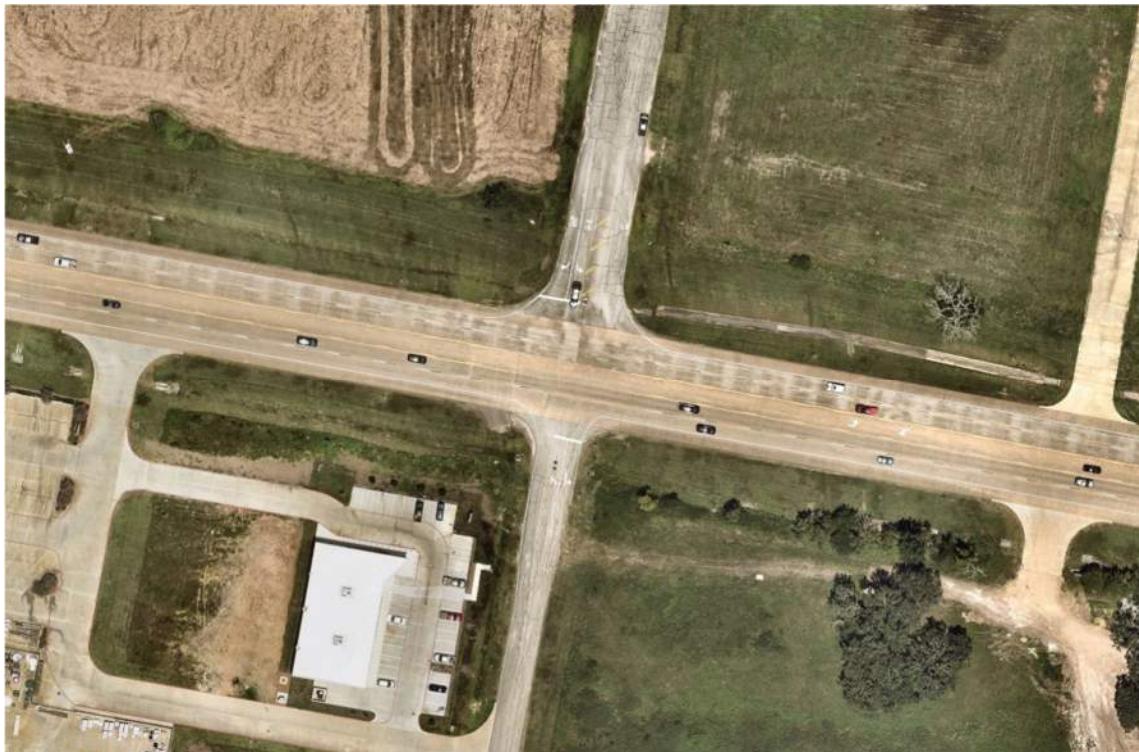


SH 105 at Buffalo Springs Drive

Traffic Signal Warrant Analysis

September 2021



Prepared for:
City of Montgomery

Prepared by:



JONES | CARTER

Texas Board of Professional Engineers Registration No. F-439
6330 West Loop South, Suite 150 Bellaire, Texas 77401 (713) 777-5337

SH 105 at Buffalo Springs Drive

Traffic Signal Warrant Analysis *September 2021*

Interim Review:

This Document is released for Review Only under
the authority of Mary Beth Hairrell, P.E., Texas No.
140234 on September 14, 2021.

Prepared for:
City of Montgomery

Prepared by:



JONES | CARTER

Texas Board of Professional Engineers Registration No. F-439
6330 West Loop South, Suite 150 Bellaire, Texas 77401 (713) 777-5337

Executive Summary

City of Montgomery subcontracted Jones|Carter (JC) to prepare Traffic Signal Warrant Studies at SH 105 at Buffalo Springs Drive. This study analyzes the intersection of SH 105 at Buffalo Springs Drive and includes traffic data collection, site inspection, existing conditions, and applicable traffic signal warrants. The study intersection is located in the City of Montgomery, Texas.

A site inspection was conducted to document the existing conditions of the study intersection and surrounding area. The study intersection is two-way stop controlled; Buffalo Springs Drive is stop controlled and SH 105 is free flow. There is no illumination present at the study intersection. There are no pedestrian ramps or sidewalks at the study intersection.

A 13-hour Turning Movement Counts (TMC) were collected by CJ Hensch & Associates, Inc. on Wednesday, August 25, 2021 at the study intersection between the hours of 6:00 AM – 7:00 PM. The peak hours were reached between 6:30-7:30 AM and 4:45-5:45 PM.

The 2nd Revision (adopted 2014) to the 2011 Texas Manual on Uniform Traffic Control Devices (TMUTCD) defines warrants for the installation of a traffic signal. A Traffic Signal Warrant Analysis (TSWA) was performed at the intersection of SH 105 at Buffalo Springs Drive for 2021 Existing Conditions and 2023 Future Conditions. Warrant 1 – Eight Hour, Warrant 2 – Four Hour, Warrant 3 – Peak Hour and Warrant 7 – Crash Experience were evaluated. The study results in the following conclusions and recommendations:

Conclusions and Recommendations

In accordance with the TMUTCD, Warrant 1- Eight-Hour Vehicular Volume and Warrant 2- Four-Hour Vehicular Volume were met using the data collected and the site generated volumes for the 2023 Future Conditions at the study intersection; therefore, signalization is recommended at the study intersection for the 2023 Future Conditions.

Traffic Signal Warrant Analysis
SH 105 at Buffalo Springs Dr

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Introduction

The purpose of this Traffic Signal Warrant Analysis is to evaluate safety and operations at the intersection of SH 105 and Buffalo Springs Drive in Montgomery County, Texas. The project is located in the City of Montgomery.

This study analyzes the intersection of SH 105 at Buffalo Springs Drive and includes traffic data collection, site inspection, existing conditions, and applicable traffic signal warrants. An aerial photo of the study intersection is provided in **Figure 1**.

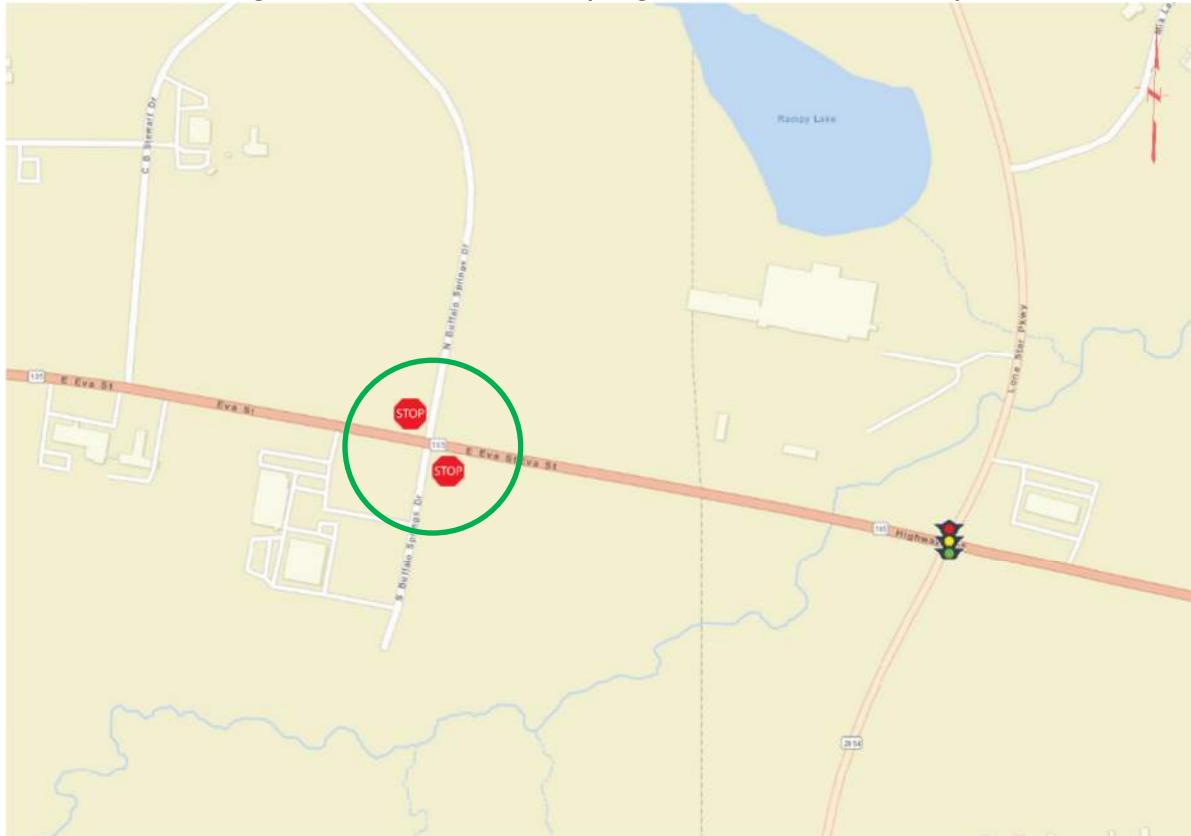
Figure 1 – Intersection Aerial Photograph



Existing Conditions

The intersection is located in the City of Montgomery. SH 105 at Buffalo Springs Drive is an existing two-way stop-controlled intersection. The nearest signalized intersection is SH 105 at FM 2854/Lone Star Parkway located approximately 0.4 miles to the east. The area location map is shown in **Figure 2**.

Figure 2 – SH 105 at Buffalo Springs Drive Area Location Map



Roadways

SH 105 is a five-lane concrete roadway that runs east-west. At the study intersection, there is 86 feet of pavement which includes four 12-foot wide travel lanes, an 18-foot wide two-way left turn lane, and a 10-foot shoulder on the north and south sides. It is a thoroughfare with a posted speed limit of 45 mph and open ditch drainage.

Buffalo Springs Drive is a two-lane asphalt roadway that runs north-south. At the northern leg of the study intersection, there is 52 feet of pavement which includes two 12-foot wide southbound lanes, an 18-foot wide northbound travel lane, and a 10-foot wide striped median. At the southern leg of the study intersection, there is 36 feet of pavement which includes two 12-foot wide northbound lanes and one 12-foot wide southbound travel lane. It is a collector road with a posted speed limit of 30 mph north of SH 105, a posted speed limit of 35 mph south of SH 105, and open ditch drainage.

Land Use

The area to the north of the intersection, along Buffalo Springs Drive, is predominately vacant.

The area to the south of the intersection includes retail stores. The businesses include a building materials store and an auto parts store.

The area to the east, along SH 105, is predominantly retail and vacant land. A car wash, fast food restaurant, grocery store, and a gas station are located east of the study intersection.

The area to the west, along SH 105, includes a church/vacant land.

Intersection Conditions

A site inspection was conducted to document the existing conditions of the study intersection and surrounding area. The 4-leg study intersection is two-way stop controlled and there is no illumination at the intersection. There are no pedestrian ramps nor sidewalks at the study intersection.

An existing condition diagram is provided in **Figure 3**. Intersection approach photos are provided in **Figure 4** through **Figure 7**.

