TRAFFIC SIGNAL WARRANT ANALYSIS FOR THE INTERSECTION OF:

Artesia Boulevard and West First Street

Prosper, Collin County, Texas

JANUARY 14, 2026

PREPARED BY:

Westwood

PROJECT R0051364.11

Westwood

January 14, 2026

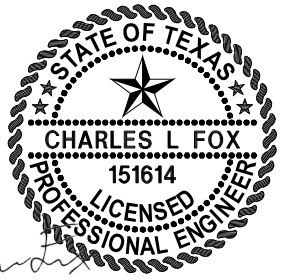
Traffic Signal Warrant Analysis For:

Artesia Boulevard and West First Street

Prosper, Collin County, Texas

Prepared By: Charles Logan Fox, P.E., PTOE

Westwood Professional Services, Inc.
4060 Bryant Irvin Road
Fort Worth, Texas 76109
(817) 412-7155
westwoodps.com
TBPELS Firm #10074301, Firm #11756



THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY CHARLES L. FOX, P.E. 151614 ON 01/14/2026. ALTERATION OF A SEALED DOCUMENT WITHOUT PROPER NOTIFICATION TO THE RESPONSIBLE ENGINEER IS AN OFFENSE UNDER THE TEXAS ENGINEERING PRACTICE ACT.

EXECUTIVE SUMMARY

Westwood Professional Services was engaged to perform a Traffic Signal Warrant Analysis (TSWA) for the intersection of Artesia Boulevard and West First Street in Prosper, TX. This analysis was conducted based on existing traffic conditions observed on December 10, 2025 and adhered to the traffic signal warrant criteria outlined in the latest edition of the Texas Manual on Uniform Traffic Control Devices (TMUTCD).

The technical evaluation revealed that the current traffic volumes at the intersection do satisfy the minimum requirements for the installation of a traffic signal. See the Summary of Findings for traffic splits and cost sharing recommendations.

END

Intersection Location Map

EXHIBIT 1 – Site Location and Study Area Map

TABLE OF CONTENTS

LIST OF TABLES:

LIST OF EXHIBITS:

LIST OF APPENDICES:

INTRODUCTION

The services of **Westwood Professional Services** ("Westwood") were retained to conduct a Traffic Signal Warrant Analysis (TSWA) for the intersection of Artesia Boulevard and West First Street in Prosper, Texas. This analysis was based upon existing traffic volumes at the intersection. An image showing the existing conditions of the subject intersection is provided in **Exhibit 1** for reference following the EXECUTIVE SUMMARY.

For a traffic signal to be warranted, an engineering study of the intersection is required to determine if at least one of nine, predefined, traffic signal warrants are satisfied. The warrant criteria are summarized in the 2014 Texas Manual on Uniform Traffic Control Devices (TMUTCD). To obtain approval for installation of a traffic signal, staff of the agency responsible for traffic operations of the intersection must agree that one or more traffic signal warrants are satisfied and determine that installation of a traffic signal is appropriate and can be operated safely and efficiently.

The City of Celina, on behalf of The Elm Ridge District requested that Westwood analyze the traffic volumes at the intersection to determine which percentage of the traffic was driven by which entities, in order to assist with determining cost sharing. To determine this, the following assumptions were made:

- The north leg of the intersection is owned and maintained by the Elm Ridge District, and therefore all traffic from that leg is generated by them.
- The south leg of the intersection is owned by Prosper ISD, and therefore all traffic from that leg is generated by them.
- The east and west legs of the intersection are owned and maintained by the Town of Prosper, Texas, and therefore all traffic from that leg is generated by them.

It is understood that these assumptions will not be 100% accurate, but generally this provides a split of traffic generation from each entity.

BACKGROUND

Description of Intersection

The intersection of Artesia Boulevard and West First Street is a four-way intersection with four approaches (or "legs") with a STOP-sign control on the Artesia Boulevard approaches.

The major street, West First Street, has a median divided four-lane cross-section with two 12-foot-wide through lanes in each direction and a dedicated left-turn lane at the eastbound approach of the intersection. West First Street has a posted speed limit of 45-MPH.

The minor street, Artesia Boulevard features a median-divided four-lane cross-section, with the lanes separated by a water fountain and community tower on a median island. The median width between Brelsford Pl and Placid Trail narrows from approximately 90

to 8 feet, and the posted speed limit is 30 MPH. The northbound approach, which serves as a school approach, is also median divided with four lanes—two in each direction. This northbound approach median is approximately 8 feet wide and 90 feet long.

A 5-foot-wide meandering sidewalk is located along the north side of West First Street and along both sides of Arteria Boulevard. No pedestrian ramps, crosswalk markings, or signage are located at or near the intersection.

An existing traffic signal is located approximately 0.2 miles west of the subject intersection. No existing traffic signal is located within 2.0 miles north, east, or south of the subject intersection.

Westwood staff conducted a site visit on Wednesday, December 10, 2025, to observe traffic and make note of existing conditions.

During the AM visit, traffic reached its peak around 8:00am when a police officer arrived at the intersection to direct traffic. While controlling pedestrian and vehicular traffic at the location, every five minutes, the officer would stop vehicular traffic in all directions to allow pedestrians time to cross. As vehicles stopped for pedestrians, the east and westbound queues stretched to 150 feet, reaching the school zone signage for each direction. While the southbound queue extended to approximately 10 vehicles. At 8:50am, the police officer left the scene and traffic eased by 9:00am.

Westwood staff arrived at the intersection at 3:30pm to observe PM traffic. At 4:00pm a police officer directed traffic until 4:30pm. After the officer left, the engineer observed several vehicles turning left from the westbound lane would drive past the median and wait in the center of the intersection, blocking north and southbound traffic, until it was safe to turn.

Site Photos can be found in **Appendix A**.

Existing Traffic Volumes

Westwood commissioned 24-hour traffic approach counts for all approaches at the intersection, as well as speed data for West First Street. The data was collected on Tuesday, December 2nd, 2025, and is summarized in **Appendix B.** Pedestrian volumes were not collected for this portion of the study.

TRAFFIC SIGNAL WARRANT ANALYSIS

Traffic Signal Warrants

The TMUTCD defines a series of nine traffic signal warrants to be used in the investigation of a traffic signal installation. These warrants are listed as follows:

Warrant 1 – Eight-Hour Vehicular Volume –**Met**
Warrant 2 – Four-Hour Vehicular Volume –**Met**
Warrant 3 – Peak Hour – **Not Met**
Warrant 4 – Pedestrian Volume – **Not Applicable**
Warrant 5 – School Crossing – **Not Studied**
Warrant 6 – Coordinated Signal System – **Not Met**
Warrant 7 – Crash Experience – **Not Met**
Warrant 8 – Roadway Network – **Not Studied**
Warrant 9 – Intersection Near a Grade Crossing – **Not Applicable**

A description of the warrants as obtained from §4C-01 of the TMUTCD are provided in **Appendix C**. It is important to note that the intersection Level of Service (LOS) is not a warrant for signal installation. The TMUTCD states:

> *The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal. A traffic control signal should not be installed unless one or more of the factors described in this [manual] are met. A traffic control signal should not be installed unless an engineering study indicates that installing a traffic control signal will improve the overall safety and/or operation of the intersection.*

Study Scope

The scope of this study is to evaluate the vehicular-volume-related warrants (Warrants 1, 2, and 3) for the subject intersection under the circumstances described previously, as well as to evaluate Warrant 5 based on school crossing behaviors, Warrant 7 based on TxDOT CRIS data, and Warrant 8 based on the surrounding Roadway Network. Due to the location of the intersection, pedestrian volume, and nearby land uses, the other warrants do not apply in this case and were not studied.

Analysis Results

The TMUTCD does acknowledge several site-specific conditions that, based upon engineering judgment, may justify adjustments to the analysis that affect the decision to install a traffic signal.

By applying all the warrant criteria, data, and applicable adjustments as above, the applicable traffic signal warrants were analyzed. A detailed summary of the traffic signal warrant analysis data is provided in **Appendix D**; and a written summary of each warrant is provided in the following sections.

Warrant 1 – Eight-Hour Vehicular Volumes

Warrant 1 is considered when traffic volumes on the major street results in insufficient opportunity for motorists on the minor street to enter or cross the major street traffic flow for extended periods on a daily basis. For Warrant 1 to be satisfied, traffic volumes at the intersection must exceed specific minimum parameters on the major street AND the minor street for eight or more hours per day. The TMUTCD provides three sets of established volume criteria—referred to as Condition A, Condition B, and Condition A/B Combination—that vary based upon certain roadway conditions. (The Combination Condition only applies if neither Condition A or Condition B are satisfied.)

The following table summarizes the findings of this analysis for Warrant 1:

WARRANT/ CONDITION	NUMBER OF HOURS EXCEEDING MINIMUM CRITERIA	WARRANT SATISFIED? (8 OR MORE HOURS)
Warrant 1 – Condition A	13	**Yes**
Warrant 1 – Condition B	10	**Yes**
Warrant 1 – Condition A and B	23	**Yes**

Warrant 2 – Four-Hour Vehicular Volumes

Warrant 2 is considered when traffic volumes on the major street results in insufficient opportunity for motorists on the minor street to enter or cross the major street traffic flow for periods on a daily basis. For Warrant 2 to be satisfied, traffic volumes at the intersection must exceed specific minimum parameters on the major street AND the minor street during four or more hours per day. TMUTCD warrant criteria are presented on a sliding scale that vary by number of lanes on each roadway.

The following table summarizes the findings of this analysis for Warrant 2:

WARRANT	NUMBER OF HOURS EXCEEDING MINIMUM CRITERIA	WARRANT SATISFIED? (4 OR MORE HOURS)
Warrant 2	12	**Yes**

Warrant 3 – Peak-Hour

Warrant 3 is considered when traffic volumes on the major street results in insufficient opportunity for motorists on the minor street to enter or cross the major street traffic flow for a brief period on a daily basis. For Warrant 3 to be satisfied, traffic volumes at the intersection must exceed specific minimum parameters on the major street AND the minor street during a one-hour period (and four, consecutive 15-minute periods) on a typical day. [Note: This warrant is typically reserved for special cases with a large trip generator—such as a major employment center—often only in less urbanized areas.] TMUTCD warrant criteria are presented on a sliding scale that vary by number of lanes on each roadway.

The following table summarizes the findings of this analysis for Warrant 3:

WARRANT	NUMBER OF HOURS EXCEEDING MINIMUM CRITERIA	WARRANT SATISFIED? (1 OR MORE HOURS)
Warrant 3	6	**Yes***

*Although the Warrant is met via volumes, Warrant 3 is not satisfied due to the lack of a special case.

Based upon the results of the analysis, Warrant 3 is met. However, since School Crossings are provided for in Warrant 5, this does not count as a special case. Therefore, Warrant 3 is **not satisfied**.

Warrant 5 – School Crossing

Warrant 5 is considered when the fact that school children cross the major street is the principal reason to consider installing a traffic control signal. For the purposes of this warrant, the word "school children" includes elementary through high school students. This warrant was not necessary due to the intersection warranting via volumes, and so pedestrian data was not collected.

