

CARLISLE & MENAUL DEVELOPMENT

FINAL SUBMITTAL

MAY 2, 2025

Prepared For:

JEFFREY JESIONOWSKI
VISTA ORIENTE, LTD. CO.
9751 CARMEL AVE. NE
ALBUQUERQUE, NM 87122

Prepared By:

Bohannon  **Huston**

Engineering

Spatial Data

Advanced Technologies



CARLISLE & MENAUL DEVELOPMENT

FINAL SUBMITTAL

Date:

May 2, 2025

Prepared by:

Bohannon Huston, Inc.

7500 Jefferson St NE

Courtyard Two

Albuquerque, NM 87109

Prepared for:

Jeffrey Jesionowski

Vista Oriente, Ltd. Co.

9751 Carmel Ave. NE

Albuquerque, NM 87122

Carl Vermillion, PE, PTOE

Date

TABLE OF CONTENTS

I.	INTRODUCTION AND SUMMARY	1
A.	Study Purpose	1
B.	Executive Summary	1
1.	Site Location and Study Area	1
2.	Principal Findings	2
3.	Recommendations	6
II.	PROPOSED DEVELOPMENT	10
A.	Land Use and Intensity	10
B.	Development Phasing and Timing	10
III.	STUDY AREA CONDITIONS	10
A.	Study Area	10
B.	Site Accessibility	11
C.	Data Sources	11
IV.	EXISTING CONDITIONS ANALYSIS	12
A.	Background	12
1.	Adjacent Roadways	12
B.	2024 Existing Traffic Conditions	13
C.	Level of Service Definitions	13
D.	Existing Intersection Capacity Analysis	14
V.	PROJECTED TRAFFIC	20
A.	Site Traffic Forecasting	20
1.	Trip Generation	20
2.	Trip Distribution and Assignment	21
3.	Traffic Projections	22
VI.	TRAFFIC AND IMPROVEMENT ANALYSIS	25
1.	2026 No Build Intersection Capacity Analysis	25
2.	2026 Build Intersection Capacity Analysis	30
3.	2036 Horizon Year No Build Intersection Capacity Analysis	36
4.	2036 Horizon Year Build Intersection Capacity Analysis	41
B.	Deceleration Lane requirements	47

C. Queue Evaluation.....	48
VII. CRASH DATA ANALYSIS	52
A. Intersection Crashes By Year	52
VIII. CONCLUSIONS AND RECOMMENDATIONS.....	59
A. Conclusions	59
1. Existing Conditions.....	59
2. 2026 Build	60
3. 2036 Build	61
4. Crash Data.....	62
B. Recommendations.....	63

FIGURES

Figure 1 Vicinity Map.....	8
Figure 2 Site Map	9
Figure 3 2024 AM(PM) Existing Peak Hour Traffic Volumes	19
Figure 4 Trip Assignment Percentages	23
Figure 5 Trip Assignment Volumes.....	24
Figure 6 2026 AM(PM) No Build Peak Hour Traffic Volumes	29
Figure 7 2026 AM(PM) Build Peak Hour Traffic Volumes	35
Figure 8 2036 AM(PM) No Build Peak Hour Traffic Volumes	40
Figure 9 2036 AM(PM) Build Peak Hour Traffic Volumes	46

TABLES

Table 1 LOS Definitions.....	13
Table 2 2024 Existing Signalized Intersection Results	16
Table 3 Existing Unsignalized Intersection Results.....	18
Table 4 Trip Generation	21
Table 5 2026 No Build Signalized Intersection Results	26
Table 6 2026 No Build Unsignalized Intersection Results	28
Table 7 2026 Build Signalized Intersection Results	31

Table 8 | 2026 Build Unsignalized Intersection Results 34

Table 9 | 2036 Horizon Year No Build Signalized Intersection Results 37

Table 10 | 2036 Horizon Year Build Signalized Intersection Results 42

Table 11 | 2036 Horizon Year Build Unsignalized Intersection Results 45

Table 12 | Deceleration Lane Warrants.....47

Table 13 | Queue Evaluation.....49

Table 14 | Menaul & Carlisle Development Crash Data 54

Table 15 | Menaul & Carlisle Pedestrian Involved Crash Data 55

Table 16 | Menaul & Carlisle Bicycle Involved Crash Data 57

APPENDICES

Appendix A Existing Traffic Data

Appendix B 2024 Existing Intersection Capacity Analysis

Appendix C 2024 Existing Traffic Signal Warrants

Appendix D Turning Movement Counts

Appendix E 2026 No Build Intersection Capacity Analysis

Appendix F 2026 Build Intersection Capacity Analysis

Appendix G 2036 No Build Intersection Warrant Analysis

Appendix H 2036 Build Intersection Capacity Analysis

Appendix I Compiled Crash Data

I. INTRODUCTION AND SUMMARY

Vista Oriente is looking to redevelop approximately 10 acres of warehouse and associated parking space northwest of the intersection of Carlisle Blvd & Menaul Blvd in Albuquerque, New Mexico. Formerly the Lot 2-B American Square, this mixed-use space is planned to be redeveloped into 6 different commercial pad sites including a warehouse, a car wash, and several fast-food restaurants at the site. This redevelopment is projected to increase traffic within the area.

A. STUDY PURPOSE

The purpose of the traffic study is to determine the impacts of the proposed development on the surrounding roadway network, evaluate the operation of the proposed site entrances, and to recommend any mitigation measures that may be necessary to support the additional traffic generated by the new development.

B. EXECUTIVE SUMMARY

1. SITE LOCATION AND STUDY AREA

The site is located northwest of the intersection at Menaul Blvd & Carlisle Blvd in the City of Albuquerque, New Mexico. The proposed development will include five access driveways along Menaul, Carlisle, and Phoenix. The access points on Carlisle Blvd and Menaul Blvd will remain in existing locations with some upgrades due to the site. A vicinity map and site plan are shown in Figure 1, and the proposed site plan of the future development is shown in Figure 2.

The study area consists of the following intersections:

- Carlisle Blvd & Claremont Ave (Existing Signalized Intersection)
- Carlisle Blvd & Phoenix Ave (Existing Stop-Controlled Intersection)
- Carlisle Blvd & Menaul Blvd (Existing Signalized Intersection)
- Carlisle Blvd & Prospect Ave (Existing Stop-Controlled Intersection)
- Carlisle Blvd & Cutler Ave (Existing Signalized Intersection)
- Carlisle Blvd & I-40 WB Off Ramp (Existing Signalized Intersection)
- Carlisle Blvd & I-40 EB Off Ramp (Existing Signalized Intersection)
- Menaul Blvd & Bryn Mawr/American Dr (Existing Stop-Controlled Intersection)
- Phoenix Ave & Bryn Mawr/American Dr (Existing Stop-Controlled Intersection)

- Menaul Blvd & Access 1 (Existing Stop-Controlled Intersection)
- Menaul Blvd & Access 2 (Existing Stop-Controlled Intersection)
- Carlisle Blvd & Access 3 (Existing Stop-Controlled Intersection)
- Carlisle Blvd & Access 4 (Existing Stop-Controlled Intersection)
- Phoenix Ave & Access 5 (Existing Stop-Controlled Intersection)

The intersection evaluations include analysis for the AM and PM peak hours for the following traffic conditions:

- Existing traffic (2024)
- 2026 Completion Year without proposed development (2026 No Build)
- 2026 Completion Year with buildout of the site (2026 Build)
- 2036 Horizon Year without proposed development (2036 No Build)
- 2036 Horizon Year with buildout of the site (2036 Build)

2. PRINCIPAL FINDINGS

a) *Existing Conditions*

The signalized intersection of Carlisle & I-40 WB and the intersection of Carlisle and I-40 EB contain several movements that are LOS E or LOS F during the existing analysis. The Carlisle and I-40 WB intersection includes the westbound right turning movement during the AM peak hour that will operate at LOS E. During the PM peak hour this movement operates at LOS F and the northbound left will operate at LOS E.

The Carlisle and I-40 EB intersection will operate acceptably overall during both peak hours with LOS E. The southbound left will operate at LOS E during the PM peak hour at this intersection.

Carlisle & Phoenix experiences LOS E in the AM peak hour and LOS F in the PM peak hour. During the AM peak hour the westbound approach operates at LOS E. In the PM peak hour the eastbound approach, westbound approach, and northbound left all operate at LOS F.

Carlisle & Prospect experiences LOS F in the AM peak hour, where the eastbound and westbound approach operates at LOS F. In the PM peak hour, the overall intersection performs at LOS F. This is due to the eastbound approach, westbound approach, and northbound left all operating at LOS F.

Menaul & Bryn Mawr experiences LOS E in the AM peak hour, where the northbound left and southbound left operate at LOS E. In the PM peak hour, the eastbound left operates at LOS E, while the northbound left and southbound left operate at LOS F.

Menaul & Access 2, which is a full access intersection, experiences LOS E in the AM peak hour, where the southbound left operates at LOS E. In the PM peak hour, the southbound left operates at LOS F. There are no stripes on the southbound approach to this intersection, so it was modeled with a through/right lane and a dedicated left since there is enough room for this to occur in existing conditions.

Carlisle & Access 4, which is a full access intersection, experiences LOS F in the AM peak hour, where the eastbound approach operates at LOS F. In the PM peak hour, the eastbound approach, and the westbound approach operate at LOS F, while the southbound left operates at LOS E.

All other unsignalized intersections will have an overall operation at or above LOS C.

A traffic signal warrant check was completed for the existing intersection of Carlisle and Pheonix. This check verified warrant 3 of the MUTCD, which checks the peak hour volumes for the intersection. The AM and PM peak hours were plotted, and the AM peak hour volumes fell below the threshold, but the PM peak hour fell above the threshold to warrant a traffic signal. The MUTCD states that for 1 hour of an average day, if the plotted point falls above the applicable curve, then a traffic signal shall be considered. Since this intersection warrants a traffic signal during the peak hour existing conditions with no additional development, the responsibility to design and construct a traffic signal at this intersection should be the City of Albuquerque. The City of Albuquerque may want to study this intersection further to verify other traffic signal warrants as suggested in the MUTCD.

b) 2026 Build

The Build scenario finds that the signalized intersections continue to operate at a generally overall acceptable level of service in most peak hours, save for the intersection of Carlisle & I-40 WB, which would operate at a LOS E in the PM peak hour.

The signalized intersection of Carlisle & Claremont continues to operate at LOS A in the AM peak hour and LOS B in the PM peak hour. During the PM peak hour the westbound left movement remains operating at LOS E due to the operations of the signal and the high volume of competing movements similar to the no build analysis.

Carlisle & Menaul will operate at overall acceptable conditions with optimized signal timing in both peak hours at LOS D. During the AM and PM peak hours all movements operate at or better than LOS D.

The signalized intersections of Carlisle & I-40 WB will continue to operate at overall LOS C in the AM peak hour and LOS E during the PM peak hour. During the AM peak hour the westbound right turning movement will continue to operate at LOS E. This movement will continue to operate at LOS F during the PM peak hour. Additionally, the northbound left will continue to operate at LOS E during the PM peak hour.

Carlisle & I-40 EB intersection will continue to operate acceptably overall during both peak hours with LOS C. The southbound left will continue to operate at LOS E during the PM peak hour at the intersection.

Carlisle & Phoenix continues to experience LOS F in both the AM and PM peak hour with unsignalized operations. During the AM peak hour the eastbound and westbound approach operates at LOS F. In the PM peak hour, the northbound left will operate at LOS F. For the eastbound and westbound approach in the PM peak hour, the analysis program could not calculate delay and level of service due to the large delay that will be seen due to the volume of vehicles on Carlisle Boulevard. In signalized conditions both peak hours will operate acceptably at LOS A, and thus the City of Albuquerque should monitor this intersection to determine if a traffic signal should be installed.

Carlisle & Prospect experiences LOS F in the AM peak hour, where the eastbound and westbound approach operates at LOS F. In the PM peak hour the intersection will operate at LOS F with the eastbound approach, westbound approach, northbound left, and southbound left all operating at LOS F.

Menaul & Bryn Mawr experiences overall LOS F in the AM peak hour, where the northbound left and southbound left operate at LOS F. In the PM peak hour, the eastbound left, northbound left, and southbound left all continue to operate at LOS F.

Menaul & Access 2 operates at LOS C during the AM peak hour, and at LOS D during the PM peak hour. The southbound left operates at LOS F during both peak periods.

Carlisle & Access 4 operates at LOS C during the AM peak hour with all movements operating at LOS C. In the PM peak hour the intersection operates at LOS F due to the westbound left and southbound left continuing to operate at LOS F, similarly to the no build conditions. These movements are entering and exiting an adjacent site and have no impacts from the development. In implementing the development build out, an alternative analysis widened this access point to allow a dedicated eastbound left turn lane with a through/right lane. This analysis showed that the delay would still be very high, although right turning vehicle delay is substantially lowered. Due to the consideration of vulnerable roadway users, this alternative will not be considered for this access point due to longer crossings for pedestrians and bicycles.

All other unsignalized intersections continue to have an overall operation at or above LOS D.

c) 2036 Build

In the 2036 Build scenario, the signalized intersection of Carlisle & Claremont continues to operate at LOS A in the AM peak hour and LOS B in the PM peak hour. During the

PM peak hour the westbound left movement remains operating at LOS E due to the operations of the signal and the high volume of competing movements.

Carlisle & Menaul continues to operate at overall acceptable conditions with optimized signal timing in both peak hours at LOS D. During the AM peak hour all movements operate at or better than LOS D. During the PM peak hour the eastbound left, westbound left, and southbound left will all operate at LOS E.

The signalized intersections of Carlisle & I-40 WB will continue to operate at overall LOS C in the AM peak hour but will decline to LOS F in the PM peak hour. During the AM peak hour the westbound right turning movement will continue to operate at LOS E. This movement will continue to operate at LOS F during the PM peak hour. Additionally, the northbound left will continue to operate at LOS E during the PM peak hour.

Carlisle & I-40 EB intersection will continue to operate acceptably overall during both peak hours with LOS C. The southbound left will continue to operate at LOS E during the PM peak hour at the intersection.

Carlisle & Phoenix continues to experience LOS F in both the AM and PM peak hour with unsignalized operations. During the AM peak hour the eastbound and westbound approach operates at LOS F. In the PM peak hour, the northbound left will operate at LOS F. For the eastbound and westbound approach in the PM peak hour, the analysis program could not calculate delay and level of service due to the large delay that will be seen due to the volume of vehicles on Carlisle Boulevard. In signalized conditions both peak hours will operate acceptably at LOS B or better, and thus the City of Albuquerque should monitor this intersection to determine if a traffic signal should be installed.

Carlisle & Prospect experiences LOS F in the AM peak hour, where the eastbound and westbound approach operates at LOS F. Additionally the northbound left declines to LOS E in the AM peak hour. In the PM peak hour the intersection will operate at LOS F with the eastbound approach, westbound approach, northbound left, and southbound left all operating at LOS F. For the eastbound and westbound approach in the PM peak hour, the analysis program could not calculate delay and level of service due to the large delay that will be seen due to the volume of vehicles on Carlisle Boulevard.

Menaul & Bryn Mawr experiences overall LOS F in the AM peak hour, where the northbound left and southbound left operate at LOS F. In the PM peak hour, the eastbound left, northbound left, southbound left, and southbound through/right all continue to operate at LOS F.

Menaul & Access 2 operates at LOS C during the AM peak hour, and at LOS E during the PM peak hour. The operational deterioration can be contributed to the southbound left, which operates at LOS F during both peak periods.

Carlisle & Access 4 experiences LOS D in the AM peak hour. In the PM peak hour the intersection operates at LOS F with movements of LOS E and LOS F due to the volume of vehicles on Carlisle during the PM peak hour. westbound movements operating at LOS E and LOS F, and the eastbound approach, westbound left, and the southbound left, continuing to operate at LOS F similarly to the no build conditions. Additionally, the westbound through/right will operate at LOS E.

All other unsignalized intersections continue to have an overall operation at or above LOS D.

d) *Crash Data*

The intersection of Carlisle & Menaul experiences the most crashes as the major defining intersection of the development study. The HFIN data documented a high rate of crashes along the stretch of Carlisle between Manual and Candelaria. Mitigations that may improve crash rates in this area are drastic and will require additional studies and designs to implement such mitigation strategies. These include access plans, roadway striping projects to change lane widths, adding sidewalk buffers between sidewalks and roadways, and improving bicycle facilities in the area. The proposed development is only a small change that is occurring along Carlisle and larger changes may be needed to fully impact the crash rates in the area.

3. RECOMMENDATIONS

- As the signal at the intersection of Carlisle and Pheonix is warranted in the existing scenario, the City of Albuquerque should be responsibility for the construction of a signal. The city may want to study this intersection further to verify other traffic signal warrants as suggested in the MUTCD.
- A signal timing adjustment should be made to the Carlisle and Menaul intersection so all movements will operate at LOS D or better during the AM and PM peak hour. This work shall be coordinated with the City of Albuquerque.
- The Carlisle and Access 4 intersection should be designed as a single exiting lane to minimize effects to vulnerable road users.
- Carlisle & Access 4 should be updated to allow only eastbound right turning movements onto Carlisle. Additionally, the northbound left turning lane should be removed and a median designed in its place.
- Carlisle and Access 4 should include a new sign prohibiting left turning movements that should be posted in the median.
- Menaul & Access 1 should include a new one-way sign (R6-1-36) in the median to bring more attention to the requirement of turning right only.

- Carlisle and Access 3 should install onsite right turn arrow pavement marking to indicate this movement as the only allowable movement.
- At Carlisle and Access 3, the median along Carlisle should be painted yellow to enhance the medians visibility.
- All designs shall satisfy the Manual on Uniform Traffic Control Devices (MUTCD), NMDOT and City of Albuquerque requirements.

Figure 1 | Vicinity Map

Figure 2 | Site Map

II. PROPOSED DEVELOPMENT

A. LAND USE AND INTENSITY

The proposed development is replacing the closed furniture store on Lot 2-B American Square, northwest the intersection of Carlisle & Menaul in Albuquerque, New Mexico. The 10 acres is planned to be re-platted into 6 sites, divided into 17,400 square feet of planned fast-food restaurants with drive throughs, 6,500 square feet of automated car wash, and 30,000 square feet of strip retail plaza shopping, as determined by the development team and discussed in the traffic scoping meeting held on March 6, 2024.

The redevelopment is situated along the corner of Menaul and Carlisle, with the existing driveways into the site to be maintained but renovated with the redevelopment of the site. The proposed development will remove the closed American Home Furniture store and develop several commercial buildings at the site. The surrounding area is majority commercial and office spaces, with the area to the northeast being a residential neighborhood near the development.

B. DEVELOPMENT PHASING AND TIMING

The project is expected to be fully built out by 2026. Construction is anticipated to occur in one phase finishing in 2026. Additionally, the City of Albuquerque and the NMDOT require a horizon year analysis that will be completed for 2036. This study will discuss the overall recommendations and needs for the development in the fully built out phase.

III. STUDY AREA CONDITIONS

A. STUDY AREA

The study area consists of the following intersections:

- Carlisle Blvd & Claremont Ave (Existing Signalized Intersection)
- Carlisle Blvd & Phoenix Ave (Existing Stop-Controlled Intersection)
- Carlisle Blvd & Menaul Blvd (Existing Signalized Intersection)
- Carlisle Blvd & Prospect Ave (Existing Stop-Controlled Intersection)
- Carlisle Blvd & Cutler Ave (Existing Signalized Intersection)
- Carlisle Blvd & I-40 WB Off Ramp (Existing Signalized Intersection)
- Carlisle Blvd & I-40 EB Off Ramp (Existing Signalized Intersection)

- Menaul Blvd & Bryn Mawr/American Dr (Existing Stop-Controlled Intersection)
- Phoenix Ave & Bryn Mawr/American Dr (Existing Stop-Controlled Intersection)
- Menaul Blvd & Access 1 (Existing Stop-Controlled Intersection)
- Menaul Blvd & Access 2 (Existing Stop-Controlled Intersection)
- Carlisle Blvd & Access 3 (Existing Stop-Controlled Intersection)
- Carlisle Blvd & Access 4 (Existing Stop-Controlled Intersection)
- Phoenix Ave & Access 5 (Existing Stop-Controlled Intersection)

B. SITE ACCESSIBILITY

The development will have access via five access driveways to the site, two to the south on Menaul, two on the east on Carlisle, and one to the north on Phoenix. All driveways to the site are existing, with Access driveways 2, 4, and 5 to be full access and either may function as the primary entrance to the Carlisle & Menaul development site, as the development spans both sides of the road. Access driveways 1 and 3 are right-in, right-out driveways only.

C. DATA SOURCES

The data used in this report consist of the traffic volumes described below, aerial photography and mapping from Google Earth®, information provided from scoping meetings, Traffic Data collected by Cleland Counts, and information provided by the city of Albuquerque and NMDOT.

IV. EXISTING CONDITIONS ANALYSIS

A. BACKGROUND

Roadway federal classification is updated approximately every four years. The classification process involves local governments, the city Metropolitan planning organization (MPO), New Mexico Department of Transportation (NMDOT), and the Federal Highway Administration (FHWA). The NMDOT Roadway Functional Classification Map classifies roadways based on their function. Roadways are subject to design guidance based on their functional classification, design speed, or based on Comprehensive Plan corridor designations.

1. ADJACENT ROADWAYS

The following are roadways adjacent to the site:

- Carlisle Boulevard is classified as a minor arterial. Within the study area, Carlisle is posted at 35 miles per hour (MPH) with three through lanes in each direction, with several northbound and southbound left turning bays through non-traversable medians at intersections. According to data provided by the NMDOT Traffic Monitoring Bureau, in 2023, Carlisle had an annual average daily traffic volume of 28,254 vehicles per day (vpd) within the vicinity of the site.
- Menaul Boulevard is classified as a principal arterial. Within the study area, Menaul is posted at 35 miles per hour (MPH) with three through lanes in each direction, with several eastbound and westbound left turning bays through non-traversable medians at intersections. According to data provided by the NMDOT Traffic Monitoring Bureau, in 2023, Carlisle had an annual average daily traffic volume of 21,045 vehicles per day (vpd) within the vicinity of the site.
- I-40 Eastbound & Westbound are classified as interstate roads. Within the study area, both intersections include several turning lanes on their respective off-ramps, and two lanes on the departure of the intersection onto I-40.
- Phoenix Avenue is classified as a local road within the vicinity of the site. Within the study area, Phoenix is posted at 25 miles per hour (MPH) with an unmarked through lane in each direction. MRCOG daily traffic volumes have not been recorded near the site.
- Claremont Avenue is classified as a local road within the vicinity of the site. Within the study area, Phoenix is posted at 25 miles per hour (MPH) with an unmarked through lane in each direction. MRCOG daily traffic volumes have not been recorded near the site.

- American Drive/ Bryn Mawr Drive is classified as a local road within the vicinity of the site. Within the study area, American/Bryn Mawr is posted at 25 miles per hour (MPH) with an unmarked through lane in each direction, split by a non-traversable median. MRCOG daily traffic volumes have not been recorded near the site.
- Smaller roads, such as Prospect and Cutler Avenue, analyzed as part of the study are not classified under the MRCOG but can be assumed to be local roads. No MRCOG daily traffic volumes have been recorded for these roadways.

B. 2024 EXISTING TRAFFIC CONDITIONS

Existing 2024 traffic turning movement counts (TMC) for the intersections analyzed in the study area were collected the weeks of April 22nd, 2024, and April 29th, 2024, by Cleland Counts, where all of the intersections' vehicle counts were collected for 9-hr periods. Data was collected from 7:00 AM to 10:00 AM, 11:00 AM to 2:00 PM, and from 3:00 PM to 6:00 PM. Existing traffic counts are included in Appendix A. The counts provide the AM and PM peak hours used in the analysis.

C. LEVEL OF SERVICE DEFINITIONS

The *Highway Capacity Manual Seventh Edition* (HCM) defines Level of Service (LOS) for un-signalized intersections in Table 1 as follows:

Table 1 LOS Definitions			
Level of Service	Definition	Signalized (sec/veh)	Unsignalized (sec/veh)
A	Most vehicles do not stop	<10	<10
B	Some vehicles stop	>10 and <20	>10 and <15
C	Significant numbers of vehicles stop	>20 and <35	>15 and <25
D	Many vehicles stop	>35 and <55	>25 and <35
E	Limit of acceptable delay	>55 and <80	>35 and <50
F	Unacceptable delay	>80	>50

The City of Albuquerque has established LOS D as the generally acceptable level of service in urban areas. When intersections operate below this level, improvements are considered, where feasible. Other critical movements are generally desired to have LOS D or better if possible.

D. EXISTING INTERSECTION CAPACITY ANALYSIS

Intersections were analyzed using Highway Capacity Software version 8.3 (HCS 2024), which uses the intersection methodology from the 7th Edition of the Highway Capacity Manual (HCM). Individual intersection output for the existing conditions analysis is included in Appendix B. The results for both signalized and unsignalized intersections are summarized in Table 2 and Table 3.

The signalized intersection of Carlisle & Claremont operates at LOS A in the AM peak hour and LOS B in the PM peak hour. During the PM peak hour the westbound left movement will operate at LOS E due to the operations of the signal and the high volume of competing movements.

Carlisle & Menaul operates at overall acceptable conditions in both peak hours at LOS C in the AM peak hour and LOS D in the PM peak hour. During the PM peak hour the eastbound left, westbound left, northbound left, and southbound left all will operate at LOS E.

The signalized intersections of Carlisle & I-40 WB will operate at overall LOS C in the AM peak hour and LOS D in the PM peak hour. During the AM peak hour the westbound right turning movement will operate at LOS E. This movement will decline to LOS F during the PM peak hour. Additionally, the northbound left will operate at LOS E during the PM peak hour.

Carlisle & I-40 EB intersection will operate acceptably overall during both peak hours with LOS C. The southbound left will operate at LOS E during the PM peak hour at the intersection.

A traffic signal warrant check was completed for the existing intersection of Carlisle and Pheonix. This check was completed for warrant 1, warrant 2, and warrant 3 of the MUTCD. These warrant evaluations are included in Appendix C.

For warrant 1; eight-hour vehicular volume, condition A and condition B was checked with the volumes of the minor approach on Pheonix and the major approach on Carlisle. Condition A showed that six hours of available data met both major and minor volume approaches but fell short since this warrant specifies meeting 8 hours of a typical day. Condition B showed that eight hours of available data met both major and minor volume approaches. The warrant states that one of either condition A or condition B exists for each of any 8 hours of an average day, a traffic control signal is warranted, therefore warranting a traffic signal at this intersection based on warrant 1.

Warrant 2; four-hour vehicular volume, was also verified. This warrant is intended to be applied where the volume of intersecting traffic is the principal reason to consider installing a traffic signal. This warrant is valid if four hours of a typical day is plotted above certain thresholds. When the volumes from the minor approach and major

approach were plotted, all nine hours of available data fell above this threshold, therefore warranting a traffic signal based on warrant 2

For warrant 3 ; Peak hour, the AM and PM peak hours were plotted, and the AM peak hour volumes fell below the threshold, but the PM peak hour fell above the threshold to warrant a traffic signal. The MUTCD states that warrant 3 is for unusual cases that attract or discharge a large number of vehicles over a short time so this warrant may not apply in this case.

Since this intersection meets several signal warrants in the existing conditions, the design and installation of a traffic signal at this location should be the responsibility of the City of Albuquerque and not the development. Although not considered in this report, alternative intersection designs may be considered at this intersection in lue of a signal to help mitigate the degraded operations of this intersection. The City of Albuquerque may want to initiate a further study at this intersection to fully understand other mitigation strategies.

This intersection was run as a signalized intersection in existing conditions that shows the intersection operating at LOS A during both peak hours.

Table 2 2024 Existing Signalized Intersection Results						
Intersection	2024 AM Peak			2024 PM Peak		
	Delay	LOS	Max V/C	Delay	LOS	Max V/C
Carlisle and Claremont	7.9	A	0.545	11.4	B*	0.681
Eastbound Left	46.4	D	0.169	49.7	D	0.414
Eastbound Through/Right	47.4	D	0.545	50.1	D	0.681
Westbound Left	51.3	D	0.297	56.0	E	0.283
Westbound Through/Right	44.6	D	0.160	45.2	D	0.159
Northbound Left	2.9	A	0.231	4.3	A	0.322
Northbound Through/Right	2.0	A	0.235	4.5	A	0.350
Southbound Left	3.9	A	0.025	5.1	A	0.105
Southbound Through/Right	5.0	A	0.188	7.2	A	0.289
Carlisle and Menaul	34.2	C	0.792	43.5	D*	0.847
Eastbound Left	53.7	D	0.606	57.3	E	0.710
Eastbound Through/Right	29.3	C	0.451	38.5	D	0.692
Westbound Left	53.2	D	0.631	55.9	E	0.783
Westbound Through/Right	26.6	C	0.321	32.1	C	0.545
Northbound Left	52.2	D	0.792	60.0	E	0.847
Northbound Through/Right	33.2	C	0.500	51.4	D	0.712
Southbound Left	52.8	D	0.672	56.5	E	0.783
Southbound Through/Right	34.9	C	0.377	45.2	D	0.586
Carlisle and I-40 WB Ramp	21.2	C*	0.882	51.8	D**	1.099
Westbound Through/Left	39.7	D	0.386	40.4	D	0.486
Westbound Right	56.0	E	0.882	267.8	F	1.099
Northbound Left	48.1	D	0.829	59.1	E	0.835
Northbound Through	7.1	A	0.280	15.9	B	0.354
Southbound Through	12.7	B	0.225	25.1	C	0.411
Carlisle and I-40 EB Ramp	23.7	C	0.819	23.3	C*	0.811
Eastbound Left	44.1	D	0.819	50.5	D	0.794
Eastbound Through/Right	41.3	D	0.586	50.8	D	0.745
Northbound Through	10.0	B	0.172	11.2	B	0.244
Northbound Right	10.5	B	0.190	12.5	B	0.305
Southbound Left	54.1	D	0.695	57.0	E	0.811
Southbound Through	9.3	A	0.194	6.9	A	0.263
Carlisle & Phoenix Signalized Alternative	6.5	A	0.706	8.7	A	0.822
Eastbound Left	39.7	D	0.015	35.8	D	0.022
Eastbound Through/Right	45.4	D	0.706	41.1	D	0.822
Westbound Left	39.3	D	0.057	-	-	-
Westbound Through/Right	39.9	D	0.139	39.0	D	0.220
Northbound Left	2.8	A	0.133	4.0	A	0.288
Northbound Through/Right	3.9	A	0.197	5.5	A	0.311
Southbound Left	47.6	D	0.373	45.5	D	0.416
Southbound Through/Right	5.2	A	0.252	6.7	A	0.354
* Includes movements of LOS E						
** Includes movements of LOS F						

The existing unsignalized intersections operate with many existing movements at LOS E and LOS F during both peak hours. This can be attributed to the high volume of traffic on both Menaul and Carlisle since these roadways are classified as principal and minor arterials, respectively.

Carlisle & Phoenix experiences LOS E in the AM peak hour and LOS F in the PM peak hour. During the AM peak hour the westbound approach operates at LOS E. In the PM peak hour the eastbound approach, westbound approach, and northbound left all operate at LOS F.

Carlisle & Prospect experiences LOS F in the AM peak hour, where the eastbound and westbound approach operates at LOS F. In the PM peak hour, the overall intersection performs at LOS F. This is due to the eastbound approach, westbound approach, and northbound left all operating at LOS F.

Menaul & Bryn Mawr experiences LOS E in the AM peak hour, where the northbound left and southbound left operate at LOS E. In the PM peak hour, the eastbound left operates at LOS E, while the northbound left and southbound left operate at LOS F.

Menaul & Access 2, which is a full access intersection, experiences LOS E in the AM peak hour, where the southbound left operates at LOS E. In the PM peak hour, the southbound left operates at LOS F. There are no stripes on the southbound approach to this intersection, so it was modeled with a through/right lane and a dedicated left since there is enough room for this to occur in existing conditions.

Carlisle & Access 4, which is a full access intersection, experiences LOS F in the AM peak hour, where the eastbound approach operates at LOS F. In the PM peak hour, the eastbound approach, and the westbound approach operate at LOS F, while the southbound left operates at LOS E.

All other unsignalized intersections will have an overall operation at or above LOS C.

Table 3 Existing Unsignalized Intersection Results								
Intersection/Movement	2024 AM Peak				2024 PM Peak			
	Delay (sec)	V/C	Queue* (ft)	LOS	Delay (sec)	V/C	Queue* (ft)	LOS
Carlisle & Phoenix								
Eastbound Approach	17.5	0.21	25	C	2897.4	2.55	75	F
Westbound Approach	46.9	0.23	25	E	329.5	0.84	25	F
Northbound Left	18.1	0.25	25	C	64.7	0.74	25	F
Southbound Left	14.1	0.03	25	B	23.3	0.11	25	C
Carlisle & Prospect								
Eastbound Approach	91.5	0.67	125	F	3566.4	2.86	1100	F
Westbound Approach	345.5	0.89	175	F	3774.9	2.41	200	F
Northbound Left	23.1	0.41	75	C	72.5	0.7	150	F
Southbound Left	18.1	0.04	25	C	29.1	0.14	25	D
Carlisle & Cutler	No Results							
Menaul & Bryn Mawr								
Eastbound Left	16.4	0.14	25	C	42.4	0.47	75	E
Westbound Left	13.1	0.06	25	B	21.1	0.21	25	C
Northbound Left	45.0	0.13	25	E	418.9	0.14	25	F
Northbound Thru/Right	12.6	0.06	25	B	15.5	0.05	25	C
Southbound Left	48.8	0.09	25	E	2258.5	1.83	225	F
Southbound Thru/Right	17.4	0.15	25	C	30.9	0.47	75	D
Phoenix & American								
Westbound Approach	9.1	0.08	25	A	9.7	0.14	25	A
Southbound Approach	7.4	0.01	0	A	7.5	0.01	0	A
Menaul & Access 1								
Southbound Right	13.6	0.02	25	B	24.5	0.07	25	C
Menaul & Access 2								
Eastbound Left	15.4	0.08	25	C	20.5	0.12	25	C
Westbound Left	12.7	0.08	25	B	16.1	0.10	25	C
Southbound Left	39.9	0.09	25	E	115.1	0.46	75	F
Southbound Thru/Right	16.5	0.18	25	C	17.0	0.12	25	C
Carlisle & Access 3								
Eastbound Right	14.7	0.08	25	B	19.4	0.04	25	C
Carlisle & Access 4								
Eastbound Approach	53.7	0.16	25	F	193.1	0.29	50	F
Westbound Left	-	-	-	-	1835.0	1.32	125	F
Westbound Thru/Right	15.0	0.02	25	C	27.4	0.29	50	D
Northbound Left	17.4	0.03	25	C	30.3	0.05	25	D
Southbound Left	17.7	0.03	25	C	44.6	0.37	50	E
Phoenix & Access 5								
Eastbound Approach	7.6	0.00	-	A	7.6	0.01	-	A
Westbound Approach	7.4	0.00	-	A	7.6	0.00	-	A
Northbound Approach	11.1	0.01	-	B	10.8	0.01	-	B
Southbound Approach	10.7	0.08	25	B	11.3	0.10	25	B
* – HCM 95 th percentile queue rounded to next 25-foot increment								

Figure 3 | 2024 AM(PM) Existing Peak Hour Traffic Volumes

V. PROJECTED TRAFFIC

A. SITE TRAFFIC FORECASTING

1. TRIP GENERATION

Generated trips are broken down into three types; 1) primary, 2) pass-by trips, and 3) diverted link. The Trip Generation report defines these trips as follows:

- **Primary Trips** – These trips are made for the specific purpose of visiting the generator. The stop at that generator is the primary reason for the trip. For example, a home to shopping to home combination of trips is a primary trip set.
- **Pass-by Trips** – These trips are made as intermediate stops on the way from an origin to a primary trip generation. Pass-by trips are attracted from the traffic passing the site on an adjacent street that contains direct access to the generator site. These trips do not require a diversion from another roadway. For example, stopping at the store on the way home from work is an example of a pass-by trip.
- **Diverted Linked Trips** – These trips are attracted from the traffic volume on the roadway within the vicinity of the generator, but which require a diversion from that roadway to another roadway to gain access to the site. The roadways could include streets or freeways adjacent to the generator, but without access to the generator. For this study, the diverted link trips have been included in with the primary trips.

This study evaluates primary trips and pass-by trips.

The trip generation based on the 11th Edition of the Institute of Transportation engineer's (ITE) Trip Generation Manual is shown in Table 4 below with the following considerations. The trip generation is based on the peak hour of the adjacent street traffic. Mixed land use has included fast food restaurants, an automated car wash, and a strip retail plaza as determined in the scoping meetings to make use of the commercial site plan. As the preexisting American Furniture retail store, which is on the site today, is permanently closed and was demolished in June 2024, no current trip adjustments were needed since this business was closed prior to traffic counts. Driveways into the site are preexisting and will function as access points with the redevelopment.

Mentioned above, the inclusion of pass-by trips is made as an intermediate stop on the way from an origin to a primary destination with diversion only from Menaul or Carlisle.

The *Trip Generation Handbook* defines the 'Average Pass-by Trip Percentage' by land use type in the Handbook's Appendix F: Database on Pass-by, and Primary Trips. The database reports percentages for 25 land uses to derive pass-by estimates. For the purposes of this study, the pass-by percentage obtained from the *Trip Generation Handbook* was classified based on the fast-food development. The average pass-by rate used for this study was 50%. The relevance of these pass-by trips are isolated to the site's access driveway intersections, as it is these intersections that pull existing vehicles from the adjacent streets of Carlisle Blvd and Menaul Blvd.

A summary of the associated trips generated by this facility is shown in Table 4. The counts that were completed for this are included in Appendix D.

Table 4 Trip Generation					
ITE Land Use Type	SIZE (SF)	AM Enter	AM Exit	PM Enter	PM Exit
Commercial – Fast Food Restaurant 934	17,400	354	343	268	248
Commercial – Automated Car Wash 948	6,500	-	-	39	39
Commercial – Strip Retail Plaza (<40k) 822	30,000	42	29	99	99
Pass-By Trips	-	-173	-173	-134	-134
Total New Trips		223	199	272	252

2. TRIP DISTRIBUTION AND ASSIGNMENT

The standard trip distribution is determined utilizing a modified gravity model that considered a region-wide travel shed for employment trips. In this scenario standard traffic analysis assumes the trips in the peak hour to be primarily employment trips, so the destinations leaving for the AM trips are employment locations, with the origins at the site. In the PM peak hour, the generated trips are returning to the site, and the origins are the employment locations.

The gravity model utilized socioeconomic data obtained from the Mid-Region Council of Government (MRCOG), which included population and employment estimates for each subarea within the Metropolitan Planning jurisdiction to develop the trip distribution.

The socioeconomic utilized socioeconomic data from MRCOG 2016 to 2040 data set, as available from MRCOG.

Spreadsheets showing the development of the trip distribution are included in Appendix D. The trip distribution percentages and assigned traffic volumes is shown in Figure 4 and Figure 5.

3. TRAFFIC PROJECTIONS

The annual background growth rate is normally determined by analyzing the AADT volumes from the latest counts completed on nearby roadways. The Transportation Data Management System maintained by the NMDOT had the latest counts in 2022, so this data for the past 10 years was used along Menaul to determine the annual background growth rate. Due to significant variance on the background growth on Menaul in the vicinity of the site within the decade, the annual background traffic growth rate was averaged to be approximately 1%. This report will utilize this standard background growth rate of 1% to provide an estimate of potential future growth of traffic at all intersections evaluated. The growth rate determination and data are summarized in the spreadsheets included in Appendix D.

Figure 4 | Trip Assignment Percentages

Figure 5 | Trip Assignment Volumes

VI. TRAFFIC AND IMPROVEMENT ANALYSIS

The following section will discuss the results of the future year traffic analysis. The intersection capacity analysis was completed using HCS 2024, implementing the Highway Capacity Manual procedures.

1. 2026 NO BUILD INTERSECTION CAPACITY ANALYSIS

The 2026 No Build scenario assumed that the proposed Carlisle & Menaul development project is not included for the analysis, with the undeveloped site not affecting traffic patterns in the area. A summary of the results for the 2026 No Build scenario are shown in Table 5 And Table 6. The HCS outputs are included in Appendix E.

The signalized intersection of Carlisle & Claremont continues to operate at LOS A in the AM peak hour and LOS B in the PM peak hour. During the PM peak hour the westbound left movement remains operating at LOS E due to the operations of the signal and the high volume of competing movements.

Carlisle & Menaul continues to operate at overall acceptable conditions in both peak hours at LOS C in the AM peak hour and LOS D in the PM peak hour. During the PM peak hour the eastbound left, westbound left, northbound left, and southbound left will all continue to operate at LOS E.

The signalized intersections of Carlisle & I-40 WB will continue to operate at overall LOS C in the AM peak hour but will decline to LOS E in the PM peak hour. During the AM peak hour the westbound right turning movement will continue to operate at LOS E. This movement will continue to operate at LOS F during the PM peak hour. Additionally, the northbound left will continue to operate at LOS E during the PM peak hour.

Carlisle & I-40 EB intersection will continue to operate acceptably overall during both peak hours with LOS C. The southbound left will continue to operate at LOS E during the PM peak hour at the intersection.

Table 5 2026 No Build Signalized Intersection Results						
Intersection	2026 AM Peak			2026 PM Peak		
	Delay	LOS	Max V/C	Delay	LOS	Max V/C
Carlisle and Claremont	8.1	A	0.546	11.4	B*	0.681
Eastbound Left	46.2	D	0.169	49.5	D	0.416
Eastbound Through/Right	47.3	D	0.546	49.9	D	0.681
Westbound Left	51.3	D	0.302	56.0	E	0.288
Westbound Through/Right	44.4	D	0.157	44.9	D	0.156
Northbound Left	3.0	A	0.239	4.4	A	0.336
Northbound Through/Right	2.4	A	0.247	4.5	A	0.362
Southbound Left	3.9	A	0.026	5.2	A	0.112
Southbound Through/Right	5.1	A	0.196	7.5	A	0.302
Carlisle and Menaul	34.8	C	0.802	44.3	D*	0.855
Eastbound Left	53.6	D	0.613	57.2	E	0.717
Eastbound Through/Right	29.9	C	0.474	40.6	D	0.718
Westbound Left	53.0	D	0.644	56.4	E	0.793
Westbound Through/Right	26.9	C	0.343	32.6	C	0.558
Northbound Left	52.4	D	0.802	59.8	E	0.855
Northbound Through/Right	34.4	C	0.525	51.5	D	0.740
Southbound Left	52.7	D	0.676	56.2	E	0.788
Southbound Through/Right	35.1	D	0.398	46.4	D	0.617
Carlisle and I-40 WB Ramp	21.8	C*	0.888	62.1	E**	1.156
Westbound Through/Left	39.0	D	0.377	40.5	D	0.496
Westbound Right	58.0	E	0.888	358.8	F	1.156
Northbound Left	48.3	D	0.831	59.0	E	0.837
Northbound Through	8.0	A	0.297	16.1	B	0.370
Southbound Through	14.2	B	0.242	25.6	C	0.432
Carlisle and I-40 EB Ramp	23.9	C	0.822	23.6	C*	0.811
Eastbound Left	44.2	D	0.822	50.2	D	0.794
Eastbound Through/Right	40.9	D	0.583	50.2	D	0.745
Northbound Through	10.4	B	0.182	11.8	B	0.244
Northbound Right	10.9	B	0.197	13.1	B	0.305
Southbound Left	54.2	D	0.702	57.4	E	0.811
Southbound Through	9.9	A	0.205	7.7	A	0.263
Carlisle & Phoenix Signalized Alternative	6.5	A	0.714	8.7	A	0.824
Eastbound Left	39.7	D	0.015	35.7	D	0.022
Eastbound Through/Right	45.5	D	0.714	41.1	D	0.824
Westbound Left	39.3	D	0.057	-	-	-
Westbound Through/Right	39.9	D	0.139	38.8	D	0.222
Northbound Left	2.8	A	0.140	4.2	A	0.305
Northbound Through/Right	3.9	A	0.208	5.7	A	0.324
Southbound Left	47.6	D	0.373	45.5	D	0.416
Southbound Through/Right	5.3	A	0.262	6.9	A	0.369

Continuing on from the existing scenario, the 2026 No Build unsignalized intersections operate with many existing movements at LOS E and LOS F during both peak hours. This can again be tied to the high volume of traffic on both Menaul and Carlisle since these roadways are classified as principal and minor arterials, respectively.

Carlisle & Phoenix experiences LOS F in both the AM and PM peak hour. During the AM peak hour the westbound approach operates at LOS F. In the PM peak hour, the eastbound approach, and northbound left will operate at LOS F. As a signal warrant was completed for this intersection in existing conditions and warrants a traffic signal, this was again analyzed in both signalized and unsignalized conditions. In signalized conditions both peak hours will operate at LOS A.

Carlisle & Prospect experiences LOS F in the AM peak hour, where the eastbound and westbound approach operates at LOS F. In the PM peak hour the intersection will operate at LOS F with the eastbound approach, westbound approach, and northbound left all operating at LOS F, while the southbound left operates at LOS E.

Menaul & Bryn Mawr experiences overall LOS F in the AM peak hour, where the northbound left and southbound left operate at LOS E and LOS F, respectively. In the PM peak hour, the eastbound left operates at LOS E, while the northbound left and southbound left operate at LOS F.

Menaul & Access 2 experiences LOS E in the AM peak hour, where the southbound left operates at LOS E. In the PM peak hour, the intersection operates at LOS F due to the southbound left operating at LOS F.

Carlisle & Access 4 experiences LOS F in the AM peak hour, where the eastbound approach operates at LOS F. In the PM peak hour the intersection also operates at LOS F due to the eastbound approach, westbound approach, and the southbound left operating at LOS F.

All other unsignalized intersections continue to have an overall operation at or above LOS D.

Table 6 2026 No Build Unsignalized Intersection Results								
	2026 AM Peak				2026 PM Peak			
Intersection/Movement	Delay (sec)	V/C	Queue* (ft)	LOS	Delay (sec)	V/C	Queue* (ft)	LOS
Carlisle & Phoenix								
Eastbound Approach	18.3	0.23	25	C	1830.7	1.96	1500	F
Westbound Approach	55.5	0.27	50	F	0	-	-	
Northbound Left	19.1	0.27	50	C	86.5	0.81	225	F
Southbound Left	14.7	0.03	25	B	24.8	0.11	25	C
Carlisle & Prospect								
Eastbound Approach	29.7	0.91	25	F	10290	6.49	1425	F
Westbound Approach	3732.1	2.93	50	F	47009	25.65	925	F
Northbound Left	24.5	0.43	25	C	86.1	0.74	175	F
Southbound Left	20.9	0.15	25	C	43.7	0.42	50	E
Carlisle & Cutler	No Results							
Menaul & Bryn Mawr								
Eastbound Left	17.0	0.15	25	C	46.7	0.50	75	E
Westbound Left	13.3	0.06	25	B	21.9	0.22	25	C
Northbound Left	48.7	0.14	25	E	533.8	0.17	25	F
Northbound Thru/Right	12.8	0.06	25	B	15.8	0.05	25	C
Southbound Left	52.8	0.1	25	F	2959.7	2.17	250	F
Southbound Thru/Right	18.0	0.15	25	c	33.2	0.50	75	D
Phoenix & American								
Westbound Approach	9.1	0.08	25	A	9.4	0.14	25	A
Southbound Approach	7.4	0.01	0	A	7.5	0.01	25	A
Menaul & Access 1								
Southbound Right	13.9	0.02	25	B	25.4	0.07	25	D
Menaul & Access 2								
Eastbound Left	15.8	0.09	25	C	21.3	0.13	25	C
Westbound Left	13.0	0.09	25	B	16.5	0.11	25	C
Southbound Left	43.0	0.1	25	E	134.7	0.50	75	F
Southbound Thru/Right	17.0	0.19	25	C	17.5	0.13	25	C
Carlisle & Access 3								
Eastbound Right	15.1	0.09	25	C	20.1	0.04	25	C
Carlisle & Access 4								
Eastbound Approach	61.4	0.18	25	F	592.1	0.61	75	F
Westbound Left	-	-	-	-	2713.9	1.70	150	F
Westbound Thru/Right	15.5	0.02	25	C	29.3	0.32	50	D
Northbound Left	18.2	0.03	25	C	32.4	0.06	25	D
Southbound Left	18.6	0.04	25	C	50.9	0.41	50	F
Phoenix & Access 5								
Eastbound Approach	7.7	0.00	-	A	7.6	0.01	-	A
Westbound Approach	7.4	0.00	-	A	7.6	0.00	-	A
Northbound Approach	11.2	0.01	-	B	10.9	0.01	-	B
Southbound Approach	10.8	0.08	25	B	11.3	0.1	25	B
* - HCM 95 th percentile queue rounded to next 25-foot increment								

Figure 6 | 2026 AM(PM) No Build Peak Hour Traffic Volumes

2. 2026 BUILD INTERSECTION CAPACITY ANALYSIS

The additional trips generated by the Carlisle & Menaul development (Table 4) were assigned to the intersections using the trip percentages and associated volumes shown in Figure 4 and Figure 5. These trips were added to the 2026 No Build traffic projections. A summary of the 2026 Build operational analysis is shown in Table 7 and Table 8. The individual intersection output is included in Appendix F.

The Build scenario finds that the signalized intersections continue to operate at a generally overall acceptable level of service in most peak hours, save for the intersection of Carlisle & I-40 WB, which would operate at a LOS E in the PM peak hour.

The signalized intersection of Carlisle & Claremont continues to operate at LOS A in the AM peak hour and LOS B in the PM peak hour. During the PM peak hour the westbound left movement remains operating at LOS E due to the operations of the signal and the high volume of competing movements.

Carlisle & Menaul will operate at overall acceptable conditions in both peak hours at LOS D during both AM and PM peak hours. During the AM peak hour, the northbound left will decline to LOS E. During the PM peak hour, the eastbound left, westbound left, and southbound left will all operate at LOS E, while the northbound left will operate at LOS F. As the decline in the peak hours for the northbound left occurred during the build scenario, a very small signal timing adjustment was made to improve the northbound left to LOS D, which makes all movements at LOS D or better for the AM and PM peak hour.

The signalized intersections of Carlisle & I-40 WB will continue to operate at overall LOS C in the AM peak hour and LOS E in the PM peak hour. During the AM peak hour the westbound right turning movement will continue to operate at LOS E. This movement will continue to operate at LOS F during the PM peak hour. Additionally, the northbound left will continue to operate at LOS E during the PM peak hour. The development is adding 7% of traffic to the westbound movement in the AM peak hour and 5% of traffic during the PM peak hour. The development team should not be responsible for mitigation strategies since this also was an existing condition.

Carlisle & I-40 EB intersection will continue to operate acceptably overall during both peak hours with LOS C. The southbound left will continue to operate at LOS E during the PM peak hour at the intersection.

Table 7 2026 Build Signalized Intersection Results						
Intersection	2026 AM Peak			2026 PM Peak		
	Delay	LOS	Max V/C	Delay	LOS	Max V/C
Carlisle and Claremont	7.7	A	0.538	11.0	B*	0.669
Eastbound Left	56.8	D	0.165	48.9	D	0.405
Eastbound Through/Right	56.9	D	0.538	49.3	D	0.669
Westbound Left	51.1	D	0.322	55.8	E	0.317
Westbound Through/Right	4.0	D	0.152	44.4	D	0.151
Northbound Left	3.1	A	0.254	4.8	A	0.360
Northbound Through/Right	1.9	A	0.263	3.8	A	0.381
Southbound Left	4.1	A	0.027	5.4	A	0.117
Southbound Through/Right	5.4	A	0.209	7.9	A	0.318
Carlisle and Menaul	36.5	D*	0.845	48.6	D**	0.968
Eastbound Left	53.6	D	0.613	57.2	E	0.717
Eastbound Through	29.7	C	0.472	40.2	D	0.723
Eastbound Right	30.0	C	0.477	40.8	D	0.723
Westbound Left	53.0	D	0.644	56.4	E	0.793
Westbound Through	26.3	C	0.366	31.5	C	0.599
Westbound Right	27.6	C	0.381	34.0	C	0.601
Northbound Left	57.3	E	0.845	94.7	F	0.968
Northbound Through	35.6	D	0.541	50.5	D	0.752
Northbound Right	36.0	D	0.543	53.1	D	0.752
Southbound Left	51.7	D	0.726	60.4	E	0.822
Southbound Through	34.1	C	0.423	44.8	D	0.665
Southbound Right	37.3	D	0.429	50.2	D	0.668
Carlisle and Menaul – Timing Optimized	36.2	D	0.731	37.8	D	0.841
Eastbound Left	53.6	D	0.613	42.6	D	0.673
Eastbound Through	29.7	C	0.472	41.4	D	0.818
Eastbound Right	30.0	C	0.477	42.5	D	0.818
Westbound Left	53.0	D	0.644	41.0	D	0.735
Westbound Through	26.3	C	0.366	27.8	C	0.666
Westbound Right	27.6	C	0.381	31.5	C	0.668
Northbound Left	49.9	D	0.731	43.5	D	0.828
Northbound Through	35.6	D	0.541	37.9	D	0.841
Northbound Right	36.0	D	0.543	47.1	D	0.841
Southbound Left	51.7	D	0.726	49.1	D	0.784
Southbound Through	35.8	D	0.450	31.4	C	0.793
Southbound Right	39.4	D	0.456	38.6	D	0.796
Carlisle and I-40 WB Ramp	23.1	C	0.896	74.7	E	1.215
Westbound Through/Left	37.9	D	0.350	40.5	D	0.496
Westbound Right	60.9	E	0.896	459.1	F	1.215
Northbound Left	49.0	D	0.830	58.8	E	0.838
Northbound Through	9.2	A	0.318	16.3	B	0.391
Southbound Through	16.6	B	0.256	28.2	C	0.443
Carlisle and I-40 EB Ramp	24.0	C	0.827	23.8	C	0.818
Eastbound Left	44.3	D	0.827	49.8	D	0.807
Eastbound Through/Right	39.6	D	0.523	49.2	D	0.707
Northbound Through	10.9	B	0.193	12.5	B	0.271
Northbound Right	11.4	B	0.200	13.7	B	0.321
Southbound Left	54.1	D	0.710	57.0	E	0.818
Southbound Through	10.3	B	0.210	8.0	A	0.283

Carlisle & Phoenix Signalized Alternative	9.2	A	0.601	9.9	A	0.844
Eastbound Left	34.9	C	0.264	34.6	C	0.142
Eastbound Through/Right	39.6	D	0.601	40.0	D	0.844
Westbound Left	38.8	D	0.054	0.0	-	0.000
Westbound Through/Right	40.0	D	0.143	39.7	D	0.250
Northbound Left	4.3	A	0.253	5.5	A	0.463
Northbound Through	5.2	A	0.214	6.1	A	0.336
Northbound Right	5.4	A	0.214	6.5	A	0.336
Southbound Left	47.6	D	0.373	45.5	D	0.416
Southbound Through	7.4	A	0.287	7.9	A	0.387
Southbound Right	6.2	A	0.064	6.1	A	0.080

Continuing on from the no build scenario, the 2026 Build unsignalized intersections operate with many existing movements at LOS E and LOS F during both peak hours. Due to the nature of this infill development, this can again be tied to the high volume of traffic on both Menaul and Carlisle since these roadways are classified as principal and minor arterials, respectively.

Carlisle & Phoenix continues to experience LOS F in both the AM and PM peak hour. During the AM peak hour the eastbound and westbound approach operates at LOS F. In the PM peak hour, the northbound left will operate at LOS F. For the eastbound and westbound approach in the PM peak hour, the analysis program could not calculate delay and level of service due to the large delay that will be seen due to the volume of vehicles on Carlisle Boulevard. In signalized conditions both peak hours will operate acceptably at LOS A, and thus the City of Albuquerque should monitor this intersection to determine if a traffic signal should be installed.

Carlisle & Prospect experiences LOS F in the AM peak hour, where the eastbound and westbound approach operates at LOS F. In the PM peak hour the intersection will operate at LOS F with the eastbound approach, westbound approach, northbound left, and southbound left all operating at LOS F.

Menaul & Bryn Mawr experiences overall LOS F in the AM peak hour, where the northbound left and southbound left operate at LOS F. In the PM peak hour, the eastbound left, northbound left, and southbound left all continue to operate at LOS F.

Menaul & Access 2 operates at LOS C during the AM peak hour, and at LOS D during the PM peak hour. The southbound left operates at LOS F during both peak periods.

Carlisle & Access 4 operates at LOS C, where all movements operate at LOS C. In the PM peak hour the intersection also operates at LOS F due to the westbound left and southbound left continuing to operate at LOS F, similarly to the no build conditions. In implementing the development build out, an alternative analysis widened this access point to allow a dedicated eastbound left turn lane with a through/right lane. This analysis showed that the delay would still be very high, although right turning vehicle delay is substantially lowered. Due to the consideration of vulnerable roadway users,

this alternative will not be considered for this access point due to longer crossings for pedestrians and bicycles.

All other unsignalized intersections continue to have an overall operation at or above LOS D.

Table 8 2026 Build Unsignalized Intersection Results								
Intersection/Movement	2026 AM Peak				2026 PM Peak			
	Delay (sec)	V/C	Queue* (ft)	LOS	Delay (sec)	V/C	Queue* (ft)	LOS
Carlisle & Phoenix								
Eastbound Approach	2935.1	2.56	1650	F	-	-	-	-
Westbound Approach	127.3	0.47	75	F	-	-	-	-
Northbound Left	26.7	0.49	75	D	639.5	1.30	950	F
Southbound Left	14.3	0.03	25	B	25.0	0.11	25	C
Carlisle & Prospect								
Eastbound Approach	742.6	1.27	425	F	23998.7	13.87	1525	F
Westbound Approach	5548.1	3.90	1050	F	113565.5	60.67	950	F
Northbound Left	28.0	0.47	75	D	128.8	0.84	225	F
Southbound Left	23.1	0.17	25	C	54.0	0.48	75	F
Carlisle & Cutler	No Results							
Menaul & Bryn Mawr								
Eastbound Left	17.4	0.16	25	C	50.8	0.54	100	F
Westbound Left	13.5	0.06	25	B	22.5	0.23	25	C
Northbound Left	52.2	0.15	25	F	655.3	0.20	25	F
Northbound Thru/Right	12.9	0.06	25	B	16.0	0.05	25	C
Southbound Left	55.8	0.10	25	F	3617.2	2.49	275	F
Southbound Thru/Right	18.4	0.17	25	C	34.7	0.52	100	D
Phoenix & American								
Westbound Approach	9.2	0.12	25	A	9.9	0.19	25	A
Southbound Approach	7.4	0.01	0	A	7.5	0.02	0	A
Menaul & Access 1								
Southbound Right	14.0	0.03	25	B	26.5	0.10	25	D
Menaul & Access 2								
Eastbound Left	20.8	0.27	50	C	30.1	0.34	50	D
Westbound Left	12.7	0.08	25	B	16.2	0.11	25	C
Southbound Left	182.9	0.76	150	F	1773.4	1.81	475	F
Southbound Thru/Right	26.3	0.52	100	D	25.8	0.42	50	D
Carlisle & Access 3								
Eastbound Right	18.4	0.25	50	C	30.6	0.36	50	D
Carlisle & Access 4								
Eastbound Approach	22.6	0.41	75	C	76.1	0.78	225	F
Westbound Left	-	-	-	-	11886.7	5.48	175	F
Westbound Thru/Right	15.6	0.02	25	C	31.2	0.33	50	D
Southbound Left	18.7	0.04	25	C	57.3	0.45	75	F
Carlisle & Access 4 Build								
Eastbound Left	1690.1	1.75	425	F	107640.7	55.6	600	F
Eastbound Thru/Right	34.7	0.54	100	D	76.1	0.78	200	F
Westbound Left	-	-	-	-	121296.2	50.11	200	F
Westbound Thru/Right	15.5	0.02	25	C	29.7	0.32	50	D
Northbound Left	27.6	0.40	75	D	152.8	0.87	250	F
Southbound Left	18.5	0.04	25	C	52.0	0.42	75	F
Phoenix & Access 5								
Eastbound Approach	7.7	0.00	0	A	7.6	0.01	0	A
Westbound Approach	7.5	0.05	25	A	7.8	0.06	25	A
Northbound Approach	11.9	0.13	25	B	13.2	0.17	25	B
Southbound Approach	12.7	0.10	25	B	13.9	0.14	25	B
* – HCM 95 th percentile queue rounded to next 25-foot increment								

Figure 7 | 2026 AM(PM) Build Peak Hour Traffic Volumes

3. 2036 HORIZON YEAR NO BUILD INTERSECTION CAPACITY ANALYSIS

A 10-year Horizon capacity analysis was requested by the NMDOT and City of Albuquerque to determine long term traffic effects of newly established developments within the area for future network considerations.

The 2036 No Build scenario assumes that the proposed Carlisle & Menaul development is not built and therefore will not be included for this analysis. Table 9 and Table 10 shows the 2036 No Build results. The HCS output is included in Appendix G.

In the 2036 No Build scenario, the signalized intersection of Carlisle & Claremont continues to operate at LOS A in the AM peak hour and LOS B in the PM peak hour. During the PM peak hour the westbound left movement remains operating at LOS E due to the operations of the signal and the high volume of competing movements.

Carlisle & Menaul continues to operate at overall acceptable conditions in both peak hours at LOS D. During the PM peak hour the eastbound left, westbound left, northbound left, and southbound left will all continue to operate at LOS E.

The signalized intersections of Carlisle & I-40 WB will continue to operate at overall LOS C in the AM peak hour but will decline to LOS E in the PM peak hour. During the AM peak hour the westbound right turning movement will continue to operate at LOS E. This movement will continue to operate at LOS F during the PM peak hour. Additionally, the northbound left will continue to operate at LOS E during the PM peak hour.

Carlisle & I-40 EB intersection will continue to operate acceptably overall during both peak hours with LOS C. The southbound left will continue to operate at LOS E during the PM peak hour at the intersection.

Table 9 2036 Horizon Year No Build Signalized Intersection Results						
Intersection	2036 AM Peak			2036 PM Peak		
	Delay	LOS	Max V/C	Delay	LOS	Max V/C
Carlisle and Claremont	8.4	A	0.554	11.9	B*	0.693
Eastbound Left	45.7	D	0.179	48.7	D	0.432
Eastbound Through/Right	46.6	D	0.554	49.0	D	0.693
Westbound Left	51.1	D	0.321	55.8	E	0.306
Westbound Through/Right	43.7	D	0.165	43.8	D	0.162
Northbound Left	3.2	A	0.281	5.1	A	0.401
Northbound Through/Right	2.8	A	0.274	4.8	A	0.400
Southbound Left	4.3	A	0.031	5.9	A	0.135
Southbound Through/Right	5.8	A	0.220	8.6	A	0.339
Carlisle and Menaul	35.9	D	0.823	47.2	D*	0.873
Eastbound Left	56.4	D	0.625	57.0	E	0.736
Eastbound Through/Right	31.4	C	0.526	47.1	D	0.805
Westbound Left	52.8	D	0.659	58.3	E	0.809
Westbound Through/Right	27.8	C	0.379	34.9	C	0.620
Northbound Left	52.2	D	0.823	58.7	E	0.873
Northbound Through/Right	36.4	D	0.582	56.0	E	0.814
Southbound Left	52.1	D	0.693	58.0	E	0.803
Southbound Through/Right	36.4	D	0.446	50.0	D	0.691
Carlisle and I-40 WB Ramp	23.5	C	0.899	85.0	F	1.272
Westbound Through/Left	37.7	D	0.381	41.5	D	0.544
Westbound Right	62.3	E	0.899	557.2	F	1.272
Northbound Left	48.5	D	0.841	59.0	E	0.847
Northbound Through	9.8	A	0.334	16.7	B	0.407
Southbound Through	17.2	B	0.282	29.2	C	0.489
Carlisle and I-40 EB Ramp	24.5	C	0.833	24.4	C	0.826
Eastbound Left	44.3	D	0.833	49.4	D	0.809
Eastbound Through/Right	39.7	D	0.591	49.3	D	0.745
Northbound Through	11.7	B	0.208	13.5	B	0.295
Northbound Right	12.3	B	0.224	15.1	B	0.362
Southbound Left	54.3	D	0.717	56.8	E	0.826
Southbound Through	11.3	B	0.231	8.9	A	0.309
Carlisle & Phoenix Signalized Alternative	6.8	A	0.741	9.4	A	0.835
Eastbound Left	39.4	D	0.014	34.7	C	0.020
Eastbound Through/Right	45.7	D	0.741	40.5	D	0.835
Westbound Left	38.9	D	0.064	-	-	-
Westbound Through/Right	39.5	D	0.146	37.9	D	0.209
Northbound Left	3.1	A	0.163	5.1	A	0.367
Northbound Through/Right	4.2	A	0.230	6.4	A	0.364
Southbound Left	47.2	D	0.377	45.3	D	0.426
Southbound Through/Right	5.7	A	0.291	7.7	A	0.413

Continuing on from the previous scenarios, the 2036 Horizon Year No Build unsignalized intersections will see many LOS E and LOS F movements that are caused from the high volume on Carlisle and Menaul that will only increase based on the growth rates seen historically.

Carlisle & Phoenix continues to experience LOS F in both the AM and PM peak hour. During the AM peak hour the westbound approach operates at LOS F. In the PM peak hour, the eastbound approach, westbound approach, and northbound left will operate at LOS F. For the eastbound and westbound approach in the PM peak hour, the analysis program could not calculate delay and level of service due to the large delay that will be seen due to the volume of vehicles on Carlisle Boulevard. In signalized conditions both peak hours will continue to operate at LOS A, and thus the City of Albuquerque should monitor this intersection to determine if a traffic signal should be installed.

Carlisle & Prospect will continue to experience LOS F in the AM peak hour, where the eastbound and westbound approach operates at LOS F. In the PM peak hour the intersection will operate at LOS F with the eastbound approach, westbound approach, northbound left, and southbound left all operating at LOS F. For the eastbound and westbound approach in the PM peak hour, the analysis program could not calculate delay and level of service due to the large delay that will be seen due to the volume of vehicles on Carlisle Boulevard.

Menaul & Bryn Mawr continues to experience overall LOS F in the AM peak hour, where the northbound left and southbound left operate at LOS F. In the PM peak hour, the eastbound left, northbound left, and southbound left all continue to operate at LOS F. The southbound through/right will also operate at LOS E during the PM peak hour.

Menaul & Access 2 continues to operate at LOS F in the AM and PM peak hour, where the southbound left operates at LOS F during both peak hours.

Carlisle & Access 4 continues to experience LOS F in the AM peak hour, where the eastbound approach operates at LOS F. In the PM peak hour the intersection also operates at LOS F due to the eastbound approach, westbound left, and the southbound left continuing to operate at LOS F similarly to the no build conditions. The PM peak hour also sees the westbound through/right and northbound left operate at LOS E.

All other unsignalized intersections continue to have an overall operation at or above LOS C.

Table D 2036 Horizon Year No Build Unsignalized Intersection Results								
	2036 AM Peak				2036 PM Peak			
Intersection/Movement	Delay (sec)	V/C	Queue* (ft)	LOS	Delay (sec)	V/C	Queue* (ft)	LOS
Carlisle & Phoenix								
Eastbound Approach	21.2	0.28	50	C	-	-	-	-
Westbound Approach	92.6	0.42	75	F	-	-	-	-
Northbound Left	22.5	0.33	50	C	294.3	1.06	500	F
Southbound Left	15.9	0.03	25	C	29.8	0.15	25	D
Carlisle & Prospect								
Eastbound Approach	2008.7	1.99	700	F	-	-	-	-
Westbound Approach	9356.4	5.97	1275	F	-	-	-	-
Northbound Left	32.4	0.54	100	D	266.3	1.01	375	F
Southbound Left	24.6	0.20	25	C	68.0	0.57	100	F
Carlisle & Cutler	No Results							
Menaul & Bryn Mawr								
Eastbound Left	19.2	0.19	25	C	81.2	0.68	150	F
Westbound Left	14.3	0.07	25	B	26.3	0.28	50	D
Northbound Left	68.7	0.21	25	F	2216.9	0.53	50	F
Northbound Thru/Right	13.4	0.08	25	B	17.0	0.06	25	C
Southbound Left	73.7	0.15	25	F	10859.6	6.05	350	F
Southbound Thru/Right	20.6	0.19	25	C	47.4	0.63	125	E
Phoenix & American								
Westbound Approach	9.2	0.09	25	A	9.9	0.16	25	A
Southbound Approach	7.4	0.01	0	A	7.5	0.02	0	A
Menaul & Access 1								
Southbound Right	14.7	0.03	25	B	23.2	0.06	150	C
Menaul & Access 2								
Eastbound Left	17.5	0.11	25	C	25.0	0.17	25	C
Westbound Left	13.8	0.10	25	B	18.4	0.14	25	C
Southbound Left	56.2	0.14	25	F	333.6	0.81	150	F
Southbound Thru/Right	19.1	0.24	25	C	19.3	0.16	25	C
Carlisle & Access 3								
Eastbound Right	16.2	0.10	25	C	22.5	0.05	25	C
Carlisle & Access 4								
Eastbound Approach	93.0	0.27	50	F	76.2	0.15	25	F
Westbound Left	-	-	-	-	8811.0	4.35	175	F
Westbound Thru/Right	16.7	0.02	25	C	37.3	0.40	50	E
Northbound Left	20.4	0.04	25	C	40.2	0.08	25	E
Southbound Left	21.0	0.05	25	C	82.1	0.57	100	F
Phoenix & Access 5								
Eastbound Approach	7.7	0.01	0	A	7.7	0.01	0	A
Westbound Approach	7.4	0.00	0	A	7.6	0.00	0	A
Northbound Approach	11.5	0.01	0	B	11.2	0.01	0	B
Southbound Approach	11.1	0.09	25	B	11.8	0.12	25	B
* – HCM 95 th percentile queue rounded to next 25-foot increment								

Figure 8 | 2036 AM(PM) No Build Peak Hour Traffic Volumes

4. 2036 HORIZON YEAR BUILD INTERSECTION CAPACITY ANALYSIS

The addition of trips generated by the Carlisle & Menaul Development (Table 4) were assigned to the intersections using the trip percentages and associated volumes shown in Figure 4 and Figure 5. These trips were added to the 2036 No Build traffic projections. A summary of the 2036 Build capacity analysis is shown in Table 10 and Table 11 and the full individual intersection output is included in Appendix H.

In the 2036 Build scenario, the signalized intersection of Carlisle & Claremont continues to operate at LOS A in the AM peak hour and LOS B in the PM peak hour. During the PM peak hour the westbound left movement remains operating at LOS E due to the operations of the signal and the high volume of competing movements.

Carlisle & Menaul continues to operate at overall acceptable conditions in both peak hours at LOS D. During the AM peak hour the northbound left operates at a LOS E. During the PM peak hour the eastbound left, westbound left, northbound right, and southbound left will all operate at LOS E, while the northbound left operates at LOS F.

The signalized intersections of Carlisle & I-40 WB will continue to operate at overall LOS C in the AM peak hour but will decline to LOS F in the PM peak hour. During the AM peak hour the westbound right turning movement will continue to operate at LOS E. This movement will continue to operate at LOS F during the PM peak hour. Additionally, the northbound left will continue to operate at LOS E during the PM peak hour.

Carlisle & I-40 EB intersection will continue to operate acceptably overall during both peak hours with LOS C. The southbound left will continue to operate at LOS E during the PM peak hour at the intersection.