Figure 3 – SH 105 at Buffalo Springs Drive Existing Conditions Diagram

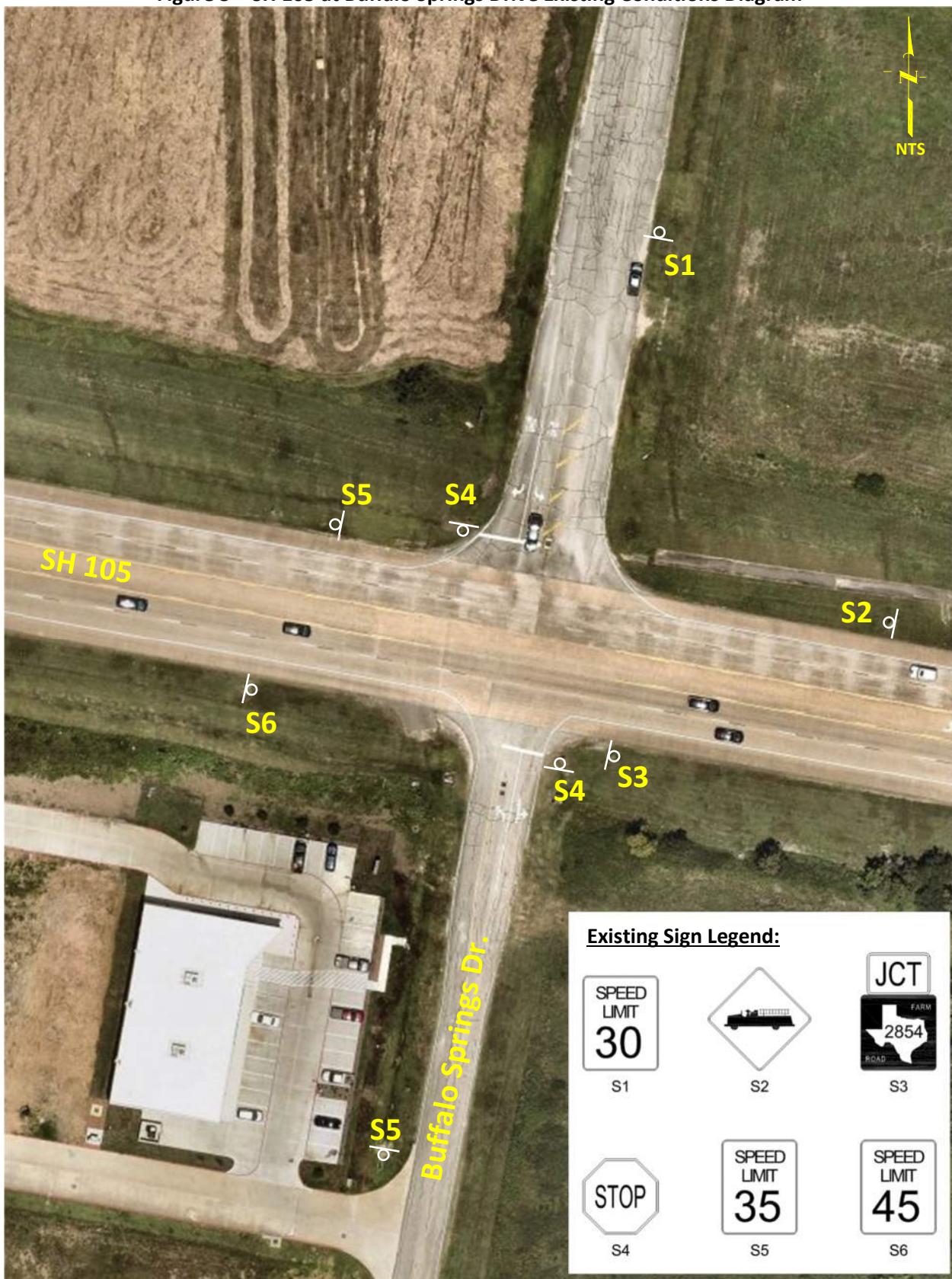


Figure 4 – SH 105 at Buffalo Springs Drive Eastbound Approach

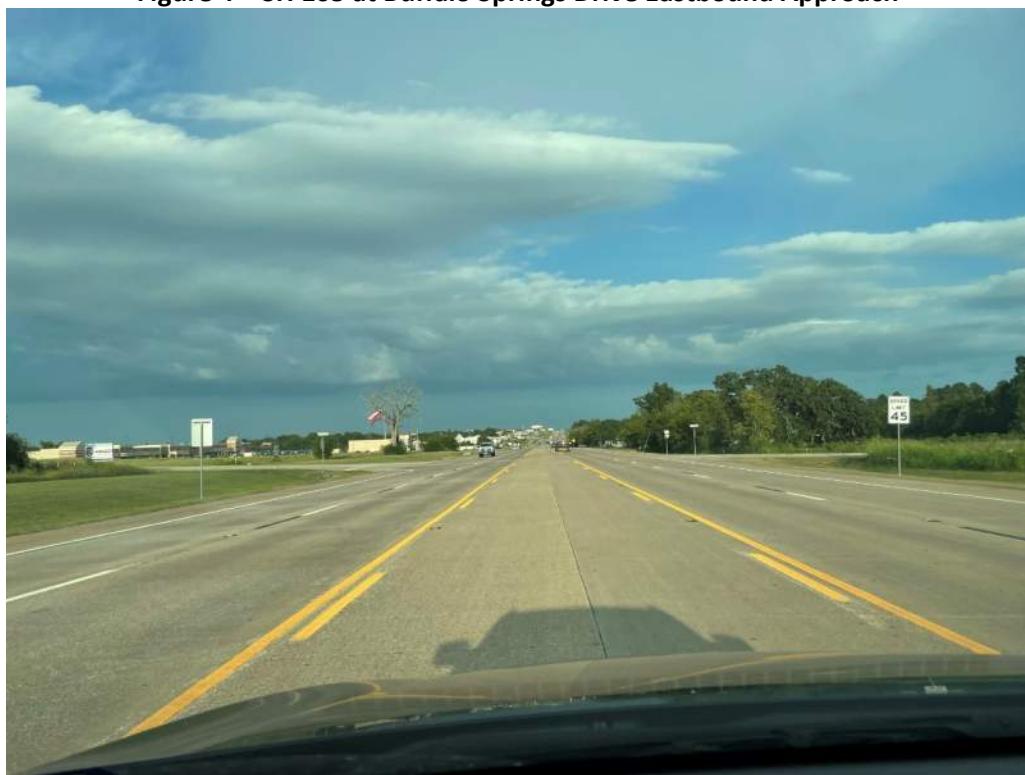


Figure 5 – SH 105 at Buffalo Springs Drive Westbound Approach

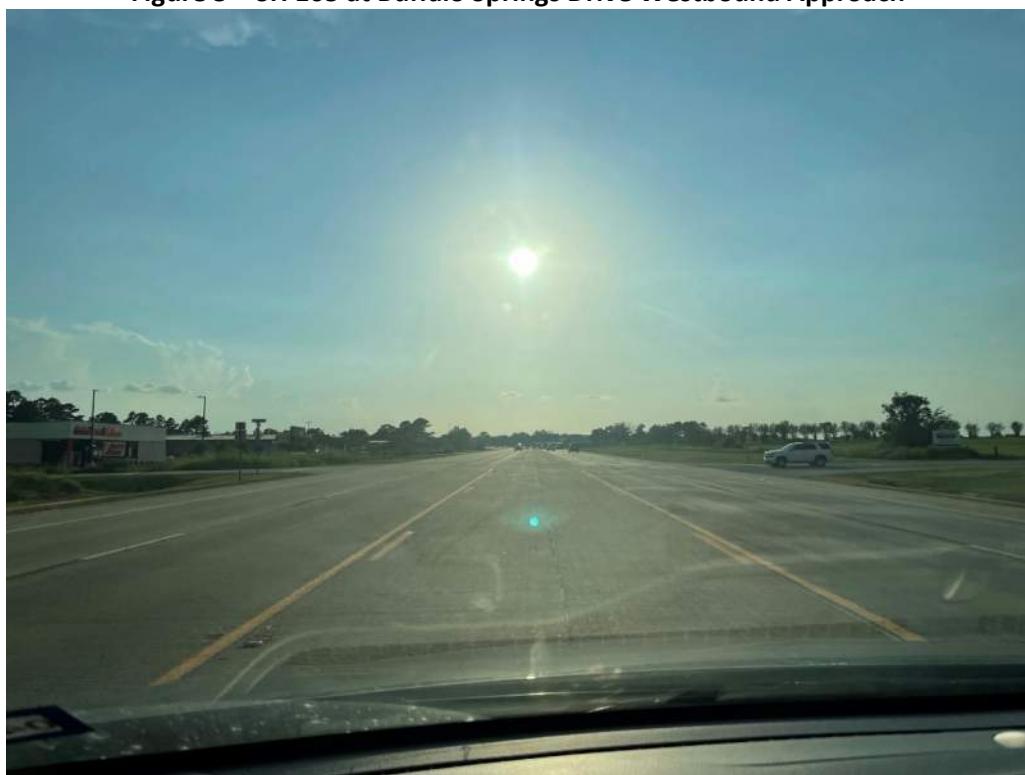


Figure 6 – SH 105 at Buffalo Springs Drive Northbound Approach

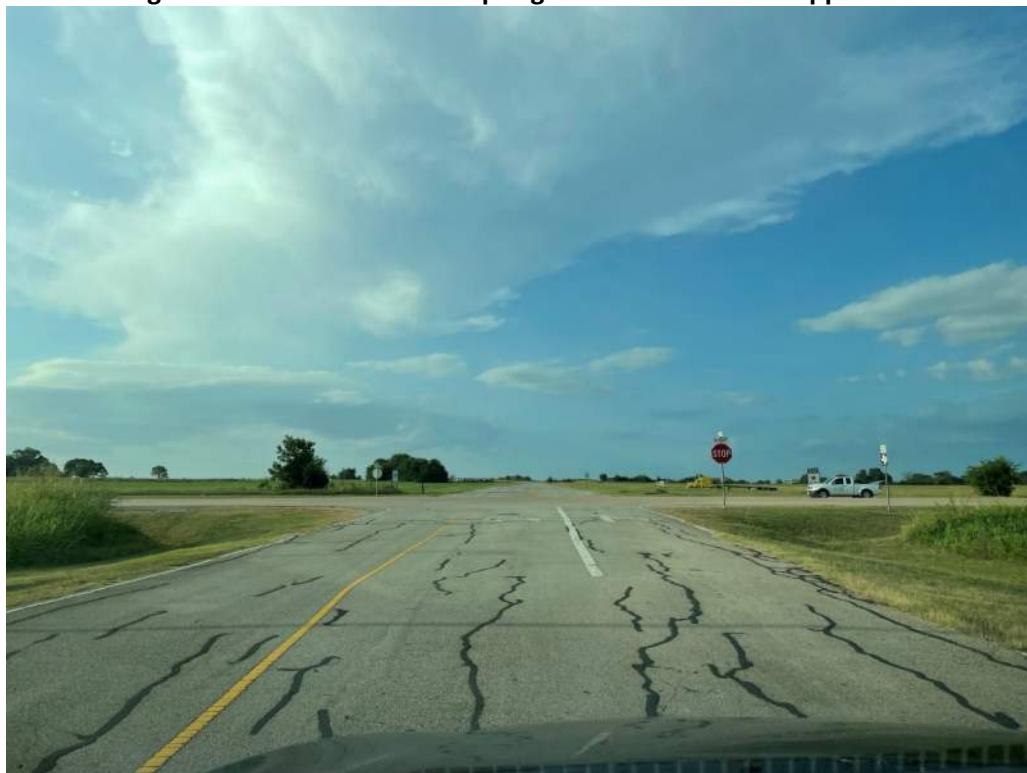


Figure 7 – SH 105 at Buffalo Springs Drive Southbound Approach



Traffic Data Collection

A 13-hour Turning Movement Count (TMC) was collected by CJ Hensch & Associates, Inc. on Wednesday, August 25, 2021, at the study intersection. The peak hours were reached between 6:30-7:30 AM and 4:45-5:45 PM.

A summary of the traffic data is provided in **Table 1** and the raw traffic count data can be found in the **Appendix**.

Table 1 – Traffic Volume Summary

Time Period	Traffic Volumes (vph)							Total Volume	Rank		
	Major Street			Minor Street							
	SH 105			Buffalo Springs Drive							
	EB	WB	Both Approaches	NB	SB	Both Approaches					
6:30-7:30 AM	703	927	1630	3	44	47	1677	7			
8:00-9:00 AM	802	826	1628	7	37	44	1672	8			
12:00-1:00 PM	840	858	1698	17	39	56	1754	5			
1:30-2:30 PM	887	872	1759	10	45	55	1814	4			
2:30-3:30 PM	1004	983	1987	13	54	67	2054	2			
3:45-4:45 PM	1033	952	1985	17	28	45	2030	3			
4:45-5:45 PM	1010	1019	2029	7	40	47	2076	1			
5:45-6:45 PM	845	841	1686	8	31	39	1725	6			

Future Development

The 2023 Future Conditions include 3 land uses in the vicinity of the project area; a 2,500 SF fast food restaurant with a drive through window, a 6,000 SF tire shop, and 138 single family homes.

The *Institute of Transportation Engineers (ITE), Trip Generation, 10th Edition*, was used to estimate the traffic that will be generated by the proposed development by using *Online Traffic Impact Study Software (OTISS)*. The following analysis periods were utilized:

- Weekday
- Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 AM
- Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 PM

A 2,500 SF Panda Express (fast food restaurant with a drive through window) is proposed on the south side of SH 105 to the east of the intersection of SH 105 and Buffalo Springs Drive. It is assumed that 25% of the site generated traffic will utilize the study intersection via Buffalo Springs Drive. The site generated volumes for the Panda Express are included in the 2023 Future Conditions.

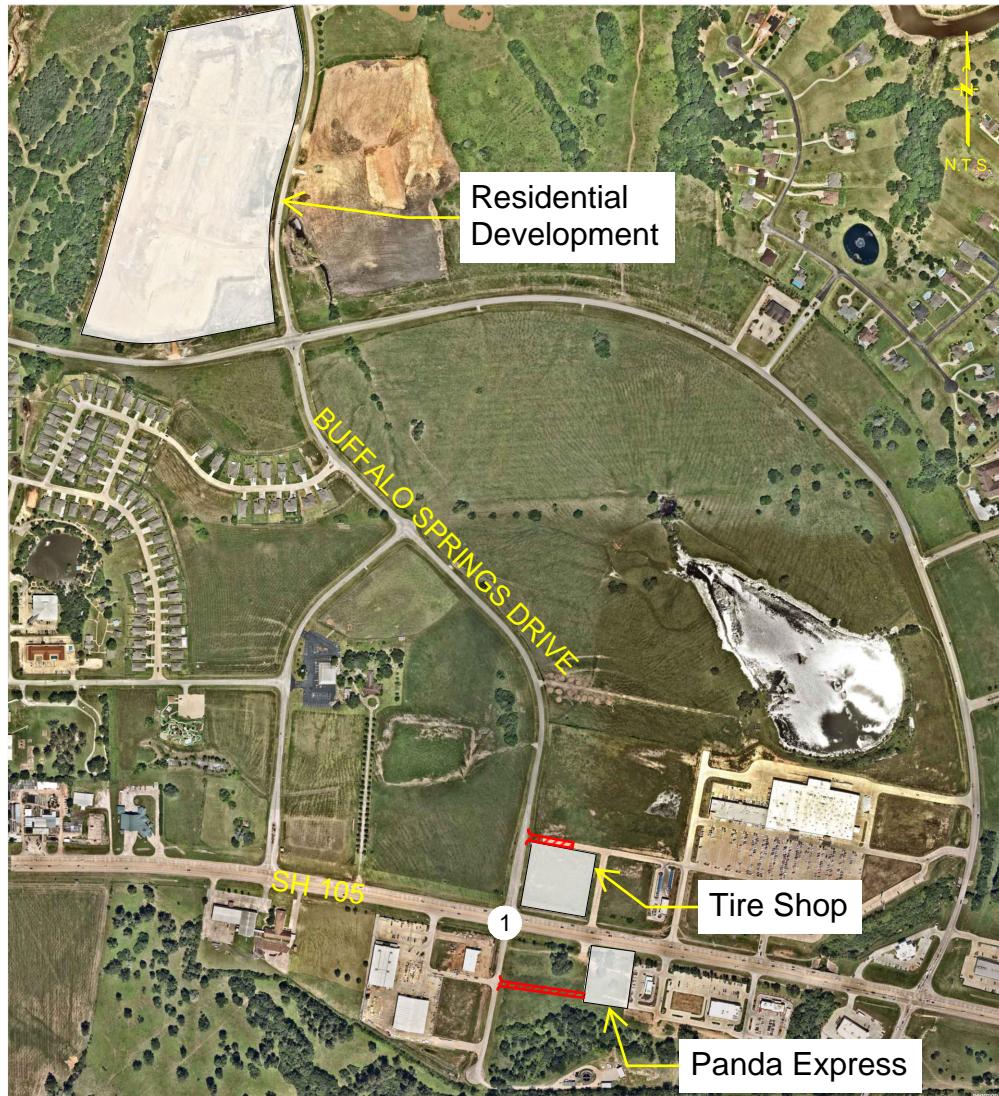
A 6,000 SF tire shop is proposed on the northeast corner of SH 105 and Buffalo Springs Drive. It is assumed that 100% of the site generated volumes will utilize the study intersection via Buffalo Springs Drive. The site generated volumes for the tire shop are included in the 2023 Future Conditions.

A residential development with 138 single family homes is proposed to the north side of the intersection of SH 105 and Buffalo Springs Drive. It is assumed that 50% of the site generated traffic will utilize the study intersection via Buffalo Springs Drive. The site generated volumes for the residential development are included in the 2023 Future Conditions.

Table 2 provides a summary of the estimated trips generated for the proposed development. No trip reductions were taken.

Table 2 – Trip Generation Volumes

Proposed Land Use (ITE code)	Size	24-Hour Two-Way Volume	AM Peak			PM Peak		
			Enter	Exit	Total	Enter	Exit	Total
Single-Family Detached Housing (210)	138 Dwelling Homes	1,398	28	80	108	92	52	144
Tire Store (848)	6,000 SF	172	12	11	23	10	13	23
Fast-Food Restaurant with Drive-Through Window (934)	2,500 SF	1178	66	61	127	65	63	128



LEGEND

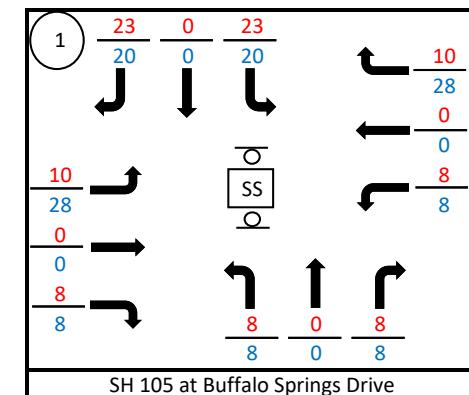
AM PEAK HOUR VOLUME

PM PEAK HOUR VOLUME

STOP SIGN

FUTURE ROADWAY CONNECTIONS

Site Generated Volumes



2023 Future Volumes

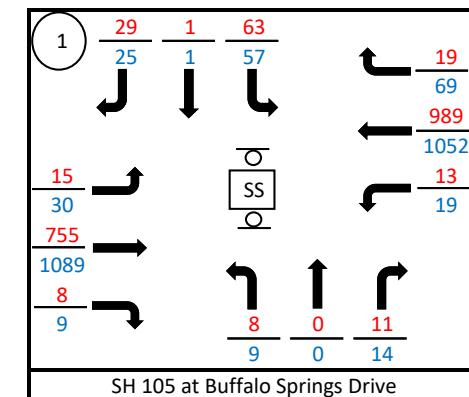


FIGURE 8
2023 FUTURE CONDITIONS

Traffic Signal Warrant Analysis Results

A Traffic Signal Warrant Analysis (TSWA) was performed at the intersection of SH 105 at Buffalo Springs Drive for the 2021 Existing Conditions and 2023 Future Conditions. The TSWA was performed in accordance with the 2nd Revision (adopted 2014) to the 2011 TMUTCD utilizing the TxDOT Form TFF-TSCA. A summary of the results is shown in **Table 2** and the complete analysis can be found in the **Appendix**.

Table 2 – Summary of Traffic Signal Warrant Analysis

Traffic Signal Warrant	Warrant Met	
	2021 Existing Conditions	2023 Future Conditions
Warrant 1, Eight-Hour Vehicular Volume	Not Met	Met
Warrant 2, Four-Hour Vehicular Volume	Not Met	Met
Warrant 3, Peak Hour	Not Met	Not Met
Warrant 4, Pedestrian Volume	Not Applicable	Not Applicable
Warrant 5, School Crossing	Not Applicable	Not Applicable
Warrant 6, Coordinated Signal System	Not Applicable	Not Applicable
Warrant 7, Crash Experience	Not Met	Not Met
Warrant 8, Roadway Network	Not Applicable	Not Applicable
Warrant 9, Intersection Near a Grade Crossing	Not Applicable	Not Applicable

Crash records were downloaded through TxDOT's Crash Records Information System (CRIS) for 2016 through 2020. There were 6 reported crashes at the intersection during the years analyzed.

When analyzing 2021 Existing Conditions, Warrant 1-Eight-Hour Vehicular Volume, Warrant 2- Four-Hour Vehicular Volume, Warrant 3 - Peak Hour, and Warrant 7 – Crash Experience were not met for the intersection.