Warrant 7 – Crash Experience

Warrant 7 is considered when the severity and frequency of crashes are the principal reasons to consider installing a traffic control signal. In order for a signal to be warranted, at least five reported crashes must have occurred at the intersection within a 12-month period. Based on CRIS data and City of Celina data, there have been two crashes at the intersection within the last 12 months. Based on this, Warrant 7 is **not satisfied.** CRIS data can be found in **Appendix E**.

Warrant 8 – Roadway Network

Warrant 8 is considered when installing a traffic signal at an intersection might be justified to encourage concentration and organization of traffic flow on a roadway network. In order for a signal to be warranted, the intersection must have a total existing, or immediately projected, entering volume of at least 1,000 vehicles per hour during the peak hour of a typical weekday and has 5-year projected traffic volumes, based on an engineering study, that meet one or more of Warrants 1, 2, and 3 during an average weekday. Since Warrants 1 and 2 are already met, Warrant 8 should not be considered.

SUMMARY OF FINDINGS

The findings of this Traffic Signal Warrant Analysis are summarized in the following table:

Table 1. Summary of Results

TRAFFIC SIGNAL WARRANT	STATUS
Warrant 1. Eight-Hour Vehicular Volume	Met
Warrant 2. Four-Hour Vehicular Volume	Met
Warrant 3. Peak-Hour	Not Met
Warrant 4. Pedestrian Volume	Not Studied
Warrant 5. School Crossing	Not Studied
Warrant 6. Coordinated Signal System	Not Met
Warrant 7. Crash Experience	Not Met
Warrant 8. Roadway Network	Not Studied
Warrant 9. Intersection Near a Grade Crossing	Not Studied

Based upon Westwood's technical analysis of the traffic-volume-related traffic signal warrant criteria defined in the Texas Manual on Uniform Traffic Control Devices, it was determined that installation of a traffic signal at the intersection of Artesia Boulevard and West First Street is warranted.

It is recommended that a traffic signal be installed at the study intersection to improve the flow of vehicular and pedestrian traffic while removing the need for a traffic coordinator during peak hours.

It was requested that Westwood also look at the distribution of traffic driven by each entity which is served by the intersection. To make these determinations, the following assumptions were made:

- The north leg of the intersection is owned and maintained by the Elm Ridge District, and therefore all traffic from that leg is generated by them.
- The south leg of the intersection is owned by Prosper ISD, and therefore all traffic from that leg is generated by them.
- The east and west legs of the intersection are owned and maintained by the Town of Prosper, Texas, and therefore all traffic from that leg is generated by them.

Depending upon the timeframe observes, this split varies throughout the day, but a general split can be observed throughout the day. These various timeframe scenarios are shown in **Appendix F**. Based upon the results of this split, it is Westwood's determination that if a traffic signal is installed at this intersection, the cost may be split as follows:

- Town of Prosper – 70%
- Prosper ISD – 10%
- Elm Ridge District – 20%

APPENDIX A. Site Visit Photos

Artesia Blvd & W First St - Site Photos

Westwood

January 14, 2026

EB on W First St

WB on W First St

Left Turn Conflict NB Traffic

NB on Artesia Blvd

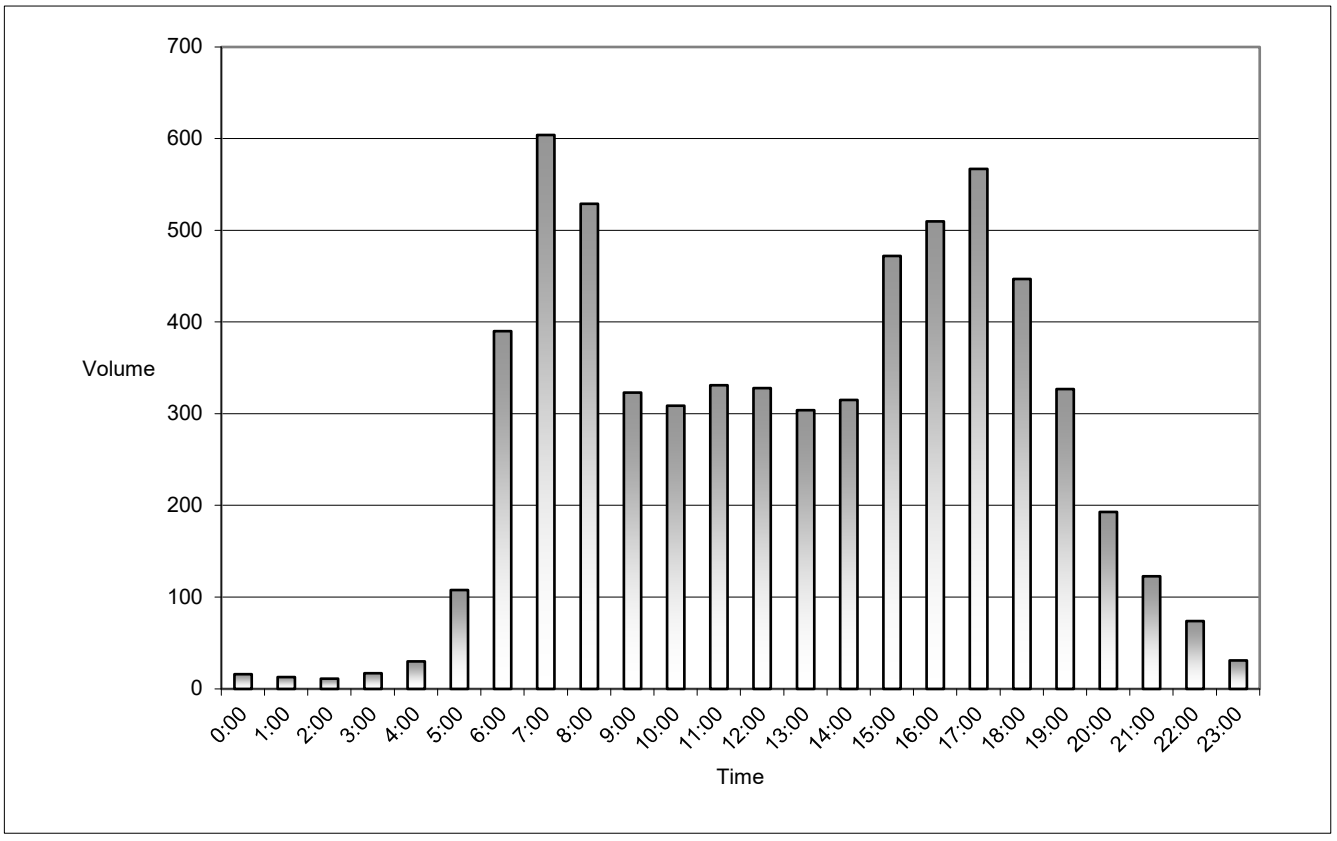
APPENDIX B. Current Traffic Volumes

Artesia at First EB Approach

Date Began:
12/2/2025

TIME	0:00	0:15	0:30	0:45	Total
0:00	1	3	3	9	16
1:00	3	5	4	1	13
2:00	5	1	1	4	11
3:00	0	3	7	7	17
4:00	2	4	10	14	30
5:00	10	22	35	41	108
6:00	51	88	109	142	390
7:00	103	143	184	174	604
8:00	167	115	120	127	529
9:00	71	89	82	81	323
10:00	77	90	74	68	309
11:00	83	86	85	77	331
12:00	84	77	82	85	328
13:00	67	61	80	96	304
14:00	92	54	84	85	315
15:00	90	126	128	128	472
16:00	123	120	121	146	510
17:00	134	155	125	153	567
18:00	130	118	111	88	447
19:00	79	94	87	67	327
20:00	53	57	49	34	193
21:00	32	40	27	24	123
22:00	24	18	15	17	74
23:00	17	6	5	3	31
				TOTAL:	6372

The A.M. peak hour from 7:15 to 8:14 is 668
The P.M. peak hour from 17:00 to 17:59 is 567

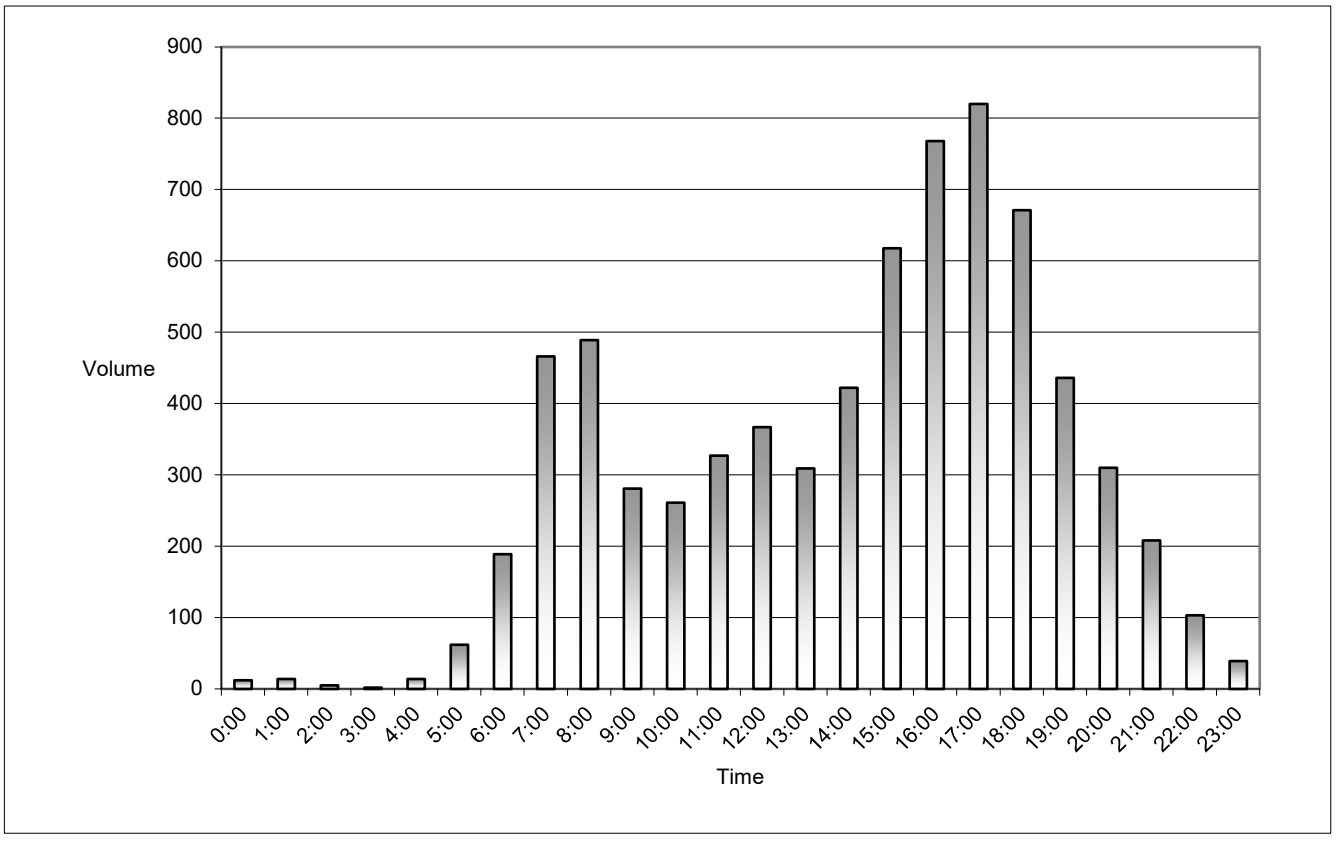


Artesia at First WB Approach

Date Began:
12/2/2025

TIME	0:00	0:15	0:30	0:45	Total
0:00	4	3	3	2	12
1:00	3	4	5	2	14
2:00	3	0	2	0	5
3:00	1	0	0	1	2
4:00	1	2	2	9	14
5:00	8	18	17	19	62
6:00	21	33	56	79	189
7:00	59	81	153	173	466
8:00	153	135	124	77	489
9:00	70	76	73	62	281
10:00	78	63	62	58	261
11:00	87	75	80	85	327
12:00	87	106	92	82	367
13:00	101	70	71	67	309
14:00	94	109	105	114	422
15:00	97	155	121	245	618
16:00	191	171	199	207	768
17:00	206	211	209	194	820
18:00	191	184	176	120	671
19:00	123	120	83	110	436
20:00	71	91	71	77	310
21:00	63	69	47	29	208
22:00	40	29	20	14	103
23:00	13	11	7	8	39
				TOTAL:	7193