Table 10 2036 Horizon Year Build Signalized Intersection Results						
Intersection	2036 AM Peak			2036 PM Peak		
	Delay	LOS	Max V/C	Delay	LOS	Max V/C
Carlisle and Claremont	7.9	A	0.548	11.4	B*	0.679
Eastbound Left	45.2	D	0.174	48.0	D	0.418
Eastbound Through/Right	46.2	D	0.548	48.3	D	0.679
Westbound Left	51.0	D	0.341	55.6	E	0.338
Westbound Through/Right	43.2	D	0.159	43.1	D	0.156
Northbound Left	3.5	A	0.300	5.5	A	0.427
Northbound Through/Right	1.9	A	0.292	3.8	A	0.421
Southbound Left	4.4	A	0.032	6.1	A	0.141
Southbound Through/Right	6.0	A	0.233	9.1	A	0.358
Carlisle and Menaul	37.6	D*	0.869	54.7	D**	1.021
Eastbound Left	53.4	D	0.625	57.0	E	0.734
Eastbound Through	31.2	C	0.525	46.5	D	0.809
Eastbound Right	31.5	C	0.529	47.4	D	0.810
Westbound Left	52.8	D	0.659	58.3	E	0.809
Westbound Through	27.1	C	0.404	33.4	C	0.663
Westbound Right	28.5	C	0.417	36.6	D	0.663
Northbound Left	55.6	E	0.869	138.2	F	1.021
Northbound Through	37.7	D	0.602	53.0	D	0.830
Northbound Right	38.6	D	0.603	58.0	E	0.830
Southbound Left	51.7	D	0.738	62.0	E	0.835
Southbound Through	35.2	D	0.474	46.8	D	0.732
Southbound Right	38.9	D	0.480	53.4	D	0.734
Carlisle and Menaul – Timing Optimized	36.5	D	0.819	47.4	D	0.905
Eastbound Left	53.4	D	0.630	56.6	E	0.719
Eastbound Through	34.2	C	0.566	53.3	D	0.855
Eastbound Right	34.7	C	0.570	54.7	D	0.855
Westbound Left	53.0	D	0.669	65.5	E	0.821
Westbound Through	29.5	C	0.435	36.2	D	0.702
Westbound Right	31.2	C	0.449	40.3	D	0.703
Northbound Left	49.0	D	0.819	37.2	D	0.905
Northbound Through	35.0	C	0.561	45.3	D	0.829
Northbound Right	35.3	D	0.562	49.1	D	0.829
Southbound Left	51.6	D	0.736	62.2	E	0.836
Southbound Through	32.9	C	0.447	47.5	D	0.749
Southbound Right	33.6	C	0.452	54.3	D	0.751
Carlisle and I-40 WB Ramp	24.8	C	0.907	99.5	F	1.331
Westbound Through/Left	36.7	D	0.357	41.5	D	0.544
Westbound Right	65.2	E	0.907	661.3	F	1.331
Northbound Left	49.2	D	0.841	58.8	E	0.847
Northbound Through	11.0	B	0.356	16.6	B	0.428
Southbound Through	19.8	B	0.298	30.3	C	0.471
Carlisle and I-40 EB Ramp	24.7	C	0.837	24.8	C	0.824
Eastbound Left	44.5	D	0.837	49.6	D	0.816
Eastbound Through/Right	39.2	D	0.577	48.3	D	0.718
Northbound Through	12.2	B	0.220	13.9	B	0.307
Northbound Right	12.8	B	0.227	15.4	B	0.364
Southbound Left	54.1	D	0.725	56.9	E	0.824
Southbound Through	11.8	B	0.237	10.0	A	0.302

Carlisle & Phoenix Signalized Alternative	9.3	A	0.644	10.6	B	0.853
Eastbound Left	34.9	C	0.269	33.7	C	0.133
Eastbound Through/Right	40.1	D	0.644	39.5	D	0.853
Westbound Left	38.7	D	0.063	0.0	-	0.000
Westbound Through/Right	40.1	D	0.161	38.7	D	0.231
Northbound Left	4.6	A	0.288	7.0	A	0.544
Northbound Through	5.4	A	0.237	6.9	A	0.377
Northbound Right	5.6	A	0.237	7.3	A	0.377
Southbound Left	47.2	D	0.377	45.3	D	0.426
Southbound Through	7.6	A	0.316	8.7	A	0.433
Northbound Right	6.3	A	0.065	6.5	A	0.085

Continuing on from the 2036 no build scenario, the 2036 Build unsignalized intersections operate with many existing movements at LOS E and LOS F during both peak hours. Due to the nature of this infill development, this can again be tied to the high volume of traffic on both Menaul and Carlisle since these roadways are classified as principal and minor arterials, respectively.

Carlisle & Phoenix continues to experience LOS F in both the AM and PM peak hour. During the AM peak hour the eastbound and westbound approach operates at LOS F. In the PM peak hour, the northbound left will operate at LOS F. For the eastbound and westbound approach in the PM peak hour, the analysis program could not calculate delay and level of service due to the large delay that will be seen due to the volume of vehicles on Carlisle Boulevard. In signalized conditions both peak hours will operate acceptably at LOS B or better, and thus the City of Albuquerque should monitor this intersection to determine if a traffic signal should be installed.

Carlisle & Prospect experiences LOS F in the AM peak hour, where the eastbound and westbound approach operates at LOS F. Additionally the northbound left declines to LOS E in the AM peak hour. In the PM peak hour the intersection will operate at LOS F with the eastbound approach, westbound approach, northbound left, and southbound left all operating at LOS F. For the eastbound and westbound approach in the PM peak hour, the analysis program could not calculate delay and level of service due to the large delay that will be seen due to the volume of vehicles on Carlisle Boulevard.

Menaul & Bryn Mawr experiences overall LOS F in the AM peak hour, where the northbound left and southbound left operate at LOS F. In the PM peak hour, the eastbound left, northbound left, southbound left, and southbound through/right all continue to operate at LOS F.

Menaul & Access 2 operates at LOS C during the AM peak hour, and at LOS E during the PM peak hour. The operational deterioration can be contributed to the southbound left, which operates at LOS F during both peak periods.

Carlisle & Access 4 experiences LOS D in the AM peak hour. In the PM peak hour the intersection operates at LOS F due to westbound through/right movement operating at LOS E, and the eastbound approach, westbound left, and the southbound left, continuing to operate at LOS F similarly to the no build conditions.

All other unsignalized intersections continue to have an overall operation at or above LOS D.

Table 11 2036 Horizon Year Build Unsignalized Intersection Results								
	2036 AM Peak				2036 PM Peak			
Intersection/Movement	Delay (sec)	V/C	Queue* (ft)	LOS	Delay (sec)	V/C	Queue* (ft)	LOS
Carlisle & Phoenix								
Eastbound Approach	6157.2	4.32	2100	F	-	-	-	-
Westbound Approach	431.3	0.88	150	F	-	-	-	-
Northbound Left	35.5	0.59	125	E	1294.4	1.67	1475	F
Southbound Left	15.5	0.03	25	C	30.0	0.15	25	D
Carlisle & Prospect								
Eastbound Approach	3852.3	2.98	850	F	-	-	-	-
Westbound Approach	14015.0	8.47	1350	F	-	-	-	-
Northbound Left	38.7	0.59	125	E	439.1	1.13	475	F
Southbound Left	27.5	0.22	25	D	91.9	0.65	125	F
Carlisle & Cutler	No Results							
Menaul & Bryn Mawr								
Eastbound Left	19.7	0.20	25	C	91.1	0.72	150	F
Westbound Left	14.5	0.07	25	B	27.1	0.29	50	D
Northbound Left	75.0	0.23	25	F	3075.3	0.69	50	F
Northbound Thru/Right	13.5	0.08	25	B	17.3	0.06	25	C
Southbound Left	78.8	0.16	25	F	13357.6	7.25	350	F
Southbound Thru/Right	21.1	0.20	25	C	51.3	0.65	150	F
Phoenix & American								
Westbound Approach	9.3	0.13	25	A	10.1	0.21	25	B
Southbound Approach	5.4	0.01	0	A	7.5	0.02	25	A
Menaul & Access 1								
Southbound Right	14.8	0.04	25	B	30.8	0.12	25	D
Menaul & Access 2								
Eastbound Left	23.9	0.31	50	C	38.3	0.42	75	E
Westbound Left	13.5	0.10	25	B	18.0	0.13	50	C
Southbound Left	469.6	1.04	250	F	3802.7	2.89	650	F
Southbound Thru/Right	33.0	0.60	125	D	30.7	0.48	75	D
Carlisle & Access 3								
Eastbound Right	20.3	0.28	50	C	37.0	0.41	75	E
Carlisle & Access 4								
Eastbound Right	25.9	0.45	75	D	139.4	0.91	325	F
Westbound Left	-	-	-	-	67796	29.11	200	F
Westbound Thru/Right	16.8	0.02	25	C	40.1	0.42	75	E
Southbound Left	21.1	0.05	25	C	96.3	0.62	125	F
Phoenix & Access 5								
Eastbound Approach	7.7	0.01	0	A	7.7	0.01	0	A
Westbound Approach	7.5	0.05	25	A	7.8	0.06	25	A
Northbound Approach	12.2	0.14	25	B	13.8	0.18	25	B
Southbound Approach	13.2	0.12	25	B	14.7	0.16	25	B
* – HCM 95 th percentile queue rounded to next 25-foot increment								

Figure 9 | 2036 AM(PM) Build Peak Hour Traffic Volumes

B. DECELERATION LANE REQUIREMENTS

As part of this traffic impact study turn lane warrants based on the City of Albuquerque DPM were assessed. The DPM requires that a dedicated right turn deceleration lane be installed based on speeds of the roadway and volume of turning vehicles. With a design speed of 30 – 40 MPH a volume of 50 or more turning vehicles per hour is required.

A summary of the warrant volume requirements and turning volumes for each access point is shown in Table 12.

Table 12 Deceleration Lane Warrants						
	2026 Build AM Peak			2026 Build PM Peak		
Intersection/Movement	COA Warrant Turning Volume	Turning Volume	Warrant	COA Warrant Turning Volume	Turning Volume	Warrant
Menaul & Access 1 Westbound Right	50	10	No	50	12	No
Menaul & Access 2 Westbound Right	50	203	Yes	50	230	Yes
Eastbound Left	40	65	Yes	40	66	Yes
Carlisle & Access 3 Southbound Right	50	65	Yes	50	42	No
Carlisle & Access 4 Southbound Right	50	39	No	50	36	No
Northbound Left	40	0	No	40	0	No

At the Carlisle and Access 4 intersection, the right turning volumes are 39 in the AM peak hour and 36 in the PM peak hour, which is below the threshold to require a right turn lane. There is no left turning volume per the 2026 build scenario and beyond. A left turn deceleration lane exists at this intersection today, although it is planned to be removed during the buildout of the site development.

At the Carlisle and Access 3 intersection, the right turning volumes are 65 in the AM peak hour and 42 in the PM peak hour. During the AM peak hour a right turn deceleration lane is required based on this criteria. Due to the limited space between access 3 and access 4, a deceleration lane that is shortened would be required. The spacing would allow for 30 feet of storage length with a transition length that includes a 150-150 reverse curve.

At the Carlisle and Access 1 intersection, the right turning volumes are 10 in the AM peak hour and 12 in the PM peak hour, which is well below the threshold to require a right turn lane at this location.

The Menaul and Access 2 intersection includes a right turning volume of 203 in the AM peak hour and 230 in the PM peak hour, which are well above the requirement of

installation of a right turn deceleration lane. The left turn deceleration lane is warranted with volumes of 65 and 66 vehicles during both AM and PM peak hours, respectively, as well. A left turn deceleration lane exists at this intersection today with 90 feet of storage length with a reverse curve transition length into it.

Between this access point and the Menaul and Carlisle intersection a bus stop with a shelter is located. This bus stop is the most active bus stop at this intersection and is a decision factor in how to treat the Access 2 intersection. According to NACTO, the far side bus stops are the most common and are generally preferred by designers. They allow pedestrians to cross behind the bus at a marked signalized crosswalk at Menaul and Carlisle. The existing bus stop could potentially be moved to the east so that it is closer to the signalized intersection, but right of way constraints in front of the Starbucks on this corner do not allow this option. Moving the bus stop further to the west may increase the potential of J-walking to cross Menaul which will make vulnerable road users more at risk of accidents. Additionally, the City of Albuquerque transit department would rather not have a deceleration lane tying directly into a bus stop because it makes it more difficult for the driver to enter traffic due to vehicles going around the bus with some making a right turn directly in front of the bus.

Since this area is already on the High Fatality and Injury network due to high pedestrian use, we conclude that the safest option for the bus stop is to keep the existing bus stop location. Additionally, to allow for the bus stop to function optimally, and to prioritize vulnerable road users, a dedicated right turn deceleration lane should not be built at Menaul and Access 2 due to the historically low vehicle crash rate at this access point. Since access 2 does not have a high accident rate a right turn deceleration lane should not be required at this location.

C. QUEUE EVALUATION

For all scenarios, all right and left turning lanes were evaluated to verify that the available queue storage is adequate for the calculated queues for each scenario. The City of Albuquerque DPM provides a minimum storage length for right turn lanes as 240 for the design speed of 35 – 40 MPH. The left turn lane storage length is calculated based on the 95th percentile queue length at each location.

A summary of each intersection with existing, 2026 build, and 2036 build scenario 95th percentile queues are provided in Table 13.

Table 13 | Queue Evaluation

Condition	Existing 2024		2026 Build		2036 Build		Available Queue Storage	Storage Length per COA DPM/ SAMM Table 18.K-1
	AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak		
	95 th % Queue Length*	95 th % Queue Length*	95 th % Queue Length*	95 th % Queue Length*	95 th % Queue Length*	95 th % Queue Length*		
Carlisle and Claremont								
Eastbound Left	50	125	50	125	50	150	175	95 th %ile
Westbound Left	50	50	75	75	75	75	50	95 th %ile
Northbound Left	25	50	50	50	50	50	190	95 th %ile
Southbound Left	25	25	25	25	25	25	70	95 th %ile
Carlisle and Phoenix								
Northbound Left	25	175	75	950	125	1475	115	95 th %ile
Southbound Left	25	25	25	25	25	25	90	95 th %ile
Carlisle and Phoenix(Signal)								
Eastbound Left	25	25	75	50	75	50		
Westbound Left	25	0	25	0	25	0		
Northbound Left	25	25	50	50	50	50	115	95 th %ile
Southbound Left	25	25	25	25	25	25	90	95 th %ile
Carlisle and Menaul								
Eastbound Left	75	100	75	75	75	125	220	95 th %ile
Westbound Left	75	175	75	125	75	200	200	95 th %ile
Northbound Left	175	225	225	250	225	225	275	95 th %ile
Southbound Left	100	175	125	175	125	225	225	95 th %ile
Menaul and Bryn Mawr								
Eastbound Left	25	75	25	100	25	150	215	95 th %ile
Westbound Left	25	25	25	25	25	50	160	95 th %ile
Northbound Left	25	25	25	25	25	50	60	95 th %ile
Southbound Left	25	225	25	275	25	350	80	95 th %ile
Menaul and Access 2								
Eastbound Left	25	25	50	50	50	75	95	95 th %ile
Westbound Left	25	25	25	25	25	25	50	95 th %ile
Carlisle and Access 4								
Southbound Left	25	50	25	75	25	125	45	95 th %ile
Carlisle and Prospect								
Northbound Left	75	150	75	225	125	475	130	95 th %ile
Southbound Left	25	25	25	75	25	125	100	95 th %ile
Carlisle and I-40 WB Ramp								
Westbound Through/Left	150	200	150	200	150	200	170	95%+725
Westbound Right	325	1150	375	1850	400	2600	170(1275)	95%+725
Northbound Left	250	300	250	300	275	325	270	95%+250
Carlisle and I-40 EB Ramp								
Eastbound Through/Left	300	250	325	275	350	300	445(1300)	95%+725
Eastbound Right	200	200	200	200	200	225	445(1300)	95%+725
Northbound Right	100	200	100	200	125	225	285	95%+250
Southbound Left	125	225	125	250	150	250	310	95%+250

* – HCM 95th percentile queue rounded to next 25-foot increment

**Movements are free-flow, therefore have no calculated queue in HCS

The intersection of Carlisle and Claremont adequately holds all the queue that exists in the existing scenario for both peak hours. In the build scenarios due to the background growth, the westbound left will increase over the available queue storage distance. The westbound lanes at this intersection are very tight and in review of this leg, additional queue past the striped lanes will store in the roadway adequately with little issues to the adjacent westbound lane.

The Carlisle and Pheonix intersection experiences queue lengths that extend past the available storage through the 2036 build year during the PM peak hour for the northbound left turn lane. During the 2026 build scenario the PM peak hour will see a queue extend 950 feet which will extend through the Menaul and Carlisle intersection upstream. In the 2036 build scenario the PM peak hour will see a queue extend 1,475 feet which will extend through the Menaul and Carlisle intersection and the Carlisle and Prospect intersection.

Many of the existing trips to this area are concentrated to the supermarket that is located between Claremont and Phoenix to the west of Carlisle. In existing conditions, it appears that more trips are using Pheonix to access the supermarket during the PM peak hour which is causing more delays and increased queues for the northbound left turning movement, while the signalized intersection at Carlisle and Claremont does not exceed the available queue storage length and has significantly less delay.

In the build scenarios an alternative signalized intersection analysis was completed. With this intersection signalized, the queues seen in both 2026 build and 2036 build will not extend past the available queue storage.

At the signalized intersection of Carlisle and Menaul all analysis scenario queues will remain within the available queue lengths provided for the existing condition. This trend continues into the 2026 and 2036 build scenarios, where the 275 foot and 225 foot queue for the northbound left and southbound left, respectively, is not surpassed.

Menaul and Bryn Mawr is not currently striped with two lanes for the southbound movements although the pavement is approximately 30 feet in width at the intersection which is sufficient space for two lanes. Field investigation confirmed that vehicles are utilizing this area to form two lanes. The queue for the southbound left turning movement extends past the area where pavement is wide enough to facilitate two lanes. In existing conditions, the queue extends and functionally it works more like a single lane, more so during the PM peak hour. In build scenarios this southbound queue continues to grow to 350 feet in the horizon year PM analysis.

Menaul and Access 2 has existing eastbound and westbound left turn lanes which contain the expected queues for all scenarios for both movements.

Carlisle and Access 4 will close the median for northbound left turning movements into the site and eastbound left turning movements exiting the site. The 95th percentile queues seen for the southbound left turning lane will be contained in the available

storage area during the AM peak hour but during the PM peak hour this movement will generate a queue that extends outside of this lane, but this is not due to the development. During the build scenarios, the southbound left surpasses the available queue with a queue of 75 feet during the PM peak hour, extending to 125 feet by the 2036 build year scenario. The available queue storage of 45 feet will not hold these anticipated queues at this access point. Due to this movement being for a different commercial site, the development will not be responsible for this queue.

The Carlisle and Prospect intersection has a northbound left turning queue that extends past the available queue in the PM peak hour. With the background growth on Carlisle, that queue continues to grow in the build scenario and out to the horizon year build scenario. In 2036 the estimated 95th percentile queue will be 475 feet in length which will require an extension of the left turn lane.

Carlisle and I-40 Westbound Ramp has lane stripes for the westbound through/left and the westbound right that extend to 170 feet. Past this point the transition area to fully develop these lanes exists. The number in parenthesis in Table 13 refers to the distance from the stop bar to the end of the gore area on I-40 westbound. The westbound through/left turn lanes will extend to just past the striped lane. The westbound right turning lane sees queues that extend far during the existing conditions. During the PM peak hour the queue extends to 1,150 feet which is almost to the end of the gore on I-40 westbound. The northbound left also sees queues that fill the left turn lanes on the overpass bridge for I-40 although additional queue length from a pre-left is provided upstream of the eastbound I-40 intersection which will capture all the queue.

With the addition of the development, the westbound right queue will continue to grow to 1,850 feet in the 2026 build scenario and 2,600 feet in the 2036 build scenario. This will extend into the auxiliary lanes of I-40 westbound. To help prevent this queue. A threshold analysis was also completed to determine how many right turn on red movements would keep the westbound queue from passing the gore area. A right turn on red volume of 35 vehicles per hour will keep the queue at 1,261 feet in length during the 2026 build scenario. In the 2036 build scenario, a right turn on red volume of 80 vehicles per hour would keep the queue at 1,230 feet in length. For a conservative number we assume that 30% of vehicles making this right turn may turn when the signal is red for the westbound movement. That would equate to 135 during the 2026 build scenario and 148 in the horizon year which is much higher than the amount that would be required to keep the queue under the threshold of entering the auxiliary lane of I-40 westbound right turn on red movements.

The Carlisle and I-40 Eastbound Ramp has all estimated 95th percentile queues able to stay within the available storage length for all scenarios. Again, the number in parenthesis in Table 13 refers to the distance from the stop bar to the end of the gore area on I-40 eastbound.

VII. CRASH DATA ANALYSIS

A. INTERSECTION CRASHES BY YEAR

Crash data for the project was provided for 5 years from 2018 to 2022 for all intersections included in the scope of this traffic study. The complete data set is included in Appendix I.

Incidence of crashes to the area are a cause for concern, and depending on their severity and occurrence, mitigation efforts may be implemented to reduce them. The intersections involved with the Carlisle & Menaul development vary in the number or crashes per intersection, with the highest concentration of crashes per intersection occurring in 2019 from the collected 5-year period. A summary of these crashes per year can be seen in Table 14.

The intersection of Carlisle & Claremont included a total of 63 crashes over the 5 years of data. In 2019, this intersection experienced the most crashes with 17 crashes that year. The highest contributing factor of crashes is failing to yield to right of way. The signal operations at this intersection operates as permissive for eastbound and westbound movements even though there is a high volume of turning vehicles at the intersection. Installing a protected phase for left turning vehicles may improve the crash rate at this intersection but should be evaluated by the City of Albuquerque.

The intersection of Carlisle & Phoenix included a total of 25 crashes over the 5 years of data. This intersection experienced the most crashes in 2019, at 8 crashes that year. The highest contributing factor of crashes is either failing to yield right-of-way or making an improper turn. As this intersection is stop controlled on the minor approach and not controlled on Carlisle and operates with high delay, these contributing factors align with what is anticipated. A traffic signal at this intersection is warranted, and the crash modification factor for the installation of a traffic signal is 0.803. The signal may help with both the delay and the crash occurrence but should be evaluated by the City of Albuquerque due to the close proximity to other signalized intersections along Carlisle.

Using the Mid Region Council of Governments High Fatal and Injury Network (HFIN) map showed that the link information from Menaul to Candelaria showed a very high rate of injury with 225 injuries shown from 2017 to 2021 with an additional 2 fatalities reported. That puts this link 2 times above the average for HFIN designation. This link also showed 2 bicycle involved incidents with injury and 17 pedestrian injuries and 1 pedestrian fatality.

Of the link information Carlisle & Menaul experiences a majority of the high crash occurrences with 188 crashes over the 5-year span of data. The most crashes per year occurred in 2018 with 44 crashes that year. The highest contributing factor for crashes

was driver inattention. The crash data included 4 crashes that involved pedestrians, one in each year except 2019. In 2022, the crash involving a pedestrian included an impaired driver, resulting in the fatality of the pedestrian involved.

The intersection of Carlisle & Prospect included a total of 27 crashes over the 5 years of data. This intersection experienced most crashes in 2022, at 9 crashes that year. The highest contributing factor for this intersection was driver inattention.

The intersection of Carlisle & Cutler has only 1 crash, experienced in 2020. This crash was due to a vehicle failing to yield right-of way resulting in a T-bone type collision.

The intersection of Carlisle & I-40 WB Ramp included a total of 66 crashes over the 5 years of data. This intersection experienced the most crashes in 2019, at 22 crashes that year. The highest contributing factor for crashes was following too closely causing rear-end collisions. No Pedestrian involved crashes occurred at this intersection over the 5 years.

The intersection of Carlisle & I-40 EB Ramp included a total of 76 crashes over the 5 years of data. This intersection experienced the most crashes in 2021, at 24 crashes that year. The highest contributing factor for crashes was driver inattention and disregarding traffic signal.

Menaul & Bryn Mawr included a total of 9 crashes over the 5 years. This intersection experienced the most crashes in 2019, at 4 crashes that year. One crash that occurred in 2019 involved a pedestrian and the driver was impaired due to alcohol involvement.

Phoenix & Bryn Mawr has only 1 crash, experienced in 2022. This crash involved a collision with a fixed object that was outside of the roadway.

Menaul & Access 1 has only 1 crash that occurred in 2020 at the right-in/right-out access point. There was another crash that was on the Menaul roadway eastbound that involved a pedestrian just east of this intersection. Seeing that the right-in/right-out intersection has a very low crash rate, this access point will remain in place for the development. Appropriately signing this intersection as a right turn only should be considered as part of the project. We recommend the developer install a one-way sign (R6-1-36) in the median to bring more attention to the requirement of turning right only.

Carlisle and Access 3 showed no crashes that occurred at this intersection. Because the main intersection of Menaul and Carlisle and this access are very close, the data provided for this study may have been labeled with the main intersection. Additionally, the existing Starbucks that is located at this access point owns the southern half of this access point which does not allow for easily changing the access. Existing signing exists at this access point that denotes this as a right turn only. Additional onsite pavement markings should be installed to make this fact clearer,

with a right turn arrow. Additionally, the existing median of Carlisle is not painted yellow at this time. The site development team have agreed to paint this median yellow to help visually show that drives leaving this site can only turn right.

Carlisle and Access 4 included no crashes at the intersection as well. Discussions with the City requested we look at adjusting this access to remove left access out of the site. The proposed site includes 39 trips in the AM peak hour and 32 trips in the PM peak hour that make an eastbound left from this access point. If Carlisle and Access 4 is updated to a right in/right out/left in, the left out traffic would likely redistribute and be added to the Carlisle and Pheonix intersection or Carlisle and Claremont intersections, which includes 25 crashes and 63 crashes in the crash data respectively. Closing the left access out at this location may impact these alternative intersections and create a higher crash rate due to a higher volume of vehicles. Due to this fact, this access point is proposed to remain a full access for the development.

All other access intersections involved with the Carlisle & Menaul Development did not experience any crashes during the most recent 5-year data collection period.

Table 14 Menaul & Carlisle Development Crash Data						
Intersections	2018	2019	2020	2021	2022	Total
Carlisle & Claremont	10	17	14	10	12	63
Carlisle & Phoenix	7	8	5	3	2	25
Carlisle & Menaul	44	38	40	37	29	188
Carlisle & Prospect	3	3	6	6	9	27
Carlisle & Cutler			1			1
Carlisle & I-40 WB Ramp	9	22	10	11	14	66
Carlisle & I-40 EB Ramp	9	19	6	24	18	76
Menaul & Bryn Mawr	1	4		3	1	9
Phoenix & Bryn Mawr					1	1
Menaul & Access 1			1			1
Menaul & Access 2						0
Menaul & Access 3						0
Menaul & Access 4						0
Menaul & Access 5						0
Total	83	111	83	94	86	

A more in depth look at crash data that included vulnerable road users was done to review the cause of accidents that specifically included pedestrian or bicycle users. Table 15 includes pedestrian involved accidents by year.

Table 15 Menaul & Carlisle Pedestrian Involved Crash Data						
Intersections	2018	2019	2020	2021	2022	Total
Carlisle & Claremont	1		1		1	3
Carlisle & Phoenix		1	1			2
Carlisle & Menaul	1		1	1	1	4
Menaul & Bryn Mawr		1				1
Menaul Midblock				1		1
Total	2	2	3	2	2	11

The intersection of Carlisle and Claremont saw three accidents involving pedestrians in the 5 years of data collected.

The accident in 2018 was crash report number 710452829 and included a vehicle that was traveling southbound on Carlisle making a left hand turn onto Claremont. The accident crash severity was C meaning possible injury. The pedestrian was crossing in the marked crosswalk westbound on the north side of the intersection and was struck by the vehicle. This accident occurred at 7:50 PM, so it was dark but was lit by streetlights. The contributing factor for the crash was the vehicle failed to yield right of way.

In 2020, the accident that occurred at this intersection was crash report number 710581853 and included a vehicle traveling west on Claremont and a pedestrian crossing northbound at the signalized intersection. The accident crash severity was B meaning suspected minor injury. This accident occurred at 1:23 PM, was in daylight with clear conditions. The contributing factor for this accident was noted as driver inattention.

The last accident that occurred at Carlisle and Claremont occurred in 2022 and was crash report number 710898853. This accident included a vehicle traveling west on Claremont and a pedestrian that was crossing Claremont northbound at the signalized intersection. The accident severity was B meaning suspected minor injury. This accident occurred at 7:48 PM, so it was dark but was lit by streetlights, although it was raining at the time of accident. The contributing factor for the crash was the pedestrian disregarding the traffic signal and was noted as pedestrian error.

The intersection of Carlisle and Pheonix saw two accidents involving pedestrians in the 5 ears of data collected.

The first accident occurred in 2019 with crash report number 710363851 which included a vehicle traveling northbound on Carlisle with a pedestrian that was also traveling northbound on the sidewalk adjacent to the lane. The accident occurred at 7:08 PM in the daylight, although it was raining at the time. The crash severity was A which indicates suspected serious injury. The pedestrian was traveling northbound on the sidewalk and the vehicle lost control and entered the sidewalk area. The

contributing factor was driver inattention, excessive speed, and speed too fast for conditions.

The second accident occurred in 2020 with a crash report number 710581936 which included a vehicle traveling west on Phoenix and a pedestrian traveling East on the sidewalk adjacent to the traffic lane. This accident occurred at 4:42 PM in the dark while it was raining. The crash severity was C which indicates possible Injury. The pedestrian was traveling on the sidewalk and the vehicle jumped the curb and entered the sidewalk. The contributing factor was driver inattention.

The intersection of Carlisle and Menaul saw four accidents involving pedestrians in the 5 years of data collected.

The accident occurring in 2018 was crash report number 710391415 which included a vehicle traveling south on Carlisle and a pedestrian crossing East at the signalized intersection. This accident occurred at 3:30 PM in the daylight on a clear day. The crash severity was B which indicates suspected minor injury. The pedestrian was crossing and was struck by the southbound vehicle although the contributing factor was pedestrian error.

The 2020 accident was crash report number 710568644 which included a vehicle traveling north on Carlisle and a pedestrian traveling south on Carlisle. The report indicates that this incident didn't happen directly at the intersection. This accident occurred at 1:35 AM and was dark but lit by streetlights. The crash severity was A which indicates suspected serious injury. This report indicates that the pedestrian was in the roadway, so the contributing factor was avoid no contact.

In 2021, the accident that occurred at this intersection was crash report number 710800121 and included a bus traveling northbound on Claremont and a pedestrian traveling northwest crossing outside of the marked crosswalk of the signalized intersection. The accident crash severity was A meaning suspected serious injury. This accident occurred at 8:26 PM, in the dark with lighting provided by streetlights. The contributing factor for this accident was noted as pedestrian error.

The final crash occurred in 2022 at this intersection with a crash report number of 710877008 which included a passenger car traveling eastbound on Menaul and a pedestrian that was under the influence of drugs and alcohol. This accident occurred at 10:31 PM and was dark but lit by streetlights. This accident resulted in a fatality. The report indicated no driver error on the part of the vehicle driver but contributing factors were pedestrian error, under the influence of alcohol and under the influence of drugs.

The intersection of Menaul and Bryn Mawr saw one accident involving pedestrians in the 5 years of data collected. This crash occurred in 2019 with a crash report number of 710567554 which included a passenger car traveling eastbound and a pedestrian crossing Menaul northbound. This accident occurred at 6:40 PM at dusk with clear

conditions. The accident crash severity was O meaning property damage only. The report indicated that the contributing factor was the pedestrian failed to yield right of way, pedestrian error, and under the influence of Alcohol.

The final crash that occurred in the study area that involved a pedestrian is crash report number 710545309 which occurred in 2021 on Menaul between Bryn Mawr and Carlisle. This crash involved a passenger car that was traveling eastbound on Menaul and a pedestrian that was crossing Menaul northbound not at a controlled crossing. The accident crash severity was B meaning suspected minor injury. The contributing factor was noted as pedestrian error in the report.

A more in depth look at crash data that included vulnerable road users was done to review the cause of accidents that specifically included pedestrian or bicycle users. Table 16 shows crashes that involved a bicycle separated by year of accident.

Table 16 Menaul & Carlisle Bicycle Involved Crash Data						
Intersections	2018	2019	2020	2021	2022	Total
Carlisle & Claremont						
Carlisle & Phoenix						
Carlisle & Menaul				1		
Menaul & Bryn Mawr				1		
Total						

The Carlisle and Menaul accident that occurred during 2021 had a crash report number 710791015. This crash involved a passenger vehicle traveling west turning into 2536 Carlisle Blvd. The bicyclist was also traveling west although he was traveling west in the eastbound shoulder. The vehicle and bicycle intersected in a T-bone accident. This crash occurred at 3:22 PM on a clear day. The accident crash severity was B meaning suspected minor injury. The report indicated that the contributing factor was other improper driving by the bicycle.

The accident that occurred at Menaul and Bryn Mawr during 2021 had a crash report number 710766789. This crash involved a passenger car traveling south on Bryn Mawr and a bicycle traveling west on Menaul. The vehicle and bicycle intersected in a T-bone accident. This crash occurred at 11:26 AM on a clear day. The accident crash severity was C meaning possible Injury. The report indicated that the contributing factor was the vehicle failed to yield the right of way.

To help mitigate crashes in the study area, Carlisle may benefit from a sidewalk buffer installation to provide more space between pedestrians and vehicles although inconsistent sidewalks and buffers along the corridor may negatively impact pedestrians. Right-of-way along Carlisle was not verified and may be a variable in why the sidewalks are currently installed at the back of curb today. Additionally, bicycle crashes in this area may be decreased by the installation of bicycle

infrastructure along the main roadways, but it appears bicycle facilities may not have solved the crashes that were recorded with bicycles. Again, this will likely need analysis and recommendations from the City of Albuquerque to identify how this could be implemented in this area. A major factor in vehicle crashes in this area may be due to the higher speed facility. The City of Albuquerque has been implementing projects that restripe some roadways with a smaller width of lanes to slow drivers down. The largest factor from the crashes documented in this report were failing to yield right of way, which typically occurs at intersections where drivers turn in front of another vehicle not adhering to proper right-of-way assignments. A way to minimize these types of accidents is to limit the number of access points that are allowed onto a roadway, although in this case, limiting access points may push the issue to other intersections that have a similar problem, not necessarily decreasing the number of crashes. Carlisle in this area has several access points to businesses and creating an access plan and making improvements to access may improve the crash rates of vehicles. Because these mitigation strategies involve a high range of changes that may impact City roadways, additional studies and improvement plans should be considered to make an impact to the crash rates along these arterials. The proposed development is only a small change that is occurring along Carlisle and larger changes may be needed to fully impact the crash rates in the area.

VIII. CONCLUSIONS AND RECOMMENDATIONS

A. CONCLUSIONS

1. EXISTING CONDITIONS

The signalized intersection of Carlisle & I-40 WB and the intersection of Carlisle and I-40 EB contain several movements that are LOS E or LOS F during the existing analysis. The Carlisle and I-40 WB intersection includes the westbound right turning movement during the AM peak hour that will operate at LOS E. During the PM peak hour this movement operates at LOS F and the northbound left will operate at LOS E.

The Carlisle and I-40 EB intersection will operate acceptably overall during both peak hours with LOS E. The southbound left will operate at LOS E during the PM peak hour at this intersection.

Carlisle & Phoenix experiences LOS E in the AM peak hour and LOS F in the PM peak hour. During the AM peak hour the westbound approach operates at LOS E. In the PM peak hour the eastbound approach, westbound approach, and northbound left all operate at LOS F.

Carlisle & Prospect experiences LOS F in the AM peak hour, where the eastbound and westbound approach operates at LOS F. In the PM peak hour, the overall intersection performs at LOS F. This is due to the eastbound approach, westbound approach, and northbound left all operating at LOS F.

Menaul & Bryn Mawr experiences LOS E in the AM peak hour, where the northbound left and southbound left operate at LOS E. In the PM peak hour, the eastbound left operates at LOS E, while the northbound left and southbound left operate at LOS F.

Menaul & Access 2, which is a full access intersection, experiences LOS E in the AM peak hour, where the southbound left operates at LOS E. In the PM peak hour, the southbound left operates at LOS F. There are no stripes on the southbound approach to this intersection, so it was modeled with a through/right lane and a dedicated left since there is enough room for this to occur in existing conditions.

Carlisle & Access 4, which is a full access intersection, experiences LOS F in the AM peak hour, where the eastbound approach operates at LOS F. In the PM peak hour, the eastbound approach, and the westbound approach operate at LOS F, while the southbound left operates at LOS E.

All other unsignalized intersections will have an overall operation at or above LOS C.

A traffic signal warrant check was completed for the existing intersection of Carlisle and Pheonix. This check verified warrant 3 of the MUTCD, which checks the peak hour volumes for the intersection. The AM and PM peak hours were plotted, and the AM

peak hour volumes fell below the threshold, but the PM peak hour fell above the threshold to warrant a traffic signal. The MUTCD states that for 1 hour of an average day, if the plotted point falls above the applicable curve, then a traffic signal shall be considered. Since this intersection warrants a traffic signal during the peak hour existing conditions with no additional development, the responsibility to design and construct a traffic signal at this intersection should be the City of Albuquerque. The City of Albuquerque may want to study this intersection further to verify other traffic signal warrants as suggested in the MUTCD.

2. 2026 BUILD

The Build scenario finds that the signalized intersections continue to operate at a generally overall acceptable level of service in most peak hours, save for the intersection of Carlisle & I-40 WB, which would operate at a LOS E in the PM peak hour.

The signalized intersection of Carlisle & Claremont continues to operate at LOS A in the AM peak hour and LOS B in the PM peak hour. During the PM peak hour the westbound left movement remains operating at LOS E due to the operations of the signal and the high volume of competing movements similar to the no build analysis.

Carlisle & Menaul will operate at overall acceptable conditions with optimized signal timing in both peak hours at LOS D. During the AM and PM peak hours all movements operate at or better than LOS D.

The signalized intersections of Carlisle & I-40 WB will continue to operate at overall LOS C in the AM peak hour and LOS E during the PM peak hour. During the AM peak hour the westbound right turning movement will continue to operate at LOS E. This movement will continue to operate at LOS F during the PM peak hour. Additionally, the northbound left will continue to operate at LOS E during the PM peak hour.

Carlisle & I-40 EB intersection will continue to operate acceptably overall during both peak hours with LOS C. The southbound left will continue to operate at LOS E during the PM peak hour at the intersection.

Carlisle & Phoenix continues to experience LOS F in both the AM and PM peak hour with unsignalized operations. During the AM peak hour the eastbound and westbound approach operates at LOS F. In the PM peak hour, the northbound left will operate at LOS F. For the eastbound and westbound approach in the PM peak hour, the analysis program could not calculate delay and level of service due to the large delay that will be seen due to the volume of vehicles on Carlisle Boulevard. In signalized conditions both peak hours will operate acceptably at LOS A, and thus the City of Albuquerque should monitor this intersection to determine if a traffic signal should be installed.

Carlisle & Prospect experiences LOS F in the AM peak hour, where the eastbound and westbound approach operates at LOS F. In the PM peak hour the intersection will

operate at LOS F with the eastbound approach, westbound approach, northbound left, and southbound left all operating at LOS F.

Menaul & Bryn Mawr experiences overall LOS F in the AM peak hour, where the northbound left and southbound left operate at LOS F. In the PM peak hour, the eastbound left, northbound left, and southbound left all continue to operate at LOS F.

Menaul & Access 2 operates at LOS C during the AM peak hour, and at LOS D during the PM peak hour. The southbound left operates at LOS F during both peak periods.

Carlisle & Access 4 operates at LOS C during the AM peak hour with all movements operating at LOS C. In the PM peak hour the intersection operates at LOS F due to the westbound left and southbound left continuing to operate at LOS F, similarly to the no build conditions. These movements are entering and exiting an adjacent site and have no impacts from the development. In implementing the development build out, an alternative analysis widened this access point to allow a dedicated eastbound left turn lane with a through/right lane. This analysis showed that the delay would still be very high, although right turning vehicle delay is substantially lowered. Due to the consideration of vulnerable roadway users, this alternative will not be considered for this access point due to longer crossings for pedestrians and bicycles.

All other unsignalized intersections continue to have an overall operation at or above LOS D.

3. 2036 BUILD

In the 2036 Build scenario, the signalized intersection of Carlisle & Claremont continues to operate at LOS A in the AM peak hour and LOS B in the PM peak hour. During the PM peak hour the westbound left movement remains operating at LOS E due to the operations of the signal and the high volume of competing movements.

Carlisle & Menaul continues to operate at overall acceptable conditions with optimized signal timing in both peak hours at LOS D. During the AM peak hour all movements operate at or better than LOS D. During the PM peak hour the eastbound left, westbound left, and southbound left will all operate at LOS E.

The signalized intersections of Carlisle & I-40 WB will continue to operate at overall LOS C in the AM peak hour but will decline to LOS F in the PM peak hour. During the AM peak hour the westbound right turning movement will continue to operate at LOS E. This movement will continue to operate at LOS F during the PM peak hour. Additionally, the northbound left will continue to operate at LOS E during the PM peak hour.

Carlisle & I-40 EB intersection will continue to operate acceptably overall during both peak hours with LOS C. The southbound left will continue to operate at LOS E during the PM peak hour at the intersection.

Carlisle & Phoenix continues to experience LOS F in both the AM and PM peak hour with unsignalized operations. During the AM peak hour the eastbound and westbound approach operates at LOS F. In the PM peak hour, the northbound left will operate at LOS F. For the eastbound and westbound approach in the PM peak hour, the analysis program could not calculate delay and level of service due to the large delay that will be seen due to the volume of vehicles on Carlisle Boulevard. In signalized conditions both peak hours will operate acceptably at LOS B or better, and thus the City of Albuquerque should monitor this intersection to determine if a traffic signal should be installed.

Carlisle & Prospect experiences LOS F in the AM peak hour, where the eastbound and westbound approach operates at LOS F. Additionally the northbound left declines to LOS E in the AM peak hour. In the PM peak hour the intersection will operate at LOS F with the eastbound approach, westbound approach, northbound left, and southbound left all operating at LOS F. For the eastbound and westbound approach in the PM peak hour, the analysis program could not calculate delay and level of service due to the large delay that will be seen due to the volume of vehicles on Carlisle Boulevard.

Menaul & Bryn Mawr experiences overall LOS F in the AM peak hour, where the northbound left and southbound left operate at LOS F. In the PM peak hour, the eastbound left, northbound left, southbound left, and southbound through/right all continue to operate at LOS F.

Menaul & Access 2 operates at LOS C during the AM peak hour, and at LOS E during the PM peak hour. The operational deterioration can be contributed to the southbound left, which operates at LOS F during both peak periods.

Carlisle & Access 4 experiences LOS D in the AM peak hour. In the PM peak hour the intersection operates at LOS F with movements of LOS E and LOS F due to the volume of vehicles on Carlisle during the PM peak hour. westbound movements operating at LOS E and LOS F, and the eastbound approach, westbound left, and the southbound left, continuing to operate at LOS F similarly to the no build conditions. Additionally, the westbound through/right will operate at LOS E.

All other unsignalized intersections continue to have an overall operation at or above LOS D

4. CRASH DATA

The intersection of Carlisle & Menaul experiences the most crashes as the major defining intersection of the development study. The HFIN data documented a high

rate of crashes along the stretch of Carlisle between Manual and Candelaria. Mitigations that may improve crash rates in this area are drastic and will require additional studies and designs to implement such mitigation strategies. These include access plans, roadway striping projects to change lane widths, adding sidewalk buffers between sidewalks and roadways, and improving bicycle facilities in the area. The proposed development is only a small change that is occurring along Carlisle and larger changes may be needed to fully impact the crash rates in the area.

B. RECOMMENDATIONS

- As the signal at the intersection of Carlisle and Pheonix is warranted in the existing scenario, the City of Albuquerque should be responsibility for the construction of a signal. The city may want to study this intersection further to verify other traffic signal warrants as suggested in the MUTCD.
- A signal timing adjustment should be made to the Carlisle and Menaul intersection so all movements will operate at LOS D or better during the AM and PM peak hour. This work shall be coordinated with the City of Albuquerque.
- The Carlisle and Access 4 intersection should be designed as a single exiting lane to minimize effects to vulnerable road users.
- Carlisle & Access 4 should be updated to allow only eastbound right turning movements onto Carlisle. Additionally, the northbound left turning lane should be removed and a median designed in its place.
- Carlisle and Access 4 should include a new sign prohibiting left turning movements that should be posted in the median.
- Menaul & Access 1 should include a new one-way sign (R6-1-36) in the median to bring more attention to the requirement of turning right only.
- Carlisle and Access 3 should install onsite right turn arrow pavement marking to indicate this movement as the only allowable movement.
- At Carlisle and Access 3, the median along Carlisle should be painted yellow to enhance the medians visibility.
- All designs shall satisfy the Manual on Uniform Traffic Control Devices (MUTCD), NMDOT and City of Albuquerque requirements.

APPENDIX A

EXISTING TRAFFIC DATA

1441 Camino Cerritos S.E.
Albuquerque, New Mexico 87123
(505) 414-0465

File Name : Carlisle Blvd. and Menaul Blvd.
Site Code : 04252024
Start Date : 4/25/2024
Page No : 1

*** BREAK ***

Cleland Counts

1441 Camino Cerritos S.E.
Albuquerque, New Mexico 87123
(505) 414-0465

File Name : Carlisle Blvd. and Menaul Blvd.
Site Code : 04252024
Start Date : 4/25/2024
Page No : 2

Groups Printed- Cars - Trucks - Buses

	Menaul Blvd. Eastbound						Menaul Blvd. Westbound						Carlisle Blvd. Northbound						Carlisle Blvd. Southbound						
Start Time	Left	Thru	Right	Bikes	Peds	App. Total	Left	Thru	Right	Bikes	Peds	App. Total	Left	Thru	Right	Bikes	Peds	App. Total	Left	Thru	Right	Bikes	Peds	App. Total	Int. Total
03:00 PM	32	127	53	1	0	213	43	161	73	0	2	279	53	170	36	0	0	259	68	243	29	0	3	343	1094
03:15 PM	41	159	43	0	2	245	50	174	62	0	0	286	59	211	33	0	0	303	59	240	29	0	1	329	1163
03:30 PM	24	168	57	0	0	249	56	164	64	0	1	285	57	206	36	0	1	300	62	225	17	0	2	306	1140
03:45 PM	29	144	42	0	0	215	62	180	74	1	0	317	55	272	43	0	1	371	91	244	28	0	1	364	1267
Total	126	598	195	1	2	922	211	679	273	1	3	1167	224	859	148	0	2	1233	280	952	103	0	7	1342	4664
04:00 PM	32	139	51	1	2	225	45	195	80	1	1	322	72	270	42	0	1	385	104	240	29	0	5	378	1310
04:15 PM	37	170	53	0	1	261	58	163	49	0	2	272	48	237	30	0	2	317	67	264	34	0	1	366	1216
04:30 PM	36	170	52	0	1	259	56	194	86	0	3	339	71	252	32	0	1	356	76	239	33	0	0	348	1302
04:45 PM	37	144	45	1	0	227	60	205	64	1	3	333	71	278	41	0	0	390	77	248	32	0	1	358	1308
Total	142	623	201	2	4	972	219	757	279	2	9	1266	262	1037	145	0	4	1448	324	991	128	0	7	1450	5136
05:00 PM	33	197	71	1	1	303	45	237	82	0	5	369	76	237	19	0	0	332	61	280	23	0	0	364	1368
05:15 PM	38	191	42	0	0	271	63	201	68	1	1	334	74	269	44	0	0	387	59	299	28	0	2	388	1380
05:30 PM	26	151	43	1	0	221	54	191	49	0	1	295	83	245	26	0	0	354	62	216	15	0	0	293	1163
05:45 PM	26	105	30	0	0	161	38	126	69	0	5	238	55	194	20	0	0	269	54	211	36	0	0	301	969
Total	123	644	186	2	1	956	200	755	268	1	12	1236	288	945	109	0	0	1342	236	1006	102	0	2	1346	4880
Grand Total	966	4785	1513	6	25	7295	1617	5083	2106	7	56	8869	1882	6990	1190	3	16	10081	2037	7245	911	1	38	10232	36477
Apprch %	13.2	65.6	20.7	0.1	0.3		18.2	57.3	23.7	0.1	0.6		18.7	69.3	11.8	0	0.2		19.9	70.8	8.9	0	0.4		
Total %	2.6	13.1	4.1	0	0.1	20	4.4	13.9	5.8	0	0.2	24.3	5.2	19.2	3.3	0	0	27.6	5.6	19.9	2.5	0	0.1	28.1	
Cars	963	4753	1486	6	25	7233	1602	5052	2096	7	56	8813	1866	6927	1182	3	16	9994	2025	7199	904	1	38	10167	36207
% Cars	99.7	99.3	98.2	100	100	99.2	99.1	99.4	99.5	100	100	99.4	99.1	99.1	99.3	100	100	99.1	99.4	99.4	99.2	100	100	99.4	99.3
Trucks	1	16	25	0	0	42	11	11	7	0	0	29	16	27	5	0	0	48	7	18	4	0	0	29	148
% Trucks	0.1	0.3	1.7	0	0	0.6	0.7	0.2	0.3	0	0	0.3	0.9	0.4	0.4	0	0	0.5	0.3	0.2	0.4	0	0	0.3	0.4
Buses	2	16	2	0	0	20	4	20	3	0	0	27	0	36	3	0	0	39	5	28	3	0	0	36	122
% Buses	0.2	0.3	0.1	0	0	0.3	0.2	0.4	0.1	0	0	0.3	0	0.5	0.3	0	0	0.4	0.2	0.4	0.3	0	0	0.4	0.3

Cleland Counts

1441 Camino Cerritos S.E.
Albuquerque, New Mexico 87123
(505) 414-0465

File Name : Carlisle Blvd. and Menaul Blvd.
Site Code : 04252024
Start Date : 4/25/2024
Page No : 3

	Menaul Blvd. Eastbound				Menaul Blvd. Westbound				Carlisle Blvd. Northbound				Carlisle Blvd. Southbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	19	120	32	171	29	151	41	221	66	209	30	305	35	167	27	229	926
08:00 AM	24	111	35	170	21	111	42	174	60	189	31	280	38	183	24	245	869
08:15 AM	17	126	24	167	22	112	52	186	45	198	31	274	41	198	31	270	897
08:30 AM	21	100	45	166	27	96	44	167	47	160	29	236	43	198	24	265	834
Total Volume	81	457	136	674	99	470	179	748	218	756	121	1095	157	746	106	1009	3526
% App. Total	12	67.8	20.2		13.2	62.8	23.9		19.9	69	11.1		15.6	73.9	10.5		
PHF	.844	.907	.756	.985	.853	.778	.861	.846	.826	.904	.976	.898	.913	.942	.855	.934	.952
Cars	80	451	135	666	98	468	178	744	217	748	120	1085	155	739	106	1000	3495
% Cars	98.8	98.7	99.3	98.8	99.0	99.6	99.4	99.5	99.5	98.9	99.2	99.1	98.7	99.1	100	99.1	99.1
Trucks	1	3	1	5	1	0	0	1	1	6	0	7	1	2	0	3	16
% Trucks	1.2	0.7	0.7	0.7	1.0	0	0	0.1	0.5	0.8	0	0.6	0.6	0.3	0	0.3	0.5
Buses	0	3	0	3	0	2	1	3	0	2	1	3	1	5	0	6	15
% Buses	0	0.7	0	0.4	0	0.4	0.6	0.4	0	0.3	0.8	0.3	0.6	0.7	0	0.6	0.4
Peak Hour Analysis From 10:00 AM to 01:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 12:15 PM																	
12:15 PM	31	160	43	234	54	137	79	270	57	169	39	265	70	226	36	332	1101
12:30 PM	47	125	35	207	59	139	76	274	48	172	40	260	65	206	31	302	1043
12:45 PM	34	142	43	219	65	147	64	276	37	188	49	274	63	200	23	286	1055
01:00 PM	27	149	50	226	48	172	79	299	47	164	31	242	66	214	27	307	1074
Total Volume	139	576	171	886	226	595	298	1119	189	693	159	1041	264	846	117	1227	4273
% App. Total	15.7	65	19.3		20.2	53.2	26.6		18.2	66.6	15.3		21.5	68.9	9.5		
PHF	.739	.900	.855	.947	.869	.865	.943	.936	.829	.922	.811	.950	.943	.936	.813	.924	.970
Cars	139	572	167	878	224	593	298	1115	188	689	159	1036	263	843	116	1222	4251
% Cars	100	99.3	97.7	99.1	99.1	99.7	100	99.6	99.5	99.4	100	99.5	99.6	99.6	99.1	99.6	99.5
Trucks	0	3	3	6	1	1	0	2	1	1	0	2	0	1	1	2	12
% Trucks	0	0.5	1.8	0.7	0.4	0.2	0	0.2	0.5	0.1	0	0.2	0	0.1	0.9	0.2	0.3
Buses	0	1	1	2	1	1	0	2	0	3	0	3	1	2	0	3	10
% Buses	0	0.2	0.6	0.2	0.4	0.2	0	0.2	0	0.4	0	0.3	0.4	0.2	0	0.2	0.2

Cleland Counts

1441 Camino Cerritos S.E.
Albuquerque, New Mexico 87123
(505) 414-0465

File Name : Carlisle Blvd. and Menaul Blvd.
Site Code : 04252024
Start Date : 4/25/2024
Page No : 4

	Menaul Blvd. Eastbound				Menaul Blvd. Westbound				Carlisle Blvd. Northbound				Carlisle Blvd. Southbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	36	170	52	258	56	194	86	336	71	252	32	355	76	239	33	348	1297
04:45 PM	37	144	45	226	60	205	64	329	71	278	41	390	77	248	32	357	1302
05:00 PM	33	197	71	301	45	237	82	364	76	237	19	332	61	280	23	364	1361
05:15 PM	38	191	42	271	63	201	68	332	74	269	44	387	59	299	28	386	1376
Total Volume	144	702	210	1056	224	837	300	1361	292	1036	136	1464	273	1066	116	1455	5336
% App. Total	13.6	66.5	19.9		16.5	61.5	22		19.9	70.8	9.3		18.8	73.3	8		
PHF	.947	.891	.739	.877	.889	.883	.872	.935	.961	.932	.773	.938	.886	.891	.879	.942	.969
Cars	144	699	209	1052	224	832	300	1356	290	1026	136	1452	272	1064	116	1452	5312
% Cars	100	99.6	99.5	99.6	100	99.4	100	99.6	99.3	99.0	100	99.2	99.6	99.8	100	99.8	99.6
Trucks	0	2	1	3	0	3	0	3	2	3	0	5	0	0	0	0	11
% Trucks	0	0.3	0.5	0.3	0	0.4	0	0.2	0.7	0.3	0	0.3	0	0	0	0	0.2
Buses	0	1	0	1	0	2	0	2	0	7	0	7	1	2	0	3	13
% Buses	0	0.1	0	0.1	0	0.2	0	0.1	0	0.7	0	0.5	0.4	0.2	0	0.2	0.2

Cleland Counts

1441 Camino Cerritos S.E.
Albuquerque, New Mexico 87123
(505) 414-0465

Counter R.C.

File Name : Carlisle Blvd. and Access 3

Site Code : 04252024

Start Date : 4/25/2024

Page No : 1

Groups Printed- Cars - Trucks - Buses

	Access 3 Eastbound				Northbound			Carlisle Blvd Southbound					
Start Time	Right	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Thru	Right	Bikes	Peds	App. Total	Int. Total
07:00 AM	5	0	0	5	0	0	0	128	2	0	0	130	135
07:15 AM	6	0	0	6	0	0	0	206	4	0	1	211	217
07:30 AM	4	0	0	4	0	0	0	230	7	0	0	237	241
07:45 AM	7	0	0	7	0	0	0	234	6	0	0	240	247
Total	22	0	0	22	0	0	0	798	19	0	1	818	840
08:00 AM	8	0	0	8	0	0	0	232	12	0	0	244	252
08:15 AM	8	0	0	8	0	0	0	248	5	0	2	255	263
08:30 AM	9	0	0	9	0	0	0	256	10	0	2	268	277
08:45 AM	5	0	0	5	0	0	0	244	9	0	1	254	259
Total	30	0	0	30	0	0	0	980	36	0	5	1021	1051
09:00 AM	9	0	0	9	0	0	0	215	3	0	0	218	227
09:15 AM	8	0	0	8	0	0	0	200	7	1	1	209	217
09:30 AM	12	0	0	12	0	0	0	209	3	1	1	214	226
09:45 AM	6	0	0	6	0	0	0	243	9	0	0	252	258
Total	35	0	0	35	0	0	0	867	22	2	2	893	928
*** BREAK ***													
11:00 AM	2	0	0	2	0	0	0	229	5	0	0	234	236
11:15 AM	8	0	0	8	0	0	0	246	3	0	0	249	257
11:30 AM	4	0	0	4	0	0	0	236	2	0	3	241	245
11:45 AM	3	0	1	4	0	0	0	284	6	0	0	290	294
Total	17	0	1	18	0	0	0	995	16	0	3	1014	1032
12:00 PM	3	0	0	3	0	0	0	265	2	0	1	268	271
12:15 PM	7	0	0	7	0	0	0	320	2	0	1	323	330
12:30 PM	1	0	0	1	0	0	0	297	1	0	1	299	300
12:45 PM	6	0	0	6	0	0	0	283	2	0	0	285	291
Total	17	0	0	17	0	0	0	1165	7	0	3	1175	1192
01:00 PM	1	0	0	1	0	0	0	315	6	0	1	322	323
01:15 PM	3	0	0	3	0	0	0	267	6	0	4	277	280
01:30 PM	2	0	0	2	0	0	0	276	3	0	0	279	281
01:45 PM	3	0	0	3	0	0	0	282	1	0	1	284	287
Total	9	0	0	9	0	0	0	1140	16	0	6	1162	1171

Cleland Counts

1441 Camino Cerritos S.E.
Albuquerque, New Mexico 87123
(505) 414-0465

File Name : Carlisle Blvd. and Access 3

Site Code : 04252024

Start Date : 4/25/2024

Page No : 2

Groups Printed- Cars - Trucks - Buses

	Access 3 Eastbound				Northbound			Carlisle Blvd Southbound					
Start Time	Right	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Thru	Right	Bikes	Peds	App. Total	Int. Total
*** BREAK ***													
03:00 PM	4	0	0	4	0	0	0	329	4	0	4	337	341
03:15 PM	4	0	0	4	0	0	0	323	2	0	0	325	329
03:30 PM	3	0	0	3	0	0	0	304	0	0	1	305	308
03:45 PM	3	0	0	3	0	0	0	364	1	0	1	366	369
Total	14	0	0	14	0	0	0	1320	7	0	6	1333	1347
04:00 PM	2	0	0	2	0	0	0	372	2	1	4	379	381
04:15 PM	2	0	0	2	0	0	0	359	2	0	2	363	365
04:30 PM	2	0	0	2	0	0	0	346	3	0	0	349	351
04:45 PM	2	0	0	2	0	0	0	355	4	0	1	360	362
Total	8	0	0	8	0	0	0	1432	11	1	7	1451	1459
05:00 PM	1	0	0	1	0	0	0	368	2	0	2	372	373
05:15 PM	3	0	0	3	0	0	0	383	2	0	0	385	388
05:30 PM	3	0	0	3	0	0	0	290	3	0	0	293	296
05:45 PM	1	0	0	1	0	0	0	294	5	0	3	302	303
Total	8	0	0	8	0	0	0	1335	12	0	5	1352	1360
Grand Total	160	0	1	161	0	0	0	10032	146	3	38	10219	10380
Apprch %	99.4	0	0.6		0	0		98.2	1.4	0	0.4		
Total %	1.5	0	0	1.6	0	0	0	96.6	1.4	0	0.4	98.4	
Cars	160	0	1	161	0	0	0	9968	146	3	38	10155	10316
% Cars	100	0	100	100	0	0	0	99.4	100	100	100	99.4	99.4
Trucks	0	0	0	0	0	0	0	28	0	0	0	28	28
% Trucks	0	0	0	0	0	0	0	0.3	0	0	0	0.3	0.3
Buses	0	0	0	0	0	0	0	36	0	0	0	36	36
% Buses	0	0	0	0	0	0	0	0.4	0	0	0	0.4	0.3

Cleland Counts

1441 Camino Cerritos S.E.
Albuquerque, New Mexico 87123
(505) 414-0465

File Name : Carlisle Blvd. and Access 3

Site Code : 04252024

Start Date : 4/25/2024

Page No : 3

	Access 3 Eastbound		Northbound	Carlisle Blvd Southbound			
Start Time	Right	App. Total	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1							
Peak Hour for Entire Intersection Begins at 08:00 AM							
08:00 AM	8	8	0	232	12	244	252
08:15 AM	8	8	0	248	5	253	261
08:30 AM	9	9	0	256	10	266	275
08:45 AM	5	5	0	244	9	253	258
Total Volume	30	30	0	980	36	1016	1046
% App. Total	100			96.5	3.5		
PHF	.833	.833	.000	.957	.750	.955	.951
Cars	30	30	0	970	36	1006	1036
% Cars	100	100	0	99.0	100	99.0	99.0
Trucks	0	0	0	4	0	4	4
% Trucks	0	0	0	0.4	0	0.4	0.4
Buses	0	0	0	6	0	6	6
% Buses	0	0	0	0.6	0	0.6	0.6
Peak Hour Analysis From 10:00 AM to 01:45 PM - Peak 1 of 1							
Peak Hour for Entire Intersection Begins at 12:15 PM							
12:15 PM	7	7	0	320	2	322	329
12:30 PM	1	1	0	297	1	298	299
12:45 PM	6	6	0	283	2	285	291
01:00 PM	1	1	0	315	6	321	322
Total Volume	15	15	0	1215	11	1226	1241
% App. Total	100			99.1	0.9		
PHF	.536	.536	.000	.949	.458	.952	.943
Cars	15	15	0	1210	11	1221	1236
% Cars	100	100	0	99.6	100	99.6	99.6
Trucks	0	0	0	2	0	2	2
% Trucks	0	0	0	0.2	0	0.2	0.2
Buses	0	0	0	3	0	3	3
% Buses	0	0	0	0.2	0	0.2	0.2

Cleland Counts

1441 Camino Cerritos S.E.
Albuquerque, New Mexico 87123
(505) 414-0465

File Name : Carlisle Blvd. and Access 3

Site Code : 04252024

Start Date : 4/25/2024

Page No : 4

	Access 3 Eastbound		Northbound	Carlisle Blvd Southbound			
Start Time	Right	App. Total	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1							
Peak Hour for Entire Intersection Begins at 04:30 PM							
04:30 PM	2	2	0	346	3	349	351
04:45 PM	2	2	0	355	4	359	361
05:00 PM	1	1	0	368	2	370	371
05:15 PM	3	3	0	383	2	385	388
Total Volume	8	8	0	1452	11	1463	1471
% App. Total	100			99.2	0.8		
PHF	.667	.667	.000	.948	.688	.950	.948
Cars	8	8	0	1449	11	1460	1468
% Cars	100	100	0	99.8	100	99.8	99.8
Trucks	0	0	0	0	0	0	0
% Trucks	0	0	0	0	0	0	0
Buses	0	0	0	3	0	3	3
% Buses	0	0	0	0.2	0	0.2	0.2

1441 Camino Cerritos S.E.
Albuquerque, New Mexico 87123
(505) 414-0465

File Name : Carlisle Blvd. and Access 4
Site Code : 04252024
Start Date : 4/25/2024
Page No : 1

*** BREAK ***

Cleland Counts

1441 Camino Cerritos S.E.
Albuquerque, New Mexico 87123
(505) 414-0465

File Name : Carlisle Blvd. and Access 4

Site Code : 04252024

Start Date : 4/25/2024

Page No : 2

Groups Printed- Cars - Trucks - Buses

	Access 4 Eastbound						Shopping Center Parking lot Westbound						Carlisle Blvd. Northbound						Carlisle Blvd. Southbound						
Start Time	Left	Thru	Right	Bikes	Peds	App. Total	Left	Thru	Right	Bikes	Peds	App. Total	Left	Thru	Right	Bikes	Peds	App. Total	Left	Thru	Right	Bikes	Peds	App. Total	Int. Total
03:00 PM	1	0	0	0	0	1	7	0	15	0	0	22	3	263	5	0	0	271	8	326	2	0	3	339	633
03:15 PM	0	0	0	0	1	1	5	0	13	0	2	20	3	301	1	0	0	305	10	320	1	1	1	333	659
03:30 PM	0	0	0	0	0	0	10	0	23	0	0	33	0	284	3	0	2	289	12	294	2	0	0	308	630
03:45 PM	0	0	1	0	0	1	4	0	16	0	0	20	0	375	4	0	0	379	8	359	0	1	0	368	768
Total	1	0	1	0	1	3	26	0	67	0	2	95	6	1223	13	0	2	1244	38	1299	5	2	4	1348	2690
04:00 PM	0	0	0	0	0	0	1	0	19	0	0	20	0	351	4	0	1	356	11	373	1	2	5	392	768
04:15 PM	0	0	3	0	0	3	6	0	17	0	2	25	2	349	3	0	3	357	11	352	2	4	1	370	755
04:30 PM	0	0	2	0	0	2	2	1	11	0	0	14	2	372	5	0	0	379	13	345	0	0	2	360	755
04:45 PM	0	0	0	0	0	0	3	0	18	0	1	22	0	384	3	0	0	387	10	356	0	1	2	369	778
Total	0	0	5	0	0	5	12	1	65	0	3	81	4	1456	15	0	4	1479	45	1426	3	7	10	1491	3056
05:00 PM	0	0	3	0	0	3	1	0	14	0	0	15	4	344	2	0	0	350	10	366	0	0	5	381	749
05:15 PM	1	0	0	0	0	1	1	0	9	0	2	12	0	367	3	0	0	370	9	384	2	0	3	398	781
05:30 PM	0	0	1	0	0	1	4	0	20	0	0	24	1	293	3	0	0	297	6	288	0	0	0	294	616
05:45 PM	0	0	0	0	0	0	12	0	16	0	0	28	2	302	2	0	0	306	15	287	0	0	3	305	639
Total	1	0	4	0	0	5	18	0	59	0	2	79	7	1306	10	0	0	1323	40	1325	2	0	11	1378	2785
Grand Total	22	2	50	1	10	85	112	2	400	2	12	528	71	9819	102	2	16	10010	275	10015	33	15	47	10385	21008
Apprch %	25.9	2.4	58.8	1.2	11.8		21.2	0.4	75.8	0.4	2.3		0.7	98.1	1	0	0.2		2.6	96.4	0.3	0.1	0.5		
Total %	0.1	0	0.2	0	0	0.4	0.5	0	1.9	0	0.1	2.5	0.3	46.7	0.5	0	0.1	47.6	1.3	47.7	0.2	0.1	0.2	49.4	
Cars	22	2	50	1	10	85	112	2	400	2	12	528	71	9749	102	2	16	9940	275	9951	33	15	47	10321	20874
% Cars	100	100	100	100	100	100	100	100	100	100	100	100	100	99.3	100	100	100	99.3	100	99.4	100	100	100	99.4	99.4
Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	28	0	0	0	28	0	28	0	0	0	28	56
% Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0.3	0	0	0	0.3	0	0.3	0	0	0	0.3	0.3
Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	42	0	0	0	42	0	36	0	0	0	36	78
% Buses	0	0	0	0	0	0	0	0	0	0	0	0	0	0.4	0	0	0	0.4	0	0.4	0	0	0	0.3	0.4

Cleland Counts

1441 Camino Cerritos S.E.
Albuquerque, New Mexico 87123
(505) 414-0465

File Name : Carlisle Blvd. and Access 4
Site Code : 04252024
Start Date : 4/25/2024
Page No : 3

	Access 4 Eastbound				Shopping Center Parking lot Westbound				Carlisle Blvd. Northbound				Carlisle Blvd. Southbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	0	1	1	2	0	0	0	0	2	273	0	275	0	239	0	239	516
08:00 AM	1	0	2	3	0	0	0	0	3	252	0	255	2	242	1	245	503
08:15 AM	2	0	1	3	0	0	3	3	2	252	0	254	2	252	1	255	515
08:30 AM	3	0	0	3	0	0	2	2	0	237	2	239	4	266	0	270	514
Total Volume	6	1	4	11	0	0	5	5	7	1014	2	1023	8	999	2	1009	2048
% App. Total	54.5	9.1	36.4		0	0	100		0.7	99.1	0.2		0.8	99	0.2		
PHF	.500	.250	.500	.917	.000	.000	.417	.417	.583	.929	.250	.930	.500	.939	.500	.934	.992
Cars	6	1	4	11	0	0	5	5	7	1005	2	1014	8	990	2	1000	2030
% Cars	100	100	100	100	0	0	100	100	100	99.1	100	99.1	100	99.1	100	99.1	99.1
Trucks	0	0	0	0	0	0	0	0	0	6	0	6	0	3	0	3	9
% Trucks	0	0	0	0	0	0	0	0	0	0.6	0	0.6	0	0.3	0	0.3	0.4
Buses	0	0	0	0	0	0	0	0	0	3	0	3	0	6	0	6	9
% Buses	0	0	0	0	0	0	0	0	0	0.3	0	0.3	0	0.6	0	0.6	0.4
Peak Hour Analysis From 10:00 AM to 01:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 12:00 PM																	
12:00 PM	0	0	2	2	2	0	26	28	2	293	4	299	15	263	1	279	608
12:15 PM	1	0	0	1	3	0	20	23	2	249	6	257	12	319	2	333	614
12:30 PM	1	0	1	2	6	0	15	21	3	292	5	300	5	291	3	299	622
12:45 PM	0	0	4	4	4	0	18	22	5	274	3	282	10	277	1	288	596
Total Volume	2	0	7	9	15	0	79	94	12	1108	18	1138	42	1150	7	1199	2440
% App. Total	22.2	0	77.8		16	0	84		1.1	97.4	1.6		3.5	95.9	0.6		
PHF	.500	.000	.438	.563	.625	.000	.760	.839	.600	.945	.750	.948	.700	.901	.583	.900	.981
Cars	2	0	7	9	15	0	79	94	12	1104	18	1134	42	1144	7	1193	2430
% Cars	100	0	100	100	100	0	100	100	100	99.6	100	99.6	100	99.5	100	99.5	99.6
Trucks	0	0	0	0	0	0	0	0	0	2	0	2	0	3	0	3	5
% Trucks	0	0	0	0	0	0	0	0	0	0.2	0	0.2	0	0.3	0	0.3	0.2
Buses	0	0	0	0	0	0	0	0	0	2	0	2	0	3	0	3	5
% Buses	0	0	0	0	0	0	0	0	0	0.2	0	0.2	0	0.3	0	0.3	0.2

Cleland Counts

1441 Camino Cerritos S.E.
Albuquerque, New Mexico 87123
(505) 414-0465

File Name : Carlisle Blvd. and Access 4
Site Code : 04252024
Start Date : 4/25/2024
Page No : 4

	Access 4 Eastbound				Shopping Center Parking lot Westbound				Carlisle Blvd. Northbound				Carlisle Blvd. Southbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	0	2	2	2	1	11	14	2	372	5	379	13	345	0	358	753
04:45 PM	0	0	0	0	3	0	18	21	0	384	3	387	10	356	0	366	774
05:00 PM	0	0	3	3	1	0	14	15	4	344	2	350	10	366	0	376	744
05:15 PM	1	0	0	1	1	0	9	10	0	367	3	370	9	384	2	395	776
Total Volume	1	0	5	6	7	1	52	60	6	1467	13	1486	42	1451	2	1495	3047
% App. Total	16.7	0	83.3		11.7	1.7	86.7		0.4	98.7	0.9		2.8	97.1	0.1		
PHF	.250	.000	.417	.500	.583	.250	.722	.714	.375	.955	.650	.960	.808	.945	.250	.946	.982
Cars	1	0	5	6	7	1	52	60	6	1459	13	1478	42	1448	2	1492	3036
% Cars	100	0	100	100	100	100	100	100	100	99.5	100	99.5	100	99.8	100	99.8	99.6
Trucks	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
% Trucks	0	0	0	0	0	0	0	0	0	0.1	0	0.1	0	0	0	0	0.0
Buses	0	0	0	0	0	0	0	0	0	7	0	7	0	3	0	3	10
% Buses	0	0	0	0	0	0	0	0	0	0.5	0	0.5	0	0.2	0	0.2	0.3

Cleland Counts

1441 Camino Cerritos S.E.
Albuquerque, New Mexico 87123
(505) 414-0465

Counter R.C.

