					
		2011	2012	2013	2014	2015	Total
Severity	Not Injured	5	4	7	7	8	31
	Non-Incapacitating	2	4	6	7	6	25
	Incapacitating	0	0	0	1	0	1
	Fatal	0	2	0	0	0	2
Type	Right Angle	0	1	0	0	1	2
	Left Turn	1	1	4	3	4	13
	Rear End	3	1	2	4	3	13
	Sideswipe	1	0	0	1	0	2
	Head On	0	1	0	1	0	2
	One Motor Vehicle	2	6	7	6	6	27
	Other	0	0	0	0	0	0
Weather Conditions	Dry	7	7	11	11	9	45
	Wet	0	3	2	4	5	14
Light Conditions	Daytime	5	9	8	11	7	40
	Nighttime	2	1	5	4	7	19
Total crashes per year		**7**	**10**	**13**	**15**	**14**	**59**

This segment has a crash rate of 64.43 crashes per 100 million vehicles miles in the corridor.

SUMMARY TABLE 3

Crash Summary for SH 46 Segment 3 (between IH-10 and US 87)

		Crashes Per Year					
		2011	2012	2013	2014	2015	Total
Severity	Not Injured	19	15	16	21	25	96
	Non-Incapacitating	4	6	4	6	0	20
	Incapacitating	0	0	2	0	0	2
	Fatal	0	0	0	0	0	0
Type	Right Angle	2	6	3	0	6	17
	Left Turn	14	8	10	17	9	58
	Rear End	5	2	6	7	8	28
	Sideswipe	1	3	0	2	2	8
	Head On	0	0	0	0	0	0
	One Motor Vehicle	1	2	3	1	1	8
	Other	0	0	0	0	0	0
Weather Conditions	Dry	20	20	21	21	22	104
	Wet	3	1	1	6	4	15
Light Conditions	Daytime	20	19	21	24	25	109
	Nighttime	3	2	1	3	1	10
Total crashes per year		**23**	**21**	**22**	**27**	**26**	**119**

This segment has a crash rate of 727.78 crashes per 100 million vehicles miles in the corridor.

SUMMARY TABLE 4

Crash Summary for SH 46 Segment 4 (between US 87 and FM 474)

		Crashes Per Year					
		2011	2012	2013	2014	2015	Total
Severity	Not Injured	13	13	6	17	19	68
	Non-Incapacitating	3	2	3	0	4	12
	Incapacitating	1	0	0	0	0	1
	Fatal	0	0	0	0	0	0
Type	Right Angle	1	3	3	2	0	9
	Left Turn	12	6	5	8	7	38
	Rear End	2	4	1	4	13	24
	Sideswipe	0	2	0	1	2	5
	Head On	1	0	0	0	0	1
	One Motor Vehicle	1	0	0	2	1	4
	Other	0	0	0	0	0	0
Weather Conditions	Dry	17	14	9	14	18	72
	Wet	0	1	0	3	5	9
Light Conditions	Daytime	16	14	9	15	22	76
	Nighttime	1	1	0	2	1	5
Total crashes per year		**17**	**15**	**9**	**17**	**23**	**81**

This segment has a crash rate of 580.69 crashes per 100 million vehicles miles in the corridor.

SUMMARY TABLE 5

Crash Summary for SH 46 Segment 5 (between FM 474 and Herff Ranch Blvd)

		Crashes Per Year					
		2011	2012	2013	2014	2015	Total
Severity	Not Injured	4	3	5	6	9	27
	Non-Incapacitating	1	3	0	4	3	11
	Incapacitating	0	1	0	0	0	1
	Fatal	0	0	0	0	0	0
Type	Right Angle	0	0	0	0	1	1
	Left Turn	0	0	1	1	1	3
	Rear End	1	4	3	8	9	25
	Sideswipe	0	0	0	0	0	0
	Head On	0	1	0	0	0	1
	One Motor Vehicle	4	2	1	1	1	9
	Other	0	0	0	0	0	0
Weather Conditions	Dry	5	5	4	5	9	28
	Wet	0	2	1	5	3	11
Light Conditions	Daytime	4	5	5	9	10	33
	Nighttime	1	2	0	1	2	6
Total crashes per year		**5**	**7**	**5**	**10**	**12**	**39**

This segment has a crash rate of 170.25 crashes per 100 million vehicles miles in the corridor.