The A.M. peak hour from 7:30 to 8:29 is 614
The P.M. peak hour from 16:45 to 17:44 is 833

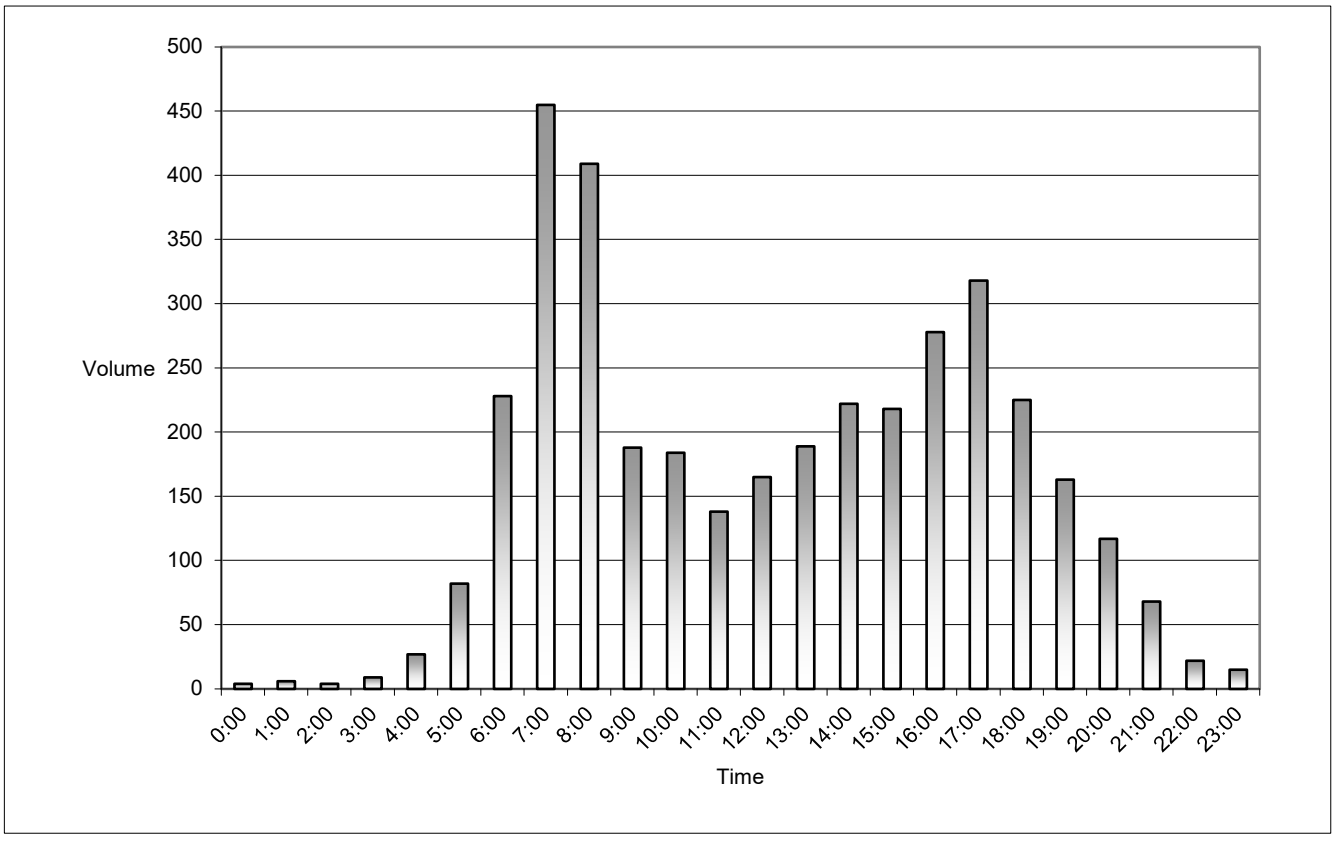


Artesia at First SB Approach

Date Began:
12/2/2025

TIME	0:00	0:15	0:30	0:45	Total
0:00	1	0	2	1	4
1:00	1	1	1	3	6
2:00	1	0	1	2	4
3:00	1	1	4	3	9
4:00	2	4	5	16	27
5:00	14	13	31	24	82
6:00	32	46	59	91	228
7:00	112	131	132	80	455
8:00	99	113	130	67	409
9:00	56	44	42	46	188
10:00	54	42	43	45	184
11:00	31	34	30	43	138
12:00	32	50	43	40	165
13:00	58	52	35	44	189
14:00	34	60	70	58	222
15:00	48	50	46	74	218
16:00	72	76	66	64	278
17:00	63	67	91	97	318
18:00	49	81	51	44	225
19:00	46	49	32	36	163
20:00	32	34	23	28	117
21:00	16	20	14	18	68
22:00	9	5	6	2	22
23:00	10	1	1	3	15
				TOTAL:	3734

The A.M. peak hour from 6:45 to 7:44 is 466
The P.M. peak hour from 17:30 to 18:29 is 318

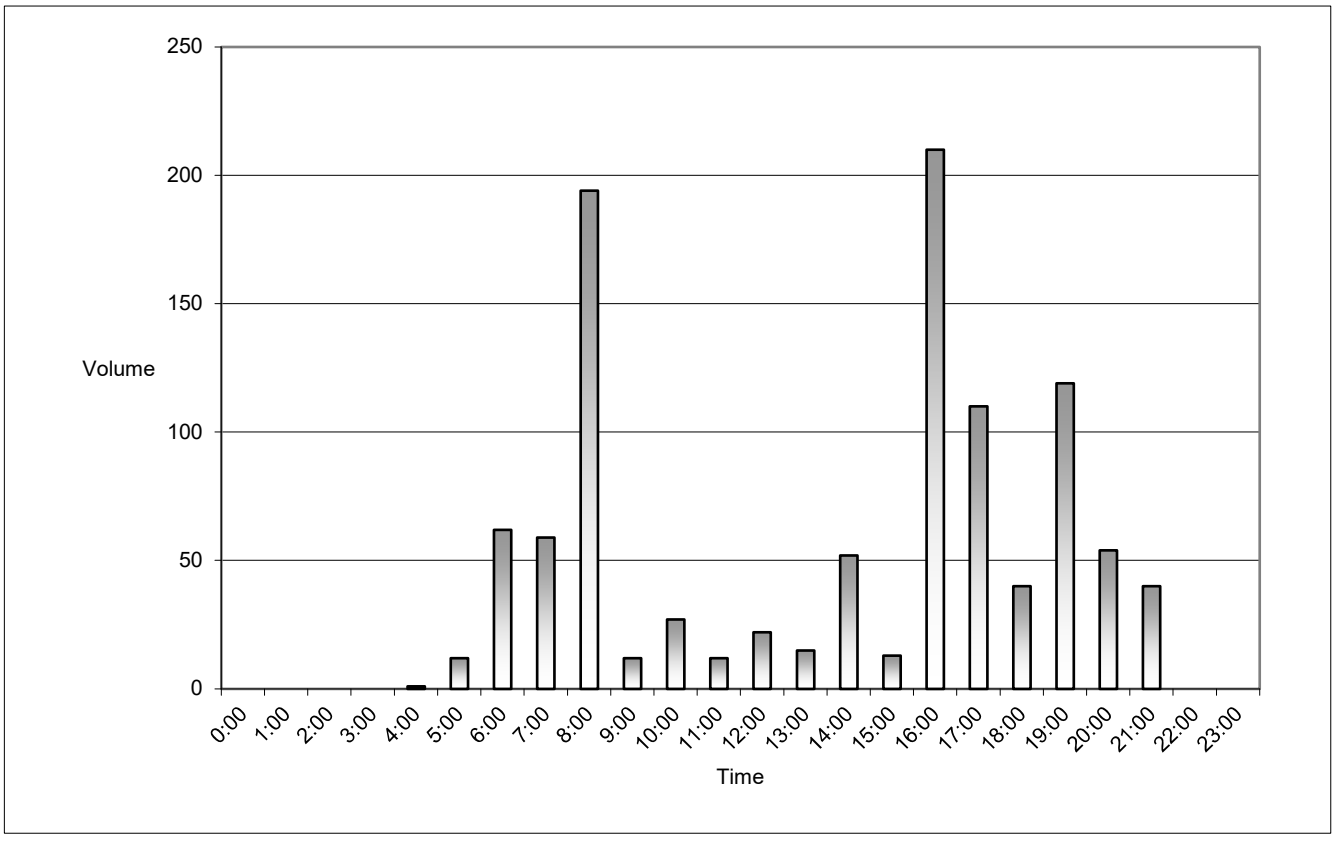


Artesia at First NB Approach

Date Began:
12/2/2025

TIME	0:00	0:15	0:30	0:45	Total
0:00	0	0	0	0	0
1:00	0	0	0	0	0
2:00	0	0	0	0	0
3:00	0	0	0	0	0
4:00	1	0	0	0	1
5:00	0	0	7	5	12
6:00	1	26	15	20	62
7:00	7	13	24	15	59
8:00	33	54	79	28	194
9:00	3	2	4	3	12
10:00	11	12	1	3	27
11:00	2	1	4	5	12
12:00	9	4	8	1	22
13:00	2	4	4	5	15
14:00	19	9	11	13	52
15:00	7	2	1	3	13
16:00	13	134	48	15	210
17:00	24	28	28	30	110
18:00	14	7	5	14	40
19:00	21	35	46	17	119
20:00	23	9	4	18	54
21:00	29	9	2	0	40
22:00	0	0	0	0	0
23:00	0	0	0	0	0
				TOTAL:	1054

The A.M. peak hour from 8:00 to 8:59 is 194
The P.M. peak hour from 16:15 to 17:14 is 221



APPENDIX C. Excerpts from TMUTCD

CHAPTER 4C. TRAFFIC CONTROL SIGNAL NEEDS STUDIES

Section 4C.01 Studies and Factors for Justifying Traffic Control Signals

Standard:

01 **An engineering study of traffic conditions, pedestrian characteristics, and physical characteristics of the location shall be performed to determine whether installation of a traffic control signal is justified at a particular location.**

02 **The investigation of the need for a traffic control signal shall include an analysis of factors related to the existing operation and safety at the study location and the potential to improve these conditions, and the applicable factors contained in the following traffic signal warrants:**

Warrant 1, Eight-Hour Vehicular Volume
Warrant 2, Four-Hour Vehicular Volume
Warrant 3, Peak Hour
Warrant 4, Pedestrian Volume
Warrant 5, School Crossing
Warrant 6, Coordinated Signal System
Warrant 7, Crash Experience
Warrant 8, Roadway Network
Warrant 9, Intersection Near a Grade Crossing

03 **The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.**

Support:

04 Sections 8C.09 and 8C.10 contain information regarding the use of traffic control signals instead of gates and/or flashing-light signals at highway-rail grade crossings and highway-light rail transit grade crossings, respectively.