File Name : Carlisle Blvd. and I-40 EB Ramp
Site Code : 04232024
Start Date : 4/23/2024
Page No : 1

Groups Printed- Cars - Trucks - Buses

	I-40 Off Ramp Eastbound						Carlisle Blvd. Northbound						Carlisle Blvd. Southbound						
Start Time	Left	Thru	Right	Bikes	Peds	App. Total	Left	Thru	Right	Bikes	Peds	App. Total	Left	Thru	Bikes	Peds	App. Total	Int. Total	
07:00 AM	115	0	101	0	0	216	0	130	30	1	0	161	28	154	1	0	183	560	
07:15 AM	118	0	140	0	0	258	0	181	34	0	0	215	31	203	0	0	234	707	
07:30 AM	123	1	115	0	0	239	0	257	54	0	0	311	47	215	0	0	262	812	
07:45 AM	150	0	126	0	0	276	0	245	51	0	2	298	59	210	0	0	269	843	
Total	506	1	482	0	0	989	0	813	169	1	2	985	165	782	1	0	948	2922	
08:00 AM	155	1	126	0	1	283	0	203	44	0	1	248	55	194	0	0	249	780	
08:15 AM	117	1	125	0	0	243	0	209	30	0	0	239	43	178	0	0	221	703	
08:30 AM	111	2	161	0	0	274	0	204	41	1	0	246	40	161	0	0	201	721	
08:45 AM	123	1	133	0	1	258	0	228	57	1	1	287	45	209	0	0	254	799	
Total	506	5	545	0	2	1058	0	844	172	2	2	1020	183	742	0	0	925	3003	
09:00 AM	117	1	127	0	0	245	0	202	40	1	0	243	49	191	0	0	240	728	
09:15 AM	109	2	106	0	0	217	0	163	41	0	2	206	38	152	0	0	190	613	
09:30 AM	90	0	106	0	0	196	0	179	36	0	1	216	30	157	0	0	187	599	
09:45 AM	146	1	119	0	0	266	0	178	31	0	1	210	56	170	0	0	226	702	
Total	462	4	458	0	0	924	0	722	148	1	4	875	173	670	0	0	843	2642	
*** BREAK ***																			
11:00 AM	123	4	106	0	3	236	0	211	56	0	1	268	57	167	0	0	224	728	
11:15 AM	125	2	98	0	1	226	0	227	47	0	1	275	48	183	0	4	235	736	
11:30 AM	119	0	111	0	3	233	0	231	45	0	2	278	54	200	0	1	255	766	
11:45 AM	114	4	124	0	0	242	0	224	52	0	1	277	50	229	0	0	279	798	
Total	481	10	439	0	7	937	0	893	200	0	5	1098	209	779	0	5	993	3028	
12:00 PM	106	0	111	0	0	217	0	235	58	0	0	293	52	244	0	0	296	806	
12:15 PM	113	0	106	0	0	219	0	240	49	0	0	289	50	223	0	0	273	781	
12:30 PM	132	0	107	0	0	239	0	263	51	0	1	315	47	218	0	0	265	819	
12:45 PM	115	0	130	0	1	246	0	229	60	0	0	289	59	194	0	0	253	788	
Total	466	0	454	0	1	921	0	967	218	0	1	1186	208	879	0	0	1087	3194	
01:00 PM	104	0	108	0	0	212	0	266	58	0	0	324	76	221	0	1	298	834	
01:15 PM	108	0	115	0	1	224	0	251	44	0	1	296	52	220	0	0	272	792	
01:30 PM	104	1	116	0	0	221	0	233	56	0	0	289	51	217	0	0	268	778	
01:45 PM	87	1	115	0	0	203	0	212	55	1	1	269	61	212	0	0	273	745	
Total	403	2	454	0	1	860	0	962	213	1	2	1178	240	870	0	1	1111	3149	

Cleland Counts

1441 Camino Cerritos S.E.
Albuquerque, New Mexico 87123
(505) 414-0465

File Name : Carlisle Blvd. and I-40 EB Ramp
Site Code : 04232024
Start Date : 4/23/2024
Page No : 2

Groups Printed- Cars - Trucks - Buses

	I-40 Off Ramp Eastbound						Carlisle Blvd. Northbound						Carlisle Blvd. Southbound					
Start Time	Left	Thru	Right	Bikes	Peds	App. Total	Left	Thru	Right	Bikes	Peds	App. Total	Left	Thru	Bikes	Peds	App. Total	Int. Total
*** BREAK ***																		
03:00 PM	114	2	109	0	0	225	0	268	61	1	0	330	77	185	0	0	262	817
03:15 PM	129	2	110	0	0	241	0	270	76	0	1	347	76	198	0	1	275	863
03:30 PM	105	2	106	0	0	213	0	277	89	1	0	367	77	216	0	0	293	873
03:45 PM	125	2	120	0	0	247	0	285	74	0	0	359	73	221	0	3	297	903
Total	473	8	445	0	0	926	0	1100	300	2	1	1403	303	820	0	4	1127	3456
04:00 PM	113	1	110	0	0	224	0	308	87	0	0	395	87	260	0	0	347	966
04:15 PM	124	3	142	0	2	271	0	296	70	0	3	369	79	258	1	0	338	978
04:30 PM	100	1	121	0	0	222	0	348	78	0	1	427	97	281	0	0	378	1027
04:45 PM	100	2	142	0	0	244	0	292	76	1	2	371	80	244	1	1	326	941
Total	437	7	515	0	2	961	0	1244	311	1	6	1562	343	1043	2	1	1389	3912
05:00 PM	90	2	93	0	0	185	0	343	67	0	0	410	102	268	0	1	371	966
05:15 PM	120	3	129	0	0	252	0	285	75	0	1	361	73	290	0	0	363	976
05:30 PM	89	0	99	0	0	188	0	291	75	0	0	366	79	273	0	3	355	909
05:45 PM	76	4	133	0	0	213	0	217	59	0	0	276	65	208	0	3	276	765
Total	375	9	454	0	0	838	0	1136	276	0	1	1413	319	1039	0	7	1365	3616
Grand Total	4109	46	4246	0	13	8414	0	8681	2007	8	24	10720	2143	7624	3	18	9788	28922
Apprch %	48.8	0.5	50.5	0	0.2		0	81	18.7	0.1	0.2		21.9	77.9	0	0.2		
Total %	14.2	0.2	14.7	0	0	29.1	0	30	6.9	0	0.1	37.1	7.4	26.4	0	0.1	33.8	
Cars	4071	46	4229	0	13	8359	0	8640	1990	8	24	10662	2136	7582	3	18	9739	28760
% Cars	99.1	100	99.6	0	100	99.3	0	99.5	99.2	100	100	99.5	99.7	99.4	100	100	99.5	99.4
Trucks	28	0	5	0	0	33	0	18	3	0	0	21	5	10	0	0	15	69
% Trucks	0.7	0	0.1	0	0	0.4	0	0.2	0.1	0	0	0.2	0.2	0.1	0	0	0.2	0.2
Buses	10	0	12	0	0	22	0	23	14	0	0	37	2	32	0	0	34	93
% Buses	0.2	0	0.3	0	0	0.3	0	0.3	0.7	0	0	0.3	0.1	0.4	0	0	0.3	0.3

Cleland Counts

1441 Camino Cerritos S.E.
Albuquerque, New Mexico 87123
(505) 414-0465

File Name : Carlisle Blvd. and I-40 EB Ramp
Site Code : 04232024
Start Date : 4/23/2024
Page No : 3

	I-40 Off Ramp Eastbound				Carlisle Blvd. Northbound				Carlisle Blvd. Southbound			
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1												
Peak Hour for Entire Intersection Begins at 07:15 AM												
07:15 AM	118	0	140	258	0	181	34	215	31	203	234	707
07:30 AM	123	1	115	239	0	257	54	311	47	215	262	812
07:45 AM	150	0	126	276	0	245	51	296	59	210	269	841
08:00 AM	155	1	126	282	0	203	44	247	55	194	249	778
Total Volume	546	2	507	1055	0	886	183	1069	192	822	1014	3138
% App. Total	51.8	0.2	48.1		0	82.9	17.1		18.9	81.1		
PHF	.881	.500	.905	.935	.000	.862	.847	.859	.814	.956	.942	.933
Cars	542	2	506	1050	0	882	179	1061	191	813	1004	3115
% Cars	99.3	100	99.8	99.5	0	99.5	97.8	99.3	99.5	98.9	99.0	99.3
Trucks	2	0	1	3	0	2	2	4	0	3	3	10
% Trucks	0.4	0	0.2	0.3	0	0.2	1.1	0.4	0	0.4	0.3	0.3
Buses	2	0	0	2	0	2	2	4	1	6	7	13
% Buses	0.4	0	0	0.2	0	0.2	1.1	0.4	0.5	0.7	0.7	0.4
Peak Hour Analysis From 10:00 AM to 01:45 PM - Peak 1 of 1												
Peak Hour for Entire Intersection Begins at 12:30 PM												
12:30 PM	132	0	107	239	0	263	51	314	47	218	265	818
12:45 PM	115	0	130	245	0	229	60	289	59	194	253	787
01:00 PM	104	0	108	212	0	266	58	324	76	221	297	833
01:15 PM	108	0	115	223	0	251	44	295	52	220	272	790
Total Volume	459	0	460	919	0	1009	213	1222	234	853	1087	3228
% App. Total	49.9	0	50.1		0	82.6	17.4		21.5	78.5		
PHF	.869	.000	.885	.938	.000	.948	.888	.943	.770	.965	.915	.969
Cars	456	0	460	916	0	1008	210	1218	232	850	1082	3216
% Cars	99.3	0	100	99.7	0	99.9	98.6	99.7	99.1	99.6	99.5	99.6
Trucks	1	0	0	1	0	1	0	1	2	0	2	4
% Trucks	0.2	0	0	0.1	0	0.1	0	0.1	0.9	0	0.2	0.1
Buses	2	0	0	2	0	0	3	3	0	3	3	8
% Buses	0.4	0	0	0.2	0	0	1.4	0.2	0	0.4	0.3	0.2

Cleland Counts

1441 Camino Cerritos S.E.
Albuquerque, New Mexico 87123
(505) 414-0465

File Name : Carlisle Blvd. and I-40 EB Ramp
Site Code : 04232024
Start Date : 4/23/2024
Page No : 4

	I-40 Off Ramp Eastbound				Carlisle Blvd. Northbound				Carlisle Blvd. Southbound			
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1												
Peak Hour for Entire Intersection Begins at 04:30 PM												
04:30 PM	100	1	121	222	0	348	78	426	97	281	378	1026
04:45 PM	100	2	142	244	0	292	76	368	80	244	324	936
05:00 PM	90	2	93	185	0	343	67	410	102	268	370	965
05:15 PM	120	3	129	252	0	285	75	360	73	290	363	975
Total Volume	410	8	485	903	0	1268	296	1564	352	1083	1435	3902
% App. Total	45.4	0.9	53.7		0	81.1	18.9		24.5	75.5		
PHF	.854	.667	.854	.896	.000	.911	.949	.918	.863	.934	.949	.951
Cars	408	8	485	901	0	1261	296	1557	352	1079	1431	3889
% Cars	99.5	100	100	99.8	0	99.4	100	99.6	100	99.6	99.7	99.7
Trucks	1	0	0	1	0	2	0	2	0	0	0	3
% Trucks	0.2	0	0	0.1	0	0.2	0	0.1	0	0	0	0.1
Buses	1	0	0	1	0	5	0	5	0	4	4	10
% Buses	0.2	0	0	0.1	0	0.4	0	0.3	0	0.4	0.3	0.3

1441 Camino Cerritos S.E.
Albuquerque, New Mexico 87123
(505) 414-0465

File Name : Carlisle Blvd. and I-40 WB Ramp
Site Code : 04232024
Start Date : 4/23/2024
Page No : 1

*** BREAK ***

Cleland Counts

1441 Camino Cerritos S.E.
Albuquerque, New Mexico 87123
(505) 414-0465

File Name : Carlisle Blvd. and I-40 WB Ramp
Site Code : 04232024
Start Date : 4/23/2024
Page No : 2

Groups Printed- Cars - Trucks - Buses

	Eastbound			I-40 Off Ramp Westbound						Carlisle Blvd. Northbound					Carlisle Blvd. Southbound					
Start Time	Bikes	Peds	App. Total	Left	Thru	Right	Bikes	Peds	App. Total	Left	Thru	Bikes	Peds	App. Total	Thru	Right	Bikes	Peds	App. Total	Int. Total
03:00 PM	0	0	0	45	1	62	0	0	108	131	258	0	0	389	206	61	0	0	267	764
03:15 PM	0	0	0	55	0	50	0	1	106	110	267	0	0	377	237	81	0	1	319	802
03:30 PM	0	0	0	59	1	48	0	1	109	116	266	0	1	383	211	69	0	0	280	772
03:45 PM	0	0	0	63	1	69	0	0	133	127	270	0	0	397	235	66	0	0	301	831
Total	0	0	0	222	3	229	0	2	456	484	1061	0	1	1546	889	277	0	1	1167	3169
04:00 PM	0	0	0	60	4	58	0	1	123	122	311	0	0	433	277	77	0	0	354	910
04:15 PM	0	0	0	91	15	115	0	0	221	97	313	0	2	412	249	58	1	0	308	941
04:30 PM	0	0	0	78	19	110	0	0	207	120	354	0	0	474	284	63	0	0	347	1028
04:45 PM	0	0	0	76	8	110	0	0	194	100	283	0	0	383	256	81	0	0	337	914
Total	0	0	0	305	46	393	0	1	745	439	1261	0	2	1702	1066	279	1	0	1346	3793
05:00 PM	0	0	0	62	4	78	0	0	144	148	308	2	1	459	296	77	0	0	373	976
05:15 PM	0	0	0	103	14	109	0	0	226	71	311	0	0	382	272	64	0	0	336	944
05:30 PM	0	0	0	63	8	86	0	0	157	91	307	0	0	398	272	82	0	1	355	910
05:45 PM	0	0	0	70	1	53	0	0	124	84	207	0	2	293	214	44	0	0	258	675
Total	0	0	0	298	27	326	0	0	651	394	1133	2	3	1532	1054	267	0	1	1322	3505
Grand Total	0	1	1	2287	88	2358	0	11	4744	3584	9258	10	17	12869	7380	2246	5	9	9640	27254
Apprch %	0	100		48.2	1.9	49.7	0	0.2		27.8	71.9	0.1	0.1		76.6	23.3	0.1	0.1		
Total %	0	0	0	8.4	0.3	8.7	0	0	17.4	13.2	34	0	0.1	47.2	27.1	8.2	0	0	35.4	
Cars	0	1	1	2281	84	2339	0	11	4715	3557	9187	10	17	12771	7332	2205	5	9	9551	27038
% Cars	0	100	100	99.7	95.5	99.2	0	100	99.4	99.2	99.2	100	100	99.2	99.3	98.2	100	100	99.1	99.2
Trucks	0	0	0	1	1	13	0	0	15	17	36	0	0	53	19	32	0	0	51	119
% Trucks	0	0	0	0	1.1	0.6	0	0	0.3	0.5	0.4	0	0	0.4	0.3	1.4	0	0	0.5	0.4
Buses	0	0	0	5	3	6	0	0	14	10	35	0	0	45	29	9	0	0	38	97
% Buses	0	0	0	0.2	3.4	0.3	0	0	0.3	0.3	0.4	0	0	0.3	0.4	0.4	0	0	0.4	0.4

Cleland Counts

1441 Camino Cerritos S.E.
Albuquerque, New Mexico 87123
(505) 414-0465

File Name : Carlisle Blvd. and I-40 WB Ramp
Site Code : 04232024
Start Date : 4/23/2024
Page No : 3

	Eastbound	I-40 Off Ramp Westbound				Carlisle Blvd. Northbound			Carlisle Blvd. Southbound			
Start Time	App. Total	Left	Thru	Right	App. Total	Left	Thru	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1												
Peak Hour for Entire Intersection Begins at 07:30 AM												
07:30 AM	0	68	2	60	130	114	275	389	197	75	272	791
07:45 AM	0	60	0	69	129	109	284	393	195	68	263	785
08:00 AM	0	68	0	73	141	90	266	356	178	53	231	728
08:15 AM	0	55	1	59	115	101	238	339	166	68	234	688
Total Volume	0	251	3	261	515	414	1063	1477	736	264	1000	2992
% App. Total		48.7	0.6	50.7		28	72		73.6	26.4		
PHF	.000	.923	.375	.894	.913	.908	.936	.940	.934	.880	.919	.946
Cars	0	251	3	259	513	412	1053	1465	729	262	991	2969
% Cars	0	100	100	99.2	99.6	99.5	99.1	99.2	99.0	99.2	99.1	99.2
Trucks	0	0	0	2	2	2	6	8	2	2	4	14
% Trucks	0	0	0	0.8	0.4	0.5	0.6	0.5	0.3	0.8	0.4	0.5
Buses	0	0	0	0	0	0	4	4	5	0	5	9
% Buses	0	0	0	0	0	0	0.4	0.3	0.7	0	0.5	0.3
Peak Hour Analysis From 10:00 AM to 01:45 PM - Peak 1 of 1												
Peak Hour for Entire Intersection Begins at 12:30 PM												
12:30 PM	0	63	3	55	121	102	290	392	198	72	270	783
12:45 PM	0	62	0	53	115	111	245	356	207	66	273	744
01:00 PM	0	51	0	58	109	108	265	373	239	61	300	782
01:15 PM	0	62	0	56	118	123	247	370	198	60	258	746
Total Volume	0	238	3	222	463	444	1047	1491	842	259	1101	3055
% App. Total		51.4	0.6	47.9		29.8	70.2		76.5	23.5		
PHF	.000	.944	.250	.957	.957	.902	.903	.951	.881	.899	.918	.975
Cars	0	236	3	220	459	441	1040	1481	839	251	1090	3030
% Cars	0	99.2	100	99.1	99.1	99.3	99.3	99.3	99.6	96.9	99.0	99.2
Trucks	0	0	0	1	1	1	4	5	2	7	9	15
% Trucks	0	0	0	0.5	0.2	0.2	0.4	0.3	0.2	2.7	0.8	0.5
Buses	0	2	0	1	3	2	3	5	1	1	2	10
% Buses	0	0.8	0	0.5	0.6	0.5	0.3	0.3	0.1	0.4	0.2	0.3

Cleland Counts

1441 Camino Cerritos S.E.
Albuquerque, New Mexico 87123
(505) 414-0465

File Name : Carlisle Blvd. and I-40 WB Ramp
Site Code : 04232024
Start Date : 4/23/2024
Page No : 4

	Eastbound	I-40 Off Ramp Westbound				Carlisle Blvd. Northbound			Carlisle Blvd. Southbound			
Start Time	App. Total	Left	Thru	Right	App. Total	Left	Thru	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1												
Peak Hour for Entire Intersection Begins at 04:30 PM												
04:30 PM	0	78	19	110	207	120	354	474	284	63	347	1028
04:45 PM	0	76	8	110	194	100	283	383	256	81	337	914
05:00 PM	0	62	4	78	144	148	308	456	296	77	373	973
05:15 PM	0	103	14	109	226	71	311	382	272	64	336	944
Total Volume	0	319	45	407	771	439	1256	1695	1108	285	1393	3859
% App. Total		41.4	5.8	52.8		25.9	74.1		79.5	20.5		
PHF	.000	.774	.592	.925	.853	.742	.887	.894	.936	.880	.934	.938
Cars	0	318	42	404	764	437	1250	1687	1105	283	1388	3839
% Cars	0	99.7	93.3	99.3	99.1	99.5	99.5	99.5	99.7	99.3	99.6	99.5
Trucks	0	0	0	2	2	1	1	2	0	1	1	5
% Trucks	0	0	0	0.5	0.3	0.2	0.1	0.1	0	0.4	0.1	0.1
Buses	0	1	3	1	5	1	5	6	3	1	4	15
% Buses	0	0.3	6.7	0.2	0.6	0.2	0.4	0.4	0.3	0.4	0.3	0.4

1441 Camino Cerritos S.E.
Albuquerque, New Mexico 87123
(505) 414-0465

File Name : Carlisle Blvd. and Phoenix Ave.
Site Code : 04302024
Start Date : 4/30/2024
Page No : 1

*** BREAK ***

Cleland Counts

1441 Camino Cerritos S.E.
Albuquerque, New Mexico 87123
(505) 414-0465

File Name : Carlisle Blvd. and Phoenix Ave.
Site Code : 04302024
Start Date : 4/30/2024
Page No : 2

Groups Printed- Cars - Trucks - Buses

	Phoenix Ave. Eastbound						Phoenix Ave. Westbound						Carlisle Blvd. Northbound						Carlisle Blvd. Southbound						
Start Time	Left	Thru	Right	Bikes	Peds	App. Total	Left	Thru	Right	Bikes	Peds	App. Total	Left	Thru	Right	Bikes	Peds	App. Total	Left	Thru	Right	Bikes	Peds	App. Total	Int. Total
03:00 PM	6	0	36	0	0	42	0	0	3	0	0	3	44	240	1	0	0	285	5	269	1	0	4	279	609
03:15 PM	5	0	43	0	0	48	0	1	7	1	1	10	35	239	1	0	0	275	4	299	9	0	0	312	645
03:30 PM	0	0	40	0	0	40	1	1	3	0	2	7	31	237	5	1	1	275	2	269	9	0	0	280	602
03:45 PM	5	0	41	0	0	46	0	1	9	0	1	11	41	287	6	0	0	334	5	276	3	0	3	287	678
Total	16	0	160	0	0	176	1	3	22	1	4	31	151	1003	13	1	1	1169	16	1113	22	0	7	1158	2534
04:00 PM	1	1	30	0	0	32	0	0	8	0	2	10	38	278	8	0	0	324	1	324	7	1	1	334	700
04:15 PM	1	0	40	0	0	41	1	0	3	0	2	6	32	324	4	0	0	360	3	302	8	0	0	313	720
04:30 PM	2	0	35	0	0	37	0	0	5	0	0	5	34	320	2	1	0	357	5	315	10	0	2	332	731
04:45 PM	0	1	41	0	0	42	0	1	4	0	0	5	26	313	7	0	0	346	3	304	9	0	1	317	710
Total	4	2	146	0	0	152	1	1	20	0	4	26	130	1235	21	1	0	1387	12	1245	34	1	4	1296	2861
05:00 PM	1	0	43	0	0	44	0	0	13	0	0	13	39	281	6	1	0	327	6	317	8	1	1	333	717
05:15 PM	1	0	55	0	2	58	0	0	6	0	0	6	33	316	8	0	0	357	5	291	8	0	1	305	726
05:30 PM	2	1	49	0	0	52	2	0	5	0	1	8	36	267	1	0	0	304	5	257	8	1	1	272	636
05:45 PM	2	0	27	0	2	31	0	0	4	0	2	6	38	244	3	0	0	285	0	220	8	0	1	229	551
Total	6	1	174	0	4	185	2	0	28	0	3	33	146	1108	18	1	0	1273	16	1085	32	2	4	1139	2630
Grand Total	68	12	1194	1	14	1289	23	10	211	8	25	277	1216	8340	103	7	24	9690	141	8850	245	8	42	9286	20542
Apprch %	5.3	0.9	92.6	0.1	1.1		8.3	3.6	76.2	2.9	9		12.5	86.1	1.1	0.1	0.2		1.5	95.3	2.6	0.1	0.5		
Total %	0.3	0.1	5.8	0	0.1	6.3	0.1	0	1	0	0.1	1.3	5.9	40.6	0.5	0	0.1	47.2	0.7	43.1	1.2	0	0.2	45.2	
Cars	68	12	1187	1	14	1282	23	10	211	8	25	277	1214	8285	102	7	24	9632	141	8775	242	8	42	9208	20399
% Cars	100	100	99.4	100	100	99.5	100	100	100	100	100	100	99.8	99.3	99	100	100	99.4	100	99.2	98.8	100	100	99.2	99.3
Trucks	0	0	5	0	0	5	0	0	0	0	0	0	2	20	1	0	0	23	0	43	2	0	0	45	73
% Trucks	0	0	0.4	0	0	0.4	0	0	0	0	0	0	0.2	0.2	1	0	0	0.2	0	0.5	0.8	0	0	0.5	0.4
Buses	0	0	2	0	0	2	0	0	0	0	0	0	0	35	0	0	0	35	0	32	1	0	0	33	70
% Buses	0	0	0.2	0	0	0.2	0	0	0	0	0	0	0	0.4	0	0	0	0.4	0	0.4	0.4	0	0	0.4	0.3

Cleland Counts

1441 Camino Cerritos S.E.
Albuquerque, New Mexico 87123
(505) 414-0465

File Name : Carlisle Blvd. and Phoenix Ave.
Site Code : 04302024
Start Date : 4/30/2024
Page No : 3

	Phoenix Ave. Eastbound				Phoenix Ave. Westbound				Carlisle Blvd. Northbound				Carlisle Blvd. Southbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	0	19	19	1	1	2	4	20	210	2	232	1	213	3	217	472
07:45 AM	0	0	13	13	2	0	5	7	24	225	0	249	2	236	2	240	509
08:00 AM	1	0	12	13	1	0	3	4	18	215	1	234	3	237	9	249	500
08:15 AM	1	0	21	22	3	1	3	7	15	175	1	191	3	214	2	219	439
Total Volume	2	0	65	67	7	2	13	22	77	825	4	906	9	900	16	925	1920
% App. Total	3	0	97		31.8	9.1	59.1		8.5	91.1	0.4		1	97.3	1.7		
PHF	.500	.000	.774	.761	.583	.500	.650	.786	.802	.917	.500	.910	.750	.949	.444	.929	.943
Cars	2	0	64	66	7	2	13	22	77	818	4	899	9	886	16	911	1898
% Cars	100	0	98.5	98.5	100	100	100	100	100	99.2	100	99.2	100	98.4	100	98.5	98.9
Trucks	0	0	1	1	0	0	0	0	0	2	0	2	0	10	0	10	13
% Trucks	0	0	1.5	1.5	0	0	0	0	0	0.2	0	0.2	0	1.1	0	1.1	0.7
Buses	0	0	0	0	0	0	0	0	0	5	0	5	0	4	0	4	9
% Buses	0	0	0	0	0	0	0	0	0	0.6	0	0.6	0	0.4	0	0.4	0.5
Peak Hour Analysis From 10:00 AM to 01:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 12:00 PM																	
12:00 PM	5	0	41	46	0	0	11	11	27	236	3	266	7	264	8	279	602
12:15 PM	2	0	25	27	0	0	11	11	40	255	6	301	8	322	8	338	677
12:30 PM	0	0	44	44	2	0	15	17	34	260	1	295	5	278	8	291	647
12:45 PM	3	1	41	45	1	1	7	9	48	225	3	276	3	277	4	284	614
Total Volume	10	1	151	162	3	1	44	48	149	976	13	1138	23	1141	28	1192	2540
% App. Total	6.2	0.6	93.2		6.2	2.1	91.7		13.1	85.8	1.1		1.9	95.7	2.3		
PHF	.500	.250	.858	.880	.375	.250	.733	.706	.776	.938	.542	.945	.719	.886	.875	.882	.938
Cars	10	1	148	159	3	1	44	48	148	973	13	1134	23	1127	28	1178	2519
% Cars	100	100	98.0	98.1	100	100	100	100	99.3	99.7	100	99.6	100	98.8	100	98.8	99.2
Trucks	0	0	3	3	0	0	0	0	1	2	0	3	0	11	0	11	17
% Trucks	0	0	2.0	1.9	0	0	0	0	0.7	0.2	0	0.3	0	1.0	0	0.9	0.7
Buses	0	0	0	0	0	0	0	0	0	1	0	1	0	3	0	3	4
% Buses	0	0	0	0	0	0	0	0	0	0.1	0	0.1	0	0.3	0	0.3	0.2

Cleland Counts

1441 Camino Cerritos S.E.
Albuquerque, New Mexico 87123
(505) 414-0465

File Name : Carlisle Blvd. and Phoenix Ave.
Site Code : 04302024
Start Date : 4/30/2024
Page No : 4

	Phoenix Ave. Eastbound				Phoenix Ave. Westbound				Carlisle Blvd. Northbound				Carlisle Blvd. Southbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	2	0	35	37	0	0	5	5	34	320	2	356	5	315	10	330	728
04:45 PM	0	1	41	42	0	1	4	5	26	313	7	346	3	304	9	316	709
05:00 PM	1	0	43	44	0	0	13	13	39	281	6	326	6	317	8	331	714
05:15 PM	1	0	55	56	0	0	6	6	33	316	8	357	5	291	8	304	723
Total Volume	4	1	174	179	0	1	28	29	132	1230	23	1385	19	1227	35	1281	2874
% App. Total	2.2	0.6	97.2		0	3.4	96.6		9.5	88.8	1.7		1.5	95.8	2.7		
PHF	.500	.250	.791	.799	.000	.250	.538	.558	.846	.961	.719	.970	.792	.968	.875	.968	.987
Cars	4	1	173	178	0	1	28	29	132	1222	23	1377	19	1221	34	1274	2858
% Cars	100	100	99.4	99.4	0	100	100	100	100	99.3	100	99.4	100	99.5	97.1	99.5	99.4
Trucks	0	0	0	0	0	0	0	0	0	2	0	2	0	1	1	2	4
% Trucks	0	0	0	0	0	0	0	0	0	0.2	0	0.1	0	0.1	2.9	0.2	0.1
Buses	0	0	1	1	0	0	0	0	0	6	0	6	0	5	0	5	12
% Buses	0	0	0.6	0.6	0	0	0	0	0	0.5	0	0.4	0	0.4	0	0.4	0.4

1441 Camino Cerritos S.E.
Albuquerque, New Mexico 87123
(505) 414-0465

File Name : Carlisle Blvd. and Prospect Ave.
Site Code : 04242024
Start Date : 4/24/2024
Page No : 1

*** BREAK ***

Cleland Counts

1441 Camino Cerritos S.E.
Albuquerque, New Mexico 87123
(505) 414-0465

File Name : Carlisle Blvd. and Prospect Ave.
Site Code : 04242024
Start Date : 4/24/2024
Page No : 2

Groups Printed- Cars - Trucks - Buses

	Prospect Ave. Eastbound						Blvd 2500 Apartments Westbound						Carlisle Blvd. Northbound						Carlisle Blvd. Southbound						
Start Time	Left	Thru	Right	Bikes	Peds	App. Total	Left	Thru	Right	Bikes	Peds	App. Total	Left	Thru	Right	Bikes	Peds	App. Total	Left	Thru	Right	Bikes	Peds	App. Total	Int. Total
03:00 PM	4	0	22	0	0	26	6	0	4	0	0	10	15	259	0	0	0	274	8	323	9	0	0	340	650
03:15 PM	3	0	22	0	0	25	1	1	3	0	0	5	21	273	2	0	4	300	7	342	9	0	2	360	690
03:30 PM	4	0	22	0	0	26	6	1	4	0	0	11	21	297	3	0	0	321	5	345	7	0	1	358	716
03:45 PM	3	0	16	0	0	19	6	0	2	0	0	8	21	310	4	0	1	336	5	351	10	0	0	366	729
Total	14	0	82	0	0	96	19	2	13	0	0	34	78	1139	9	0	5	1231	25	1361	35	0	3	1424	2785
04:00 PM	2	0	31	0	0	33	2	1	2	0	0	5	24	358	1	0	0	383	4	363	7	0	0	374	795
04:15 PM	0	0	21	1	1	23	4	0	5	0	0	9	21	316	4	0	2	343	5	353	4	1	0	363	738
04:30 PM	4	0	39	0	0	43	1	0	2	0	0	3	27	366	8	0	1	402	5	370	14	0	0	389	837
04:45 PM	4	0	12	0	0	16	2	0	1	0	0	3	25	361	5	0	0	391	4	333	7	0	0	344	754
Total	10	0	103	1	1	115	9	1	10	0	0	20	97	1401	18	0	3	1519	18	1419	32	1	0	1470	3124
05:00 PM	3	0	24	2	0	29	2	0	2	0	0	4	26	354	6	0	0	386	7	371	12	0	2	392	811
05:15 PM	1	0	17	0	0	18	2	0	2	0	0	4	20	365	8	0	0	393	5	386	9	0	1	401	816
05:30 PM	0	0	11	0	0	11	6	0	2	0	0	8	18	298	5	0	0	321	5	324	5	0	0	334	674
05:45 PM	3	0	17	0	2	22	2	0	0	0	0	2	31	299	5	0	1	336	7	278	13	0	1	299	659
Total	7	0	69	2	2	80	12	0	6	0	0	18	95	1316	24	0	1	1436	24	1359	39	0	4	1426	2960
Grand Total	136	0	669	7	9	821	125	5	120	0	6	256	934	9962	108	5	19	11028	137	10092	319	6	36	10590	22695
Apprch %	16.6	0	81.5	0.9	1.1		48.8	2	46.9	0	2.3		8.5	90.3	1	0	0.2		1.3	95.3	3	0.1	0.3		
Total %	0.6	0	2.9	0	0	3.6	0.6	0	0.5	0	0	1.1	4.1	43.9	0.5	0	0.1	48.6	0.6	44.5	1.4	0	0.2	46.7	
Cars	136	0	667	7	9	819	124	5	119	0	6	254	928	9866	107	5	19	10925	136	10011	319	6	36	10508	22506
% Cars	100	0	99.7	100	100	99.8	99.2	100	99.2	0	100	99.2	99.4	99	99.1	100	100	99.1	99.3	99.2	100	100	100	99.2	99.2
Trucks	0	0	2	0	0	2	1	0	0	0	0	1	5	66	1	0	0	72	0	47	0	0	0	47	122
% Trucks	0	0	0.3	0	0	0.2	0.8	0	0	0	0	0.4	0.5	0.7	0.9	0	0	0.7	0	0.5	0	0	0	0.4	0.5
Buses	0	0	0	0	0	0	0	0	1	0	0	1	1	30	0	0	0	31	1	34	0	0	0	35	67
% Buses	0	0	0	0	0	0	0	0	0.8	0	0	0.4	0.1	0.3	0	0	0	0.3	0.7	0.3	0	0	0	0.3	0.3

Cleland Counts

1441 Camino Cerritos S.E.
Albuquerque, New Mexico 87123
(505) 414-0465

File Name : Carlisle Blvd. and Prospect Ave.
Site Code : 04242024
Start Date : 4/24/2024
Page No : 3

	Prospect Ave. Eastbound				Blvd 2500 Apartments Westbound				Carlisle Blvd. Northbound				Carlisle Blvd. Southbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	4	0	16	20	5	0	3	8	32	257	2	291	3	248	10	261	580
07:45 AM	4	0	11	15	7	1	4	12	38	296	1	335	2	225	7	234	596
08:00 AM	2	0	9	11	3	0	5	8	24	265	1	290	4	244	8	256	565
08:15 AM	5	0	16	21	3	0	5	8	20	263	2	285	1	215	8	224	538
Total Volume	15	0	52	67	18	1	17	36	114	1081	6	1201	10	932	33	975	2279
% App. Total	22.4	0	77.6		50	2.8	47.2		9.5	90	0.5		1	95.6	3.4		
PHF	.750	.000	.813	.798	.643	.250	.850	.750	.750	.913	.750	.896	.625	.940	.825	.934	.956
Cars	15	0	51	66	18	1	17	36	114	1069	5	1188	10	927	33	970	2260
% Cars	100	0	98.1	98.5	100	100	100	100	100	98.9	83.3	98.9	100	99.5	100	99.5	99.2
Trucks	0	0	1	1	0	0	0	0	0	8	1	9	0	3	0	3	13
% Trucks	0	0	1.9	1.5	0	0	0	0	0	0.7	16.7	0.7	0	0.3	0	0.3	0.6
Buses	0	0	0	0	0	0	0	0	0	4	0	4	0	2	0	2	6
% Buses	0	0	0	0	0	0	0	0	0	0.4	0	0.3	0	0.2	0	0.2	0.3
Peak Hour Analysis From 10:00 AM to 01:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 11:45 AM																	
11:45 AM	6	0	25	31	4	0	4	8	29	268	3	300	2	301	14	317	656
12:00 PM	7	0	17	24	2	0	3	5	23	312	2	337	3	307	8	318	684
12:15 PM	9	0	18	27	5	0	4	9	29	253	1	283	2	279	13	294	613
12:30 PM	1	0	27	28	4	0	8	12	33	275	4	312	6	293	10	309	661
Total Volume	23	0	87	110	15	0	19	34	114	1108	10	1232	13	1180	45	1238	2614
% App. Total	20.9	0	79.1		44.1	0	55.9		9.3	89.9	0.8		1.1	95.3	3.6		
PHF	.639	.000	.806	.887	.750	.000	.594	.708	.864	.888	.625	.914	.542	.961	.804	.973	.955
Cars	23	0	87	110	15	0	19	34	112	1092	10	1214	13	1173	45	1231	2589
% Cars	100	0	100	100	100	0	100	100	98.2	98.6	100	98.5	100	99.4	100	99.4	99.0
Trucks	0	0	0	0	0	0	0	0	2	12	0	14	0	3	0	3	17
% Trucks	0	0	0	0	0	0	0	0	1.8	1.1	0	1.1	0	0.3	0	0.2	0.7
Buses	0	0	0	0	0	0	0	0	0	4	0	4	0	4	0	4	8
% Buses	0	0	0	0	0	0	0	0	0	0.4	0	0.3	0	0.3	0	0.3	0.3

Cleland Counts

1441 Camino Cerritos S.E.
Albuquerque, New Mexico 87123
(505) 414-0465

File Name : Carlisle Blvd. and Prospect Ave.

Site Code : 04242024

Start Date : 4/24/2024

Page No : 4

	Prospect Ave. Eastbound				Blvd 2500 Apartments Westbound				Carlisle Blvd. Northbound				Carlisle Blvd. Southbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	4	0	39	43	1	0	2	3	27	366	8	401	5	370	14	389	836
04:45 PM	4	0	12	16	2	0	1	3	25	361	5	391	4	333	7	344	754
05:00 PM	3	0	24	27	2	0	2	4	26	354	6	386	7	371	12	390	807
05:15 PM	1	0	17	18	2	0	2	4	20	365	8	393	5	386	9	400	815
Total Volume	12	0	92	104	7	0	7	14	98	1446	27	1571	21	1460	42	1523	3212
% App. Total	11.5	0	88.5		50	0	50		6.2	92	1.7		1.4	95.9	2.8		
PHF	.750	.000	.590	.605	.875	.000	.875	.875	.907	.988	.844	.979	.750	.946	.750	.952	.961
Cars	12	0	92	104	7	0	7	14	97	1432	27	1556	21	1454	42	1517	3191
% Cars	100	0	100	100	100	0	100	100	99.0	99.0	100	99.0	100	99.6	100	99.6	99.3
Trucks	0	0	0	0	0	0	0	0	1	8	0	9	0	1	0	1	10
% Trucks	0	0	0	0	0	0	0	0	1.0	0.6	0	0.6	0	0.1	0	0.1	0.3
Buses	0	0	0	0	0	0	0	0	0	6	0	6	0	5	0	5	11
% Buses	0	0	0	0	0	0	0	0	0	0.4	0	0.4	0	0.3	0	0.3	0.3

1441 Camino Cerritos S.E.
Albuquerque, New Mexico 87123
(505) 414-0465

File Name : Claremont Ave. and Carlisle Blvd.
Site Code : 05072024
Start Date : 5/7/2024
Page No : 1

*** BREAK ***

Cleland Counts

1441 Camino Cerritos S.E.
Albuquerque, New Mexico 87123
(505) 414-0465

File Name : Claremont Ave. and Carlisle Blvd.
Site Code : 05072024
Start Date : 5/7/2024
Page No : 2

Groups Printed- Cars - Trucks - Buses

	Claremont Ave Eastbound						Claremont Ave Westbound						Carlisle Blvd. Northbound						Carlisle Blvd. Southbound						
Start Time	Left	Thru	Right	Bikes	Peds	App. Total	Left	Thru	Right	Bikes	Peds	App. Total	Left	Thru	Right	Bikes	Peds	App. Total	Left	Thru	Right	Bikes	Peds	App. Total	Int. Total
03:00 PM	37	10	22	0	0	69	5	4	5	0	1	15	24	203	6	0	0	233	11	216	27	0	0	254	571
03:15 PM	36	5	25	0	4	70	7	3	7	0	1	18	24	230	10	1	0	265	7	203	20	0	1	231	584
03:30 PM	40	9	25	0	0	74	7	1	8	1	1	18	43	205	7	0	0	255	8	262	28	0	2	300	647
03:45 PM	36	3	31	0	0	70	8	1	6	0	3	18	25	216	13	0	0	254	8	247	29	0	0	284	626
Total	149	27	103	0	4	283	27	9	26	1	6	69	116	854	36	1	0	1007	34	928	104	0	3	1069	2428
04:00 PM	53	10	40	0	0	103	8	2	4	0	1	15	28	234	9	0	0	271	8	284	28	0	0	320	709
04:15 PM	37	3	29	0	0	69	7	3	8	0	0	18	31	247	16	0	1	295	4	278	29	0	2	313	695
04:30 PM	56	5	37	0	1	99	8	5	10	0	2	25	27	245	7	0	1	280	11	240	22	0	1	274	678
04:45 PM	46	4	32	1	2	85	12	6	1	1	1	21	21	298	7	0	0	326	12	231	25	0	0	268	700
Total	192	22	138	1	3	356	35	16	23	1	4	79	107	1024	39	0	2	1172	35	1033	104	0	3	1175	2782
05:00 PM	56	5	29	0	1	91	20	4	5	0	2	31	27	243	3	0	0	273	11	279	20	2	1	313	708
05:15 PM	51	5	25	0	0	81	7	0	3	0	0	10	25	244	16	0	0	285	8	285	27	0	0	320	696
05:30 PM	27	4	24	0	0	55	5	3	8	0	0	16	13	208	7	0	0	228	5	265	33	0	0	303	602
05:45 PM	36	4	24	0	0	64	6	3	4	0	0	13	14	179	8	0	1	202	4	269	19	0	0	292	571
Total	170	18	102	0	1	291	38	10	20	0	2	70	79	874	34	0	1	988	28	1098	99	2	1	1228	2577
Grand Total	1189	156	922	5	28	2300	277	122	203	5	38	645	909	6632	279	4	8	7832	255	7576	805	5	24	8665	19442
Apprch %	51.7	6.8	40.1	0.2	1.2		42.9	18.9	31.5	0.8	5.9		11.6	84.7	3.6	0.1	0.1		2.9	87.4	9.3	0.1	0.3		
Total %	6.1	0.8	4.7	0	0.1	11.8	1.4	0.6	1	0	0.2	3.3	4.7	34.1	1.4	0	0	40.3	1.3	39	4.1	0	0.1	44.6	
Cars	1185	155	920	5	28	2293	276	122	201	5	38	642	904	6579	279	4	8	7774	254	7521	799	5	24	8603	19312
% Cars	99.7	99.4	99.8	100	100	99.7	99.6	100	99	100	100	99.5	99.4	99.2	100	100	100	99.3	99.6	99.3	99.3	100	100	99.3	99.3
Trucks	1	1	2	0	0	4	1	0	0	0	0	1	5	22	0	0	0	27	0	21	2	0	0	23	55
% Trucks	0.1	0.6	0.2	0	0	0.2	0.4	0	0	0	0	0.2	0.6	0.3	0	0	0	0.3	0	0.3	0.2	0	0	0.3	0.3
Buses	3	0	0	0	0	3	0	0	2	0	0	2	0	31	0	0	0	31	1	34	4	0	0	39	75
% Buses	0.3	0	0	0	0	0.1	0	0	1	0	0	0.3	0	0.5	0	0	0	0.4	0.4	0.4	0.5	0	0	0.5	0.4

Cleland Counts

1441 Camino Cerritos S.E.
Albuquerque, New Mexico 87123
(505) 414-0465

File Name : Claremont Ave. and Carlisle Blvd.
Site Code : 05072024
Start Date : 5/7/2024
Page No : 3

	Claremont Ave Eastbound				Claremont Ave Westbound				Carlisle Blvd. Northbound				Carlisle Blvd. Southbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	18	1	19	38	15	5	0	20	27	196	4	227	1	178	12	191	476
07:45 AM	12	2	18	32	12	2	5	19	20	186	6	212	4	194	10	208	471
08:00 AM	18	5	19	42	10	4	3	17	21	156	3	180	2	190	15	207	446
08:15 AM	18	3	29	50	3	4	7	14	36	168	6	210	5	144	16	165	439
Total Volume	66	11	85	162	40	15	15	70	104	706	19	829	12	706	53	771	1832
% App. Total	40.7	6.8	52.5		57.1	21.4	21.4		12.5	85.2	2.3		1.6	91.6	6.9		
PHF	.917	.550	.733	.810	.667	.750	.536	.875	.722	.901	.792	.913	.600	.910	.828	.927	.962
Cars	66	11	84	161	40	15	13	68	104	697	19	820	12	696	52	760	1809
% Cars	100	100	98.8	99.4	100	100	86.7	97.1	100	98.7	100	98.9	100	98.6	98.1	98.6	98.7
Trucks	0	0	1	1	0	0	0	0	0	5	0	5	0	7	0	7	13
% Trucks	0	0	1.2	0.6	0	0	0	0	0	0.7	0	0.6	0	1.0	0	0.9	0.7
Buses	0	0	0	0	0	0	2	2	0	4	0	4	0	3	1	4	10
% Buses	0	0	0	0	0	0	13.3	2.9	0	0.6	0	0.5	0	0.4	1.9	0.5	0.5
Peak Hour Analysis From 10:00 AM to 01:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 11:30 AM																	
11:30 AM	29	2	27	58	4	2	8	14	34	176	4	214	8	220	30	258	544
11:45 AM	33	6	33	72	7	3	8	18	27	186	13	226	9	193	21	223	539
12:00 PM	36	1	25	62	10	11	4	25	37	192	12	241	9	213	23	245	573
12:15 PM	48	9	32	89	7	2	13	22	30	178	13	221	14	236	30	280	612
Total Volume	146	18	117	281	28	18	33	79	128	732	42	902	40	862	104	1006	2268
% App. Total	52	6.4	41.6		35.4	22.8	41.8		14.2	81.2	4.7		4	85.7	10.3		
PHF	.760	.500	.886	.789	.700	.409	.635	.790	.865	.953	.808	.936	.714	.913	.867	.898	.926
Cars	144	18	116	278	28	18	33	79	127	730	42	899	40	856	102	998	2254
% Cars	98.6	100	99.1	98.9	100	100	100	100	99.2	99.7	100	99.7	100	99.3	98.1	99.2	99.4
Trucks	1	0	1	2	0	0	0	0	1	0	0	1	0	4	0	4	7
% Trucks	0.7	0	0.9	0.7	0	0	0	0	0.8	0	0	0.1	0	0.5	0	0.4	0.3
Buses	1	0	0	1	0	0	0	0	0	2	0	2	0	2	2	4	7
% Buses	0.7	0	0	0.4	0	0	0	0	0	0.3	0	0.2	0	0.2	1.9	0.4	0.3

Cleland Counts

1441 Camino Cerritos S.E.
Albuquerque, New Mexico 87123
(505) 414-0465

File Name : Claremont Ave. and Carlisle Blvd.
Site Code : 05072024
Start Date : 5/7/2024
Page No : 4

	Claremont Ave Eastbound				Claremont Ave Westbound				Carlisle Blvd. Northbound				Carlisle Blvd. Southbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	53	10	40	103	8	2	4	14	28	234	9	271	8	284	28	320	708
04:15 PM	37	3	29	69	7	3	8	18	31	247	16	294	4	278	29	311	692
04:30 PM	56	5	37	98	8	5	10	23	27	245	7	279	11	240	22	273	673
04:45 PM	46	4	32	82	12	6	1	19	21	298	7	326	12	231	25	268	695
Total Volume	192	22	138	352	35	16	23	74	107	1024	39	1170	35	1033	104	1172	2768
% App. Total	54.5	6.2	39.2		47.3	21.6	31.1		9.1	87.5	3.3		3	88.1	8.9		
PHF	.857	.550	.863	.854	.729	.667	.575	.804	.863	.859	.609	.897	.729	.909	.897	.916	.977
Cars	191	22	138	351	35	16	23	74	107	1019	39	1165	34	1030	104	1168	2758
% Cars	99.5	100	100	99.7	100	100	100	100	100	99.5	100	99.6	97.1	99.7	100	99.7	99.6
Trucks	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
% Trucks	0	0	0	0	0	0	0	0	0	0.1	0	0.1	0	0	0	0	0.0
Buses	1	0	0	1	0	0	0	0	0	4	0	4	1	3	0	4	9
% Buses	0.5	0	0	0.3	0	0	0	0	0	0.4	0	0.3	2.9	0.3	0	0.3	0.3

Cleland Counts

1441 Camino Cerritos S.E.
Albuquerque, New Mexico 87123
(505) 414-0465

Counter R.C.

File Name : Cutler Ave. and Carlisle Blvd.

Site Code : 04242024

Start Date : 4/24/2024

Page No : 1

Groups Printed- Cars - Trucks - Buses													
	Eastbound			Cutler Ave Westbound				Carlisle Blvd. Northbound					
Start Time	Bikes	Peds	App. Total	Right	Bikes	Peds	App. Total	Thru	Right	Bikes	Peds	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	226	25	0	0	251	251
07:15 AM	0	0	0	0	0	0	0	285	28	0	0	313	313
07:30 AM	0	0	0	0	0	0	0	291	27	0	2	320	320
07:45 AM	0	0	0	0	0	0	0	335	44	0	1	380	380
Total	0	0	0	0	0	0	0	1137	124	0	3	1264	1264
08:00 AM	0	1	1	0	0	0	0	290	54	0	1	345	346
08:15 AM	0	0	0	0	0	0	0	285	37	0	0	322	322
08:30 AM	0	0	0	0	0	0	0	302	10	0	1	313	313
08:45 AM	0	0	0	0	0	0	0	309	21	0	0	330	330
Total	0	1	1	0	0	0	0	1186	122	0	2	1310	1311
09:00 AM	0	0	0	0	0	1	1	253	16	1	1	271	272
09:15 AM	0	0	0	1	0	0	1	266	18	1	1	286	287
09:30 AM	0	0	0	0	0	0	0	235	12	0	0	247	247
09:45 AM	0	0	0	0	0	0	0	259	22	0	0	281	281
Total	0	0	0	1	0	1	2	1013	68	2	2	1085	1087
*** BREAK ***													
11:00 AM	0	0	0	0	0	1	1	271	19	0	0	290	291
11:15 AM	0	0	0	0	0	0	0	257	17	0	0	274	274
11:30 AM	0	0	0	0	0	0	0	280	17	0	1	298	298
11:45 AM	0	0	0	0	0	0	0	300	30	0	0	330	330
Total	0	0	0	0	0	1	1	1108	83	0	1	1192	1193
12:00 PM	0	0	0	0	0	0	0	337	27	0	1	365	365
12:15 PM	0	0	0	0	0	0	0	283	23	0	2	308	308
12:30 PM	0	0	0	1	0	0	1	311	24	0	1	336	337
12:45 PM	0	2	2	0	0	0	0	288	29	0	0	317	319
Total	0	2	2	1	0	0	1	1219	103	0	4	1326	1329
01:00 PM	0	0	0	0	0	0	0	277	18	0	0	295	295
01:15 PM	0	0	0	0	0	0	0	311	20	0	0	331	331
01:30 PM	0	0	0	0	0	0	0	288	14	0	0	302	302
01:45 PM	0	0	0	1	0	2	3	292	22	1	2	317	320
Total	0	0	0	1	0	2	3	1168	74	1	2	1245	1248

Cleland Counts

1441 Camino Cerritos S.E.
Albuquerque, New Mexico 87123
(505) 414-0465

File Name : Cutler Ave. and Carlisle Blvd.

Site Code : 04242024

Start Date : 4/24/2024

Page No : 2

Groups Printed- Cars - Trucks - Buses

	Eastbound			Cutler Ave Westbound				Carlisle Blvd. Northbound					
Start Time	Bikes	Peds	App. Total	Right	Bikes	Peds	App. Total	Thru	Right	Bikes	Peds	App. Total	Int. Total
*** BREAK ***													
03:00 PM	0	0	0	2	0	0	2	272	22	0	0	294	296
03:15 PM	0	1	1	0	0	0	0	296	32	1	1	330	331
03:30 PM	0	0	0	0	0	0	0	321	20	0	2	343	343
03:45 PM	0	0	0	1	0	0	1	334	27	1	1	363	364
Total	0	1	1	3	0	0	3	1223	101	2	4	1330	1334
04:00 PM	0	0	0	0	0	0	0	383	33	0	0	416	416
04:15 PM	0	0	0	0	0	1	1	341	29	0	1	371	372
04:30 PM	0	0	0	0	0	0	0	401	24	0	2	427	427
04:45 PM	0	0	0	0	0	0	0	391	37	0	0	428	428
Total	0	0	0	0	0	1	1	1516	123	0	3	1642	1643
05:00 PM	0	0	0	0	1	1	2	386	32	0	0	418	420
05:15 PM	0	0	0	1	0	0	1	392	33	1	1	427	428
05:30 PM	0	0	0	0	0	0	0	321	49	0	0	370	370
05:45 PM	0	0	0	1	0	1	2	334	35	0	1	370	372
Total	0	0	0	2	1	2	5	1433	149	1	2	1585	1590
Grand Total	0	4	4	8	1	7	16	11003	947	6	23	11979	11999
Apprch %	0	100		50	6.2	43.8		91.9	7.9	0.1	0.2		
Total %	0	0	0	0.1	0	0.1	0.1	91.7	7.9	0.1	0.2	99.8	
Cars	0	4	4	8	1	6	15	10901	941	6	17	11865	11884
% Cars	0	100	100	100	100	85.7	93.8	99.1	99.4	100	73.9	99	99
Trucks	0	0	0	0	0	1	1	71	1	0	6	78	79
% Trucks	0	0	0	0	0	14.3	6.2	0.6	0.1	0	26.1	0.7	0.7
Buses	0	0	0	0	0	0	0	31	5	0	0	36	36
% Buses	0	0	0	0	0	0	0	0.3	0.5	0	0	0.3	0.3

Cleland Counts

1441 Camino Cerritos S.E.
Albuquerque, New Mexico 87123
(505) 414-0465

File Name : Cutler Ave. and Carlisle Blvd.
Site Code : 04242024
Start Date : 4/24/2024
Page No : 3

	Eastbound	Cutler Ave Westbound		Carlisle Blvd. Northbound			
Start Time	App. Total	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1							
Peak Hour for Entire Intersection Begins at 07:30 AM							
07:30 AM	0	0	0	291	27	318	318
07:45 AM	0	0	0	335	44	379	379
08:00 AM	0	0	0	290	54	344	344
08:15 AM	0	0	0	285	37	322	322
Total Volume	0	0	0	1201	162	1363	1363
% App. Total	0	0	0	88.1	11.9		
PHF	.000	.000	.000	.896	.750	.899	.899
Cars	0	0	0	1188	160	1348	1348
% Cars	0	0	0	98.9	98.8	98.9	98.9
Trucks	0	0	0	9	0	9	9
% Trucks	0	0	0	0.7	0	0.7	0.7
Buses	0	0	0	4	2	6	6
% Buses	0	0	0	0.3	1.2	0.4	0.4
Peak Hour Analysis From 10:00 AM to 01:45 PM - Peak 1 of 1							
Peak Hour for Entire Intersection Begins at 11:45 AM							
11:45 AM	0	0	0	300	30	330	330
12:00 PM	0	0	0	337	27	364	364
12:15 PM	0	0	0	283	23	306	306
12:30 PM	0	1	1	311	24	335	336
Total Volume	0	1	1	1231	104	1335	1336
% App. Total		100		92.2	7.8		
PHF	.000	.250	.250	.913	.867	.917	.918
Cars	0	1	1	1213	104	1317	1318
% Cars	0	100	100	98.5	100	98.7	98.7
Trucks	0	0	0	14	0	14	14
% Trucks	0	0	0	1.1	0	1.0	1.0
Buses	0	0	0	4	0	4	4
% Buses	0	0	0	0.3	0	0.3	0.3

Cleland Counts

1441 Camino Cerritos S.E.
Albuquerque, New Mexico 87123
(505) 414-0465

File Name : Cutler Ave. and Carlisle Blvd.

Site Code : 04242024

Start Date : 4/24/2024

Page No : 4

	Eastbound	Cutler Ave Westbound		Carlisle Blvd. Northbound			
Start Time	App. Total	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1							
Peak Hour for Entire Intersection Begins at 04:30 PM							
04:30 PM	0	0	0	401	24	425	425
04:45 PM	0	0	0	391	37	428	428
05:00 PM	0	0	0	386	32	418	418
05:15 PM	0	1	1	392	33	425	426
Total Volume	0	1	1	1570	126	1696	1697
% App. Total		100		92.6	7.4		
PHF	.000	.250	.250	.979	.851	.991	.991
Cars	0	1	1	1555	126	1681	1682
% Cars	0	100	100	99.0	100	99.1	99.1
Trucks	0	0	0	9	0	9	9
% Trucks	0	0	0	0.6	0	0.5	0.5
Buses	0	0	0	6	0	6	6
% Buses	0	0	0	0.4	0	0.4	0.4

Cleland Counts

1441 Camino Cerritos S.E.
Albuquerque, New Mexico 87123
(505) 414-0465

Counter R.C.

File Name : Menaul Blvd. and Access 1

Site Code : 05022024

Start Date : 5/2/2024

Page No : 1

Groups Printed- Cars - Trucks - Buses

Start Time	Menaul Blvd. Westbound					Northbound			Access 1 Southbound				Int. Total
	Thru	Right	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Right	Bikes	Peds	App. Total	
07:00 AM	116	1	1	0	118	0	0	0	2	0	0	2	120
07:15 AM	150	1	0	0	151	0	0	0	2	0	0	2	153
07:30 AM	219	1	0	1	221	0	2	2	2	0	0	2	225
07:45 AM	233	1	0	0	234	0	0	0	1	0	1	2	236
Total	718	4	1	1	724	0	2	2	7	0	1	8	734
08:00 AM	175	6	0	0	181	0	0	0	2	0	0	2	183
08:15 AM	178	2	0	0	180	0	0	0	3	0	0	3	183
08:30 AM	157	0	0	0	157	0	0	0	1	0	0	1	158
08:45 AM	156	2	0	3	161	0	0	0	1	0	0	1	162
Total	666	10	0	3	679	0	0	0	7	0	0	7	686
09:00 AM	143	5	0	2	150	0	0	0	2	0	0	2	152
09:15 AM	152	2	0	0	154	0	0	0	1	0	0	1	155
09:30 AM	158	7	1	1	167	0	0	0	3	0	0	3	170
09:45 AM	151	6	0	0	157	0	0	0	2	0	0	2	159
Total	604	20	1	3	628	0	0	0	8	0	0	8	636
*** BREAK ***													
11:00 AM	152	3	0	0	155	0	0	0	1	0	0	1	156
11:15 AM	161	3	0	1	165	0	0	0	3	0	0	3	168
11:30 AM	181	3	0	0	184	0	1	1	3	0	0	3	188
11:45 AM	195	4	0	0	199	0	0	0	2	0	0	2	201
Total	689	13	0	1	703	0	1	1	9	0	0	9	713
12:00 PM	198	2	1	0	201	0	0	0	0	0	0	0	201
12:15 PM	205	9	0	1	215	0	0	0	1	0	0	1	216
12:30 PM	190	4	0	0	194	0	0	0	1	0	0	1	195
12:45 PM	204	3	0	0	207	0	0	0	2	0	1	3	210
Total	797	18	1	1	817	0	0	0	4	0	1	5	822
01:00 PM	205	5	0	0	210	0	0	0	2	0	0	2	212
01:15 PM	177	6	0	0	183	0	0	0	0	0	0	0	183
01:30 PM	205	2	0	0	207	0	0	0	1	0	0	1	208
01:45 PM	193	8	0	1	202	0	0	0	3	0	0	3	205
Total	780	21	0	1	802	0	0	0	6	0	0	6	808

Cleland Counts

1441 Camino Cerritos S.E.
Albuquerque, New Mexico 87123
(505) 414-0465

File Name : Menaul Blvd. and Access 1

Site Code : 05022024

Start Date : 5/2/2024

Page No : 2

Groups Printed- Cars - Trucks - Buses

	Menaul Blvd. Westbound					Northbound			Access 1 Southbound				
Start Time	Thru	Right	Bikes	Peds	App. Total	Bikes	Peds	App. Total	Right	Bikes	Peds	App. Total	Int. Total
*** BREAK ***													
03:00 PM	216	4	0	0	220	0	2	2	3	0	0	3	225
03:15 PM	203	4	0	1	208	0	1	1	5	0	0	5	214
03:30 PM	212	4	0	0	216	0	0	0	2	0	0	2	218
03:45 PM	210	6	0	1	217	0	0	0	3	0	1	4	221
Total	841	18	0	2	861	0	3	3	13	0	1	14	878
04:00 PM	253	3	0	1	257	0	0	0	3	0	0	3	260
04:15 PM	238	4	0	0	242	0	0	0	1	0	0	1	243
04:30 PM	281	1	0	0	282	0	0	0	7	0	0	7	289
04:45 PM	288	4	0	0	292	0	2	2	5	0	0	5	299
Total	1060	12	0	1	1073	0	2	2	16	0	0	16	1091
05:00 PM	317	0	0	0	317	0	0	0	1	0	0	1	318
05:15 PM	268	3	0	0	271	0	0	0	1	0	0	1	272
05:30 PM	299	5	0	0	304	0	0	0	1	0	0	1	305
05:45 PM	214	2	0	0	216	0	0	0	4	0	0	4	220
Total	1098	10	0	0	1108	0	0	0	7	0	0	7	1115
Grand Total	7253	126	3	13	7395	0	8	8	77	0	3	80	7483
Apprch %	98.1	1.7	0	0.2		0	100		96.2	0	3.8		
Total %	96.9	1.7	0	0.2	98.8	0	0.1	0.1	1	0	0	1.1	
Cars	7210	122	3	13	7348	0	8	8	77	0	3	80	7436
% Cars	99.4	96.8	100	100	99.4	0	100	100	100	0	100	100	99.4
Trucks	27	3	0	0	30	0	0	0	0	0	0	0	30
% Trucks	0.4	2.4	0	0	0.4	0	0	0	0	0	0	0	0.4
Buses	16	1	0	0	17	0	0	0	0	0	0	0	17
% Buses	0.2	0.8	0	0	0.2	0	0	0	0	0	0	0	0.2

Cleland Counts

1441 Camino Cerritos S.E.
Albuquerque, New Mexico 87123
(505) 414-0465

File Name : Menaul Blvd. and Access 1
Site Code : 05022024
Start Date : 5/2/2024
Page No : 3

	Menaul Blvd. Westbound			Northbound	Access 1 Southbound		
Start Time	Thru	Right	App. Total	App. Total	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1							
Peak Hour for Entire Intersection Begins at 07:30 AM							
07:30 AM	219	1	220	0	2	2	222
07:45 AM	233	1	234	0	1	1	235
08:00 AM	175	6	181	0	2	2	183
08:15 AM	178	2	180	0	3	3	183
Total Volume	805	10	815	0	8	8	823
% App. Total	98.8	1.2			100		
PHF	.864	.417	.871	.000	.667	.667	.876
Cars	802	10	812	0	8	8	820
% Cars	99.6	100	99.6	0	100	100	99.6
Trucks	2	0	2	0	0	0	2
% Trucks	0.2	0	0.2	0	0	0	0.2
Buses	1	0	1	0	0	0	1
% Buses	0.1	0	0.1	0	0	0	0.1
Peak Hour Analysis From 10:00 AM to 01:45 PM - Peak 1 of 1							
Peak Hour for Entire Intersection Begins at 12:15 PM							
12:15 PM	205	9	214	0	1	1	215
12:30 PM	190	4	194	0	1	1	195
12:45 PM	204	3	207	0	2	2	209
01:00 PM	205	5	210	0	2	2	212
Total Volume	804	21	825	0	6	6	831
% App. Total	97.5	2.5			100		
PHF	.980	.583	.964	.000	.750	.750	.966
Cars	801	21	822	0	6	6	828
% Cars	99.6	100	99.6	0	100	100	99.6
Trucks	2	0	2	0	0	0	2
% Trucks	0.2	0	0.2	0	0	0	0.2
Buses	1	0	1	0	0	0	1
% Buses	0.1	0	0.1	0	0	0	0.1

Cleland Counts

1441 Camino Cerritos S.E.
Albuquerque, New Mexico 87123
(505) 414-0465

File Name : Menaul Blvd. and Access 1

Site Code : 05022024

Start Date : 5/2/2024

Page No : 4

	Menaul Blvd. Westbound			Northbound	Access 1 Southbound		
Start Time	Thru	Right	App. Total	App. Total	Right	App. Total	Int. Total
Peak Hour Analysis From 02:00 PM to 05:45 PM - Peak 1 of 1							
Peak Hour for Entire Intersection Begins at 04:45 PM							
04:45 PM	288	4	292	0	5	5	297
05:00 PM	317	0	317	0	1	1	318
05:15 PM	268	3	271	0	1	1	272
05:30 PM	299	5	304	0	1	1	305
Total Volume	1172	12	1184	0	8	8	1192
% App. Total	99	1			100		
PHF	.924	.600	.934	.000	.400	.400	.937
Cars	1169	10	1179	0	8	8	1187
% Cars	99.7	83.3	99.6	0	100	100	99.6
Trucks	1	2	3	0	0	0	3
% Trucks	0.1	16.7	0.3	0	0	0	0.3
Buses	2	0	2	0	0	0	2
% Buses	0.2	0	0.2	0	0	0	0.2

1441 Camino Cerritos S.E.
Albuquerque, New Mexico 87123
(505) 414-0465

File Name : Menaul Blvd. and Access 2
Site Code : 05022024
Start Date : 5/2/2024
Page No : 1

*** BREAK ***

1441 Camino Cerritos S.E.
Albuquerque, New Mexico 87123
(505) 414-0465

Page No : 2

Groups Printed- Cars - Trucks - Buses

	Menaul Blvd. Eastbound						Menaul Blvd. Westbound						Parking lot Northbound						Access 2 Southbound						
Start Time	Left	Thru	Right	Bikes	Peds	App. Total	Left	Thru	Right	Bikes	Peds	App. Total	Left	Thru	Right	Bikes	Peds	App. Total	Left	Thru	Right	Bikes	Peds	App. Total	Int. Total
03:00 PM	1	237	0	1	0	239	7	213	9	0	1	230	0	0	8	0	0	8	4	0	7	0	0	11	488
03:15 PM	1	235	1	0	3	240	11	202	9	0	2	224	0	0	11	0	0	11	3	0	5	0	0	8	483
03:30 PM	5	244	1	0	1	251	5	210	11	0	3	229	0	0	3	0	0	3	5	0	6	0	0	11	494
03:45 PM	2	209	1	0	1	213	12	206	3	0	2	223	0	0	11	0	0	11	2	0	10	0	0	12	459
Total	9	925	3	1	5	943	35	831	32	0	8	906	0	0	33	0	0	33	14	0	28	0	0	42	1924
04:00 PM	7	245	1	0	0	253	8	248	17	1	3	277	0	0	6	0	0	6	1	0	8	0	0	9	545
04:15 PM	8	223	1	0	1	233	11	232	7	0	1	251	0	0	9	0	0	9	5	0	10	0	0	15	508
04:30 PM	14	252	0	0	0	266	9	269	13	0	1	292	0	0	7	0	0	7	3	0	13	0	0	16	581
04:45 PM	9	228	0	1	1	239	7	283	24	0	3	317	0	0	7	0	0	7	9	0	9	0	0	18	581
Total	38	948	2	1	2	991	35	1032	61	1	8	1137	0	0	29	0	0	29	18	0	40	0	0	58	2215
05:00 PM	4	251	0	1	1	257	8	311	13	0	1	333	0	0	7	0	0	7	5	0	6	0	0	11	608
05:15 PM	2	224	0	0	0	226	9	262	23	0	4	298	0	0	9	0	0	9	7	0	9	0	0	16	549
05:30 PM	3	169	0	0	1	173	9	295	10	0	2	316	0	0	9	0	0	9	7	0	9	1	0	17	515
05:45 PM	4	154	0	0	0	158	8	205	11	0	2	226	0	0	8	0	0	8	3	0	11	0	1	15	407
Total	13	798	0	1	2	814	34	1073	57	0	9	1173	0	0	33	0	0	33	22	0	35	1	1	59	2079
Grand Total	174	6789	19	8	32	7022	288	7085	326	5	66	7770	0	0	250	0	1	251	101	3	293	1	3	401	15444
Apprch %	2.5	96.7	0.3	0.1	0.5		3.7	91.2	4.2	0.1	0.8		0	0	99.6	0	0.4		25.2	0.7	73.1	0.2	0.7		
Total %	1.1	44	0.1	0.1	0.2	45.5	1.9	45.9	2.1	0	0.4	50.3	0	0	1.6	0	0	1.6	0.7	0	1.9	0	0	2.6	
Cars	174	6718	19	8	32	6951	288	7039	326	5	66	7724	0	0	250	0	1	251	101	3	292	1	3	400	15326
% Cars	100	99	100	100	100	99	100	99.4	100	100	100	99.4	0	0	100	0	100	100	100	100	99.7	100	100	99.8	99.2
Trucks	0	49	0	0	0	49	0	29	0	0	0	29	0	0	0	0	0	0	0	0	1	0	0	1	79
% Trucks	0	0.7	0	0	0	0.7	0	0.4	0	0	0	0.4	0	0	0	0	0	0	0	0	0.3	0	0	0.2	0.5
Buses	0	22	0	0	0	22	0	17	0	0	0	17	0	0	0	0	0	0	0	0	0	0	0	0	39
% Buses	0	0.3	0	0	0	0.3	0	0.2	0	0	0	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0.3

1441 Camino Cerritos S.E.
Albuquerque, New Mexico 87123
(505) 414-0465

Page No : 3

[illegible]

1441 Camino Cerritos S.E.
Albuquerque, New Mexico 87123
(505) 414-0465

Page No : 4

[illegible]

1441 Camino Cerritos S.E.
Albuquerque, New Mexico 87123
(505) 414-0465

File Name : Menaul Blvd. and Bryn Mawr Dr.
Site Code : 05012024
Start Date : 5/1/2024
Page No : 1

*** BREAK ***

Cleland Counts

1441 Camino Cerritos S.E.
Albuquerque, New Mexico 87123
(505) 414-0465

File Name : Menaul Blvd. and Bryn Mawr Dr.