SUMMARY TABLE 6

Crash Summary for SH 46 Segment 6 (between Herff Ranch Blvd and Ammann Rd)

		Crashes Per Year					
		2011	2012	2013	2014	2015	Total
Severity	Not Injured	0	0	0	2	1	3
	Non-Incapacitating	0	0	1	0	1	2
	Incapacitating	0	0	0	0	0	0
	Fatal	0	0	0	0	0	0
Type	Right Angle	0	0	0	0	0	0
	Left Turn	0	0	0	1	0	1
	Rear End	0	0	1	1	2	4
	Sideswipe	0	0	0	0	0	0
	Head On	0	0	0	0	0	0
	One Motor Vehicle	0	0	0	0	0	0
	Other	0	0	0	0	0	0
Weather Conditions	Dry	0	0	0	2	1	3
	Wet	0	0	1	0	1	2
Light Conditions	Daytime	0	0	0	2	2	4
	Nighttime	0	0	1	0	0	1
Total crashes per year		**0**	**0**	**1**	**2**	**2**	**5**

This segment has a crash rate of 52.38 crashes per 100 million vehicles miles in the corridor.

SUMMARY TABLE 7

Crash Summary for SH 46 Segment 7 (between Ammann Rd to FM 3351)

		Crashes Per Year					
		2011	2012	2013	2014	2015	Total
Severity	Not Injured	5	3	3	6	16	33
	Non-Incapacitating	2	2	4	3	7	18
	Incapacitating	0	2	1	1	0	4
	Fatal	0	0	0	0	0	0
Type	Right Angle	0	0	0	0	0	0
	Left Turn	1	0	0	3	1	5
	Rear End	1	1	0	1	6	9
	Sideswipe	0	0	0	0	1	1
	Head On	0	2	0	2	1	5
	One Motor Vehicle	5	4	8	4	14	35
	Other	0	0	0	0	0	0
Weather Conditions	Dry	7	5	7	9	12	40
	Wet	0	2	1	1	11	15
Light Conditions	Daytime	4	3	6	6	21	40
	Nighttime	3	4	2	4	2	15
Total crashes per year		**7**	**7**	**8**	**10**	**23**	**55**

This segment has a crash rate of 41.49 crashes per 100 million vehicles miles in the corridor.

SUMMARY TABLE 1

Crash Summary for IH-10 Segment 1 (between Kendall-Bexar County Lines to S US87)

		Crashes Per Year					
		2011	2012	2013	2014	2015	Total
Severity	Not Injured	29	33	18	16	27	123
	Non-Incapacitating	11	9	5	4	6	35
	Incapacitating	1	2	3	1	3	10
	Fatal	2	0	0	0	0	2
Type	Right Angle	0	0	0	3	1	4
	Left Turn	7	6	5	0	3	21
	Rear End	8	5	4	7	9	33
	Sideswipe	4	5	0	2	2	13
	Head On	2	1	2	1	1	7
	One Motor Vehicle	22	27	17	9	20	95
	Other	0	0	0	0	0	0
Weather Conditions	Dry	35	31	23	18	27	134
	Wet	8	13	5	4	9	39
Light Conditions	Daytime	31	33	21	14	24	123
	Nighttime	12	11	7	8	12	50
Total crashes per year		**43**	**44**	**28**	**22**	**36**	**173**

This segment has a crash rate of 68.28 crashes per 100 million vehicles miles in the corridor.