Guidance:

05 *A traffic control signal should not be installed unless one or more of the factors described in this Chapter are met.*

06 *A traffic control signal should not be installed unless an engineering study indicates that installing a traffic control signal will improve the overall safety and/or operation of the intersection.*

07 *A traffic control signal should not be installed if it will seriously disrupt progressive traffic flow.*

08 *The study should consider the effects of the right-turn vehicles from the minor-street approaches. Engineering judgment should be used to determine what, if any, portion of the right-turn traffic is subtracted from the minor-street traffic count when evaluating the count against the signal warrants listed in Paragraph 2.*

09 *Engineering judgment should also be used in applying various traffic signal warrants to cases where approaches consist of one lane plus one left-turn or right-turn lane. The site-specific traffic characteristics should dictate whether an approach is considered as one lane or two lanes. For example, for an approach with one lane for through and right-turning traffic plus a left-turn lane, if engineering judgment indicates that it should be considered a one-lane approach because the traffic using the left-turn lane is minor, the total traffic volume approaching the intersection should be applied against the signal warrants as a one-lane approach. The approach should be considered two lanes if approximately half of the traffic on the approach turns left and the left-turn lane is of sufficient length to accommodate all left-turn vehicles.*

10 *Similar engineering judgment and rationale should be applied to a street approach with one through/left-turn lane plus a right-turn lane. In this case, the degree of conflict of minor-street right-turn traffic with traffic on the major street should be considered. Thus, right-turn traffic should not be included in the minor-street volume if the movement enters the major street with minimal conflict. The approach should be evaluated as a one-lane approach with only the traffic volume in the through/left-turn lane considered.*

11 *At a location that is under development or construction and where it is not possible to obtain a traffic count that would represent future traffic conditions, hourly volumes should be estimated as part of an engineering study for comparison with traffic signal warrants. Except for locations where the engineering study uses the satisfaction of Warrant 8 to justify a signal, a traffic control signal installed under projected conditions should have an engineering study done within 1 year of putting the signal into stop-and-go operation to determine if the signal is justified. If not justified, the signal should be taken out of stop-and-go operation or removed.*

12 *For signal warrant analysis, a location with a wide median, even if the median width is greater than 30 feet, should be considered as one intersection.*

Option:

13 At an intersection with a high volume of left-turn traffic from the major street, the signal warrant analysis may be performed in a manner that considers the higher of the major-street left-turn volumes as the "minor-street" volume and the corresponding single direction of opposing traffic on the major street as the "major-street" volume.

14 For signal warrants requiring conditions to be present for a certain number of hours in order to be satisfied, any four sequential 15-minute periods may be considered as 1 hour if the separate 1-hour periods used in the warrant analysis do not overlap each other and both the major-street volume and the minor-street volume are for the same specific one-hour periods.

15 For signal warrant analysis, bicyclists may be counted as either vehicles or pedestrians.

Support:

16 When performing a signal warrant analysis, bicyclists riding in the street with other vehicular traffic are usually counted as vehicles and bicyclists who are clearly using pedestrian facilities are usually counted as pedestrians.

Option:

17 Engineering study data may include the following:

A. The number of vehicles entering the intersection in each hour from each approach during 12 hours of an average day. It is desirable that the hours selected contain the greatest percentage of the 24-hour traffic volume.
B. Vehicular volumes for each traffic movement from each approach, classified by vehicle type (heavy trucks, passenger cars and light trucks, public-transit vehicles, and, in some locations, bicycles), during each 15-minute period of the 2 hours in the morning and 2 hours in the afternoon during which total traffic entering the intersection is greatest.
C. Pedestrian volume counts on each crosswalk during the same periods as the vehicular counts in Item B and during hours of highest pedestrian volume. Where young, elderly, and/or persons with physical or visual disabilities need special consideration, the pedestrians and their crossing times may be classified by general observation.
D. Information about nearby facilities and activity centers that serve the young, elderly, and/or persons with disabilities, including requests from persons with disabilities for accessible crossing improvements at the location under study. These persons might not be adequately reflected in the pedestrian volume count if the absence of a signal restrains their mobility.
E. The posted or statutory speed limit or the 85th-percentile speed on the uncontrolled approaches to the location.
F. A condition diagram showing details of the physical layout, including such features as intersection geometrics, channelization, grades, sight-distance restrictions, transit stops and routes, parking conditions, pavement markings, roadway lighting, driveways, nearby railroad crossings, distance to nearest traffic control signals, utility poles and fixtures, and adjacent land use.
G. A collision diagram showing crash experience by type, location, direction of movement, severity, weather, time of day, date, and day of week for at least 1 year.

18 The following data, which are desirable for a more precise understanding of the operation of the intersection, may be obtained during the periods described in Item B of Paragraph 17:

A. Vehicle-hours of stopped time delay determined separately for each approach.
B. The number and distribution of acceptable gaps in vehicular traffic on the major street for entrance from the minor street.
C. The posted or statutory speed limit or the 85th-percentile speed on controlled approaches at a point near to the intersection but unaffected by the control.
D. Pedestrian delay time for at least two 30-minute peak pedestrian delay periods of an average weekday or like periods of a Saturday or Sunday.
E. Queue length on stop-controlled approaches.

Section 4C.02 Warrant 1, Eight-Hour Vehicular Volume

Support:

01 The Minimum Vehicular Volume, Condition A, is intended for application at locations where a large volume of intersecting traffic is the principal reason to consider installing a traffic control signal.

02 The Interruption of Continuous Traffic, Condition B, is intended for application at locations where Condition A is not satisfied and where the traffic volume on a major street is so heavy that traffic on a minor intersecting street suffers excessive delay or conflict in entering or crossing the major street.

03 It is intended that Warrant 1 be treated as a single warrant. If Condition A is satisfied, then Warrant 1 is satisfied and analyses of Condition B and the combination of Conditions A and B are not needed. Similarly, if Condition B is satisfied, then Warrant 1 is satisfied and an analysis of the combination of Conditions A and B is not needed.

Standard:

04 **The need for a traffic control signal shall be considered if an engineering study finds that one of the following conditions exist for each of any 8 hours of an average day:**

A. The vehicles per hour given in both of the 100 percent columns of Condition A in Table 4C-1 exist on the major-street and the higher-volume minor-street approaches, respectively, to the intersection; or

B. The vehicles per hour given in both of the 100 percent columns of Condition B in Table 4C-1 exist on the major-street and the higher-volume minor-street approaches, respectively, to the intersection.

In applying each condition the major-street and minor-street volumes shall be for the same 8 hours. On the minor street, the higher volume shall not be required to be on the same approach during each of these 8 hours.

Option:

05 If the posted or statutory speed limit or the 85th-percentile speed on the major street exceeds 40 mph, or if the intersection lies within the built-up area of an isolated community having a population of less than 10,000, the traffic volumes in the 70 percent columns in Table 4C-1 may be used in place of the 100 percent columns.

Guidance:

06 *The combination of Conditions A and B is intended for application at locations where Condition A is not satisfied and Condition B is not satisfied and should be applied only after an adequate trial of other alternatives that could cause less delay and inconvenience to traffic has failed to solve the traffic problems.*

Standard:

07 **The need for a traffic control signal shall be considered if an engineering study finds that both of the following conditions exist for each of any 8 hours of an average day:**

A. The vehicles per hour given in both of the 80 percent columns of Condition A in Table 4C-1 exist on the major-street and the higher-volume minor-street approaches, respectively, to the intersection; and

B. The vehicles per hour given in both of the 80 percent columns of Condition B in Table 4C-1 exist on the major-street and the higher-volume minor-street approaches, respectively, to the intersection.

These major-street and minor-street volumes shall be for the same 8 hours for each condition; however, the 8 hours satisfied in Condition A shall not be required to be the same 8 hours satisfied in Condition B. On the minor street, the higher volume shall not be required to be on the same approach during each of the 8 hours.

Table 4C-1. Warrant 1, Eight-Hour Vehicular Volume

Condition A—Minimum Vehicular Volume

Number of lanes for moving traffic on each approach		Vehicles per hour on major street (total of both approaches)				Vehicles per hour on higher-volume minor-street approach (one direction only)			
Major Street	Minor Street	100%[a]	80%[b]	70%[c]	56%[d]	100%[a]	80%[b]	70%[c]	56%[d]
1	1	500	400	350	280	150	120	105	84
2 or more	1	600	480	420	336	150	120	105	84
2 or more	2 or more	600	480	420	336	200	160	140	112
1	2 or more	500	400	350	280	200	160	140	112

Condition B—Interruption of Continuous Traffic

Number of lanes for moving traffic on each approach		Vehicles per hour on major street (total of both approaches)				Vehicles per hour on higher-volume minor-street approach (one direction only)			
Major Street	Minor Street	100%[a]	80%[b]	70%[c]	56%[d]	100%[a]	80%[b]	70%[c]	56%[d]
1	1	750	600	525	420	75	60	53	42
2 or more	1	900	720	630	504	75	60	53	42
2 or more	2 or more	900	720	630	504	100	80	70	56
1	2 or more	750	600	525	420	100	80	70	56

[a] Basic minimum hourly volume

[b] Used for combination of Conditions A and B after adequate trial of other remedial measures

[c] May be used when the major-street speed exceeds 40 mph or in an isolated community with a population of less than 10,000

[d] May be used for combination of Conditions A and B after adequate trial of other remedial measures when the major-street speed exceeds 40 mph or in an isolated community with a population of less than 10,000

Option:

08 If the posted or statutory speed limit or the 85th-percentile speed on the major street exceeds 40 mph, or if the intersection lies within the built-up area of an isolated community having a population of less than 10,000, the traffic volumes in the 56 percent columns in Table 4C-1 may be used in place of the 80 percent columns.

Section 4C.03 Warrant 2, Four-Hour Vehicular Volume

Support:

01 The Four-Hour Vehicular Volume signal warrant conditions are intended to be applied where the volume of intersecting traffic is the principal reason to consider installing a traffic control signal.