Site Code : 05012024

Start Date : 5/1/2024

Page No : 2

Groups Printed- Cars - Trucks - Buses

	Menaul Blvd. Eastbound						Menaul Blvd. Westbound						Bryn Mawr Dr. Northbound						Bryn Mawr Dr. Southbound						
Start Time	Left	Thru	Right	Bikes	Peds	App. Total	Left	Thru	Right	Bikes	Peds	App. Total	Left	Thru	Right	Bikes	Peds	App. Total	Left	Thru	Right	Bikes	Peds	App. Total	Int. Total
03:00 PM	18	205	1	0	3	227	12	196	3	0	0	211	0	0	6	0	0	6	9	0	19	0	0	28	472
03:15 PM	12	177	4	0	1	194	8	183	5	2	3	201	4	0	12	0	0	16	3	0	8	0	0	11	422
03:30 PM	13	219	5	0	0	237	6	222	2	0	1	231	1	0	10	0	0	11	4	0	10	0	0	14	493
03:45 PM	28	199	3	0	0	230	4	234	4	0	0	242	2	0	2	0	0	4	6	0	15	0	0	21	497
Total	71	800	13	0	4	888	30	835	14	2	4	885	7	0	30	0	0	37	22	0	52	0	0	74	1884
04:00 PM	20	204	0	0	0	224	3	249	2	0	1	255	2	0	1	0	0	3	2	0	24	0	0	26	508
04:15 PM	16	245	2	0	0	263	3	232	4	0	0	239	2	0	1	0	0	3	2	0	16	0	0	18	523
04:30 PM	18	261	2	1	1	283	9	288	1	0	0	298	0	0	0	0	0	0	2	0	25	0	0	27	608
04:45 PM	13	212	8	0	0	233	21	322	4	0	0	347	1	0	8	0	0	9	5	0	14	0	0	19	608
Total	67	922	12	1	1	1003	36	1091	11	0	1	1139	5	0	10	0	0	15	11	0	79	0	0	90	2247
05:00 PM	16	260	5	1	0	282	6	348	3	0	1	358	0	0	2	0	0	2	6	0	29	0	0	35	677
05:15 PM	15	207	4	0	1	227	8	294	4	0	0	306	0	0	2	0	0	2	4	0	24	0	0	28	563
05:30 PM	15	187	3	0	0	205	7	237	3	0	0	247	1	0	2	0	0	3	1	0	9	0	0	10	465
05:45 PM	12	171	2	1	0	186	6	184	4	1	0	195	0	0	2	0	0	2	1	0	20	0	0	21	404
Total	58	825	14	2	1	900	27	1063	14	1	1	1106	1	0	8	0	0	9	12	0	82	0	0	94	2109
Grand Total	529	6584	63	3	16	7195	192	7455	93	9	22	7771	33	1	134	0	1	169	123	1	521	0	1	646	15781
Apprch %	7.4	91.5	0.9	0	0.2		2.5	95.9	1.2	0.1	0.3		19.5	0.6	79.3	0	0.6		19	0.2	80.7	0	0.2		
Total %	3.4	41.7	0.4	0	0.1	45.6	1.2	47.2	0.6	0.1	0.1	49.2	0.2	0	0.8	0	0	1.1	0.8	0	3.3	0	0	4.1	
Cars	526	6543	63	3	16	7151	192	7411	87	9	22	7721	33	1	134	0	1	169	120	1	521	0	1	643	15684
% Cars	99.4	99.4	100	100	100	99.4	100	99.4	93.5	100	100	99.4	100	100	100	0	100	100	97.6	100	100	0	100	99.5	99.4
Trucks	3	23	0	0	0	26	0	25	5	0	0	30	0	0	0	0	0	0	2	0	0	0	0	2	58
% Trucks	0.6	0.3	0	0	0	0.4	0	0.3	5.4	0	0	0.4	0	0	0	0	0	0	1.6	0	0	0	0	0.3	0.4
Buses	0	18	0	0	0	18	0	19	1	0	0	20	0	0	0	0	0	0	1	0	0	0	0	1	39
% Buses	0	0.3	0	0	0	0.3	0	0.3	1.1	0	0	0.3	0	0	0	0	0	0	0.8	0	0	0	0	0.2	0.2

1441 Camino Cerritos S.E.
Albuquerque, New Mexico 87123
(505) 414-0465

File Name : Menaul Blvd. and Bryn Mawr Dr.
Site Code : 05012024
Start Date : 5/1/2024
Page No : 3

[illegible]

1441 Camino Cerritos S.E.
Albuquerque, New Mexico 87123
(505) 414-0465

File Name : Menaul Blvd. and Bryn Mawr Dr.
Site Code : 05012024
Start Date : 5/1/2024
Page No : 4

[illegible]

1441 Camino Cerritos S.E.
Albuquerque, New Mexico 87123
(505) 414-0465

File Name : Phoenix Ave. and Access 5
Site Code : 04302824
Start Date : 4/30/2024
Page No : 1

Groups Printed- Cars - Trucks - Buses																										
	Phoenix Ave. Eastbound						Phoenix Ave. Westbound						Access 5 Northbound						Wal-Mart/Gas Station Southbound							
Start Time	Left	Thru	Right	Bikes	Peds	App. Total	Left	Thru	Right	Bikes	Peds	App. Total	Left	Thru	Right	Bikes	Peds	App. Total	Left	Thru	Right	Bikes	Peds	App. Total	Int. Total	
07:00 AM	0	10	0	0	0	10	0	13	8	0	0	21	0	0	0	0	0	0	3	0	0	0	0	3	34	
07:15 AM	1	17	0	0	0	18	1	17	4	0	1	23	0	1	0	0	0	1	7	0	2	0	1	10	52	
07:30 AM	1	15	0	0	0	16	0	15	6	0	0	21	0	0	0	0	0	0	4	0	1	0	1	6	43	
07:45 AM	0	9	0	0	0	9	0	24	4	0	0	28	0	0	0	0	1	1	4	0	2	0	2	8	46	
Total	2	51	0	0	0	53	1	69	22	0	1	93	0	1	0	0	1	2	18	0	5	0	4	27	175	
08:00 AM	1	9	0	0	0	10	0	17	8	0	0	25	0	0	0	1	1	2	2	0	3	0	0	5	42	
08:15 AM	2	18	0	0	1	21	0	14	5	0	1	20	0	0	0	1	0	1	5	0	2	0	0	7	49	
08:30 AM	4	13	0	0	0	17	1	22	14	0	0	37	1	1	0	0	0	2	8	0	2	0	0	10	66	
08:45 AM	3	19	0	0	0	22	0	15	5	0	0	20	1	1	0	0	0	2	6	1	3	0	0	10	54	
Total	10	59	0	0	1	70	1	68	32	0	1	102	2	2	0	2	1	7	21	1	10	0	0	32	211	
09:00 AM	1	16	0	0	0	17	0	27	6	0	0	33	0	0	0	0	0	0	7	0	2	0	0	9	59	
09:15 AM	2	21	0	0	0	23	0	29	15	1	0	45	0	2	0	0	1	3	12	1	2	0	0	15	86	
09:30 AM	0	22	1	0	0	23	0	34	8	0	0	42	0	1	0	0	0	1	3	1	3	0	1	8	74	
09:45 AM	2	17	0	0	1	20	0	36	9	0	1	46	0	2	0	0	1	3	6	0	3	0	1	10	79	
Total	5	76	1	0	1	83	0	126	38	1	1	166	0	5	0	0	2	7	28	2	10	0	2	42	298	
*** BREAK ***																										
11:00 AM	5	32	0	0	0	37	0	33	12	0	1	46	0	2	1	0	1	4	9	0	3	0	0	12	99	
11:15 AM	4	36	0	0	0	40	2	38	15	0	0	55	0	1	1	0	0	2	14	0	2	0	0	16	113	
11:30 AM	3	25	2	0	0	30	1	47	8	0	0	56	2	1	0	0	0	3	8	0	3	0	0	11	100	
11:45 AM	3	31	2	0	0	36	1	33	13	0	0	47	2	2	2	0	0	6	8	0	5	0	0	13	102	
Total	15	124	4	0	0	143	4	151	48	0	1	204	4	6	4	0	1	15	39	0	13	0	0	52	414	
12:00 PM	2	35	2	0	1	40	0	24	15	0	0	39	2	0	2	0	2	6	11	0	4	0	0	15	100	
12:15 PM	4	21	1	0	0	26	0	31	10	0	1	42	0	2	1	0	0	3	4	0	2	0	0	6	77	
12:30 PM	0	40	1	0	0	41	0	34	10	0	0	44	1	2	0	0	0	3	8	1	0	0	0	9	97	
12:45 PM	2	37	0	0	0	39	0	41	14	0	1	56	1	0	0	0	0	1	6	1	0	0	0	7	103	
Total	8	133	4	0	1	146	0	130	49	0	2	181	4	4	3	0	2	13	29	2	6	0	0	37	377	
01:00 PM	5	33	1	0	0	39	0	39	18	0	0	57	0	1	1	0	2	4	8	0	2	0	0	10	110	
01:15 PM	0	39	0	0	0	39	0	39	15	0	0	54	0	0	1	0	1	2	9	0	2	0	1	12	107	
01:30 PM	4	46	2	0	0	52	1	45	8	0	1	55	0	0	0	0	1	1	4	0	2	0	3	9	117	
01:45 PM	2	39	0	0	0	41	1	30	10	0	1	42	1	2	1	0	0	4	6	0	6	0	1	13	100	
Total	11	157	3	0	0	171	2	153	51	0	2	208	1	3	3	0	4	11	27	0	12	0	5	44	434	

*** BREAK ***

Cleland Counts

1441 Camino Cerritos S.E.
Albuquerque, New Mexico 87123
(505) 414-0465

File Name : Phoenix Ave. and Access 5

Site Code : 04302824

Start Date : 4/30/2024

Page No : 2

Groups Printed- Cars - Trucks - Buses

	Phoenix Ave. Eastbound						Phoenix Ave. Westbound						Access 5 Northbound						Wal-Mart/Gas Station Southbound						
Start Time	Left	Thru	Right	Bikes	Peds	App. Total	Left	Thru	Right	Bikes	Peds	App. Total	Left	Thru	Right	Bikes	Peds	App. Total	Left	Thru	Right	Bikes	Peds	App. Total	Int. Total
03:00 PM	2	33	1	0	0	36	0	30	17	0	0	47	0	2	0	0	1	3	7	0	1	0	0	8	94
03:15 PM	2	40	0	0	0	42	0	36	12	0	1	49	0	4	0	0	0	4	13	1	4	0	0	18	113
03:30 PM	2	39	0	0	0	41	0	35	10	0	0	45	0	1	1	0	0	2	5	0	2	0	4	11	99
03:45 PM	3	30	1	0	0	34	1	33	9	0	0	43	0	1	0	0	1	2	12	0	3	0	0	15	94
Total	9	142	2	0	0	153	1	134	48	0	1	184	0	8	1	0	2	11	37	1	10	0	4	52	400
04:00 PM	3	25	2	0	0	30	0	38	11	0	1	50	0	2	0	0	1	3	7	0	1	0	0	8	91
04:15 PM	2	36	0	0	0	38	0	28	11	0	1	40	0	0	1	0	1	2	5	0	4	0	0	9	89
04:30 PM	2	25	0	0	0	27	1	33	11	0	0	45	0	1	1	0	0	2	12	0	3	0	1	16	90
04:45 PM	1	39	0	0	0	40	1	26	14	0	0	41	0	0	1	0	1	2	10	0	6	0	0	16	99
Total	8	125	2	0	0	135	2	125	47	0	2	176	0	3	3	0	3	9	34	0	14	0	1	49	369
05:00 PM	1	33	1	0	0	35	0	30	16	0	0	46	0	1	1	1	1	4	4	0	3	0	0	7	92
05:15 PM	2	44	1	0	0	47	0	33	15	0	0	48	2	0	0	0	0	2	11	0	3	0	0	14	111
05:30 PM	2	43	1	0	0	46	0	34	9	0	0	43	1	0	0	0	0	1	11	1	4	0	1	17	107
05:45 PM	3	22	0	0	0	25	1	35	11	0	0	47	0	0	1	0	0	1	7	0	0	0	0	7	80
Total	8	142	3	0	0	153	1	132	51	0	0	184	3	1	2	1	1	8	33	1	10	0	1	45	390
Grand Total	76	1009	19	0	3	1107	12	1088	386	1	11	1498	14	33	16	3	17	83	266	7	90	0	17	380	3068
Apprch %	6.9	91.1	1.7	0	0.3		0.8	72.6	25.8	0.1	0.7		16.9	39.8	19.3	3.6	20.5		70	1.8	23.7	0	4.5		
Total %	2.5	32.9	0.6	0	0.1	36.1	0.4	35.5	12.6	0	0.4	48.8	0.5	1.1	0.5	0.1	0.6	2.7	8.7	0.2	2.9	0	0.6	12.4	
Cars	76	1004	19	0	3	1102	12	1082	385	1	11	1491	14	33	16	3	17	83	264	7	90	0	17	378	3054
% Cars	100	99.5	100	0	100	99.5	100	99.4	99.7	100	100	99.5	100	100	100	100	100	100	99.2	100	100	0	100	99.5	99.5
Trucks	0	4	0	0	0	4	0	5	1	0	0	6	0	0	0	0	0	0	1	0	0	0	0	1	11
% Trucks	0	0.4	0	0	0	0.4	0	0.5	0.3	0	0	0.4	0	0	0	0	0	0	0.4	0	0	0	0	0.3	0.4
Buses	0	1	0	0	0	1	0	1	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	1	3
% Buses	0	0.1	0	0	0	0.1	0	0.1	0	0	0	0.1	0	0	0	0	0	0	0.4	0	0	0	0	0.3	0.1

1441 Camino Cerritos S.E.
Albuquerque, New Mexico 87123
(505) 414-0465

Page No : 3

[illegible]

1441 Camino Cerritos S.E.
Albuquerque, New Mexico 87123
(505) 414-0465

Page No : 4

[illegible]

1441 Camino Cerritos S.E.
Albuquerque, New Mexico 87123
(505) 414-0465

File Name : Phoenix Ave. and Bryn Mawr Dr.
Site Code : 05012024
Start Date : 5/1/2024
Page No : 1

*** BREAK ***

Cleland Counts

1441 Camino Cerritos S.E.
Albuquerque, New Mexico 87123
(505) 414-0465

File Name : Phoenix Ave. and Bryn Mawr Dr.
Site Code : 05012024
Start Date : 5/1/2024
Page No : 2

Groups Printed- Cars - Trucks - Buses

	Eastbound			Phoenix Ave. Westbound					Bryn Mawr Dr. Northbound					Bryn Mawr Dr. Southbound					
Start Time	Bikes	Peds	App. Total	Left	Right	Bikes	Peds	App. Total	Thru	Right	Bikes	Peds	App. Total	Left	Thru	Bikes	Peds	App. Total	Int. Total
03:00 PM	0	0	0	16	5	0	1	22	2	19	0	1	22	2	2	0	0	4	48
03:15 PM	0	0	0	5	2	0	0	7	5	14	0	0	19	3	0	0	0	3	29
03:30 PM	0	0	0	12	7	0	1	20	4	13	0	1	18	3	1	0	0	4	42
03:45 PM	0	1	1	18	2	0	0	20	9	19	0	0	28	6	1	0	0	7	56
Total	0	1	1	51	16	0	2	69	20	65	0	2	87	14	4	0	0	18	175
04:00 PM	0	0	0	24	5	0	1	30	4	22	0	0	26	3	2	0	0	5	61
04:15 PM	1	0	1	17	5	0	0	22	2	18	0	0	20	3	0	0	0	3	46
04:30 PM	0	0	0	27	2	0	0	29	2	17	0	0	19	5	0	0	0	5	53
04:45 PM	0	0	0	15	3	1	0	19	5	10	0	0	15	2	1	0	0	3	37
Total	1	0	1	83	15	1	1	100	13	67	0	0	80	13	3	0	0	16	197
05:00 PM	0	0	0	28	3	0	0	31	4	14	0	0	18	0	0	0	0	0	49
05:15 PM	0	0	0	27	3	0	0	30	1	21	0	0	22	9	0	0	0	9	61
05:30 PM	0	0	0	8	7	0	1	16	2	13	0	1	16	1	1	0	0	2	34
05:45 PM	0	1	1	20	7	0	0	27	2	16	0	1	19	4	0	0	0	4	51
Total	0	1	1	83	20	0	1	104	9	64	0	2	75	14	1	0	0	15	195
Grand Total	2	7	9	511	125	2	9	647	108	469	0	9	586	120	58	0	0	178	1420
Apprch %	22.2	77.8		79	19.3	0.3	1.4		18.4	80	0	1.5		67.4	32.6	0	0		
Total %	0.1	0.5	0.6	36	8.8	0.1	0.6	45.6	7.6	33	0	0.6	41.3	8.5	4.1	0	0	12.5	
Cars	2	7	9	509	121	2	9	641	101	466	0	9	576	115	55	0	0	170	1396
% Cars	100	100	100	99.6	96.8	100	100	99.1	93.5	99.4	0	100	98.3	95.8	94.8	0	0	95.5	98.3
Trucks	0	0	0	2	4	0	0	6	6	2	0	0	8	5	2	0	0	7	21
% Trucks	0	0	0	0.4	3.2	0	0	0.9	5.6	0.4	0	0	1.4	4.2	3.4	0	0	3.9	1.5
Buses	0	0	0	0	0	0	0	0	1	1	0	0	2	0	1	0	0	1	3
% Buses	0	0	0	0	0	0	0	0	0.9	0.2	0	0	0.3	0	1.7	0	0	0.6	0.2

Cleland Counts

1441 Camino Cerritos S.E.
Albuquerque, New Mexico 87123
(505) 414-0465

File Name : Phoenix Ave. and Bryn Mawr Dr.
Site Code : 05012024
Start Date : 5/1/2024
Page No : 3

	Eastbound	Phoenix Ave. Westbound			Bryn Mawr Dr. Northbound			Bryn Mawr Dr. Southbound			
Start Time	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1											
Peak Hour for Entire Intersection Begins at 09:00 AM											
09:00 AM	0	11	6	17	2	10	12	4	2	6	35
09:15 AM	0	11	4	15	3	13	16	5	1	6	37
09:30 AM	0	13	4	17	4	12	16	2	2	4	37
09:45 AM	0	10	5	15	2	6	8	2	0	2	25
Total Volume	0	45	19	64	11	41	52	13	5	18	134
% App. Total		70.3	29.7		21.2	78.8		72.2	27.8		
PHF	.000	.865	.792	.941	.688	.788	.813	.650	.625	.750	.905
Cars	0	45	17	62	11	40	51	13	4	17	130
% Cars	0	100	89.5	96.9	100	97.6	98.1	100	80.0	94.4	97.0
Trucks	0	0	2	2	0	1	1	0	1	1	4
% Trucks	0	0	10.5	3.1	0	2.4	1.9	0	20.0	5.6	3.0
Buses	0	0	0	0	0	0	0	0	0	0	0
% Buses	0	0	0	0	0	0	0	0	0	0	0

Peak Hour Analysis From 10:00 AM to 01:45 PM - Peak 1 of 1
Peak Hour for Entire Intersection Begins at 12:00 PM

12:00 PM	0	23	8	31	6	13	19	2	5	7	57
12:15 PM	0	17	4	21	5	20	25	6	1	7	53
12:30 PM	0	17	4	21	3	21	24	4	2	6	51
12:45 PM	0	22	4	26	6	12	18	6	4	10	54
Total Volume	0	79	20	99	20	66	86	18	12	30	215
% App. Total		79.8	20.2		23.3	76.7		60	40		
PHF	.000	.859	.625	.798	.833	.786	.860	.750	.600	.750	.943
Cars	0	77	20	97	19	66	85	16	11	27	209
% Cars	0	97.5	100	98.0	95.0	100	98.8	88.9	91.7	90.0	97.2
Trucks	0	2	0	2	1	0	1	2	0	2	5
% Trucks	0	2.5	0	2.0	5.0	0	1.2	11.1	0	6.7	2.3
Buses	0	0	0	0	0	0	0	0	1	1	1
% Buses	0	0	0	0	0	0	0	0	8.3	3.3	0.5

1441 Camino Cerritos S.E.
Albuquerque, New Mexico 87123
(505) 414-0465

File Name : Phoenix Ave. and Bryn Mawr Dr.
Site Code : 05012024
Start Date : 5/1/2024
Page No : 4

[illegible]

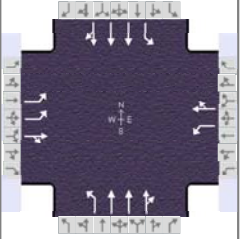
APPENDIX B
2024 EXISTING INTERSECTION CAPACITY ANALYSIS

HCS Signalized Intersection Results Summary

General Information

Agency	BH		
Analyst	AG	Analysis Date	Jun 4, 2024
Jurisdiction	EXAM	Time Period	EXAM
Urban Street	Carlisle Blvd	Analysis Year	2024
Intersection	Carlisle & Claremont	File Name	2024 EXAM Signal
Project Description	Carlisle & Menaul TIA		

Intersection Information



Demand Information

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	66	11	85	40	15	15	104	706	19	12	706	53

Signal Information

Cycle, s	110.0	Reference Phase	2									
Offset, s	53	Reference Point	End									
Uncoordinated	No	Simult. Gap E/W	On	Green	0.9	3.6	80.2	11.9	0.0	0.0		
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	3.5	0.0	4.0	3.5	0.0	0.0		
				Red	0.5	0.0	1.0	1.0	0.0	0.0		

Timer Results

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4		8	5	2	1	6
Case Number		6.0		6.0	1.1	4.0	1.1	4.0
Phase Duration, s		16.4		16.4	8.5	88.7	4.9	85.2
Change Period, ($Y+R_c$), s		4.5		4.5	4.0	5.0	4.0	5.0
Max Allow Headway (MAH), s		3.2		3.2	3.1	0.0	3.1	0.0
Queue Clearance Time (g_s), s		8.2		11.4	4.3		2.2	
Green Extension Time (g_e), s		0.4		0.4	0.2	0.0	0.0	0.0
Phase Call Probability		1.00		1.00	0.99		0.31	
Max Out Probability		0.00		0.00	0.00		0.00	

Movement Group Results

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	66	96		40	30		144	674	333	12	511	248
Adjusted Saturation Flow Rate (s), veh/h/ln	1391	1626		1310	1730		1795	1885	1859	1795	1885	1815
Queue Service Time (g_s), s	2.4	6.2		3.3	1.7		2.3	2.8	2.8	0.2	4.7	4.7
Cycle Queue Clearance Time (g_c), s	4.1	6.2		9.4	1.7		2.3	2.8	2.8	0.2	4.7	4.7
Green Ratio (g/C)	0.11	0.11		0.11	0.11		0.78	0.76	0.76	0.74	0.73	0.73
Capacity (c), veh/h	390	176		135	187		626	2867	1414	483	2746	1322
Volume-to-Capacity Ratio (X)	0.169	0.545		0.297	0.160		0.231	0.235	0.235	0.025	0.186	0.188
Back of Queue (Q), ft/ln (95 th percentile)	38	114		49	34		23	36	38	3	72	72
Back of Queue (Q), veh/ln (95 th percentile)	1.5	4.5		1.9	1.3		0.9	1.4	1.5	0.1	2.9	2.9
Queue Storage Ratio (RQ) (95 th percentile)	0.22	0.00		1.23	0.84		0.13	0.00	0.00	0.04	0.00	0.00
Uniform Delay (d_1), s/veh	46.3	46.5		50.9	44.5		2.8	1.6	1.6	3.9	4.7	4.7
Incremental Delay (d_2), s/veh	0.1	1.0		0.5	0.1		0.1	0.2	0.3	0.0	0.1	0.3
Initial Queue Delay (d_3), s/veh	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	46.4	47.4		51.3	44.6		2.9	1.8	2.0	3.9	4.8	5.0
Level of Service (LOS)	D	D		D	D		A	A	A	A	A	A
Approach Delay, s/veh / LOS	47.0	D		48.5	D		2.0	A		4.9	A	
Intersection Delay, s/veh / LOS	7.9						A					

Multimodal Results

	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	2.60	C		2.60	C		1.84	B		2.04	B	
Bicycle LOS Score / LOS	0.75	A		0.60	A		0.94	A		0.91	A	

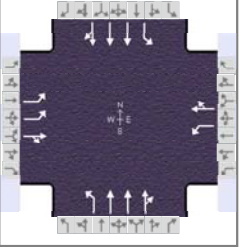
HCS Signalized Intersection Results Summary

General Information

Agency	BH		
Analyst	AG	Analysis Date	Jun 4, 2024
Jurisdiction	EXAM	Time Period	EXPM
Urban Street	Carlisle Blvd	Analysis Year	2024
Intersection	Carlisle & Claremont	File Name	2024 EXPM Signal
Project Description	Carlisle & Menaul TIA		

Intersection Information

Duration, h	1.000
Area Type	Other
PHF	1.00
Analysis Period	1> 7:00
Signalized Network.xus	



Demand Information

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	192	22	138	35	16	23	107	1024	39	35	1033	104

Signal Information

Cycle, s	120.0	Reference Phase	2									
Offset, s	53	Reference Point	End									
Uncoordinated	No	Simult. Gap E/W	On	Green	2.1	3.0	84.3	17.1	0.0	0.0		
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	3.5	0.0	4.0	3.5	0.0	0.0		
				Red	0.5	0.0	1.0	1.0	0.0	0.0		

Timer Results

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4		8	5	2	1	6
Case Number		6.0		6.0	1.1	4.0	1.1	4.0
Phase Duration, s		21.6		21.6	9.1	92.3	6.1	89.3
Change Period, ($Y+R_c$), s		4.5		4.5	4.0	5.0	4.0	5.0
Max Allow Headway (MAH), s		3.2		3.2	3.1	0.0	3.1	0.0
Queue Clearance Time (g_s), s		13.1		16.3	4.9		2.7	
Green Extension Time (g_e), s		0.8		0.8	0.2	0.0	0.0	0.0
Phase Call Probability		1.00		1.00	0.99		0.69	
Max Out Probability		0.00		0.00	0.00		0.00	

Movement Group Results

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	192	160		35	39		145	967	474	35	770	367
Adjusted Saturation Flow Rate (s), veh/h/ln	1390	1645		1246	1718		1810	1900	1863	1810	1900	1808
Queue Service Time (g_s), s	7.8	11.1		3.3	2.4		2.9	8.2	8.4	0.7	9.1	9.1
Cycle Queue Clearance Time (g_c), s	10.1	11.1		14.3	2.4		2.9	8.2	8.4	0.7	9.1	9.1
Green Ratio (g/C)	0.14	0.14		0.14	0.14		0.75	0.73	0.73	0.72	0.70	0.70
Capacity (c), veh/h	464	235		124	246		451	2764	1355	332	2669	1270
Volume-to-Capacity Ratio (X)	0.414	0.681		0.283	0.159		0.322	0.350	0.350	0.105	0.288	0.289
Back of Queue (Q), ft/ln (95 th percentile)	122	203		47	46		33	116	121	10	153	150
Back of Queue (Q), veh/ln (95 th percentile)	4.9	8.1		1.9	1.8		1.3	4.6	4.8	0.4	6.1	6.0
Queue Storage Ratio (RQ) (95 th percentile)	0.70	0.00		1.17	1.15		0.18	0.00	0.00	0.15	0.00	0.00
Uniform Delay (d_1), s/veh	49.5	48.8		55.6	45.1		4.2	3.9	4.0	5.1	6.7	6.7
Incremental Delay (d_2), s/veh	0.2	1.3		0.5	0.1		0.1	0.2	0.5	0.1	0.3	0.6
Initial Queue Delay (d_3), s/veh	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	49.7	50.1		56.0	45.2		4.3	4.2	4.5	5.1	6.9	7.2
Level of Service (LOS)	D	D		E	D		A	A	A	A	A	A
Approach Delay, s/veh / LOS	49.9	D		50.3	D		4.3	A		7.0	A	
Intersection Delay, s/veh / LOS	11.4						B					

Multimodal Results

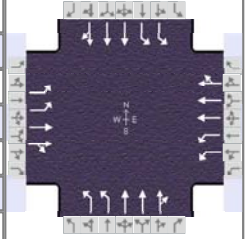
	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	2.60	C		2.60	C		1.86	B		2.06	B	
Bicycle LOS Score / LOS	1.07	A		0.61	A		1.13	A		1.13	A	

HCS Signalized Intersection Results Summary

General Information

Agency	BH		
Analyst	AG	Analysis Date	Jun 4, 2024
Jurisdiction	EXAM	Time Period	EXAM
Urban Street	Carlisle Blvd	Analysis Year	2024
Intersection	Carlisle & Menaul	File Name	2024 EXAM Signal
Project Description	Carlisle & Menaul TIA		

Intersection Information



Demand Information

Approach Movement	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	81	457	136	99	470	179	218	756	121	157	746	106

Signal Information

Cycle, s	110.0	Reference Phase	2									
Offset, s	98	Reference Point	End									
Uncoordinated	No	Simult. Gap E/W	On									
Force Mode	Fixed	Simult. Gap N/S	On									
				Green	6.0	0.7	37.2	4.2	0.7	39.7		
				Yellow	3.0	3.0	4.2	3.0	0.0	4.8		
				Red	0.5	0.5	1.0	0.5	0.0	1.0		

Timer Results

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	5	2	1	6
Case Number	2.0	4.0	2.0	4.0	2.0	4.0	2.0	4.0
Phase Duration, s	7.7	45.5	8.4	46.2	13.7	46.6	9.5	42.4
Change Period, ($Y+R_c$), s	3.5	5.8	3.5	5.8	3.5	5.2	3.5	5.2
Max Allow Headway (MAH), s	3.1	3.1	3.1	3.1	3.1	0.0	3.1	0.0
Queue Clearance Time (g_s), s	4.5	15.9	5.0	11.8	10.0		6.0	
Green Extension Time (g_e), s	0.1	2.7	0.1	2.7	0.3	0.0	0.2	0.0
Phase Call Probability	0.92	1.00	0.95	1.00	1.00		0.98	
Max Out Probability	0.00	0.00	0.00	0.00	0.12		0.00	

Movement Group Results

Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	81	307	286	99	448	201	257	705	329	129	475	226
Adjusted Saturation Flow Rate (s), veh/h/ln	1743	1885	1737	1757	1900	1638	1743	1885	1749	1757	1900	1777
Queue Service Time (g_s), s	2.5	13.7	13.9	3.0	9.3	9.8	8.0	17.5	17.3	4.0	11.3	11.9
Cycle Queue Clearance Time (g_c), s	2.5	13.7	13.9	3.0	9.3	9.8	8.0	17.5	17.3	4.0	11.3	11.9
Green Ratio (g/C)	0.04	0.36	0.36	0.04	0.37	0.37	0.09	0.38	0.38	0.05	0.34	0.34
Capacity (c), veh/h	134	680	626	157	1395	601	325	1419	658	192	1284	600
Volume-to-Capacity Ratio (X)	0.606	0.451	0.457	0.631	0.321	0.335	0.792	0.497	0.500	0.672	0.370	0.377
Back of Queue (Q), ft/ln (95 th percentile)	51	267	252	61	190	179	162	331	309	80	230	239
Back of Queue (Q), veh/ln (95 th percentile)	2.0	10.6	10.1	2.5	7.6	7.2	6.4	13.1	12.4	3.2	9.2	9.6
Queue Storage Ratio (RQ) (95 th percentile)	0.23	0.00	0.00	0.35	0.00	0.00	0.86	0.00	0.00	0.40	0.00	0.00
Uniform Delay (d_1), s/veh	52.1	26.8	26.9	51.7	25.0	25.1	49.4	32.0	30.7	51.3	31.1	33.1
Incremental Delay (d_2), s/veh	1.7	2.2	2.4	1.6	0.6	1.5	2.7	1.2	2.5	1.5	0.8	1.8
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	53.7	29.0	29.3	53.2	25.6	26.6	52.2	33.1	33.2	52.8	31.9	34.9
Level of Service (LOS)	D	C	C	D	C	C	D	C	C	D	C	C
Approach Delay, s/veh / LOS	32.1	C		29.5	C		36.9	D		36.0	D	
Intersection Delay, s/veh / LOS	34.2						C					

Multimodal Results

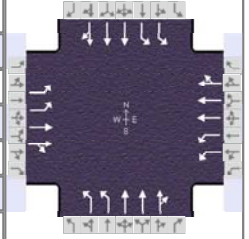
	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	2.71	C		2.71	C		2.57	C		2.58	C	
Bicycle LOS Score / LOS	1.04	A		0.90	A		1.09	A		1.04	A	

HCS Signalized Intersection Results Summary

General Information

Agency	BH		
Analyst	AG	Analysis Date	Jun 4, 2024
Jurisdiction	EXPM	Time Period	EXPM
Urban Street	Carlisle Blvd	Analysis Year	2024
Intersection	Carlisle & Menaul	File Name	2024 EXPM Signal
Project Description	Carlisle & Menaul TIA		

Intersection Information



Demand Information

Approach Movement	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	144	702	210	224	837	300	292	1036	136	273	1066	116

Signal Information

Cycle, s	120.0	Reference Phase	2									
Offset, s	98	Reference Point	End									
Uncoordinated	No	Simult. Gap E/W	On									
Force Mode	Fixed	Simult. Gap N/S	On									
				Green	9.9	3.1	35.9	6.9	2.8	43.3		
				Yellow	3.0	0.0	4.2	3.0	0.0	4.8		
				Red	0.5	0.0	1.0	0.5	0.0	1.0		

Timer Results

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	5	2	1	6
Case Number	2.0	4.0	2.0	4.0	2.0	4.0	2.0	4.0
Phase Duration, s	10.4	49.1	13.3	52.0	16.5	44.2	13.4	41.1
Change Period, ($Y+R_c$), s	3.5	5.8	3.5	5.8	3.5	5.2	3.5	5.2
Max Allow Headway (MAH), s	3.1	3.1	3.1	3.1	3.1	0.0	3.1	0.0
Queue Clearance Time (g_s), s	6.8	27.6	9.5	21.6	12.7		9.6	
Green Extension Time (g_e), s	0.1	4.8	0.3	5.3	0.3	0.0	0.3	0.0
Phase Call Probability	0.99	1.00	1.00	1.00	1.00		1.00	
Max Out Probability	0.01	0.17	0.04	0.05	1.00		0.04	

Movement Group Results

Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	144	475	437	224	792	345	322	879	413	226	663	316
Adjusted Saturation Flow Rate (s), veh/h/ln	1757	1900	1749	1757	1900	1643	1757	1900	1783	1757	1900	1801
Queue Service Time (g_s), s	4.8	25.5	25.6	7.5	19.4	19.6	10.7	26.3	26.2	7.6	18.5	19.0
Cycle Queue Clearance Time (g_c), s	4.8	25.5	25.6	7.5	19.4	19.6	10.7	26.3	26.2	7.6	18.5	19.0
Green Ratio (g/C)	0.06	0.36	0.36	0.08	0.38	0.38	0.11	0.33	0.33	0.08	0.30	0.30
Capacity (c), veh/h	203	686	631	286	1462	632	380	1236	580	289	1138	539
Volume-to-Capacity Ratio (X)	0.710	0.692	0.692	0.783	0.542	0.545	0.847	0.711	0.712	0.783	0.583	0.586
Back of Queue (Q), ft/ln (95 th percentile)	98	461	433	151	348	322	209	479	465	155	348	357
Back of Queue (Q), veh/ln (95 th percentile)	3.9	18.5	17.3	6.1	13.9	12.9	8.4	19.2	18.6	6.2	13.9	14.3
Queue Storage Ratio (RQ) (95 th percentile)	0.44	0.00	0.00	0.86	0.00	0.00	1.10	0.00	0.00	0.77	0.00	0.00
Uniform Delay (d_1), s/veh	55.6	32.7	32.7	54.1	28.7	28.7	50.6	45.1	44.1	54.7	38.8	40.8
Incremental Delay (d_2), s/veh	1.7	5.8	6.3	1.8	1.5	3.4	9.4	2.9	6.3	1.7	2.1	4.5
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	57.3	38.5	39.0	55.9	30.1	32.1	60.0	48.1	50.4	56.5	40.9	45.2
Level of Service (LOS)	E	D	D	E	C	C	E	D	D	E	D	D
Approach Delay, s/veh / LOS	41.3	D		34.9	C		51.0	D		45.0	D	
Intersection Delay, s/veh / LOS	43.5						D					

Multimodal Results

	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.71	C	2.71	C	2.58	C	2.59	C
Bicycle LOS Score / LOS	1.36	A	1.24	A	1.29	A	1.29	A

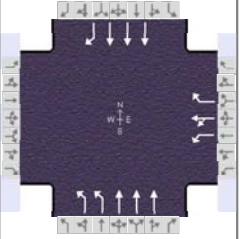
HCS Signalized Intersection Results Summary

General Information

Agency	BH		
Analyst	AG	Analysis Date	Jun 4, 2024
Jurisdiction	EXAM	Time Period	EXAM
Urban Street	Carlisle Blvd	Analysis Year	2024
Intersection	Carlisle & I-40 WB	File Name	2024 EXAM Signal
Project Description	Carlisle & Menaul TIA		

Intersection Information

Duration, h	1.000
Area Type	Other
PHF	1.00
Analysis Period	1> 7:00
Signalized Network.xus	



Demand Information

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h				251	3	261	414	1063			736	264

Signal Information

Cycle, s	110.0	Reference Phase	2									
Offset, s	92	Reference Point	End									
Uncoordinated	No	Simult. Gap E/W	On	Green	15.3	59.0	20.2	0.0	0.0	0.0		
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	4.0	4.0	4.0	0.0	0.0	0.0		
				Red	0.5	1.0	2.0	0.0	0.0	0.0		

Timer Results

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase				8	5	2		6
Case Number				9.0	2.0	4.0		7.3
Phase Duration, s				26.2	19.8	83.8		64.0
Change Period, ($Y+R_c$), s				6.0	4.5	5.0		5.0
Max Allow Headway (MAH), s				3.2	3.1	0.0		0.0
Queue Clearance Time (g_s), s				19.4	14.4			
Green Extension Time (g_e), s				0.8	0.9	0.0		0.0
Phase Call Probability				1.00	1.00			
Max Out Probability				0.02	0.00			

Movement Group Results

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement				3	8	18	5	2		6		16
Adjusted Flow Rate (v), veh/h				126	129	261	401	1031		625		224
Adjusted Saturation Flow Rate (s), veh/h/ln				1810	1812	1610	1743	1712		1725		
Queue Service Time (g_s), s				6.7	6.9	17.4	12.4	9.3		6.6		
Cycle Queue Clearance Time (g_c), s				6.7	6.9	17.4	12.4	9.3		6.6		
Green Ratio (g/C)				0.18	0.18	0.18	0.14	0.72		0.54		
Capacity (c), veh/h				332	333	296	484	3678		2777		
Volume-to-Capacity Ratio (X)				0.378	0.386	0.882	0.829	0.280		0.225		
Back of Queue (Q), ft/ln (95 th percentile)				134	137	310	229	141		112		
Back of Queue (Q), veh/ln (95 th percentile)				5.3	5.5	12.4	9.1	5.6		4.5		
Queue Storage Ratio (RQ) (95 th percentile)				0.79	0.81	1.82	0.86	0.00		0.00		
Uniform Delay (d_1), s/veh				39.4	39.4	43.7	46.8	6.9		12.6		
Incremental Delay (d_2), s/veh				0.3	0.3	12.2	1.3	0.2		0.2		
Initial Queue Delay (d_3), s/veh				0.0	0.0	0.0	0.0	0.0		0.0		
Control Delay (d), s/veh				39.6	39.7	56.0	48.1	7.1		12.7		0.0
Level of Service (LOS)				D	D	E	D	A		B		A
Approach Delay, s/veh / LOS	0.0			47.9		D	18.6	B		9.4		A
Intersection Delay, s/veh / LOS				21.2				C				

Multimodal Results

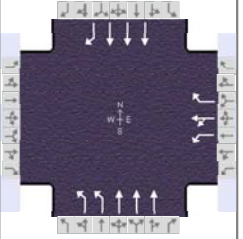
	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	2.74		C	2.61		C	1.86		B	1.67		B
Bicycle LOS Score / LOS				1.34		A	1.30		A	1.04		A

HCS Signalized Intersection Results Summary

General Information

Agency	BH		
Analyst	AG	Analysis Date	Jun 4, 2024
Jurisdiction	EXPM	Time Period	EXPM
Urban Street	Carlisle Blvd	Analysis Year	2024
Intersection	Carlisle & I-40 WB	File Name	2024 EXPM Signal
Project Description	Carlisle & Menaul TIA		

Intersection Information



Demand Information

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h				319	45	407	439	1256			1108	285

Signal Information

Cycle, s	120.0	Reference Phase	2									
Offset, s	92	Reference Point	End									
Uncoordinated	No	Simult. Gap E/W	On	Green	17.8	59.1	27.6	0.0	0.0	0.0		
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	4.0	4.0	4.0	0.0	0.0	0.0		
				Red	0.5	1.0	2.0	0.0	0.0	0.0		

Timer Results

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase				8	5	2		6
Case Number				9.0	2.0	4.0		7.3
Phase Duration, s				33.6	22.3	86.4		64.1
Change Period, (Y+R c), s				6.0	4.5	5.0		5.0
Max Allow Headway (MAH), s				3.2	3.1	0.0		0.0
Queue Clearance Time (g s), s				29.6	16.8			
Green Extension Time (g e), s				0.0	1.0	0.0		0.0
Phase Call Probability				1.00	1.00			
Max Out Probability				1.00	0.00			

Movement Group Results

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement				3	8	18	5	2		6	16	
Adjusted Flow Rate (v), veh/h				160	205	407	435	1243		1048	270	
Adjusted Saturation Flow Rate (s), veh/h/ln				1810	1829	1610	1757	1725		1725		
Queue Service Time (g s), s				8.9	11.6	27.6	14.8	18.7		18.0		
Cycle Queue Clearance Time (g c), s				8.9	11.6	27.6	14.8	18.7		18.0		
Green Ratio (g/C)				0.23	0.23	0.23	0.15	0.68		0.49		
Capacity (c), veh/h				416	421	370	520	3511		2550		
Volume-to-Capacity Ratio (X)				0.383	0.486	1.099	0.835	0.354		0.411		
Back of Queue (Q), ft/ln (95 th percentile)				179	224	1142	288	314		291		
Back of Queue (Q), veh/ln (95 th percentile)				7.1	9.0	45.7	11.5	12.6		11.6		
Queue Storage Ratio (RQ) (95 th percentile)				1.05	1.32	6.71	1.09	0.00		0.00		
Uniform Delay (d 1), s/veh				39.0	40.1	46.2	57.8	15.6		24.7		
Incremental Delay (d 2), s/veh				0.2	0.3	221.6	1.3	0.3		0.4		
Initial Queue Delay (d 3), s/veh				0.0	0.0	0.0	0.0	0.0		0.0		
Control Delay (d), s/veh				39.2	40.4	267.8	59.1	15.9		25.1	0.0	
Level of Service (LOS)				D	D	F	E	B		C	A	
Approach Delay, s/veh / LOS	0.0			160.2		F	27.1		C	19.9		B
Intersection Delay, s/veh / LOS				51.8						D		

Multimodal Results

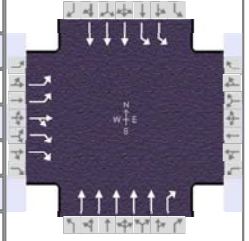
	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	2.75		C	2.62		C	1.87		B	1.68		B
Bicycle LOS Score / LOS				1.76		B	1.42		A	1.25		A

HCS Signalized Intersection Results Summary

General Information

Agency	BH		
Analyst	AG	Analysis Date	Jun 4, 2024
Jurisdiction	EXAM	Time Period	EXAM
Urban Street	Carlisle Blvd	Analysis Year	2024
Intersection	Carlisle & I-40 EB	File Name	2024 EXAM Signal
Project Description	Carlisle & Menaul TIA		

Intersection Information



Demand Information

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	546	2	507					886	183	192	822	

Signal Information

Cycle, s	110.0	Reference Phase	2									
Offset, s	92	Reference Point	End									
Uncoordinated	No	Simult. Gap E/W	On	Green	7.5	65.7	20.9	0.0	0.0	0.0		
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	4.0	4.0	4.5	0.0	0.0	0.0		
				Red	0.5	1.0	2.0	0.0	0.0	0.0		

Timer Results

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4				2	1	6
Case Number		9.0				7.3	2.0	4.0
Phase Duration, s		27.4				70.7	12.0	82.6
Change Period, ($Y+R_c$), s		6.5				5.0	4.5	5.0
Max Allow Headway (MAH), s		3.2				0.0	3.1	0.0
Queue Clearance Time (g_s), s		18.4					7.2	
Green Extension Time (g_e), s		2.5				0.0	0.4	0.0
Phase Call Probability		1.00					0.99	
Max Out Probability		0.02					0.00	

Movement Group Results

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14				2	12		1	6	
Adjusted Flow Rate (v), veh/h	546	179	330				886	183		166	710	
Adjusted Saturation Flow Rate (s), veh/h/ln	1757	1613	1610				1725	1610		1757	1725	
Queue Service Time (g_s), s	16.4	11.2	10.2				5.1	5.7		5.2	7.7	
Cycle Queue Clearance Time (g_c), s	16.4	11.2	10.2				5.1	5.7		5.2	7.7	
Green Ratio (g/C)	0.19	0.19	0.19				0.60	0.60		0.07	0.71	
Capacity (c), veh/h	667	306	611				5149	961		239	3653	
Volume-to-Capacity Ratio (X)	0.819	0.586	0.539				0.172	0.190		0.695	0.194	
Back of Queue (Q), ft/ln (95 th percentile)	288	197	180				83	91		107	126	
Back of Queue (Q), veh/ln (95 th percentile)	11.5	7.9	7.2				3.3	3.6		4.3	5.0	
Queue Storage Ratio (RQ) (95 th percentile)	0.65	0.45	0.41				0.00	0.32		0.34	0.00	
Uniform Delay (d_1), s/veh	42.8	40.6	40.2				10.0	10.1		52.8	9.2	
Incremental Delay (d_2), s/veh	1.3	0.7	0.3				0.1	0.4		1.3	0.1	
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0				0.0	0.0		0.0	0.0	
Control Delay (d), s/veh	44.1	41.3	40.5				10.0	10.5		54.1	9.3	
Level of Service (LOS)	D	D	D				B	B		D	A	
Approach Delay, s/veh / LOS	42.5		D	0.0			10.1		B	17.8		B
Intersection Delay, s/veh / LOS	23.7						C					

Multimodal Results

	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	2.87		C	2.98		C	1.66		B	2.22		B
Bicycle LOS Score / LOS	2.23		B				0.84		A	1.05		A

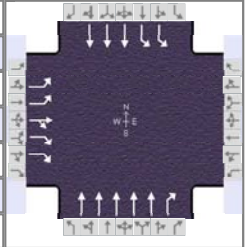
HCS Signalized Intersection Results Summary

General Information

Agency	BH		
Analyst	AG	Analysis Date	Jun 4, 2024
Jurisdiction	EXPM	Time Period	EXPM
Urban Street	Carlisle Blvd	Analysis Year	2024
Intersection	Carlisle & I-40 EB	File Name	2024 EXPM Signal
Project Description	Carlisle & Menaul TIA		

Intersection Information

Duration, h	1.000
Area Type	Other
PHF	1.00
Analysis Period	1> 7:00
Signalized Network.xus	



Demand Information

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	410	8	485					1268	296	352	1083	

Signal Information

Cycle, s	120.0	Reference Phase	2									
Offset, s	92	Reference Point	End									
Uncoordinated	No	Simult. Gap E/W	On	Green	14.1	72.3	17.6	0.0	0.0	0.0		
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	4.0	4.0	4.5	0.0	0.0	0.0		
				Red	0.5	1.0	2.0	0.0	0.0	0.0		

Timer Results

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4				2	1	6
Case Number		9.0				7.3	2.0	4.0
Phase Duration, s		24.1				77.3	18.6	95.9
Change Period, ($Y+R_c$), s		6.5				5.0	4.5	5.0
Max Allow Headway (MAH), s		3.2				0.0	3.1	0.0
Queue Clearance Time (g_s), s		15.5					13.3	
Green Extension Time (g_e), s		2.1				0.0	0.8	0.0
Phase Call Probability		1.00					1.00	
Max Out Probability		0.00					0.00	

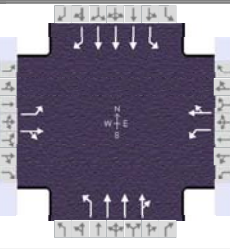
Movement Group Results

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14				2	12		1	6	
Adjusted Flow Rate (v), veh/h	410	178	315				1268	296		335	1032	
Adjusted Saturation Flow Rate (s), veh/h/ln	1757	1623	1610				1725	1610		1757	1725	
Queue Service Time (g_s), s	13.5	12.6	11.1				8.2	10.8		11.3	9.9	
Cycle Queue Clearance Time (g_c), s	13.5	12.6	11.1				8.2	10.8		11.3	9.9	
Green Ratio (g/C)	0.15	0.15	0.15				0.60	0.60		0.12	0.76	
Capacity (c), veh/h	516	239	473				5194	970		413	3919	
Volume-to-Capacity Ratio (X)	0.794	0.745	0.666				0.244	0.305		0.811	0.263	
Back of Queue (Q), ft/ln (95 th percentile)	249	223	198				137	176		222	155	
Back of Queue (Q), veh/ln (95 th percentile)	10.0	8.9	7.9				5.5	7.0		8.9	6.2	
Queue Storage Ratio (RQ) (95 th percentile)	0.57	0.51	0.45				0.00	0.63		0.72	0.00	
Uniform Delay (d_1), s/veh	49.4	49.0	48.4				11.1	11.6		55.7	6.7	
Incremental Delay (d_2), s/veh	1.1	1.8	0.6				0.1	0.8		1.3	0.1	
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0				0.0	0.0		0.0	0.0	
Control Delay (d), s/veh	50.5	50.8	49.0				11.2	12.5		57.0	6.9	
Level of Service (LOS)	D	D	D				B	B		E	A	
Approach Delay, s/veh / LOS	50.0		D	0.0			11.5		B	19.2		B
Intersection Delay, s/veh / LOS	23.3						C					

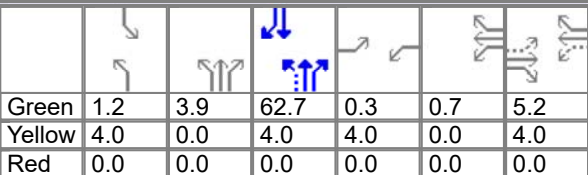
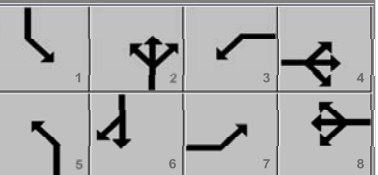
Multimodal Results

	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	2.87		C	2.99		C	1.66		B	2.21		B
Bicycle LOS Score / LOS	1.98		B				1.00		A	1.28		A

HCS Signalized Intersection Results Summary

General Information				Intersection Information		
Agency	BH			Duration, h	1.000	
Analyst	AG	Analysis Date	7/2/2024	Area Type	Other	
Jurisdiction	CoA	Time Period	EXAM	PHF	1.00	
Urban Street	Carlisle Blvd	Analysis Year	2024	Analysis Period	1> 7:00	
Intersection	Carlisle & Phoenix	File Name	2024 EXAM Carlisle & Phoenix ALT.xus			
Project Description	Carlisle & Menaul TIA Signalized Alt					

Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	2	0	65	7	2	13	77	825	4	9	900	16

Signal Information														
Cycle, s	90.0	Reference Phase	2											
Offset, s	0	Reference Point	End											
Uncoordinated	No	Simult. Gap E/W	On											
Force Mode	Fixed	Simult. Gap N/S	On											
Green	1.2	3.9	62.7	0.3	0.7	5.2								
Yellow	4.0	0.0	4.0	4.0	0.0	4.0								
Red	0.0	0.0	0.0	0.0	0.0	0.0								

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	5	2	1	6
Case Number	1.1	4.0	1.1	4.0	1.1	4.0	2.0	3.0
Phase Duration, s	4.3	9.2	5.0	9.9	9.1	70.6	5.2	66.7
Change Period, ($Y+R_c$), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Allow Headway (MAH), s	3.1	3.4	3.1	3.4	3.1	0.0	3.1	0.0
Queue Clearance Time (g_s), s	2.1	5.6	2.3	2.8	2.9		2.4	
Green Extension Time (g_e), s	0.0	0.1	0.0	0.1	0.1	0.0	0.0	0.0
Phase Call Probability	0.05	0.87	0.16	0.89	0.85		0.20	
Max Out Probability	0.00	0.00	0.02	0.00	0.00		0.00	

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	2	65		7	15		77	553	276	9	900	16
Adjusted Saturation Flow Rate (s), veh/h/ln	1781	1585		1810	1644		1810	1900	1895	1795	1712	1598
Queue Service Time (g_s), s	0.1	3.6		0.3	0.8		0.9	4.0	4.0	0.4	5.8	0.3
Cycle Queue Clearance Time (g_c), s	0.1	3.6		0.3	0.8		0.9	4.0	4.0	0.4	5.8	0.3
Green Ratio (g/C)	0.06	0.06		0.07	0.07		0.77	0.74	0.74	0.01	0.70	0.70
Capacity (c), veh/h	134	92		124	108		580	2812	1402	24	3577	1113
Volume-to-Capacity Ratio (X)	0.015	0.706		0.057	0.139		0.133	0.197	0.197	0.373	0.252	0.014
Back of Queue (Q), ft/ln (95 th percentile)	2	68		6	14		9	52	55	10	77	4
Back of Queue (Q), veh/ln (95 th percentile)	0.1	2.7		0.3	0.6		0.4	2.1	2.2	0.4	3.0	0.1
Queue Storage Ratio (RQ) (95 th percentile)	0.00	0.00		0.06	0.14		0.08	0.00	0.00	0.11	0.00	0.04
Uniform Delay (d_1), s/veh	39.7	41.6		39.2	39.7		2.8	3.6	3.6	44.0	5.0	4.2
Incremental Delay (d_2), s/veh	0.0	3.7		0.1	0.2		0.0	0.2	0.3	3.5	0.2	0.0
Initial Queue Delay (d_3), s/veh	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	39.7	45.4		39.3	39.9		2.8	3.7	3.9	47.6	5.2	4.2
Level of Service (LOS)	D	D		D	D		A	A	A	D	A	A
Approach Delay, s/veh / LOS	45.2	D		39.7	D		3.7	A		5.6	A	
Intersection Delay, s/veh / LOS	6.5						A					

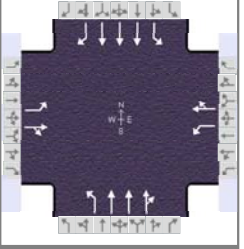
Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.60	C	2.73	C	1.84	B	1.85	B
Bicycle LOS Score / LOS	0.60	A	0.52	A	0.99	A	1.00	A

HCS Signalized Intersection Results Summary

General Information

Agency	BH		
Analyst	AG	Analysis Date	7/2/2024
Jurisdiction	CoA	Time Period	EXPM
Urban Street	Carlisle Blvd	Analysis Year	2024
Intersection	Carlisle & Phoenix	File Name	2024 EXPM Carlis
Project Description	Carlisle & Menaul TIA Signalized Alt		

Intersection Information



Demand Information

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	4	1	174	0	1	28	132	1230	23	19	1227	35

Signal Information

Cycle, s	90.0	Reference Phase	2									
Offset, s	0	Reference Point	End									
Uncoordinated	No	Simult. Gap E/W	On	Green	2.3	3.5	60.3	0.6	7.3	0.0		
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	4.0	0.0	4.0	4.0	4.0	0.0		
				Red	0.0	0.0	0.0	0.0	0.0	0.0		

Timer Results

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	5	2	1	6
Case Number	1.1	4.0	1.1	4.0	1.1	4.0	2.0	3.0
Phase Duration, s	4.6	15.9	0.0	11.3	9.8	67.8	6.3	64.3
Change Period, ($Y+R_c$), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Allow Headway (MAH), s	3.1	3.4	0.0	3.4	3.1	0.0	3.1	0.0
Queue Clearance Time (g_s), s	2.2	11.5		3.5	3.8		2.9	
Green Extension Time (g_e), s	0.0	0.4	0.0	0.4	0.2	0.0	0.0	0.0
Phase Call Probability	0.10	0.99		0.99	0.96		0.38	
Max Out Probability	0.00	0.00		0.00	0.00		0.00	

Movement Group Results

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	4	175		0	29		132	838	415	19	1227	35
Adjusted Saturation Flow Rate (s), veh/h/ln	1810	1612		1810	1619		1810	1900	1881	1810	1725	1610
Queue Service Time (g_s), s	0.2	9.5		0.0	1.5		1.8	7.4	7.4	0.9	9.2	0.7
Cycle Queue Clearance Time (g_c), s	0.2	9.5		0.0	1.5		1.8	7.4	7.4	0.9	9.2	0.7
Green Ratio (g/C)	0.11	0.13		0.04	0.08		0.75	0.71	0.71	0.03	0.67	0.67
Capacity (c), veh/h	182	213		87	132		458	2695	1334	46	3469	1079
Volume-to-Capacity Ratio (X)	0.022	0.822		0.000	0.220		0.288	0.311	0.311	0.416	0.354	0.032
Back of Queue (Q), ft/ln (95 th percentile)	4	172		0	27		20	106	110	20	128	9
Back of Queue (Q), veh/ln (95 th percentile)	0.1	6.9		0.0	1.1		0.8	4.2	4.4	0.8	5.1	0.4
Queue Storage Ratio (RQ) (95 th percentile)	0.00	0.00		0.00	0.27		0.19	0.00	0.00	0.22	0.00	0.10
Uniform Delay (d_1), s/veh	35.8	38.0		0.0	38.7		3.9	4.9	4.9	43.2	6.4	5.0
Incremental Delay (d_2), s/veh	0.0	3.1		0.0	0.3		0.1	0.3	0.6	2.3	0.3	0.1
Initial Queue Delay (d_3), s/veh	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	35.8	41.1		0.0	39.0		4.0	5.2	5.5	45.5	6.7	5.1
Level of Service (LOS)	D	D			D		A	A	A	D	A	A
Approach Delay, s/veh / LOS	41.0		D	39.0		D	5.2		A	7.2		A
Intersection Delay, s/veh / LOS	8.7						A					

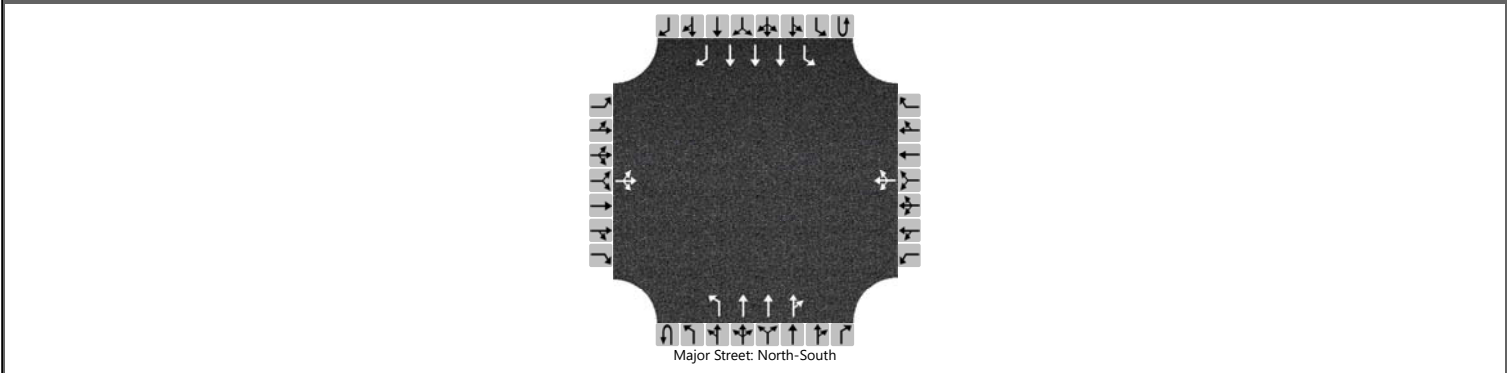
Multimodal Results

	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.59	C	2.73	C	1.85	B	1.86	B
Bicycle LOS Score / LOS	0.78	A	0.54	A	1.25	A	1.19	A

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AG	Intersection	Carlisle & Phoenix
Agency/Co.	BH	Jurisdiction	CoA
Date Performed	6/4/2024	East/West Street	Phoenix Ave
Analysis Year	2024	North/South Street	Carlisle Blvd
Time Analyzed	EXAM	Peak Hour Factor	0.85
Intersection Orientation	North-South	Analysis Time Period (hrs)	1.00
Project Description	Menaul & Carlisle TIA		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	1	3	0	0	1	3	1
Configuration			LTR				LTR			L	T	TR		L	T	R
Volume (veh/h)		2	0	65		7	2	13	0	77	825	4	0	9	900	16
Percent Heavy Vehicles (%)		2	2	2		0	0	0	0	0			1	1		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized													No			
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		6.4	6.5	7.1		6.4	6.5	7.1		5.3				5.3		
Critical Headway (sec)		6.43	6.53	7.14		6.40	6.50	7.10		5.30				5.32		
Base Follow-Up Headway (sec)		3.8	4.0	3.9		3.8	4.0	3.9		3.1				3.1		
Follow-Up Headway (sec)		3.82	4.02	3.92		3.80	4.00	3.90		3.10				3.11		

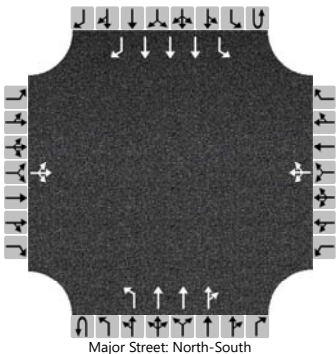
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			79			26				91				11		
Capacity, c (veh/h)			367			112				365				405		
v/c Ratio			0.21			0.23				0.25				0.03		
95% Queue Length, Q ₉₅ (veh)			0.8			0.9				1.0				0.1		
95% Queue Length, Q ₉₅ (ft)			20.3			22.5				25.0				2.5		
Control Delay (s/veh)			17.5			46.9				18.1				14.1		
Level of Service (LOS)			C			E				C				B		
Approach Delay (s/veh)	17.5				46.9				1.5				0.1			
Approach LOS	C				E				A				A			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AG	Intersection	Carlisle & Phoenix
Agency/Co.	BH	Jurisdiction	CoA
Date Performed	6/4/2024	East/West Street	Phoenix Ave
Analysis Year	2024	North/South Street	Carlisle Blvd
Time Analyzed	EXPM	Peak Hour Factor	0.82
Intersection Orientation	North-South	Analysis Time Period (hrs)	1.00
Project Description	Menaul & Carlisle TIA		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	1	3	0	0	1	3	1
Configuration			LTR				LTR			L	T	TR		L	T	R
Volume (veh/h)		4	1	174		0	1	28	0	132	1230	23	0	19	1227	35
Percent Heavy Vehicles (%)		0	0	0		0	0	0	0	0			0	0		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized													No			
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		6.4	6.5	7.1		6.4	6.5	7.1		5.3				5.3		
Critical Headway (sec)		6.40	6.50	7.10		6.40	6.50	7.10		5.30				5.30		
Base Follow-Up Headway (sec)		3.8	4.0	3.9		3.8	4.0	3.9		3.1				3.1		
Follow-Up Headway (sec)		3.80	4.00	3.90		3.80	4.00	3.90		3.10				3.10		

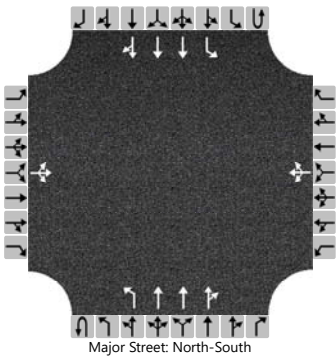
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			218				35				161				23	
Capacity, c (veh/h)			86				42				217				220	
v/c Ratio			2.55				0.84				0.74				0.11	
95% Queue Length, Q ₉₅ (veh)			70.9				5.8				6.9				0.4	
95% Queue Length, Q ₉₅ (ft)			1772.5				145.0				172.5				10.0	
Control Delay (s/veh)			2897.4				329.5				64.7				23.3	
Level of Service (LOS)			F				F				F				C	
Approach Delay (s/veh)	2897.4				329.5				6.2				0.3			
Approach LOS	F				F				A				A			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AG	Intersection	Carlisle & Prospect
Agency/Co.	BH	Jurisdiction	CoA
Date Performed	6/4/2024	East/West Street	Prospect Ave
Analysis Year	2024	North/South Street	Carlisle Blvd
Time Analyzed	EXAM	Peak Hour Factor	0.84
Intersection Orientation	North-South	Analysis Time Period (hrs)	1.00
Project Description	Menaul & Carlisle TIA		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	1	3	0	0	1	3	0
Configuration			LTR				LTR			L	T	TR		L	T	TR
Volume (veh/h)		15	0	52		18	1	17	0	114	1081	6	0	10	932	33
Percent Heavy Vehicles (%)		2	2	2		0	0	0	1	1			0	0		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		6.4	6.5	7.1		6.4	6.5	7.1		5.3				5.3		
Critical Headway (sec)		6.44	6.54	7.14		6.40	6.50	7.10		5.32				5.30		
Base Follow-Up Headway (sec)		3.8	4.0	3.9		3.8	4.0	3.9		3.1				3.1		
Follow-Up Headway (sec)		3.82	4.02	3.92		3.80	4.00	3.90		3.11				3.10		

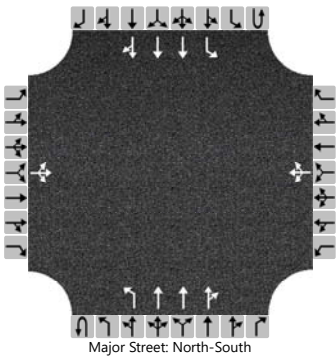
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			80			43				136				12		
Capacity, c (veh/h)			119			48				334				287		
v/c Ratio			0.67			0.89				0.41				0.04		
95% Queue Length, Q ₉₅ (veh)			4.9			6.9				2.0				0.1		
95% Queue Length, Q ₉₅ (ft)			124.5			172.5				50.4				2.5		
Control Delay (s/veh)			91.5			345.5				23.1				18.1		
Level of Service (LOS)			F			F				C				C		
Approach Delay (s/veh)	91.5				345.5				2.2				0.2			
Approach LOS	F				F				A				A			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AG	Intersection	Carlisle & Prospect
Agency/Co.	BH	Jurisdiction	CoA
Date Performed	6/4/2024	East/West Street	Prospect Ave
Analysis Year	2024	North/South Street	Carlisle Blvd
Time Analyzed	EXPM	Peak Hour Factor	0.85
Intersection Orientation	North-South	Analysis Time Period (hrs)	1.00
Project Description	Menaul & Carlisle TIA		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	1	3	0	0	1	3	0
Configuration			LTR				LTR			L	T	TR		L	T	TR
Volume (veh/h)		12	0	92		7	0	7	0	98	1446	27	0	21	1460	42
Percent Heavy Vehicles (%)		0	0	0		0	0	0	1	1			0	0		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		6.4	6.5	7.1		6.4	6.5	7.1		5.3				5.3		
Critical Headway (sec)		6.40	6.50	7.10		6.40	6.50	7.10		5.32				5.30		
Base Follow-Up Headway (sec)		3.8	4.0	3.9		3.8	4.0	3.9		3.1				3.1		
Follow-Up Headway (sec)		3.80	4.00	3.90		3.80	4.00	3.90		3.11				3.10		

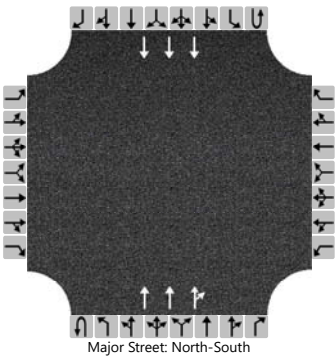
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			122				16			115				25		
Capacity, c (veh/h)			43				7			166				174		
v/c Ratio			2.86				2.41			0.70				0.14		
95% Queue Length, Q ₉₅ (veh)			44.0				7.9			5.6				0.5		
95% Queue Length, Q ₉₅ (ft)			1100.0				197.5			141.1				12.5		
Control Delay (s/veh)			3566.4				3774.9			72.5				29.1		
Level of Service (LOS)			F				F			F				D		
Approach Delay (s/veh)	3566.4				3774.9				4.5				0.4			
Approach LOS	F				F				A				A			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AG	Intersection	Carlisle & Cutler
Agency/Co.	BH	Jurisdiction	CoA
Date Performed	6/4/2024	East/West Street	Cutler Ave
Analysis Year	2024	North/South Street	Carlisle Blvd
Time Analyzed	EXPM	Peak Hour Factor	0.62
Intersection Orientation	North-South	Analysis Time Period (hrs)	1.00
Project Description	Carlisle & Menaul TIA		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	0	0	0	0	3	0	0	0	3	0
Configuration											T	TR			T	
Volume (veh/h)											1570	126			1500	
Percent Heavy Vehicles (%)																
Proportion Time Blocked																
Percent Grade (%)																
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)																
Critical Headway (sec)																
Base Follow-Up Headway (sec)																
Follow-Up Headway (sec)																

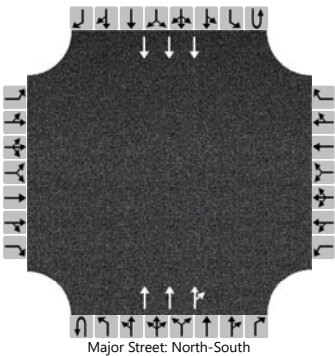
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)																
Capacity, c (veh/h)																
v/c Ratio																
95% Queue Length, Q ₉₅ (veh)																
95% Queue Length, Q ₉₅ (ft)																
Control Delay (s/veh)																
Level of Service (LOS)																
Approach Delay (s/veh)																
Approach LOS																

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AG	Intersection	Carlisle & Cutler
Agency/Co.	BH	Jurisdiction	CoA
Date Performed	6/4/2024	East/West Street	Cutler Ave
Analysis Year	2024	North/South Street	Carlisle Blvd
Time Analyzed	EXAM	Peak Hour Factor	0.90
Intersection Orientation	North-South	Analysis Time Period (hrs)	1.00
Project Description	Carlisle & Menaul TIA		

Lanes



Vehicle Volumes and Adjustments

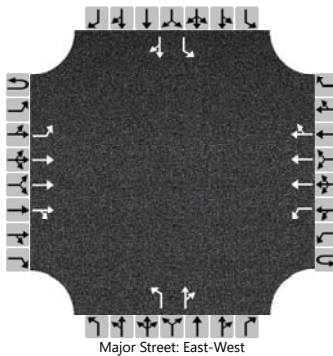
Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	0	0	0	0	3	0	0	0	3	0
Configuration											T	TR			T	
Volume (veh/h)											1201	162			981	
Percent Heavy Vehicles (%)																
Proportion Time Blocked																
Percent Grade (%)																
Right Turn Channelized																
Median Type Storage	Undivided															

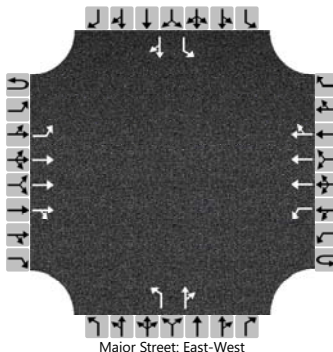
Critical and Follow-up Headways

Base Critical Headway (sec)																
Critical Headway (sec)																
Base Follow-Up Headway (sec)																
Follow-Up Headway (sec)																

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)																
Capacity, c (veh/h)																
v/c Ratio																
95% Queue Length, Q ₉₅ (veh)																
95% Queue Length, Q ₉₅ (ft)																
Control Delay (s/veh)																
Level of Service (LOS)																
Approach Delay (s/veh)																
Approach LOS																

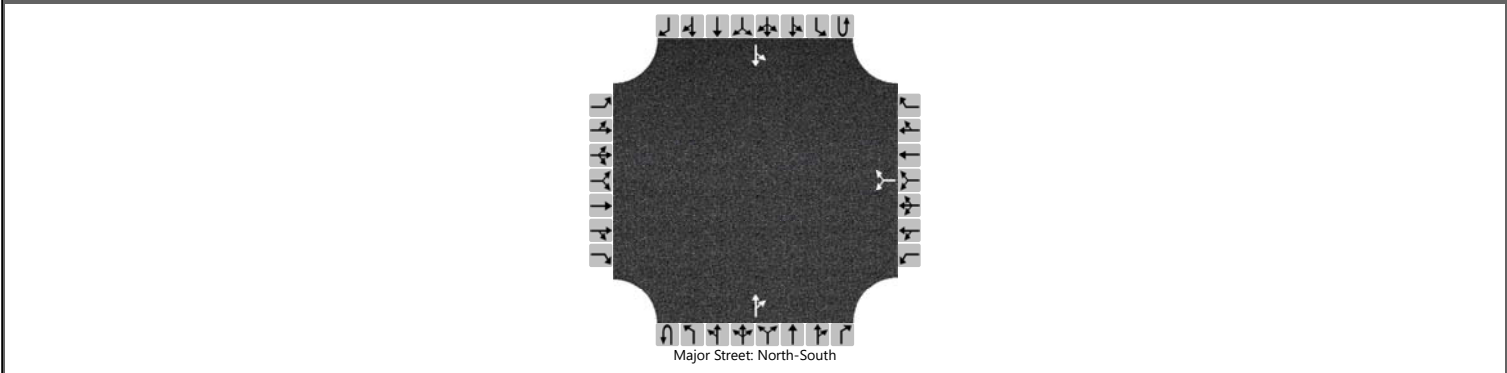
HCS Two-Way Stop-Control Report																	
General Information						Site Information											
Analyst	AG					Intersection				Menaul & Bryn Mawr							
Agency/Co.	BH					Jurisdiction				CoA							
Date Performed	6/4/2024					East/West Street				Menaul Blvd							
Analysis Year	2024					North/South Street				Bryn Mawr/American Dr							
Time Analyzed	EXAM					Peak Hour Factor				0.73							
Intersection Orientation	East-West					Analysis Time Period (hrs)				1.00							
Project Description	Carlisle & Menaul TIA																
Lanes																	
 Major Street: East-West																	
Vehicle Volumes and Adjustments																	
Approach	Eastbound				Westbound				Northbound				Southbound				
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12	
Number of Lanes	0	1	3	0	0	1	3	0		1	1	0		1	1	0	
Configuration		L	T	TR		L	T	TR		L		TR		L		TR	
Volume (veh/h)	0	37	597	14	0	20	774	6		10	0	23		6	1	35	
Percent Heavy Vehicles (%)	1	1			1	1				0	0	0		2	2	2	
Proportion Time Blocked																	
Percent Grade (%)									0				0				
Right Turn Channelized																	
Median Type Storage	Undivided																
Critical and Follow-up Headways																	
Base Critical Headway (sec)		5.3				5.3				6.4	6.5	7.1		6.4	6.5	7.1	
Critical Headway (sec)		5.32				5.32				6.40	6.50	7.10		6.44	6.54	7.14	
Base Follow-Up Headway (sec)		3.1				3.1				3.8	4.0	3.9		3.8	4.0	3.9	
Follow-Up Headway (sec)		3.11				3.11				3.80	4.00	3.90		3.82	4.02	3.92	
Delay, Queue Length, and Level of Service																	
Flow Rate, v (veh/h)		51				27				14		32		8		49	
Capacity, c (veh/h)		366				472				104		503		90		340	
v/c Ratio		0.14				0.06				0.13		0.06		0.09		0.15	
95% Queue Length, Q ₉₅ (veh)		0.5				0.2				0.5		0.2		0.3		0.5	
95% Queue Length, Q ₉₅ (ft)		12.6				5.0				12.5		5.0		7.6		12.7	
Control Delay (s/veh)		16.4				13.1				45.0		12.6		48.8		17.4	
Level of Service (LOS)		C				B				E		B		E		C	
Approach Delay (s/veh)	0.9				0.3				22.4				21.9				
Approach LOS	A				A				C				C				