SUMMARY TABLE 2

Crash Summary for IH-10 Segment 2 (between US87 to SH 46)

		Crashes Per Year					
		2011	2012	2013	2014	2015	Total
Severity	Not Injured	11	3	6	8	12	40
	Non-Incapacitating	1	3	1	3	0	8
	Incapacitating	0	0	1	1	0	2
	Fatal	0	0	0	0	0	0
Type	Right Angle	0	1	1	0	1	3
	Left Turn	1	1	1	0	0	3
	Rear End	0	1	2	0	4	7
	Sideswipe	2	1	0	0	1	4
	Head On	0	0	0	0	1	1
	One Motor Vehicle	9	2	4	12	5	32
	Other	0	0	0	0	0	0
Weather Conditions	Dry	5	6	5	9	11	36
	Wet	7	0	3	3	1	14
Light Conditions	Daytime	10	4	6	7	9	36
	Nighttime	2	2	2	5	3	14
Total crashes per year		**12**	**6**	**8**	**12**	**12**	**50**

This segment has a crash rate of 42.69 crashes per 100 million vehicles miles in the corridor.

SUMMARY TABLE 3

Crash Summary for IH-10 Segment 3 (between SH 46 to Johns Rd)

		Crashes Per Year					
		2011	2012	2013	2014	2015	Total
Severity	Not Injured	7	6	3	7	9	32
	Non-Incapacitating	1	3	1	4	1	10
	Incapacitating	2	2	0	0	0	4
	Fatal	1	0	0	0	0	1
Type	Right Angle	1	0	1	0	0	2
	Left Turn	0	0	0	0	0	0
	Rear End	4	1	0	2	1	8
	Sideswipe	0	0	0	0	3	3
	Head On	0	0	0	0	0	0
	One Motor Vehicle	6	10	3	9	6	34
	Other	0	0	0	0	0	0
Weather Conditions	Dry	6	6	3	8	6	29
	Wet	5	5	1	3	4	18
Light Conditions	Daytime	9	4	2	5	5	25
	Nighttime	2	7	2	6	5	22
Total crashes per year		**11**	**11**	**4**	**11**	**10**	**47**

This segment has a crash rate of 45.85 crashes per 100 million vehicles miles in the corridor.

SUMMARY TABLE 4

Crash Summary for IH-10 Segment 4 (between Johns Rd to US 87, N Main St)

		Crashes Per Year					
		2011	2012	2013	2014	2015	Total
Severity	Not Injured	10	1	6	4	2	23
	Non-Incapacitating	3	4	0	1	3	11
	Incapacitating	1	0	0	0	0	1
	Fatal	0	0	1	0	0	1
Type	Right Angle	0	0	0	0	0	0
	Left Turn	0	0	0	0	0	0
	Rear End	2	0	0	0	0	2
	Sideswipe	0	0	0	0	0	0
	Head On	0	1	0	0	0	1
	One Motor Vehicle	12	4	7	5	5	33
	Other	0	0	0	0	0	0
Weather Conditions	Dry	10	4	5	1	4	24
	Wet	4	0	2	4	1	11
Light Conditions	Daytime	7	1	5	4	4	21
	Nighttime	7	4	2	1	1	15
Total crashes per year		**14**	**5**	**7**	**5**	**5**	**36**

This segment has a crash rate of 31.95 crashes per 100 million vehicles miles in the corridor.

SUMMARY TABLE 5

Crash Summary for IH-10 Segment 5 (between N US 87 to Upper Cibolo Creed Rd)

		Crashes Per Year					
		2011	2012	2013	2014	2015	Total
Severity	Not Injured	2	3	1	2	1	9
	Non-Incapacitating	1	2	0	1	1	5
	Incapacitating	0	0	0	0	2	2
	Fatal	0	1	0	0	0	1
Type	Right Angle	0	0	0	0	0	0
	Left Turn	0	1	0	0	0	1
	Rear End	1	0	0	0	1	2
	Sideswipe	1	1	0	0	0	2
	Head On	0	0	0	0	0	0
	One Motor Vehicle	1	5	1	3	3	13
	Other	0	0	0	0	0	0
Weather Conditions	Dry	1	7	1	1	3	13
	Wet	2	0	0	2	1	5
Light Conditions	Daytime	3	4	1	3	1	12
	Nighttime	0	3	0	0	3	6
Total crashes per year		**3**	**7**	**1**	**3**	**4**	**18**

This segment has a crash rate of 24.86 crashes per 100 million vehicles miles in the corridor.