Standard:

02 **The need for a traffic control signal shall be considered if an engineering study finds that, for each of any 4 hours of an average day, the plotted points representing the vehicles per hour on the major street (total of both approaches) and the corresponding vehicles per hour on the higher-volume minor-street approach (one direction only) all fall above the applicable curve in Figure 4C-1 for the existing combination of approach lanes. On the minor street, the higher volume shall not be required to be on the same approach during each of these 4 hours.**

Option:

03 If the posted or statutory speed limit or the 85th-percentile speed on the major street exceeds 40 mph, or if the intersection lies within the built-up area of an isolated community having a population of less than 10,000, Figure 4C-2 may be used in place of Figure 4C-1.

Section 4C.04 Warrant 3, Peak Hour

Support:

01 The Peak Hour signal warrant is intended for use at a location where traffic conditions are such that for a minimum of 1 hour of an average day, the minor-street traffic suffers undue delay when entering or crossing the major street.

Standard:

02 **This signal warrant shall be applied only in unusual cases, such as office complexes, manufacturing plants, industrial complexes, or high-occupancy vehicle facilities that attract or discharge large numbers of vehicles over a short time.**

03 **The need for a traffic control signal shall be considered if an engineering study finds that the criteria in either of the following two categories are met:**

- **A. If all three of the following conditions exist for the same 1 hour (any four consecutive 15-minute periods) of an average day:**
  - **1. The total stopped time delay experienced by the traffic on one minor-street approach (one direction only) controlled by a STOP sign equals or exceeds: 4 vehicle-hours for a one-lane approach or 5 vehicle-hours for a two-lane approach; and**
  - **2. The volume on the same minor-street approach (one direction only) equals or exceeds 100 vehicles per hour for one moving lane of traffic or 150 vehicles per hour for two moving lanes; and**
  - **3. The total entering volume serviced during the hour equals or exceeds 650 vehicles per hour for intersections with three approaches or 800 vehicles per hour for intersections with four or more approaches.**
- **B. The plotted point representing the vehicles per hour on the major street (total of both approaches) and the corresponding vehicles per hour on the higher-volume minor-street approach (one direction only) for 1 hour (any four consecutive 15-minute periods) of an average day falls above the applicable curve in Figure 4C-3 for the existing combination of approach lanes.**

Option:

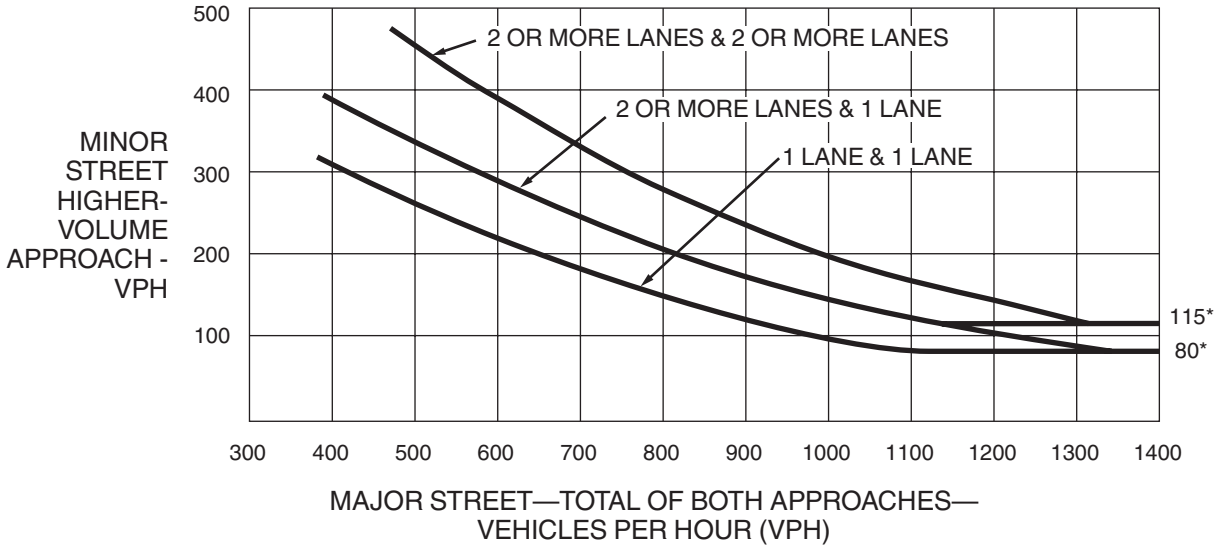
04 If the posted or statutory speed limit or the 85th-percentile speed on the major street exceeds 40 mph, or if the intersection lies within the built-up area of an isolated community having a population of less than 10,000, Figure 4C-4 may be used in place of Figure 4C-3 to evaluate the criteria in the second category of the Standard.

05 If this warrant is the only warrant met and a traffic control signal is justified by an engineering study, the traffic control signal may be operated in the flashing mode during the hours that the volume criteria of this warrant are not met.

Guidance:

06 *If this warrant is the only warrant met and a traffic control signal is justified by an engineering study, the traffic control signal should be traffic-actuated.*

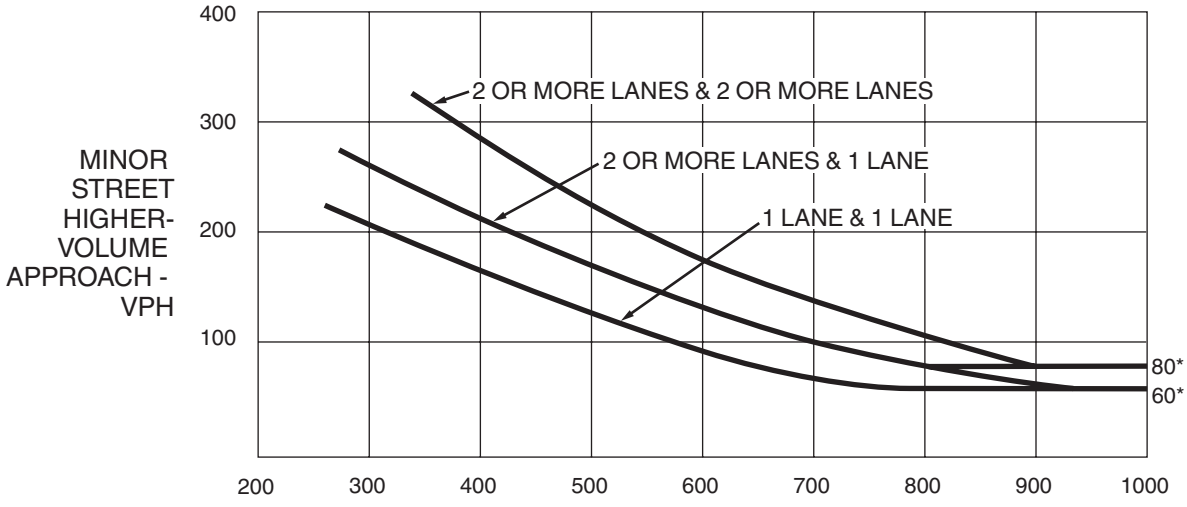
Figure 4C-1. Warrant 2, Four-Hour Vehicular Volume



*Note: 115 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 80 vph applies as the lower threshold volume for a minor-street approach with one lane.

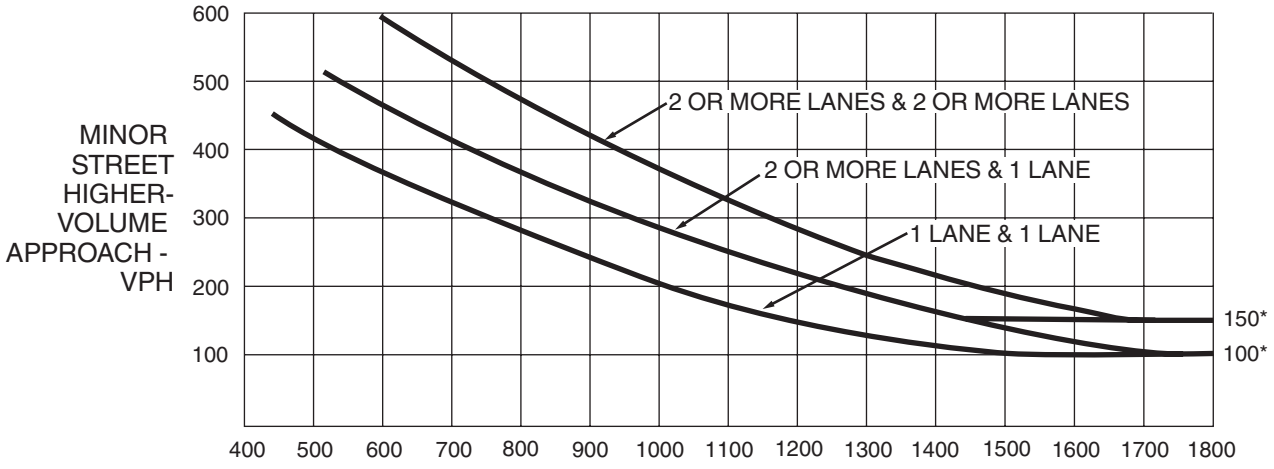
Figure 4C-2. Warrant 2, Four-Hour Vehicular Volume (70% Factor)

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



*Note: 80 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 60 vph applies as the lower threshold volume for a minor-street approach with one lane.

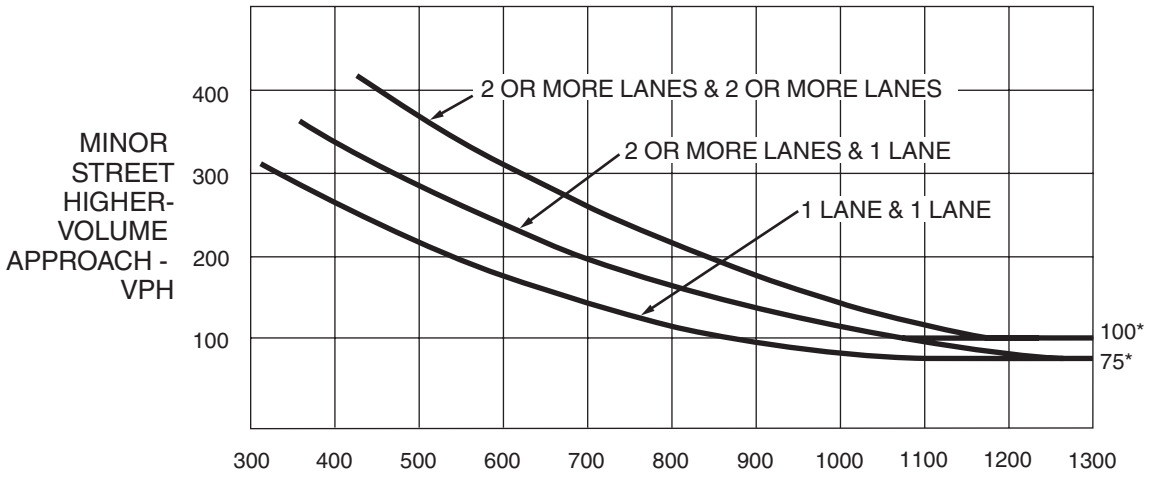
Figure 4C-3. Warrant 3, Peak Hour



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

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

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



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

Section 4C.05 Warrant 4, Pedestrian Volume

Support:

01 The Pedestrian Volume signal warrant is intended for application where the traffic volume on a major street is so heavy that pedestrians experience excessive delay in crossing the major street.