When analyzing 2023 Future Conditions, Warrant 1-Eight-Hour Vehicular Volume and Warrant 2- Four-Hour Vehicular Volume were met for the intersection. Warrant 3 - Peak Hour and Warrant 7 – Crash Experience were not met for the intersection.

Conclusions and Recommendations

Jones Carter determined the following conclusions and recommendations for the intersection of SH 105 at Buffalo Springs Drive based on the analysis of the traffic data collection, site inspection, existing conditions, crash data, and applicable traffic signal warrants:

Conclusions and Recommendations

In accordance with the TMUTCD, Warrant 1- Eight-Hour Vehicular Volume and Warrant 2- Four-Hour Vehicular Volume were met using the data collected and the site generated volumes for the 2023 Future Conditions at the study intersection; therefore, signalization is recommended at the study intersection for the 2023 Future Conditions.

Appendix

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Appendix A Traffic Counts

Appendix B Crash Data

Appendix C Traffic Signal Warrant Analysis – 2021 Existing Conditions

Appendix D Traffic Signal Warrant Analysis – 2023 Future Conditions

Appendix A

Traffic Counts

Texas 105 at Buffalo Springs Drive - TMC

Wed Aug 25, 2021

Full Length (6 AM-7 PM)

All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses)

All Movements

ID: 864277, Location: 30.388434, -95.683144



Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave., Pasadena, TX, 77503, US

Leg Direction	Buffalo Springs Drive Southbound					Texas 105 Westbound					Buffalo Springs Drive Northbound					Texas 105 Eastbound					
Time	R	T	L	U	App	R	T	L	U	App	R	T	L	U	App	R	T	L	U	App	Int
2021-08-25 6:00AM	0	0	2	0	2	1	86	0	0	87	0	0	0	0	0	0	93	0	0	93	182
6:15AM	4	1	4	0	9	1	134	1	0	136	0	0	0	0	0	0	87	0	0	87	232
6:30AM	3	1	16	0	20	3	204	2	0	209	1	0	0	0	1	0	162	0	0	162	392
6:45AM	1	0	6	0	7	1	269	2	0	272	0	0	0	0	0	0	165	1	0	166	445
Hourly Total	8	2	28	0	38	6	693	5	0	704	1	0	0	0	1	0	507	1	0	508	1251
7:00AM	1	0	5	0	6	1	239	1	0	241	1	0	0	0	1	0	193	0	0	193	441
7:15AM	1	0	10	0	11	3	202	0	0	205	1	0	0	0	1	0	178	4	0	182	399
7:30AM	3	1	9	0	13	3	176	0	0	179	0	0	2	0	2	0	161	2	0	163	357
7:45AM	3	0	7	0	10	2	196	2	0	200	0	0	0	0	0	0	170	2	0	172	382
Hourly Total	8	1	31	0	40	9	813	3	0	825	2	0	2	0	4	0	702	8	0	710	1579
8:00AM	2	0	6	0	8	2	205	2	0	209	0	0	0	0	0	2	195	2	0	199	416
8:15AM	1	0	3	0	4	3	228	4	0	235	2	0	3	0	5	0	175	5	0	180	424
8:30AM	7	0	8	0	15	3	175	0	0	178	1	0	1	0	2	1	201	1	0	203	398
8:45AM	3	0	7	0	10	3	199	2	0	204	0	0	0	0	0	0	214	6	0	220	434
Hourly Total	13	0	24	0	37	11	807	8	0	826	3	0	4	0	7	3	785	14	0	802	1672
9:00AM	1	0	3	0	4	6	180	3	0	189	0	0	2	0	2	1	184	3	0	188	383
9:15AM	3	1	8	0	12	6	187	2	0	195	1	0	1	0	2	0	185	1	0	186	395
9:30AM	2	0	9	0	11	4	164	0	0	168	0	0	3	0	3	0	168	2	0	170	352
9:45AM	3	0	8	0	11	4	172	2	0	178	1	0	0	0	1	0	198	3	0	201	391
Hourly Total	9	1	28	0	38	20	703	7	0	730	2	0	6	0	8	1	735	9	0	745	1521
10:00AM	2	0	9	0	11	4	166	1	1	172	0	0	0	0	0	1	185	2	0	188	371
10:15AM	1	1	7	0	9	5	162	1	0	168	1	0	1	0	2	0	191	2	0	193	372
10:30AM	1	0	13	0	14	1	167	1	0	169	3	0	0	0	3	1	172	1	0	174	360
10:45AM	3	0	9	0	12	4	135	2	0	141	2	1	1	0	4	0	216	3	0	219	376
Hourly Total	7	1	38	0	46	14	630	5	1	650	6	1	2	0	9	2	764	8	0	774	1479
11:00AM	3	0	3	0	6	6	167	1	0	174	0	0	0	0	0	1	178	3	0	182	362
11:15AM	6	0	5	0	11	3	191	3	0	197	1	0	2	0	3	1	194	2	0	197	408
11:30AM	1	0	7	0	8	6	188	0	0	194	2	0	0	0	2	1	174	3	0	178	382
11:45AM	2	0	10	0	12	9	177	2	0	188	0	0	0	0	0	4	220	1	0	225	425
Hourly Total	12	0	25	0	37	24	723	6	0	753	3	0	2	0	5	7	766	9	0	782	1577
12:00PM	2	1	5	1	9	6	187	4	0	197	7	0	0	0	7	2	189	4	0	195	408
12:15PM	2	0	8	0	10	7	181	2	1	191	4	0	0	0	4	2	223	5	0	230	435
12:30PM	2	0	4	0	6	12	208	4	0	224	3	0	0	0	3	1	180	1	0	182	415
12:45PM	3	0	12	0	15	6	238	3	1	248	2	1	0	0	3	4	227	2	0	233	499
Hourly Total	9	1	29	1	40	31	814	13	2	860	16	1	0	0	17	9	819	12	0	840	1757
1:00PM	2	0	8	0	10	12	169	1	0	182	0	0	2	0	2	0	201	2	0	203	397
1:15PM	2	0	4	0	6	4	212	0	0	216	2	0	1	0	3	0	199	5	0	204	429
1:30PM	2	0	9	0	11	9	223	1	0	233	2	0	0	0	2	0	192	1	0	193	439
1:45PM	4	0	6	0	10	3	210	4	0	217	2	0	0	0	2	0	221	1	0	222	451
Hourly Total	10	0	27	0	37	28	814	6	0	848	6	0	3	0	9	0	813	9	0	822	1716
2:00PM	3	0	9	0	12	3	206	4	0	213	2	0	0	0	2	0	232	3	0	235	462
2:15PM	1	1	10	0	12	5	203	1	0	209	4	0	0	0	4	2	234	1	0	237	462
2:30PM	3	1	8	0	12	9	250	0	0	259	0	0	2	0	2	3	226	3	0	232	505
2:45PM	5	0	10	0	15	14	252	2	0	268	2	1	0	0	3	0	271	8	0	279	565
Hourly Total	12	2	37	0	51	31	911	7	0	949	8	1	2	0	11	5	963	15	0	983	1994
3:00PM	1	1	13	0	15	10	208	1	0	219	1	0	1	0	2	2	279	2	0	283	519
3:15PM	2	1	9	0	12	9	226	2	0	237	4	0	2	0	6	0	208	2	1	211	466
3:30PM	2	0	2	0	4	5	198	2	0	205	2	0	0	0	2	3	205	1	0	209	420
3:45PM	0	0	2	0	2	9	231	3	0	243	2	0	1	0	3	2	265	4	0	271	519
Hourly Total	5	2	26	0	33	33	863	8	0	904	9	0	4	0	13	7	957	9	1	974	1924
4:00PM	2	0	2	0	4	5	236	2	0	243	6	1	2	0	9	1	255	4	0	260	516
4:15PM	0	0	9	0	9	12	210	2	0	224	1	0	2	0	3	1	268	5	0	274	510
4:30PM	1	0	12	0	13	11	230	1	1	243	2	0	0	0	2	2	221	5	0	228	486
4:45PM	1	0	6	0	7	5	242	3	1	251	1	0	0	0	1	0	264	0	0	264	523

Leg Direction	Buffalo Springs Drive Southbound					Texas 105 Westbound					Buffalo Springs Drive Northbound					Texas 105 Eastbound					
Time	R	T	L	U	App	R	T	L	U	App	R	T	L	U	App	R	T	L	U	App	Int
Hourly Total	4	0	29	0	33	33	918	8	2	961	10	1	4	0	15	4	1008	14	0	1026	2035
5:00PM	1	1	7	0	9	9	223	1	0	233	2	0	1	0	3	1	257	0	0	258	503
5:15PM	1	0	10	0	11	12	245	2	1	260	2	0	0	0	2	0	241	1	0	242	515
5:30PM	2	0	11	0	13	12	263	2	0	277	1	0	0	0	1	0	245	1	0	246	537
5:45PM	1	0	4	0	5	15	207	1	0	223	1	0	1	0	2	0	225	1	1	227	457
Hourly Total	5	1	32	0	38	48	938	6	1	993	6	0	2	0	8	1	968	3	1	973	2012
6:00PM	1	0	9	0	10	5	222	1	1	229	0	1	0	0	1	2	233	1	0	236	476
6:15PM	1	0	6	0	7	10	201	1	0	212	2	0	1	0	3	1	209	7	0	217	439
6:30PM	0	0	9	0	9	1	176	1	0	178	1	0	1	0	2	0	165	1	0	166	355
6:45PM	0	0	5	0	5	6	151	4	0	161	1	0	0	0	1	0	155	0	0	155	322
Hourly Total	2	0	29	0	31	22	750	7	1	780	4	1	2	0	7	3	762	9	0	774	1592
Total	104	11	383	1	499	310	10377	89	7	10783	76	5	33	0	114	42	10549	120	2	10713	22109
% Approach	20.8%	2.2%	76.8%	0.2%	-	2.9%	96.2%	0.8%	0.1%	-	66.7%	4.4%	28.9%	0%	-	0.4%	98.5%	1.1%	0%	-	-
% Total	0.5%	0%	1.7%	0%	2.3%	1.4%	46.9%	0.4%	0%	48.8%	0.3%	0%	0.1%	0%	0.5%	0.2%	47.7%	0.5%	0%	48.5%	-
Lights	99	11	373	1	484	308	9934	85	7	10334	75	5	31	0	111	39	10103	113	2	10257	21186
% Lights	95.2%	100%	97.4%	100%	97.0%	99.4%	95.7%	95.5%	100%	95.8%	98.7%	100%	93.9%	0%	97.4%	92.9%	95.8%	94.2%	100%	95.7%	95.8%
Single-Unit Trucks	3	0	8	0	11	2	151	2	0	155	0	0	2	0	2	1	154	5	0	160	328
% Single-Unit Trucks	2.9%	0%	2.1%	0%	2.2%	0.6%	1.5%	2.2%	0%	1.4%	0%	0%	6.1%	0%	1.8%	2.4%	1.5%	4.2%	0%	1.5%	1.5%
Articulated Trucks	1	0	2	0	3	0	206	2	0	208	1	0	0	0	1	2	200	2	0	204	416
% Articulated Trucks	1.0%	0%	0.5%	0%	0.6%	0%	2.0%	2.2%	0%	1.9%	1.3%	0%	0%	0%	0.9%	4.8%	1.9%	1.7%	0%	1.9%	1.9%
Buses	1	0	0	0	1	0	86	0	0	86	0	0	0	0	0	0	92	0	0	92	179
% Buses	1.0%	0%	0%	0%	0.2%	0%	0.8%	0%	0%	0.8%	0%	0%	0%	0%	0%	0%	0.9%	0%	0%	0.9%	0.8%

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

Texas 105 at Buffalo Springs Drive - TMC

Wed Aug 25, 2021

Full Length (6 AM-7 PM)

All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses)

All Movements

ID: 864277, Location: 30.388434, -95.683144

CJ Hensch
Associates, Inc.

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave., Pasadena, TX, 77503, US

[N] Buffalo Springs Drive

Total: 935
In: 499 Out: 436

104
111
383
1

[W] Texas 105
In: 10713 Total: 21229 Out: 10516

120
2
10549
42

310
10377
89
7
Out: 11015 Total: 21798 In: 10783
[E] Texas 105

33 5 76

Out: 142 In: 114
Total: 256

[S] Buffalo Springs Drive

Texas 105 at Buffalo Springs Drive - TMC

Wed Aug 25, 2021

AM Peak (6:30 AM - 7:30 AM)

All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses)

All Movements

ID: 864277, Location: 30.388434, -95.683144



Provided by: C. J. Hensch & Associates Inc.

5215 Sycamore Ave., Pasadena, TX, 77503, US

Leg Direction	Buffalo Springs Drive Southbound					Texas 105 Westbound					Buffalo Springs Drive Northbound					Texas 105 Eastbound					
Time	R	T	L	U	App	R	T	L	U	App	R	T	L	U	App	R	T	L	U	App	Int
2021-08-25 6:30AM	3	1	16	0	20	3	204	2	0	209	1	0	0	0	1	0	162	0	0	162	392
6:45AM	1	0	6	0	7	1	269	2	0	272	0	0	0	0	0	0	165	1	0	166	445
7:00AM	1	0	5	0	6	1	239	1	0	241	1	0	0	0	1	0	193	0	0	193	441
7:15AM	1	0	10	0	11	3	202	0	0	205	1	0	0	0	1	0	178	4	0	182	399
Total	6	1	37	0	44	8	914	5	0	927	3	0	0	0	3	0	698	5	0	703	1677
% Approach	13.6%	2.3%	84.1%	0%	-	0.9%	98.6%	0.5%	0%	-	100%	0%	0%	0%	-	0%	99.3%	0.7%	0%	-	-
% Total	0.4%	0.1%	2.2%	0%	2.6%	0.5%	54.5%	0.3%	0%	55.3%	0.2%	0%	0%	0%	0.2%	0%	41.6%	0.3%	0%	41.9%	-
PHF	0.500	0.250	0.578	-	0.550	0.667	0.849	0.625	-	0.852	0.750	-	-	-	0.750	-	0.904	0.313	-	0.911	0.942
Lights	6	1	37	0	44	8	867	5	0	880	3	0	0	0	3	0	648	5	0	653	1580
% Lights	100%	100%	100%	0%	100%	100%	94.9%	100%	0%	94.9%	100%	0%	0%	0%	100%	0%	92.8%	100%	0%	92.9%	94.2%
Single-Unit Trucks	0	0	0	0	0	0	12	0	0	12	0	0	0	0	0	0	12	0	0	12	24
% Single-Unit Trucks	0%	0%	0%	0%	0%	0%	1.3%	0%	0%	1.3%	0%	0%	0%	0%	0%	0%	1.7%	0%	0%	1.7%	1.4%
Articulated Trucks	0	0	0	0	0	0	14	0	0	14	0	0	0	0	0	0	12	0	0	12	26
% Articulated Trucks	0%	0%	0%	0%	0%	0%	1.5%	0%	0%	1.5%	0%	0%	0%	0%	0%	0%	1.7%	0%	0%	1.7%	1.6%
Buses	0	0	0	0	0	0	21	0	0	21	0	0	0	0	0	0	26	0	0	26	47
% Buses	0%	0%	0%	0%	0%	0%	2.3%	0%	0%	2.3%	0%	0%	0%	0%	0%	0%	3.7%	0%	0%	3.7%	2.8%

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

Texas 105 at Buffalo Springs Drive - TMC

Wed Aug 25, 2021

AM Peak (6:30 AM - 7:30 AM)

All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses)

All Movements

ID: 864277, Location: 30.388434, -95.683144

CJ Hensch
Associates, Inc.