US 87 (Main Street)

SUMMARY TABLE 1

Crash Summary for US 87 Segment 1 (between IH-10 S to SH 46)

		Crashes Per Year					
		2011	2012	2013	2014	2015	Total
Severity	Not Injured	0	3	3	2	8	16
	Non-Incapacitating	0	1	0	0	10	11
	Incapacitating	0	0	1	0	0	1
	Fatal	0	0	0	0	0	0
Type	Right Angle	0	0	0	0	2	2
	Left Turn	0	2	3	0	1	6
	Rear End	0	1	0	2	9	12
	Sideswipe	0	0	0	0	2	2
	Head On	0	0	0	0	0	0
	One Motor Vehicle	0	1	1	0	4	6
	Other	0	0	0	0	0	0
Weather Conditions	Dry	0	3	3	1	14	21
	Wet	0	1	1	1	4	7
Light Conditions	Daytime	0	3	3	2	15	23
	Nighttime	0	1	1	0	3	5
Total crashes per year		**0**	**4**	**4**	**2**	**18**	**28**

This segment has a crash rate of 54.50 crashes per 100 million vehicles miles in the corridor.

SUMMARY TABLE 2

Crash Summary for US 87 Segment 2 (between Bandera Rd to River Rd)

		Crashes Per Year					
		2011	2012	2013	2014	2015	Total
Severity	Not Injured	7	12	9	17	16	61
	Non-Incapacitating	2	4	6	3	1	16
	Incapacitating	0	0	2	0	0	2
	Fatal	0	0	0	0	0	0
Type	Right Angle	1	2	3	4	3	13
	Left Turn	1	5	7	7	3	23
	Rear End	4	4	5	4	5	22
	Sideswipe	2	3	1	2	4	12
	Head On	0	0	0	0	0	0
	One Motor Vehicle	1	2	1	2	2	8
	Other	0	0	0	1	0	1
Weather Conditions	Dry	7	14	15	20	13	69
	Wet	2	2	2	0	4	10
Light Conditions	Daytime	8	12	14	20	15	69
	Nighttime	1	4	3	0	2	10
Total crashes per year		**9**	**16**	**17**	**20**	**17**	**79**

This segment has a crash rate of 275.03 crashes per 100 million vehicles miles in the corridor.

SUMMARY TABLE 3

Crash Summary for US 87 Segment 3 (between River Rd to Adler Rd)

		Crashes Per Year					
		2011	2012	2013	2014	2015	Total
Severity	Not Injured	13	17	11	16	17	74
	Non-Incapacitating	3	2	4	4	5	18
	Incapacitating	0	0	0	0	0	0
	Fatal	0	0	0	1	0	1
Type	Right Angle	1	3	4	1	3	12
	Left Turn	6	1	4	6	7	24
	Rear End	4	7	2	4	5	22
	Sideswipe	2	4	3	4	2	15
	Head On	0	0	1	0	0	1
	One Motor Vehicle	3	4	1	6	5	19
	Other	0	0	1	0	0	1
Weather Conditions	Dry	15	18	13	1	20	67
	Wet	1	1	2	20	2	26
Light Conditions	Daytime	14	16	13	15	22	80
	Nighttime	2	3	2	6	0	13
Total crashes per year		**16**	**19**	**15**	**21**	**22**	**93**

This segment has a crash rate of 335.72 crashes per 100 million vehicles miles in the corridor.

SUMMARY TABLE 4

Crash Summary for US 87 Segment 4 (between Adler Rd to FM 1376)

		Crashes Per Year					
		2011	2012	2013	2014	2015	Total
Severity	Not Injured	1	4	0	0	2	7
	Non-Incapacitating	0	0	0	0	1	1
	Incapacitating	0	0	0	0	0	0
	Fatal	0	0	0	0	0	0
Type	Right Angle	0	0	0	0	0	0
	Left Turn	1	2	0	0	0	3
	Rear End	0	2	0	0	2	4
	Sideswipe	0	0	0	0	0	0
	Head On	0	0	0	0	0	0
	One Motor Vehicle	0	0	0	0	1	1
	Other	0	0	0	0	0	0
Weather Conditions	Dry	0	4	0	0	3	7
	Wet	1	0	0	0	0	1
Light Conditions	Daytime	1	4	0	0	2	7
	Nighttime	0	0	0	0	1	1
Total crashes per year		**1**	**4**	**0**	**0**	**3**	**8**

This segment has a crash rate of 122.84 crashes per 100 million vehicles miles in the corridor.