Standard:

02 **The need for a traffic control signal at an intersection or midblock crossing shall be considered if an engineering study finds that one of the following criteria is met:**

A. For each of any 4 hours of an average day, the plotted points representing the vehicles per hour on the major street (total of both approaches) and the corresponding pedestrians per hour crossing the major street (total of all crossings) all fall above the curve in Figure 4C-5; or

B. For 1 hour (any four consecutive 15-minute periods) of an average day, the plotted point representing the vehicles per hour on the major street (total of both approaches) and the corresponding pedestrians per hour crossing the major street (total of all crossings) falls above the curve in Figure 4C-7.

Option:

03 If the posted or statutory speed limit or the 85th-percentile speed on the major street exceeds 35 mph, or if the intersection lies within the built-up area of an isolated community having a population of less than 10,000, Figure 4C-6 may be used in place of Figure 4C-5 to evaluate Criterion A in Paragraph 2, and Figure 4C-8 may be used in place of Figure 4C-7 to evaluate Criterion B in Paragraph 2.

Standard:

04 **The Pedestrian Volume signal warrant shall not be applied at locations where the distance to the nearest traffic control signal or STOP sign controlling the street that pedestrians desire to cross is less than 300 feet, unless the proposed traffic control signal will not restrict the progressive movement of traffic.**

05 **If this warrant is met and a traffic control signal is justified by an engineering study, the traffic control signal shall be equipped with pedestrian signal heads complying with the provisions set forth in Chapter 4E.**

Guidance:

06 *If this warrant is met and a traffic control signal is justified by an engineering study, then:*

A. If it is installed at an intersection or major driveway location, the traffic control signal should also control the minor-street or driveway traffic, should be traffic-actuated, and should include pedestrian detection.

B. If it is installed at a non-intersection crossing, the traffic control signal should be installed at least 100 feet from side streets or driveways that are controlled by STOP or YIELD signs, and should be pedestrian-actuated. If the traffic control signal is installed at a non-intersection crossing, at least one of the signal faces should be over the traveled way for each approach, parking and other sight obstructions should be prohibited for at least 100 feet in advance of and at least 20 feet beyond the crosswalk or site accommodations should be made through curb extensions or other techniques to provide adequate sight distance, and the installation should include suitable standard signs and pavement markings.

C. Furthermore, if it is installed within a signal system, the traffic control signal should be coordinated.

Option:

07 The criterion for the pedestrian volume crossing the major street may be reduced as much as 50 percent if the 15th-percentile crossing speed of pedestrians is less than 3.5 feet per second.

08 A traffic control signal may not be needed at the study location if adjacent coordinated traffic control signals consistently provide gaps of adequate length for pedestrians to cross the street.

Section 4C.06 Warrant 5, School Crossing

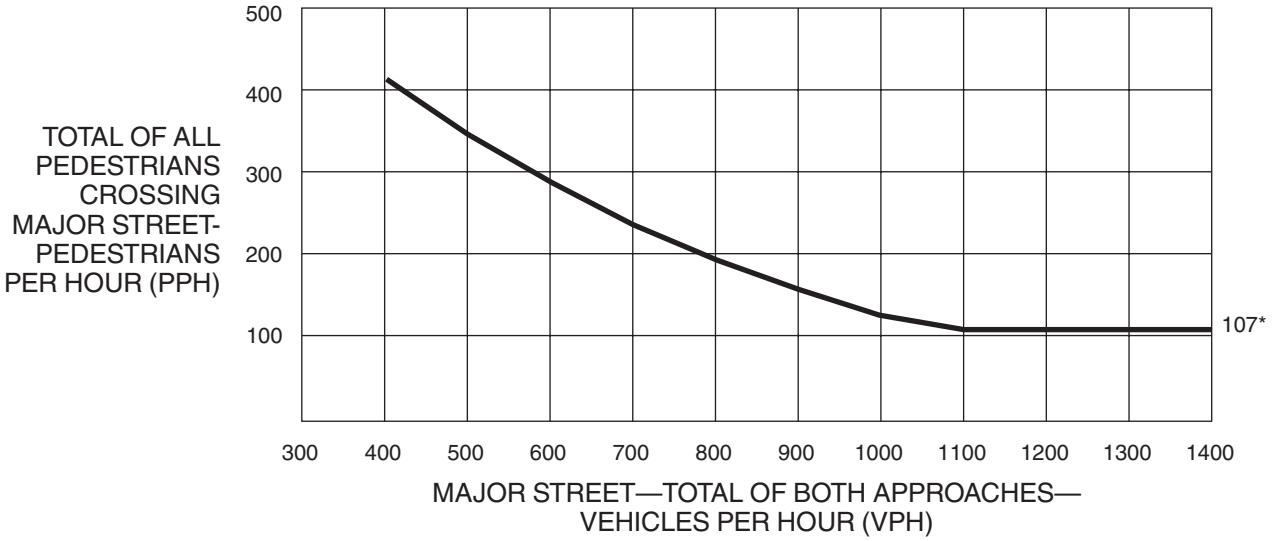
Support:

01 The School Crossing signal warrant is intended for application where the fact that school children cross the major street is the principal reason to consider installing a traffic control signal. For the purposes of this warrant, the word “school children” includes elementary through high school students.

Standard:

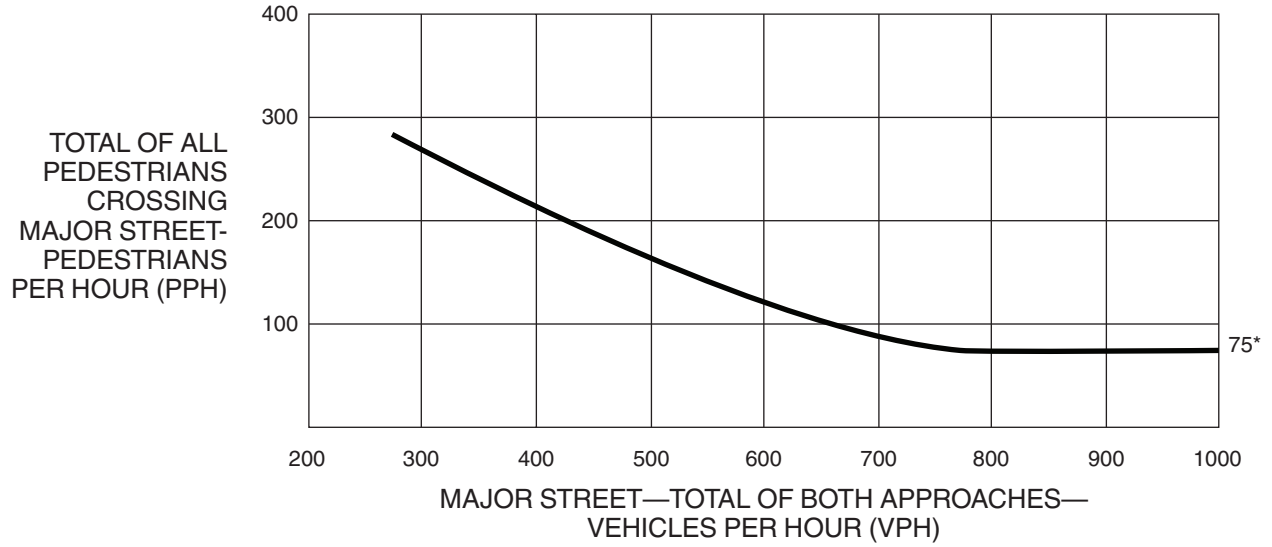
02 **The need for a traffic control signal shall be considered when an engineering study of the frequency and adequacy of gaps in the vehicular traffic stream as related to the number and size of groups of school children at an established school crossing across the major street shows that the number of adequate gaps in the traffic stream during the period when the school children are using the crossing is less than the number of minutes in the same period (see Section 7A.03) and there are a minimum of 20 school children during the highest crossing hour.**

Figure 4C-5. Warrant 4, Pedestrian Four-Hour Volume



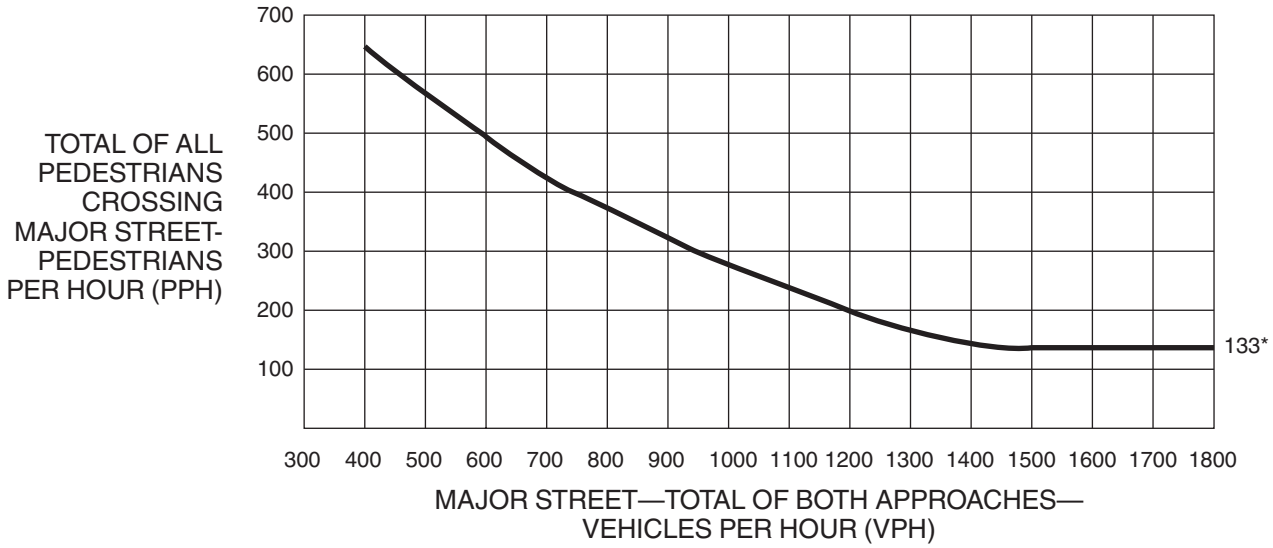
*Note: 107 pph applies as the lower threshold volume.