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave., Pasadena, TX, 77503, US

[N] Buffalo Springs Drive

Total: 57

In: 44 Out: 13

6-137

[W] Texas 105
Total: 1623
In: 703 Out: 920

5
698

8
914
5
Out: 738 Total: 1665 In: 927
[E] Texas 105

Out: 6 In: 3
Total: 9
[S] Buffalo Springs Drive

Texas 105 at Buffalo Springs Drive - TMC

Wed Aug 25, 2021

Midday Peak (12 PM - 1 PM)

All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses)

All Movements

ID: 864277, Location: 30.388434, -95.683144



Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave., Pasadena, TX, 77503, US

Leg Direction	Buffalo Springs Drive Southbound					Texas 105 Westbound					Buffalo Springs Drive Northbound					Texas 105 Eastbound					
Time	R	T	L	U	App	R	T	L	U	App	R	T	L	U	App	R	T	L	U	App	Int
2021-08-25 12:00PM	2	1	5	1	9	6	187	4	0	197	7	0	0	0	7	2	189	4	0	195	408
12:15PM	2	0	8	0	10	7	181	2	1	191	4	0	0	0	4	2	223	5	0	230	435
12:30PM	2	0	4	0	6	12	208	4	0	224	3	0	0	0	3	1	180	1	0	182	415
12:45PM	3	0	12	0	15	6	238	3	1	248	2	1	0	0	3	4	227	2	0	233	499
Total	9	1	29	1	40	31	814	13	2	860	16	1	0	0	17	9	819	12	0	840	1757
% Approach	22.5%	2.5%	72.5%	2.5%	-	3.6%	94.7%	1.5%	0.2%	-	94.1%	5.9%	0%	0%	-	1.1%	97.5%	1.4%	0%	-	-
% Total	0.5%	0.1%	1.7%	0.1%	2.3%	1.8%	46.3%	0.7%	0.1%	48.9%	0.9%	0.1%	0%	0%	1.0%	0.5%	46.6%	0.7%	0%	47.8%	-
PHF	0.750	0.250	0.604	0.250	0.667	0.646	0.855	0.813	0.500	0.867	0.571	0.250	-	-	0.607	0.563	0.902	0.600	-	0.901	0.880
Lights	9	1	28	1	39	29	782	13	2	826	16	1	0	0	17	9	792	12	0	813	1695
% Lights	100%	100%	96.6%	100%	97.5%	93.5%	96.1%	100%	100%	96.0%	100%	100%	0%	0%	100%	100%	96.7%	100%	0%	96.8%	96.5%
Single-Unit Trucks	0	0	1	0	1	2	11	0	0	13	0	0	0	0	0	0	7	0	0	7	21
% Single-Unit Trucks	0%	0%	3.4%	0%	2.5%	6.5%	1.4%	0%	0%	1.5%	0%	0%	0%	0%	0%	0%	0.9%	0%	0%	0.8%	1.2%
Articulated Trucks	0	0	0	0	0	0	21	0	0	21	0	0	0	0	0	0	18	0	0	18	39
% Articulated Trucks	0%	0%	0%	0%	0%	0%	2.6%	0%	0%	2.4%	0%	0%	0%	0%	0%	0%	2.2%	0%	0%	2.1%	2.2%
Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	2
% Buses	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0.2%	0%	0%	0.2%	0.1%

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

Texas 105 at Buffalo Springs Drive - TMC

Wed Aug 25, 2021

Midday Peak (12 PM - 1 PM)

All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses)

All Movements

ID: 864277, Location: 30.388434, -95.683144

CJ Hensch & Associates, Inc.

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave., Pasadena, TX, 77503, US

[N] Buffalo Springs Drive

Total: 85

In: 40 Out: 45

9 29
1

[W] Texas 105
In: 840 Total: 1663 Out: 823

31
814
12
[E] Texas 105
Out: 866 Total: 1726 In: 860

12

819

9

16

Out: 23 In: 17

Total: 40

[S] Buffalo Springs Drive

Texas 105 at Buffalo Springs Drive - TMC

Wed Aug 25, 2021

PM Peak (4:45 PM - 5:45 PM) - Overall Peak Hour

All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses)

All Movements

ID: 864277, Location: 30.388434, -95.683144

CJ Hensch & Associates, Inc.

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave., Pasadena, TX, 77503, US

Leg Direction	Buffalo Springs Drive Southbound					Texas 105 Westbound					Buffalo Springs Drive Northbound					Texas 105 Eastbound					
Time	R	T	L	U	App	R	T	L	U	App	R	T	L	U	App	R	T	L	U	App	Int
2021-08-25 4:45PM	1	0	6	0	7	5	242	3	1	251	1	0	0	0	1	0	264	0	0	264	523
5:00PM	1	1	7	0	9	9	223	1	0	233	2	0	1	0	3	1	257	0	0	258	503
5:15PM	1	0	10	0	11	12	245	2	1	260	2	0	0	0	2	0	241	1	0	242	515
5:30PM	2	0	11	0	13	12	263	2	0	277	1	0	0	0	1	0	245	1	0	246	537
Total	5	1	34	0	40	38	973	8	2	1021	6	0	1	0	7	1	1007	2	0	1010	2078
% Approach	12.5%	2.5%	85.0%	0%	-	3.7%	95.3%	0.8%	0.2%	-	85.7%	0%	14.3%	0%	-	0.1%	99.7%	0.2%	0%	-	-
% Total	0.2%	0%	1.6%	0%	1.9%	1.8%	46.8%	0.4%	0.1%	49.1%	0.3%	0%	0%	0%	0.3%	0%	48.5%	0.1%	0%	48.6%	-
PHF	0.625	0.250	0.773	-	0.769	0.792	0.925	0.667	0.500	0.921	0.750	-	0.250	-	0.583	0.250	0.954	0.500	-	0.956	0.967
Lights	5	1	33	0	39	38	951	8	2	999	6	0	1	0	7	1	980	2	0	983	2028
% Lights	100%	100%	97.1%	0%	97.5%	100%	97.7%	100%	100%	97.8%	100%	0%	100%	0%	100%	100%	97.3%	100%	0%	97.3%	97.6%
Single-Unit Trucks	0	0	1	0	1	0	8	0	0	8	0	0	0	0	0	0	9	0	0	9	18
% Single-Unit Trucks	0%	0%	2.9%	0%	2.5%	0%	0.8%	0%	0%	0.8%	0%	0%	0%	0%	0%	0%	0.9%	0%	0%	0.9%	0.9%
Articulated Trucks	0	0	0	0	0	0	8	0	0	8	0	0	0	0	0	0	18	0	0	18	26
% Articulated Trucks	0%	0%	0%	0%	0%	0%	0.8%	0%	0%	0.8%	0%	0%	0%	0%	0%	0%	1.8%	0%	0%	1.8%	1.3%
Buses	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	0	0	0	0	0	6
% Buses	0%	0%	0%	0%	0%	0%	0.6%	0%	0%	0.6%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0.3%

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

Texas 105 at Buffalo Springs Drive - TMC

Wed Aug 25, 2021

PM Peak (4:45 PM - 5:45 PM) - Overall Peak Hour

All Classes (Lights, Single-Unit Trucks, Articulated Trucks, Buses)

All Movements

ID: 864277, Location: 30.388434, -95.683144

CJ Hensch
Associates, Inc.

Provided by: C. J. Hensch & Associates Inc.
5215 Sycamore Ave., Pasadena, TX, 77503, US

[N] Buffalo Springs Drive

Total: 80

In: 40 Out: 40

5134

[W] Texas 105
Total: 1989
In: 1010 Out: 979

1007

1

38

973

208

Out: 1049 Total: 2070 In: 1021

[E] Texas 105

16

Out: 10 In: 7

Total: 17

[S] Buffalo Springs Drive

Appendix B

Crash Data

All crash data available using this tool represents reportable data collected from Texas Peace Officer's Crash Reports (CR-3) received and processed by the Texas Department of Transportation (Department) as of 09/01/2021. The Department makes no warranty, representation or guaranty as to the content, accuracy, timeliness or completeness of any of the information provided as a result of your query. Any opinions and conclusions resulting from analysis performed on the crash data must be represented as your own and not those of the State of Texas or the Department.



Query Results List View					Select Columns	Print	Export CSV
Crash ID	At Intersection Flag	Crash Severity	Intersecting Street Name	Street Name			
15688087	true	N - NOT INJURED	BUFFALO SPRINGS DR	SH0105			
16029862	true	N - NOT INJURED	BUFFALO SPRINGS DR	SH0105			
15989110	true	N - NOT INJURED	BUFFALO SPRINGS DR	SH0105			
16012633	true	N - NOT INJURED	BUFFALO SPRINGS DR	SH0105			
16017090	true	N - NOT INJURED	BUFFALO SPRINGS DR	SH0105			
16628586	true	N - NOT INJURED	BUFFALO SPRINGS DR	SH0105			
17160858	false	B - SUSPECTED MINOR INJU...	N/A	SH0105			
17717659	false	N - NOT INJURED	N/A	SH0105			

Appendix C

**Traffic Signal Warrant Analysis – 2021 Existing
Conditions**

Warrants Summary Report

1: SH 105 at Buffalo Springs Drive

Intersection Information

	Major Street	Minor Street
Street Name	SH 105	Buffalo Springs Drive
Direction	EB/WB	NB/SB
Number of Lanes	2	2
Approach Speed	45	35

Warrant	Met?	Notes
Warrant 1, Eight-Hour Vehicular Volume		
Condition A or B Met?	No	0 Hours met (8 required)
Condition A and B Met?	No	0 Hours met (8 required)
Warrant 2, Four-Hour Vehicular Volume		
	No	0 Hours met (4 required)
Warrant 3, Peak Hour		
Condition A Met?	No	0 Hours met (1 required)
Condition B Met?	No	0 Hours met (1 required)
Warrant 7, Crash Experience		
Traffic Volume Condition?	No	0 Hours met (8 required)
Ped Condition?	No	0 Hours met (8 required)

Warrant 1: Eight-hour Vehicular Volume

1: SH 105 at Buffalo Springs Drive

Intersection Information

Major Street Name: SH 105

Major Street Direction: EB/WB

Minor Street Direction: NB/SB

WARRANT 1 MET? No

Details:

Condition A Met? No 0 Hours met (8 required)

Condition B Met? No 0 Hours met (8 required)

Hour	Major Street Vehicles (Total of Both Approaches)	High Volume Minor Approach Vehicles	70% Standard Met? Cond. A OR Cond. B		56% Standard Met? Cond. A AND Cond. B	
			Condition A 70% Column	Condition B 70% Column	Condition A 56% Column	Condition B 56% Column
06:00 to 07:00	1,212	38	No	No	No	No
Condition A	Volume \geq 70% column (420)?	Yes	Volume \geq 70% column (630)?	No		
	Volume \geq 56% column (336)?	Yes	Volume \geq 56% column (504)?	No		
Condition B	Volume \geq 70% column (630)?	Yes	Volume \geq 70% column (70)?	No		
	Volume \geq 56% column (504)?	Yes	Volume \geq 56% column (56)?	No		
06:15 to 07:15	1,466	42	No	No	No	No
Condition A	Volume \geq 70% column (420)?	Yes	Volume \geq 70% column (630)?	No		
	Volume \geq 56% column (336)?	Yes	Volume \geq 56% column (504)?	No		
Condition B	Volume \geq 70% column (630)?	Yes	Volume \geq 70% column (70)?	No		
	Volume \geq 56% column (504)?	Yes	Volume \geq 56% column (56)?	No		
06:30 to 07:30	1,630	44	No	No	No	No
Condition A	Volume \geq 70% column (420)?	Yes	Volume \geq 70% column (630)?	No		
	Volume \geq 56% column (336)?	Yes	Volume \geq 56% column (504)?	No		
Condition B	Volume \geq 70% column (630)?	Yes	Volume \geq 70% column (70)?	No		
	Volume \geq 56% column (504)?	Yes	Volume \geq 56% column (56)?	No		
06:45 to 07:45	1,601	37	No	No	No	No
Condition A	Volume \geq 70% column (420)?	Yes	Volume \geq 70% column (630)?	No		
	Volume \geq 56% column (336)?	Yes	Volume \geq 56% column (504)?	No		
Condition B	Volume \geq 70% column (630)?	Yes	Volume \geq 70% column (70)?	No		
	Volume \geq 56% column (504)?	Yes	Volume \geq 56% column (56)?	No		

07:00 to 08:00	1,535	40	No	No	No	No
Condition A	Volume >= 70% column (420)?	Yes	Volume >= 70% column (630)?	No		
	Volume >= 56% column (336)?	Yes	Volume >= 56% column (504)?	No		
Condition B	Volume >= 70% column (630)?	Yes	Volume >= 70% column (70)?	No		
	Volume >= 56% column (504)?	Yes	Volume >= 56% column (56)?	No		
07:15 to 08:15	1,509	42	No	No	No	No
Condition A	Volume >= 70% column (420)?	Yes	Volume >= 70% column (630)?	No		
	Volume >= 56% column (336)?	Yes	Volume >= 56% column (504)?	No		
Condition B	Volume >= 70% column (630)?	Yes	Volume >= 70% column (70)?	No		
	Volume >= 56% column (504)?	Yes	Volume >= 56% column (56)?	No		
07:30 to 08:30	1,537	35	No	No	No	No
Condition A	Volume >= 70% column (420)?	Yes	Volume >= 70% column (630)?	No		
	Volume >= 56% column (336)?	Yes	Volume >= 56% column (504)?	No		
Condition B	Volume >= 70% column (630)?	Yes	Volume >= 70% column (70)?	No		
	Volume >= 56% column (504)?	Yes	Volume >= 56% column (56)?	No		
07:45 to 08:45	1,576	37	No	No	No	No
Condition A	Volume >= 70% column (420)?	Yes	Volume >= 70% column (630)?	No		
	Volume >= 56% column (336)?	Yes	Volume >= 56% column (504)?	No		
Condition B	Volume >= 70% column (630)?	Yes	Volume >= 70% column (70)?	No		
	Volume >= 56% column (504)?	Yes	Volume >= 56% column (56)?	No		
08:00 to 09:00	1,628	37	No	No	No	No
Condition A	Volume >= 70% column (420)?	Yes	Volume >= 70% column (630)?	No		
	Volume >= 56% column (336)?	Yes	Volume >= 56% column (504)?	No		
Condition B	Volume >= 70% column (630)?	Yes	Volume >= 70% column (70)?	No		
	Volume >= 56% column (504)?	Yes	Volume >= 56% column (56)?	No		
08:15 to 09:15	1,597	33	No	No	No	No
Condition A	Volume >= 70% column (420)?	Yes	Volume >= 70% column (630)?	No		
	Volume >= 56% column (336)?	Yes	Volume >= 56% column (504)?	No		
Condition B	Volume >= 70% column (630)?	Yes	Volume >= 70% column (70)?	No		
	Volume >= 56% column (504)?	Yes	Volume >= 56% column (56)?	No		

08:30 to 09:30	1,563	41	No	No	No	No
Condition A	Volume >= 70% column (420)?	Yes	Volume >= 70% column (630)?	No		
	Volume >= 56% column (336)?	Yes	Volume >= 56% column (504)?	No		
Condition B	Volume >= 70% column (630)?	Yes	Volume >= 70% column (70)?	No		
	Volume >= 56% column (504)?	Yes	Volume >= 56% column (56)?	No		
08:45 to 09:45	1,520	37	No	No	No	No
Condition A	Volume >= 70% column (420)?	Yes	Volume >= 70% column (630)?	No		
	Volume >= 56% column (336)?	Yes	Volume >= 56% column (504)?	No		
Condition B	Volume >= 70% column (630)?	Yes	Volume >= 70% column (70)?	No		
	Volume >= 56% column (504)?	Yes	Volume >= 56% column (56)?	No		
09:00 to 10:00	1,475	38	No	No	No	No
Condition A	Volume >= 70% column (420)?	Yes	Volume >= 70% column (630)?	No		
	Volume >= 56% column (336)?	Yes	Volume >= 56% column (504)?	No		
Condition B	Volume >= 70% column (630)?	Yes	Volume >= 70% column (70)?	No		
	Volume >= 56% column (504)?	Yes	Volume >= 56% column (56)?	No		
09:15 to 10:15	1,457	45	No	No	No	No
Condition A	Volume >= 70% column (420)?	Yes	Volume >= 70% column (630)?	No		
	Volume >= 56% column (336)?	Yes	Volume >= 56% column (504)?	No		
Condition B	Volume >= 70% column (630)?	Yes	Volume >= 70% column (70)?	No		
	Volume >= 56% column (504)?	Yes	Volume >= 56% column (56)?	No		
09:30 to 10:30	1,437	42	No	No	No	No
Condition A	Volume >= 70% column (420)?	Yes	Volume >= 70% column (630)?	No		
	Volume >= 56% column (336)?	Yes	Volume >= 56% column (504)?	No		
Condition B	Volume >= 70% column (630)?	Yes	Volume >= 70% column (70)?	No		
	Volume >= 56% column (504)?	Yes	Volume >= 56% column (56)?	No		
09:45 to 10:45	1,442	45	No	No	No	No
Condition A	Volume >= 70% column (420)?	Yes	Volume >= 70% column (630)?	No		
	Volume >= 56% column (336)?	Yes	Volume >= 56% column (504)?	No		
Condition B	Volume >= 70% column (630)?	Yes	Volume >= 70% column (70)?	No		
	Volume >= 56% column (504)?	Yes	Volume >= 56% column (56)?	No		