HCS Two-Way Stop-Control Report																
General Information								Site Information								
Analyst	AG							Intersection				Menaul & Bryn Mawr				
Agency/Co.	BH							Jurisdiction				CoA				
Date Performed	6/4/2024							East/West Street				Menaul Blvd				
Analysis Year	2024							North/South Street				Bryn Mawr/American Dr				
Time Analyzed	EXPM							Peak Hour Factor				0.74				
Intersection Orientation	East-West							Analysis Time Period (hrs)				1.00				
Project Description	Carlisle & Menaul TIA															
Lanes																
																
Vehicle Volumes and Adjustments																
Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	3	0	0	1	3	0		1	1	0		1	1	0
Configuration		L	T	TR		L	T	TR		L		TR		L		TR
Volume (veh/h)	0	62	940	19	0	44	1252	12		1	0	12		17	0	92
Percent Heavy Vehicles (%)	0	0			1	1				0	0	0		0	0	0
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized																
Median Type Storage	Undivided															
Critical and Follow-up Headways																
Base Critical Headway (sec)		5.3				5.3				6.4	6.5	7.1		6.4	6.5	7.1
Critical Headway (sec)		5.30				5.32				6.40	6.50	7.10		6.40	6.50	7.10
Base Follow-Up Headway (sec)		3.1				3.1				3.8	4.0	3.9		3.8	4.0	3.9
Follow-Up Headway (sec)		3.10				3.11				3.80	4.00	3.90		3.80	4.00	3.90
Delay, Queue Length, and Level of Service																
Flow Rate, v (veh/h)		84				59				1		16		23		124
Capacity, c (veh/h)		179				283				10		358		13		263
v/c Ratio		0.47				0.21				0.14		0.05		1.83		0.47
95% Queue Length, Q ₉₅ (veh)		2.5				0.8				0.4		0.1		9.0		2.6
95% Queue Length, Q ₉₅ (ft)		62.5				20.2				10.0		2.5		225.0		65.0
Control Delay (s/veh)		42.4				21.1				418.9		15.5		2258.5		30.9
Level of Service (LOS)		E				C				F		C		F		D
Approach Delay (s/veh)	2.6				0.7				46.6				378.3			
Approach LOS	A				A				E				F			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AG	Intersection	Phoenix & Bryn Mawr
Agency/Co.	BH	Jurisdiction	CoA
Date Performed	6/4/2024	East/West Street	Phoenix Ave
Analysis Year	2024	North/South Street	American Ave (Bryn Mawr)
Time Analyzed	EXAM	Peak Hour Factor	0.83
Intersection Orientation	North-South	Analysis Time Period (hrs)	1.00
Project Description	Carlisle & Menaul TIA		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	1	0	0	0	1	0
Configuration							LR					TR		LT		
Volume (veh/h)						45		19			11	41		13	5	
Percent Heavy Vehicles (%)						3		3						6		
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						7.1		6.2						4.1		
Critical Headway (sec)						6.43		6.23						4.16		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.53		3.33						2.25		

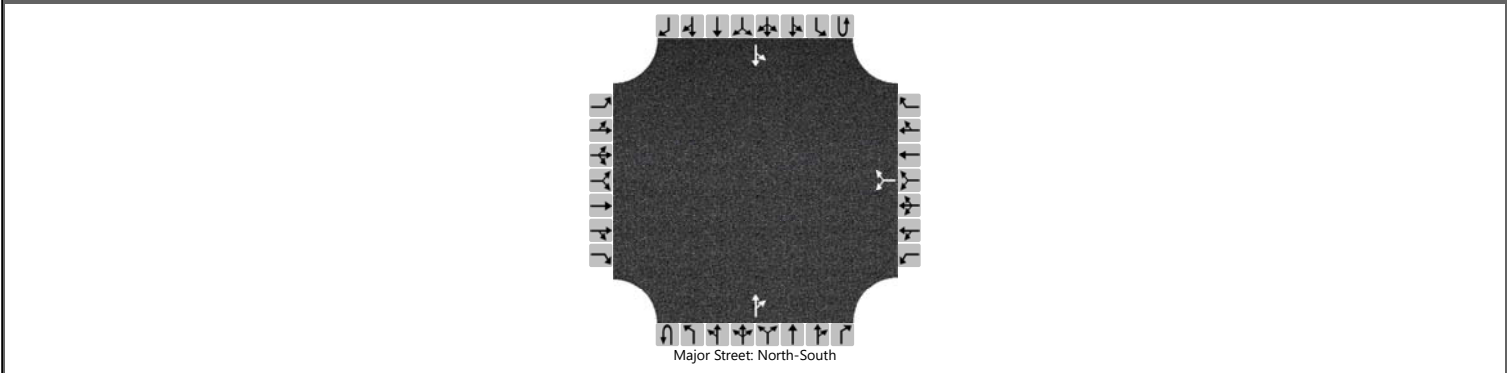
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						77								16		
Capacity, c (veh/h)						947								1515		
v/c Ratio						0.08								0.01		
95% Queue Length, Q ₉₅ (veh)						0.3								0.0		
95% Queue Length, Q ₉₅ (ft)						7.7								0.0		
Control Delay (s/veh)						9.1								7.4	0.1	
Level of Service (LOS)						A								A	A	
Approach Delay (s/veh)					9.1								5.4			
Approach LOS					A								A			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AG	Intersection	Phoenix & Bryn Mawr
Agency/Co.	BH	Jurisdiction	CoA
Date Performed	6/4/2024	East/West Street	Phoenix Ave
Analysis Year	2024	North/South Street	American Ave (Bryn Mawr)
Time Analyzed	EXPM	Peak Hour Factor	0.80
Intersection Orientation	North-South	Analysis Time Period (hrs)	1.00
Project Description	Carlisle & Menaul TIA		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	1	0	0	0	1	0
Configuration							LR					TR		LT		
Volume (veh/h)						86		14			17	76		17	3	
Percent Heavy Vehicles (%)						0		0						0		
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						7.1		6.2						4.1		
Critical Headway (sec)						6.40		6.20						4.10		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.50		3.30						2.20		

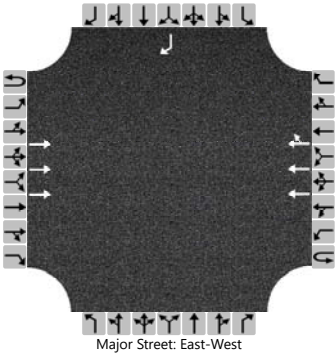
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						125								21		
Capacity, c (veh/h)						889								1485		
v/c Ratio						0.14								0.01		
95% Queue Length, Q ₉₅ (veh)						0.5								0.0		
95% Queue Length, Q ₉₅ (ft)						12.5								0.0		
Control Delay (s/veh)						9.7								7.5	0.1	
Level of Service (LOS)						A								A	A	
Approach Delay (s/veh)					9.7								6.4			
Approach LOS					A								A			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AG	Intersection	Menaul & Access 1
Agency/Co.	BH	Jurisdiction	CoA
Date Performed	6/4/2024	East/West Street	Menaul Blvd
Analysis Year	2024	North/South Street	Access 1
Time Analyzed	EXAM	Peak Hour Factor	0.77
Intersection Orientation	East-West	Analysis Time Period (hrs)	1.00
Project Description	Carlisle & Menaul TIA		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	3	0	0	0	3	0		0	0	0		0	0	1
Configuration			T				T	TR								R
Volume (veh/h)			626				805	10								8
Percent Heavy Vehicles (%)																0
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized													No			
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)																7.1
Critical Headway (sec)																7.10
Base Follow-Up Headway (sec)																3.9
Follow-Up Headway (sec)																3.90

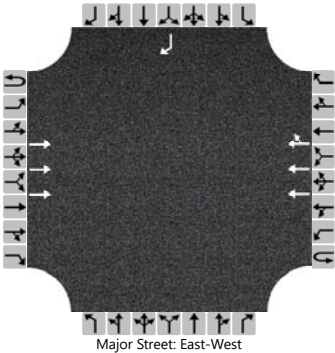
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)																10
Capacity, c (veh/h)																427
v/c Ratio																0.02
95% Queue Length, Q ₉₅ (veh)																0.1
95% Queue Length, Q ₉₅ (ft)																2.5
Control Delay (s/veh)																13.6
Level of Service (LOS)																B
Approach Delay (s/veh)													13.6			
Approach LOS													B			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AG	Intersection	Menaul & Access 1
Agency/Co.	BH	Jurisdiction	CoA
Date Performed	6/4/2024	East/West Street	Menaul Blvd
Analysis Year	2024	North/South Street	Access 1
Time Analyzed	EXPM	Peak Hour Factor	0.57
Intersection Orientation	East-West	Analysis Time Period (hrs)	1.00
Project Description	Carlisle & Menaul TIA		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	3	0	0	0	3	0		0	0	0		0	0	1
Configuration			T				T	TR								R
Volume (veh/h)			969				1172	12								8
Percent Heavy Vehicles (%)																0
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized													No			
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)																7.1
Critical Headway (sec)																7.10
Base Follow-Up Headway (sec)																3.9
Follow-Up Headway (sec)																3.90

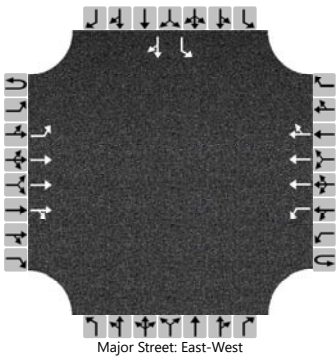
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)																14
Capacity, c (veh/h)																198
v/c Ratio																0.07
95% Queue Length, Q ₉₅ (veh)																0.2
95% Queue Length, Q ₉₅ (ft)																5.0
Control Delay (s/veh)																24.5
Level of Service (LOS)																C
Approach Delay (s/veh)													24.5			
Approach LOS													C			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AG	Intersection	Menaul & Access 2
Agency/Co.	BH	Jurisdiction	CoA
Date Performed	6/4/2024	East/West Street	Menaul Blvd
Analysis Year	2024	North/South Street	Access 2
Time Analyzed	EXAM	Peak Hour Factor	0.78
Intersection Orientation	East-West	Analysis Time Period (hrs)	1.00
Project Description	Carlisle & Menaul TIA		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	3	0	0	1	3	0		0	0	0		1	1	0
Configuration		L	T	TR		L	T	TR						L		TR
Volume (veh/h)	0	25	598	8	0	33	761	46						8	1	54
Percent Heavy Vehicles (%)	1	1			0	0								2	2	2
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		5.3				5.3								6.4	6.5	7.1
Critical Headway (sec)		5.32				5.30								6.44	6.54	7.14
Base Follow-Up Headway (sec)		3.1				3.1								3.8	4.0	3.9
Follow-Up Headway (sec)		3.11				3.10								3.82	4.02	3.92

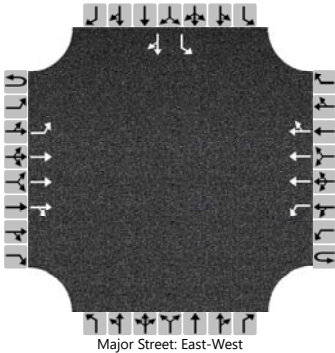
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		32				42								10		71
Capacity, c (veh/h)		380				507								113		383
v/c Ratio		0.08				0.08								0.09		0.18
95% Queue Length, Q ₉₅ (veh)		0.3				0.3								0.3		0.7
95% Queue Length, Q ₉₅ (ft)		7.6				7.5								7.6		17.8
Control Delay (s/veh)		15.4				12.7								39.9		16.5
Level of Service (LOS)		C				B								E		C
Approach Delay (s/veh)	0.6				0.5								19.5			
Approach LOS	A				A								C			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AG	Intersection	Menaul & Access 2
Agency/Co.	BH	Jurisdiction	CoA
Date Performed	6/4/2024	East/West Street	Menaul Blvd
Analysis Year	2024	North/South Street	Access 2
Time Analyzed	EXPM	Peak Hour Factor	0.88
Intersection Orientation	East-West	Analysis Time Period (hrs)	1.00
Project Description	Carlisle & Menaul TIA		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	3	0	0	1	3	0		0	0	0		1	1	0
Configuration		L	T	TR		L	T	TR						L		TR
Volume (veh/h)	0	29	955	0	0	33	1125	73						24	0	37
Percent Heavy Vehicles (%)	0	0			0	0								0	0	0
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		5.3				5.3								6.4	6.5	7.1
Critical Headway (sec)		5.30				5.30								6.40	6.50	7.10
Base Follow-Up Headway (sec)		3.1				3.1								3.8	4.0	3.9
Follow-Up Headway (sec)		3.10				3.10								3.80	4.00	3.90

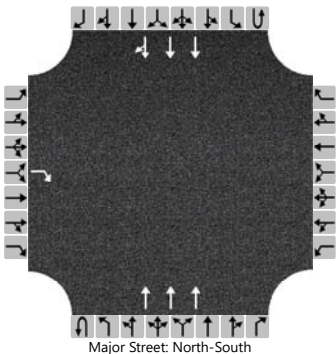
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		33				38								27		42
Capacity, c (veh/h)		266				362								59		341
v/c Ratio		0.12				0.10								0.46		0.12
95% Queue Length, Q ₉₅ (veh)		0.4				0.3								2.2		0.4
95% Queue Length, Q ₉₅ (ft)		10.0				7.5								55.0		10.0
Control Delay (s/veh)		20.5				16.1								115.1		17.0
Level of Service (LOS)		C				C								F		C
Approach Delay (s/veh)	0.6				0.4								55.6			
Approach LOS	A				A								F			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AG	Intersection	Carlisle & Access 3
Agency/Co.	BH	Jurisdiction	CoA
Date Performed	6/4/2024	East/West Street	Access 3
Analysis Year	2024	North/South Street	Carlisle Blvd
Time Analyzed	EXAM	Peak Hour Factor	0.90
Intersection Orientation	North-South	Analysis Time Period (hrs)	1.00
Project Description	Carlisle & Menaul TIA		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	1		0	0	0	0	0	3	0	0	0	3	0
Configuration				R							T				T	TR
Volume (veh/h)				30							1016				980	36
Percent Heavy Vehicles (%)				0												
Proportion Time Blocked																
Percent Grade (%)	0															
Right Turn Channelized	No															
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)				7.1												
Critical Headway (sec)				7.10												
Base Follow-Up Headway (sec)				3.9												
Follow-Up Headway (sec)				3.90												

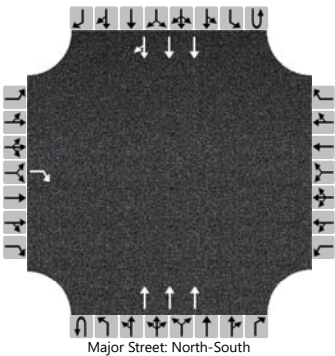
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)				33												
Capacity, c (veh/h)				405												
v/c Ratio				0.08												
95% Queue Length, Q ₉₅ (veh)				0.3												
95% Queue Length, Q ₉₅ (ft)				7.5												
Control Delay (s/veh)				14.7												
Level of Service (LOS)				B												
Approach Delay (s/veh)	14.7															
Approach LOS	B															

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AG	Intersection	Carlisle & Access 3
Agency/Co.	BH	Jurisdiction	CoA
Date Performed	6/4/2024	East/West Street	Access 3
Analysis Year	2024	North/South Street	Carlisle Blvd
Time Analyzed	EXPM	Peak Hour Factor	0.85
Intersection Orientation	North-South	Analysis Time Period (hrs)	1.00
Project Description	Carlisle & Menaul TIA		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	1		0	0	0	0	0	3	0	0	0	3	0
Configuration				R							T				T	TR
Volume (veh/h)				8							1480				1452	11
Percent Heavy Vehicles (%)				0												
Proportion Time Blocked																
Percent Grade (%)	0															
Right Turn Channelized	No															
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)				7.1												
Critical Headway (sec)				7.10												
Base Follow-Up Headway (sec)				3.9												
Follow-Up Headway (sec)				3.90												

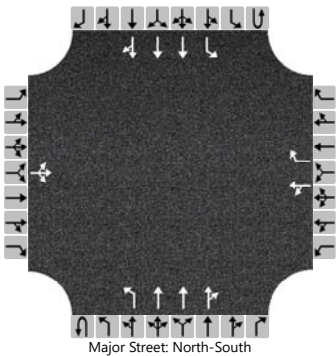
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)				9												
Capacity, c (veh/h)				260												
v/c Ratio				0.04												
95% Queue Length, Q ₉₅ (veh)				0.1												
95% Queue Length, Q ₉₅ (ft)				2.5												
Control Delay (s/veh)				19.4												
Level of Service (LOS)				C												
Approach Delay (s/veh)	19.4															
Approach LOS	C															

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AG	Intersection	Carlisle & Access 4
Agency/Co.	BH	Jurisdiction	CoA
Date Performed	6/4/2024	East/West Street	Access 4
Analysis Year	2024	North/South Street	Carlisle Blvd
Time Analyzed	EXAM	Peak Hour Factor	0.80
Intersection Orientation	North-South	Analysis Time Period (hrs)	1.00
Project Description	Carlisle & Menaul TIA		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	1	0	1	3	0	0	1	3	0
Configuration			LTR			LT		R		L	T	TR		L	T	TR
Volume (veh/h)		6	1	4		0	0	5	0	7	1014	2	0	8	999	2
Percent Heavy Vehicles (%)		0	0	0		0	0	0	1	1			0	0		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized					No											
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		6.4	6.5	7.1		6.4	6.5	7.1		5.3				5.3		
Critical Headway (sec)		6.40	6.50	7.10		6.40	6.50	7.10		5.32				5.30		
Base Follow-Up Headway (sec)		3.8	4.0	3.9		3.8	4.0	3.9		3.1				3.1		
Follow-Up Headway (sec)		3.80	4.00	3.90		3.80	4.00	3.90		3.11				3.10		

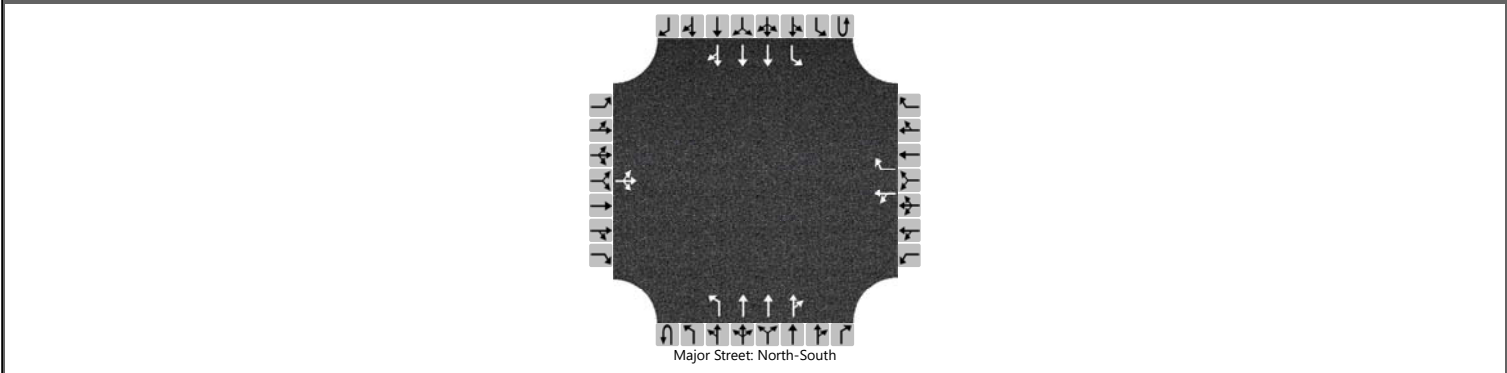
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			14		0		6		9					10		
Capacity, c (veh/h)			88		0		365		298					294		
v/c Ratio			0.16				0.02		0.03					0.03		
95% Queue Length, Q ₉₅ (veh)			0.6				0.1		0.1					0.1		
95% Queue Length, Q ₉₅ (ft)			15.0				2.5		2.5					2.5		
Control Delay (s/veh)			53.7				15.0		17.4					17.7		
Level of Service (LOS)			F				C		C					C		
Approach Delay (s/veh)	53.7								0.1				0.1			
Approach LOS	F								A				A			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AG	Intersection	Carlisle & Access 4
Agency/Co.	BH	Jurisdiction	CoA
Date Performed	6/4/2024	East/West Street	Access 4
Analysis Year	2024	North/South Street	Carlisle Blvd
Time Analyzed	EXPM	Peak Hour Factor	0.78
Intersection Orientation	North-South	Analysis Time Period (hrs)	1.00
Project Description	Carlisle & Menaul TIA		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	1	0	1	3	0	0	1	3	0
Configuration			LTR			LT		R		L	T	TR		L	T	TR
Volume (veh/h)		1	0	5		7	1	52	0	6	1467	13	0	42	1451	2
Percent Heavy Vehicles (%)		0	0	0		0	0	0	0	0			0	0		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized					No											
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		6.4	6.5	7.1		6.4	6.5	7.1		5.3				5.3		
Critical Headway (sec)		6.40	6.50	7.10		6.40	6.50	7.10		5.30				5.30		
Base Follow-Up Headway (sec)		3.8	4.0	3.9		3.8	4.0	3.9		3.1				3.1		
Follow-Up Headway (sec)		3.80	4.00	3.90		3.80	4.00	3.90		3.10				3.10		

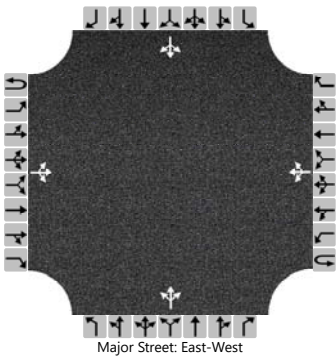
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			8			10		67		8				54		
Capacity, c (veh/h)			27			8		227		150				144		
v/c Ratio			0.29			1.32		0.29		0.05				0.37		
95% Queue Length, Q ₉₅ (veh)			1.1			4.6		1.2		0.2				1.7		
95% Queue Length, Q ₉₅ (ft)			27.5			115.0		30.0		5.0				42.5		
Control Delay (s/veh)			193.1			1835.0		27.4		30.3				44.6		
Level of Service (LOS)			F			F		D		D				E		
Approach Delay (s/veh)	193.1				268.4				0.1				1.3			
Approach LOS	F				F				A				A			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AG	Intersection	Phoenix & Access 5
Agency/Co.	BH	Jurisdiction	CoA
Date Performed	6/4/2024	East/West Street	Phoenix Ave
Analysis Year	2024	North/South Street	Access 5/Prive Driveway
Time Analyzed	EXAM	Peak Hour Factor	0.77
Intersection Orientation	East-West	Analysis Time Period (hrs)	1.00
Project Description	Carlisle & Menaul TIA		

Lanes



Vehicle Volumes and Adjustments

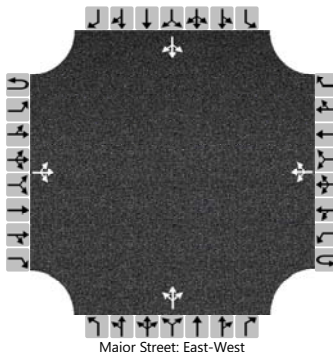
Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		5	76	1		0	126	38		0	5	0		28	2	10
Percent Heavy Vehicles (%)		0				1				0	0	0		0	0	0
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.10				4.11				7.10	6.50	6.20		7.10	6.50	6.20
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.20				2.21				3.50	4.00	3.30		3.50	4.00	3.30

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		6				0					6					52
Capacity, c (veh/h)		1369				1499					593					683
v/c Ratio		0.00				0.00					0.01					0.08
95% Queue Length, Q ₉₅ (veh)		0.0				0.0					0.0					0.2
95% Queue Length, Q ₉₅ (ft)											0.0					5.0
Control Delay (s/veh)		7.6	0.0	0.0		7.4	0.0	0.0			11.1					10.7
Level of Service (LOS)		A	A	A		A	A	A			B					B
Approach Delay (s/veh)	0.5				0.0				11.1				10.7			
Approach LOS	A				A				B				B			

HCS Two-Way Stop-Control Report																	
General Information						Site Information											
Analyst	AG					Intersection				Phoenix & Access 5							
Agency/Co.	BH					Jurisdiction				CoA							
Date Performed	6/4/2024					East/West Street				Phoenix Ave							
Analysis Year	2024					North/South Street				Access 5/Prive Driveway							
Time Analyzed	EXPM					Peak Hour Factor				0.85							
Intersection Orientation	East-West					Analysis Time Period (hrs)				1.00							
Project Description	Carlisle & Menaul TIA																
Lanes																	
																	
Vehicle Volumes and Adjustments																	
Approach	Eastbound				Westbound				Northbound				Southbound				
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12	
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0	
Configuration			LTR				LTR				LTR				LTR		
Volume (veh/h)		6	159	3		1	123	54		3	1	2		36	1	16	
Percent Heavy Vehicles (%)		0				1				0	0	0		0	0	0	
Proportion Time Blocked																	
Percent Grade (%)									0				0				
Right Turn Channelized																	
Median Type Storage	Undivided																
Critical and Follow-up Headways																	
Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2	
Critical Headway (sec)		4.10				4.11				7.10	6.50	6.20		7.10	6.50	6.20	
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3	
Follow-Up Headway (sec)		2.20				2.21				3.50	4.00	3.30		3.50	4.00	3.30	
Delay, Queue Length, and Level of Service																	
Flow Rate, v (veh/h)		7				1					7				62		
Capacity, c (veh/h)		1375				1389					622				637		
v/c Ratio		0.01				0.00					0.01				0.10		
95% Queue Length, Q ₉₅ (veh)		0.0				0.0					0.0				0.3		
95% Queue Length, Q ₉₅ (ft)											0.0				7.5		
Control Delay (s/veh)		7.6	0.0	0.0		7.6	0.0	0.0			10.8				11.3		
Level of Service (LOS)		A	A	A		A	A	A			B				B		
Approach Delay (s/veh)	0.3				0.0				10.8				11.3				
Approach LOS	A				A				B				B				

APPENDIX C
2024 EXISTING TRAFFIC SIGNAL WARRANTS

WARRANT 1; Eight Hour Vehicular Volume

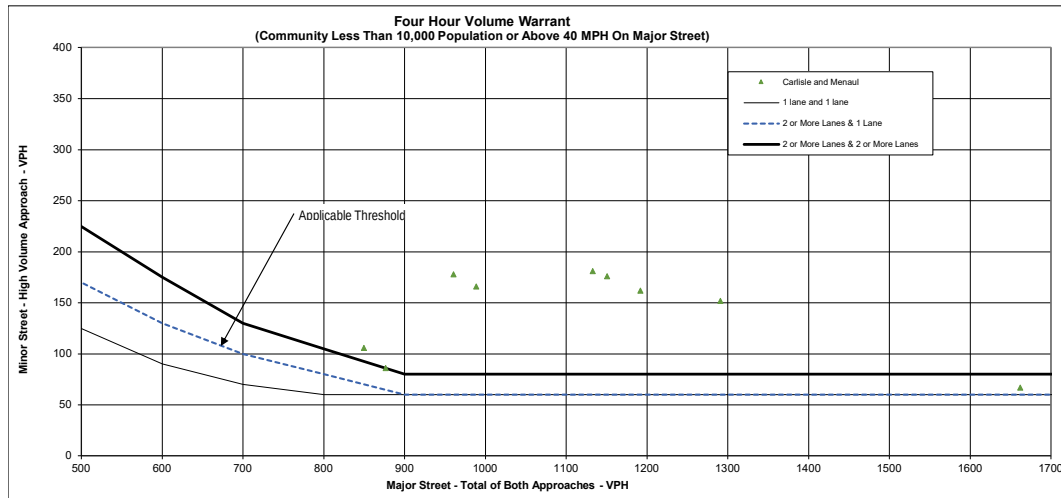
		Condition A		Condition B		Condition A & B			
		Vehicles per hour on major street (total of both approaches)	Vehicles per hour on higher-volume minor-street approach (one direction)	Vehicles per hour on major street (total of both approaches)	Vehicles per hour on higher-volume minor-street approach (one direction only)	Vehicles per hour on major street (total of both approaches) for Condition A	Vehicles per hour on higher-volume minor-street approach (one direction)	Vehicles per hour on major street (total of both approaches) for Condition B	Vehicles per hour on higher-volume minor-street approach (one direction only) for Condition B
Major Street	Minor Street	100%	100%	100%	100%	80%	80%	80%	80%
2 lanes	1 lane	600	150	900	75	480	120	720	60

Warrant Met?	YES

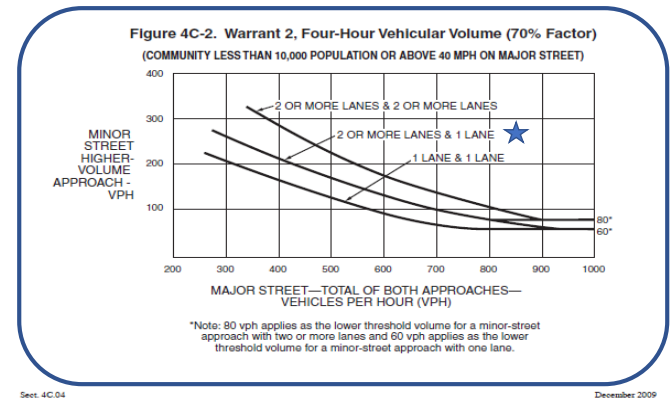
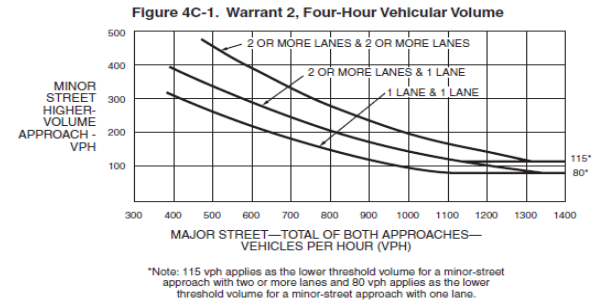
Carlisle and Phoenix Intersection										
Hour	Phoenix	Carlisle	Carlisle meet Condition A?	Phoenix meet Condition A?	BOTH Major & Minor meet Condition A?	Condition A Met?	Carlisle meet Condition B?	Phoenix meet Condition B?	BOTH Major & Minor meet Condition B?	Condition B Met?
~~6:00 AM~~	-	-	-	-	-	NO	-	-	-	YES
7:00 AM	67	1662	YES	NO	NO		YES	NO	NO	
8:00 AM	86	877	YES	NO	NO		YES	YES	YES	
9:00 AM	106	850	YES	NO	NO		YES	YES	YES	
~~10:00 AM~~	-	-	-	-	-		-	-	-	
11:00 AM	166	989	YES	YES	YES		YES	YES	YES	
12:00 PM	162	1192	YES	YES	YES		YES	YES	YES	
1:00 PM	178	961	YES	YES	YES		YES	YES	YES	
~~2:00 PM~~	-	-	-	-	-		-	-	-	
3:00 PM	176	1151	YES	YES	YES		YES	YES	YES	
4:00 PM	152	1291	YES	YES	YES		YES	YES	YES	
5:00 PM	181	1133	YES	YES	YES		YES	YES	YES	

WARRANT 2; Four-Hour Vehicular Volume

Carlisle and Phoenix Intersection			
Hour	Phoenix	Carlisle	Total
6:00 AM	-	-	0
7:00 AM	67	1662	1729
8:00 AM	86	877	963
9:00 AM	106	850	-
10:00 AM	-	-	-
11:00 AM	166	989	1155
12:00 PM	162	1192	1354
1:00 PM	178	961	1139
2:00 PM	-	-	-
3:00 PM	176	1151	1327
4:00 PM	152	1291	1443
5:00 PM	181	1133	1314
Warrant Met?			YES



Note: 100 VPH applies as the lower threshold for minor street approach with 2 or more lanes & 75 VPH as the threshold for a minor street approach with one lane



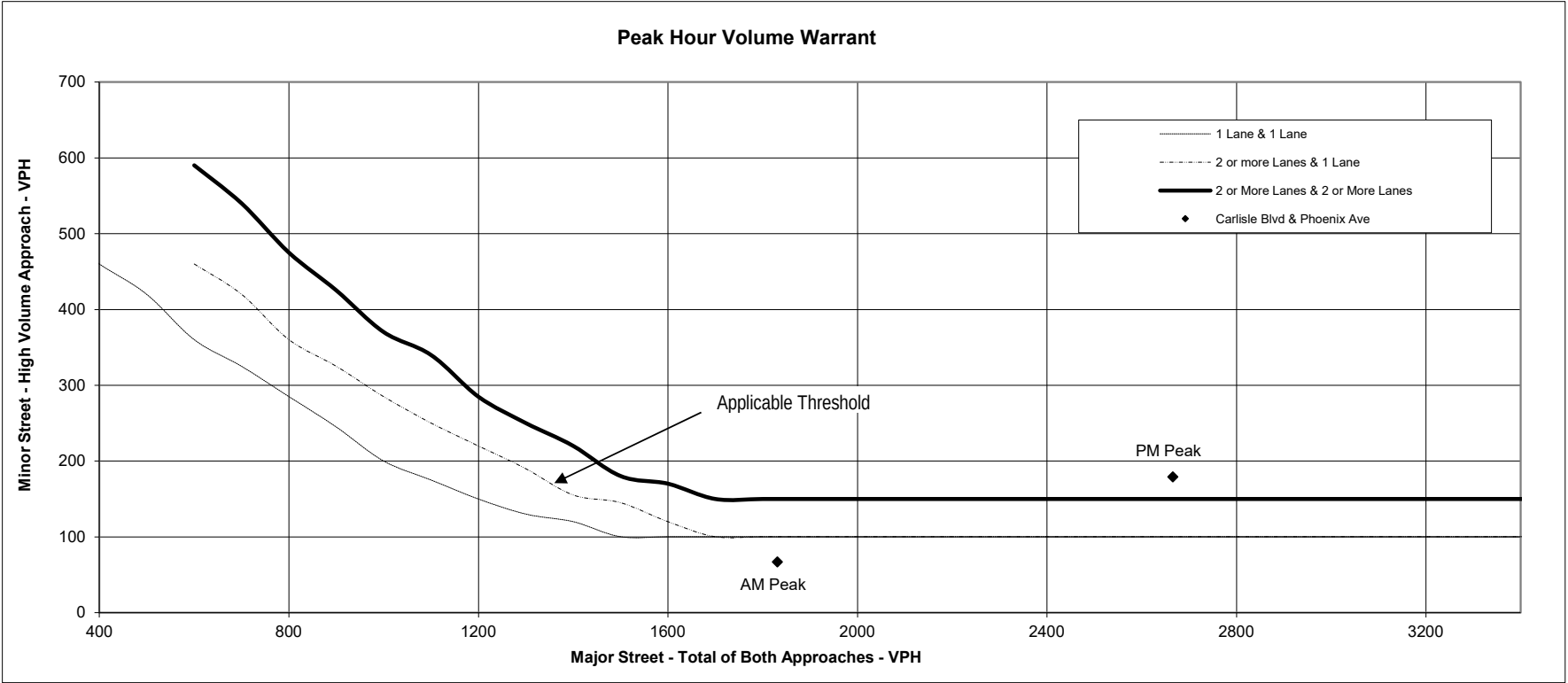
PEAK HOUR VOLUME SIGNAL WARRANT ANALYSIS

Scenario: 2024 Scenario
Intersection: Carlisle Blvd & Phoenix Ave
Type: 2+ Lane/1 Lane
Major Street (Orientation): Carlisle Blvd (N/S)
Minor Street (Orientation): Phoenix Ave (E/W)

Satisfies Warrant 3A YES

Peak Hour Delay (Criteria 4 Hours if 1-lane, 5 hrs if 2-lane approach)		Total Intersection Volume > 800	Minor Approach > 100
0.33 Hours in AM	NO	YES	NO
144.07 Hours in PM	YES	YES	YES

Time	Minor Street Approach Volume			Major Street Approach Volume			Satisfies Warrant 3B
	EB	WB	High Vol	NB	SB	NB + SB	
AM Peak	67	22	67	906	925	1,831	NO
PM Peak	179	29	179	1,385	1,281	2,666	YES



Note: 150 VPH applies as the lower threshold for minor street approach with 2 or more lanes & 100 VPH as the threshold for a minor street approach with one lane

APPENDIX D

TURNING MOVEMENT COUNTS

MENAU & CARLISLE DEVELOPMENT
EXISTING & PROJECTED TURNING MOVEMENTS

INTERSECTION: CARLISLE BLVD & CLAREMONT AVE

AM Peak Hour

	Eastbound CLAREMONT			Westbound CLAREMONT			Northbound CARLISLE			Southbound CARLISLE		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes (2024)	66	11	85	40	15	15	104	706	19	12	706	53
Background Growth	1	0	2	1	0	0	2	14	0	0	14	1
Dunkin Menaul Background TIA								3			5	
2500 Carlisle Background TIA								26			14	
2026 No Build	67	11	87	41	15	15	106	749	19	12	739	54
Entering	0	0	2	4	0	0	0	0	0	0	47	0
Exiting	0	0	0	0	0	0	2	42	4	0	0	0
Pass By Trips												
2026 Build	67	11	89	45	15	15	108	791	23	12	786	54
Horizon Year Background Growth	7	1	9	4	2	2	11	75	2	1	74	5
2036 Horizon Year No Build	74	12	95	45	17	17	117	824	21	13	813	59
2036 Horizon Year Build	74	12	98	49	17	17	119	866	25	13	860	59

PHF 0.81

0.88

0.91

0.93

HV % 0.6

0.5

0.6

0.9

PM Peak Hour

	Eastbound CLAREMONT			Westbound CLAREMONT			Northbound CARLISLE			Southbound CARLISLE		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes (2024)	192	22	138	35	16	23	107	1,024	39	35	1,033	104
Background Growth	4	0	3	1	0	0	2	20	1	1	21	2
Dunkin Menaul Background TIA								2			2	
2500 Carlisle Background TIA								24			21	
2026 No Build	196	22	141	36	16	23	109	1,070	40	36	1,077	106
Entering	0	0	3	5	0	0	0	0	0	0	57	0
Exiting	0	0	0	0	0	0	3	53	5	0	0	0
Pass By Trips												
2026 Build	196	22	143	41	16	23	112	1,123	45	36	1,134	106
Horizon Year Background Growth	20	2	14	4	2	2	11	107	4	4	108	11
2036 Horizon Year No Build	215	25	155	39	18	26	120	1,178	44	39	1,184	117
2036 Horizon Year Build	215	25	158	45	18	26	123	1,230	49	39	1,241	117

PHF 0.85

0.80

0.90

0.92

HV % 0

0

0.1

0

growth rates	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
Trip Distribution % Enter			1.00%	2.00%							21.00%	
Trip Distribution % Exit	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.00%	21.00%	2.00%	0.00%	0.00%	0.00%

MENAU & CARLISLE DEVELOPMENT
EXISTING & PROJECTED TURNING MOVEMENTS

INTERSECTION: CARLISLE BLVD & PHOENIX AVE

AM Peak Hour

	Eastbound PHOENIX			Westbound PHOENIX			Northbound CARLISLE			Southbound CARLISLE		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes (2024)	2	0	65	7	2	13	77	825	4	9	900	16
Background Growth	0	0	1	0	0	0	2	17	0	0	18	0
Dunkin Menaul Background TIA								3			5	
2500 Carlisle Background TIA								26			14	
2026 No Build	2	0	66	7	2	13	79	871	4	9	937	16
Entering	0	0	0	0	0	0	30	0	0	0	31	22
Exiting	16	0	10	0	0	0	0	10	0	0	0	0
Pass By Trips	9	0	26	0	0	0	9	-9	0	0	-26	26
2026 Build	27	0	102	7	2	13	117	872	4	9	942	65
Horizon Year Background Growth	0	0	7	1	0	1	8	87	0	1	94	2
2036 Horizon Year No Build	2	0	73	8	2	15	86	958	4	10	1,031	18
2036 Horizon Year Build	27	0	109	8	2	15	125	959	4	10	1,036	66

PHF 0.76

0.79

0.91

0.93

HV %

1.5

0

0.2

1.1

PM Peak Hour

	Eastbound PHOENIX			Westbound PHOENIX			Northbound CARLISLE			Southbound CARLISLE		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes (2024)	4	1	174	0	1	28	132	1,230	23	19	1,227	35
Background Growth	0	0	3	0	0	1	3	25	0	0	25	1
Dunkin Menaul Background TIA								2			2	
2500 Carlisle Background TIA								24			21	
2026 No Build	4	1	177	0	1	29	135	1,281	23	19	1,275	36
Entering	0	0	0	0	0	0	37	0	0	0	38	27
Exiting	20	0	13	0	0	0	0	13	0	0	0	0
Pass By Trips	7		20				7	-7			-20	20
2026 Build	31	1	210	0	1	29	178	1,287	23	19	1,293	83
Horizon Year Background Growth	0	0	18	0	0	3	13	128	2	2	127	4
2036 Horizon Year No Build	4	1	195	0	1	31	148	1,409	26	21	1,402	39
2036 Horizon Year Build	31	1	228	0	1	31	192	1,415	26	21	1,420	87

PHF 0.80

0.56

0.97

0.97

HV %

0

0

0.1

0.2

growth rates 1.00% 1.00% 1.00% 1.00% 1.00% 1.00% 1.00% 1.00% 1.00% 1.00% 1.00% 1.00%

Trip Distribution % Enter 13.50% 14.00% 10.00%

Trip Distribution % Exit 8.00% 0.00% 5.00% 0.00% 0.00% 0.00% 0.00% 5.00% 0.00% 0.00% 0.00% 0.00%

MENAU & CARLISLE DEVELOPMENT
EXISTING & PROJECTED TURNING MOVEMENTS

INTERSECTION: CARLISLE BLVD & MENAU BLVD

AM Peak Hour

	Eastbound MENAU			Westbound MENAU			Northbound CARLISLE			Southbound CARLISLE		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes (2024)	81	457	136	99	470	179	218	756	121	157	746	106
Background Growth	2	9	3	2	9	4	4	15	2	3	15	2
Dunkin Menaul Background TIA	3	2		2			2				5	
2500 Carlisle Background TIA			3	5			8	26	8		14	
2026 No Build	86	468	142	108	479	183	232	797	131	160	780	108
Entering	0	0	0	0	33	38	45	37	0	0	0	0
Exiting	0	2	2	0	0	0	0	0	0	66	67	0
Pass By Trips												
2026 Build	86	470	144	108	513	220	277	834	131	226	846	108
Horizon Year Background Growth	9	47	14	11	48	18	23	80	13	16	78	11
2036 Horizon Year No Build	94	515	156	119	527	201	256	877	145	176	858	119
2036 Horizon Year Build	94	517	158	119	561	239	300	914	145	242	924	119

PHF 0.99

0.85

0.90

0.93

HV % 0.7

0.1

0.6

0.3

PM Peak Hour

	Eastbound MENAU			Westbound MENAU			Northbound CARLISLE			Southbound CARLISLE		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes (2024)	144	702	210	224	837	300	292	1,036	136	273	1,066	116
Background Growth	3	14	4	4	17	6	6	21	3	5	21	2
Dunkin Menaul Background TIA	2	1		1			1				2	
2500 Carlisle Background TIA			4	9			7	24	7		21	
2026 No Build	149	717	218	238	854	306	306	1,081	146	278	1,110	118
Entering	0	0	0	0	41	46	54	45	0	0	0	0
Exiting	0	3	3	0	0	0	0	0	0	83	84	0
Pass By Trips												
2026 Build	149	720	221	238	895	352	360	1,126	146	362	1,195	118
Horizon Year Background Growth	15	72	22	24	85	31	31	108	15	28	111	12
2036 Horizon Year No Build	164	789	240	262	939	337	336	1,189	160	306	1,221	130
2036 Horizon Year Build	164	791	243	262	980	383	391	1,234	160	389	1,306	130

PHF 0.88

0.94

0.94

0.94

HV % 0.3

0.2

0.3

0

growth rates	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
Trip Distribution % Enter					15.00%	17.00%	20.00%	16.50%				
Trip Distribution % Exit	0.00%	1.00%	1.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	33.00%	33.50%	0.00%

MENAU & CARLISLE DEVELOPMENT
EXISTING & PROJECTED TURNING MOVEMENTS

INTERSECTION: CARLISLE BLVD & PROSPECT AVE

AM Peak Hour

	Eastbound PROSPECT			Westbound PRIVATE ENTRANCE			Northbound CARLISLE			Southbound CARLISLE		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes (2024)	15	0	52	18	1	17	114	1,081	6	10	932	33
Background Growth	0	0	1	0	0	0	2	22	0	0	19	1
Dunkin Menaul Background TIA								9		2	7	1
2500 Carlisle Background TIA				27		23		11	13	22		
2026 No Build	15	0	53	45	1	40	116	1,123	19	34	958	35
Entering	0	0	0	0	0	0	0	81	0	0	0	0
Exiting	0	0	0	0	0	0	0	0	0	0	68	0
Pass By Trips												
2026 Build	15	0	53	45	1	40	116	1,204	19	34	1,026	35
Horizon Year Background Growth	2	0	5	5	0	4	12	112	2	3	96	3
2036 Horizon Year No Build	17	0	58	50	1	44	128	1,235	21	38	1,053	38
2036 Horizon Year Build	17	0	58	50	1	44	128	1,316	21	38	1,122	38

PHF 0.80

0.75

0.90

0.93

HV % 1.5

0

0.7

0.3

PM Peak Hour

	Eastbound PROSPECT			Westbound PRIVATE ENTRANCE			Northbound CARLISLE			Southbound CARLISLE		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes (2024)	12	0	92	7	0	7	98	1,446	27	21	1,460	42
Background Growth	0	0	2	0	0	0	2	29	1	0	29	1
Dunkin Menaul Background TIA								3		1	4	0
2500 Carlisle Background TIA				25		21		17	21	34		
2026 No Build	12	0	94	32	0	28	100	1,495	49	56	1,493	43
Entering	0	0	0	0	0	0	0	99	0	0	0	0
Exiting	0	0	0	0	0	0	0	0	0	0	87	0
Pass By Trips												
2026 Build	12	0	94	32	0	28	100	1,594	49	56	1,580	43
Horizon Year Background Growth	1	0	9	3	0	3	10	149	5	6	149	4
2036 Horizon Year No Build	13	0	103	35	0	31	110	1,644	53	62	1,643	47
2036 Horizon Year Build	13	0	103	35	0	31	110	1,744	53	62	1,729	47

PHF 0.61

0.88

0.98

0.95

HV % 0

0

0.6

0.1

growth rates	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
Trip Distribution % Enter								36.50%				
Trip Distribution % Exit	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%		34.50%	0.00%

MENAU & CARLISLE DEVELOPMENT
EXISTING & PROJECTED TURNING MOVEMENTS

INTERSECTION: CARLISLE BLVD & CUTLER AVE

AM Peak Hour

	Eastbound			Westbound CUTLER			Northbound CARLISLE			Southbound CARLISLE		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes (2024)						0		1,201	162		981	
Background Growth	0	0	0	0	0	0	0	24	3	0	20	0
Dunkin Menaul Background TIA								9			7	
2500 Carlisle Background TIA								24	3		27	
2026 No Build	0	0	0	0	0	0	0	1,258	168	0	1,035	0
Entering	0	0	0	0	0	4	0	77	0	0	0	0
Exiting	0	0	0	0	0	0	0	0	0	0	68	0
Pass By Trips												
2026 Build	0	0	0	0	0	4	0	1,335	168	0	1,103	0
Horizon Year Background Growth	0	0	0	0	0	0	0	126	17	0	103	0
2036 Horizon Year No Build	0	0	0	0	0	0	0	1,384	185	0	1,138	0
2036 Horizon Year Build	0	0	0	0	0	4	0	1,461	185	0	1,207	0

PHF

0.90

HV %

0.7

PM Peak Hour

	Eastbound 0			Westbound CUTLER			Northbound CARLISLE			Southbound CARLISLE		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes (2024)						1		1,570	126		1,500	
Background Growth	0	0	0	0	0	0	0	31	3	0	30	0
Dunkin Menaul Background TIA								3			4	
2500 Carlisle Background TIA								38	4		25	
2026 No Build	0	0	0	0	0	1	0	1,642	133	0	1,559	0
Entering	0	0	0	0	0	5	0	94	0	0	0	0
Exiting	0	0	0	0	0	0	0	0	0	0	87	0
Pass By Trips												
2026 Build	0	0	0	0	0	6	0	1,736	133	0	1,646	0
Horizon Year Background Growth	0	0	0	0	0	0	0	164	13	0	156	0
2036 Horizon Year No Build	0	0	0	0	0	1	0	1,807	146	0	1,715	0
2036 Horizon Year Build	0	0	0	0	0	7	0	1,900	146	0	1,802	0

PHF

0.25

0.99

HV %

0

0.5

growth rates	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
Trip Distribution % Enter						2.00%		34.50%				
Trip Distribution % Exit	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%			34.50%	0.00%

MENAU & CARLISLE DEVELOPMENT
EXISTING & PROJECTED TURNING MOVEMENTS

INTERSECTION: CARLISLE BLVD & I-40 WB OFF RAMP

AM Peak Hour

	Eastbound			Westbound I-40 WB RAMP			Northbound CARLISLE			Southbound CARLISLE		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes (2024)				251	3	261	414	1,063			736	264
Background Growth	0	0	0	5	0	5	8	21	0	0	15	5
Dunkin Menaul Background TIA								9			7	
2500 Carlisle Background TIA						8		19			19	8
2026 No Build	0	0	0	256	3	274	422	1,112	0	0	777	277
Entering	0	0	0	0	0	18	0	59	0	0	0	0
Exiting	0	0	0	0	0	0	0	0	0	16	53	0
Pass By Trips												
2026 Build	0	0	0	256	3	292	422	1,171	0	16	829	277
Horizon Year Background Growth	0	0	0	26	0	27	42	111	0	0	78	28
2036 Horizon Year No Build	0	0	0	282	3	302	465	1,223	0	0	854	305
2036 Horizon Year Build	0	0	0	282	3	319	465	1,282	0	16	907	305

PHF		0.91		0.94		0.92
HV %		0.4		0.5		0.4

PM Peak Hour

	Eastbound 0			Westbound I-40 WB RAMP			Northbound CARLISLE			Southbound CARLISLE		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes (2024)				319	45	407	439	1,256			1,108	285
Background Growth	0	0	0	6	1	8	9	25	0	0	22	6
Dunkin Menaul Background TIA								3			4	
2500 Carlisle Background TIA						13		29			18	7
2026 No Build	0	0	0	325	46	428	448	1,313	0	0	1,152	298
Entering	0	0	0	0	0	22	0	72	0	0	0	0
Exiting	0	0	0	0	0	0	0	0	0	20	67	0
Pass By Trips												
2026 Build	0	0	0	325	46	450	448	1,385	0	20	1,219	298
Horizon Year Background Growth	0	0	0	33	5	43	45	131	0	0	115	30
2036 Horizon Year No Build	0	0	0	358	50	471	493	1,444	0	0	1,267	327
2036 Horizon Year Build	0	0	0	358	50	493	493	1,517	0	20	1,334	327

PHF		0.85		0.89		0.93
HV %		0.3		0.1		0.1

growth rates	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
Trip Distribution % Enter						8.00%		26.50%				
Trip Distribution % Exit	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	8.00%	26.50%	0.00%

MENAU & CARLISLE DEVELOPMENT
EXISTING & PROJECTED TURNING MOVEMENTS

INTERSECTION: CARLISLE BLVD & I-40 EB OFF RAMP

AM Peak Hour

	Eastbound I-40 EB RAMP			Westbound			Northbound CARLISLE			Southbound CARLISLE		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes (2024)	546	2	507					886	183	192	822	
Background Growth	11	0	10	0	0	0	0	18	4	4	16	0
Dunkin Menaul Background TIA								9			7	
2500 Carlisle Background TIA	5							14		4	15	
2026 No Build	562	2	517	0	0	0	0	927	187	200	860	0
Entering	18	0	0	0	0	0	0	41	0	0	0	0
Exiting	0	0	0	0	0	0	0	0	0	16	37	16
Pass By Trips												
2026 Build	580	2	517	0	0	0	0	968	187	216	897	16
Horizon Year Background Growth	56	0	52	0	0	0	0	93	19	20	86	0
2036 Horizon Year No Build	618	2	569	0	0	0	0	1,019	205	220	946	0
2036 Horizon Year Build	636	2	569	0	0	0	0	1,061	205	236	983	16

PHF 0.94

0.86

0.94

HV % 0.3

0.4

0.3

PM Peak Hour

	Eastbound I-40 EB RAMP			Westbound 0			Northbound CARLISLE			Southbound CARLISLE		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes (2024)	410	8	485					1,268	296	352	1,083	
Background Growth	8	0	10	0	0	0	0	25	6	7	22	0
Dunkin Menaul Background TIA								3			4	
2500 Carlisle Background TIA	8							21		4	14	
2026 No Build	426	8	495	0	0	0	0	1,317	302	363	1,123	0
Entering	22	0	0	0	0	0	0	50	0	0	0	0
Exiting	0	0	0	0	0	0	0	0	0	20	47	20
Pass By Trips												
2026 Build	448	8	495	0	0	0	0	1,368	302	383	1,169	20
Horizon Year Background Growth	43	1	49	0	0	0	0	132	30	36	112	0
2036 Horizon Year No Build	469	9	544	0	0	0	0	1,449	332	399	1,235	0
2036 Horizon Year Build	491	9	544	0	0	0	0	1,499	332	420	1,282	20

PHF 0.90

0.92

0.95

HV % 0.1

0.1

0

growth rates	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
Trip Distribution % Enter	8.00%							18.50%				
Trip Distribution % Exit	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	8.00%	18.50%	8.00%

MENAU & CARLISLE DEVELOPMENT
EXISTING & PROJECTED TURNING MOVEMENTS

INTERSECTION: MENAU BLVD & BRYN MAWR DR

AM Peak Hour

	Eastbound MENAU			Westbound MENAU			Northbound BRYN MAWR			Southbound AMERICAN		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes (2024)	37	597	14	20	774	6	10	0	23	6	1	35
Background Growth	1	12	0	0	15	0	0	0	0	0	0	1
Dunkin Menaul Background TIA		2			2							
2500 Carlisle Background TIA		3			8							
2026 No Build	38	614	14	20	799	6	10	0	23	6	1	36
Entering	2	13	0	0	0	0	0	0	0	0	0	0
Exiting	0	0	0	0	12	0	0	0	0	0	0	2
Pass By Trips												
2026 Build	40	627	14	20	811	6	10	0	23	6	1	38
Horizon Year Background Growth	4	61	1	2	80	1	1	0	2	1	0	4
2036 Horizon Year No Build	42	675	16	22	879	7	11	0	26	7	1	39
2036 Horizon Year Build	44	689	16	22	891	7	11	0	26	7	1	41

PHF	0.95		0.82		0.49		0.66
HV %		0.6		0.5		0	2.4

PM Peak Hour

	Eastbound MENAU			Westbound MENAU			Northbound BRYN MAWR			Southbound AMERICAN		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes (2024)	62	940	19	44	1,252	12	1	0	12	17	0	92
Background Growth	1	19	0	1	25	0	0	0	0	0	0	2
Dunkin Menaul Background TIA		1			1							
2500 Carlisle Background TIA		4			7							
2026 No Build	63	964	19	45	1,285	12	1	0	12	17	0	94
Entering	3	16	0	0	0	0	0	0	0	0	0	0
Exiting	0	0	0	0	15	0	0	0	0	0	0	3
Pass By Trips												
2026 Build	66	980	19	45	1,300	12	1	0	12	17	0	96
Horizon Year Background Growth	6	96	2	4	129	1	0	0	1	2	0	9
2036 Horizon Year No Build	70	1,060	21	49	1,414	13	1	0	13	19	0	103
2036 Horizon Year Build	72	1,077	21	49	1,429	13	1	0	13	19	0	106

PHF	0.91		0.92		0.36		0.78
HV %		0.2		0.5		0	0

growth rates	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
Trip Distribution % Enter	1.00%	6.00%										
Trip Distribution % Exit	0.00%	0.00%	0.00%	0.00%	6.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.00%

MENAU & CARLISLE DEVELOPMENT
EXISTING & PROJECTED TURNING MOVEMENTS

INTERSECTION: PHOENIX AVE & BRYN MAWR DR

AM Peak Hour

	Eastbound			Westbound PHEONIX			Northbound AMERICAN			Southbound AMERICAN		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes (2024)				45		19		11	41	13	5	
Background Growth	0	0	0	1	0	0	0	0	1	0	0	0
Dunkin Menaul Background TIA												
2500 Carlisle Background TIA												
2026 No Build	0	0	0	46	0	19	0	11	42	13	5	0
Entering	0	0	0	0	0	0	0	0	2	1	0	0
Exiting	0	0	4	2	0	29	0	0	0	0	0	0
Pass By Trips												
2026 Build	0	0	4	48	0	48	0	11	44	14	5	0
Horizon Year Background Growth	0	0	0	5	0	2	0	1	4	1	1	0
2036 Horizon Year No Build	0	0	0	50	0	21	0	12	46	15	6	0
2036 Horizon Year Build	0	0	4	52	0	50	0	12	48	16	6	0

PHF		0.94		0.81		0.75
HV %		3.1		1.9		5.6

PM Peak Hour

	Eastbound 0			Westbound PHEONIX			Northbound AMERICAN			Southbound AMERICAN		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes (2024)				86		14		17	76	17	3	
Background Growth	0	0	0	2	0	0	0	0	2	0	0	0
Dunkin Menaul Background TIA												
2500 Carlisle Background TIA												
2026 No Build	0	0	0	88	0	14	0	17	78	17	3	0
Entering	0	0	0	0	0	0	0	0	3	1	0	0
Exiting	0	0	5	3	0	37	0	0	0	0	0	0
Pass By Trips												
2026 Build	0	0	5	90	0	51	0	17	80	19	3	0
Horizon Year Background Growth	0	0	0	9	0	1	0	2	8	2	0	0
2036 Horizon Year No Build	0	0	0	96	0	16	0	19	85	19	3	0
2036 Horizon Year Build	0	0	5	99	0	52	0	19	88	20	3	0

PHF		0.86		0.83		0.71
HV %		0		0		0

growth rates	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
Trip Distribution % Enter									1.00%	0.50%		
Trip Distribution % Exit	0.00%	0.00%	2.00%	1.00%	0.00%	14.50%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

MENAU & CARLISLE DEVELOPMENT
EXISTING & PROJECTED TURNING MOVEMENTS

INTERSECTION: MENAU BLVD & ACCESS 1

AM Peak Hour

	Eastbound MENAU			Westbound MENAU			Northbound			Southbound ACCESS 1		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes (2024)		626			805	10						8
Background Growth	0	13	0	0	16	0	0	0	0	0	0	0
Dunkin Menaul Background TIA		2			2							
2500 Carlisle Background TIA		3			8							
2026 No Build	0	644	0	0	831	10	0	0	0	0	0	8
Entering	0	13	0	0	0	0	0	0	0	0	0	0
Exiting	0	0	0	0	10	0	0	0	0	0	0	2
Pass By Trips												
2026 Build	0	657	0	0	841	10	0	0	0	0	0	10
Horizon Year Background Growth	0	64	0	0	83	1	0	0	0	0	0	1
2036 Horizon Year No Build	0	708	0	0	914	11	0	0	0	0	0	9
2036 Horizon Year Build	0	721	0	0	924	11	0	0	0	0	0	11

PHF 0.87 0.67
HV % 0.2 0

PM Peak Hour

	Eastbound MENAU			Westbound MENAU			Northbound 0			Southbound ACCESS 1		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes (2024)		969			1,172	12						8
Background Growth	0	19	0	0	23	0	0	0	0	0	0	0
Dunkin Menaul Background TIA		1			1							
2500 Carlisle Background TIA		4			7							
2026 No Build	0	993	0	0	1,203	12	0	0	0	0	0	8
Entering	0	16	0	0	0	0	0	0	0	0	0	0
Exiting	0	0	0	0	13	0	0	0	0	0	0	3
Pass By Trips												
2026 Build	0	1,010	0	0	1,216	12	0	0	0	0	0	11
Horizon Year Background Growth	0	99	0	0	120	1	0	0	0	0	0	1
2036 Horizon Year No Build	0	1,093	0	0	1,324	13	0	0	0	0	0	9
2036 Horizon Year Build	0	1,109	0	0	1,336	13	0	0	0	0	0	11

PHF 0.93 0.40
HV % 0.3 0

growth rates	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
Trip Distribution % Enter		6.00%										
Trip Distribution % Exit	0.00%	0.00%	0.00%	0.00%	5.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	1.00%
Trip Distribution % Enter												
Trip Distribution % Exit	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

MENAU & CARLISLE DEVELOPMENT
EXISTING & PROJECTED TURNING MOVEMENTS

INTERSECTION: MENAU BLVD & ACCESS 2

AM Peak Hour

	Eastbound MENAU			Westbound MENAU			Northbound			Southbound ACCESS 2		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes (2024)	25	598	8	33	761	46				8	1	54
Background Growth	1	12	0	1	15	1	0	0	0	0	0	1
Dunkin Menaul Background TIA		2			2							
2500 Carlisle Background TIA		3			8							
2026 No Build	26	615	8	34	786	47	0	0	0	8	1	55
Entering	13	0	0	0	0	78	0	0	0	0	0	0
Exiting	0	0	0	0	0	0	0	0	0	4	0	10
Pass By Trips	26	-26	0	0	-43	43	0	0	0	26	0	43
2026 Build	65	589	8	34	743	168	0	0	0	38	1	108
Horizon Year Background Growth	3	61	1	3	79	5	0	0	0	1	0	6
2036 Horizon Year No Build	28	676	9	37	865	52	0	0	0	9	1	61
2036 Horizon Year Build	67	650	9	37	821	173	0	0	0	39	1	114

PHF 0.89

0.87

0.53

0.83

HV %

1

0.1

0

1.6

PM Peak Hour

	Eastbound MENAU			Westbound MENAU			Northbound 0			Southbound ACCESS 2		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes (2024)	29	955		33	1,125	73				24	0	37
Background Growth	1	19	0	1	23	1	0	0	0	0	0	1
Dunkin Menaul Background TIA		1			1							
2500 Carlisle Background TIA		4			7							
2026 No Build	30	979	0	34	1,156	74	0	0	0	24	0	38
Entering	16	0	0	0	0	95	0	0	0	0	0	0
Exiting	0	0	0	0	0	0	0	0	0	5	0	13
Pass By Trips	20	-20			-34	34	0	0	0	20	0	34
2026 Build	66	959	0	34	1,122	203	0	0	0	50	0	84
Horizon Year Background Growth	3	98	0	3	116	7	0	0	0	2	0	4
2036 Horizon Year No Build	33	1,077	0	37	1,271	82	0	0	0	27	0	42
2036 Horizon Year Build	69	1,057	0	37	1,238	211	0	0	0	52	0	88

PHF 0.93

0.93

0.83

0.85

HV %

0.3

0.2

0

0

growth rates 1.00% 1.00% 1.00% 1.00% 1.00% 1.00% 1.00% 1.00% 1.00% 1.00% 1.00% 1.00%

Trip Distribution % Enter	6.00%					35.00%						
Trip Distribution % Exit	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	2.00%	0.00%	5.00%

Trip Distribution % Enter	15.00%	-15.00%			-25.00%	25.00%						
Trip Distribution % Exit	0.00%		0.00%	0.00%		0.00%	0.00%	0.00%	0.00%	15.00%	0.00%	25.00%

MENAU & CARLISLE DEVELOPMENT
EXISTING & PROJECTED TURNING MOVEMENTS

INTERSECTION: CARLISLE BLVD & ACCESS 3

AM Peak Hour

	Eastbound ACCESS 3			Westbound			Northbound CARLISLE			Southbound CARLISLE		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes (2024)			30					1,016			980	36
Background Growth	0	0	1	0	0	0	0	20	0	0	20	1
Dunkin Menaul Background TIA								3			5	
2500 Carlisle Background TIA								26			14	
2026 No Build	0	0	31	0	0	0	0	1,065	0	0	1,019	37
Entering	0	0	0	0	0	0	0	75	0	0	0	20
Exiting	0	0	41	0	0	0	0	0	0	0	91	0
Pass By Trips			9								-9	9
2026 Build	0	0	80	0	0	0	0	1,140	0	0	1,101	65
Horizon Year Background Growth	0	0	3	0	0	0	0	107	0	0	102	4
2036 Horizon Year No Build	0	0	34	0	0	0	0	1,172	0	0	1,120	40
2036 Horizon Year Build	0	0	83	0	0	0	0	1,246	0	0	1,203	69

PHF 0.83

0.90

0.96

HV %

0

0.6

0.4

PM Peak Hour

	Eastbound ACCESS 3			Westbound 0			Northbound CARLISLE			Southbound CARLISLE		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes (2024)			8					1,480			1,452	11
Background Growth	0	0	0	0	0	0	0	30	0	0	29	0
Dunkin Menaul Background TIA								2			2	
2500 Carlisle Background TIA								24			21	
2026 No Build	0	0	8	0	0	0	0	1,536	0	0	1,504	11
Entering	0	0	0	0	0	0	0	91	0	0	0	24
Exiting	0	0	52	0	0	0	0	0	0	0	116	0
Pass By Trips			7								-7	7
2026 Build	0	0	67	0	0	0	0	1,627	0	0	1,613	42
Horizon Year Background Growth	0	0	1	0	0	0	0	154	0	0	150	1
2036 Horizon Year No Build	0	0	9	0	0	0	0	1,689	0	0	1,654	12
2036 Horizon Year Build	0	0	67	0	0	0	0	1,780	0	0	1,764	44

PHF 0.67

0.94

0.95

HV %

0

0.3

0

growth rates	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
Trip Distribution % Enter								33.50%				9.00%
Trip Distribution % Exit		0.00%	20.50%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	46.00%	0.00%
Trip Distribution % Enter											-5.00%	5.00%
Trip Distribution % Exit		0.00%	5.00%	0.00%	0.00%	0.00%	0.00%		0.00%	0.00%	0.00%	0.00%

MENAU & CARLISLE DEVELOPMENT
EXISTING & PROJECTED TURNING MOVEMENTS

INTERSECTION: CARLISLE BLVD & ACCESS 4

AM Peak Hour

	Eastbound ACCESS 4			Westbound PRIVATE ACCESS			Northbound CARLISLE			Southbound CARLISLE		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes (2024)	6	1	4	0	0	5	7	1,014	2	8	999	2
Background Growth	0	0	0	0	0	0	0	20	0	0	20	0
Dunkin Menaul Background TIA								3			5	
2500 Carlisle Background TIA								26			14	
2026 No Build	6	1	4	0	0	5	7	1,063	2	8	1,038	2
Entering	0	0	0	0	0	0	45	30	0	0	20	11
Exiting	4	0	81	0	0	0	0	0	0	0	10	0
Pass By Trips	35		26	0	0	0	35	-35	0	0	-26	26
2026 Build	45	1	112	0	0	5	86	1,059	2	8	1,042	39
Horizon Year Background Growth	1	0	0	0	0	1	1	106	0	1	104	0
2036 Horizon Year No Build	7	1	4	0	0	6	8	1,170	2	9	1,142	2
2036 Horizon Year Build	45	1	112	0	0	6	87	1,165	2	9	1,146	39

PHF 0.92

0.42

0.93

0.93

HV %

0

0

0.6

0.3

PM Peak Hour

	Eastbound ACCESS 4			Westbound PRIVATE ACCESS			Northbound CARLISLE			Southbound CARLISLE		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes (2024)	1	0	5	7	1	52	6	1,467	13	42	1,451	2
Background Growth	0	0	0	0	0	1	0	29	0	1	29	0
Dunkin Menaul Background TIA								2			2	
2500 Carlisle Background TIA								24			21	
2026 No Build	1	0	5	7	1	53	6	1,522	13	43	1,503	2
Entering	0	0	0	0	0	0	54	37	0	0	24	14
Exiting	5	0	103	0	0	0	0	0	0	0	13	0
Pass By Trips	27		20				27	-27			-20	20
2026 Build	33	0	129	7	1	53	87	1,532	13	43	1,520	36
Horizon Year Background Growth	0	0	1	1	0	5	1	152	1	4	150	0
2036 Horizon Year No Build	1	0	6	8	1	58	7	1,675	15	47	1,653	2
2036 Horizon Year Build	33	0	129	8	1	58	88	1,684	15	47	1,670	36

PHF 0.50

0.71

0.96

0.95

HV %

0

0

0.1

0

growth rates	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
Trip Distribution % Enter							20.00%	13.50%			9.00%	5.00%
Trip Distribution % Exit	2.00%	0.00%	41.00%	0.00%	0.00%	0.00%	0.00%		0.00%	0.00%	5.00%	0.00%
Trip Distribution % Enter							20.00%	-20.00%			-15.00%	15.00%
Trip Distribution % Exit	20.00%	0.00%	15.00%	0.00%	0.00%	0.00%	0.00%		0.00%	0.00%	-20.00%	0.00%

MENAU & CARLISLE DEVELOPMENT
EXISTING & PROJECTED TURNING MOVEMENTS

INTERSECTION: PHOENIX AVE & ACCESS 5

AM Peak Hour

	Eastbound PHOENIX			Westbound PHOENIX			Northbound ACCESS 5			Southbound PRIVATE ACCESS		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes (2024)	5	76	1	0	126	38	0	5	0	28	2	10
Background Growth	0	2	0	0	3	1	0	0	0	1	0	0
Dunkin Menaul Background TIA												
2500 Carlisle Background TIA												
2026 No Build	5	78	1	0	129	39	0	5	0	29	2	10
Entering	0	0	3	52	0	0	0	0	0	0	0	0
Exiting	0	0	0	0	0	0	31	0	26	0	0	0
Pass By Trips												
2026 Build	5	78	4	52	129	39	31	5	26	29	2	10
Horizon Year Background Growth	1	8	0	0	13	4	0	1	0	3	0	1
2036 Horizon Year No Build	6	85	1	0	141	43	0	6	0	31	2	11
2036 Horizon Year Build	6	85	4	52	141	43	31	6	26	31	2	11

PHF	0.89		0.91		0.63		0.67
HV %	0		1.2		0		0

PM Peak Hour

	Eastbound PHOENIX			Westbound PHOENIX			Northbound ACCESS 5			Southbound PRIVATE ACCESS		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Existing Volumes (2024)	6	159	3	1	123	54	3	1	2	36	1	16
Background Growth	0	3	0	0	2	1	0	0	0	1	0	0
Dunkin Menaul Background TIA												
2500 Carlisle Background TIA												
2026 No Build	6	162	3	1	125	55	3	1	2	37	1	16
Entering	0	0	4	64	0	0	0	0	0	0	0	0
Exiting	0	0	0	0	0	0	39	0	33	0	0	0
Pass By Trips												
2026 Build	6	162	7	65	125	55	42	1	35	37	1	16
Horizon Year Background Growth	1	16	0	0	13	6	0	0	0	4	0	2
2036 Horizon Year No Build	7	178	3	1	138	61	3	1	2	40	1	18
2036 Horizon Year Build	7	178	7	65	138	61	42	1	35	40	1	18

PHF	0.89		0.93		0.75		0.83
HV %	0		1.1		0		0

growth rates	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%	1.00%
Trip Distribution % Enter			1.50%	23.50%								
Trip Distribution % Exit	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	15.50%	0.00%	13.00%	0.00%	0.00%	0.00%
Trip Distribution % Enter												
Trip Distribution % Exit	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

[Home](#)

Locate

Locate All

Email This

Auto-Locate: ☐

List View

All DIRs

[Report Center](#)

 Record   1   of 1 Goto Record  go			
Location ID	17956	MPO ID	
Type	SPOT	HPMS ID	
On NHS	No	On HPMS	
LRS ID	FL4046P	LRS Loc Pt.	3.659886
SF Group	U2-3	Route Type	Two-Way Roadway
AF Group	U2-3	Route	FL4046
GF Group	U2-3	Active	Yes
Class Dist Grp	U2-3	Category	
Seas Clss Grp	Statewide		
WIM Group	FC-NOT-1		
QC Group	Default		
Funct'l Class	(3) Other Principal Arterial	Milepost	
Located On	MENAUL BLVD NE		
Loc On Alias	JCT. GIRARD ON MENAUL BLVD. IN ALBUQUERQUE.		
More Detail 			
STATION DATA			

Directions: 2-WAY NEG POS ?