SUMMARY TABLE 5

Crash Summary for US 87 Segment 5 (between FM 1376 to IH-10 N)

		Crashes Per Year					
		2011	2012	2013	2014	2015	Total
Severity	Not Injured	0	0	0	1	2	3
	Non-Incapacitating	2	0	2	0	2	6
	Incapacitating	0	0	0	0	0	0
	Fatal	0	0	0	0	0	0
Type	Right Angle	0	0	0	0	0	0
	Left Turn	1	0	0	0	0	1
	Rear End	1	0	0	0	1	2
	Sideswipe	0	0	0	0	0	0
	Head On	0	0	0	0	0	0
	One Motor Vehicle	0	0	2	1	3	6
	Other	0	0	0	0	0	0
Weather Conditions	Dry	2	0	2	0	2	6
	Wet	0	0	0	1	2	3
Light Conditions	Daytime	2	0	1	1	2	6
	Nighttime	0	0	1	0	2	3
Total crashes per year		**2**	**0**	**2**	**1**	**4**	**9**

This segment has a crash rate of 44.91 crashes per 100 million vehicles miles in the corridor.

FM 474 (S Esser Rd)

SUMMARY TABLE 1

Crash Summary for FM 474 Segment 1 (between SH 46 – River Rd to Adler Rd)

		Crashes Per Year					
		2011	2012	2013	2014	2015	Total
Severity	Not Injured	0	0	2	1	1	4
	Non-Incapacitating	1	1	0	1	2	5
	Incapacitating	0	0	0	0	0	0
	Fatal	0	0	0	0	0	0
Type	Right Angle	0	0	1	0	0	1
	Left Turn	0	0	0	0	0	0
	Rear End	1	0	0	0	2	3
	Sideswipe	0	0	0	0	0	0
	Head On	0	0	0	0	0	0
	One Motor Vehicle	0	1	1	2	1	5
	Other	0	0	0	0	0	0
Weather Conditions	Dry	1	1	2	1	2	7
	Wet	0	0	0	1	1	2
Light Conditions	Daytime	1	1	2	1	3	8
	Nighttime	0	0	0	1	0	1
Total crashes per year		**1**	**1**	**2**	**2**	**3**	**9**

This segment has a crash rate of 106.86 crashes per 100 million vehicles miles in the corridor.

SUMMARY TABLE 2

Crash Summary for FM 474 Segment 2 (between Adler Rd to Spring Creek Rd)

		Crashes Per Year					
		2011	2012	2013	2014	2015	Total
Severity	Not Injured	0	4	0	1	1	6
	Non-Incapacitating	1	1	0	1	0	3
	Incapacitating	1	1	0	0	0	2
	Fatal	0	0	0	0	0	0
Type	Right Angle	0	0	0	0	1	1
	Left Turn	0	0	0	0	0	0
	Rear End	0	1	0	1	0	2
	Sideswipe	0	0	0	0	0	0
	Head On	1	0	0	0	0	1
	One Motor Vehicle	1	5	0	1	0	7
	Other	0	0	0	0	0	0
Weather Conditions	Dry	1	3	0	2	1	7
	Wet	1	3	0	0	0	4
Light Conditions	Daytime	0	3	0	1	1	5
	Nighttime	2	3	0	1	0	6
Total crashes per year		**2**	**6**	**0**	**2**	**1**	**11**

This segment has a crash rate of 130.61 crashes per 100 million vehicles miles in the corridor.