10:00 to 11:00	1,423	46	No	No	No	No
Condition A	Volume >= 70% column (420)?	Yes	Volume >= 70% column (630)?	No		
	Volume >= 56% column (336)?	Yes	Volume >= 56% column (504)?	No		
Condition B	Volume >= 70% column (630)?	Yes	Volume >= 70% column (70)?	No		
	Volume >= 56% column (504)?	Yes	Volume >= 56% column (56)?	No		
10:15 to 11:15	1,420	41	No	No	No	No
Condition A	Volume >= 70% column (420)?	Yes	Volume >= 70% column (630)?	No		
	Volume >= 56% column (336)?	Yes	Volume >= 56% column (504)?	No		
Condition B	Volume >= 70% column (630)?	Yes	Volume >= 70% column (70)?	No		
	Volume >= 56% column (504)?	Yes	Volume >= 56% column (56)?	No		
10:30 to 11:30	1,453	43	No	No	No	No
Condition A	Volume >= 70% column (420)?	Yes	Volume >= 70% column (630)?	No		
	Volume >= 56% column (336)?	Yes	Volume >= 56% column (504)?	No		
Condition B	Volume >= 70% column (630)?	Yes	Volume >= 70% column (70)?	No		
	Volume >= 56% column (504)?	Yes	Volume >= 56% column (56)?	No		
10:45 to 11:45	1,482	37	No	No	No	No
Condition A	Volume >= 70% column (420)?	Yes	Volume >= 70% column (630)?	No		
	Volume >= 56% column (336)?	Yes	Volume >= 56% column (504)?	No		
Condition B	Volume >= 70% column (630)?	Yes	Volume >= 70% column (70)?	No		
	Volume >= 56% column (504)?	Yes	Volume >= 56% column (56)?	No		
11:00 to 12:00	1,535	37	No	No	No	No
Condition A	Volume >= 70% column (420)?	Yes	Volume >= 70% column (630)?	No		
	Volume >= 56% column (336)?	Yes	Volume >= 56% column (504)?	No		
Condition B	Volume >= 70% column (630)?	Yes	Volume >= 70% column (70)?	No		
	Volume >= 56% column (504)?	Yes	Volume >= 56% column (56)?	No		
11:15 to 12:15	1,571	39	No	No	No	No
Condition A	Volume >= 70% column (420)?	Yes	Volume >= 70% column (630)?	No		
	Volume >= 56% column (336)?	Yes	Volume >= 56% column (504)?	No		
Condition B	Volume >= 70% column (630)?	Yes	Volume >= 70% column (70)?	No		
	Volume >= 56% column (504)?	Yes	Volume >= 56% column (56)?	No		

11:30 to 12:30	1,597	38	No	No	No	No
Condition A	Volume >= 70% column (420)?	Yes	Volume >= 70% column (630)?	No		
	Volume >= 56% column (336)?	Yes	Volume >= 56% column (504)?	No		
Condition B	Volume >= 70% column (630)?	Yes	Volume >= 70% column (70)?	No		
	Volume >= 56% column (504)?	Yes	Volume >= 56% column (56)?	No		
11:45 to 12:45	1,631	36	No	No	No	No
Condition A	Volume >= 70% column (420)?	Yes	Volume >= 70% column (630)?	No		
	Volume >= 56% column (336)?	Yes	Volume >= 56% column (504)?	No		
Condition B	Volume >= 70% column (630)?	Yes	Volume >= 70% column (70)?	No		
	Volume >= 56% column (504)?	Yes	Volume >= 56% column (56)?	No		
12:00 to 13:00	1,698	39	No	No	No	No
Condition A	Volume >= 70% column (420)?	Yes	Volume >= 70% column (630)?	No		
	Volume >= 56% column (336)?	Yes	Volume >= 56% column (504)?	No		
Condition B	Volume >= 70% column (630)?	Yes	Volume >= 70% column (70)?	No		
	Volume >= 56% column (504)?	Yes	Volume >= 56% column (56)?	No		
12:15 to 13:15	1,691	41	No	No	No	No
Condition A	Volume >= 70% column (420)?	Yes	Volume >= 70% column (630)?	No		
	Volume >= 56% column (336)?	Yes	Volume >= 56% column (504)?	No		
Condition B	Volume >= 70% column (630)?	Yes	Volume >= 70% column (70)?	No		
	Volume >= 56% column (504)?	Yes	Volume >= 56% column (56)?	No		
12:30 to 13:30	1,691	37	No	No	No	No
Condition A	Volume >= 70% column (420)?	Yes	Volume >= 70% column (630)?	No		
	Volume >= 56% column (336)?	Yes	Volume >= 56% column (504)?	No		
Condition B	Volume >= 70% column (630)?	Yes	Volume >= 70% column (70)?	No		
	Volume >= 56% column (504)?	Yes	Volume >= 56% column (56)?	No		
12:45 to 13:45	1,711	42	No	No	No	No
Condition A	Volume >= 70% column (420)?	Yes	Volume >= 70% column (630)?	No		
	Volume >= 56% column (336)?	Yes	Volume >= 56% column (504)?	No		
Condition B	Volume >= 70% column (630)?	Yes	Volume >= 70% column (70)?	No		
	Volume >= 56% column (504)?	Yes	Volume >= 56% column (56)?	No		

13:00 to 14:00	1,670	37	No	No	No	No
Condition A	Volume >= 70% column (420)?	Yes	Volume >= 70% column (630)?	No		
	Volume >= 56% column (336)?	Yes	Volume >= 56% column (504)?	No		
Condition B	Volume >= 70% column (630)?	Yes	Volume >= 70% column (70)?	No		
	Volume >= 56% column (504)?	Yes	Volume >= 56% column (56)?	No		
13:15 to 14:15	1,733	39	No	No	No	No
Condition A	Volume >= 70% column (420)?	Yes	Volume >= 70% column (630)?	No		
	Volume >= 56% column (336)?	Yes	Volume >= 56% column (504)?	No		
Condition B	Volume >= 70% column (630)?	Yes	Volume >= 70% column (70)?	No		
	Volume >= 56% column (504)?	Yes	Volume >= 56% column (56)?	No		
13:30 to 14:30	1,759	45	No	No	No	No
Condition A	Volume >= 70% column (420)?	Yes	Volume >= 70% column (630)?	No		
	Volume >= 56% column (336)?	Yes	Volume >= 56% column (504)?	No		
Condition B	Volume >= 70% column (630)?	Yes	Volume >= 70% column (70)?	No		
	Volume >= 56% column (504)?	Yes	Volume >= 56% column (56)?	No		
13:45 to 14:45	1,824	46	No	No	No	No
Condition A	Volume >= 70% column (420)?	Yes	Volume >= 70% column (630)?	No		
	Volume >= 56% column (336)?	Yes	Volume >= 56% column (504)?	No		
Condition B	Volume >= 70% column (630)?	Yes	Volume >= 70% column (70)?	No		
	Volume >= 56% column (504)?	Yes	Volume >= 56% column (56)?	No		
14:00 to 15:00	1,932	51	No	No	No	No
Condition A	Volume >= 70% column (420)?	Yes	Volume >= 70% column (630)?	No		
	Volume >= 56% column (336)?	Yes	Volume >= 56% column (504)?	No		
Condition B	Volume >= 70% column (630)?	Yes	Volume >= 70% column (70)?	No		
	Volume >= 56% column (504)?	Yes	Volume >= 56% column (56)?	No		
14:15 to 15:15	1,986	54	No	No	No	No
Condition A	Volume >= 70% column (420)?	Yes	Volume >= 70% column (630)?	No		
	Volume >= 56% column (336)?	Yes	Volume >= 56% column (504)?	No		
Condition B	Volume >= 70% column (630)?	Yes	Volume >= 70% column (70)?	No		
	Volume >= 56% column (504)?	Yes	Volume >= 56% column (56)?	No		

14:30 to 15:30	1,987	54	No	No	No	No
Condition A	Volume >= 70% column (420)?	Yes	Volume >= 70% column (630)?	No		
	Volume >= 56% column (336)?	Yes	Volume >= 56% column (504)?	No		
Condition B	Volume >= 70% column (630)?	Yes	Volume >= 70% column (70)?	No		
	Volume >= 56% column (504)?	Yes	Volume >= 56% column (56)?	No		
14:45 to 15:45	1,910	46	No	No	No	No
Condition A	Volume >= 70% column (420)?	Yes	Volume >= 70% column (630)?	No		
	Volume >= 56% column (336)?	Yes	Volume >= 56% column (504)?	No		
Condition B	Volume >= 70% column (630)?	Yes	Volume >= 70% column (70)?	No		
	Volume >= 56% column (504)?	Yes	Volume >= 56% column (56)?	No		
15:00 to 16:00	1,877	33	No	No	No	No
Condition A	Volume >= 70% column (420)?	Yes	Volume >= 70% column (630)?	No		
	Volume >= 56% column (336)?	Yes	Volume >= 56% column (504)?	No		
Condition B	Volume >= 70% column (630)?	Yes	Volume >= 70% column (70)?	No		
	Volume >= 56% column (504)?	Yes	Volume >= 56% column (56)?	No		
15:15 to 16:15	1,878	22	No	No	No	No
Condition A	Volume >= 70% column (420)?	Yes	Volume >= 70% column (630)?	No		
	Volume >= 56% column (336)?	Yes	Volume >= 56% column (504)?	No		
Condition B	Volume >= 70% column (630)?	Yes	Volume >= 70% column (70)?	No		
	Volume >= 56% column (504)?	Yes	Volume >= 56% column (56)?	No		
15:30 to 16:30	1,929	19	No	No	No	No
Condition A	Volume >= 70% column (420)?	Yes	Volume >= 70% column (630)?	No		
	Volume >= 56% column (336)?	Yes	Volume >= 56% column (504)?	No		
Condition B	Volume >= 70% column (630)?	Yes	Volume >= 70% column (70)?	No		
	Volume >= 56% column (504)?	Yes	Volume >= 56% column (56)?	No		
15:45 to 16:45	1,985	28	No	No	No	No
Condition A	Volume >= 70% column (420)?	Yes	Volume >= 70% column (630)?	No		
	Volume >= 56% column (336)?	Yes	Volume >= 56% column (504)?	No		
Condition B	Volume >= 70% column (630)?	Yes	Volume >= 70% column (70)?	No		
	Volume >= 56% column (504)?	Yes	Volume >= 56% column (56)?	No		

16:00 to 17:00	1,985	33	No	No	No	No
Condition A	Volume >= 70% column (420)?	Yes	Volume >= 70% column (630)?	No		
	Volume >= 56% column (336)?	Yes	Volume >= 56% column (504)?	No		
Condition B	Volume >= 70% column (630)?	Yes	Volume >= 70% column (70)?	No		
	Volume >= 56% column (504)?	Yes	Volume >= 56% column (56)?	No		
16:15 to 17:15	1,973	38	No	No	No	No
Condition A	Volume >= 70% column (420)?	Yes	Volume >= 70% column (630)?	No		
	Volume >= 56% column (336)?	Yes	Volume >= 56% column (504)?	No		
Condition B	Volume >= 70% column (630)?	Yes	Volume >= 70% column (70)?	No		
	Volume >= 56% column (504)?	Yes	Volume >= 56% column (56)?	No		
16:30 to 17:30	1,976	40	No	No	No	No
Condition A	Volume >= 70% column (420)?	Yes	Volume >= 70% column (630)?	No		
	Volume >= 56% column (336)?	Yes	Volume >= 56% column (504)?	No		
Condition B	Volume >= 70% column (630)?	Yes	Volume >= 70% column (70)?	No		
	Volume >= 56% column (504)?	Yes	Volume >= 56% column (56)?	No		
16:45 to 17:45	2,029	40	No	No	No	No
Condition A	Volume >= 70% column (420)?	Yes	Volume >= 70% column (630)?	No		
	Volume >= 56% column (336)?	Yes	Volume >= 56% column (504)?	No		
Condition B	Volume >= 70% column (630)?	Yes	Volume >= 70% column (70)?	No		
	Volume >= 56% column (504)?	Yes	Volume >= 56% column (56)?	No		
17:00 to 18:00	1,964	38	No	No	No	No
Condition A	Volume >= 70% column (420)?	Yes	Volume >= 70% column (630)?	No		
	Volume >= 56% column (336)?	Yes	Volume >= 56% column (504)?	No		
Condition B	Volume >= 70% column (630)?	Yes	Volume >= 70% column (70)?	No		
	Volume >= 56% column (504)?	Yes	Volume >= 56% column (56)?	No		
17:15 to 18:15	1,937	39	No	No	No	No
Condition A	Volume >= 70% column (420)?	Yes	Volume >= 70% column (630)?	No		
	Volume >= 56% column (336)?	Yes	Volume >= 56% column (504)?	No		
Condition B	Volume >= 70% column (630)?	Yes	Volume >= 70% column (70)?	No		
	Volume >= 56% column (504)?	Yes	Volume >= 56% column (56)?	No		

17:30 to 18:30	1,865	35	No	No	No	No
Condition A	Volume >= 70% column (420)?	Yes	Volume >= 70% column (630)?	No		
	Volume >= 56% column (336)?	Yes	Volume >= 56% column (504)?	No		
Condition B	Volume >= 70% column (630)?	Yes	Volume >= 70% column (70)?	No		
	Volume >= 56% column (504)?	Yes	Volume >= 56% column (56)?	No		
17:45 to 18:45	1,686	31	No	No	No	No
Condition A	Volume >= 70% column (420)?	Yes	Volume >= 70% column (630)?	No		
	Volume >= 56% column (336)?	Yes	Volume >= 56% column (504)?	No		
Condition B	Volume >= 70% column (630)?	Yes	Volume >= 70% column (70)?	No		
	Volume >= 56% column (504)?	Yes	Volume >= 56% column (56)?	No		
18:00 to 19:00	1,553	31	No	No	No	No
Condition A	Volume >= 70% column (420)?	Yes	Volume >= 70% column (630)?	No		
	Volume >= 56% column (336)?	Yes	Volume >= 56% column (504)?	No		
Condition B	Volume >= 70% column (630)?	Yes	Volume >= 70% column (70)?	No		
	Volume >= 56% column (504)?	Yes	Volume >= 56% column (56)?	No		
18:15 to 19:15	1,089	21	No	No	No	No
Condition A	Volume >= 70% column (420)?	Yes	Volume >= 70% column (630)?	No		
	Volume >= 56% column (336)?	Yes	Volume >= 56% column (504)?	No		
Condition B	Volume >= 70% column (630)?	Yes	Volume >= 70% column (70)?	No		
	Volume >= 56% column (504)?	Yes	Volume >= 56% column (56)?	No		
18:30 to 19:30	660	14	No	No	No	No
Condition A	Volume >= 70% column (420)?	Yes	Volume >= 70% column (630)?	No		
	Volume >= 56% column (336)?	Yes	Volume >= 56% column (504)?	No		
Condition B	Volume >= 70% column (630)?	Yes	Volume >= 70% column (70)?	No		
	Volume >= 56% column (504)?	Yes	Volume >= 56% column (56)?	No		
18:45 to 19:45	316	5	No	No	No	No
Condition A	Volume >= 70% column (420)?	No	Volume >= 70% column (630)?	No		
	Volume >= 56% column (336)?	No	Volume >= 56% column (504)?	No		
Condition B	Volume >= 70% column (630)?	No	Volume >= 70% column (70)?	No		
	Volume >= 56% column (504)?	No	Volume >= 56% column (56)?	No		

Warrant 2: Four-hour Vehicular Volume

1: SH 105 at Buffalo Springs Drive

Intersection Information

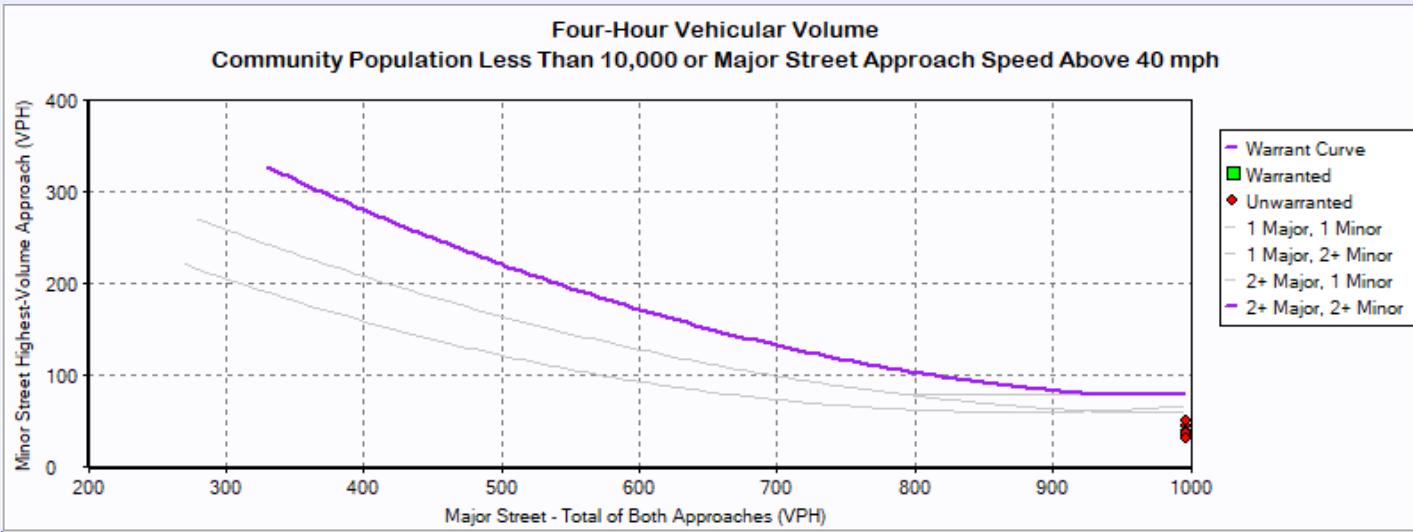
Major Street		Minor Street	
Street Name	SH 105	Buffalo Springs Drive	
Direction	EB/WB	NB/SB	
Number of Lanes	2	2	
Approach Speed	45	35	

Warrant 2 Met?