AADT

Year	AADT	DHV-30	K %	D %	PA	BC	Src
2023	21,045 ³		10	51	18,309 (87%)	2,736 (13%)	Grown from 2022
2022	20,532	2,040	10	51	18,888 (92%)	1,644 (8%)	
2021	19,130	1,755	9	51	17,409 (91%)	1,721 (9%)	
2020	15,409	1,579	10	50	14,301 (93%)	1,108 (7%)	
2019	24,111		9	58	22,712 (94%)	1,399 (6%)	

1-5 of 14

Travel Demand Model

	Model Year	Model AADT	AM PHV	AM PPV	MD PHV	MD PPV	PM PHV	PM PPV	NT PHV	NT PPV

VOLUME COUNT

	Date	Int	Total
	Wed 5/4/2022	15	23,599
	Tue 5/3/2022	15	23,659
	Wed 5/19/2021	15	22,294
	Tue 5/18/2021	15	22,324
	Wed 12/9/2020	15	16,652
	Tue 12/8/2020	15	16,027
	Tue 8/18/2020	15	18,361
	Mon 8/17/2020	15	17,850
	Wed 5/13/2020	15	15,554
	Tue 5/12/2020	15	15,188

mm / dd / yyyy

1-10 of 12

VOLUME TREND

Year	Annual Growth
2023	2%
2022	7%
2021	24%
2020	-36%
2019	15%
2018	-1%
2017	-1%
2015	1%
2014	-1%
2013	-34%

1-10 of 13

PER VEHICLE

	Date	Axles	85th	Total
No Data				

No Data

GAP

	Date	Int	Total
No Data			

No Data

PARTIAL COUNT

Date _____

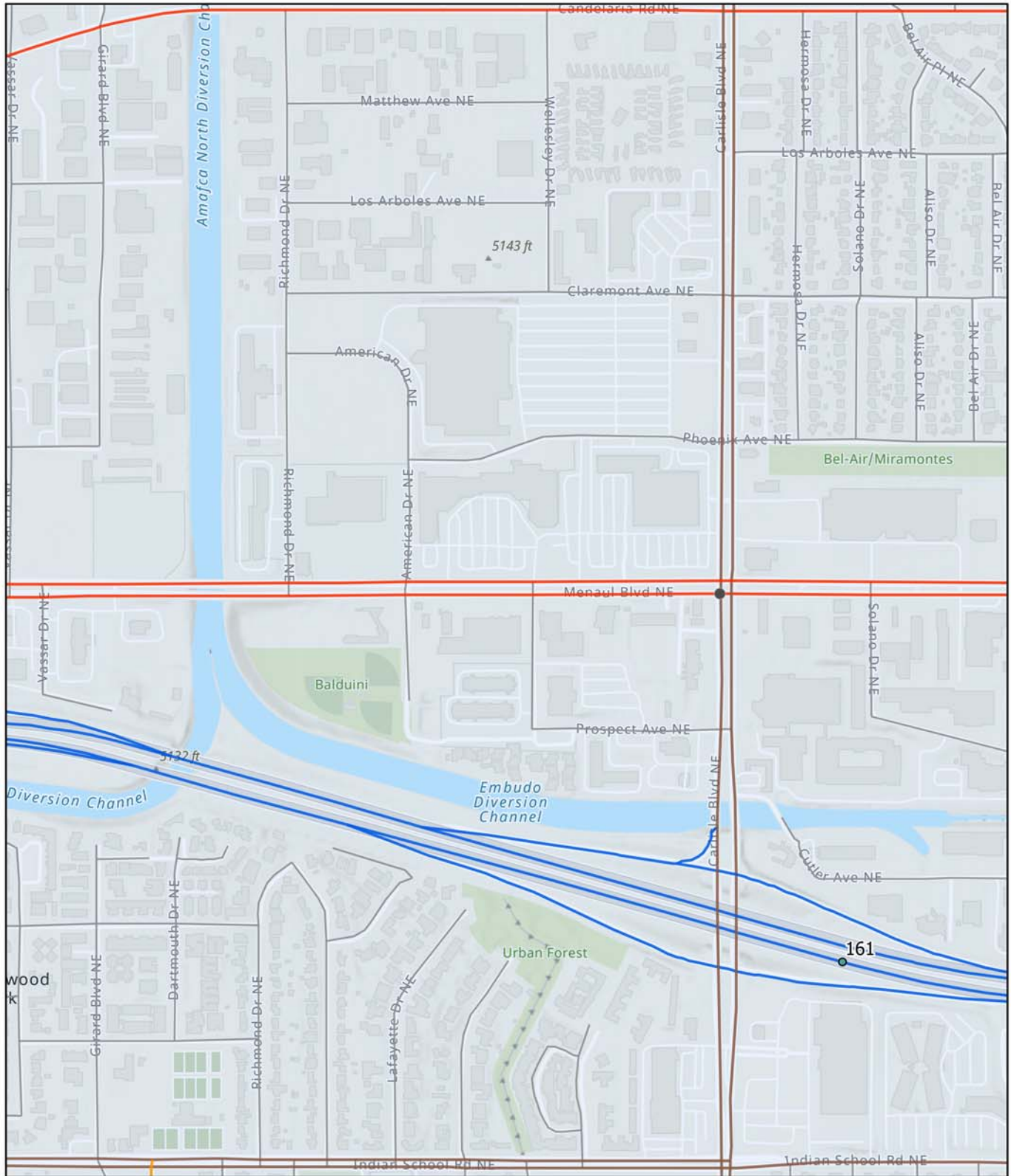
Int

24-Hr Total

NOTES/FILES

	Note	Date	

Roadway Functional Class



7/1/2024, 4:21:42 PM

- Mileposts - 1 Mile Intervals
- NMDOT Functional Class
- 1 - Interstate
- 3 - Principal Arterial - Other
- 4 - Minor Arterial
- 5 - Major Collector
- Local Roads
- 2020 FHWA Urban Area Boundaries

Esri, NASA, NGA, USGS, FEMA, Esri Community Maps Contributors, New Mexico State University, City of Albuquerque, Bernalillo County, NM, Texas Parks & Wildlife, © OpenStreetMap, Microsoft, Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, US Census Bureau, USDA, USFWS

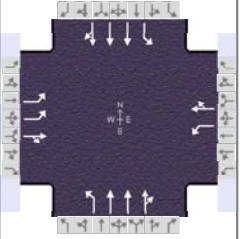
APPENDIX E
2026 NO BUILD INTERSECTION CAPACITY ANALYSIS

HCS Signalized Intersection Results Summary

General Information

Agency	BH		
Analyst	AG	Analysis Date	Jun 4, 2024
Jurisdiction	CoA	Time Period	NBAM
Urban Street	Carlisle Blvd	Analysis Year	2026
Intersection	Carlisle & Claremont	File Name	2026 NBAM Signal
Project Description	Carlisle & Menaul TIA		

Intersection Information



Demand Information

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	67	11	87	41	15	15	106	749	19	12	739	54

Signal Information

Cycle, s	110.0	Reference Phase	2									
Offset, s	53	Reference Point	End									
Uncoordinated	No	Simult. Gap E/W	On	Green	0.9	3.6	79.9	12.1	0.0	0.0		
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	3.5	0.0	4.0	3.5	0.0	0.0		
				Red	0.5	0.0	1.0	1.0	0.0	0.0		

Timer Results

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4		8	5	2	1	6
Case Number		6.0		6.0	1.1	4.0	1.1	4.0
Phase Duration, s		16.6		16.6	8.5	88.5	4.9	84.9
Change Period, ($Y+R_c$), s		4.5		4.5	4.0	5.0	4.0	5.0
Max Allow Headway (MAH), s		3.2		3.2	3.1	0.0	3.1	0.0
Queue Clearance Time (g_s), s		8.3		11.6	4.3		2.2	
Green Extension Time (g_e), s		0.5		0.4	0.2	0.0	0.0	0.0
Phase Call Probability		1.00		1.00	0.99		0.31	
Max Out Probability		0.00		0.00	0.00		0.00	

Movement Group Results

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	67	98		41	30		145	705	348	12	534	259
Adjusted Saturation Flow Rate (s), veh/h/ln	1391	1625		1308	1730		1795	1885	1860	1795	1885	1817
Queue Service Time (g_s), s	2.5	6.3		3.4	1.7		2.3	3.6	3.6	0.2	5.0	5.0
Cycle Queue Clearance Time (g_c), s	4.1	6.3		9.6	1.7		2.3	3.6	3.6	0.2	5.0	5.0
Green Ratio (g/C)	0.11	0.11		0.11	0.11		0.78	0.76	0.76	0.73	0.73	0.73
Capacity (c), veh/h	396	179		136	191		608	2860	1411	462	2738	1319
Volume-to-Capacity Ratio (X)	0.169	0.546		0.302	0.157		0.239	0.247	0.247	0.026	0.195	0.196
Back of Queue (Q), ft/ln (95 th percentile)	38	116		50	34		24	46	49	3	77	77
Back of Queue (Q), veh/ln (95 th percentile)	1.5	4.6		2.0	1.3		1.0	1.8	2.0	0.1	3.1	3.1
Queue Storage Ratio (RQ) (95 th percentile)	0.22	0.00		1.26	0.84		0.13	0.00	0.00	0.04	0.00	0.00
Uniform Delay (d_1), s/veh	46.1	46.3		50.8	44.3		2.9	2.1	2.1	3.9	4.8	4.8
Incremental Delay (d_2), s/veh	0.1	1.0		0.5	0.1		0.1	0.2	0.4	0.0	0.2	0.3
Initial Queue Delay (d_3), s/veh	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	46.2	47.3		51.3	44.4		3.0	2.2	2.4	3.9	5.0	5.1
Level of Service (LOS)	D	D		D	D		A	A	A	A	A	A
Approach Delay, s/veh / LOS	46.9	D		48.4	D		2.4	A		5.0	A	
Intersection Delay, s/veh / LOS	8.1						A					

Multimodal Results

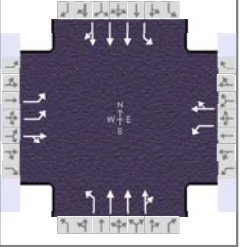
	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	2.60	C		2.60	C		1.84	B		2.05	B	
Bicycle LOS Score / LOS	0.76	A		0.60	A		0.97	A		0.93	A	

HCS Signalized Intersection Results Summary

General Information

Agency	BH		
Analyst	AG	Analysis Date	Jun 4, 2024
Jurisdiction	CoA	Time Period	NBPM
Urban Street	Carlisle Blvd	Analysis Year	2026
Intersection	Carlisle & Claremont	File Name	2026 NBPM Signal
Project Description	Carlisle & Menaul TIA		

Intersection Information



Demand Information

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	196	22	141	36	16	23	109	1070	40	36	1077	106

Signal Information

Cycle, s	120.0	Reference Phase	2									
Offset, s	53	Reference Point	End									
Uncoordinated	No	Simult. Gap E/W	On	Green	2.1	3.0	84.0	17.4	0.0	0.0		
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	3.5	0.0	4.0	3.5	0.0	0.0		
				Red	0.5	0.0	1.0	1.0	0.0	0.0		

Timer Results

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4		8	5	2	1	6
Case Number		6.0		6.0	1.1	4.0	1.1	4.0
Phase Duration, s		21.9		21.9	9.1	92.0	6.1	89.0
Change Period, ($Y+R_c$), s		4.5		4.5	4.0	5.0	4.0	5.0
Max Allow Headway (MAH), s		3.2		3.2	3.1	0.0	3.1	0.0
Queue Clearance Time (g_s), s		13.3		16.6	4.9		2.7	
Green Extension Time (g_e), s		0.9		0.8	0.2	0.0	0.0	0.0
Phase Call Probability		1.00		1.00	0.99		0.70	
Max Out Probability		0.00		0.00	0.00		0.00	

Movement Group Results

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	196	163		36	39		146	997	489	36	801	382
Adjusted Saturation Flow Rate (s), veh/h/ln	1390	1644		1242	1718		1810	1900	1863	1810	1900	1810
Queue Service Time (g_s), s	8.0	11.3		3.4	2.4		2.9	8.3	8.5	0.7	9.6	9.7
Cycle Queue Clearance Time (g_c), s	10.3	11.3		14.6	2.4		2.9	8.3	8.5	0.7	9.6	9.7
Green Ratio (g/C)	0.15	0.15		0.15	0.15		0.75	0.72	0.72	0.72	0.70	0.70
Capacity (c), veh/h	471	239		125	250		434	2753	1350	321	2658	1266
Volume-to-Capacity Ratio (X)	0.416	0.681		0.288	0.156		0.336	0.362	0.362	0.112	0.301	0.302
Back of Queue (Q), ft/ln (95 th percentile)	124	206		48	46		34	116	121	11	162	160
Back of Queue (Q), veh/ln (95 th percentile)	5.0	8.2		1.9	1.8		1.3	4.7	4.9	0.4	6.5	6.4
Queue Storage Ratio (RQ) (95 th percentile)	0.71	0.00		1.21	1.15		0.18	0.00	0.00	0.15	0.00	0.00
Uniform Delay (d_1), s/veh	49.3	48.6		55.5	44.8		4.3	3.9	4.0	5.2	6.9	6.9
Incremental Delay (d_2), s/veh	0.2	1.3		0.5	0.1		0.1	0.2	0.5	0.1	0.3	0.6
Initial Queue Delay (d_3), s/veh	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	49.5	49.9		56.0	44.9		4.4	4.1	4.5	5.2	7.2	7.5
Level of Service (LOS)	D	D		E	D		A	A	A	A	A	A
Approach Delay, s/veh / LOS	49.7		D	50.2		D	4.2		A	7.2		A
Intersection Delay, s/veh / LOS	11.4						B					

Multimodal Results

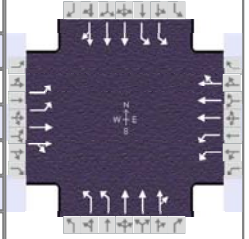
	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	2.60		C	2.60		C	1.86		B	2.06		B
Bicycle LOS Score / LOS	1.08		A	0.61		A	1.16		A	1.16		A

HCS Signalized Intersection Results Summary

General Information

Agency	BH		
Analyst	AG	Analysis Date	Jun 4, 2024
Jurisdiction	CoA	Time Period	NBAM
Urban Street	Carlisle Blvd	Analysis Year	2026
Intersection	Carlisle & Menaul	File Name	2026 NBAM Signal
Project Description	Carlisle & Menaul TIA		

Intersection Information



Demand Information

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	86	468	142	108	479	183	232	797	131	160	780	108

Signal Information

Cycle, s	110.0	Reference Phase	2									
Offset, s	98	Reference Point	End									
Uncoordinated	No	Simult. Gap E/W	On	Green	6.1	1.0	36.8	4.4	0.8	39.3		
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	3.0	3.0	4.2	3.0	0.0	4.8		
				Red	0.5	0.5	1.0	0.5	0.0	1.0		

Timer Results

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	5	2	1	6
Case Number	2.0	4.0	2.0	4.0	2.0	4.0	2.0	4.0
Phase Duration, s	7.9	45.1	8.8	46.0	14.1	46.5	9.6	42.0
Change Period, ($Y+R_c$), s	3.5	5.8	3.5	5.8	3.5	5.2	3.5	5.2
Max Allow Headway (MAH), s	3.1	3.1	3.1	3.1	3.1	0.0	3.1	0.0
Queue Clearance Time (g_s), s	4.7	16.4	5.3	12.0	10.4		6.1	
Green Extension Time (g_e), s	0.1	2.8	0.1	2.8	0.3	0.0	0.2	0.0
Phase Call Probability	0.93	1.00	0.96	1.00	1.00		0.98	
Max Out Probability	0.00	0.00	0.00	0.00	0.18		0.00	

Movement Group Results

Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	86	316	294	108	457	205	271	739	344	132	498	237
Adjusted Saturation Flow Rate (s), veh/h/ln	1743	1885	1734	1757	1900	1637	1743	1885	1745	1757	1900	1779
Queue Service Time (g_s), s	2.7	14.2	14.4	3.3	9.5	10.0	8.4	18.7	18.4	4.1	11.8	12.4
Cycle Queue Clearance Time (g_c), s	2.7	14.2	14.4	3.3	9.5	10.0	8.4	18.7	18.4	4.1	11.8	12.4
Green Ratio (g/C)	0.04	0.36	0.36	0.05	0.37	0.37	0.10	0.38	0.38	0.06	0.33	0.33
Capacity (c), veh/h	140	674	620	168	1388	598	338	1415	655	196	1270	595
Volume-to-Capacity Ratio (X)	0.613	0.469	0.474	0.644	0.329	0.343	0.802	0.522	0.525	0.676	0.392	0.398
Back of Queue (Q), ft/ln (95 th percentile)	54	276	260	67	194	184	171	351	327	82	238	247
Back of Queue (Q), veh/ln (95 th percentile)	2.1	11.0	10.4	2.7	7.8	7.4	6.8	13.9	13.1	3.3	9.5	9.9
Queue Storage Ratio (RQ) (95 th percentile)	0.24	0.00	0.00	0.38	0.00	0.00	0.90	0.00	0.00	0.41	0.00	0.00
Uniform Delay (d_1), s/veh	51.9	27.3	27.3	51.5	25.2	25.3	48.6	33.0	31.7	51.2	31.1	33.1
Incremental Delay (d_2), s/veh	1.6	2.3	2.6	1.6	0.6	1.6	3.8	1.3	2.8	1.5	0.9	2.0
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	53.6	29.6	29.9	53.0	25.8	26.9	52.4	34.2	34.4	52.7	32.0	35.1
Level of Service (LOS)	D	C	C	D	C	C	D	C	C	D	C	D
Approach Delay, s/veh / LOS	32.7	C		29.9	C		37.9	D		36.0	D	
Intersection Delay, s/veh / LOS	34.8						C					

Multimodal Results

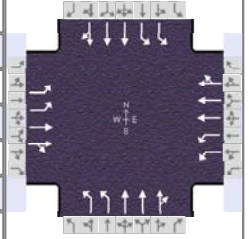
	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	2.71	C		2.71	C		2.57	C		2.58	C	
Bicycle LOS Score / LOS	1.06	A		0.91	A		1.13	A		1.06	A	

HCS Signalized Intersection Results Summary

General Information

Agency	BH		
Analyst	AG	Analysis Date	Jun 4, 2024
Jurisdiction	CoA	Time Period	NBPM
Urban Street	Carlisle Blvd	Analysis Year	2026
Intersection	Carlisle & Menaul	File Name	2026 NBPM Signal
Project Description	Carlisle & Menaul TIA		

Intersection Information



Demand Information

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	149	717	218	238	854	306	306	1081	146	278	1110	118

Signal Information

Cycle, s	120.0	Reference Phase	2									
Offset, s	98	Reference Point	End									
Uncoordinated	No	Simult. Gap E/W	On	Green	10.0	3.3	35.6	7.1	3.1	42.9		
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	3.0	0.0	4.2	3.0	0.0	4.8		
				Red	0.5	0.0	1.0	0.5	0.0	1.0		

Timer Results

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	5	2	1	6
Case Number	2.0	4.0	2.0	4.0	2.0	4.0	2.0	4.0
Phase Duration, s	10.6	48.7	13.7	51.8	16.8	44.1	13.5	40.8
Change Period, ($Y+R_c$), s	3.5	5.8	3.5	5.8	3.5	5.2	3.5	5.2
Max Allow Headway (MAH), s	3.1	3.1	3.1	3.1	3.1	0.0	3.1	0.0
Queue Clearance Time (g_s), s	7.0	28.6	10.0	22.1	13.1		9.8	
Green Extension Time (g_e), s	0.2	4.8	0.3	5.4	0.2	0.0	0.3	0.0
Phase Call Probability	0.99	1.00	1.00	1.00	1.00		1.00	
Max Out Probability	0.02	0.22	0.06	0.06	1.00		0.05	

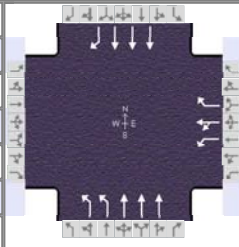
Movement Group Results

Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	149	487	448	238	809	351	333	910	427	231	692	330
Adjusted Saturation Flow Rate (s), veh/h/ln	1757	1900	1747	1757	1900	1643	1757	1900	1781	1757	1900	1803
Queue Service Time (g_s), s	5.0	26.6	26.6	8.0	20.0	20.1	11.1	27.4	27.2	7.8	19.5	20.0
Cycle Queue Clearance Time (g_c), s	5.0	26.6	26.6	8.0	20.0	20.1	11.1	27.4	27.2	7.8	19.5	20.0
Green Ratio (g/C)	0.06	0.36	0.36	0.09	0.38	0.38	0.11	0.32	0.32	0.08	0.30	0.30
Capacity (c), veh/h	208	679	624	300	1457	630	390	1231	577	294	1127	535
Volume-to-Capacity Ratio (X)	0.717	0.718	0.718	0.793	0.555	0.558	0.855	0.739	0.740	0.788	0.614	0.617
Back of Queue (Q), ft/ln (95 th percentile)	101	481	451	162	357	330	212	494	480	158	365	374
Back of Queue (Q), veh/ln (95 th percentile)	4.0	19.2	18.0	6.5	14.3	13.2	8.5	19.8	19.2	6.3	14.6	15.0
Queue Storage Ratio (RQ) (95 th percentile)	0.46	0.00	0.00	0.93	0.00	0.00	1.11	0.00	0.00	0.79	0.00	0.00
Uniform Delay (d_1), s/veh	55.5	33.3	33.3	53.8	29.0	29.0	49.4	45.5	44.5	54.4	39.4	41.3
Incremental Delay (d_2), s/veh	1.8	6.7	7.2	2.6	1.5	3.6	10.4	3.3	7.0	1.9	2.4	5.1
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	57.2	40.0	40.6	56.4	30.5	32.6	59.8	48.8	51.5	56.2	41.8	46.4
Level of Service (LOS)	E	D	D	E	C	C	E	D	D	E	D	D
Approach Delay, s/veh / LOS	42.6	D		35.5	D		51.7	D		45.7	D	
Intersection Delay, s/veh / LOS	44.3						D					

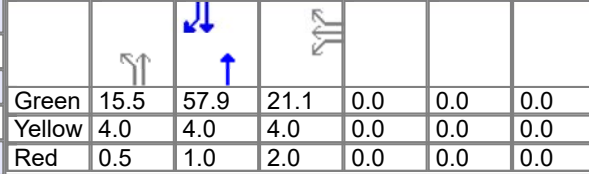
Multimodal Results

	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	2.71	C		2.71	C		2.58	C		2.59	C	
Bicycle LOS Score / LOS	1.38	A		1.26	A		1.33	A		1.32	A	

HCS Signalized Intersection Results Summary

General Information				Intersection Information		
Agency	BH			Duration, h	1.000	
Analyst	AG	Analysis Date	Jun 4, 2024	Area Type	Other	
Jurisdiction	CoA	Time Period	NBAM	PHF	1.00	
Urban Street	Carlisle Blvd	Analysis Year	2026	Analysis Period	1> 7:00	
Intersection	Carlisle & I-40 WB	File Name	2026 NBAM Signalized Network.xus			
Project Description	Carlisle & Menaul TIA					

Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h				256	3	274	422	1112			777	277

Signal Information											
Cycle, s	110.0	Reference Phase	2								
Offset, s	92	Reference Point	End								
Uncoordinated	No	Simult. Gap E/W	On								
Force Mode	Fixed	Simult. Gap N/S	On	Green	15.5	57.9	21.1	0.0	0.0	0.0	
				Yellow	4.0	4.0	4.0	0.0	0.0	0.0	
				Red	0.5	1.0	2.0	0.0	0.0	0.0	

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase				8	5	2		6
Case Number				9.0	2.0	4.0		7.3
Phase Duration, s				27.1	20.0	82.9		62.9
Change Period, ($Y+R_c$), s				6.0	4.5	5.0		5.0
Max Allow Headway (MAH), s				3.2	3.1	0.0		0.0
Queue Clearance Time (g_s), s				20.2	14.6			
Green Extension Time (g_e), s				0.8	0.9	0.0		0.0
Phase Call Probability				1.00	1.00			
Max Out Probability				0.04	0.00			

Movement Group Results	EB			WB			NB			SB			
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R	
Assigned Movement				3	8	18	5	2			6	16	
Adjusted Flow Rate (v), veh/h				128	131	274	410	1079			660	235	
Adjusted Saturation Flow Rate (s), veh/h/ln				1810	1812	1610	1743	1712			1725		
Queue Service Time (g_s), s				6.8	6.9	18.2	12.6	10.4			7.5		
Cycle Queue Clearance Time (g_c), s				6.8	6.9	18.2	12.6	10.4			7.5		
Green Ratio (g/C)				0.19	0.19	0.19	0.14	0.71			0.53		
Capacity (c), veh/h				347	347	309	493	3638			2723		
Volume-to-Capacity Ratio (X)				0.369	0.377	0.888	0.831	0.297			0.242		
Back of Queue (Q), ft/ln (95 th percentile)				135	138	328	234	164			130		
Back of Queue (Q), veh/ln (95 th percentile)				5.4	5.5	13.1	9.3	6.5			5.2		
Queue Storage Ratio (RQ) (95 th percentile)				0.79	0.81	1.93	0.88	0.00			0.00		
Uniform Delay (d_1), s/veh				38.7	38.7	43.3	47.0	7.8			14.0		
Incremental Delay (d_2), s/veh				0.2	0.3	14.7	1.3	0.2			0.2		
Initial Queue Delay (d_3), s/veh				0.0	0.0	0.0	0.0	0.0			0.0		
Control Delay (d), s/veh				38.9	39.0	58.0	48.3	8.0			14.2	0.0	
Level of Service (LOS)				D	D	E	D	A			B	A	
Approach Delay, s/veh / LOS	0.0			48.7		D	19.1		B		10.5		B
Intersection Delay, s/veh / LOS	21.8						C						

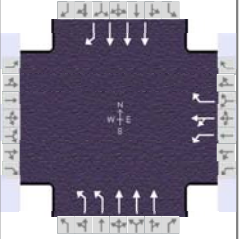
Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.74	C	2.61	C	1.86	B	1.67	B
Bicycle LOS Score / LOS			1.37	A	1.33	A	1.07	A

HCS Signalized Intersection Results Summary

General Information

Agency	BH		
Analyst	AG	Analysis Date	Jun 4, 2024
Jurisdiction	CoA	Time Period	NBPM
Urban Street	Carlisle Blvd	Analysis Year	2026
Intersection	Carlisle & I-40 WB	File Name	2026 NBPM Signal
Project Description	Carlisle & Menaul TIA		

Intersection Information



Demand Information

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h				325	46	428	448	1313			1152	298

Signal Information

Cycle, s	120.0	Reference Phase	2									
Offset, s	92	Reference Point	End									
Uncoordinated	No	Simult. Gap E/W	On	Green	18.1	58.8	27.6	0.0	0.0	0.0		
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	4.0	4.0	4.0	0.0	0.0	0.0		
				Red	0.5	1.0	2.0	0.0	0.0	0.0		

Timer Results

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase				8	5	2		6
Case Number				9.0	2.0	4.0		7.3
Phase Duration, s				33.6	22.6	86.4		63.8
Change Period, ($Y+R_c$), s				6.0	4.5	5.0		5.0
Max Allow Headway (MAH), s				3.2	3.1	0.0		0.0
Queue Clearance Time (g_s), s				29.6	17.1			
Green Extension Time (g_e), s				0.0	1.0	0.0		0.0
Phase Call Probability				1.00	1.00			
Max Out Probability				1.00	0.00			

Movement Group Results

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement				3	8	18	5	2		6	16	
Adjusted Flow Rate (v), veh/h				163	209	428	443	1300		1097	284	
Adjusted Saturation Flow Rate (s), veh/h/ln				1810	1829	1610	1757	1725		1725		
Queue Service Time (g_s), s				9.1	11.9	27.6	15.1	19.7		19.0		
Cycle Queue Clearance Time (g_c), s				9.1	11.9	27.6	15.1	19.7		19.0		
Green Ratio (g/C)				0.23	0.23	0.23	0.15	0.68		0.49		
Capacity (c), veh/h				416	421	370	530	3511		2537		
Volume-to-Capacity Ratio (X)				0.390	0.496	1.156	0.837	0.370		0.432		
Back of Queue (Q), ft/ln (95 th percentile)				182	228	1464	293	326		302		
Back of Queue (Q), veh/ln (95 th percentile)				7.3	9.1	58.5	11.7	13.0		12.1		
Queue Storage Ratio (RQ) (95 th percentile)				1.07	1.34	8.61	1.11	0.00		0.00		
Uniform Delay (d_1), s/veh				39.1	40.1	46.2	57.8	15.8		25.2		
Incremental Delay (d_2), s/veh				0.2	0.3	312.6	1.3	0.3		0.4		
Initial Queue Delay (d_3), s/veh				0.0	0.0	0.0	0.0	0.0		0.0		
Control Delay (d), s/veh				39.3	40.5	358.8	59.0	16.1		25.6	0.0	
Level of Service (LOS)				D	D	F	E	B		C	A	
Approach Delay, s/veh / LOS	0.0			210.8		F	27.0		C	20.3		C
Intersection Delay, s/veh / LOS				62.1					E			

Multimodal Results

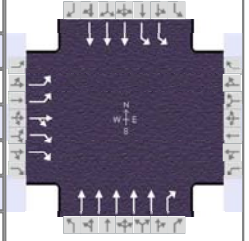
	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	2.75		C	2.62		C	1.87		B	1.68		B
Bicycle LOS Score / LOS				1.81		B	1.46		A	1.29		A

HCS Signalized Intersection Results Summary

General Information

Agency	BH		
Analyst	AG	Analysis Date	Jun 4, 2024
Jurisdiction	CoA	Time Period	NBAM
Urban Street	Carlisle Blvd	Analysis Year	2026
Intersection	Carlisle & I-40 EB	File Name	2026 NBAM Signal
Project Description	Carlisle & Menaul TIA		

Intersection Information



Demand Information

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	562	2	517					927	187	200	860	

Signal Information

Cycle, s	110.0	Reference Phase	2									
Offset, s	92	Reference Point	End									
Uncoordinated	No	Simult. Gap E/W	On	Green	7.7	64.9	21.4	0.0	0.0	0.0		
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	4.0	4.0	4.5	0.0	0.0	0.0		
				Red	0.5	1.0	2.0	0.0	0.0	0.0		

Timer Results

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4				2	1	6
Case Number		9.0				7.3	2.0	4.0
Phase Duration, s		27.9				69.9	12.2	82.1
Change Period, ($Y+R_c$), s		6.5				5.0	4.5	5.0
Max Allow Headway (MAH), s		3.2				0.0	3.1	0.0
Queue Clearance Time (g_s), s		18.9					7.4	
Green Extension Time (g_e), s		2.5				0.0	0.4	0.0
Phase Call Probability		1.00					0.99	
Max Out Probability		0.02					0.00	

Movement Group Results

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14				2	12		1	6	
Adjusted Flow Rate (v), veh/h	562	183	336				927	187		173	743	
Adjusted Saturation Flow Rate (s), veh/h/ln	1757	1613	1610				1725	1610		1757	1725	
Queue Service Time (g_s), s	16.9	11.3	10.3				5.4	5.9		5.4	8.4	
Cycle Queue Clearance Time (g_c), s	16.9	11.3	10.3				5.4	5.9		5.4	8.4	
Green Ratio (g/C)	0.19	0.19	0.19				0.59	0.59		0.07	0.70	
Capacity (c), veh/h	683	314	626				5089	950		246	3628	
Volume-to-Capacity Ratio (X)	0.822	0.583	0.537				0.182	0.197		0.702	0.205	
Back of Queue (Q), ft/ln (95 th percentile)	295	199	183				89	95		112	139	
Back of Queue (Q), veh/ln (95 th percentile)	11.8	8.0	7.3				3.6	3.8		4.5	5.6	
Queue Storage Ratio (RQ) (95 th percentile)	0.67	0.45	0.42				0.00	0.34		0.36	0.00	
Uniform Delay (d_1), s/veh	42.5	40.3	39.8				10.4	10.5		52.9	9.8	
Incremental Delay (d_2), s/veh	1.7	0.6	0.3				0.1	0.5		1.3	0.1	
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0				0.0	0.0		0.0	0.0	
Control Delay (d), s/veh	44.2	40.9	40.1				10.4	10.9		54.2	9.9	
Level of Service (LOS)	D	D	D				B	B		D	A	
Approach Delay, s/veh / LOS	42.4		D	0.0			10.5		B	18.2		B
Intersection Delay, s/veh / LOS	23.9						C					

Multimodal Results

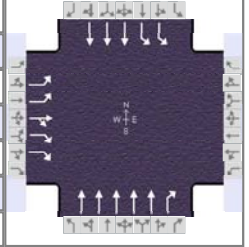
	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	2.87		C	2.98		C	1.66		B	2.22		B
Bicycle LOS Score / LOS	2.27		B				0.86		A	1.07		A

HCS Signalized Intersection Results Summary

General Information

Agency	BH		
Analyst	AG	Analysis Date	Jun 4, 2024
Jurisdiction	CoA	Time Period	NBPM
Urban Street	Carlisle Blvd	Analysis Year	2026
Intersection	Carlisle & I-40 EB	File Name	2026 NBPM Signal
Project Description	Carlisle & Menaul TIA		

Intersection Information



Demand Information

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	426	8	495					1317	302	363	1123	

Signal Information

Cycle, s	120.0	Reference Phase	2									
Offset, s	92	Reference Point	End									
Uncoordinated	No	Simult. Gap E/W	On	Green	14.6	71.2	18.2	0.0	0.0	0.0		
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	4.0	4.0	4.5	0.0	0.0	0.0		
				Red	0.5	1.0	2.0	0.0	0.0	0.0		

Timer Results

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4				2	1	6
Case Number		9.0				7.3	2.0	4.0
Phase Duration, s		24.7				76.2	19.1	95.3
Change Period, ($Y+R_c$), s		6.5				5.0	4.5	5.0
Max Allow Headway (MAH), s		3.2				0.0	3.1	0.0
Queue Clearance Time (g_s), s		16.0					13.8	
Green Extension Time (g_e), s		2.2				0.0	0.8	0.0
Phase Call Probability		1.00					1.00	
Max Out Probability		0.01					0.00	

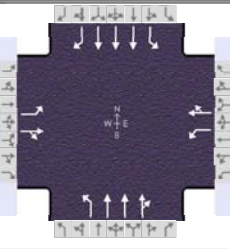
Movement Group Results

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14				2	12		1	6	
Adjusted Flow Rate (v), veh/h	426	181	322				1317	302		347	1074	
Adjusted Saturation Flow Rate (s), veh/h/ln	1757	1623	1610				1725	1610		1757	1725	
Queue Service Time (g_s), s	14.0	12.8	11.3				8.8	11.3		11.8	11.2	
Cycle Queue Clearance Time (g_c), s	14.0	12.8	11.3				8.8	11.3		11.8	11.2	
Green Ratio (g/C)	0.15	0.15	0.15				0.59	0.59		0.12	0.75	
Capacity (c), veh/h	533	246	489				5120	956		426	3894	
Volume-to-Capacity Ratio (X)	0.799	0.736	0.658				0.257	0.316		0.814	0.276	
Back of Queue (Q), ft/ln (95 th percentile)	256	225	201				147	185		230	178	
Back of Queue (Q), veh/ln (95 th percentile)	10.2	9.0	8.0				5.9	7.4		9.2	7.1	
Queue Storage Ratio (RQ) (95 th percentile)	0.58	0.51	0.46				0.00	0.66		0.74	0.00	
Uniform Delay (d_1), s/veh	49.1	48.6	48.0				11.7	12.2		56.1	7.6	
Incremental Delay (d_2), s/veh	1.1	1.6	0.6				0.1	0.9		1.3	0.1	
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0				0.0	0.0		0.0	0.0	
Control Delay (d), s/veh	50.2	50.2	48.5				11.8	13.1		57.4	7.7	
Level of Service (LOS)	D	D	D				B	B		E	A	
Approach Delay, s/veh / LOS	49.6		D	0.0			12.1		B	19.8		B
Intersection Delay, s/veh / LOS	23.6						C					

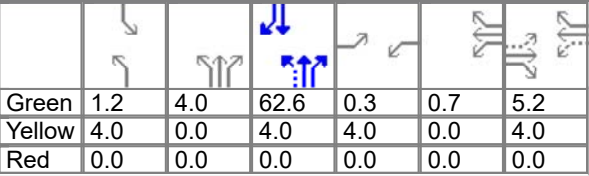
Multimodal Results

	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	2.87		C	2.99		C	1.66		B	2.21		B
Bicycle LOS Score / LOS	2.02		B				1.02		A	1.30		A

HCS Signalized Intersection Results Summary

General Information				Intersection Information		
Agency	BH			Duration, h	1.000	
Analyst	AG	Analysis Date	7/2/2024	Area Type	Other	
Jurisdiction	CoA	Time Period	NBAM	PHF	1.00	
Urban Street	Carlisle Blvd	Analysis Year	2026	Analysis Period	1> 7:00	
Intersection	Carlisle & Phoenix	File Name	2026 NBAM Carlisle & Phoenix ALT.xus			
Project Description	Carlisle & Menaul TIA Signalized Alt					

Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	2	0	66	7	2	13	79	871	4	9	937	16

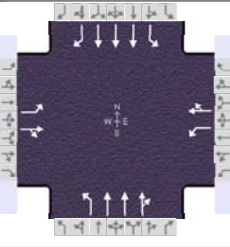
Signal Information											
Cycle, s	90.0	Reference Phase	2		Green	1.2	4.0	62.6	0.3	0.7	5.2
Offset, s	0	Reference Point	End								
Uncoordinated	No	Simult. Gap E/W	On								
Force Mode	Fixed	Simult. Gap N/S	On								
				Yellow	4.0	0.0	4.0	4.0	0.0	4.0	
				Red	0.0	0.0	0.0	0.0	0.0	0.0	

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	5	2	1	6
Case Number	1.1	4.0	1.1	4.0	1.1	4.0	2.0	3.0
Phase Duration, s	4.3	9.2	5.0	9.9	9.2	70.6	5.2	66.6
Change Period, ($Y+R_c$), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Allow Headway (MAH), s	3.1	3.4	3.1	3.4	3.1	0.0	3.1	0.0
Queue Clearance Time (g_s), s	2.1	5.7	2.3	2.8	2.9		2.4	
Green Extension Time (g_e), s	0.0	0.1	0.0	0.1	0.1	0.0	0.0	0.0
Phase Call Probability	0.05	0.87	0.16	0.89	0.86		0.20	
Max Out Probability	0.00	0.00	0.02	0.00	0.00		0.00	

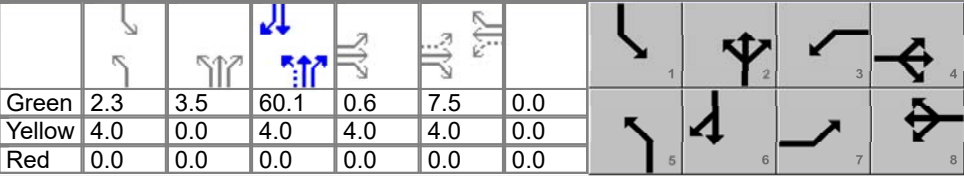
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	2	66		7	15		79	584	291	9	937	16
Adjusted Saturation Flow Rate (s), veh/h/ln	1781	1585		1810	1644		1810	1900	1895	1795	1712	1598
Queue Service Time (g_s), s	0.1	3.7		0.3	0.8		0.9	4.3	4.3	0.4	6.1	0.3
Cycle Queue Clearance Time (g_c), s	0.1	3.7		0.3	0.8		0.9	4.3	4.3	0.4	6.1	0.3
Green Ratio (g/C)	0.06	0.06		0.07	0.07		0.77	0.74	0.74	0.01	0.70	0.70
Capacity (c), veh/h	135	92		123	108		565	2811	1402	24	3573	1112
Volume-to-Capacity Ratio (X)	0.015	0.714		0.057	0.139		0.140	0.208	0.208	0.373	0.262	0.014
Back of Queue (Q), ft/ln (95 th percentile)	2	69		6	14		10	56	59	10	81	4
Back of Queue (Q), veh/ln (95 th percentile)	0.1	2.7		0.3	0.6		0.4	2.2	2.3	0.4	3.2	0.1
Queue Storage Ratio (RQ) (95 th percentile)	0.00	0.00		0.06	0.14		0.09	0.00	0.00	0.11	0.00	0.04
Uniform Delay (d_1), s/veh	39.7	41.6		39.2	39.6		2.8	3.6	3.6	44.0	5.1	4.2
Incremental Delay (d_2), s/veh	0.0	3.9		0.1	0.2		0.0	0.2	0.3	3.5	0.2	0.0
Initial Queue Delay (d_3), s/veh	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	39.7	45.5		39.3	39.9		2.8	3.8	3.9	47.6	5.3	4.2
Level of Service (LOS)	D	D		D	D		A	A	A	D	A	A
Approach Delay, s/veh / LOS	45.3		D	39.7		D	3.7		A	5.7		A
Intersection Delay, s/veh / LOS	6.5						A					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.60	C	2.73	C	1.84	B	1.85	B
Bicycle LOS Score / LOS	0.60	A	0.52	A	1.01	A	1.02	A

HCS Signalized Intersection Results Summary

General Information				Intersection Information		
Agency	BH			Duration, h	1.000	
Analyst	AG	Analysis Date	7/2/2024	Area Type	Other	
Jurisdiction	CoA	Time Period	NBPM	PHF	1.00	
Urban Street	Carlisle Blvd	Analysis Year	2026	Analysis Period	1> 7:00	
Intersection	Carlisle & Phoenix	File Name	2026 NBPM Carlisle & Phoenix ALT.xus			
Project Description	Carlisle & Menaul TIA Signalized Alt					

Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	4	1	177	0	1	29	135	1281	23	19	1275	36

Signal Information											
Cycle, s	90.0	Reference Phase	2								
Offset, s	0	Reference Point	End								
Uncoordinated	No	Simult. Gap E/W	On								
Force Mode	Fixed	Simult. Gap N/S	On	Green	2.3	3.5	60.1	0.6	7.5	0.0	
				Yellow	4.0	0.0	4.0	4.0	4.0	0.0	
				Red	0.0	0.0	0.0	0.0	0.0	0.0	

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	5	2	1	6
Case Number	1.1	4.0	1.1	4.0	1.1	4.0	2.0	3.0
Phase Duration, s	4.6	16.1	0.0	11.5	9.8	67.7	6.3	64.1
Change Period, ($Y+R_c$), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Allow Headway (MAH), s	3.1	3.4	0.0	3.4	3.1	0.0	3.1	0.0
Queue Clearance Time (g_s), s	2.2	11.7		3.6	3.8		2.9	
Green Extension Time (g_e), s	0.0	0.5	0.0	0.5	0.2	0.0	0.0	0.0
Phase Call Probability	0.10	1.00		0.99	0.97		0.38	
Max Out Probability	0.00	0.00		0.00	0.00		0.00	

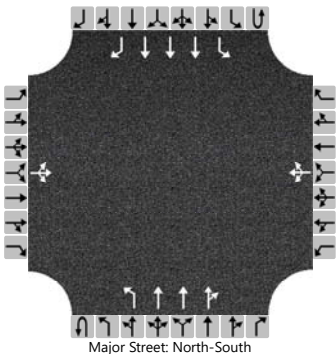
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	4	178		0	30		135	872	432	19	1275	36
Adjusted Saturation Flow Rate (s), veh/h/ln	1810	1612		1810	1618		1810	1900	1882	1810	1725	1610
Queue Service Time (g_s), s	0.2	9.7		0.0	1.6		1.8	7.8	7.8	0.9	9.8	0.7
Cycle Queue Clearance Time (g_c), s	0.2	9.7		0.0	1.6		1.8	7.8	7.8	0.9	9.8	0.7
Green Ratio (g/C)	0.11	0.13		0.04	0.08		0.75	0.71	0.71	0.03	0.67	0.67
Capacity (c), veh/h	184	216		87	135		443	2688	1331	46	3458	1076
Volume-to-Capacity Ratio (X)	0.022	0.824		0.000	0.222		0.305	0.324	0.324	0.416	0.369	0.033
Back of Queue (Q), ft/ln (95 th percentile)	4	175		0	28		21	113	117	20	136	9
Back of Queue (Q), veh/ln (95 th percentile)	0.1	7.0		0.0	1.1		0.9	4.5	4.7	0.8	5.4	0.4
Queue Storage Ratio (RQ) (95 th percentile)	0.00	0.00		0.00	0.28		0.19	0.00	0.00	0.22	0.00	0.10
Uniform Delay (d_1), s/veh	35.6	37.9		0.0	38.5		4.1	5.0	5.0	43.2	6.6	5.1
Incremental Delay (d_2), s/veh	0.0	3.1		0.0	0.3		0.1	0.3	0.6	2.3	0.3	0.1
Initial Queue Delay (d_3), s/veh	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	35.7	41.0		0.0	38.8		4.2	5.3	5.7	45.5	6.9	5.1
Level of Service (LOS)	D	D			D		A	A	A	D	A	A
Approach Delay, s/veh / LOS	40.9		D	38.8		D	5.3		A	7.4		A
Intersection Delay, s/veh / LOS	8.7						A					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.59	C	2.73	C	1.85	B	1.86	B
Bicycle LOS Score / LOS	0.79	A	0.54	A	1.28	A	1.22	A

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AG	Intersection	Carlisle & Phoenix
Agency/Co.	BH	Jurisdiction	CoA
Date Performed	6/5/2024	East/West Street	Phoenix Ave
Analysis Year	2026	North/South Street	Carlisle Blvd
Time Analyzed	NBAM	Peak Hour Factor	0.85
Intersection Orientation	North-South	Analysis Time Period (hrs)	1.00
Project Description	Menaul & Carlisle TIA		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	1	3	0	0	1	3	1
Configuration			LTR				LTR			L	T	TR		L	T	R
Volume (veh/h)		2	0	66		7	2	13	0	79	871	4	0	9	937	16
Percent Heavy Vehicles (%)		2	2	2		0	0	0	0	0			1	1		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized													No			
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		6.4	6.5	7.1		6.4	6.5	7.1		5.3				5.3		
Critical Headway (sec)		6.43	6.53	7.14		6.40	6.50	7.10		5.30				5.32		
Base Follow-Up Headway (sec)		3.8	4.0	3.9		3.8	4.0	3.9		3.1				3.1		
Follow-Up Headway (sec)		3.82	4.02	3.92		3.80	4.00	3.90		3.10				3.11		

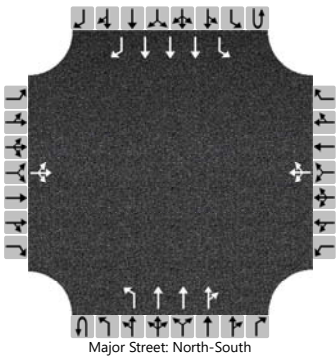
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			80			26				93				11		
Capacity, c (veh/h)			350			97				348				382		
v/c Ratio			0.23			0.27				0.27				0.03		
95% Queue Length, Q ₉₅ (veh)			0.9			1.1				1.1				0.1		
95% Queue Length, Q ₉₅ (ft)			22.9			27.5				27.5				2.5		
Control Delay (s/veh)			18.3			55.5				19.1				14.7		
Level of Service (LOS)			C			F				C				B		
Approach Delay (s/veh)	18.3				55.5				1.6				0.1			
Approach LOS	C				F				A				A			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AG	Intersection	Carlisle & Phoenix
Agency/Co.	BH	Jurisdiction	CoA
Date Performed	6/5/2024	East/West Street	Phoenix Ave
Analysis Year	2026	North/South Street	Carlisle Blvd
Time Analyzed	NBPM	Peak Hour Factor	0.82
Intersection Orientation	North-South	Analysis Time Period (hrs)	1.00
Project Description	Menaul & Carlisle TIA		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	1	3	0	0	1	3	1
Configuration			LTR				LTR			L	T	TR		L	T	R
Volume (veh/h)		4	1	177		0	1	29	0	135	1281	23	0	19	1275	36
Percent Heavy Vehicles (%)		0	0	0		0	0	0	0	0			0	0		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized													No			
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		6.4	6.5	7.1		6.4	6.5	7.1		5.3				5.3		
Critical Headway (sec)		6.40	6.50	7.10		6.40	6.50	7.10		5.30				5.30		
Base Follow-Up Headway (sec)		3.8	4.0	3.9		3.8	4.0	3.9		3.1				3.1		
Follow-Up Headway (sec)		3.80	4.00	3.90		3.80	4.00	3.90		3.10				3.10		

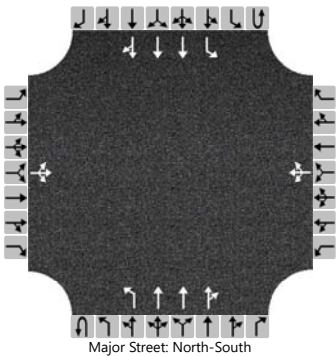
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			222				37			165				23		
Capacity, c (veh/h)			113				0			203				205		
v/c Ratio			1.96							0.81				0.11		
95% Queue Length, Q ₉₅ (veh)			60.0							8.8				0.4		
95% Queue Length, Q ₉₅ (ft)			1500.0							220.0				10.0		
Control Delay (s/veh)			1830.7							86.5				24.8		
Level of Service (LOS)			F							F				C		
Approach Delay (s/veh)	1830.7								8.1				0.4			
Approach LOS	F								A				A			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AG	Intersection	Carlisle & Prospect
Agency/Co.	BH	Jurisdiction	CoA
Date Performed	6/5/2024	East/West Street	Prospect Ave
Analysis Year	2026	North/South Street	Carlisle Blvd
Time Analyzed	NBAM	Peak Hour Factor	0.84
Intersection Orientation	North-South	Analysis Time Period (hrs)	1.00
Project Description	Menaul & Carlisle TIA		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	1	3	0	0	1	3	0
Configuration			LTR				LTR			L	T	TR		L	T	TR
Volume (veh/h)		15	0	53		45	1	40	0	116	1123	19	0	34	958	35
Percent Heavy Vehicles (%)		2	2	2		0	0	0	1	1			0	0		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		6.4	6.5	7.1		6.4	6.5	7.1		5.3				5.3		
Critical Headway (sec)		6.44	6.54	7.14		6.40	6.50	7.10		5.32				5.30		
Base Follow-Up Headway (sec)		3.8	4.0	3.9		3.8	4.0	3.9		3.1				3.1		
Follow-Up Headway (sec)		3.82	4.02	3.92		3.80	4.00	3.90		3.11				3.10		

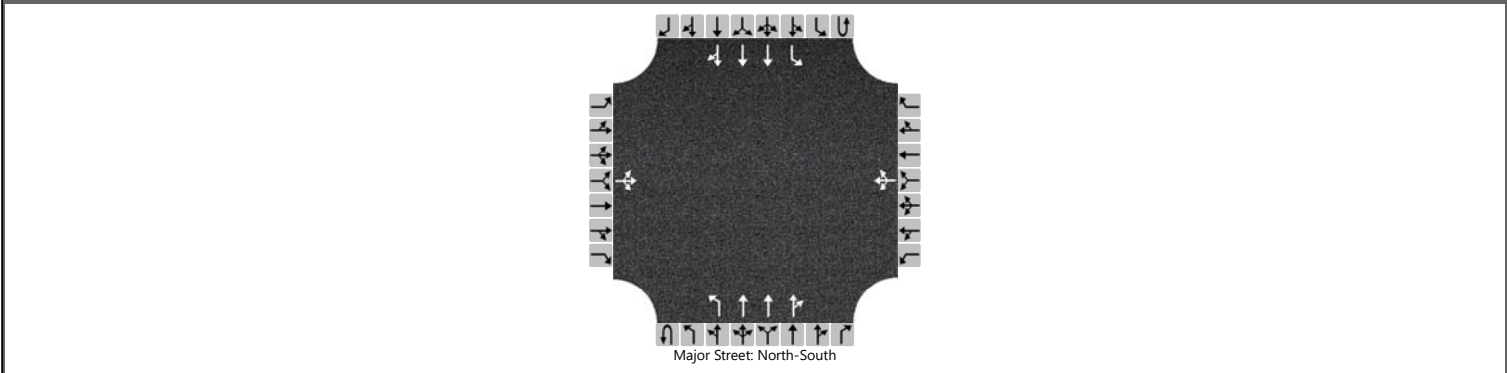
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			81			102				138				40		
Capacity, c (veh/h)			84			35				322				266		
v/c Ratio			0.97			2.93				0.43				0.15		
95% Queue Length, Q ₉₅ (veh)			10.4			37.8				2.2				0.5		
95% Queue Length, Q ₉₅ (ft)			264.2			945.0				55.4				12.5		
Control Delay (s/veh)			294.7			3732.1				24.5				20.9		
Level of Service (LOS)			F			F				C				C		
Approach Delay (s/veh)	294.7				3732.1				2.3				0.7			
Approach LOS	F				F				A				A			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AG	Intersection	Carlisle & Prospect
Agency/Co.	BH	Jurisdiction	CoA
Date Performed	6/5/2024	East/West Street	Prospect Ave
Analysis Year	2026	North/South Street	Carlisle Blvd
Time Analyzed	NBPM	Peak Hour Factor	0.85
Intersection Orientation	North-South	Analysis Time Period (hrs)	1.00
Project Description	Menaul & Carlisle TIA		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	1	3	0	0	1	3	0
Configuration			LTR				LTR			L	T	TR		L	T	TR
Volume (veh/h)		12	0	94		32	0	28	0	100	1495	49	0	56	1493	43
Percent Heavy Vehicles (%)		0	0	0		0	0	0	1	1			0	0		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		6.4	6.5	7.1		6.4	6.5	7.1		5.3				5.3		
Critical Headway (sec)		6.40	6.50	7.10		6.40	6.50	7.10		5.32				5.30		
Base Follow-Up Headway (sec)		3.8	4.0	3.9		3.8	4.0	3.9		3.1				3.1		
Follow-Up Headway (sec)		3.80	4.00	3.90		3.80	4.00	3.90		3.11				3.10		

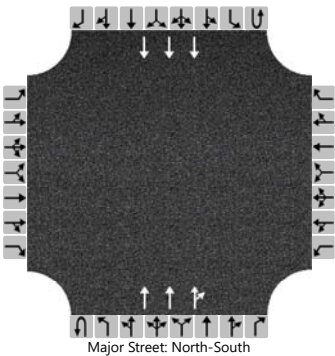
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			125			71				118				66		
Capacity, c (veh/h)			19			3				158				158		
v/c Ratio			6.49			25.65				0.74				0.42		
95% Queue Length, Q ₉₅ (veh)			56.1			36.8				6.6				2.0		
95% Queue Length, Q ₉₅ (ft)			1402.5			920.0				166.3				50.0		
Control Delay (s/veh)			10290.8			47009.2				86.1				43.7		
Level of Service (LOS)			F			F				F				E		
Approach Delay (s/veh)	10290.8				47009.2				5.2				1.5			
Approach LOS	F				F				A				A			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AG	Intersection	Carlisle & Cutler
Agency/Co.	BH	Jurisdiction	CoA
Date Performed	6/5/2024	East/West Street	Cutler Ave
Analysis Year	2026	North/South Street	Carlisle Blvd
Time Analyzed	NBAM	Peak Hour Factor	0.90
Intersection Orientation	North-South	Analysis Time Period (hrs)	1.00
Project Description	Carlisle & Menaul TIA		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	0	0	0	0	3	0	0	0	3	0
Configuration											T	TR			T	
Volume (veh/h)											1258	168			1035	
Percent Heavy Vehicles (%)																
Proportion Time Blocked																
Percent Grade (%)																
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)																
Critical Headway (sec)																
Base Follow-Up Headway (sec)																
Follow-Up Headway (sec)																

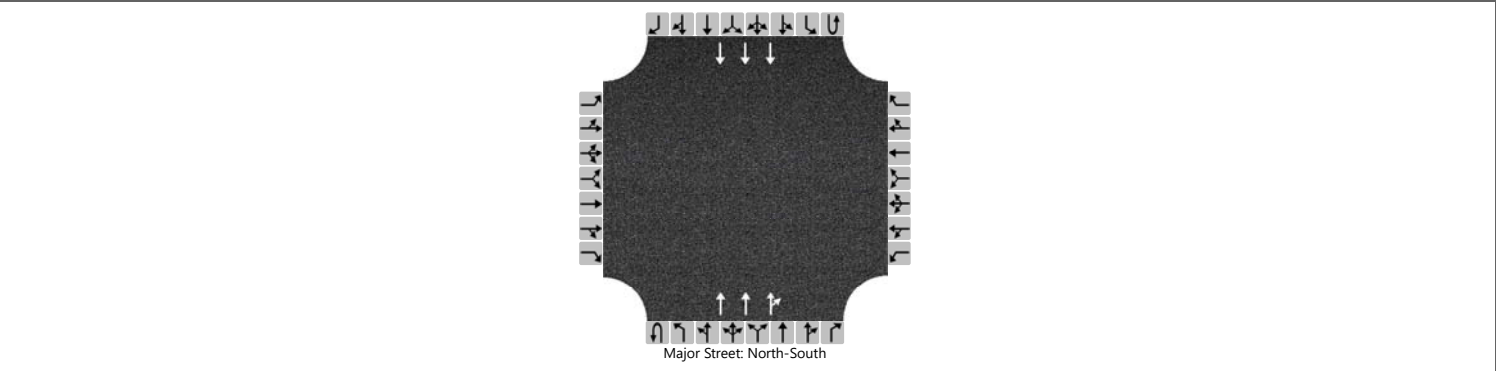
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)																
Capacity, c (veh/h)																
v/c Ratio																
95% Queue Length, Q ₉₅ (veh)																
95% Queue Length, Q ₉₅ (ft)																
Control Delay (s/veh)																
Level of Service (LOS)																
Approach Delay (s/veh)																
Approach LOS																

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AG	Intersection	Carlisle & Cutler
Agency/Co.	BH	Jurisdiction	CoA
Date Performed	6/5/2024	East/West Street	Cutler Ave
Analysis Year	2026	North/South Street	Carlisle Blvd
Time Analyzed	NBPM	Peak Hour Factor	0.62
Intersection Orientation	North-South	Analysis Time Period (hrs)	1.00
Project Description	Carlisle & Menaul TIA		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	0	0	0	0	3	0	0	0	3	0
Configuration											T	TR			T	
Volume (veh/h)											1642	133			1559	
Percent Heavy Vehicles (%)																
Proportion Time Blocked																
Percent Grade (%)																
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)																
Critical Headway (sec)																
Base Follow-Up Headway (sec)																
Follow-Up Headway (sec)																

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)																
Capacity, c (veh/h)																
v/c Ratio																
95% Queue Length, Q ₉₅ (veh)																
95% Queue Length, Q ₉₅ (ft)																
Control Delay (s/veh)																
Level of Service (LOS)																
Approach Delay (s/veh)																
Approach LOS																

HCS Two-Way Stop-Control Report

General Information

Analyst

AG

Agency/Co.

BH

Date Performed

6/5/2024

Analysis Year

2026

Time Analyzed

NBAM

Intersection Orientation

East-West

Project Description

Carlisle & Menaul TIA

Site Information

Intersection

Menaul & Bryn Mawr

Jurisdiction

CoA

East/West Street

Menaul Blvd

North/South Street

Bryn Mawr/American Dr

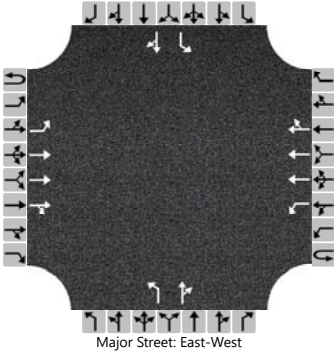
Peak Hour Factor

0.73

Analysis Time Period (hrs)

1.00

Lanes



Major Street: East-West

Vehicle Volumes and Adjustments																
Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	3	0	0	1	3	0		1	1	0		1	1	0
Configuration		L	T	TR		L	T	TR		L		TR		L		TR
Volume (veh/h)	0	38	614	14	0	20	799	6		10	0	23		6	1	36
Percent Heavy Vehicles (%)	1	1			1	1				0	0	0		2	2	2
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways																
Base Critical Headway (sec)		5.3				5.3				6.4	6.5	7.1		6.4	6.5	7.1
Critical Headway (sec)		5.32				5.32				6.40	6.50	7.10		6.44	6.54	7.14
Base Follow-Up Headway (sec)		3.1				3.1				3.8	4.0	3.9		3.8	4.0	3.9
Follow-Up Headway (sec)		3.11				3.11				3.80	4.00	3.90		3.82	4.02	3.92

Delay, Queue Length, and Level of Service																
Flow Rate, v (veh/h)		52				27				14		32		8		51
Capacity, c (veh/h)		352				460				96		494		84		327
v/c Ratio		0.15				0.06				0.14		0.06		0.10		0.15
95% Queue Length, Q ₉₅ (veh)		0.5				0.2				0.5		0.2		0.3		0.5
95% Queue Length, Q ₉₅ (ft)		12.6				5.0				12.5		5.0		7.6		12.7
Control Delay (s/veh)		17.0				13.3				48.7		12.8		52.8		18.0
Level of Service (LOS)		C				B				E		B		F		C
Approach Delay (s/veh)	1.0				0.3				23.7				22.9			
Approach LOS	A				A				C				C			

Copyright © 2024 University of Florida. All Rights Reserved.

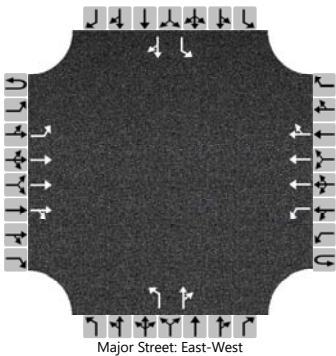
HCS™ TWSC Version 2024
2026 NBAM Menaul & Bryn Mawr.xtw

Generated: 6/5/2024 4:29:57 PM

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AG	Intersection	Menaul & Bryn Mawr
Agency/Co.	BH	Jurisdiction	CoA
Date Performed	6/5/2024	East/West Street	Menaul Blvd
Analysis Year	2026	North/South Street	Bryn Mawr/American Dr
Time Analyzed	NBPM	Peak Hour Factor	0.74
Intersection Orientation	East-West	Analysis Time Period (hrs)	1.00
Project Description	Carlisle & Menaul TIA		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	3	0	0	1	3	0		1	1	0		1	1	0
Configuration		L	T	TR		L	T	TR		L		TR		L		TR
Volume (veh/h)	0	63	964	19	0	45	1285	12		1	0	12		17	0	94
Percent Heavy Vehicles (%)	0	0			1	1				0	0	0		0	0	0
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		5.3				5.3				6.4	6.5	7.1		6.4	6.5	7.1
Critical Headway (sec)		5.30				5.32				6.40	6.50	7.10		6.40	6.50	7.10
Base Follow-Up Headway (sec)		3.1				3.1				3.8	4.0	3.9		3.8	4.0	3.9
Follow-Up Headway (sec)		3.10				3.11				3.80	4.00	3.90		3.80	4.00	3.90

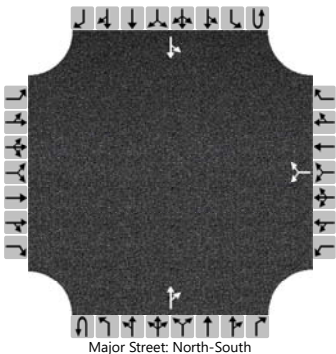
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		85				61				1		16		23		127
Capacity, c (veh/h)		170				273				8		349		11		254
v/c Ratio		0.50				0.22				0.17		0.05		2.17		0.50
95% Queue Length, Q ₉₅ (veh)		2.8				0.9				0.5		0.1		9.7		2.9
95% Queue Length, Q ₉₅ (ft)		70.0				22.7				12.5		2.5		242.5		72.5
Control Delay (s/veh)		46.7				21.9				533.8		15.8		2959.7		33.2
Level of Service (LOS)		E				C				F		C		F		D
Approach Delay (s/veh)	2.8				0.7				55.7				481.4			
Approach LOS	A				A				F				F			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AG	Intersection	Phoenix & Bryn Mawr
Agency/Co.	BH	Jurisdiction	CoA
Date Performed	6/5/2024	East/West Street	Phoenix Ave
Analysis Year	2026	North/South Street	American Ave (Bryn Mawr)
Time Analyzed	NBAM	Peak Hour Factor	0.83
Intersection Orientation	North-South	Analysis Time Period (hrs)	1.00
Project Description	Carlisle & Menaul TIA		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	1	0	0	0	1	0
Configuration							LR					TR		LT		
Volume (veh/h)						46		19			11	42		13	5	
Percent Heavy Vehicles (%)						3		3						6		
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						7.1		6.2						4.1		
Critical Headway (sec)						6.43		6.23						4.16		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.53		3.33						2.25		

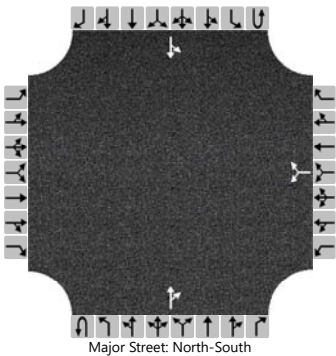
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						78								16		
Capacity, c (veh/h)						946								1513		
v/c Ratio						0.08								0.01		
95% Queue Length, Q ₉₅ (veh)						0.3								0.0		
95% Queue Length, Q ₉₅ (ft)						7.7								0.0		
Control Delay (s/veh)						9.1								7.4	0.1	
Level of Service (LOS)						A								A	A	
Approach Delay (s/veh)					9.1								5.4			
Approach LOS					A								A			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AG	Intersection	Phoenix & Bryn Mawr
Agency/Co.	BH	Jurisdiction	CoA
Date Performed	6/5/2024	East/West Street	Phoenix Ave
Analysis Year	2026	North/South Street	American Ave (Bryn Mawr)
Time Analyzed	NBPM	Peak Hour Factor	0.80
Intersection Orientation	North-South	Analysis Time Period (hrs)	1.00
Project Description	Carlisle & Menaul TIA		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	1	0	0	0	1	0
Configuration							LR					TR		LT		
Volume (veh/h)						88		14			17	78		17	3	
Percent Heavy Vehicles (%)						0		0						0		
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						7.1		6.2						4.1		
Critical Headway (sec)						6.40		6.20						4.10		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.50		3.30						2.20		

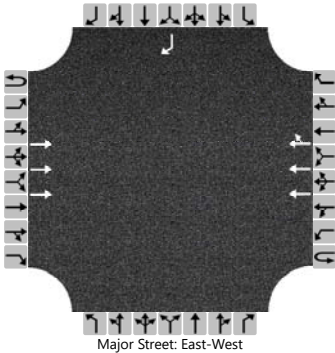
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						128								21		
Capacity, c (veh/h)						887								1482		
v/c Ratio						0.14								0.01		
95% Queue Length, Q ₉₅ (veh)						0.5								0.0		
95% Queue Length, Q ₉₅ (ft)						12.5								0.0		
Control Delay (s/veh)						9.7								7.5	0.1	
Level of Service (LOS)						A								A	A	
Approach Delay (s/veh)					9.7								6.4			
Approach LOS					A								A			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AG	Intersection	Menaul & Access 1
Agency/Co.	BH	Jurisdiction	CoA
Date Performed	6/5/2024	East/West Street	Menaul Blvd
Analysis Year	2026	North/South Street	Access 1
Time Analyzed	NBAM	Peak Hour Factor	0.77
Intersection Orientation	East-West	Analysis Time Period (hrs)	1.00
Project Description	Carlisle & Menaul TIA		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	3	0	0	0	3	0		0	0	0		0	0	1
Configuration			T				T	TR								R
Volume (veh/h)			644				831	10								8
Percent Heavy Vehicles (%)																0
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized													No			
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)																7.1
Critical Headway (sec)																7.10
Base Follow-Up Headway (sec)																3.9
Follow-Up Headway (sec)																3.90

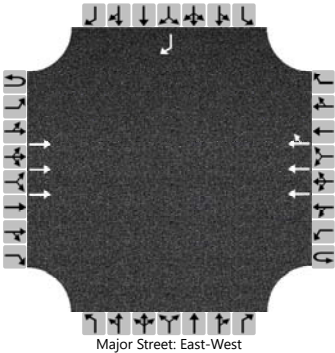
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)																10
Capacity, c (veh/h)																417
v/c Ratio																0.02
95% Queue Length, Q ₉₅ (veh)																0.1
95% Queue Length, Q ₉₅ (ft)																2.5
Control Delay (s/veh)																13.9
Level of Service (LOS)																B
Approach Delay (s/veh)													13.9			
Approach LOS													B			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AG	Intersection	Menaul & Access 1
Agency/Co.	BH	Jurisdiction	CoA
Date Performed	6/5/2024	East/West Street	Menaul Blvd
Analysis Year	2026	North/South Street	Access 1
Time Analyzed	NBPM	Peak Hour Factor	0.57
Intersection Orientation	East-West	Analysis Time Period (hrs)	1.00
Project Description	Carlisle & Menaul TIA		

Lanes



Vehicle Volumes and Adjustments

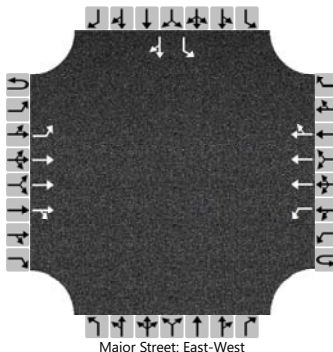
Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	3	0	0	0	3	0		0	0	0		0	0	1
Configuration			T				T	TR								R
Volume (veh/h)			993				1203	12								8
Percent Heavy Vehicles (%)																0
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized													No			
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)																7.1
Critical Headway (sec)																7.10
Base Follow-Up Headway (sec)																3.9
Follow-Up Headway (sec)																3.90

Delay, Queue Length, and Level of Service

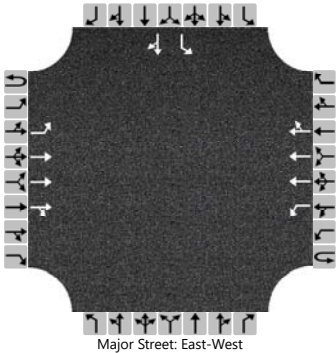
Flow Rate, v (veh/h)																14
Capacity, c (veh/h)																190
v/c Ratio																0.07
95% Queue Length, Q ₉₅ (veh)																0.2
95% Queue Length, Q ₉₅ (ft)																5.0
Control Delay (s/veh)																25.4
Level of Service (LOS)																D
Approach Delay (s/veh)													25.4			
Approach LOS													D			

HCS Two-Way Stop-Control Report																	
General Information						Site Information											
Analyst	AG					Intersection				Menaul & Access 2							
Agency/Co.	BH					Jurisdiction				CoA							
Date Performed	6/5/2024					East/West Street				Menaul Blvd							
Analysis Year	2026					North/South Street				Access 2							
Time Analyzed	NBAM					Peak Hour Factor				0.78							
Intersection Orientation	East-West					Analysis Time Period (hrs)				1.00							
Project Description	Carlisle & Menaul TIA																
Lanes																	
																	
Vehicle Volumes and Adjustments																	
Approach	Eastbound				Westbound				Northbound				Southbound				
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12	
Number of Lanes	0	1	3	0	0	1	3	0		0	0	0		1	1	0	
Configuration		L	T	TR		L	T	TR						L		TR	
Volume (veh/h)	0	26	615	8	0	34	786	47						8	1	55	
Percent Heavy Vehicles (%)	1	1			0	0								2	2	2	
Proportion Time Blocked																	
Percent Grade (%)													0				
Right Turn Channelized																	
Median Type Storage	Undivided																
Critical and Follow-up Headways																	
Base Critical Headway (sec)		5.3				5.3								6.4	6.5	7.1	
Critical Headway (sec)		5.32				5.30								6.44	6.54	7.14	
Base Follow-Up Headway (sec)		3.1				3.1								3.8	4.0	3.9	
Follow-Up Headway (sec)		3.11				3.10								3.82	4.02	3.92	
Delay, Queue Length, and Level of Service																	
Flow Rate, v (veh/h)		33				44								10		72	
Capacity, c (veh/h)		366				496								105		371	
v/c Ratio		0.09				0.09								0.10		0.19	
95% Queue Length, Q ₉₅ (veh)		0.3				0.3								0.3		0.7	
95% Queue Length, Q ₉₅ (ft)		7.6				7.5								7.6		17.8	
Control Delay (s/veh)		15.8				13.0								43.0		17.0	
Level of Service (LOS)		C				B								E		C	
Approach Delay (s/veh)	0.6				0.5								20.3				
Approach LOS	A				A								C				

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AG	Intersection	Menaul & Access 2
Agency/Co.	BH	Jurisdiction	CoA
Date Performed	6/5/2024	East/West Street	Menaul Blvd
Analysis Year	2026	North/South Street	Access 2
Time Analyzed	NBPM	Peak Hour Factor	0.88
Intersection Orientation	East-West	Analysis Time Period (hrs)	1.00
Project Description	Carlisle & Menaul TIA		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	3	0	0	1	3	0		0	0	0		1	1	0
Configuration		L	T	TR		L	T	TR						L		TR
Volume (veh/h)	0	30	979	0	0	34	1156	74						24	0	38
Percent Heavy Vehicles (%)	0	0			0	0								0	0	0
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		5.3				5.3								6.4	6.5	7.1
Critical Headway (sec)		5.30				5.30								6.40	6.50	7.10
Base Follow-Up Headway (sec)		3.1				3.1								3.8	4.0	3.9
Follow-Up Headway (sec)		3.10				3.10								3.80	4.00	3.90

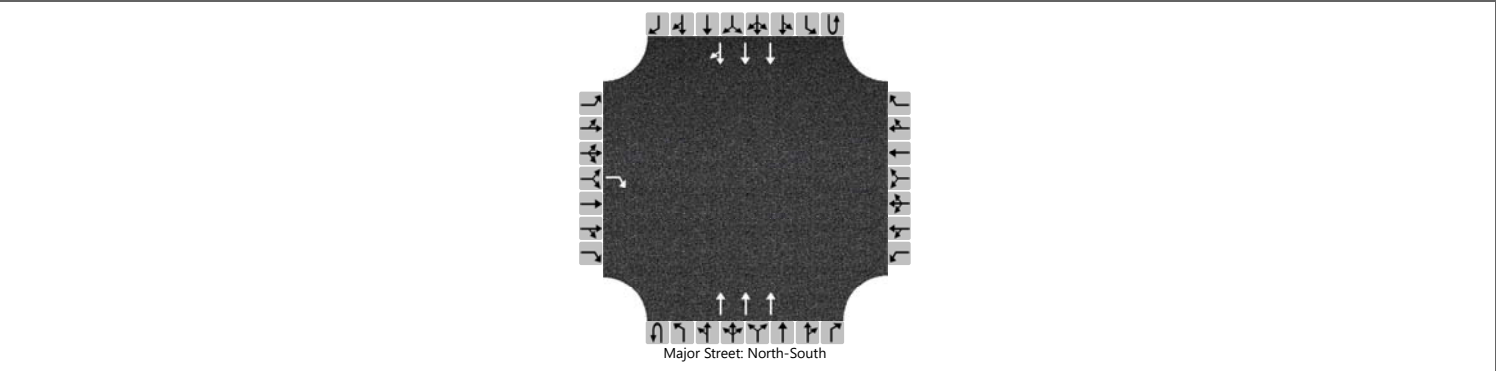
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		34				39								27		43
Capacity, c (veh/h)		255				351								54		332
v/c Ratio		0.13				0.11								0.50		0.13
95% Queue Length, Q ₉₅ (veh)		0.5				0.4								2.6		0.4
95% Queue Length, Q ₉₅ (ft)		12.5				10.0								65.0		10.0
Control Delay (s/veh)		21.3				16.5								134.7		17.5
Level of Service (LOS)		C				C								F		C
Approach Delay (s/veh)	0.6				0.4								62.9			
Approach LOS	A				A								F			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AG	Intersection	Carlisle & Access 3
Agency/Co.	BH	Jurisdiction	CoA
Date Performed	6/5/2024	East/West Street	Access 3
Analysis Year	2026	North/South Street	Carlisle Blvd
Time Analyzed	NBAM	Peak Hour Factor	0.90
Intersection Orientation	North-South	Analysis Time Period (hrs)	1.00
Project Description	Carlisle & Menaul TIA		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	1		0	0	0	0	0	3	0	0	0	3	0
Configuration				R							T				T	TR
Volume (veh/h)				31							1065				1019	37
Percent Heavy Vehicles (%)				0												
Proportion Time Blocked																
Percent Grade (%)	0															
Right Turn Channelized	No															
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)				7.1												
Critical Headway (sec)				7.10												
Base Follow-Up Headway (sec)				3.9												
Follow-Up Headway (sec)				3.90												

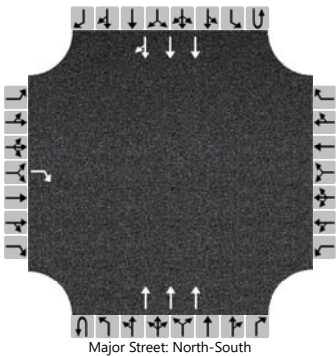
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)				34												
Capacity, c (veh/h)				392												
v/c Ratio				0.09												
95% Queue Length, Q ₉₅ (veh)				0.3												
95% Queue Length, Q ₉₅ (ft)				7.5												
Control Delay (s/veh)				15.1												
Level of Service (LOS)				C												
Approach Delay (s/veh)	15.1															
Approach LOS	C															

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AG	Intersection	Carlisle & Access 3
Agency/Co.	BH	Jurisdiction	CoA
Date Performed	6/5/2024	East/West Street	Access 3
Analysis Year	2026	North/South Street	Carlisle Blvd
Time Analyzed	NBPM	Peak Hour Factor	0.85
Intersection Orientation	North-South	Analysis Time Period (hrs)	1.00
Project Description	Carlisle & Menaul TIA		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	1		0	0	0	0	0	3	0	0	0	3	0
Configuration				R							T				T	TR
Volume (veh/h)				8							1536				1504	11
Percent Heavy Vehicles (%)				0												
Proportion Time Blocked																
Percent Grade (%)	0															
Right Turn Channelized	No															
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)				7.1												
Critical Headway (sec)				7.10												
Base Follow-Up Headway (sec)				3.9												
Follow-Up Headway (sec)				3.90												

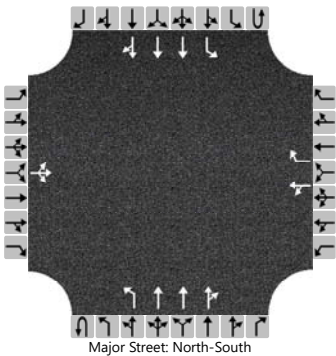
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)				9												
Capacity, c (veh/h)				248												
v/c Ratio				0.04												
95% Queue Length, Q ₉₅ (veh)				0.1												
95% Queue Length, Q ₉₅ (ft)				2.5												
Control Delay (s/veh)				20.1												
Level of Service (LOS)				C												
Approach Delay (s/veh)	20.1															
Approach LOS	C															

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AG	Intersection	Carlisle & Access 4
Agency/Co.	BH	Jurisdiction	CoA
Date Performed	6/5/2024	East/West Street	Access 4
Analysis Year	2026	North/South Street	Carlisle Blvd
Time Analyzed	NBAM	Peak Hour Factor	0.80
Intersection Orientation	North-South	Analysis Time Period (hrs)	1.00
Project Description	Carlisle & Menaul TIA		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	1	0	1	3	0	0	1	3	0
Configuration			LTR			LT		R		L	T	TR		L	T	TR
Volume (veh/h)		6	1	4		0	0	5	0	7	1063	2	0	8	1038	2
Percent Heavy Vehicles (%)		0	0	0		0	0	0	1	1			0	0		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized					No											
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		6.4	6.5	7.1		6.4	6.5	7.1		5.3				5.3		
Critical Headway (sec)		6.40	6.50	7.10		6.40	6.50	7.10		5.32				5.30		
Base Follow-Up Headway (sec)		3.8	4.0	3.9		3.8	4.0	3.9		3.1				3.1		
Follow-Up Headway (sec)		3.80	4.00	3.90		3.80	4.00	3.90		3.11				3.10		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			14		0		6		9					10		
Capacity, c (veh/h)			78		0		349		282					275		
v/c Ratio			0.18				0.02		0.03					0.04		
95% Queue Length, Q ₉₅ (veh)			0.6				0.1		0.1					0.1		
95% Queue Length, Q ₉₅ (ft)			15.0				2.5		2.5					2.5		
Control Delay (s/veh)			61.4				15.5		18.2					18.6		
Level of Service (LOS)			F				C		C					C		
Approach Delay (s/veh)	61.4								0.1				0.1			
Approach LOS	F								A				A			

HCS Two-Way Stop-Control Report

General Information

Analyst

AG

Agency/Co.