FM 1376

SUMMARY TABLE 1

Crash Summary for FM 1376 Segment 1 (between US 87-Main St to Wollschlaeger Rd)

		Crashes Per Year					
		2011	2012	2013	2014	2015	Total
Severity	Not Injured	1	0	4	1	1	7
	Non-Incapacitating	0	1	0	3	1	5
	Incapacitating	0	0	0	0	0	0
	Fatal	0	0	0	0	0	0
Type	Right Angle	0	0	0	0	0	0
	Left Turn	0	0	0	1	0	1
	Rear End	0	1	0	0	2	3
	Sideswipe	0	0	0	0	0	0
	Head On	0	0	0	2	0	2
	One Motor Vehicle	1	0	4	1	0	6
	Other	0	0	0	0	0	0
Weather Conditions	Dry	1	1	4	4	1	11
	Wet	0	0	0	0	1	1
Light Conditions	Daytime	1	1	0	3	2	7
	Nighttime	0	0	4	1	0	5
Total crashes per year		**1**	**1**	**4**	**4**	**2**	**12**

This segment has a crash rate of 130.24 crashes per 100 million vehicles miles in the corridor.

Intersections - SH 46

SUMMARY TABLE 1

Crash Summary for SH 46 at FM 474 (S Esser Rd)

		Crashes Per Year					
		2011	2012	2013	2014	2015	Total
Severity	Not Injured	2	3	3	8	6	22
	Non-Incapacitating	4	3	0	1	1	9
	Incapacitating	0	0	0	0	0	0
	Fatal	0	0	0	0	0	0
Type	Right Angle	1	1	1	1	1	5
	Left Turn	1	0	0	2	1	4
	Rear End	4	5	2	6	5	22
	Sideswipe	0	0	0	0	0	0
	Head On	0	0	0	0	0	0
	One Motor Vehicle	0	0	0	0	0	0
	Other	0	0	0	0	0	0
Weather Conditions	Dry	5	5	3	6	7	26
	Wet	1	1	0	3	0	5
Light Conditions	Daytime	4	6	3	8	7	28
	Nighttime	2	0	0	1	0	3
Total crashes per year		6	6	3	9	7	31

This segment has a crash frequency of 0.62 crashes per million entering vehicles in the corridor.

SUMMARY TABLE 2

Crash Summary for SH 46 at IH-10

		Crashes Per Year					
		2011	2012	2013	2014	2015	Total
Severity	Not Injured	4	1	4	11	2	22
	Non-Incapacitating	2	1	2	0	3	8
	Incapacitating	0	0	0	0	0	0
	Fatal	0	0	0	0	0	0
Type	Right Angle	0	0	0	0	0	0
	Left Turn	1	2	1	1	0	5
	Rear End	5	0	5	8	5	23
	Sideswipe	0	0	0	2	0	2
	Head On	0	0	0	0	0	0
	One Motor Vehicle	0	0	0	0	0	0
	Other	0	0	0	0	0	0
Weather Conditions	Dry	6	2	6	10	4	28
	Wet	0	0	0	1	1	2
Light Conditions	Daytime	6	2	5	10	5	28
	Nighttime	0	0	1	1	0	2
Total crashes per year		6	2	6	11	5	30

This segment has a crash frequency of 0.68 crashes per million entering vehicles in the corridor.

SUMMARY TABLE 3

Crash Summary for SH 46 at US 87

		Crashes Per Year					
		2011	2012	2013	2014	2015	Total
Severity	Not Injured	1	0	1	5	2	9
	Non-Incapacitating	0	0	0	0	0	0
	Incapacitating	0	0	0	0	0	0
	Fatal	0	0	0	0	0	0
Type	Right Angle	0	0	1	1	1	3
	Left Turn	0	0	0	0	0	0
	Rear End	1	0	0	4	1	6
	Sideswipe	0	0	0	0	0	0
	Head On	0	0	0	0	0	0
	One Motor Vehicle	0	0	0	0	0	0
	Other	0	0	0	0	0	0
Weather Conditions	Dry	1	0	1	4	2	8
	Wet	0	0	0	1	0	1
Light Conditions	Daytime	1	0	1	4	2	8
	Nighttime	0	0	0	1	0	1
Total crashes per year		**1**	**0**	**1**	**5**	**2**	**9**

This segment has a crash frequency of 0.16 crashes per million entering vehicles in the corridor.