No

Details:

Notes	0 Hours met (4 required)
Low population	No



Hourly Volumes

Hour	Major Street Total All Approaches (vph)	Minor Street Highest Volume Approach (vph)
00:00:00 - 01:00:00	0.00	0.00
01:00:00 - 02:00:00	0.00	0.00
02:00:00 - 03:00:00	0.00	0.00
03:00:00 - 04:00:00	0.00	0.00
04:00:00 - 05:00:00	0.00	0.00
05:00:00 - 06:00:00	0.00	0.00
06:00:00 - 07:00:00	1,212.00	38.00
07:00:00 - 08:00:00	1,535.00	40.00
08:00:00 - 09:00:00	1,628.00	37.00
09:00:00 - 10:00:00	1,475.00	38.00
10:00:00 - 11:00:00	1,423.00	46.00
11:00:00 - 12:00:00	1,535.00	37.00
12:00:00 - 13:00:00	1,698.00	39.00
13:00:00 - 14:00:00	1,670.00	37.00
14:00:00 - 15:00:00	1,932.00	51.00
15:00:00 - 16:00:00	1,877.00	33.00
16:00:00 - 17:00:00	1,985.00	33.00
17:00:00 - 18:00:00	1,964.00	38.00
18:00:00 - 19:00:00	1,553.00	31.00
19:00:00 - 20:00:00	0.00	0.00
20:00:00 - 21:00:00	0.00	0.00
21:00:00 - 22:00:00	0.00	0.00
22:00:00 - 23:00:00	0.00	0.00
23:00:00 - 00:00:00	0.00	0.00

Warranted Volumes

Hour	Major Street Total All Approaches (vph)	Minor Street Highest Volume Approach (vph)

Warrant 3: Peak Hour

1: SH 105 at Buffalo Springs Drive

Intersection Information

Major Street		Minor Street	
Street Name	SH 105	Buffalo Springs Drive	
Direction	EB/WB	NB/SB	
Number of Lanes	2	2	
Approach Speed	45	35	

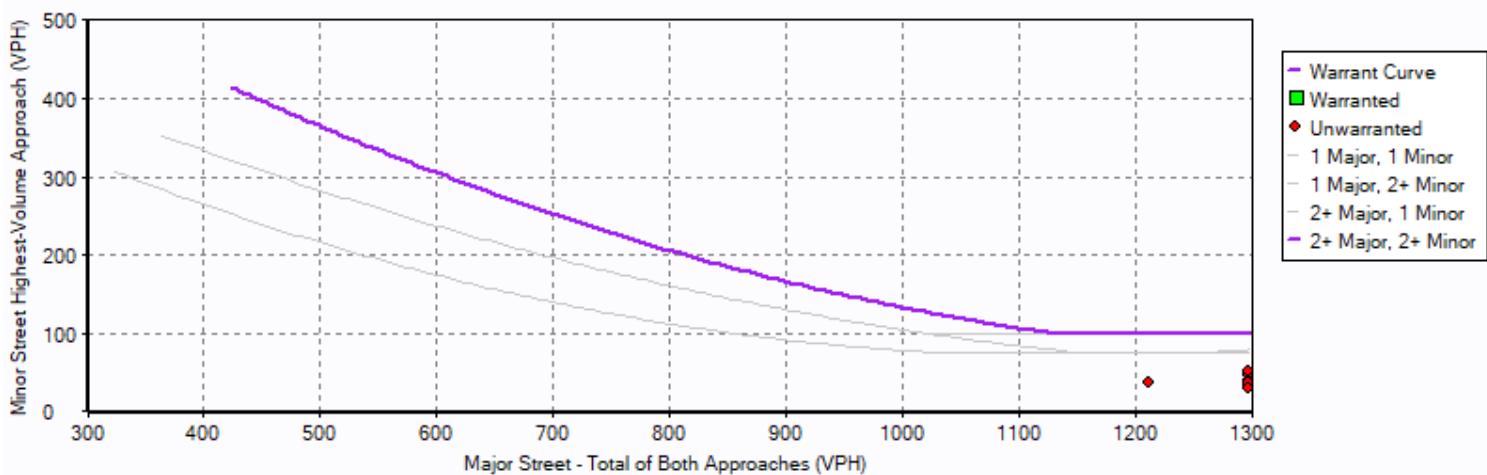
Warrant 3 Met? No

Details

Low Population?	No
Condition A Met?	No
Notes	0 Hours met (1 required)
Minor Approach Time Delay Condition Met?	Not Met
Minor Approach Volume Condition Met?	Not Met
Total Entering Intersection Volume Condition Met?	Not Met
Condition B Met?	No
Notes	0 Hours met (1 required)

Peak Hour Vehicular Volume

Community Population Less Than 10,000 or Major Street Approach Speed Above 40 mph



Hour	Major Street Total All Approaches (vph)	Minor Street Highest Volume Approach (vph)
6:00	1,212	38
7:00	1,535	40
8:00	1,628	37
9:00	1,475	38
10:00	1,423	46
11:00	1,535	37
12:00	1,698	39
13:00	1,670	37
14:00	1,932	51
15:00	1,877	33
16:00	1,985	33
17:00	1,964	38
18:00	1,553	31

Warrant 7: Crash Experience

1: SH 105 at Buffalo Springs Drive

Intersection Information

Major Street Name SH 105

Major Street Direction EB/WB

Minor Street Direction NB/SB

WARRANT 7 MET? No

Details:

Low Population? No

Traffic Volume Condition Met? No

Major Street Speed Limit 45

0 Hours Met (8 Required)

Major Street 85th-% tile Speed 0.00

Ped Volume Condition Met? No

0 Hours Met (8 Required)

Qualifying Crashes **6**

Adequate Alternative Trials? No

Hour	Traffic Volumes				Pedestrian Volumes			
	Major Street Vehicles	Minor Street Vehicles	80% Standard Met? A or B		Northbound Ped Volumes		Southbound Ped Volumes	
			Condition A	Condition B	Peds	> 80?	Peds	> 80?
06:00 to 07:00	1,212	0	No	No	0	No	0	No
06:15 to 07:15	1,466	0	No	No	0	No	0	No
06:30 to 07:30	1,630	0	No	No	0	No	0	No
06:45 to 07:45	1,601	0	No	No	0	No	0	No
07:00 to 08:00	1,535	0	No	No	0	No	0	No
07:15 to 08:15	1,509	0	No	No	0	No	0	No
07:30 to 08:30	1,537	0	No	No	0	No	0	No

07:45 to 08:45	1,576	0	No	No	0	No	0	No
08:00 to 09:00	1,628	0	No	No	0	No	0	No
08:15 to 09:15	1,597	0	No	No	0	No	0	No
08:30 to 09:30	1,563	0	No	No	0	No	0	No
08:45 to 09:45	1,520	0	No	No	0	No	0	No
09:00 to 10:00	1,475	0	No	No	0	No	0	No
09:15 to 10:15	1,457	0	No	No	0	No	0	No
09:30 to 10:30	1,437	0	No	No	0	No	0	No
09:45 to 10:45	1,442	0	No	No	0	No	0	No
10:00 to 11:00	1,423	0	No	No	0	No	0	No
10:15 to 11:15	1,420	0	No	No	0	No	0	No
10:30 to 11:30	1,453	0	No	No	0	No	0	No
10:45 to 11:45	1,482	0	No	No	0	No	0	No
11:00 to 12:00	1,535	0	No	No	0	No	0	No
11:15 to 12:15	1,571	0	No	No	0	No	0	No
11:30 to 12:30	1,597	0	No	No	0	No	0	No
11:45 to 12:45	1,631	0	No	No	0	No	0	No

12:00 to 13:00	1,698	0	No	No	0	No	0	No
12:15 to 13:15	1,691	0	No	No	0	No	0	No
12:30 to 13:30	1,691	0	No	No	0	No	0	No
12:45 to 13:45	1,711	0	No	No	0	No	0	No
13:00 to 14:00	1,670	0	No	No	0	No	0	No
13:15 to 14:15	1,733	0	No	No	0	No	0	No
13:30 to 14:30	1,759	0	No	No	0	No	0	No
13:45 to 14:45	1,824	0	No	No	0	No	0	No
14:00 to 15:00	1,932	0	No	No	0	No	0	No
14:15 to 15:15	1,986	0	No	No	0	No	0	No
14:30 to 15:30	1,987	0	No	No	0	No	0	No
14:45 to 15:45	1,910	0	No	No	0	No	0	No
15:00 to 16:00	1,877	0	No	No	0	No	0	No
15:15 to 16:15	1,878	0	No	No	0	No	0	No
15:30 to 16:30	1,929	0	No	No	0	No	0	No
15:45 to 16:45	1,985	0	No	No	0	No	0	No
16:00 to 17:00	1,985	0	No	No	0	No	0	No

16:15 to 17:15	1,973	0	No	No	0	No	0	No
16:30 to 17:30	1,976	0	No	No	0	No	0	No
16:45 to 17:45	2,029	0	No	No	0	No	0	No
17:00 to 18:00	1,964	0	No	No	0	No	0	No
17:15 to 18:15	1,937	0	No	No	0	No	0	No
17:30 to 18:30	1,865	0	No	No	0	No	0	No
17:45 to 18:45	1,686	0	No	No	0	No	0	No
18:00 to 19:00	1,553	0	No	No	0	No	0	No
18:15 to 19:15	1,089	0	No	No	0	No	0	No
18:30 to 19:30	660	0	No	No	0	No	0	No
18:45 to 19:45	316	0	No	No	0	No	0	No

Appendix D

Traffic Signal Warrant Analysis – 2023 Future Conditions

Warrants Summary Report

1: SH 105 at Buffalo Springs Drive

Intersection Information

Major Street		Minor Street
Street Name	SH 105	Buffalo Springs Drive
Direction	EB/WB	NB/SB
Number of Lanes	2	2
Approach Speed	45	35

Warrant	Met?	Notes
Warrant 1, Eight-Hour Vehicular Volume		
Condition A or B Met?	Yes	9 Hours met (8 required)
Condition A and B Met?	No	0 Hours met (8 required)
Warrant 2, Four-Hour Vehicular Volume		
	Yes	5 Hours met (4 required)
Warrant 3, Peak Hour		
Condition A Met?	No	0 Hours met (1 required)
Condition B Met?	No	0 Hours met (1 required)
Warrant 7, Crash Experience		
Traffic Volume Condition?	Yes	13 Hours met (8 required)
Ped Condition?	No	0 Hours met (8 required)

Warrant 1: Eight-hour Vehicular Volume

1: SH 105 at Buffalo Springs Drive

Intersection Information

Major Street Name: SH 105

Major Street Direction: EB/WB

Minor Street Direction: NB/SB

WARRANT 1 MET? Yes

Details:

Condition A Met? Yes 9 Hours met (8 required)

Condition B Met? No 0 Hours met (8 required)

Hour	Major Street Vehicles (Total of Both Approaches)	High Volume Minor Approach Vehicles	70% Standard Met? Cond. A OR Cond. B		56% Standard Met? Cond. A AND Cond. B	
			Condition A 70% Column	Condition B 70% Column	Condition A 56% Column	Condition B 56% Column
06:00 to 07:00	1,318	63	No	No	No	Yes
Condition A	Volume \geq 70% column (420)?	Yes	Volume \geq 70% column (630)?	No		
	Volume \geq 56% column (336)?	Yes	Volume \geq 56% column (504)?	No		
Condition B	Volume \geq 70% column (630)?	Yes	Volume \geq 70% column (70)?	No		
	Volume \geq 56% column (504)?	Yes	Volume \geq 56% column (56)?	Yes		
06:15 to 07:15	1,601	73	No	Yes*	No	Yes
Condition A	Volume \geq 70% column (420)?	Yes	Volume \geq 70% column (630)?	No		
	Volume \geq 56% column (336)?	Yes	Volume \geq 56% column (504)?	No		
Condition B	Volume \geq 70% column (630)?	Yes	Volume \geq 70% column (70)?	Yes		
	Volume \geq 56% column (504)?	Yes	Volume \geq 56% column (56)?	Yes		
06:30 to 07:30	1,786	82	No	Yes	No	Yes
Condition A	Volume \geq 70% column (420)?	Yes	Volume \geq 70% column (630)?	No		
	Volume \geq 56% column (336)?	Yes	Volume \geq 56% column (504)?	No		
Condition B	Volume \geq 70% column (630)?	Yes	Volume \geq 70% column (70)?	Yes		
	Volume \geq 56% column (504)?	Yes	Volume \geq 56% column (56)?	Yes		
06:45 to 07:45	1,762	81	No	Yes	No	Yes
Condition A	Volume \geq 70% column (420)?	Yes	Volume \geq 70% column (630)?	No		
	Volume \geq 56% column (336)?	Yes	Volume \geq 56% column (504)?	No		
Condition B	Volume \geq 70% column (630)?	Yes	Volume \geq 70% column (70)?	Yes		
	Volume \geq 56% column (504)?	Yes	Volume \geq 56% column (56)?	Yes		