Figure 4C-6. Warrant 4, Pedestrian Four-Hour Volume (70% Factor)



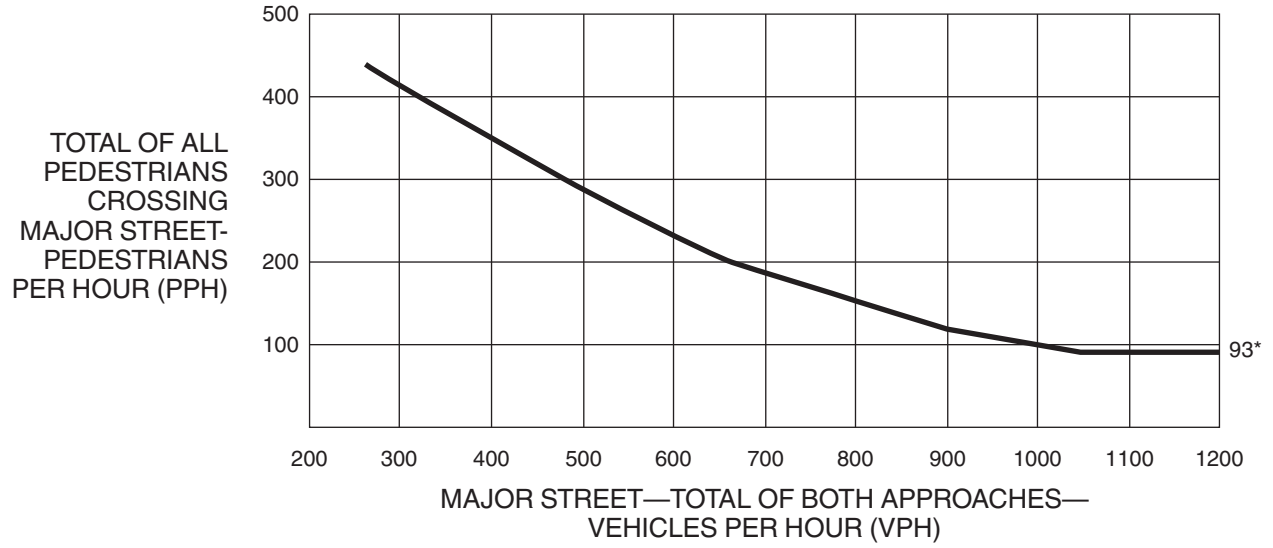
*Note: 75 pph applies as the lower threshold volume.

Figure 4C-7. Warrant 4, Pedestrian Peak Hour



*Note: 133 pph applies as the lower threshold volume.

Figure 4C-8. Warrant 4, Pedestrian Peak Hour (70% Factor)



*Note: 93 pph applies as the lower threshold volume.

03 **Before a decision is made to install a traffic control signal, consideration shall be given to the implementation of other remedial measures, such as warning signs and flashers, school speed zones, school crossing guards, or a grade-separated crossing.**

04 **The School Crossing signal warrant shall not be applied at locations where the distance to the nearest traffic control signal along the major street is less than 300 feet, unless the proposed traffic control signal will not restrict the progressive movement of traffic.**

Guidance:

05 *If this warrant is met and a traffic control signal is justified by an engineering study, then:*

A. If it is installed at an intersection or major driveway location, the traffic control signal should also control the minor-street or driveway traffic, should be traffic-actuated, and should include pedestrian detection.

B. If it is installed at a non-intersection crossing, the traffic control signal should be installed at least 100 feet from side streets or driveways that are controlled by STOP or YIELD signs, and should be pedestrian-actuated. If the traffic control signal is installed at a non-intersection crossing, at least one of the signal faces should be over the traveled way for each approach, parking and other sight obstructions should be prohibited for at least 100 feet in advance of and at least 20 feet beyond the crosswalk or site accommodations should be made through curb extensions or other techniques to provide adequate sight distance, and the installation should include suitable standard signs and pavement markings.

C. Furthermore, if it is installed within a signal system, the traffic control signal should be coordinated.

Section 4C.07 Warrant 6, Coordinated Signal System

Support:

01 Progressive movement in a coordinated signal system sometimes necessitates installing traffic control signals at intersections where they would not otherwise be needed in order to maintain proper platooning of vehicles.

Standard:

02 **The need for a traffic control signal shall be considered if an engineering study finds that one of the following criteria is met:**

A. On a one-way street or a street that has traffic predominantly in one direction, the adjacent traffic control signals are so far apart that they do not provide the necessary degree of vehicular platooning.

B. On a two-way street, adjacent traffic control signals do not provide the necessary degree of platooning and the proposed and adjacent traffic control signals will collectively provide a progressive operation.

Guidance:

03 *The Coordinated Signal System signal warrant should not be applied where the resultant spacing of traffic control signals would be less than 1,000 feet.*

Section 4C.08 Warrant 7, Crash Experience

Support:

01 The Crash Experience signal warrant conditions are intended for application where the severity and frequency of crashes are the principal reasons to consider installing a traffic control signal.

Standard:

02 **The need for a traffic control signal shall be considered if an engineering study finds that all of the following criteria are met:**

A. Adequate trial of alternatives with satisfactory observance and enforcement has failed to reduce the crash frequency; and

B. Five or more reported crashes, of types susceptible to correction by a traffic control signal, have occurred within a 12-month period, each crash involving personal injury or property damage apparently exceeding the applicable requirements for a reportable crash; and

C. For each of any 8 hours of an average day, the vehicles per hour (vph) given in both of the 80 percent columns of Condition A in Table 4C-1 (see Section 4C.02), or the vph in both of the 80 percent columns of Condition B in Table 4C-1 exists on the major-street and the higher-volume minor-street approach, respectively, to the intersection, or the volume of pedestrian traffic is not less than 80 percent of the requirements specified in the Pedestrian Volume warrant. These major-street and minor-street volumes shall be for the same 8 hours. On the minor street, the higher volume shall not be required to be on the same approach during each of the 8 hours.

Option:

03 If the posted or statutory speed limit or the 85th-percentile speed on the major street exceeds 40 mph, or if the intersection lies within the built-up area of an isolated community having a population of less than 10,000, the traffic volumes in the 56 percent columns in Table 4C-1 may be used in place of the 80 percent columns.

Section 4C.09 Warrant 8, Roadway Network

Support:

01 Installing a traffic control signal at some intersections might be justified to encourage concentration and organization of traffic flow on a roadway network.

Standard:

02 **The need for a traffic control signal shall be considered if an engineering study finds that the common intersection of two or more major routes meets one or both of the following criteria:**

- **A. The intersection has a total existing, or immediately projected, entering volume of at least 1,000 vehicles per hour during the peak hour of a typical weekday and has 5-year projected traffic volumes, based on an engineering study, that meet one or more of Warrants 1, 2, and 3 during an average weekday; or**
- **B. The intersection has a total existing or immediately projected entering volume of at least 1,000 vehicles per hour for each of any 5 hours of a non-normal business day (Saturday or Sunday).**

03 **A major route as used in this signal warrant shall have at least one of the following characteristics:**

- **A. It is part of the street or highway system that serves as the principal roadway network for through traffic flow.**
- **B. It includes rural or suburban highways outside, entering, or traversing a city.**
- **C. It appears as a major route on an official plan, such as a major street plan in an urban area traffic and transportation study.**
- **D. It connects areas of principal traffic generation.**
- **E. It has surface street freeway or expressway ramp terminals.**

Section 4C.10 Warrant 9, Intersection Near a Grade Crossing

Support:

01 The Intersection Near a Grade Crossing signal warrant is intended for use at a location where none of the conditions described in the other eight traffic signal warrants are met, but the proximity to the intersection of a grade crossing on an intersection approach controlled by a STOP or YIELD sign is the principal reason to consider installing a traffic control signal.

Guidance:

02 *This signal warrant should be applied only after adequate consideration has been given to other alternatives or after a trial of an alternative has failed to alleviate the safety concerns associated with the grade crossing. Among the alternatives that should be considered or tried are:*

- *A. Providing additional pavement that would enable vehicles to clear the track or that would provide space for an evasive maneuver, or*
- *B. Reassigning the stop controls at the intersection to make the approach across the track a non-stopping approach.*

Standard:

03 **The need for a traffic control signal shall be considered if an engineering study finds that both of the following criteria are met:**

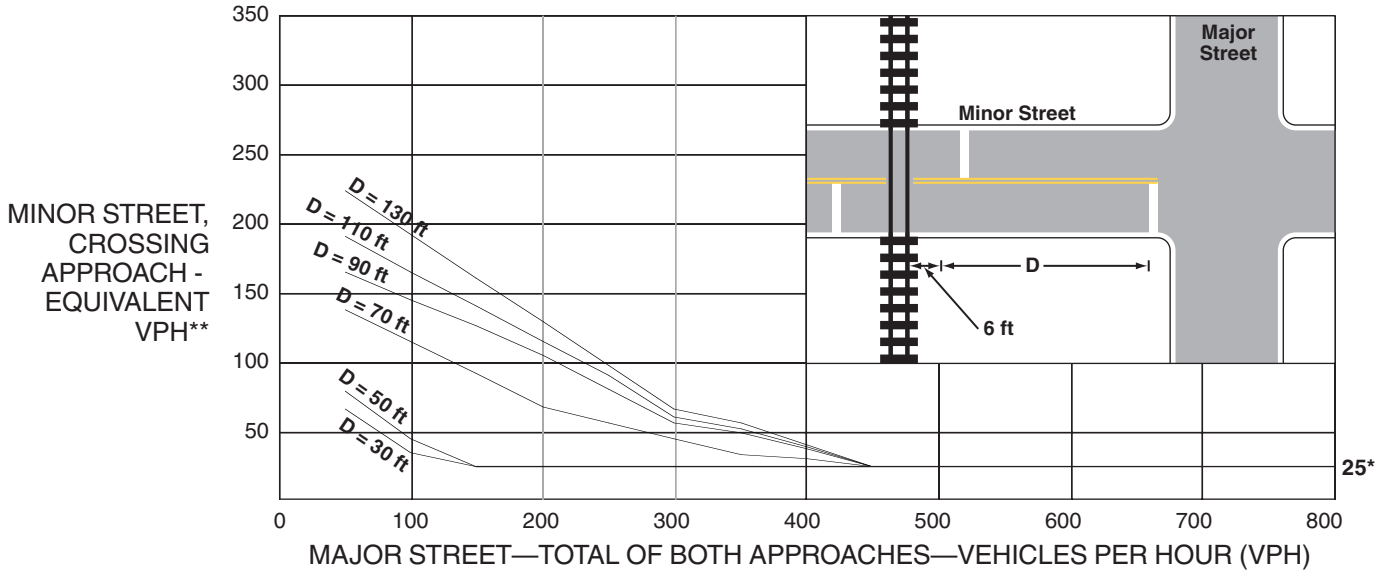
- **A. A grade crossing exists on an approach controlled by a STOP or YIELD sign and the center of the track nearest to the intersection is within 140 feet of the stop line or yield line on the approach; and**
- **B. During the highest traffic volume hour during which rail traffic uses the crossing, the plotted point representing the vehicles per hour on the major street (total of both approaches) and the corresponding vehicles per hour on the minor-street approach that crosses the track (one direction only, approaching the intersection) falls above the applicable curve in Figure 4C-9 or 4C-10 for the existing combination of approach lanes over the track and the distance D, which is the clear storage distance as defined in Section 1A.13.**

Guidance:

04 *The following considerations apply when plotting the traffic volume data on Figure 4C-9 or 4C-10:*