SUMMARY TABLE 4

Crash Summary for SH 46 at FM 3351

		Crashes Per Year					
		2011	2012	2013	2014	2015	Total
Severity	Not Injured	4	3	1	0	2	10
	Non-Incapacitating	0	0	0	2	3	5
	Incapacitating	0	0	0	0	1	1
	Fatal	0	0	0	0	0	0
Type	Right Angle	0	0	0	0	1	1
	Left Turn	3	0	1	2	1	7
	Rear End	1	3	0	0	4	8
	Sideswipe	0	0	0	0	0	0
	Head On	0	0	0	0	0	0
	One Motor Vehicle	0	0	0	0	0	0
	Other	0	0	0	0	0	0
Weather Conditions	Dry	3	2	0	2	5	12
	Wet	1	1	1	0	1	4
Light Conditions	Daytime	4	2	0	2	5	13
	Nighttime	0	1	1	0	1	3
Total crashes per year		**4**	**3**	**1**	**2**	**6**	**16**

This segment has a crash frequency of 0.62 crashes per million entering vehicles in the corridor.

IH-10

SUMMARY TABLE 1
Crash Summary for IH-10 at SH 46

		Crashes Per Year					
		2011	2012	2013	2014	2015	Total
Severity	Not Injured	6	5	10	11	22	54
	Non-Incapacitating	2	3	3	1	3	12
	Incapacitating	0	0	0	0	0	0
	Fatal	0	0	0	0	0	0
Type	Right Angle	1	0	2	2	3	8
	Left Turn	1	1	1	2	3	8
	Rear End	5	7	7	6	18	43
	Sideswipe	0	0	0	0	0	0
	Head On	0	0	0	0	0	0
	One Motor Vehicle	1	0	3	2	1	7
	Other	0	0	0	0	0	0
Weather Conditions	Dry	8	7	11	9	23	58
	Wet	0	1	2	3	2	8
Light Conditions	Daytime	6	7	10	9	23	55
	Nighttime	2	1	3	3	2	11
Total crashes per year		**8**	**8**	**13**	**12**	**25**	**66**

This segment has a crash frequency of 1.45 crashes per million entering vehicles in the corridor.

SUMMARY TABLE 2
Crash Summary for IH-10 at US 87 (S Main St)

		Crashes Per Year					
		2011	2012	2013	2014	2015	Total
Severity	Not Injured	1	4	1	6	2	14
	Non-Incapacitating	0	2	0	5	1	8
	Incapacitating	0	0	0	0	0	0
	Fatal	0	0	1	0	0	1
Type	Right Angle	1	1	0	7	0	9
	Left Turn	0	2	0	1	1	4
	Rear End	0	3	0	0	1	4
	Sideswipe	0	0	0	0	0	0
	Head On	0	0	1	0	0	1
	One Motor Vehicle	0	0	1	3	1	5
	Other	0	0	0	0	0	0
Weather Conditions	Dry	1	6	0	8	1	16
	Wet	0	0	2	3	2	7
Light Conditions	Daytime	1	5	1	9	3	19
	Nighttime	0	1	1	2	0	4
Total crashes per year		**1**	**6**	**2**	**11**	**3**	**23**

This segment has a crash frequency of 0.66 crashes per million entering vehicles in the corridor.

SUMMARY TABLE 3

Crash Summary for IH-10 at US 87 (N Main St)

		Crashes Per Year					
		2011	2012	2013	2014	2015	Total
Severity	Not Injured	1	2	0	0	5	8
	Non-Incapacitating	0	0	0	0	2	2
	Incapacitating	0	0	0	0	0	0
	Fatal	0	0	0	0	0	0
Type	Right Angle	1	2	0	0	4	7
	Left Turn	0	0	0	0	2	2
	Rear End	0	0	0	0	1	1
	Sideswipe	0	0	0	0	0	0
	Head On	0	0	0	0	0	0
	One Motor Vehicle	0	0	0	0	0	0
	Other	0	0	0	0	0	0
Weather Conditions	Dry	1	2	0	0	7	10
	Wet	0	0	0	0	0	0
Light Conditions	Daytime	1	2	0	0	6	9
	Nighttime	0	0	0	0	1	1
Total crashes per year		**1**	**2**	**0**	**0**	**7**	**10**

This segment has a crash frequency of 0.50 crashes per million entering vehicles in the corridor.