07:00 to 08:00	1,699	91	No	Yes	No	Yes
Condition A	Volume >= 70% column (420)?	Yes	Volume >= 70% column (630)?	No		
	Volume >= 56% column (336)?	Yes	Volume >= 56% column (504)?	No		
Condition B	Volume >= 70% column (630)?	Yes	Volume >= 70% column (70)?	Yes		
	Volume >= 56% column (504)?	Yes	Volume >= 56% column (56)?	Yes		
07:15 to 08:15	1,668	91	No	Yes*	No	Yes
Condition A	Volume >= 70% column (420)?	Yes	Volume >= 70% column (630)?	No		
	Volume >= 56% column (336)?	Yes	Volume >= 56% column (504)?	No		
Condition B	Volume >= 70% column (630)?	Yes	Volume >= 70% column (70)?	Yes		
	Volume >= 56% column (504)?	Yes	Volume >= 56% column (56)?	Yes		
07:30 to 08:30	1,696	81	No	Yes	No	Yes
Condition A	Volume >= 70% column (420)?	Yes	Volume >= 70% column (630)?	No		
	Volume >= 56% column (336)?	Yes	Volume >= 56% column (504)?	No		
Condition B	Volume >= 70% column (630)?	Yes	Volume >= 70% column (70)?	Yes		
	Volume >= 56% column (504)?	Yes	Volume >= 56% column (56)?	Yes		
07:45 to 08:45	1,736	82	No	Yes	No	Yes
Condition A	Volume >= 70% column (420)?	Yes	Volume >= 70% column (630)?	No		
	Volume >= 56% column (336)?	Yes	Volume >= 56% column (504)?	No		
Condition B	Volume >= 70% column (630)?	Yes	Volume >= 70% column (70)?	Yes		
	Volume >= 56% column (504)?	Yes	Volume >= 56% column (56)?	Yes		
08:00 to 09:00	1,789	80	No	Yes	No	Yes
Condition A	Volume >= 70% column (420)?	Yes	Volume >= 70% column (630)?	No		
	Volume >= 56% column (336)?	Yes	Volume >= 56% column (504)?	No		
Condition B	Volume >= 70% column (630)?	Yes	Volume >= 70% column (70)?	Yes		
	Volume >= 56% column (504)?	Yes	Volume >= 56% column (56)?	Yes		
08:15 to 09:15	1,753	72	No	Yes*	No	Yes
Condition A	Volume >= 70% column (420)?	Yes	Volume >= 70% column (630)?	No		
	Volume >= 56% column (336)?	Yes	Volume >= 56% column (504)?	No		
Condition B	Volume >= 70% column (630)?	Yes	Volume >= 70% column (70)?	Yes		
	Volume >= 56% column (504)?	Yes	Volume >= 56% column (56)?	Yes		

08:30 to 09:30	1,714	77	No	Yes	No	Yes
Condition A	Volume >= 70% column (420)?	Yes	Volume >= 70% column (630)?	No		
	Volume >= 56% column (336)?	Yes	Volume >= 56% column (504)?	No		
Condition B	Volume >= 70% column (630)?	Yes	Volume >= 70% column (70)?	Yes		
	Volume >= 56% column (504)?	Yes	Volume >= 56% column (56)?	Yes		
08:45 to 09:45	1,666	68	No	No	No	Yes
Condition A	Volume >= 70% column (420)?	Yes	Volume >= 70% column (630)?	No		
	Volume >= 56% column (336)?	Yes	Volume >= 56% column (504)?	No		
Condition B	Volume >= 70% column (630)?	Yes	Volume >= 70% column (70)?	No		
	Volume >= 56% column (504)?	Yes	Volume >= 56% column (56)?	Yes		
09:00 to 10:00	1,616	65	No	No	No	Yes
Condition A	Volume >= 70% column (420)?	Yes	Volume >= 70% column (630)?	No		
	Volume >= 56% column (336)?	Yes	Volume >= 56% column (504)?	No		
Condition B	Volume >= 70% column (630)?	Yes	Volume >= 70% column (70)?	No		
	Volume >= 56% column (504)?	Yes	Volume >= 56% column (56)?	Yes		
09:15 to 10:15	1,599	73	No	Yes*	No	Yes
Condition A	Volume >= 70% column (420)?	Yes	Volume >= 70% column (630)?	No		
	Volume >= 56% column (336)?	Yes	Volume >= 56% column (504)?	No		
Condition B	Volume >= 70% column (630)?	Yes	Volume >= 70% column (70)?	Yes		
	Volume >= 56% column (504)?	Yes	Volume >= 56% column (56)?	Yes		
09:30 to 10:30	1,580	70	No	Yes	No	Yes
Condition A	Volume >= 70% column (420)?	Yes	Volume >= 70% column (630)?	No		
	Volume >= 56% column (336)?	Yes	Volume >= 56% column (504)?	No		
Condition B	Volume >= 70% column (630)?	Yes	Volume >= 70% column (70)?	Yes		
	Volume >= 56% column (504)?	Yes	Volume >= 56% column (56)?	Yes		
09:45 to 10:45	1,588	73	No	Yes	No	Yes
Condition A	Volume >= 70% column (420)?	Yes	Volume >= 70% column (630)?	No		
	Volume >= 56% column (336)?	Yes	Volume >= 56% column (504)?	No		
Condition B	Volume >= 70% column (630)?	Yes	Volume >= 70% column (70)?	Yes		
	Volume >= 56% column (504)?	Yes	Volume >= 56% column (56)?	Yes		

10:00 to 11:00	1,570	74	No	Yes	No	Yes
Condition A	Volume >= 70% column (420)?	Yes	Volume >= 70% column (630)?	No		
	Volume >= 56% column (336)?	Yes	Volume >= 56% column (504)?	No		
Condition B	Volume >= 70% column (630)?	Yes	Volume >= 70% column (70)?	Yes		
	Volume >= 56% column (504)?	Yes	Volume >= 56% column (56)?	Yes		
10:15 to 11:15	1,569	68	No	No	No	Yes
Condition A	Volume >= 70% column (420)?	Yes	Volume >= 70% column (630)?	No		
	Volume >= 56% column (336)?	Yes	Volume >= 56% column (504)?	No		
Condition B	Volume >= 70% column (630)?	Yes	Volume >= 70% column (70)?	No		
	Volume >= 56% column (504)?	Yes	Volume >= 56% column (56)?	Yes		
10:30 to 11:30	1,607	69	No	No	No	Yes
Condition A	Volume >= 70% column (420)?	Yes	Volume >= 70% column (630)?	No		
	Volume >= 56% column (336)?	Yes	Volume >= 56% column (504)?	No		
Condition B	Volume >= 70% column (630)?	Yes	Volume >= 70% column (70)?	No		
	Volume >= 56% column (504)?	Yes	Volume >= 56% column (56)?	Yes		
10:45 to 11:45	1,639	63	No	No	No	Yes
Condition A	Volume >= 70% column (420)?	Yes	Volume >= 70% column (630)?	No		
	Volume >= 56% column (336)?	Yes	Volume >= 56% column (504)?	No		
Condition B	Volume >= 70% column (630)?	Yes	Volume >= 70% column (70)?	No		
	Volume >= 56% column (504)?	Yes	Volume >= 56% column (56)?	Yes		
11:00 to 12:00	1,698	63	No	No	No	Yes
Condition A	Volume >= 70% column (420)?	Yes	Volume >= 70% column (630)?	No		
	Volume >= 56% column (336)?	Yes	Volume >= 56% column (504)?	No		
Condition B	Volume >= 70% column (630)?	Yes	Volume >= 70% column (70)?	No		
	Volume >= 56% column (504)?	Yes	Volume >= 56% column (56)?	Yes		
11:15 to 12:15	1,735	65	No	No	No	Yes
Condition A	Volume >= 70% column (420)?	Yes	Volume >= 70% column (630)?	No		
	Volume >= 56% column (336)?	Yes	Volume >= 56% column (504)?	No		
Condition B	Volume >= 70% column (630)?	Yes	Volume >= 70% column (70)?	No		
	Volume >= 56% column (504)?	Yes	Volume >= 56% column (56)?	Yes		

11:30 to 12:30	1,763	65	No	No	No	Yes
Condition A	Volume >= 70% column (420)?	Yes	Volume >= 70% column (630)?	No		
	Volume >= 56% column (336)?	Yes	Volume >= 56% column (504)?	No		
Condition B	Volume >= 70% column (630)?	Yes	Volume >= 70% column (70)?	No		
	Volume >= 56% column (504)?	Yes	Volume >= 56% column (56)?	Yes		
11:45 to 12:45	1,801	62	No	No	No	Yes
Condition A	Volume >= 70% column (420)?	Yes	Volume >= 70% column (630)?	No		
	Volume >= 56% column (336)?	Yes	Volume >= 56% column (504)?	No		
Condition B	Volume >= 70% column (630)?	Yes	Volume >= 70% column (70)?	No		
	Volume >= 56% column (504)?	Yes	Volume >= 56% column (56)?	Yes		
12:00 to 13:00	1,873	65	No	No	No	Yes
Condition A	Volume >= 70% column (420)?	Yes	Volume >= 70% column (630)?	No		
	Volume >= 56% column (336)?	Yes	Volume >= 56% column (504)?	No		
Condition B	Volume >= 70% column (630)?	Yes	Volume >= 70% column (70)?	No		
	Volume >= 56% column (504)?	Yes	Volume >= 56% column (56)?	Yes		
12:15 to 13:15	1,867	70	No	Yes*	No	Yes
Condition A	Volume >= 70% column (420)?	Yes	Volume >= 70% column (630)?	No		
	Volume >= 56% column (336)?	Yes	Volume >= 56% column (504)?	No		
Condition B	Volume >= 70% column (630)?	Yes	Volume >= 70% column (70)?	Yes		
	Volume >= 56% column (504)?	Yes	Volume >= 56% column (56)?	Yes		
12:30 to 13:30	1,866	67	No	No	No	Yes
Condition A	Volume >= 70% column (420)?	Yes	Volume >= 70% column (630)?	No		
	Volume >= 56% column (336)?	Yes	Volume >= 56% column (504)?	No		
Condition B	Volume >= 70% column (630)?	Yes	Volume >= 70% column (70)?	No		
	Volume >= 56% column (504)?	Yes	Volume >= 56% column (56)?	Yes		
12:45 to 13:45	1,888	75	No	Yes	No	Yes
Condition A	Volume >= 70% column (420)?	Yes	Volume >= 70% column (630)?	No		
	Volume >= 56% column (336)?	Yes	Volume >= 56% column (504)?	No		
Condition B	Volume >= 70% column (630)?	Yes	Volume >= 70% column (70)?	Yes		
	Volume >= 56% column (504)?	Yes	Volume >= 56% column (56)?	Yes		

13:00 to 14:00	1,844	71	No	Yes	No	Yes
Condition A	Volume >= 70% column (420)?	Yes	Volume >= 70% column (630)?	No		
	Volume >= 56% column (336)?	Yes	Volume >= 56% column (504)?	No		
Condition B	Volume >= 70% column (630)?	Yes	Volume >= 70% column (70)?	Yes		
	Volume >= 56% column (504)?	Yes	Volume >= 56% column (56)?	Yes		
13:15 to 14:15	1,912	73	No	Yes*	No	Yes
Condition A	Volume >= 70% column (420)?	Yes	Volume >= 70% column (630)?	No		
	Volume >= 56% column (336)?	Yes	Volume >= 56% column (504)?	No		
Condition B	Volume >= 70% column (630)?	Yes	Volume >= 70% column (70)?	Yes		
	Volume >= 56% column (504)?	Yes	Volume >= 56% column (56)?	Yes		
13:30 to 14:30	1,941	80	No	Yes	No	Yes
Condition A	Volume >= 70% column (420)?	Yes	Volume >= 70% column (630)?	No		
	Volume >= 56% column (336)?	Yes	Volume >= 56% column (504)?	No		
Condition B	Volume >= 70% column (630)?	Yes	Volume >= 70% column (70)?	Yes		
	Volume >= 56% column (504)?	Yes	Volume >= 56% column (56)?	Yes		
13:45 to 14:45	2,010	81	No	Yes	No	Yes
Condition A	Volume >= 70% column (420)?	Yes	Volume >= 70% column (630)?	No		
	Volume >= 56% column (336)?	Yes	Volume >= 56% column (504)?	No		
Condition B	Volume >= 70% column (630)?	Yes	Volume >= 70% column (70)?	Yes		
	Volume >= 56% column (504)?	Yes	Volume >= 56% column (56)?	Yes		
14:00 to 15:00	2,128	87	No	Yes	No	Yes
Condition A	Volume >= 70% column (420)?	Yes	Volume >= 70% column (630)?	No		
	Volume >= 56% column (336)?	Yes	Volume >= 56% column (504)?	No		
Condition B	Volume >= 70% column (630)?	Yes	Volume >= 70% column (70)?	Yes		
	Volume >= 56% column (504)?	Yes	Volume >= 56% column (56)?	Yes		
14:15 to 15:15	2,189	90	No	Yes*	No	Yes
Condition A	Volume >= 70% column (420)?	Yes	Volume >= 70% column (630)?	No		
	Volume >= 56% column (336)?	Yes	Volume >= 56% column (504)?	No		
Condition B	Volume >= 70% column (630)?	Yes	Volume >= 70% column (70)?	Yes		
	Volume >= 56% column (504)?	Yes	Volume >= 56% column (56)?	Yes		

14:30 to 15:30	2,192	90	No	Yes	No	Yes
Condition A	Volume >= 70% column (420)?	Yes	Volume >= 70% column (630)?	No		
	Volume >= 56% column (336)?	Yes	Volume >= 56% column (504)?	No		
Condition B	Volume >= 70% column (630)?	Yes	Volume >= 70% column (70)?	Yes		
	Volume >= 56% column (504)?	Yes	Volume >= 56% column (56)?	Yes		
14:45 to 15:45	2,111	81	No	Yes	No	Yes
Condition A	Volume >= 70% column (420)?	Yes	Volume >= 70% column (630)?	No		
	Volume >= 56% column (336)?	Yes	Volume >= 56% column (504)?	No		
Condition B	Volume >= 70% column (630)?	Yes	Volume >= 70% column (70)?	Yes		
	Volume >= 56% column (504)?	Yes	Volume >= 56% column (56)?	Yes		
15:00 to 16:00	2,077	67	No	No	No	Yes
Condition A	Volume >= 70% column (420)?	Yes	Volume >= 70% column (630)?	No		
	Volume >= 56% column (336)?	Yes	Volume >= 56% column (504)?	No		
Condition B	Volume >= 70% column (630)?	Yes	Volume >= 70% column (70)?	No		
	Volume >= 56% column (504)?	Yes	Volume >= 56% column (56)?	Yes		
15:15 to 16:15	2,079	55	No	No	No	No
Condition A	Volume >= 70% column (420)?	Yes	Volume >= 70% column (630)?	No		
	Volume >= 56% column (336)?	Yes	Volume >= 56% column (504)?	No		
Condition B	Volume >= 70% column (630)?	Yes	Volume >= 70% column (70)?	No		
	Volume >= 56% column (504)?	Yes	Volume >= 56% column (56)?	No		
15:30 to 16:30	2,136	52	No	No	No	No
Condition A	Volume >= 70% column (420)?	Yes	Volume >= 70% column (630)?	No		
	Volume >= 56% column (336)?	Yes	Volume >= 56% column (504)?	No		
Condition B	Volume >= 70% column (630)?	Yes	Volume >= 70% column (70)?	No		
	Volume >= 56% column (504)?	Yes	Volume >= 56% column (56)?	No		
15:45 to 16:45	2,199	62	No	No	No	Yes
Condition A	Volume >= 70% column (420)?	Yes	Volume >= 70% column (630)?	No		
	Volume >= 56% column (336)?	Yes	Volume >= 56% column (504)?	No		
Condition B	Volume >= 70% column (630)?	Yes	Volume >= 70% column (70)?	No		
	Volume >= 56% column (504)?	Yes	Volume >= 56% column (56)?	Yes		

16:00 to 17:00	2,201	67	No	No	No	Yes
Condition A	Volume >= 70% column (420)?	Yes	Volume >= 70% column (630)?	No		
	Volume >= 56% column (336)?	Yes	Volume >= 56% column (504)?	No		
Condition B	Volume >= 70% column (630)?	Yes	Volume >= 70% column (70)?	No		
	Volume >= 56% column (504)?	Yes	Volume >= 56% column (56)?	Yes		
16:15 to 17:15	2,193	75	No	Yes*	No	Yes
Condition A	Volume >= 70% column (420)?	Yes	Volume >= 70% column (630)?	No		
	Volume >= 56% column (336)?	Yes	Volume >= 56% column (504)?	No		
Condition B	Volume >= 70% column (630)?	Yes	Volume >= 70% column (70)?	Yes		
	Volume >= 56% column (504)?	Yes	Volume >= 56% column (56)?	Yes		
16:30 to 17:30	2,201	79	No	Yes	No	Yes
Condition A	Volume >= 70% column (420)?	Yes	Volume >= 70% column (630)?	No		
	Volume >= 56% column (336)?	Yes	Volume >= 56% column (504)?	No		
Condition B	Volume >= 70% column (630)?	Yes	Volume >= 70% column (70)?	Yes		
	Volume >= 56% column (504)?	Yes	Volume >= 56% column (56)?	Yes		
16:45 to 17:45	2,262	81	No	Yes	No	Yes
Condition A	Volume >= 70% column (420)?	Yes	Volume >= 70% column (630)?	No		
	Volume >= 56% column (336)?	Yes	Volume >= 56% column (504)?	No		
Condition B	Volume >= 70% column (630)?	Yes	Volume >= 70% column (70)?	Yes		
	Volume >= 56% column (504)?	Yes	Volume >= 56% column (56)?	Yes		
17:00 to 18:00	2,195	81	No	Yes	No	Yes
Condition A	Volume >= 70% column (420)?	Yes	Volume >= 70% column (630)?	No		
	Volume >= 56% column (336)?	Yes	Volume >= 56% column (504)?	No		
Condition B	Volume >= 70% column (630)?	Yes	Volume >= 70% column (70)?	Yes		
	Volume >= 56% column (504)?	Yes	Volume >= 56% column (56)?	Yes		
17:15 to 18:15	2,157	80	No	Yes*	No	Yes
Condition A	Volume >= 70% column (420)?	Yes	Volume >= 70% column (630)?	No		
	Volume >= 56% column (336)?	Yes	Volume >= 56% column (504)?	No		
Condition B	Volume >= 70% column (630)?	Yes	Volume >= 70% column (70)?	Yes		
	Volume >= 56% column (504)?	Yes	Volume >= 56% column (56)?	Yes		