BH

Date Performed

6/5/2024

Analysis Year

2026

Time Analyzed

NBPM

Intersection Orientation

North-South

Project Description

Carlisle & Menaul TIA

Site Information

Intersection

Carlisle & Access 4

Jurisdiction

CoA

East/West Street

Access 4

North/South Street

Carlisle Blvd

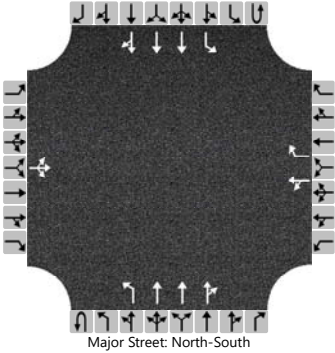
Peak Hour Factor

0.78

Analysis Time Period (hrs)

1.00

Lanes



Vehicle Volumes and Adjustments																
Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	1	0	1	3	0	0	1	3	0
Configuration			LTR			LT		R		L	T	TR		L	T	TR
Volume (veh/h)		1	0	5		7	1	53	0	6	1522	13	0	43	1503	2
Percent Heavy Vehicles (%)		0	0	0		0	0	0	0	0			0	0		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized					No											
Median Type Storage	Undivided															

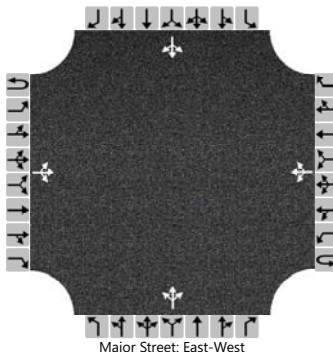
Critical and Follow-up Headways																
Base Critical Headway (sec)		6.4	6.5	7.1		6.4	6.5	7.1		5.3				5.3		
Critical Headway (sec)		6.40	6.50	7.10		6.40	6.50	7.10		5.30				5.30		
Base Follow-Up Headway (sec)		3.8	4.0	3.9		3.8	4.0	3.9		3.1				3.1		
Follow-Up Headway (sec)		3.80	4.00	3.90		3.80	4.00	3.90		3.10				3.10		

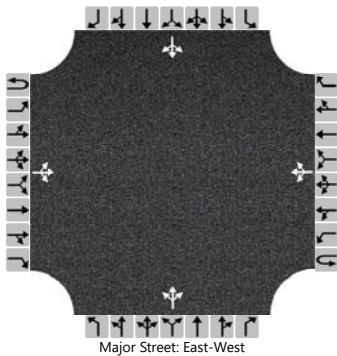
Delay, Queue Length, and Level of Service																
Flow Rate, v (veh/h)			8			10		68		8				55		
Capacity, c (veh/h)			13			6		216		139				133		
v/c Ratio			0.61			1.70		0.32		0.06				0.41		
95% Queue Length, Q ₉₅ (veh)			2.4			5.1		1.4		0.2				2.0		
95% Queue Length, Q ₉₅ (ft)			60.0			127.5		35.0		5.0				50.0		
Control Delay (s/veh)			592.1			2713.9		29.3		32.4				50.9		
Level of Service (LOS)			F			F		D		D				F		
Approach Delay (s/veh)	592.1				381.4				0.1				1.4			
Approach LOS	F				F				A				A			

Copyright © 2024 University of Florida. All Rights Reserved.

HCS™ TWSC Version 2024
2026 NBPM Carlisle & Access 4.xtw

Generated: 6/5/2024 4:37:00 PM

HCS Two-Way Stop-Control Report																
General Information							Site Information									
Analyst	AG						Intersection				Phoenix & Access 5					
Agency/Co.	BH						Jurisdiction				CoA					
Date Performed	6/5/2024						East/West Street				Phoenix Ave					
Analysis Year	2026						North/South Street				Access 5/Prive Driveway					
Time Analyzed	NBAM						Peak Hour Factor				0.77					
Intersection Orientation	East-West						Analysis Time Period (hrs)				1.00					
Project Description	Carlisle & Menaul TIA															
Lanes																
																
Vehicle Volumes and Adjustments																
Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		5	78	1		0	129	39		0	5	0		29	2	10
Percent Heavy Vehicles (%)		0				1				0	0	0		0	0	0
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized																
Median Type Storage	Undivided															
Critical and Follow-up Headways																
Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.10				4.11				7.10	6.50	6.20		7.10	6.50	6.20
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.20				2.21				3.50	4.00	3.30		3.50	4.00	3.30
Delay, Queue Length, and Level of Service																
Flow Rate, v (veh/h)		6				0					6				53	
Capacity, c (veh/h)		1363				1496					587				676	
v/c Ratio		0.00				0.00					0.01				0.08	
95% Queue Length, Q ₉₅ (veh)		0.0				0.0					0.0				0.3	
95% Queue Length, Q ₉₅ (ft)											0.0				7.5	
Control Delay (s/veh)		7.7	0.0	0.0		7.4	0.0	0.0			11.2				10.8	
Level of Service (LOS)		A	A	A		A	A	A			B				B	
Approach Delay (s/veh)	0.5				0.0				11.2				10.8			
Approach LOS	A				A				B				B			

HCS Two-Way Stop-Control Report																
General Information							Site Information									
Analyst	AG						Intersection				Phoenix & Access 5					
Agency/Co.	BH						Jurisdiction				CoA					
Date Performed	6/5/2024						East/West Street				Phoenix Ave					
Analysis Year	2026						North/South Street				Access 5/Prive Driveway					
Time Analyzed	NBPM						Peak Hour Factor				0.85					
Intersection Orientation	East-West						Analysis Time Period (hrs)				1.00					
Project Description	Carlisle & Menaul TIA															
Lanes																
																
Vehicle Volumes and Adjustments																
Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		6	162	3		1	125	55		3	1	2		37	1	16
Percent Heavy Vehicles (%)		0				1				0	0	0		0	0	0
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized																
Median Type Storage	Undivided															
Critical and Follow-up Headways																
Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.10				4.11				7.10	6.50	6.20		7.10	6.50	6.20
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.20				2.21				3.50	4.00	3.30		3.50	4.00	3.30
Delay, Queue Length, and Level of Service																
Flow Rate, v (veh/h)		7				1					7				64	
Capacity, c (veh/h)		1371				1385					617				631	
v/c Ratio		0.01				0.00					0.01				0.10	
95% Queue Length, Q ₉₅ (veh)		0.0				0.0					0.0				0.3	
95% Queue Length, Q ₉₅ (ft)											0.0				7.5	
Control Delay (s/veh)		7.6	0.0	0.0		7.6	0.0	0.0			10.9				11.3	
Level of Service (LOS)		A	A	A		A	A	A			B				B	
Approach Delay (s/veh)	0.3				0.0				10.9				11.3			
Approach LOS	A				A				B				B			

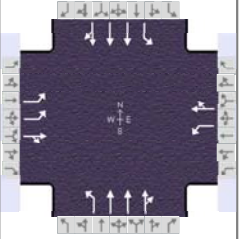
APPENDIX F
2026 BUILD INTERSECTION CAPACITY ANALYSIS

HCS Signalized Intersection Results Summary

General Information

Agency	BH		
Analyst	AG	Analysis Date	Jun 4, 2024
Jurisdiction	CoA	Time Period	BAM
Urban Street	Carlisle Blvd	Analysis Year	2026
Intersection	Carlisle & Claremont	File Name	2026 BAM Signali
Project Description	Carlisle & Menaul TIA		

Intersection Information



Demand Information

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	67	11	89	45	15	15	108	791	23	12	786	54

Signal Information

Cycle, s	110.0	Reference Phase	2									
Offset, s	53	Reference Point	End									
Uncoordinated	No	Simult. Gap E/W	On	Green	0.9	3.7	79.4	12.5	0.0	0.0		
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	3.5	0.0	4.0	3.5	0.0	0.0		
				Red	0.5	0.0	1.0	1.0	0.0	0.0		

Timer Results

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4		8	5	2	1	6
Case Number		6.0		6.0	1.1	4.0	1.1	4.0
Phase Duration, s		17.0		17.0	8.6	88.1	4.9	84.4
Change Period, ($Y+R_c$), s		4.5		4.5	4.0	5.0	4.0	5.0
Max Allow Headway (MAH), s		3.2		3.2	3.1	0.0	3.1	0.0
Queue Clearance Time (g_s), s		8.4		12.0	4.4		2.2	
Green Extension Time (g_e), s		0.5		0.4	0.2	0.0	0.0	0.0
Phase Call Probability		1.00		1.00	0.99		0.31	
Max Out Probability		0.00		0.00	0.00		0.00	

Movement Group Results

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	67	100		45	30		148	749	369	12	565	275
Adjusted Saturation Flow Rate (s), veh/h/ln	1391	1625		1305	1730		1795	1885	1857	1795	1885	1821
Queue Service Time (g_s), s	2.4	6.4		3.7	1.7		2.4	2.9	2.9	0.2	5.4	5.4
Cycle Queue Clearance Time (g_c), s	4.1	6.4		10.0	1.7		2.4	2.9	2.9	0.2	5.4	5.4
Green Ratio (g/C)	0.11	0.11		0.11	0.11		0.78	0.76	0.76	0.73	0.72	0.72
Capacity (c), veh/h	407	186		140	198		583	2845	1401	441	2719	1313
Volume-to-Capacity Ratio (X)	0.165	0.538		0.322	0.152		0.254	0.263	0.263	0.027	0.208	0.209
Back of Queue (Q), ft/ln (95 th percentile)	38	118		55	34		26	37	40	3	84	85
Back of Queue (Q), veh/ln (95 th percentile)	1.5	4.7		2.2	1.3		1.0	1.5	1.6	0.1	3.4	3.4
Queue Storage Ratio (RQ) (95 th percentile)	0.22	0.00		1.38	0.84		0.14	0.00	0.00	0.04	0.00	0.00
Uniform Delay (d_1), s/veh	45.7	46.0		50.7	43.9		3.1	1.5	1.5	4.1	5.0	5.0
Incremental Delay (d_2), s/veh	0.1	0.9		0.5	0.1		0.1	0.2	0.4	0.0	0.2	0.4
Initial Queue Delay (d_3), s/veh	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	45.8	46.9		51.1	44.0		3.1	1.7	1.9	4.1	5.2	5.4
Level of Service (LOS)	D	D		D	D		A	A	A	A	A	A
Approach Delay, s/veh / LOS	46.4	D		48.3	D		1.9	A		5.2	A	
Intersection Delay, s/veh / LOS	7.7						A					

Multimodal Results

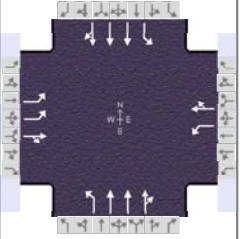
	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	2.60	C		2.60	C		1.85	B		2.05	B	
Bicycle LOS Score / LOS	0.76	A		0.61	A		0.99	A		0.96	A	

HCS Signalized Intersection Results Summary

General Information

Agency	BH		
Analyst	AG	Analysis Date	Jun 4, 2024
Jurisdiction	CoA	Time Period	BPM
Urban Street	Carlisle Blvd	Analysis Year	2026
Intersection	Carlisle & Claremont	File Name	2026 BPM Signali
Project Description	Carlisle & Menaul TIA		

Intersection Information



Demand Information

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	196	22	143	41	16	23	112	1123	45	36	1134	106

Signal Information

Cycle, s	120.0	Reference Phase	2									
Offset, s	53	Reference Point	End									
Uncoordinated	No	Simult. Gap E/W	On	Green	2.1	3.1	83.3	18.0	0.0	0.0		
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	3.5	0.0	4.0	3.5	0.0	0.0		
				Red	0.5	0.0	1.0	1.0	0.0	0.0		

Timer Results

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4		8	5	2	1	6
Case Number		6.0		6.0	1.1	4.0	1.1	4.0
Phase Duration, s		22.5		22.5	9.2	91.4	6.1	88.3
Change Period, ($Y+R_c$), s		4.5		4.5	4.0	5.0	4.0	5.0
Max Allow Headway (MAH), s		3.2		3.2	3.1	0.0	3.1	0.0
Queue Clearance Time (g_s), s		13.4		17.2	5.0		2.7	
Green Extension Time (g_e), s		0.9		0.8	0.2	0.0	0.0	0.0
Phase Call Probability		1.00		1.00	0.99		0.70	
Max Out Probability		0.00		0.01	0.00		0.00	

Movement Group Results

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	196	165		41	39		149	1043	511	36	839	401
Adjusted Saturation Flow Rate (s), veh/h/ln	1390	1644		1240	1718		1810	1900	1861	1810	1900	1814
Queue Service Time (g_s), s	7.9	11.4		3.9	2.4		3.0	7.7	7.8	0.7	10.4	10.4
Cycle Queue Clearance Time (g_c), s	10.2	11.4		15.2	2.4		3.0	7.7	7.8	0.7	10.4	10.4
Green Ratio (g/C)	0.15	0.15		0.15	0.15		0.75	0.72	0.72	0.71	0.69	0.69
Capacity (c), veh/h	484	247		130	258		415	2735	1339	307	2638	1259
Volume-to-Capacity Ratio (X)	0.405	0.669		0.317	0.151		0.360	0.381	0.381	0.117	0.318	0.318
Back of Queue (Q), ft/ln (95 th percentile)	123	207		55	46		36	102	107	11	177	174
Back of Queue (Q), veh/ln (95 th percentile)	4.9	8.3		2.2	1.8		1.4	4.1	4.3	0.4	7.1	7.0
Queue Storage Ratio (RQ) (95 th percentile)	0.70	0.00		1.37	1.14		0.20	0.00	0.00	0.16	0.00	0.00
Uniform Delay (d_1), s/veh	48.7	48.2		55.3	44.3		4.6	3.3	3.4	5.3	7.2	7.2
Incremental Delay (d_2), s/veh	0.2	1.2		0.5	0.1		0.1	0.2	0.5	0.1	0.3	0.7
Initial Queue Delay (d_3), s/veh	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	48.9	49.3		55.8	44.4		4.8	3.5	3.8	5.4	7.5	7.9
Level of Service (LOS)	D	D		E	D		A	A	A	A	A	A
Approach Delay, s/veh / LOS	49.1		D	50.3		D	3.7		A	7.6		A
Intersection Delay, s/veh / LOS	11.0						B					

Multimodal Results

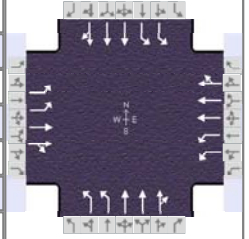
	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	2.60		C	2.60		C	1.86		B	2.06		B
Bicycle LOS Score / LOS	1.08		A	0.62		A	1.19		A	1.19		A

HCS Signalized Intersection Results Summary

General Information

Agency	BH		
Analyst	AG	Analysis Date	May 1, 2025
Jurisdiction	CoA	Time Period	BAM
Urban Street	Carlisle Blvd	Analysis Year	2026
Intersection	Carlisle & Menaul	File Name	2026 BAM Signali
Project Description	Carlisle & Menaul TIA		

Intersection Information



Demand Information

Approach Movement	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	86	470	144	108	513	220	310	834	131	226	846	108

Signal Information

Cycle, s	110.0	Reference Phase	2									
Offset, s	98	Reference Point	End									
Uncoordinated	No	Simult. Gap E/W	On									
Force Mode	Fixed	Simult. Gap N/S	On									
				Green	7.6	1.9	34.4	4.4	0.8	39.3		
				Yellow	3.0	3.0	4.2	3.0	0.0	4.8		
				Red	0.5	0.5	1.0	0.5	0.0	1.0		

Timer Results

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	5	2	1	6
Case Number	2.0	4.0	2.0	4.0	2.0	4.0	2.0	4.0
Phase Duration, s	7.9	45.1	8.8	46.0	16.5	45.0	11.1	39.6
Change Period, ($Y+R_c$), s	3.5	5.8	3.5	5.8	3.5	5.2	3.5	5.2
Max Allow Headway (MAH), s	3.1	3.1	3.1	3.1	3.1	0.0	3.1	0.0
Queue Clearance Time (g_s), s	4.7	16.5	5.3	13.3	12.7		7.4	
Green Extension Time (g_e), s	0.1	3.0	0.1	3.0	0.2	0.0	0.2	0.0
Phase Call Probability	0.93	1.00	0.96	1.00	1.00		1.00	
Max Out Probability	0.00	0.01	0.00	0.00	1.00		0.00	

Movement Group Results

Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	86	318	296	108	509	224	348	738	344	176	504	240
Adjusted Saturation Flow Rate (s), veh/h/ln	1743	1885	1733	1757	1900	1615	1743	1885	1751	1757	1900	1787
Queue Service Time (g_s), s	2.7	14.3	14.5	3.3	10.8	11.3	10.7	18.9	18.7	5.4	12.2	12.9
Cycle Queue Clearance Time (g_c), s	2.7	14.3	14.5	3.3	10.8	11.3	10.7	18.9	18.7	5.4	12.2	12.9
Green Ratio (g/C)	0.04	0.36	0.36	0.05	0.37	0.37	0.12	0.36	0.36	0.07	0.31	0.31
Capacity (c), veh/h	140	674	620	168	1388	590	411	1365	634	243	1190	559
Volume-to-Capacity Ratio (X)	0.613	0.472	0.477	0.644	0.366	0.381	0.845	0.541	0.543	0.726	0.423	0.429
Back of Queue (Q), ft/ln (95 th percentile)	54	278	262	67	214	201	219	354	333	108	247	256
Back of Queue (Q), veh/ln (95 th percentile)	2.1	11.0	10.5	2.7	8.6	8.1	8.7	14.1	13.3	4.3	9.9	10.2
Queue Storage Ratio (RQ) (95 th percentile)	0.24	0.00	0.00	0.38	0.00	0.00	1.15	0.00	0.00	0.54	0.00	0.00
Uniform Delay (d_1), s/veh	51.9	27.3	27.4	51.5	25.6	25.7	47.2	34.2	32.9	50.2	33.0	35.0
Incremental Delay (d_2), s/veh	1.6	2.4	2.6	1.6	0.7	1.9	10.1	1.4	3.0	1.5	1.1	2.4
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	53.6	29.7	30.0	53.0	26.3	27.6	57.3	35.6	36.0	51.7	34.1	37.3
Level of Service (LOS)	D	C	C	D	C	C	E	D	D	D	C	D
Approach Delay, s/veh / LOS	32.8	C		30.1	C		40.9	D		38.3	D	
Intersection Delay, s/veh / LOS	36.5						D					

Multimodal Results

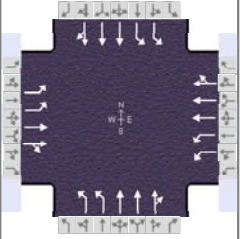
	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	2.71	C		2.71	C		2.58	C		2.58	C	
Bicycle LOS Score / LOS	1.07	A		0.95	A		1.19	A		1.14	A	

HCS Signalized Intersection Results Summary

General Information

Agency	BH		
Analyst	AG	Analysis Date	May 1, 2025
Jurisdiction	CoA	Time Period	BPM
Urban Street	Carlisle Blvd	Analysis Year	2026
Intersection	Carlisle & Menaul	File Name	2026 BPM Signalized Network.xus
Project Description	Carlisle & Menaul TIA		

Intersection Information



Demand Information

Approach Movement	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	149	720	221	238	895	352	428	1099	146	362	1195	118

Signal Information

Cycle, s	120.0	Reference Phase	2									
Offset, s	98	Reference Point	End									
Uncoordinated	No	Simult. Gap E/W	On	Green	11.8	0.4	33.2	7.1	3.1	42.9		
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	3.0	3.0	4.2	3.0	0.0	4.8		
				Red	0.5	0.5	1.0	0.5	0.0	1.0		

Timer Results

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	5	2	1	6
Case Number	2.0	4.0	2.0	4.0	2.0	4.0	2.0	4.0
Phase Duration, s	10.6	48.7	13.7	51.8	19.2	42.3	15.3	38.4
Change Period, ($Y+R_c$), s	3.5	5.8	3.5	5.8	3.5	5.2	3.5	5.2
Max Allow Headway (MAH), s	3.1	3.1	3.1	3.1	3.1	0.0	3.1	0.0
Queue Clearance Time (g_s), s	7.0	28.8	10.0	24.1	17.1		11.6	
Green Extension Time (g_e), s	0.2	5.0	0.3	5.7	0.0	0.0	0.3	0.0
Phase Call Probability	0.99	1.00	1.00	1.00	1.00		1.00	
Max Out Probability	0.02	0.26	0.06	0.10	1.00		0.38	

Movement Group Results

Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	149	490	451	238	873	374	446	882	414	285	699	334
Adjusted Saturation Flow Rate (s), veh/h/ln	1757	1900	1746	1757	1900	1625	1757	1900	1782	1757	1900	1810
Queue Service Time (g_s), s	5.0	26.8	26.8	8.0	22.1	22.1	15.1	26.7	26.6	9.6	20.1	20.6
Cycle Queue Clearance Time (g_c), s	5.0	26.8	26.8	8.0	22.1	22.1	15.1	26.7	26.6	9.6	20.1	20.6
Green Ratio (g/C)	0.06	0.36	0.36	0.09	0.38	0.38	0.13	0.31	0.31	0.10	0.28	0.28
Capacity (c), veh/h	208	679	623	300	1457	623	460	1174	550	347	1051	500
Volume-to-Capacity Ratio (X)	0.717	0.723	0.723	0.793	0.599	0.601	0.968	0.752	0.752	0.822	0.665	0.668
Back of Queue (Q), ft/ln (95 th percentile)	101	485	455	162	388	356	334	482	470	199	378	390
Back of Queue (Q), veh/ln (95 th percentile)	4.0	19.4	18.2	6.5	15.5	14.2	13.3	19.3	18.8	8.0	15.1	15.6
Queue Storage Ratio (RQ) (95 th percentile)	0.46	0.00	0.00	0.93	0.00	0.00	1.76	0.00	0.00	0.99	0.00	0.00
Uniform Delay (d_1), s/veh	55.5	33.4	33.4	53.8	29.6	29.6	47.3	46.4	45.5	53.8	41.6	43.4
Incremental Delay (d_2), s/veh	1.8	6.8	7.4	2.6	1.8	4.3	47.4	3.6	7.6	6.6	3.2	6.7
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	57.2	40.2	40.8	56.4	31.5	34.0	94.7	50.0	53.1	60.4	44.8	50.2
Level of Service (LOS)	E	D	D	E	C	C	F	D	D	E	D	D
Approach Delay, s/veh / LOS	42.8	D		36.1	D		62.1	E		49.5	D	
Intersection Delay, s/veh / LOS	48.6						D					

Multimodal Results

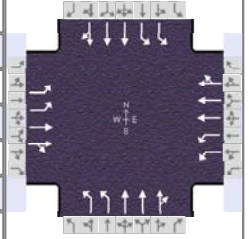
	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	2.71	C		2.71	C		2.59	C		2.59	C	
Bicycle LOS Score / LOS	1.39	A		1.30	A		1.41	A		1.41	A	

HCS Signalized Intersection Results Summary

General Information

Agency	BH		
Analyst	AG	Analysis Date	May 1, 2025
Jurisdiction	CoA	Time Period	BAM
Urban Street	Carlisle Blvd	Analysis Year	2026
Intersection	Carlisle & Menaul	File Name	2026 BAM Signaliz
Project Description	Carlisle & Menaul TIA - Optimized Signal Timing		

Intersection Information



Demand Information

Approach Movement	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	86	470	144	108	513	220	310	834	131	226	846	108

Signal Information

Cycle, s	110.0	Reference Phase	2									
Offset, s	98	Reference Point	End									
Uncoordinated	No	Simult. Gap E/W	On									
Force Mode	Fixed	Simult. Gap N/S	On									
				Green	7.6	3.9	32.4	4.4	0.8	39.3		
				Yellow	3.0	3.0	4.2	3.0	0.0	4.8		
				Red	0.5	0.5	1.0	0.5	0.0	1.0		

Timer Results

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	5	2	1	6
Case Number	2.0	4.0	2.0	4.0	2.0	4.0	2.0	4.0
Phase Duration, s	7.9	45.1	8.8	46.0	18.5	45.0	11.1	37.6
Change Period, ($Y+R_c$), s	3.5	5.8	3.5	5.8	3.5	5.2	3.5	5.2
Max Allow Headway (MAH), s	3.1	3.1	3.1	3.1	3.1	0.0	3.1	0.0
Queue Clearance Time (g_s), s	4.7	16.5	5.3	13.3	12.5		7.4	
Green Extension Time (g_e), s	0.1	3.0	0.1	3.0	0.3	0.0	0.2	0.0
Phase Call Probability	0.93	1.00	0.96	1.00	1.00		1.00	
Max Out Probability	0.00	0.01	0.00	0.00	1.00		0.00	

Movement Group Results

Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	86	318	296	108	509	224	348	738	344	176	504	240
Adjusted Saturation Flow Rate (s), veh/h/ln	1743	1885	1733	1757	1900	1615	1743	1885	1751	1757	1900	1787
Queue Service Time (g_s), s	2.7	14.3	14.5	3.3	10.8	11.3	10.5	18.9	18.7	5.4	12.5	13.1
Cycle Queue Clearance Time (g_c), s	2.7	14.3	14.5	3.3	10.8	11.3	10.5	18.9	18.7	5.4	12.5	13.1
Green Ratio (g/C)	0.04	0.36	0.36	0.05	0.37	0.37	0.14	0.36	0.36	0.07	0.29	0.29
Capacity (c), veh/h	140	674	620	168	1388	590	475	1365	634	243	1120	527
Volume-to-Capacity Ratio (X)	0.613	0.472	0.477	0.644	0.366	0.381	0.731	0.541	0.543	0.726	0.450	0.456
Back of Queue (Q), ft/ln (95 th percentile)	54	278	262	67	214	201	206	354	333	108	252	262
Back of Queue (Q), veh/ln (95 th percentile)	2.1	11.0	10.5	2.7	8.6	8.1	8.2	14.1	13.3	4.3	10.1	10.5
Queue Storage Ratio (RQ) (95 th percentile)	0.24	0.00	0.00	0.38	0.00	0.00	1.09	0.00	0.00	0.54	0.00	0.00
Uniform Delay (d_1), s/veh	51.9	27.3	27.4	51.5	25.6	25.7	45.5	34.2	32.9	50.2	34.5	36.6
Incremental Delay (d_2), s/veh	1.6	2.4	2.6	1.6	0.7	1.9	4.5	1.4	3.0	1.5	1.3	2.8
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	53.6	29.7	30.0	53.0	26.3	27.6	49.9	35.6	36.0	51.7	35.8	39.4
Level of Service (LOS)	D	C	C	D	C	C	D	D	D	D	D	D
Approach Delay, s/veh / LOS	32.8	C		30.1	C		39.2	D		39.8	D	
Intersection Delay, s/veh / LOS	36.2						D					

Multimodal Results

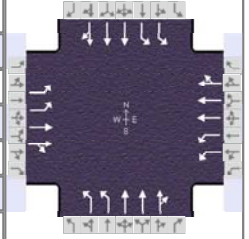
	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	2.71	C		2.71	C		2.58	C		2.58	C	
Bicycle LOS Score / LOS	1.07	A		0.95	A		1.19	A		1.14	A	

HCS Signalized Intersection Results Summary

General Information

Agency	BH		
Analyst	AG	Analysis Date	May 1, 2025
Jurisdiction	CoA	Time Period	BPM
Urban Street	Carlisle Blvd	Analysis Year	2026
Intersection	Carlisle & Menaul	File Name	2026 BPM Signaliz
Project Description	Carlisle & Menaul TIA - Optimized Signal Timing		

Intersection Information



Demand Information

Approach Movement	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	149	720	221	238	895	352	428	1099	146	362	1195	118

Signal Information

Cycle, s	90.0	Reference Phase	2									
Offset, s	4	Reference Point	End									
Uncoordinated	No	Simult. Gap E/W	On	Green	9.3	1.6	20.9	5.7	2.6	28.4		
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	3.0	3.0	4.2	3.0	0.0	4.8		
				Red	0.5	0.5	1.0	0.5	0.0	1.0		

Timer Results

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	5	2	1	6
Case Number	2.0	4.0	2.0	4.0	2.0	4.0	2.0	4.0
Phase Duration, s	9.2	34.2	11.8	36.8	17.9	31.2	12.8	26.1
Change Period, ($Y+R_c$), s	3.5	5.8	3.5	5.8	3.5	5.2	3.5	5.2
Max Allow Headway (MAH), s	3.1	3.1	3.1	3.1	3.1	0.0	3.1	0.0
Queue Clearance Time (g_s), s	5.7	23.4	7.9	19.7	13.8		9.2	
Green Extension Time (g_e), s	0.1	2.8	0.4	4.6	0.7	0.0	0.1	0.0
Phase Call Probability	0.98	1.00	1.00	1.00	1.00		1.00	
Max Out Probability	1.00	0.79	0.00	0.36	0.16		1.00	

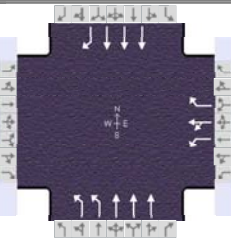
Movement Group Results

Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	149	490	451	238	873	374	466	923	433	285	699	334
Adjusted Saturation Flow Rate (s), veh/h/ln	1757	1900	1746	1757	1900	1625	1757	1900	1782	1757	1900	1810
Queue Service Time (g_s), s	3.7	21.4	21.4	5.9	17.6	17.7	11.8	20.7	20.9	7.2	14.4	14.4
Cycle Queue Clearance Time (g_c), s	3.7	21.4	21.4	5.9	17.6	17.7	11.8	20.7	20.9	7.2	14.4	14.4
Green Ratio (g/C)	0.06	0.32	0.32	0.09	0.34	0.34	0.16	0.29	0.29	0.10	0.23	0.23
Capacity (c), veh/h	221	600	551	324	1310	560	563	1097	515	364	882	420
Volume-to-Capacity Ratio (X)	0.673	0.818	0.818	0.735	0.666	0.668	0.828	0.841	0.841	0.784	0.793	0.796
Back of Queue (Q), ft/ln (95 th percentile)	73	424	400	115	316	298	226	374	399	160	241	258
Back of Queue (Q), veh/ln (95 th percentile)	2.9	16.9	16.0	4.6	12.7	11.9	9.0	15.0	16.0	6.4	9.6	10.3
Queue Storage Ratio (RQ) (95 th percentile)	0.33	0.00	0.00	0.66	0.00	0.00	1.19	0.00	0.00	0.80	0.00	0.00
Uniform Delay (d_1), s/veh	41.3	28.4	28.4	39.8	25.1	25.1	40.0	31.2	33.0	41.9	24.3	23.6
Incremental Delay (d_2), s/veh	1.3	13.0	14.1	1.2	2.7	6.4	3.5	6.7	14.0	7.2	7.2	15.0
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	42.6	41.4	42.5	41.0	27.8	31.5	43.5	37.9	47.1	49.1	31.4	38.6
Level of Service (LOS)	D	D	D	D	C	C	D	D	D	D	C	D
Approach Delay, s/veh / LOS	42.0	D		30.9	C		41.5	D		37.0	D	
Intersection Delay, s/veh / LOS	37.8						D					

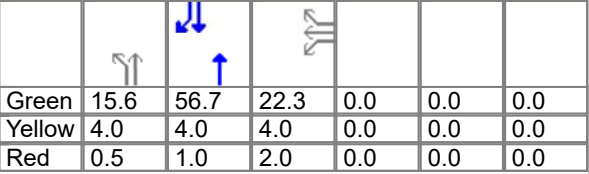
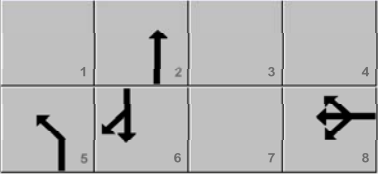
Multimodal Results

	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	2.70	C		2.70	C		2.58	C		2.58	C	
Bicycle LOS Score / LOS	1.39	A		1.30	A		1.41	A		1.41	A	

HCS Signalized Intersection Results Summary

General Information				Intersection Information		
Agency	BH			Duration, h	1.000	
Analyst	AG	Analysis Date	Jun 4, 2024	Area Type	Other	
Jurisdiction	CoA	Time Period	BAM	PHF	1.00	
Urban Street	Carlisle Blvd	Analysis Year	2026	Analysis Period	1> 7:00	
Intersection	Carlisle & I-40 WB	File Name	2026 BAM Signalized Network.xus			
Project Description	Carlisle & Menaul TIA					

Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h				256	3	292	422	1171			829	277

Signal Information											
Cycle, s	110.0	Reference Phase	2		15.6	56.7	22.3	0.0	0.0	0.0	
Offset, s	92	Reference Point	End								
Uncoordinated	No	Simult. Gap E/W	On								
Force Mode	Fixed	Simult. Gap N/S	On								
Green											
Yellow											
Red											

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase				8	5	2		6
Case Number				9.0	2.0	4.0		7.3
Phase Duration, s				28.3	20.1	81.7		61.7
Change Period, ($Y+R_c$), s				6.0	4.5	5.0		5.0
Max Allow Headway (MAH), s				3.2	3.1	0.0		0.0
Queue Clearance Time (g_s), s				21.4	14.7			
Green Extension Time (g_e), s				0.8	0.9	0.0		0.0
Phase Call Probability				1.00	1.00			
Max Out Probability				0.09	0.00			

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement				3	8	18	5	2			6	16
Adjusted Flow Rate (v), veh/h				128	131	292	410	1138			683	228
Adjusted Saturation Flow Rate (s), veh/h/ln				1810	1812	1610	1743	1712			1725	
Queue Service Time (g_s), s				6.7	6.8	19.4	12.7	12.0			8.7	
Cycle Queue Clearance Time (g_c), s				6.7	6.8	19.4	12.7	12.0			8.7	
Green Ratio (g/C)				0.20	0.20	0.20	0.14	0.70			0.52	
Capacity (c), veh/h				366	367	326	494	3583			2666	
Volume-to-Capacity Ratio (X)				0.350	0.357	0.896	0.830	0.318			0.256	
Back of Queue (Q), ft/ln (95 th percentile)				133	136	355	237	192			155	
Back of Queue (Q), veh/ln (95 th percentile)				5.3	5.4	14.2	9.4	7.6			6.2	
Queue Storage Ratio (RQ) (95 th percentile)				0.78	0.80	2.09	0.89	0.00			0.00	
Uniform Delay (d_1), s/veh				37.7	37.7	42.7	47.7	9.0			16.4	
Incremental Delay (d_2), s/veh				0.2	0.2	18.1	1.3	0.2			0.2	
Initial Queue Delay (d_3), s/veh				0.0	0.0	0.0	0.0	0.0			0.0	
Control Delay (d), s/veh				37.9	37.9	60.9	49.0	9.2			16.6	0.0
Level of Service (LOS)				D	D	E	D	A			B	A
Approach Delay, s/veh / LOS	0.0			50.1		D	19.7		B	12.5		B
Intersection Delay, s/veh / LOS	23.1						C					

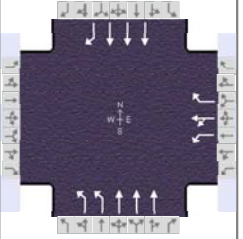
Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.74	C	2.61	C	1.86	B	1.67	B
Bicycle LOS Score / LOS			1.40	A	1.36	A	1.10	A

HCS Signalized Intersection Results Summary

General Information

Agency	BH		
Analyst	AG	Analysis Date	Jun 4, 2024
Jurisdiction	CoA	Time Period	BPM
Urban Street	Carlisle Blvd	Analysis Year	2026
Intersection	Carlisle & I-40 WB	File Name	2026 BPM Signali
Project Description	Carlisle & Menaul TIA		

Intersection Information



Demand Information

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h				325	46	450	448	1385			1219	298

Signal Information

Cycle, s	120.0	Reference Phase	2									
Offset, s	92	Reference Point	End									
Uncoordinated	No	Simult. Gap E/W	On	Green	18.1	58.8	27.6	0.0	0.0	0.0		
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	4.0	4.0	4.0	0.0	0.0	0.0		
				Red	0.5	1.0	2.0	0.0	0.0	0.0		

Timer Results

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase				8	5	2		6
Case Number				9.0	2.0	4.0		7.3
Phase Duration, s				33.6	22.6	86.4		63.8
Change Period, ($Y+R_c$), s				6.0	4.5	5.0		5.0
Max Allow Headway (MAH), s				3.2	3.1	0.0		0.0
Queue Clearance Time (g_s), s				29.6	17.1			
Green Extension Time (g_e), s				0.0	1.0	0.0		0.0
Phase Call Probability				1.00	1.00			
Max Out Probability				1.00	0.00			

Movement Group Results

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement				3	8	18	5	2		6		16
Adjusted Flow Rate (v), veh/h				163	209	450	444	1372		1124		275
Adjusted Saturation Flow Rate (s), veh/h/ln				1810	1829	1610	1757	1725		1725		
Queue Service Time (g_s), s				9.1	11.9	27.6	15.1	20.9		20.6		
Cycle Queue Clearance Time (g_c), s				9.1	11.9	27.6	15.1	20.9		20.6		
Green Ratio (g/C)				0.23	0.23	0.23	0.15	0.68		0.49		
Capacity (c), veh/h				416	421	370	530	3511		2536		
Volume-to-Capacity Ratio (X)				0.390	0.496	1.215	0.838	0.391		0.443		
Back of Queue (Q), ft/ln (95 th percentile)				182	228	1826	292	342		328		
Back of Queue (Q), veh/ln (95 th percentile)				7.3	9.1	73.1	11.7	13.7		13.1		
Queue Storage Ratio (RQ) (95 th percentile)				1.07	1.34	10.74	1.10	0.00		0.00		
Uniform Delay (d_1), s/veh				39.1	40.1	46.2	57.6	16.0		27.8		
Incremental Delay (d_2), s/veh				0.2	0.3	412.9	1.3	0.3		0.4		
Initial Queue Delay (d_3), s/veh				0.0	0.0	0.0	0.0	0.0		0.0		
Control Delay (d), s/veh				39.3	40.5	459.1	58.8	16.3		28.2		0.0
Level of Service (LOS)				D	D	F	E	B		C		A
Approach Delay, s/veh / LOS	0.0			269.7		F	26.7		C	22.6		C
Intersection Delay, s/veh / LOS				74.7					E			

Multimodal Results

	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	2.75		C	2.62		C	1.87		B	1.68		B
Bicycle LOS Score / LOS				1.84		B	1.50		A	1.32		A

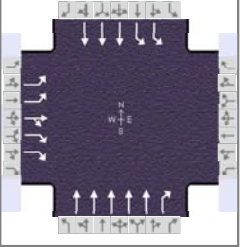
HCS Signalized Intersection Results Summary

General Information

Agency	BH		
Analyst	AG	Analysis Date	Jun 4, 2024
Jurisdiction	CoA	Time Period	BAM
Urban Street	Carlisle Blvd	Analysis Year	2026
Intersection	Carlisle & I-40 EB	File Name	2026 BAM Signalized Network.xus
Project Description	Carlisle & Menaul TIA		

Intersection Information

Duration, h	1.000
Area Type	Other
PHF	1.00
Analysis Period	1> 7:00
ed Network.xus	



Demand Information

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	580	2	517					968	187	216	897	

Signal Information

Cycle, s	110.0	Reference Phase	2									
Offset, s	92	Reference Point	End									
Uncoordinated	No	Simult. Gap E/W	On	Green	8.0	64.0	21.9	0.0	0.0	0.0		
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	4.0	4.0	4.5	0.0	0.0	0.0		
				Red	0.5	1.0	2.0	0.0	0.0	0.0		

Timer Results

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4				2	1	6
Case Number		9.0				7.3	2.0	4.0
Phase Duration, s		28.4				69.0	12.5	81.6
Change Period, ($Y+R_c$), s		6.5				5.0	4.5	5.0
Max Allow Headway (MAH), s		3.2				0.0	3.1	0.0
Queue Clearance Time (g_s), s		19.4					7.7	
Green Extension Time (g_e), s		2.5				0.0	0.4	0.0
Phase Call Probability		1.00					1.00	
Max Out Probability		0.03					0.00	

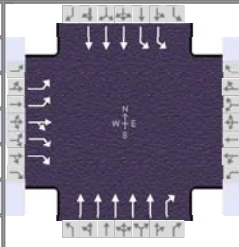
Movement Group Results

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14				2	12		1	6	
Adjusted Flow Rate (v), veh/h	580	183	336				968	187		182	757	
Adjusted Saturation Flow Rate (s), veh/h/ln	1757	1613	1610				1725	1610		1757	1725	
Queue Service Time (g_s), s	17.4	11.3	10.3				5.8	6.0		5.7	8.7	
Cycle Queue Clearance Time (g_c), s	17.4	11.3	10.3				5.8	6.0		5.7	8.7	
Green Ratio (g/C)	0.20	0.20	0.20				0.58	0.58		0.07	0.70	
Capacity (c), veh/h	701	322	643				5020	937		257	3602	
Volume-to-Capacity Ratio (X)	0.827	0.568	0.523				0.193	0.200		0.710	0.210	
Back of Queue (Q), ft/ln (95 th percentile)	304	198	181				96	98		118	147	
Back of Queue (Q), veh/ln (95 th percentile)	12.1	7.9	7.2				3.8	3.9		4.7	5.9	
Queue Storage Ratio (RQ) (95 th percentile)	0.69	0.45	0.41				0.00	0.35		0.38	0.00	
Uniform Delay (d_1), s/veh	42.2	39.7	39.3				10.8	10.9		52.9	10.1	
Incremental Delay (d_2), s/veh	2.1	0.6	0.2				0.1	0.5		1.3	0.1	
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0				0.0	0.0		0.0	0.0	
Control Delay (d), s/veh	44.3	40.3	39.6				10.9	11.4		54.1	10.3	
Level of Service (LOS)	D	D	D				B	B		D	B	
Approach Delay, s/veh / LOS	42.2		D	0.0			11.0		B	18.8		B
Intersection Delay, s/veh / LOS	24.0						C					

Multimodal Results

	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	2.87		C	2.98		C	1.66		B	2.22		B
Bicycle LOS Score / LOS	2.30		B				0.87		A	1.10		A

HCS Signalized Intersection Results Summary

General Information				Intersection Information		
Agency	BH			Duration, h	1.000	
Analyst	AG	Analysis Date	Jun 4, 2024	Area Type	Other	
Jurisdiction	CoA	Time Period	BPM	PHF	1.00	
Urban Street	Carlisle Blvd	Analysis Year	2026	Analysis Period	1> 7:00	
Intersection	Carlisle & I-40 EB	File Name	2026 BPM Signalized Network.xus			
Project Description	Carlisle & Menaul TIA					

Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	448	8	495					1368	302	383	1169	

Signal Information														
Cycle, s	120.0	Reference Phase	2											
Offset, s	92	Reference Point	End	Green	14.9	70.1	19.0	0.0	0.0	0.0				
Uncoordinated	No	Simult. Gap E/W	On	Yellow	4.0	4.0	4.5	0.0	0.0	0.0				
Force Mode	Fixed	Simult. Gap N/S	On	Red	0.5	1.0	2.0	0.0	0.0	0.0				

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4				2	1	6
Case Number		9.0				7.3	2.0	4.0
Phase Duration, s		25.5				75.1	19.4	94.5
Change Period, ($Y+R_c$), s		6.5				5.0	4.5	5.0
Max Allow Headway (MAH), s		3.2				0.0	3.1	0.0
Queue Clearance Time (g_s), s		16.8					14.1	
Green Extension Time (g_e), s		2.2				0.0	0.8	0.0
Phase Call Probability		1.00					1.00	
Max Out Probability		0.01					0.00	

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14					2	12	1	6	
Adjusted Flow Rate (v), veh/h	448	181	322					1368	302	358	1092	
Adjusted Saturation Flow Rate (s), veh/h/ln	1757	1623	1610					1725	1610	1757	1725	
Queue Service Time (g_s), s	14.8	12.7	11.2					9.4	11.5	12.1	11.5	
Cycle Queue Clearance Time (g_c), s	14.8	12.7	11.2					9.4	11.5	12.1	11.5	
Green Ratio (g/C)	0.16	0.16	0.16					0.58	0.58	0.12	0.75	
Capacity (c), veh/h	555	256	509					5040	941	437	3862	
Volume-to-Capacity Ratio (X)	0.807	0.707	0.632					0.271	0.321	0.818	0.283	
Back of Queue (Q), ft/ln (95 th percentile)	267	223	199					159	190	234	182	
Back of Queue (Q), veh/ln (95 th percentile)	10.7	8.9	8.0					6.3	7.6	9.4	7.3	
Queue Storage Ratio (RQ) (95 th percentile)	0.61	0.51	0.45					0.00	0.68	0.76	0.00	
Uniform Delay (d_1), s/veh	48.7	47.9	47.3					12.3	12.8	55.7	7.8	
Incremental Delay (d_2), s/veh	1.1	1.4	0.5					0.1	0.9	1.3	0.2	
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Control Delay (d), s/veh	49.8	49.2	47.7					12.5	13.7	57.0	8.0	
Level of Service (LOS)	D	D	D					B	B	E	A	
Approach Delay, s/veh / LOS	49.0	D		0.0			12.7	B		20.1	C	
Intersection Delay, s/veh / LOS	23.8						C					

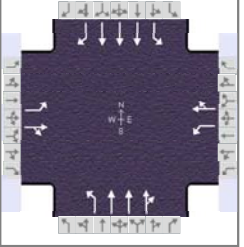
Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.87	C	2.99	C	1.67	B	2.21	B
Bicycle LOS Score / LOS	2.06	B			1.04	A	1.34	A

HCS Signalized Intersection Results Summary

General Information

Agency	BH		
Analyst	AG	Analysis Date	May 1, 2025
Jurisdiction	CoA	Time Period	BAM
Urban Street	Carlisle Blvd	Analysis Year	2026
Intersection	Carlisle & Phoenix	File Name	2026 BAM Carlisle
Project Description	Carlisle & Menaul TIA Signalized Alt		

Intersection Information



Demand Information

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	67	0	102	7	2	13	135	837	4	9	942	65

Signal Information

Cycle, s	90.0	Reference Phase	2									
Offset, s	0	Reference Point	End									
Uncoordinated	No	Simult. Gap E/W	On	Green	1.2	0.6	57.6	1.0	3.9	5.7		
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	4.0	4.0	4.0	4.0	0.0	4.0		
				Red	0.0	0.0	0.0	0.0	0.0	0.0		

Timer Results

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	5	2	1	6
Case Number	1.1	4.0	1.1	4.0	1.1	4.0	2.0	3.0
Phase Duration, s	8.9	13.6	5.0	9.7	9.8	66.2	5.2	61.6
Change Period, ($Y+R_c$), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Allow Headway (MAH), s	3.1	3.4	3.1	3.4	3.1	0.0	3.1	0.0
Queue Clearance Time (g_s), s	5.0	7.5	2.3	2.8	4.0		2.4	
Green Extension Time (g_e), s	0.1	0.2	0.0	0.2	0.2	0.0	0.0	0.0
Phase Call Probability	0.81	0.99	0.16	0.95	0.97		0.20	
Max Out Probability	0.00	0.00	0.02	0.00	0.00		0.00	

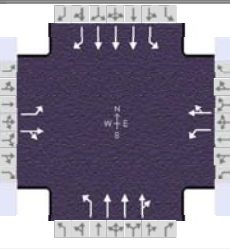
Movement Group Results

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	67	102		7	15		135	561	280	9	942	65
Adjusted Saturation Flow Rate (s), veh/h/ln	1781	1585		1810	1644		1810	1900	1895	1795	1712	1598
Queue Service Time (g_s), s	3.0	5.5		0.3	0.8		2.0	4.8	4.8	0.4	7.3	1.4
Cycle Queue Clearance Time (g_c), s	3.0	5.5		0.3	0.8		2.0	4.8	4.8	0.4	7.3	1.4
Green Ratio (g/C)	0.14	0.11		0.07	0.06		0.73	0.69	0.69	0.01	0.64	0.64
Capacity (c), veh/h	254	170		130	105		534	2625	1309	24	3286	1022
Volume-to-Capacity Ratio (X)	0.264	0.601		0.054	0.143		0.253	0.214	0.214	0.373	0.287	0.064
Back of Queue (Q), ft/ln (95 th percentile)	59	98		6	14		25	71	74	10	106	20
Back of Queue (Q), veh/ln (95 th percentile)	2.3	3.9		0.3	0.6		1.0	2.9	3.0	0.4	4.2	0.8
Queue Storage Ratio (RQ) (95 th percentile)	0.00	0.00		0.06	0.14		0.23	0.00	0.00	0.11	0.00	0.22
Uniform Delay (d_1), s/veh	34.7	38.3		38.8	39.8		4.3	5.0	5.0	44.0	7.1	6.1
Incremental Delay (d_2), s/veh	0.2	1.3		0.1	0.2		0.1	0.2	0.4	3.5	0.2	0.1
Initial Queue Delay (d_3), s/veh	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	34.9	39.6		38.8	40.0		4.3	5.2	5.4	47.6	7.4	6.2
Level of Service (LOS)	C	D		D	D		A	A	A	D	A	A
Approach Delay, s/veh / LOS	37.7		D	39.7		D	5.2		A	7.6		A
Intersection Delay, s/veh / LOS	9.2						A					

Multimodal Results

	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.59	C	2.73	C	1.86	B	1.87	B
Bicycle LOS Score / LOS	0.77	A	0.52	A	1.02	A	1.05	A

HCS Signalized Intersection Results Summary

General Information				Intersection Information		
Agency	BH			Duration, h	1.000	
Analyst	AG	Analysis Date	May 1, 2025	Area Type	Other	
Jurisdiction	CoA	Time Period	BPM	PHF	1.00	
Urban Street	Carlisle Blvd	Analysis Year	2026	Analysis Period	1> 7:00	
Intersection	Carlisle & Phoenix	File Name	2026 BPM Carlisle & Phoenix ALT.xus			
Project Description	Carlisle & Menaul TIA Signalized Alt					

Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	32	1	210	0	1	29	198	1287	23	19	1293	83

Signal Information																		
Cycle, s	90.0	Reference Phase	2															
Offset, s	0	Reference Point	End	Green	2.3	3.7	58.1	3.3	6.7	0.0								
Uncoordinated	No	Simult. Gap E/W	On	Yellow	4.0	0.0	4.0	4.0	4.0	0.0								
Force Mode	Fixed	Simult. Gap N/S	On	Red	0.0	0.0	0.0	0.0	0.0	0.0								

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	5	2	1	6
Case Number	1.1	4.0	1.1	4.0	1.1	4.0	2.0	3.0
Phase Duration, s	7.3	18.0	0.0	10.7	10.0	65.8	6.3	62.1
Change Period, ($Y+R_c$), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Allow Headway (MAH), s	3.1	3.4	0.0	3.4	3.1	0.0	3.1	0.0
Queue Clearance Time (g_s), s	3.4	13.5		3.6	5.0		2.9	
Green Extension Time (g_e), s	0.0	0.5	0.0	0.5	0.4	0.0	0.0	0.0
Phase Call Probability	0.55	1.00		1.00	0.99		0.38	
Max Out Probability	0.01	0.00		0.00	0.00		0.00	

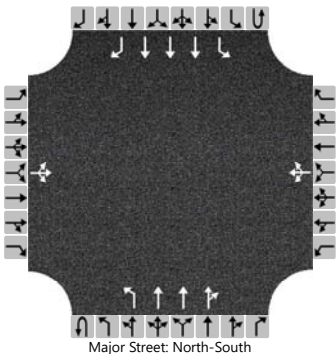
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	32	211		0	30		198	876	434	19	1293	83
Adjusted Saturation Flow Rate (s), veh/h/ln	1810	1611		1810	1618		1810	1900	1882	1810	1725	1610
Queue Service Time (g_s), s	1.4	11.5		0.0	1.6		3.0	8.5	8.5	0.9	10.6	1.7
Cycle Queue Clearance Time (g_c), s	1.4	11.5		0.0	1.6		3.0	8.5	8.5	0.9	10.6	1.7
Green Ratio (g/C)	0.13	0.16		0.03	0.07		0.73	0.69	0.69	0.03	0.65	0.65
Capacity (c), veh/h	226	250		89	120		428	2608	1291	46	3339	1039
Volume-to-Capacity Ratio (X)	0.142	0.844		0.000	0.250		0.463	0.336	0.336	0.416	0.387	0.080
Back of Queue (Q), ft/ln (95 th percentile)	28	202		0	28		37	127	132	20	154	25
Back of Queue (Q), veh/ln (95 th percentile)	1.1	8.1		0.0	1.1		1.5	5.1	5.3	0.8	6.2	1.0
Queue Storage Ratio (RQ) (95 th percentile)	0.00	0.00		0.00	0.28		0.34	0.00	0.00	0.22	0.00	0.27
Uniform Delay (d_1), s/veh	34.5	37.0		0.0	39.3		5.2	5.8	5.8	43.2	7.6	6.0
Incremental Delay (d_2), s/veh	0.1	3.1		0.0	0.4		0.3	0.3	0.7	2.3	0.3	0.2
Initial Queue Delay (d_3), s/veh	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	34.6	40.0		0.0	39.7		5.5	6.1	6.5	45.5	7.9	6.1
Level of Service (LOS)	C	D			D		A	A	A	D	A	A
Approach Delay, s/veh / LOS	39.3		D	39.7		D	6.1		A	8.3		A
Intersection Delay, s/veh / LOS	9.9						A					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.59	C	2.73	C	1.86	B	1.87	B
Bicycle LOS Score / LOS	0.89	A	0.54	A	1.32	A	1.25	A

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AG	Intersection	Carlisle & Phoenix
Agency/Co.	BH	Jurisdiction	CoA
Date Performed	5/1/2025	East/West Street	Phoenix Ave
Analysis Year	2026	North/South Street	Carlisle Blvd
Time Analyzed	BAM	Peak Hour Factor	0.85
Intersection Orientation	North-South	Analysis Time Period (hrs)	1.00
Project Description	Menaul & Carlisle TIA		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	1	3	0	0	1	3	1
Configuration			LTR				LTR			L	T	TR		L	T	R
Volume (veh/h)		67	0	102		7	2	13	0	135	837	4	0	9	942	65
Percent Heavy Vehicles (%)		2	2	2		0	0	0	0	0			1	1		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized													No			
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		6.4	6.5	7.1		6.4	6.5	7.1		5.3				5.3		
Critical Headway (sec)		6.43	6.53	7.14		6.40	6.50	7.10		5.30				5.32		
Base Follow-Up Headway (sec)		3.8	4.0	3.9		3.8	4.0	3.9		3.1				3.1		
Follow-Up Headway (sec)		3.82	4.02	3.92		3.80	4.00	3.90		3.10				3.11		

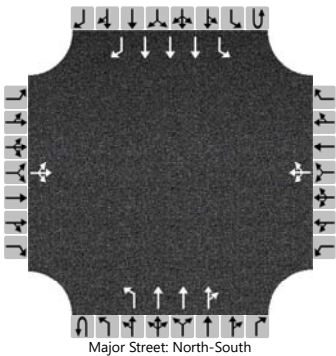
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			199			26				159				11		
Capacity, c (veh/h)			78			55				324				399		
v/c Ratio			2.56			0.47				0.49				0.03		
95% Queue Length, Q ₉₅ (veh)			65.2			2.3				2.8				0.1		
95% Queue Length, Q ₉₅ (ft)			1653.5			57.5				70.0				2.5		
Control Delay (s/veh)			2935.1			127.3				26.7				14.3		
Level of Service (LOS)			F			F				D				B		
Approach Delay (s/veh)	2935.1				127.3				3.7				0.1			
Approach LOS	F				F				A				A			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AG	Intersection	Carlisle & Phoenix
Agency/Co.	BH	Jurisdiction	CoA
Date Performed	5/1/2025	East/West Street	Phoenix Ave
Analysis Year	2026	North/South Street	Carlisle Blvd
Time Analyzed	BPM	Peak Hour Factor	0.82
Intersection Orientation	North-South	Analysis Time Period (hrs)	1.00
Project Description	Menaul & Carlisle TIA		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	1	3	0	0	1	3	1
Configuration			LTR				LTR			L	T	TR		L	T	R
Volume (veh/h)		32	1	210		0	1	29	0	198	1287	23	0	19	1293	83
Percent Heavy Vehicles (%)		0	0	0		0	0	0	0	0			0	0		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized													No			
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		6.4	6.5	7.1		6.4	6.5	7.1		5.3				5.3		
Critical Headway (sec)		6.40	6.50	7.10		6.40	6.50	7.10		5.30				5.30		
Base Follow-Up Headway (sec)		3.8	4.0	3.9		3.8	4.0	3.9		3.1				3.1		
Follow-Up Headway (sec)		3.80	4.00	3.90		3.80	4.00	3.90		3.10				3.10		

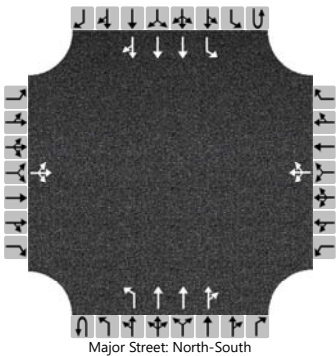
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			296				37			241				23		
Capacity, c (veh/h)			0				0			186				203		
v/c Ratio										1.30				0.11		
95% Queue Length, Q ₉₅ (veh)										37.6				0.4		
95% Queue Length, Q ₉₅ (ft)										940.0				10.0		
Control Delay (s/veh)										639.5				25.0		
Level of Service (LOS)										F				C		
Approach Delay (s/veh)									84.0				0.3			
Approach LOS									F				A			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AG	Intersection	Carlisle & Prospect
Agency/Co.	BH	Jurisdiction	CoA
Date Performed	6/5/2024	East/West Street	Prospect Ave
Analysis Year	2026	North/South Street	Carlisle Blvd
Time Analyzed	BAM	Peak Hour Factor	0.84
Intersection Orientation	North-South	Analysis Time Period (hrs)	1.00
Project Description	Menaul & Carlisle TIA		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	1	3	0	0	1	3	0
Configuration			LTR				LTR			L	T	TR		L	T	TR
Volume (veh/h)		15	0	53		45	1	40	0	116	1204	19	0	34	1026	35
Percent Heavy Vehicles (%)		2	2	2		0	0	0	1	1			0	0		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		6.4	6.5	7.1		6.4	6.5	7.1		5.3				5.3		
Critical Headway (sec)		6.44	6.54	7.14		6.40	6.50	7.10		5.32				5.30		
Base Follow-Up Headway (sec)		3.8	4.0	3.9		3.8	4.0	3.9		3.1				3.1		
Follow-Up Headway (sec)		3.82	4.02	3.92		3.80	4.00	3.90		3.11				3.10		

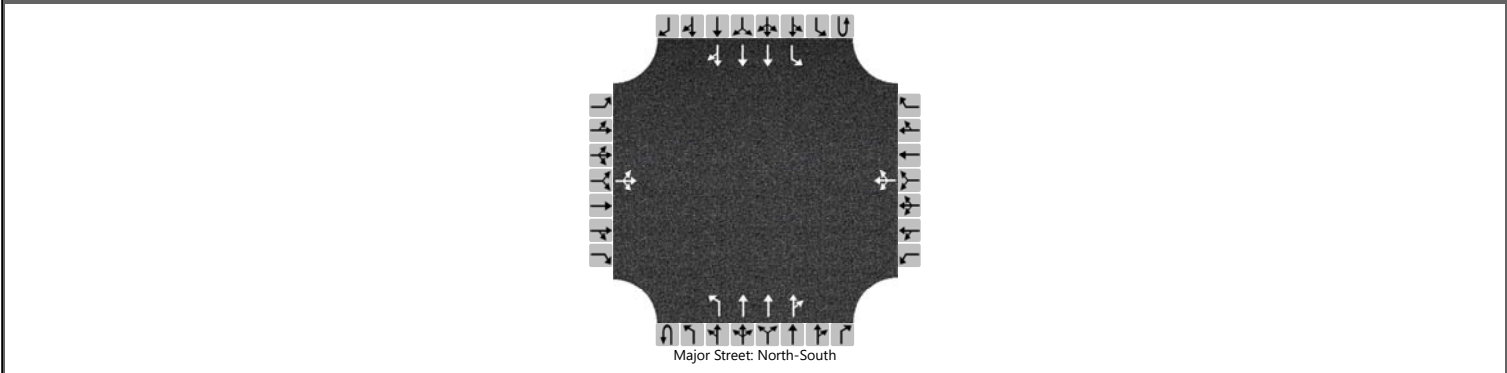
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			81				102				138				40	
Capacity, c (veh/h)			64				26				294				239	
v/c Ratio			1.27				3.90				0.47				0.17	
95% Queue Length, Q ₉₅ (veh)			16.2				41.8				2.6				0.6	
95% Queue Length, Q ₉₅ (ft)			411.5				1045.0				65.5				15.0	
Control Delay (s/veh)			742.6				5548.1				28.0				23.1	
Level of Service (LOS)			F				F				D				C	
Approach Delay (s/veh)	742.6				5548.1				2.4				0.7			
Approach LOS	F				F				A				A			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AG	Intersection	Carlisle & Prospect
Agency/Co.	BH	Jurisdiction	CoA
Date Performed	6/5/2024	East/West Street	Prospect Ave
Analysis Year	2026	North/South Street	Carlisle Blvd
Time Analyzed	BPM	Peak Hour Factor	0.85
Intersection Orientation	North-South	Analysis Time Period (hrs)	1.00
Project Description	Menaul & Carlisle TIA		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	1	3	0	0	1	3	0
Configuration			LTR				LTR			L	T	TR		L	T	TR
Volume (veh/h)		12	0	94		32	0	28	0	100	1594	49	0	56	1580	43
Percent Heavy Vehicles (%)		0	0	0		0	0	0	1	1			0	0		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		6.4	6.5	7.1		6.4	6.5	7.1		5.3				5.3		
Critical Headway (sec)		6.40	6.50	7.10		6.40	6.50	7.10		5.32				5.30		
Base Follow-Up Headway (sec)		3.8	4.0	3.9		3.8	4.0	3.9		3.1				3.1		
Follow-Up Headway (sec)		3.80	4.00	3.90		3.80	4.00	3.90		3.11				3.10		