SUMMARY TABLE 4

Crash Summary for IH-10 at Johns Rd

		Crashes Per Year					
		2011	2012	2013	2014	2015	Total
Severity	Not Injured	2	6	4	3	2	17
	Non-Incapacitating	1	0	2	0	0	3
	Incapacitating	0	0	0	0	1	1
	Fatal	0	0	0	0	0	0
Type	Right Angle	1	1	4	1	3	10
	Left Turn	0	2	0	1	0	3
	Rear End	2	3	1	1	0	7
	Sideswipe	0	0	0	0	0	0
	Head On	0	0	0	0	0	0
	One Motor Vehicle	0	0	1	0	0	1
	Other	0	0	0	0	0	0
Weather Conditions	Dry	2	6	6	3	3	20
	Wet	1	0	0	0	0	1
Light Conditions	Daytime	3	4	5	2	2	16
	Nighttime	0	2	1	1	1	5
Total crashes per year		**3**	**6**	**6**	**3**	**3**	**21**

This segment has a crash frequency of 1.21 crashes per million entering vehicles in the corridor.

US 87 (Main Street)

SUMMARY TABLE 1

Crash Summary for US 87 at SH 46 (River Road)

		Crashes Per Year					
		2011	**2012**	**2013**	**2014**	**2015**	**Total**
Severity	**Not Injured**	7	13	12	14	19	65
	Non-Incapacitating	1	2	3	4	2	12
	Incapacitating	0	0	0	0	0	0
	Fatal	0	0	0	0	0	0
Type	**Right Angle**	0	0	2	1	1	4
	Left Turn	2	3	3	10	7	25
	Rear End	5	11	9	6	13	44
	Sideswipe	1	0	1	0	0	2
	Head On	0	0	0	0	0	0
	One Motor Vehicle	0	1	0	1	0	2
	Other	0	0	0	0	0	0
Weather Conditions	**Dry**	8	14	14	17	17	70
	Wet	0	1	1	1	4	7
Light Conditions	**Daytime**	8	13	11	11	17	60
	Nighttime	0	2	4	7	4	17
Total crashes per year		**8**	**15**	**15**	**18**	**21**	**96**

This segment has a crash frequency of 2.55 crashes per million entering vehicles in the corridor.

Appendix C

O/D Study Bluetooth Volumes

72-Hour Bluetooth Matches

Bluetooth Reader No.	BR Location	Day			TOTAL
		1	2	3	
1	South on I-10	4,644	5,033	4,707	**14,384**
2	Far North on I-10 (NB)	2,520	2,633	2,659	**7,812**
3	Far North on I-10 (NB)	2,741	2,870	2,784	**8,395**
4	Far South on I-10	4,010	4,330	4,243	**12,583**
5	East of town on SH46	423	429	382	**1,234**
6	Far South on I-10	2,941	3,269	3,148	**9,358**
9	North on FM 3351	245	350	279	**874**
10	Far West on SH 46	376	394	358	**1,128**
11	East of town on SH46	432	447	412	**1,291**
13	North on Main St.	743	610	682	**2,035**
14	West of town on I-10	2,267	2,342	2,142	**6,751**
15	South of town on I-10	1,799	1,930	1,897	**5,626**
16	West of town on SH46	480	442	343	**1,265**
17	Far North on FM 3351	70	146	153	**369**
18	Far South on FM 3351	621	969	729	**2,319**
19	Far East on SH46	536	365	417	**1,318**
20	South of town on Main St	948	954	976	**2,878**
34	Far North on I-10 (SB)	1,690	1,761	1,788	**5,239**
43	Far North on I-10 (SB)	760	214	210	**1,184**
	Total	**28,246**	**29,488**	**28,309**	**86,043**