17:30 to 18:30	2,071	73	No	Yes	No	Yes
Condition A	Volume >= 70% column (420)?	Yes	Volume >= 70% column (630)?	No		
	Volume >= 56% column (336)?	Yes	Volume >= 56% column (504)?	No		
Condition B	Volume >= 70% column (630)?	Yes	Volume >= 70% column (70)?	Yes		
	Volume >= 56% column (504)?	Yes	Volume >= 56% column (56)?	Yes		
17:45 to 18:45	1,869	67	No	No	No	Yes
Condition A	Volume >= 70% column (420)?	Yes	Volume >= 70% column (630)?	No		
	Volume >= 56% column (336)?	Yes	Volume >= 56% column (504)?	No		
Condition B	Volume >= 70% column (630)?	Yes	Volume >= 70% column (70)?	No		
	Volume >= 56% column (504)?	Yes	Volume >= 56% column (56)?	Yes		
18:00 to 19:00	1,717	65	No	No	No	Yes
Condition A	Volume >= 70% column (420)?	Yes	Volume >= 70% column (630)?	No		
	Volume >= 56% column (336)?	Yes	Volume >= 56% column (504)?	No		
Condition B	Volume >= 70% column (630)?	Yes	Volume >= 70% column (70)?	No		
	Volume >= 56% column (504)?	Yes	Volume >= 56% column (56)?	Yes		
18:15 to 19:15	1,206	46	No	No	No	No
Condition A	Volume >= 70% column (420)?	Yes	Volume >= 70% column (630)?	No		
	Volume >= 56% column (336)?	Yes	Volume >= 56% column (504)?	No		
Condition B	Volume >= 70% column (630)?	Yes	Volume >= 70% column (70)?	No		
	Volume >= 56% column (504)?	Yes	Volume >= 56% column (56)?	No		
18:30 to 19:30	732	31	No	No	No	No
Condition A	Volume >= 70% column (420)?	Yes	Volume >= 70% column (630)?	No		
	Volume >= 56% column (336)?	Yes	Volume >= 56% column (504)?	No		
Condition B	Volume >= 70% column (630)?	Yes	Volume >= 70% column (70)?	No		
	Volume >= 56% column (504)?	Yes	Volume >= 56% column (56)?	No		
18:45 to 19:45	351	13	No	No	No	No
Condition A	Volume >= 70% column (420)?	No	Volume >= 70% column (630)?	No		
	Volume >= 56% column (336)?	Yes	Volume >= 56% column (504)?	No		
Condition B	Volume >= 70% column (630)?	No	Volume >= 70% column (70)?	No		
	Volume >= 56% column (504)?	No	Volume >= 56% column (56)?	No		

Warrant 2: Four-hour Vehicular Volume

1: SH 105 at Buffalo Springs Drive

Intersection Information

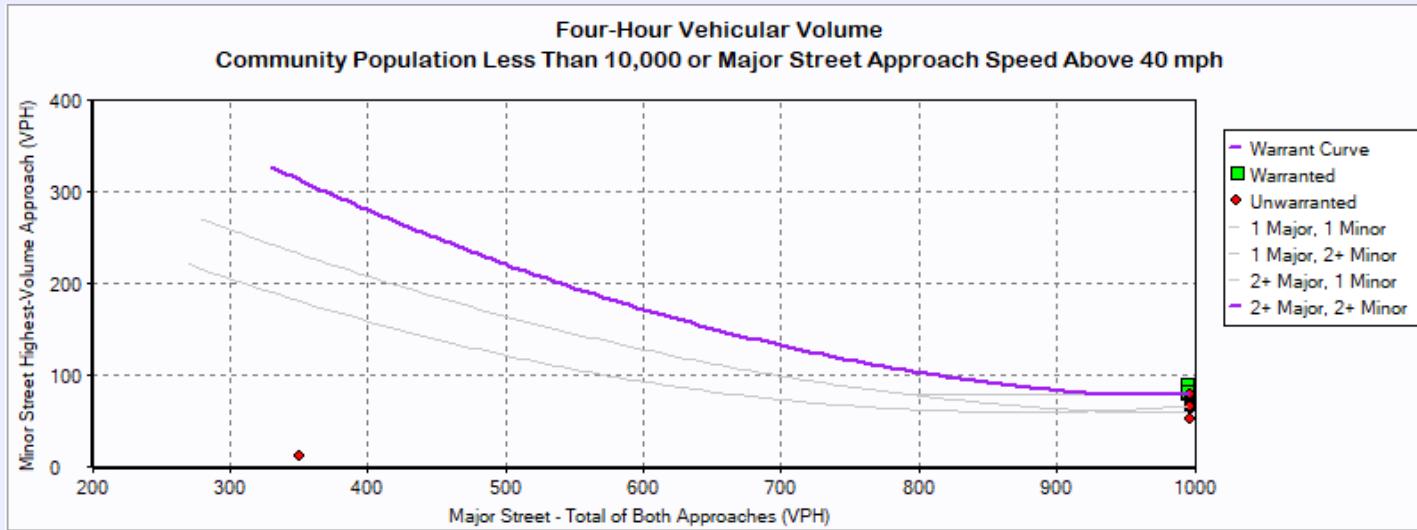
Major Street		Minor Street	
Street Name	SH 105	Buffalo Springs Drive	
Direction	EB/WB	NB/SB	
Number of Lanes	2	2	
Approach Speed	45	35	

Warrant 2 Met?

Yes

Details:

Notes	5 Hours met (4 required)
Low population	No



Hourly Volumes

Hour	Major Street Total All Approaches (vph)	Minor Street Highest Volume Approach (vph)
00:00:00 - 01:00:00	0.00	0.00
01:00:00 - 02:00:00	0.00	0.00
02:00:00 - 03:00:00	0.00	0.00
03:00:00 - 04:00:00	0.00	0.00
04:00:00 - 05:00:00	0.00	0.00
05:00:00 - 06:00:00	0.00	0.00
06:00:00 - 07:00:00	1,318.00	63.00
07:00:00 - 08:00:00	1,699.00	91.00
08:00:00 - 09:00:00	1,789.00	80.00
09:00:00 - 10:00:00	1,616.00	65.00
10:00:00 - 11:00:00	1,570.00	74.00
11:00:00 - 12:00:00	1,698.00	63.00
12:00:00 - 13:00:00	1,873.00	65.00
13:00:00 - 14:00:00	1,844.00	71.00
14:00:00 - 15:00:00	2,128.00	87.00
15:00:00 - 16:00:00	2,077.00	67.00
16:00:00 - 17:00:00	2,201.00	67.00
17:00:00 - 18:00:00	2,195.00	81.00
18:00:00 - 19:00:00	1,717.00	65.00
19:00:00 - 20:00:00	0.00	0.00
20:00:00 - 21:00:00	0.00	0.00
21:00:00 - 22:00:00	0.00	0.00
22:00:00 - 23:00:00	0.00	0.00
23:00:00 - 00:00:00	0.00	0.00

Warranted Volumes

Hour	Major Street Total All Approaches (vph)	Minor Street Highest Volume Approach (vph)
06:30:00 - 07:30:00	1,786.00	82.00
07:30:00 - 08:30:00	1,696.00	81.00
13:30:00 - 14:30:00	1,941.00	80.00
14:30:00 - 15:30:00	2,192.00	90.00
16:45:00 - 17:45:00	2,262.00	81.00

Warrant 3: Peak Hour

1: SH 105 at Buffalo Springs Drive

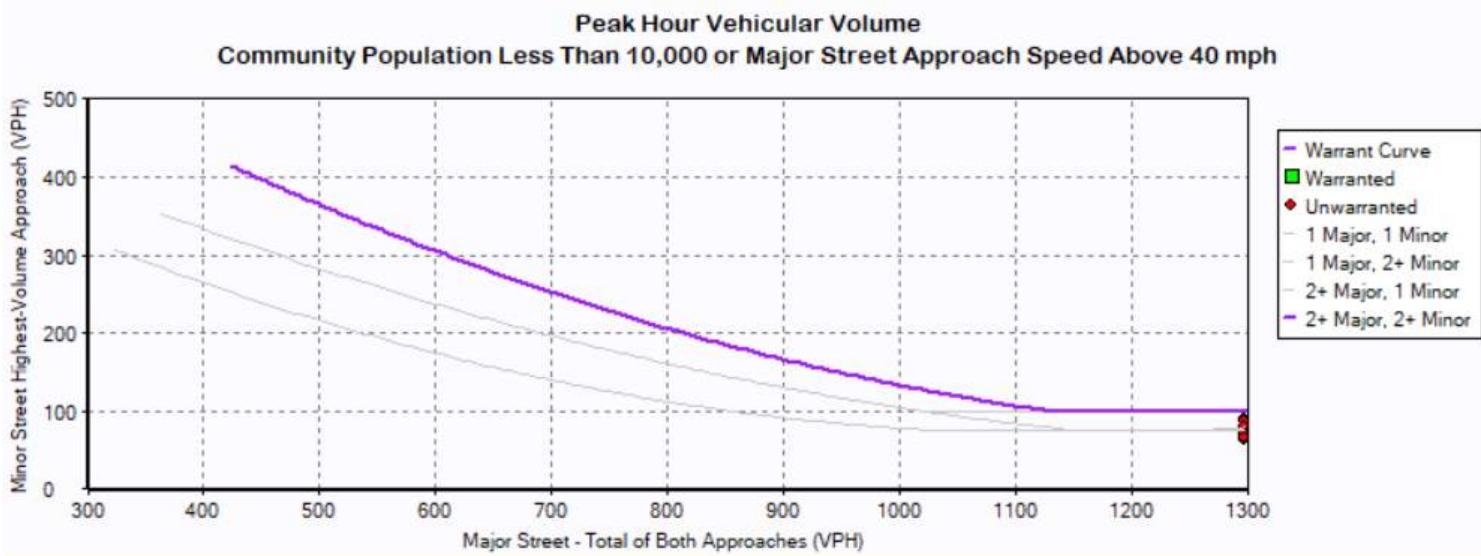
Intersection Information

Major Street		Minor Street	
Street Name	SH 105	Buffalo Springs Drive	
Direction	EB/WB	NB/SB	
Number of Lanes	2	2	
Approach Speed	45	35	

Warrant 3 Met? No

Details

Low Population?	No		
Condition A Met?	No	Condition B Met?	No
Notes	0 Hours met (1 required)	Notes	0 Hours met (1 required)
Minor Approach Time Delay Condition Met?	Not Met		
Minor Approach Volume Condition Met?	Not Met		
Total Entering Intersection Volume Condition Met?	Not Met		



Hour	Major Street Total All Approaches (vph)	Minor Street Highest Volume Approach (vph)
6:00	1,318	63
7:00	1,699	91
8:00	1,789	80
9:00	1,616	65
10:00	1,570	74
11:00	1,698	63
12:00	1,873	65
13:00	1,844	71
14:00	2,128	87
15:00	2,077	67
16:00	2,201	67
17:00	2,195	81
18:00	1,717	65

Warrant 7: Crash Experience

1: SH 105 at Buffalo Springs Drive

Intersection Information

Major Street Name SH 105

Major Street Direction EB/WB

Minor Street Direction NB/SB

WARRANT 7 MET? No

Details:

Low Population?	No	Traffic Volume Condition Met?	Yes
Major Street Speed Limit	45		13 Hours Met (8 Required)
Major Street 85th-% tile Speed	0.00	Ped Volume Condition Met?	No

Qualifying Crashes 6
Adequate Alternative Trials? No

Hour	Traffic Volumes				Pedestrian Volumes			
	Major Street Vehicles	Minor Street Vehicles	80% Standard Met? A or B		Northbound Ped Volumes		Southbound Ped Volumes	
			Condition A	Condition B	Peds	> 80?	Peds	> 80?
06:00 to 07:00	1,318	0	No	No	0	No	0	No
06:15 to 07:15	1,601	0	No	No	0	No	0	No
06:30 to 07:30	1,786	0	No	No	0	No	0	No
06:45 to 07:45	1,762	0	No	No	0	No	0	No
07:00 to 08:00	1,699	0	No	No	0	No	0	No
07:15 to 08:15	1,668	0	No	No	0	No	0	No
07:30 to 08:30	1,696	0	No	No	0	No	0	No

07:45 to 08:45	1,736	0	No	No	0	No	0	No
08:00 to 09:00	1,789	0	No	No	0	No	0	No
08:15 to 09:15	1,753	0	No	No	0	No	0	No
08:30 to 09:30	1,714	0	No	No	0	No	0	No
08:45 to 09:45	1,666	0	No	No	0	No	0	No
09:00 to 10:00	1,616	0	No	No	0	No	0	No
09:15 to 10:15	1,599	0	No	No	0	No	0	No
09:30 to 10:30	1,580	0	No	No	0	No	0	No
09:45 to 10:45	1,588	0	No	No	0	No	0	No
10:00 to 11:00	1,570	0	No	No	0	No	0	No
10:15 to 11:15	1,569	0	No	No	0	No	0	No
10:30 to 11:30	1,607	0	No	No	0	No	0	No
10:45 to 11:45	1,639	0	No	No	0	No	0	No
11:00 to 12:00	1,698	0	No	No	0	No	0	No
11:15 to 12:15	1,735	0	No	No	0	No	0	No
11:30 to 12:30	1,763	0	No	No	0	No	0	No
11:45 to 12:45	1,801	0	No	No	0	No	0	No

12:00 to 13:00	1,873	0	No	No	0	No	0	No
12:15 to 13:15	1,867	0	No	No	0	No	0	No
12:30 to 13:30	1,866	0	No	No	0	No	0	No
12:45 to 13:45	1,888	0	No	No	0	No	0	No
13:00 to 14:00	1,844	0	No	No	0	No	0	No
13:15 to 14:15	1,912	0	No	No	0	No	0	No
13:30 to 14:30	1,941	0	No	No	0	No	0	No
13:45 to 14:45	2,010	0	No	No	0	No	0	No
14:00 to 15:00	2,128	0	No	No	0	No	0	No
14:15 to 15:15	2,189	0	No	No	0	No	0	No
14:30 to 15:30	2,192	0	No	No	0	No	0	No
14:45 to 15:45	2,111	0	No	No	0	No	0	No
15:00 to 16:00	2,077	0	No	No	0	No	0	No
15:15 to 16:15	2,079	0	No	No	0	No	0	No
15:30 to 16:30	2,136	0	No	No	0	No	0	No
15:45 to 16:45	2,199	0	No	No	0	No	0	No
16:00 to 17:00	2,201	0	No	No	0	No	0	No

16:15 to 17:15	2,193	0	No	No	0	No	0	No
16:30 to 17:30	2,201	0	No	No	0	No	0	No
16:45 to 17:45	2,262	0	No	No	0	No	0	No
17:00 to 18:00	2,195	0	No	No	0	No	0	No
17:15 to 18:15	2,157	0	No	No	0	No	0	No
17:30 to 18:30	2,071	0	No	No	0	No	0	No
17:45 to 18:45	1,869	0	No	No	0	No	0	No
18:00 to 19:00	1,717	0	No	No	0	No	0	No
18:15 to 19:15	1,206	0	No	No	0	No	0	No
18:30 to 19:30	732	0	No	No	0	No	0	No
18:45 to 19:45	351	0	No	No	0	No	0	No