- *A. Figure 4C-9 should be used if there is only one lane approaching the intersection at the track crossing location and Figure 4C-10 should be used if there are two or more lanes approaching the intersection at the track crossing location.*

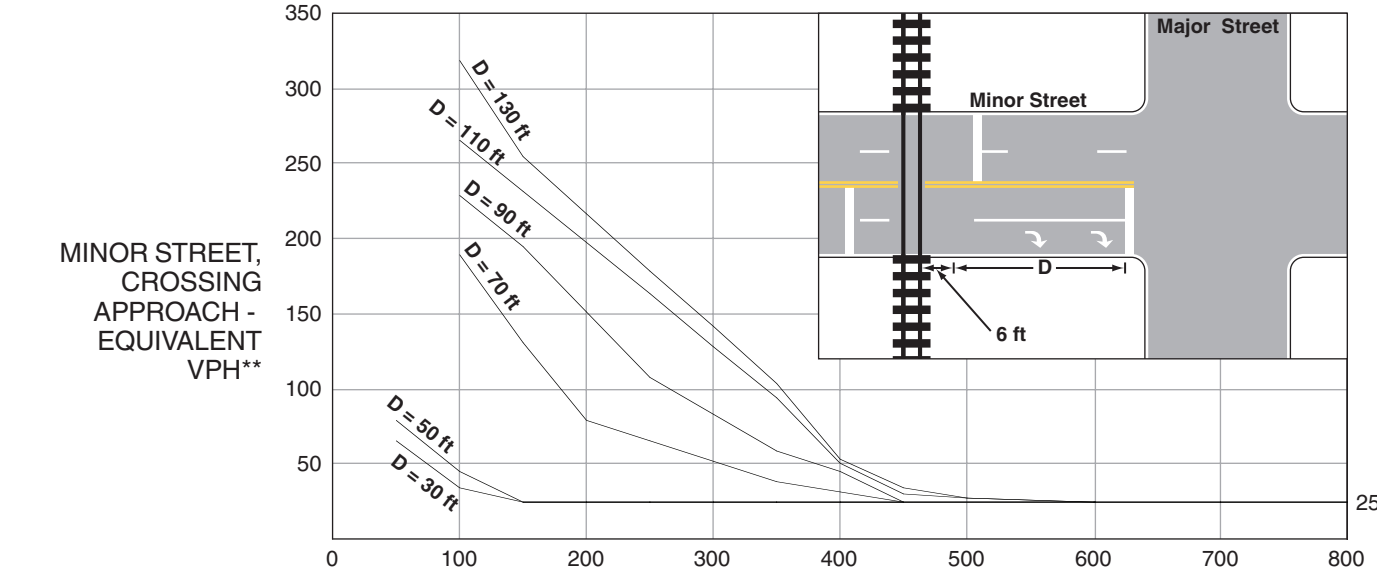
Figure 4C-9. Warrant 9, Intersection Near a Grade Crossing (One Approach Lane at the Track Crossing)



* 25 vph applies as the lower threshold volume

** VPH after applying the adjustment factors in Tables 4C-2, 4C-3, and/or 4C-4, if appropriate

Figure 4C-10. Warrant 9, Intersection Near a Grade Crossing (Two or More Approach Lanes at the Track Crossing)



* 25 vph applies as the lower threshold volume

** VPH after applying the adjustment factors in Tables 4C-2, 4C-3, and/or 4C-4, if appropriate

B. After determining the actual distance D, the curve for the distance D that is nearest to the actual distance D should be used. For example, if the actual distance D is 95 feet, the plotted point should be compared to the curve for D = 90 feet.

C. If the rail traffic arrival times are unknown, the highest traffic volume hour of the day should be used.

Option:

05 The minor-street approach volume may be multiplied by up to three adjustment factors as provided in Paragraphs 6 through 8.

06 Because the curves are based on an average of four occurrences of rail traffic per day, the vehicles per hour on the minor-street approach may be multiplied by the adjustment factor shown in Table 4C-2 for the appropriate number of occurrences of rail traffic per day.

07 Because the curves are based on typical vehicle occupancy, if at least 2% of the vehicles crossing the track are buses carrying at least 20 people, the vehicles per hour on the minor-street approach may be multiplied by the adjustment factor shown in Table 4C-3 for the appropriate percentage of high-occupancy buses.

08 Because the curves are based on tractor-trailer trucks comprising 10% of the vehicles crossing the track, the vehicles per hour on the minor-street approach may be multiplied by the adjustment factor shown in Table 4C-4 for the appropriate distance and percentage of tractor-trailer trucks.

Standard:

09 **If this warrant is met and a traffic control signal at the intersection is justified by an engineering study, then:**

A. The traffic control signal shall have actuation on the minor street;

B. Preemption control shall be provided in accordance with Sections 4D.27, 8C.09, and 8C.10; and

C. The grade crossing shall have flashing-light signals (see Chapter 8C).

Guidance:

10 *If this warrant is met and a traffic control signal at the intersection is justified by an engineering study, the grade crossing should have automatic gates (see Chapter 8C).*

Table 4C-2. Warrant 9, Adjustment Factor for Daily Frequency of Rail Traffic

Rail Traffic per Day	Adjustment Factor
1	0.67
2	0.91
3 to 5	1.00
6 to 8	1.18
9 to 11	1.25
12 or more	1.33

Table 4C-3. Warrant 9, Adjustment Factor for Percentage of High-Occupancy Buses

% of High-Occupancy Buses* on Minor-Street Approach	Adjustment Factor
0%	1.00
2%	1.09
4%	1.19
6% or more	1.32

* A high-occupancy bus is defined as a bus occupied by at least 20 people.

Table 4C-4. Warrant 9, Adjustment Factor for Percentage of Tractor-Trailer Trucks

% of Tractor-Trailer Trucks on Minor-Street Approach	Adjustment Factor	
	D less than 70 feet	D of 70 feet or more
0% to 2.5%	0.50	0.50
2.6% to 7.5%	0.75	0.75
7.6% to 12.5%	1.00	1.00
12.6% to 17.5%	2.30	1.15
17.6% to 22.5%	2.70	1.35
22.6% to 27.5%	3.28	1.64
More than 27.5%	4.18	2.09

APPENDIX D. Traffic Signal Warrant Analysis Supplement

Date: 12/15/2025

Intersection: First St at Artesia Blvd

Conditions: Existing Conditions

Project #: R0051364.11

Westwood

☐ Community Population < 10,000?

☑ Speed Limit > 40 mph?

	Major Street		Lanes: 4		Minor Street		Lanes: 4
	First St				Artesia Blvd		
	EB	WB	TOTAL		NB	SB	MAX
6:00 AM	390	189	579		62	228	228
7:00 AM	604	466	1070		59	455	455
8:00 AM	529	489	1018		194	409	409
9:00 AM	323	281	604		12	188	188
10:00 AM	309	261	570		27	184	184
11:00 AM	331	327	658		12	138	138
12:00 PM	328	367	695		22	165	165
1:00 PM	304	309	613		15	189	189
2:00 PM	315	422	737		52	222	222
3:00 PM	472	618	1090		13	218	218
4:00 PM	510	768	1278		210	278	278
5:00 PM	567	820	1387		110	318	318
6:00 PM	447	671	1118		40	225	225
7:00 PM	327	436	763		119	163	163
8:00 PM	193	310	503		54	117	117
9:00 PM	123	208	331		40	68	68

Warrant					
8-Hour					
(70%)	(70%)	(56%)			
Condition A	Condition B	Condition A	Condition B	4-Hour	Peak-Hour
Met	Not Met	Met	Met	Met	Not Met
Met	Met	Met	Met	Met	Met
Met	Met	Met	Met	Met	Met
Met	Not Met	Met	Met	Met	Not Met
Met	Not Met	Met	Met	Not Met	Not Met
Not Met	Met	Met	Met	Not Met	Not Met
Met	Met	Met	Met	Met	Not Met
Met	Not Met	Met	Met	Met	Not Met
Met	Met	Met	Met	Met	Not Met
Met	Met	Met	Met	Met	Met
Met	Met	Met	Met	Met	Met
Met	Met	Met	Met	Met	Met
Met	Met	Met	Met	Met	Met
Met	Met	Met	Met	Met	Not Met
Not Met	Not Met	Met	Not Met	Not Met	Not Met
Not Met	Not Met	Not Met	Not Met	Not Met	Not Met

			Required Volume Major	Required Volume Minor	# Hours Satisfied	# Hours Required	Warrant
1. Eight-Hour Warrant							
(70%)	Condtion A Met?		420	140	13	8	MET
	Condtion B Met?		630	70	10	8	
(56%)	Condtion A Met?		336	112	15	8	MET
	& Condtion B Met?		504	56	14	8	
2. Four-Hour Warrant							
		Met?			12	4	MET
3. Peak-Hour Warrant							
		Met?			6	1	MET

Appendix E. CRIS 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 12/15/2025. 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 Table View

Crash Date\Crash Severity	N - NOT INJURED	Total
2025-03-08	1	1
Total	1	1

Query Result Counts

Your query returned a total of 1 Crash containing 2 Units and 3 Persons.

Filters Applied to Query

Crash Date Is Between 2024-12-15 07:00 and 2025-12-15 11:40

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 11/24/2025. 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 Result Counts:
Your query returned a total of 2 Crashes containing 4 Units and 9 Persons

Filters Applied to current Query:
Crash Date Is Between 2024-11-21 00:00 and 2025-11-21 00:00

Crash ID	At Intersection Flag	Crash Date	Crash Time	Crash Total Injury Count	Manner of Collision	Street Name
20702078	TRUE	3/8/2025	1217	0	ANGLE - BOTH GOING STRAIGHT	W 1ST ST
20738445	FALSE	4/4/2025	738	0	OPPOSITE DIRECTION - ONE STRAIGHT-ONE LEFT TURN	W 1ST ST

Appendix F. Traffic Split Supplement

		TOWN OF PROSPER	PROSPER ISD	ELM RIDGE DISTRICT
24 Hours	Volumes	13565	1054	3734
	Percent	*73.9%*	*5.7%*	*20.3%*
AM Peak (7:30-8:30)	Volumes	1254	126	424
	Percent	*69.5%*	*7.0%*	*23.5%*
PM School Peak (4:15-5:15)	Volumes	1304	221	269
	Percent	*72.7%*	*12.3%*	*15.0%*
PM Peak (5:00-6:00)	Volumes	1387	110	318
	Percent	*76.4%*	*6.1%*	*17.5%*
All Hours Which Met Warrants*	Volumes	11417	828	3217
	Percent	*73.8%*	*5.4%*	*20.8%*

*Warrants A and/or B were met between 6:00 AM and 7:00 PM

The following Assumptions were made to determine these splits:

•The north leg of the intersection is owned and maintained by the Elm Ridge District, and therefore all traffic from that leg is generated by them.

•The south leg of the intersection is owned by Prosper ISD, and therefore all traffic from that leg is generated by them.

•The east and west legs of the intersection are owned and maintained by the Town of Prosper, Texas, and therefore all traffic from that leg is generated by them.