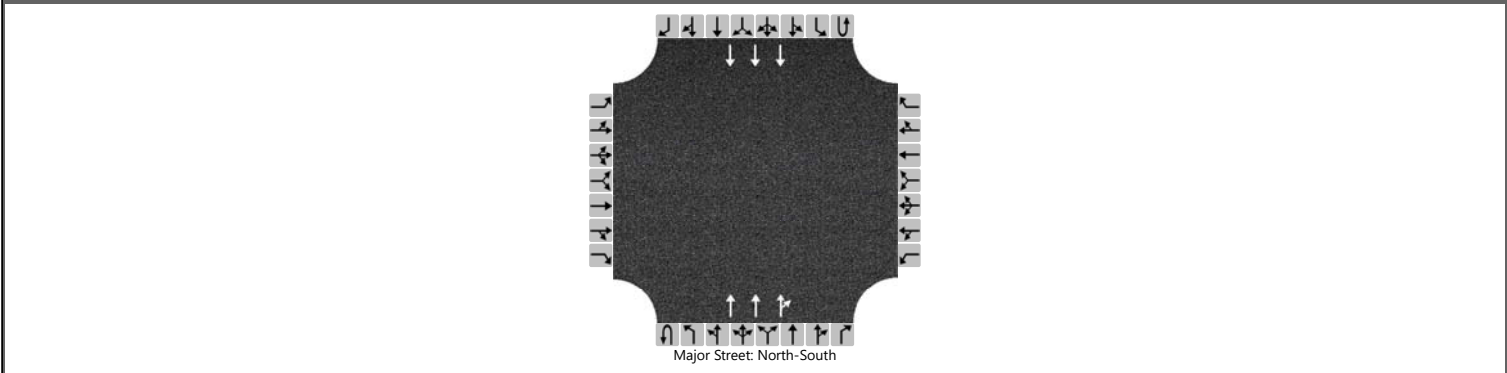
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			125			71				118				66		
Capacity, c (veh/h)			9			1				141				139		
v/c Ratio			13.87			60.67				0.84				0.48		
95% Queue Length, Q ₉₅ (veh)			60.9			37.5				8.7				2.5		
95% Queue Length, Q ₉₅ (ft)			1522.5			937.5				219.2				62.5		
Control Delay (s/veh)			23998.7			113565.5				128.8				54.0		
Level of Service (LOS)			F			F				F				F		
Approach Delay (s/veh)	23998.7				113565.5				7.4				1.8			
Approach LOS	F				F				A				A			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AG	Intersection	Carlisle & Cutler
Agency/Co.	BH	Jurisdiction	CoA
Date Performed	6/5/2024	East/West Street	Cutler Ave
Analysis Year	2026	North/South Street	Carlisle Blvd
Time Analyzed	BAM	Peak Hour Factor	0.90
Intersection Orientation	North-South	Analysis Time Period (hrs)	1.00
Project Description	Carlisle & Menaul TIA		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	0	0	0	0	3	0	0	0	3	0
Configuration											T	TR			T	
Volume (veh/h)											1335	168			1103	
Percent Heavy Vehicles (%)																
Proportion Time Blocked																
Percent Grade (%)																
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)																
Critical Headway (sec)																
Base Follow-Up Headway (sec)																
Follow-Up Headway (sec)																

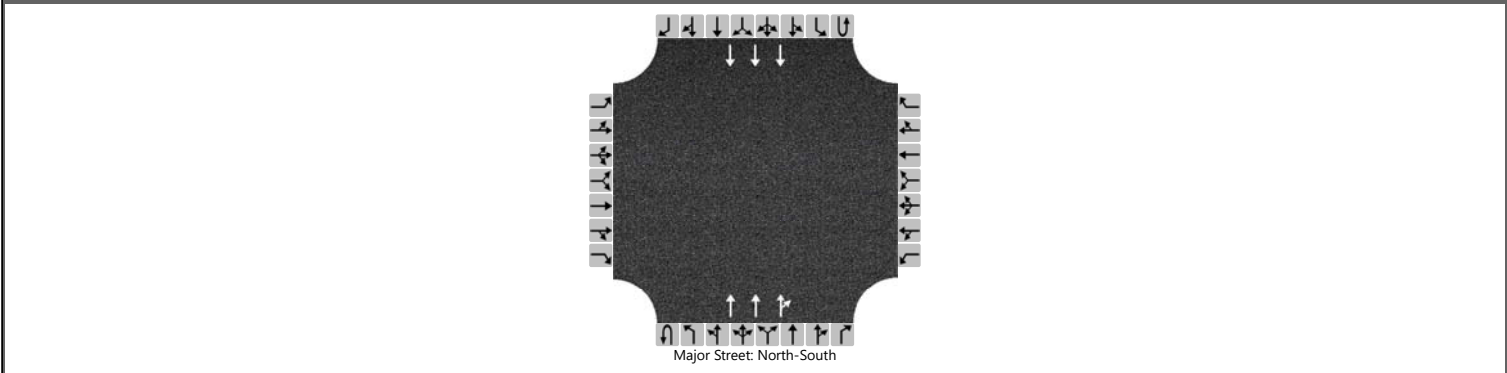
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)																
Capacity, c (veh/h)																
v/c Ratio																
95% Queue Length, Q ₉₅ (veh)																
95% Queue Length, Q ₉₅ (ft)																
Control Delay (s/veh)																
Level of Service (LOS)																
Approach Delay (s/veh)																
Approach LOS																

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AG	Intersection	Carlisle & Cutler
Agency/Co.	BH	Jurisdiction	CoA
Date Performed	6/5/2024	East/West Street	Cutler Ave
Analysis Year	2026	North/South Street	Carlisle Blvd
Time Analyzed	BPM	Peak Hour Factor	0.62
Intersection Orientation	North-South	Analysis Time Period (hrs)	1.00
Project Description	Carlisle & Menaul TIA		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	0	0	0	0	3	0	0	0	3	0
Configuration											T	TR			T	
Volume (veh/h)											1736	133			1646	
Percent Heavy Vehicles (%)																
Proportion Time Blocked																
Percent Grade (%)																
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)																
Critical Headway (sec)																
Base Follow-Up Headway (sec)																
Follow-Up Headway (sec)																

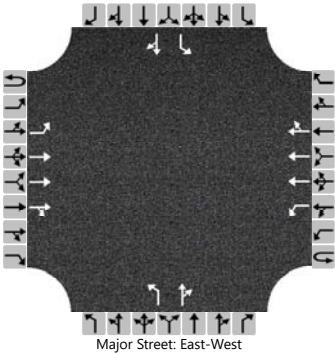
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)																
Capacity, c (veh/h)																
v/c Ratio																
95% Queue Length, Q ₉₅ (veh)																
95% Queue Length, Q ₉₅ (ft)																
Control Delay (s/veh)																
Level of Service (LOS)																
Approach Delay (s/veh)																
Approach LOS																

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AG	Intersection	Menaul & Bryn Mawr
Agency/Co.	BH	Jurisdiction	CoA
Date Performed	6/5/2024	East/West Street	Menaul Blvd
Analysis Year	2026	North/South Street	Bryn Mawr/American Dr
Time Analyzed	BAM	Peak Hour Factor	0.73
Intersection Orientation	East-West	Analysis Time Period (hrs)	1.00
Project Description	Carlisle & Menaul TIA		

Lanes



Vehicle Volumes and Adjustments

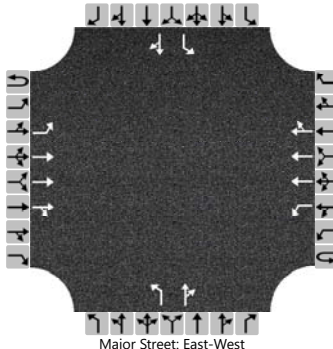
Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	3	0	0	1	3	0		1	1	0		1	1	0
Configuration		L	T	TR		L	T	TR		L		TR		L		TR
Volume (veh/h)	0	40	627	14	0	20	811	6		10	0	23		6	1	38
Percent Heavy Vehicles (%)	1	1			1	1				0	0	0		2	2	2
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		5.3				5.3				6.4	6.5	7.1		6.4	6.5	7.1
Critical Headway (sec)		5.32				5.32				6.40	6.50	7.10		6.44	6.54	7.14
Base Follow-Up Headway (sec)		3.1				3.1				3.8	4.0	3.9		3.8	4.0	3.9
Follow-Up Headway (sec)		3.11				3.11				3.80	4.00	3.90		3.82	4.02	3.92

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		55				27				14		32		8		53
Capacity, c (veh/h)		345				451				90		488		79		323
v/c Ratio		0.16				0.06				0.15		0.06		0.10		0.17
95% Queue Length, Q ₉₅ (veh)		0.6				0.2				0.5		0.2		0.3		0.6
95% Queue Length, Q ₉₅ (ft)		15.1				5.0				12.5		5.0		7.6		15.2
Control Delay (s/veh)		17.4				13.5				52.2		12.9		55.8		18.4
Level of Service (LOS)		C				B				F		B		F		C
Approach Delay (s/veh)	1.0				0.3				24.8				23.4			
Approach LOS	A				A				C				C			

HCS Two-Way Stop-Control Report			
General Information		Site Information	
Analyst	AG	Intersection	Menaul & Bryn Mawr
Agency/Co.	BH	Jurisdiction	CoA
Date Performed	6/5/2024	East/West Street	Menaul Blvd
Analysis Year	2026	North/South Street	Bryn Mawr/American Dr
Time Analyzed	BPM	Peak Hour Factor	0.74
Intersection Orientation	East-West	Analysis Time Period (hrs)	1.00
Project Description	Carlisle & Menaul TIA		
Lanes			
 Major Street: East-West			

Vehicle Volumes and Adjustments																
Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	3	0	0	1	3	0		1	1	0		1	1	0
Configuration		L	T	TR		L	T	TR		L		TR		L		TR
Volume (veh/h)	0	66	980	19	0	45	1300	12		1	0	12		17	0	96
Percent Heavy Vehicles (%)	0	0			1	1				0	0	0		0	0	0
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized																
Median Type Storage	Undivided															

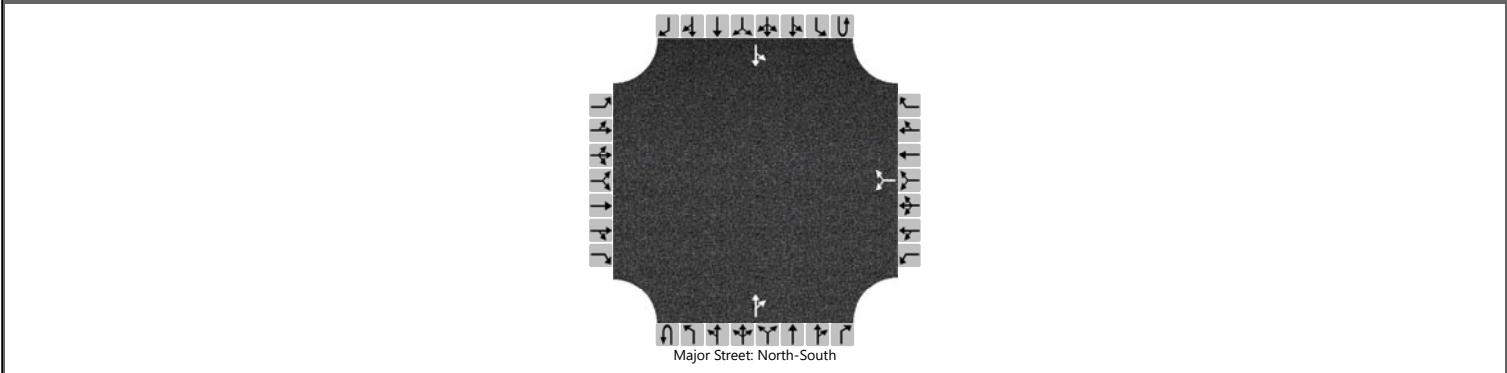
Critical and Follow-up Headways																
Base Critical Headway (sec)		5.3				5.3				6.4	6.5	7.1		6.4	6.5	7.1
Critical Headway (sec)		5.30				5.32				6.40	6.50	7.10		6.40	6.50	7.10
Base Follow-Up Headway (sec)		3.1				3.1				3.8	4.0	3.9		3.8	4.0	3.9
Follow-Up Headway (sec)		3.10				3.11				3.80	4.00	3.90		3.80	4.00	3.90

Delay, Queue Length, and Level of Service																
Flow Rate, v (veh/h)		89				61				1		16		23		130
Capacity, c (veh/h)		167				267				7		344		9		250
v/c Ratio		0.54				0.23				0.20		0.05		2.49		0.52
95% Queue Length, Q ₉₅ (veh)		3.2				0.9				0.6		0.1		10.2		3.1
95% Queue Length, Q ₉₅ (ft)		80.0				22.7				15.0		2.5		255.0		77.5
Control Delay (s/veh)		50.8				22.5				655.3		16.0		3617.2		34.7
Level of Service (LOS)		F				C				F		C		F		D
Approach Delay (s/veh)	3.2				0.7				65.2				573.6			
Approach LOS	A				A				F				F			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AG	Intersection	Phoenix & Bryn Mawr
Agency/Co.	BH	Jurisdiction	CoA
Date Performed	6/5/2024	East/West Street	Phoenix Ave
Analysis Year	2026	North/South Street	American Ave (Bryn Mawr)
Time Analyzed	BAM	Peak Hour Factor	0.83
Intersection Orientation	North-South	Analysis Time Period (hrs)	1.00
Project Description	Carlisle & Menaul TIA		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	1	0	0	0	1	0
Configuration							LR					TR		LT		
Volume (veh/h)						48		48			11	44		14	5	
Percent Heavy Vehicles (%)						3		3						6		
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						7.1		6.2						4.1		
Critical Headway (sec)						6.43		6.23						4.16		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.53		3.33						2.25		

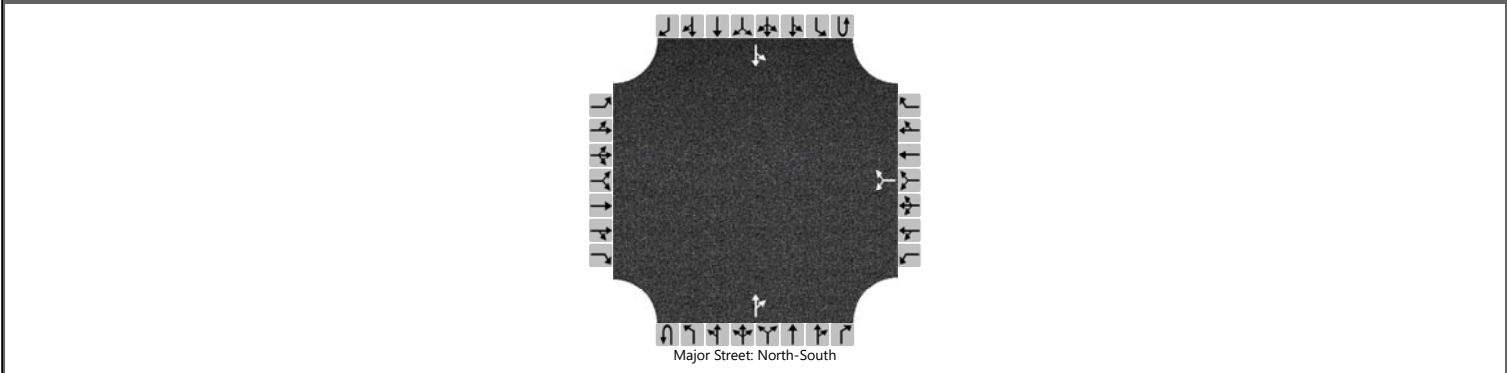
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						116								17		
Capacity, c (veh/h)						966								1510		
v/c Ratio						0.12								0.01		
95% Queue Length, Q ₉₅ (veh)						0.4								0.0		
95% Queue Length, Q ₉₅ (ft)						10.2								0.0		
Control Delay (s/veh)						9.2								7.4	0.1	
Level of Service (LOS)						A								A	A	
Approach Delay (s/veh)					9.2								5.5			
Approach LOS					A								A			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AG	Intersection	Phoenix & Bryn Mawr
Agency/Co.	BH	Jurisdiction	CoA
Date Performed	6/5/2024	East/West Street	Phoenix Ave
Analysis Year	2026	North/South Street	American Ave (Bryn Mawr)
Time Analyzed	BPM	Peak Hour Factor	0.80
Intersection Orientation	North-South	Analysis Time Period (hrs)	1.00
Project Description	Carlisle & Menaul TIA		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	1	0	0	0	1	0
Configuration							LR					TR		LT		
Volume (veh/h)						90		51			17	80		19	3	
Percent Heavy Vehicles (%)						0		0						0		
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						7.1		6.2						4.1		
Critical Headway (sec)						6.40		6.20						4.10		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.50		3.30						2.20		

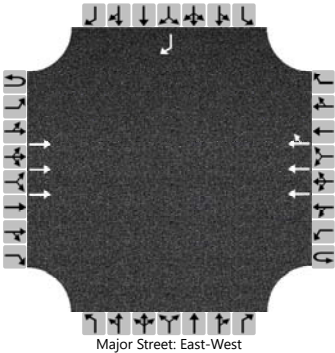
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						176								24		
Capacity, c (veh/h)						907								1479		
v/c Ratio						0.19								0.02		
95% Queue Length, Q ₉₅ (veh)						0.7								0.0		
95% Queue Length, Q ₉₅ (ft)						17.5								0.0		
Control Delay (s/veh)						9.9								7.5	0.1	
Level of Service (LOS)						A								A	A	
Approach Delay (s/veh)					9.9								6.5			
Approach LOS					A								A			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AG	Intersection	Menaul & Access 1
Agency/Co.	BH	Jurisdiction	CoA
Date Performed	6/5/2024	East/West Street	Menaul Blvd
Analysis Year	2026	North/South Street	Access 1
Time Analyzed	BAM	Peak Hour Factor	0.77
Intersection Orientation	East-West	Analysis Time Period (hrs)	1.00
Project Description	Carlisle & Menaul TIA		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	3	0	0	0	3	0		0	0	0		0	0	1
Configuration			T				T	TR								R
Volume (veh/h)			657				841	10								10
Percent Heavy Vehicles (%)																0
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized													No			
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)																7.1
Critical Headway (sec)																7.10
Base Follow-Up Headway (sec)																3.9
Follow-Up Headway (sec)																3.90

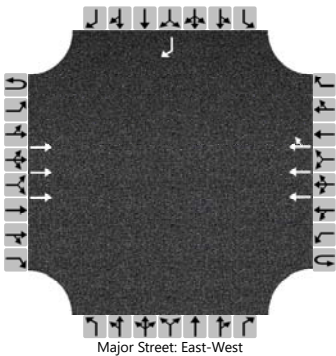
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)																13
Capacity, c (veh/h)																413
v/c Ratio																0.03
95% Queue Length, Q ₉₅ (veh)																0.1
95% Queue Length, Q ₉₅ (ft)																2.5
Control Delay (s/veh)																14.0
Level of Service (LOS)																B
Approach Delay (s/veh)													14.0			
Approach LOS													B			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AG	Intersection	Menaul & Access 1
Agency/Co.	BH	Jurisdiction	CoA
Date Performed	6/5/2024	East/West Street	Menaul Blvd
Analysis Year	2026	North/South Street	Access 1
Time Analyzed	BPM	Peak Hour Factor	0.57
Intersection Orientation	East-West	Analysis Time Period (hrs)	1.00
Project Description	Carlisle & Menaul TIA		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	3	0	0	0	3	0		0	0	0		0	0	1
Configuration			T				T	TR								R
Volume (veh/h)			1010				1216	12								11
Percent Heavy Vehicles (%)																0
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized													No			
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)																7.1
Critical Headway (sec)																7.10
Base Follow-Up Headway (sec)																3.9
Follow-Up Headway (sec)																3.90

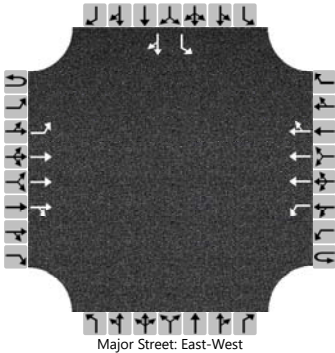
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)																19
Capacity, c (veh/h)																187
v/c Ratio																0.10
95% Queue Length, Q ₉₅ (veh)																0.3
95% Queue Length, Q ₉₅ (ft)																7.5
Control Delay (s/veh)																26.5
Level of Service (LOS)																D
Approach Delay (s/veh)													26.5			
Approach LOS													D			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AG	Intersection	Menaul & Access 2
Agency/Co.	BH	Jurisdiction	CoA
Date Performed	5/1/2025	East/West Street	Menaul Blvd
Analysis Year	2026	North/South Street	Access 2
Time Analyzed	BAM	Peak Hour Factor	0.78
Intersection Orientation	East-West	Analysis Time Period (hrs)	1.00
Project Description	Carlisle & Menaul TIA		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	3	0	0	1	3	0		0	0	0		1	1	0
Configuration		L	T	TR		L	T	TR						L		TR
Volume (veh/h)	0	65	589	8	0	34	743	203						42	1	143
Percent Heavy Vehicles (%)	1	1			0	0								2	2	2
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		5.3				5.3								6.4	6.5	7.1
Critical Headway (sec)		5.32				5.30								6.44	6.54	7.14
Base Follow-Up Headway (sec)		3.1				3.1								3.8	4.0	3.9
Follow-Up Headway (sec)		3.11				3.10								3.82	4.02	3.92

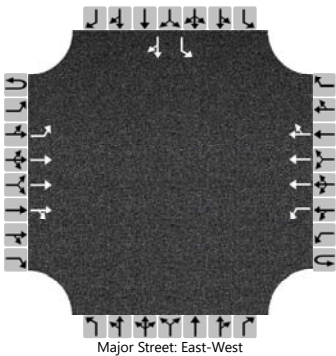
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		83				44								54		185
Capacity, c (veh/h)		311				514								71		352
v/c Ratio		0.27				0.08								0.76		0.52
95% Queue Length, Q ₉₅ (veh)		1.1				0.3								5.7		3.2
95% Queue Length, Q ₉₅ (ft)		27.7				7.5								144.8		81.3
Control Delay (s/veh)		20.8				12.7								182.9		26.3
Level of Service (LOS)		C				B								F		D
Approach Delay (s/veh)	2.0				0.4								61.7			
Approach LOS	A				A								F			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AG	Intersection	Menaul & Access 2
Agency/Co.	BH	Jurisdiction	CoA
Date Performed	5/1/2025	East/West Street	Menaul Blvd
Analysis Year	2026	North/South Street	Access 2
Time Analyzed	BPM	Peak Hour Factor	0.88
Intersection Orientation	East-West	Analysis Time Period (hrs)	1.00
Project Description	Carlisle & Menaul TIA		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	3	0	0	1	3	0		0	0	0		1	1	0
Configuration		L	T	TR		L	T	TR						L		TR
Volume (veh/h)	0	66	959	0	0	34	1122	230						55	0	111
Percent Heavy Vehicles (%)	0	0			0	0								0	0	0
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		5.3				5.3								6.4	6.5	7.1
Critical Headway (sec)		5.30				5.30								6.40	6.50	7.10
Base Follow-Up Headway (sec)		3.1				3.1								3.8	4.0	3.9
Follow-Up Headway (sec)		3.10				3.10								3.80	4.00	3.90

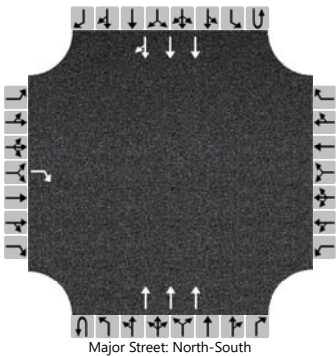
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		75				39								63		126
Capacity, c (veh/h)		218				360								35		299
v/c Ratio		0.34				0.11								1.81		0.42
95% Queue Length, Q ₉₅ (veh)		1.5				0.4								18.9		2.1
95% Queue Length, Q ₉₅ (ft)		37.5				10.0								472.5		52.5
Control Delay (s/veh)		30.1				16.2								1773.4		25.8
Level of Service (LOS)		D				C								F		D
Approach Delay (s/veh)	1.9				0.4								604.8			
Approach LOS	A				A								F			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AG	Intersection	Carlisle & Access 3
Agency/Co.	BH	Jurisdiction	CoA
Date Performed	6/5/2024	East/West Street	Access 3
Analysis Year	2026	North/South Street	Carlisle Blvd
Time Analyzed	BAM	Peak Hour Factor	0.90
Intersection Orientation	North-South	Analysis Time Period (hrs)	1.00
Project Description	Carlisle & Menaul TIA		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	1		0	0	0	0	0	3	0	0	0	3	0
Configuration				R							T				T	TR
Volume (veh/h)				80							1140				1101	65
Percent Heavy Vehicles (%)				0												
Proportion Time Blocked																
Percent Grade (%)	0															
Right Turn Channelized	No															
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)				7.1												
Critical Headway (sec)				7.10												
Base Follow-Up Headway (sec)				3.9												
Follow-Up Headway (sec)				3.90												

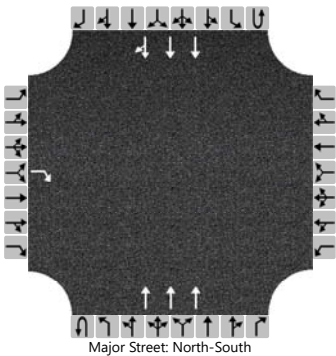
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)				89												
Capacity, c (veh/h)				358												
v/c Ratio				0.25												
95% Queue Length, Q ₉₅ (veh)				1.0												
95% Queue Length, Q ₉₅ (ft)				25.0												
Control Delay (s/veh)				18.4												
Level of Service (LOS)				C												
Approach Delay (s/veh)	18.4															
Approach LOS	C															

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AG	Intersection	Carlisle & Access 3
Agency/Co.	BH	Jurisdiction	CoA
Date Performed	6/5/2024	East/West Street	Access 3
Analysis Year	2026	North/South Street	Carlisle Blvd
Time Analyzed	BPM	Peak Hour Factor	0.85
Intersection Orientation	North-South	Analysis Time Period (hrs)	1.00
Project Description	Carlisle & Menaul TIA		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	1		0	0	0	0	0	3	0	0	0	3	0
Configuration				R							T				T	TR
Volume (veh/h)				67							1627				1613	42
Percent Heavy Vehicles (%)				0												
Proportion Time Blocked																
Percent Grade (%)	0															
Right Turn Channelized	No															
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)				7.1												
Critical Headway (sec)				7.10												
Base Follow-Up Headway (sec)				3.9												
Follow-Up Headway (sec)				3.90												

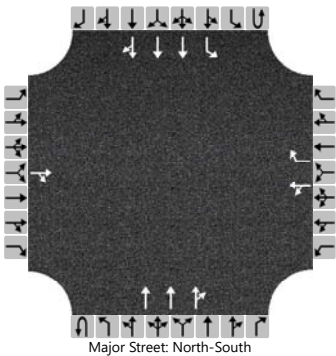
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)				79												
Capacity, c (veh/h)				219												
v/c Ratio				0.36												
95% Queue Length, Q ₉₅ (veh)				1.6												
95% Queue Length, Q ₉₅ (ft)				40.0												
Control Delay (s/veh)				30.6												
Level of Service (LOS)				D												
Approach Delay (s/veh)	30.6															
Approach LOS	D															

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AG	Intersection	Carlisle & Access 4
Agency/Co.	BH	Jurisdiction	CoA
Date Performed	5/1/2025	East/West Street	Access 4
Analysis Year	2026	North/South Street	Carlisle Blvd
Time Analyzed	BAM	Peak Hour Factor	0.80
Intersection Orientation	North-South	Analysis Time Period (hrs)	1.00
Project Description	Carlisle & Menaul TIA		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	1	0	0	3	0	0	1	3	0
Configuration				TR		LT		R			T	TR		L	T	TR
Volume (veh/h)			0	112		0	0	5			1070	2	0	8	1042	39
Percent Heavy Vehicles (%)			0	0		0	0	0					0	0		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized					No											
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)			6.5	7.1		6.4	6.5	7.1						5.3		
Critical Headway (sec)			6.50	7.10		6.40	6.50	7.10						5.30		
Base Follow-Up Headway (sec)			4.0	3.9		3.8	4.0	3.9						3.1		
Follow-Up Headway (sec)			4.00	3.90		3.80	4.00	3.90						3.10		

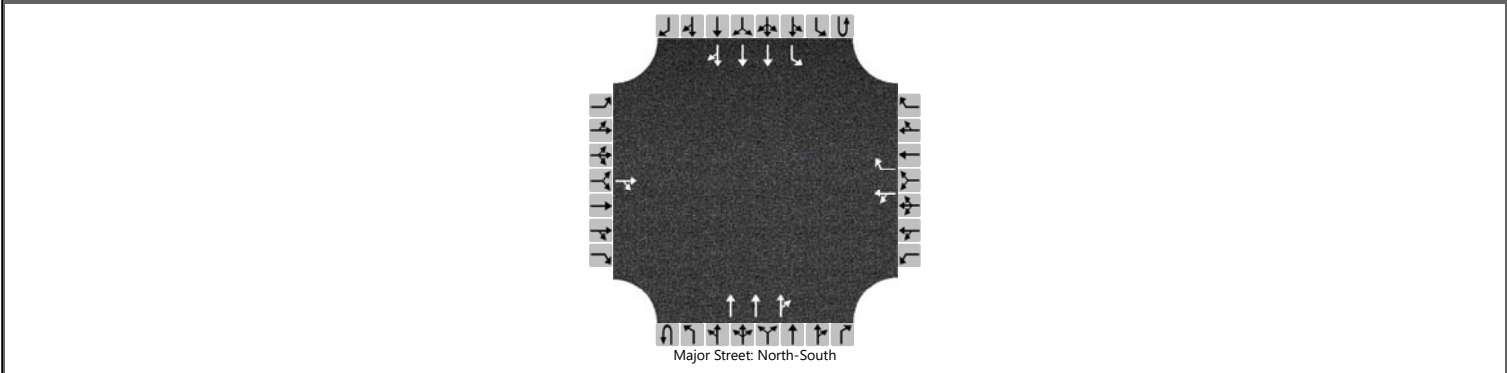
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)				140		0		6						10		
Capacity, c (veh/h)				343		0		346						272		
v/c Ratio				0.41				0.02						0.04		
95% Queue Length, Q ₉₅ (veh)				2.0				0.1						0.1		
95% Queue Length, Q ₉₅ (ft)				50.0				2.5						2.5		
Control Delay (s/veh)				22.6				15.6						18.7		
Level of Service (LOS)				C				C						C		
Approach Delay (s/veh)	22.6												0.1			
Approach LOS	C												A			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AG	Intersection	Carlisle & Access 4
Agency/Co.	BH	Jurisdiction	CoA
Date Performed	5/1/2025	East/West Street	Access 4
Analysis Year	2026	North/South Street	Carlisle Blvd
Time Analyzed	BPM	Peak Hour Factor	0.78
Intersection Orientation	North-South	Analysis Time Period (hrs)	1.00
Project Description	Carlisle & Menaul TIA		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	1	0	0	3	0	0	1	3	0
Configuration				TR		LT		R			T	TR		L	T	TR
Volume (veh/h)			0	129		7	1	53			1573	13	0	43	1520	36
Percent Heavy Vehicles (%)			0	0		0	0	0					0	0		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized					No											
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)			6.5	7.1		6.4	6.5	7.1						5.3		
Critical Headway (sec)			6.50	7.10		6.40	6.50	7.10						5.30		
Base Follow-Up Headway (sec)			4.0	3.9		3.8	4.0	3.9						3.1		
Follow-Up Headway (sec)			4.00	3.90		3.80	4.00	3.90						3.10		

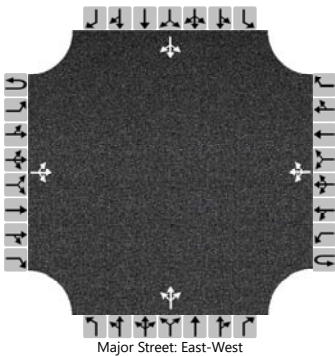
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)				165		10		68						55		
Capacity, c (veh/h)				211		2		205						123		
v/c Ratio				0.78		5.48		0.33						0.45		
95% Queue Length, Q ₉₅ (veh)				8.0		6.5		1.5						2.3		
95% Queue Length, Q ₉₅ (ft)				200.0		162.5		37.5						57.5		
Control Delay (s/veh)				76.1		11886.7		31.2						57.3		
Level of Service (LOS)				F		F		D						F		
Approach Delay (s/veh)	76.1				1586.0								1.5			
Approach LOS	F				F								A			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AG	Intersection	Phoenix & Access 5
Agency/Co.	BH	Jurisdiction	CoA
Date Performed	6/5/2024	East/West Street	Phoenix Ave
Analysis Year	2026	North/South Street	Access 5/Prive Driveway
Time Analyzed	BAM	Peak Hour Factor	0.77
Intersection Orientation	East-West	Analysis Time Period (hrs)	1.00
Project Description	Carlisle & Menaul TIA		

Lanes



Vehicle Volumes and Adjustments

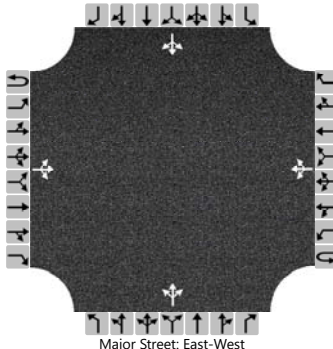
Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		5	78	4		52	129	39		31	5	26		29	2	10
Percent Heavy Vehicles (%)		0				1				0	0	0		0	0	0
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.10				4.11				7.10	6.50	6.20		7.10	6.50	6.20
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.20				2.21				3.50	4.00	3.30		3.50	4.00	3.30

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		6				68					81				53	
Capacity, c (veh/h)		1363				1491					606				519	
v/c Ratio		0.00				0.05					0.13				0.10	
95% Queue Length, Q ₉₅ (veh)		0.0				0.1					0.5				0.3	
95% Queue Length, Q ₉₅ (ft)											12.5				7.5	
Control Delay (s/veh)		7.7	0.0	0.0		7.5	0.4	0.4			11.9				12.7	
Level of Service (LOS)		A	A	A		A	A	A			B				B	
Approach Delay (s/veh)	0.5				2.1				11.9				12.7			
Approach LOS	A				A				B				B			

HCS Two-Way Stop-Control Report			
General Information		Site Information	
Analyst	AG	Intersection	Phoenix & Access 5
Agency/Co.	BH	Jurisdiction	CoA
Date Performed	6/5/2024	East/West Street	Phoenix Ave
Analysis Year	2026	North/South Street	Access 5/Prive Driveway
Time Analyzed	BPM	Peak Hour Factor	0.85
Intersection Orientation	East-West	Analysis Time Period (hrs)	1.00
Project Description	Carlisle & Menaul TIA		
Lanes			
 Major Street: East-West			

Vehicle Volumes and Adjustments																
Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		6	162	7		65	125	55		42	1	35		37	1	16
Percent Heavy Vehicles (%)		0				1				0	0	0		0	0	0
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways																
Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.10				4.11				7.10	6.50	6.20		7.10	6.50	6.20
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.20				2.21				3.50	4.00	3.30		3.50	4.00	3.30

Delay, Queue Length, and Level of Service																
Flow Rate, v (veh/h)		7				76					92				64	
Capacity, c (veh/h)		1371				1380					532				466	
v/c Ratio		0.01				0.06					0.17				0.14	
95% Queue Length, Q ₉₅ (veh)		0.0				0.2					0.6				0.5	
95% Queue Length, Q ₉₅ (ft)											15.0				12.5	
Control Delay (s/veh)		7.6	0.0	0.0		7.8	0.5	0.5			13.2				13.9	
Level of Service (LOS)		A	A	A		A	A	A			B				B	
Approach Delay (s/veh)	0.3				2.4				13.2				13.9			
Approach LOS	A				A				B				B			

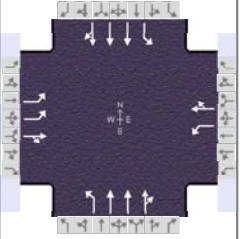
APPENDIX G
2036 NO BUILD INTERSECTION WARRANT ANALYSIS

HCS Signalized Intersection Results Summary

General Information

Agency	BH		
Analyst	AG	Analysis Date	Jun 4, 2024
Jurisdiction	CoA	Time Period	NBAM
Urban Street	Carlisle Blvd	Analysis Year	2036
Intersection	Carlisle & Claremont	File Name	2036 NBAM Signal
Project Description	Carlisle & Menaul TIA		

Intersection Information



Demand Information

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	74	12	95	45	17	17	117	824	21	13	813	59

Signal Information

Cycle, s	110.0	Reference Phase	2									
Offset, s	53	Reference Point	End									
Uncoordinated	No	Simult. Gap E/W	On	Green	1.0	4.0	78.5	13.0	0.0	0.0		
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	3.5	0.0	4.0	3.5	0.0	0.0		
				Red	0.5	0.0	1.0	1.0	0.0	0.0		

Timer Results

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4		8	5	2	1	6
Case Number		6.0		6.0	1.1	4.0	1.1	4.0
Phase Duration, s		17.5		17.5	9.0	87.5	5.0	83.5
Change Period, ($Y+R_c$), s		4.5		4.5	4.0	5.0	4.0	5.0
Max Allow Headway (MAH), s		3.3		3.3	3.1	0.0	3.1	0.0
Queue Clearance Time (g_s), s		8.8		12.5	4.7		2.2	
Green Extension Time (g_e), s		0.5		0.5	0.3	0.0	0.0	0.0
Phase Call Probability		1.00		1.00	0.99		0.33	
Max Out Probability		0.00		0.00	0.00		0.00	

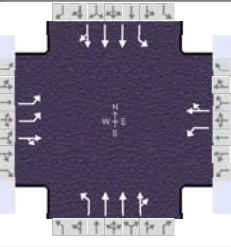
Movement Group Results

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	74	107		45	34		160	774	382	13	587	285
Adjusted Saturation Flow Rate (s), veh/h/ln	1386	1625		1297	1730		1795	1885	1860	1795	1885	1817
Queue Service Time (g_s), s	2.7	6.8		3.7	1.9		2.7	4.4	4.4	0.2	5.8	5.9
Cycle Queue Clearance Time (g_c), s	4.6	6.8		10.5	1.9		2.7	4.4	4.4	0.2	5.8	5.9
Green Ratio (g/C)	0.12	0.12		0.12	0.12		0.78	0.75	0.75	0.72	0.71	0.71
Capacity (c), veh/h	413	193		140	206		569	2826	1394	420	2689	1296
Volume-to-Capacity Ratio (X)	0.179	0.554		0.321	0.165		0.281	0.274	0.274	0.031	0.218	0.220
Back of Queue (Q), ft/ln (95 th percentile)	42	126		55	38		27	57	61	3	92	92
Back of Queue (Q), veh/ln (95 th percentile)	1.7	5.0		2.2	1.5		1.1	2.3	2.4	0.1	3.7	3.7
Queue Storage Ratio (RQ) (95 th percentile)	0.24	0.00		1.38	0.95		0.14	0.00	0.00	0.05	0.00	0.00
Uniform Delay (d_1), s/veh	45.6	45.7		50.6	43.6		3.1	2.4	2.4	4.3	5.4	5.4
Incremental Delay (d_2), s/veh	0.1	0.9		0.5	0.1		0.1	0.2	0.4	0.0	0.2	0.4
Initial Queue Delay (d_3), s/veh	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	45.7	46.6		51.1	43.7		3.2	2.6	2.8	4.3	5.5	5.8
Level of Service (LOS)	D	D		D	D		A	A	A	A	A	A
Approach Delay, s/veh / LOS	46.2	D		47.9	D		2.7	A		5.6	A	
Intersection Delay, s/veh / LOS	8.4						A					

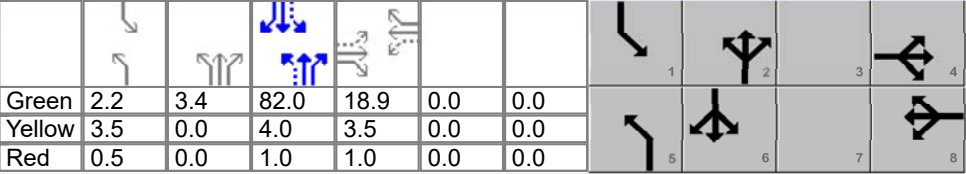
Multimodal Results

	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	2.60	C		2.60	C		1.85	B		2.05	B	
Bicycle LOS Score / LOS	0.79	A		0.62	A		1.02	A		0.97	A	

HCS Signalized Intersection Results Summary

General Information						Intersection Information		
Agency	BH					Duration, h	1.000	
Analyst	AG	Analysis Date	Jun 28, 2024			Area Type	Other	
Jurisdiction	CoA	Time Period	NBPM			PHF	1.00	
Urban Street	Carlisle Blvd	Analysis Year	2036			Analysis Period	1> 7:00	
Intersection	Carlisle & Claremont	File Name	2036 NBPM Signalized Network.xus					
Project Description	Carlisle & Menaul TIA							

Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	215	25	155	39	18	26	120	1178	44	39	1184	117

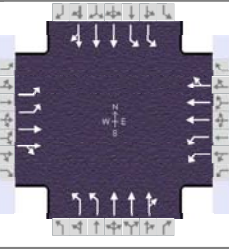
Signal Information													
Cycle, s	120.0	Reference Phase	2		Green	2.2	3.4	82.0	18.9	0.0	0.0	1	2
Offset, s	53	Reference Point	End										
Uncoordinated	No	Simult. Gap E/W	On										
Force Mode	Fixed	Simult. Gap N/S	On										
				Yellow	3.5	0.0	4.0	3.5	0.0	0.0		3	4
				Red	0.5	0.0	1.0	1.0	0.0	0.0		5	6
												7	8

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4		8	5	2	1	6
Case Number		6.0		6.0	1.1	4.0	1.1	4.0
Phase Duration, s		23.4		23.4	9.5	90.4	6.2	87.0
Change Period, ($Y+R_c$), s		4.5		4.5	4.0	5.0	4.0	5.0
Max Allow Headway (MAH), s		3.2		3.2	3.1	0.0	3.1	0.0
Queue Clearance Time (g_s), s		14.4		18.1	5.4		2.8	
Green Extension Time (g_e), s		0.9		0.8	0.2	0.0	0.0	0.0
Phase Call Probability		1.00		1.00	0.99		0.73	
Max Out Probability		0.00		0.02	0.00		0.00	

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	215	180		39	44		158	1082	531	39	881	420
Adjusted Saturation Flow Rate (s), veh/h/ln	1384	1645		1223	1717		1810	1900	1863	1810	1900	1809
Queue Service Time (g_s), s	8.7	12.4		3.7	2.7		3.4	9.6	9.8	0.8	11.5	11.5
Cycle Queue Clearance Time (g_c), s	11.3	12.4		16.1	2.7		3.4	9.6	9.8	0.8	11.5	11.5
Green Ratio (g/C)	0.16	0.16		0.16	0.16		0.74	0.71	0.71	0.70	0.68	0.68
Capacity (c), veh/h	498	260		128	271		395	2703	1325	288	2598	1237
Volume-to-Capacity Ratio (X)	0.432	0.693		0.306	0.162		0.401	0.400	0.400	0.135	0.339	0.339
Back of Queue (Q), ft/ln (95 th percentile)	135	221		52	51		39	126	130	12	196	193
Back of Queue (Q), veh/ln (95 th percentile)	5.4	8.9		2.1	2.0		1.6	5.0	5.2	0.5	7.8	7.7
Queue Storage Ratio (RQ) (95 th percentile)	0.77	0.00		1.31	1.28		0.21	0.00	0.00	0.18	0.00	0.00
Uniform Delay (d_1), s/veh	48.5	47.8		55.3	43.7		4.9	4.2	4.3	5.8	7.8	7.8
Incremental Delay (d_2), s/veh	0.2	1.2		0.5	0.1		0.1	0.2	0.5	0.1	0.4	0.7
Initial Queue Delay (d_3), s/veh	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	48.7	49.0		55.8	43.8		5.1	4.5	4.8	5.9	8.2	8.6
Level of Service (LOS)	D	D		E	D		A	A	A	A	A	A
Approach Delay, s/veh / LOS	48.9	D		49.4	D		4.6	A		8.2	A	
Intersection Delay, s/veh / LOS	11.9						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.60	C	2.60	C	1.86	B	2.06	B
Bicycle LOS Score / LOS	1.14	A	0.62	A	1.23	A	1.22	A

HCS Signalized Intersection Results Summary

General Information						Intersection Information		
Agency	BH					Duration, h	1.000	
Analyst	AG	Analysis Date	Jun 4, 2024			Area Type	Other	
Jurisdiction	CoA	Time Period	NBAM			PHF	1.00	
Urban Street	Carlisle Blvd	Analysis Year	2036			Analysis Period	1> 7:00	
Intersection	Carlisle & Menaul	File Name	2036 NBAM Signalized Network.xus					
Project Description	Carlisle & Menaul TIA							

Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	94	515	156	119	527	201	256	877	145	176	858	119

Signal Information											
Cycle, s	110.0	Reference Phase	2								
Offset, s	98	Reference Point	End								
Uncoordinated	No	Simult. Gap E/W	On	Green	6.6	1.4	36.0	4.7	0.9	38.9	
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	3.0	3.0	4.2	3.0	0.0	4.8	
				Red	0.5	0.5	1.0	0.5	0.0	1.0	

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	5	2	1	6
Case Number	2.0	4.0	2.0	4.0	2.0	4.0	2.0	4.0
Phase Duration, s	8.2	44.7	9.2	45.7	14.9	46.0	10.1	41.2
Change Period, ($Y+R_c$), s	3.5	5.8	3.5	5.8	3.5	5.2	3.5	5.2
Max Allow Headway (MAH), s	3.1	3.1	3.1	3.1	3.1	0.0	3.1	0.0
Queue Clearance Time (g_s), s	4.9	18.3	5.7	13.2	11.1		6.5	
Green Extension Time (g_e), s	0.1	3.1	0.1	3.2	0.3	0.0	0.2	0.0
Phase Call Probability	0.94	1.00	0.97	1.00	1.00		0.99	
Max Out Probability	0.00	0.01	0.00	0.00	0.41		0.00	

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	94	348	323	119	503	225	298	813	377	145	548	260
Adjusted Saturation Flow Rate (s), veh/h/ln	1743	1885	1734	1757	1900	1636	1743	1885	1745	1757	1900	1779
Queue Service Time (g_s), s	2.9	16.1	16.3	3.7	10.7	11.2	9.1	21.0	20.6	4.5	13.1	13.8
Cycle Queue Clearance Time (g_c), s	2.9	16.1	16.3	3.7	10.7	11.2	9.1	21.0	20.6	4.5	13.1	13.8
Green Ratio (g/C)	0.04	0.35	0.35	0.05	0.36	0.36	0.10	0.37	0.37	0.06	0.33	0.33
Capacity (c), veh/h	150	667	614	181	1377	593	362	1400	648	210	1243	582
Volume-to-Capacity Ratio (X)	0.625	0.522	0.526	0.659	0.366	0.379	0.823	0.581	0.582	0.693	0.441	0.446
Back of Queue (Q), ft/ln (95 th percentile)	59	307	288	73	213	202	182	386	361	89	260	269
Back of Queue (Q), veh/ln (95 th percentile)	2.3	12.2	11.5	2.9	8.5	8.1	7.2	15.3	14.4	3.6	10.4	10.8
Queue Storage Ratio (RQ) (95 th percentile)	0.27	0.00	0.00	0.42	0.00	0.00	0.96	0.00	0.00	0.45	0.00	0.00
Uniform Delay (d_1), s/veh	51.8	28.2	28.2	51.2	25.8	25.9	46.2	34.3	32.9	50.6	31.7	33.9
Incremental Delay (d_2), s/veh	1.6	2.9	3.2	1.5	0.8	1.8	6.0	1.6	3.4	1.5	1.1	2.4
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	53.4	31.1	31.4	52.8	26.5	27.8	52.2	35.9	36.4	52.1	32.8	36.4
Level of Service (LOS)	D	C	C	D	C	C	D	D	D	D	C	D
Approach Delay, s/veh / LOS	34.0	C		30.6	C		39.3	D		36.7	D	
Intersection Delay, s/veh / LOS	35.9						D					

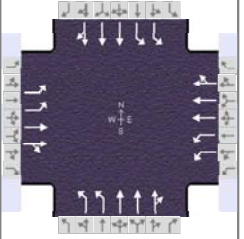
Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.71	C	2.71	C	2.57	C	2.58	C
Bicycle LOS Score / LOS	1.12	A	0.95	A	1.19	A	1.12	A

HCS Signalized Intersection Results Summary

General Information

Agency	BH		
Analyst	AG	Analysis Date	Jun 28, 2024
Jurisdiction	CoA	Time Period	NBPM
Urban Street	Carlisle Blvd	Analysis Year	2036
Intersection	Carlisle & Menaul	File Name	2036 NBPM Signal
Project Description	Carlisle & Menaul TIA		

Intersection Information



Demand Information

Approach Movement	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	164	789	240	262	939	337	336	1189	160	306	1221	130

Signal Information

Cycle, s	120.0	Reference Phase	2									
Offset, s	98	Reference Point	End									
Uncoordinated	No	Simult. Gap E/W	On									
Force Mode	Fixed	Simult. Gap N/S	On									
				Green	10.8	3.2	34.9	7.6	3.4	42.0		
				Yellow	3.0	0.0	4.2	3.0	0.0	4.8		
				Red	0.5	0.0	1.0	0.5	0.0	1.0		

Timer Results

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	5	2	1	6
Case Number	2.0	4.0	2.0	4.0	2.0	4.0	2.0	4.0
Phase Duration, s	11.1	47.8	14.6	51.3	17.5	43.3	14.3	40.1
Change Period, ($Y+R_c$), s	3.5	5.8	3.5	5.8	3.5	5.2	3.5	5.2
Max Allow Headway (MAH), s	3.1	3.1	3.1	3.1	3.1	0.0	3.1	0.0
Queue Clearance Time (g_s), s	7.5	32.6	10.8	24.9	13.8		10.5	
Green Extension Time (g_e), s	0.2	4.4	0.3	6.1	0.2	0.0	0.3	0.0
Phase Call Probability	1.00	1.00	1.00	1.00	1.00		1.00	
Max Out Probability	0.03	0.49	0.16	0.14	1.00		0.13	

Movement Group Results

Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	164	536	493	262	890	386	359	981	460	254	761	362
Adjusted Saturation Flow Rate (s), veh/h/ln	1757	1900	1747	1757	1900	1642	1757	1900	1781	1757	1900	1803
Queue Service Time (g_s), s	5.5	30.6	30.6	8.8	22.8	22.9	11.8	29.9	29.8	8.5	21.9	22.4
Cycle Queue Clearance Time (g_c), s	5.5	30.6	30.6	8.8	22.8	22.9	11.8	29.9	29.8	8.5	21.9	22.4
Green Ratio (g/C)	0.06	0.35	0.35	0.09	0.38	0.38	0.12	0.32	0.32	0.09	0.29	0.29
Capacity (c), veh/h	223	666	612	324	1440	622	411	1206	565	317	1104	524
Volume-to-Capacity Ratio (X)	0.734	0.805	0.805	0.809	0.618	0.620	0.873	0.814	0.814	0.803	0.689	0.691
Back of Queue (Q), ft/ln (95 th percentile)	111	560	526	183	400	370	215	533	524	178	405	416
Back of Queue (Q), veh/ln (95 th percentile)	4.4	22.4	21.0	7.3	16.0	14.8	8.6	21.3	21.0	7.1	16.2	16.7
Queue Storage Ratio (RQ) (95 th percentile)	0.51	0.00	0.00	1.04	0.00	0.00	1.13	0.00	0.00	0.89	0.00	0.00
Uniform Delay (d_1), s/veh	55.2	35.3	35.3	53.4	30.2	30.3	46.0	46.9	45.9	54.2	41.0	42.9
Incremental Delay (d_2), s/veh	1.8	10.8	11.8	4.9	2.0	4.7	12.7	4.8	10.1	3.8	3.4	7.1
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	57.0	46.1	47.1	58.3	32.3	34.9	58.7	51.7	56.0	58.0	44.3	50.0
Level of Service (LOS)	E	D	D	E	C	C	E	D	E	E	D	D
Approach Delay, s/veh / LOS	48.0	D		37.4	D		54.2	D		48.3	D	
Intersection Delay, s/veh / LOS	47.2						D					

Multimodal Results

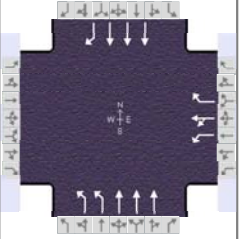
	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.71	C	2.71	C	2.58	C	2.59	C
Bicycle LOS Score / LOS	1.47	A	1.33	A	1.41	A	1.40	A

HCS Signalized Intersection Results Summary

General Information

Agency	BH		
Analyst	AG	Analysis Date	Jun 4, 2024
Jurisdiction	CoA	Time Period	NBAM
Urban Street	Carlisle Blvd	Analysis Year	2036
Intersection	Carlisle & I-40 WB	File Name	2036 NBAM Signal
Project Description	Carlisle & Menaul TIA		

Intersection Information



Demand Information

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h				282	3	302	465	1223			854	305

Signal Information

Cycle, s	110.0	Reference Phase	2									
Offset, s	92	Reference Point	End									
Uncoordinated	No	Simult. Gap E/W	On	Green	16.9	54.6	22.9	0.0	0.0	0.0		
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	4.0	4.0	4.0	0.0	0.0	0.0		
				Red	0.5	1.0	2.0	0.0	0.0	0.0		

Timer Results

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase				8	5	2		6
Case Number				9.0	2.0	4.0		7.3
Phase Duration, s				28.9	21.4	81.1		59.6
Change Period, ($Y+R_c$), s				6.0	4.5	5.0		5.0
Max Allow Headway (MAH), s				3.2	3.1	0.0		0.0
Queue Clearance Time (g_s), s				22.1	15.9			
Green Extension Time (g_e), s				0.8	1.0	0.0		0.0
Phase Call Probability				1.00	1.00			
Max Out Probability				0.14	0.00			

Movement Group Results

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement				3	8	18	5	2		6	16	
Adjusted Flow Rate (v), veh/h				141	144	302	451	1186		725	259	
Adjusted Saturation Flow Rate (s), veh/h/ln				1810	1811	1610	1743	1712		1725		
Queue Service Time (g_s), s				7.4	7.5	20.1	13.9	12.9		9.3		
Cycle Queue Clearance Time (g_c), s				7.4	7.5	20.1	13.9	12.9		9.3		
Green Ratio (g/C)				0.21	0.21	0.21	0.15	0.69		0.50		
Capacity (c), veh/h				377	378	336	536	3551		2571		
Volume-to-Capacity Ratio (X)				0.374	0.381	0.899	0.841	0.334		0.282		
Back of Queue (Q), ft/ln (95 th percentile)				146	149	370	255	208		166		
Back of Queue (Q), veh/ln (95 th percentile)				5.8	6.0	14.8	10.1	8.2		6.6		
Queue Storage Ratio (RQ) (95 th percentile)				0.86	0.88	2.18	0.96	0.00		0.00		
Uniform Delay (d_1), s/veh				37.4	37.4	42.4	47.2	9.5		17.0		
Incremental Delay (d_2), s/veh				0.2	0.2	19.8	1.3	0.2		0.2		
Initial Queue Delay (d_3), s/veh				0.0	0.0	0.0	0.0	0.0		0.0		
Control Delay (d), s/veh				37.6	37.7	62.3	48.5	9.8		17.2	0.0	
Level of Service (LOS)				D	D	E	D	A		B	A	
Approach Delay, s/veh / LOS	0.0			50.3		D	20.4	C		12.7	B	
Intersection Delay, s/veh / LOS				23.5				C				

Multimodal Results

	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	2.74		C	2.61		C	1.86		B	1.68		B
Bicycle LOS Score / LOS				1.46		A	1.42		A	1.13		A

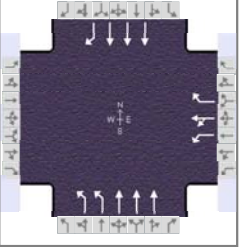
HCS Signalized Intersection Results Summary

General Information

Agency	BH		
Analyst	AG	Analysis Date	Jun 28, 2024
Jurisdiction	CoA	Time Period	NBPM
Urban Street	Carlisle Blvd	Analysis Year	2036
Intersection	Carlisle & I-40 WB	File Name	2036 NBPM Signal
Project Description	Carlisle & Menaul TIA		

Intersection Information

Duration, h	1.000
Area Type	Other
PHF	1.00
Analysis Period	1> 7:00
Signalized Network.xus	



Demand Information

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h				358	50	471	493	1444			1267	327

Signal Information

Cycle, s	120.0	Reference Phase	2									
Offset, s	92	Reference Point	End									
Uncoordinated	No	Simult. Gap E/W	On	Green	19.7	57.2	27.6	0.0	0.0	0.0		
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	4.0	4.0	4.0	0.0	0.0	0.0		
				Red	0.5	1.0	2.0	0.0	0.0	0.0		

Timer Results

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase				8	5	2		6
Case Number				9.0	2.0	4.0		7.3
Phase Duration, s				33.6	24.2	86.4		62.2
Change Period, (Y+R _c), s				6.0	4.5	5.0		5.0
Max Allow Headway (MAH), s				3.2	3.1	0.0		0.0
Queue Clearance Time (g _s), s				29.6	18.6			
Green Extension Time (g _e), s				0.0	1.1	0.0		0.0
Phase Call Probability				1.00	1.00			
Max Out Probability				1.00	0.00			

Movement Group Results

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement				3	8	18	5	2		6	16	
Adjusted Flow Rate (v), veh/h				179	229	471	488	1430		1206	311	
Adjusted Saturation Flow Rate (s), veh/h/ln				1810	1829	1610	1757	1725		1725		
Queue Service Time (g _s), s				10.1	13.2	27.6	16.6	22.0		22.5		
Cycle Queue Clearance Time (g _c), s				10.1	13.2	27.6	16.6	22.0		22.5		
Green Ratio (g/C)				0.23	0.23	0.23	0.16	0.68		0.48		
Capacity (c), veh/h				416	421	370	577	3511		2467		
Volume-to-Capacity Ratio (X)				0.430	0.544	1.272	0.847	0.407		0.489		
Back of Queue (Q), ft/ln (95 th percentile)				200	250	2188	316	356		347		
Back of Queue (Q), veh/ln (95 th percentile)				8.0	10.0	87.5	12.6	14.2		13.9		
Queue Storage Ratio (RQ) (95 th percentile)				1.18	1.47	12.87	1.19	0.00		0.00		
Uniform Delay (d ₁), s/veh				39.5	40.7	46.2	57.5	16.3		28.8		
Incremental Delay (d ₂), s/veh				0.3	0.8	511.0	1.5	0.3		0.4		
Initial Queue Delay (d ₃), s/veh				0.0	0.0	0.0	0.0	0.0		0.0		
Control Delay (d), s/veh				39.7	41.5	557.2	59.0	16.7		29.2	0.0	
Level of Service (LOS)				D	D	F	E	B		C	A	
Approach Delay, s/veh / LOS	0.0			317.5		F	27.4		C	23.2		C
Intersection Delay, s/veh / LOS				85.0					F			

Multimodal Results

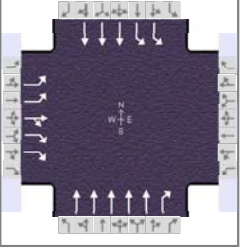
	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	2.75		C	2.62		C	1.87		B	1.68		B
Bicycle LOS Score / LOS				1.94		B	1.55		B	1.36		A

HCS Signalized Intersection Results Summary

General Information

Agency	BH		
Analyst	AG	Analysis Date	Jun 4, 2024
Jurisdiction	CoA	Time Period	NBAM
Urban Street	Carlisle Blvd	Analysis Year	2036
Intersection	Carlisle & I-40 EB	File Name	2036 NBAM Signal
Project Description	Carlisle & Menaul TIA		

Intersection Information



Demand Information

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	618	2	569					1019	205	220	946	

Signal Information

Cycle, s	110.0	Reference Phase	2									
Offset, s	92	Reference Point	End									
Uncoordinated	No	Simult. Gap E/W	On	Green	8.3	62.5	23.2	0.0	0.0	0.0		
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	4.0	4.0	4.5	0.0	0.0	0.0		
				Red	0.5	1.0	2.0	0.0	0.0	0.0		

Timer Results

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4				2	1	6
Case Number		9.0				7.3	2.0	4.0
Phase Duration, s		29.7				67.5	12.8	80.3
Change Period, ($Y+R_c$), s		6.5				5.0	4.5	5.0
Max Allow Headway (MAH), s		3.2				0.0	3.1	0.0
Queue Clearance Time (g_s), s		20.5					7.9	
Green Extension Time (g_e), s		2.7				0.0	0.4	0.0
Phase Call Probability		1.00					1.00	
Max Out Probability		0.06					0.00	

Movement Group Results

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14				2	12		1	6	
Adjusted Flow Rate (v), veh/h	618	201	370				1019	205		190	817	
Adjusted Saturation Flow Rate (s), veh/h/ln	1757	1613	1610				1725	1610		1757	1725	
Queue Service Time (g_s), s	18.5	12.4	11.3				6.4	6.9		5.9	9.8	
Cycle Queue Clearance Time (g_c), s	18.5	12.4	11.3				6.4	6.9		5.9	9.8	
Green Ratio (g/C)	0.21	0.21	0.21				0.57	0.57		0.08	0.68	
Capacity (c), veh/h	742	341	680				4899	914		265	3542	
Volume-to-Capacity Ratio (X)	0.833	0.591	0.544				0.208	0.224		0.717	0.231	
Back of Queue (Q), ft/ln (95 th percentile)	321	213	196				106	113		124	172	
Back of Queue (Q), veh/ln (95 th percentile)	12.8	8.5	7.9				4.2	4.5		4.9	6.9	
Queue Storage Ratio (RQ) (95 th percentile)	0.73	0.48	0.45				0.00	0.40		0.40	0.00	
Uniform Delay (d_1), s/veh	41.5	39.1	38.7				11.6	11.8		53.0	11.2	
Incremental Delay (d_2), s/veh	2.8	0.6	0.3				0.1	0.6		1.3	0.1	
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0				0.0	0.0		0.0	0.0	
Control Delay (d), s/veh	44.3	39.7	38.9				11.7	12.3		54.3	11.3	
Level of Service (LOS)	D	D	D				B	B		D	B	
Approach Delay, s/veh / LOS	41.9		D	0.0			11.8		B	19.4		B
Intersection Delay, s/veh / LOS	24.5						C					

Multimodal Results

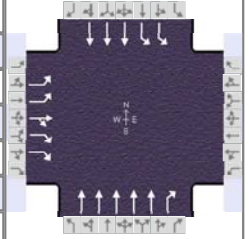
	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	2.87		C	2.98		C	1.67		B	2.23		B
Bicycle LOS Score / LOS	2.45		B				0.89		A	1.13		A

HCS Signalized Intersection Results Summary

General Information

Agency	BH		
Analyst	AG	Analysis Date	Jun 28, 2024
Jurisdiction	CoA	Time Period	NBPM
Urban Street	Carlisle Blvd	Analysis Year	2036
Intersection	Carlisle & I-40 EB	File Name	2036 NBPM Signal
Project Description	Carlisle & Menaul TIA		

Intersection Information



Demand Information

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	469	9	544					1449	332	399	1235	

Signal Information

Cycle, s	120.0	Reference Phase	2									
Offset, s	92	Reference Point	End									
Uncoordinated	No	Simult. Gap E/W	On	Green	15.8	68.4	19.8	0.0	0.0	0.0		
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	4.0	4.0	4.5	0.0	0.0	0.0		
				Red	0.5	1.0	2.0	0.0	0.0	0.0		

Timer Results

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4				2	1	6
Case Number		9.0				7.3	2.0	4.0
Phase Duration, s		26.3				73.4	20.3	93.7
Change Period, ($Y+R_c$), s		6.5				5.0	4.5	5.0
Max Allow Headway (MAH), s		3.2				0.0	3.1	0.0
Queue Clearance Time (g_s), s		17.4					14.9	
Green Extension Time (g_e), s		2.4				0.0	0.9	0.0
Phase Call Probability		1.00					1.00	
Max Out Probability		0.02					0.00	

Movement Group Results

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14				2	12		1	6	
Adjusted Flow Rate (v), veh/h	469	199	354				1449	332		382	1182	
Adjusted Saturation Flow Rate (s), veh/h/ln	1757	1623	1610				1725	1610		1757	1725	
Queue Service Time (g_s), s	15.4	14.0	12.4				10.4	13.4		12.9	13.3	
Cycle Queue Clearance Time (g_c), s	15.4	14.0	12.4				10.4	13.4		12.9	13.3	
Green Ratio (g/C)	0.16	0.16	0.16				0.57	0.57		0.13	0.74	
Capacity (c), veh/h	580	268	531				4917	918		463	3826	
Volume-to-Capacity Ratio (X)	0.809	0.745	0.666				0.295	0.362		0.826	0.309	
Back of Queue (Q), ft/ln (95 th percentile)	276	242	215				178	216		244	210	
Back of Queue (Q), veh/ln (95 th percentile)	11.1	9.7	8.6				7.1	8.6		9.8	8.4	
Queue Storage Ratio (RQ) (95 th percentile)	0.63	0.55	0.49				0.00	0.77		0.79	0.00	
Uniform Delay (d_1), s/veh	48.3	47.7	47.0				13.3	14.0		55.7	8.8	
Incremental Delay (d_2), s/veh	1.1	1.6	0.5				0.2	1.1		1.2	0.2	
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0				0.0	0.0		0.0	0.0	
Control Delay (d), s/veh	49.4	49.3	47.5				13.5	15.1		56.8	8.9	
Level of Service (LOS)	D	D	D				B	B		E	A	
Approach Delay, s/veh / LOS	48.7		D	0.0			13.8		B	20.6		C
Intersection Delay, s/veh / LOS	24.4						C					

Multimodal Results

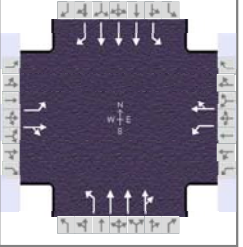
	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	2.87		C	2.99		C	1.67		B	2.21		B
Bicycle LOS Score / LOS	2.17		B				1.08		A	1.39		A

HCS Signalized Intersection Results Summary

General Information

Agency	BH		
Analyst	AG	Analysis Date	7/2/2024
Jurisdiction	CoA	Time Period	NBAM
Urban Street	Carlisle Blvd	Analysis Year	2036
Intersection	Carlisle & Phoenix	File Name	2036 NBAM Carlisle & Phoenix
Project Description	Carlisle & Menaul TIA Signalized Alt		

Intersection Information



Demand Information

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	2	0	73	8	2	15	86	958	4	10	1031	18

Signal Information

Cycle, s	90.0	Reference Phase	2									
Offset, s	0	Reference Point	End									
Uncoordinated	No	Simult. Gap E/W	On	Green	1.3	4.0	62.0	0.3	0.8	5.6		
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	4.0	0.0	4.0	4.0	0.0	4.0		
				Red	0.0	0.0	0.0	0.0	0.0	0.0		

Timer Results

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	5	2	1	6
Case Number	1.1	4.0	1.1	4.0	1.1	4.0	2.0	3.0
Phase Duration, s	4.3	9.6	5.1	10.4	9.3	70.0	5.3	66.0
Change Period, ($Y+R_c$), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Allow Headway (MAH), s	3.1	3.4	3.1	3.4	3.1	0.0	3.1	0.0
Queue Clearance Time (g_s), s	2.1	6.1	2.4	2.9	3.0		2.5	
Green Extension Time (g_e), s	0.0	0.1	0.0	0.2	0.1	0.0	0.0	0.0
Phase Call Probability	0.05	0.90	0.18	0.91	0.88		0.22	
Max Out Probability	0.00	0.00	0.02	0.00	0.00		0.00	

Movement Group Results

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	2	73		8	17		86	642	320	10	1031	18
Adjusted Saturation Flow Rate (s), veh/h/ln	1781	1585		1810	1640		1810	1900	1896	1795	1712	1598
Queue Service Time (g_s), s	0.1	4.1		0.4	0.9		1.0	4.9	4.9	0.5	7.0	0.3
Cycle Queue Clearance Time (g_c), s	0.1	4.1		0.4	0.9		1.0	4.9	4.9	0.5	7.0	0.3
Green Ratio (g/C)	0.07	0.06		0.07	0.07		0.77	0.73	0.73	0.01	0.69	0.69
Capacity (c), veh/h	140	98		125	116		526	2786	1390	27	3539	1101
Volume-to-Capacity Ratio (X)	0.014	0.741		0.064	0.146		0.163	0.230	0.230	0.377	0.291	0.016
Back of Queue (Q), ft/ln (95 th percentile)	2	76		7	16		11	66	69	11	94	4
Back of Queue (Q), veh/ln (95 th percentile)	0.1	3.0		0.3	0.6		0.4	2.6	2.8	0.4	3.7	0.2
Queue Storage Ratio (RQ) (95 th percentile)	0.00	0.00		0.07	0.16		0.10	0.00	0.00	0.12	0.00	0.05
Uniform Delay (d_1), s/veh	39.4	41.5		38.8	39.2		3.0	3.9	3.9	43.9	5.4	4.4
Incremental Delay (d_2), s/veh	0.0	4.2		0.1	0.2		0.1	0.2	0.4	3.3	0.2	0.0
Initial Queue Delay (d_3), s/veh	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	39.4	45.7		38.9	39.5		3.1	4.0	4.2	47.2	5.7	4.4
Level of Service (LOS)	D	D		D	D		A	A	A	D	A	A
Approach Delay, s/veh / LOS	45.5	D		39.3	D		4.0	A		6.0	A	
Intersection Delay, s/veh / LOS	6.8						A					

Multimodal Results

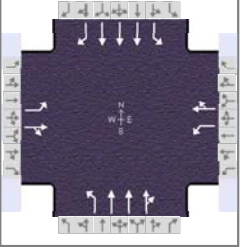
	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.60	C	2.73	C	1.84	B	1.86	B
Bicycle LOS Score / LOS	0.61	A	0.53	A	1.06	A	1.07	A

HCS Signalized Intersection Results Summary

General Information

Agency	BH		
Analyst	AG	Analysis Date	7/2/2024
Jurisdiction	CoA	Time Period	NBPM
Urban Street	Carlisle Blvd	Analysis Year	2036
Intersection	Carlisle & Phoenix	File Name	2036 NBPM Carlis
Project Description	Carlisle & Menaul TIA Signalized Alt		

Intersection Information



Demand Information

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	4	1	195	0	1	31	148	1409	26	21	1402	39

Signal Information

Cycle, s	90.0	Reference Phase	2									
Offset, s	0	Reference Point	End									
Uncoordinated	No	Simult. Gap E/W	On	Green	2.5	3.4	59.0	0.6	8.5	0.0		
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	4.0	0.0	4.0	4.0	4.0	0.0		
				Red	0.0	0.0	0.0	0.0	0.0	0.0		

Timer Results

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	5	2	1	6
Case Number	1.1	4.0	1.1	4.0	1.1	4.0	2.0	3.0
Phase Duration, s	4.6	17.1	0.0	12.5	9.9	66.4	6.5	63.0
Change Period, ($Y+R_c$), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Allow Headway (MAH), s	3.1	3.4	0.0	3.4	3.1	0.0	3.1	0.0
Queue Clearance Time (g_s), s	2.2	12.6		3.6	4.1		3.0	
Green Extension Time (g_e), s	0.0	0.5	0.0	0.5	0.3	0.0	0.0	0.0
Phase Call Probability	0.10	1.00		1.00	0.98		0.41	
Max Out Probability	0.00	0.00		0.00	0.00		0.00	

Movement Group Results

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	4	196		0	32		148	960	475	21	1402	39
Adjusted Saturation Flow Rate (s), veh/h/ln	1810	1611		1810	1618		1810	1900	1881	1810	1725	1610
Queue Service Time (g_s), s	0.2	10.6		0.0	1.6		2.1	9.3	9.3	1.0	11.5	0.8
Cycle Queue Clearance Time (g_c), s	0.2	10.6		0.0	1.6		2.1	9.3	9.3	1.0	11.5	0.8
Green Ratio (g/C)	0.12	0.15		0.05	0.09		0.74	0.69	0.69	0.03	0.66	0.66
Capacity (c), veh/h	199	235		88	153		404	2636	1305	49	3395	1056
Volume-to-Capacity Ratio (X)	0.020	0.835		0.000	0.209		0.367	0.364	0.364	0.426	0.413	0.037
Back of Queue (Q), ft/ln (95 th percentile)	3	191		0	29		26	138	143	22	164	11
Back of Queue (Q), veh/ln (95 th percentile)	0.1	7.7		0.0	1.2		1.0	5.5	5.7	0.9	6.5	0.4
Queue Storage Ratio (RQ) (95 th percentile)	0.00	0.00		0.00	0.29		0.24	0.00	0.00	0.24	0.00	0.12
Uniform Delay (d_1), s/veh	34.7	37.4		0.0	37.6		4.9	5.6	5.6	43.1	7.3	5.5
Incremental Delay (d_2), s/veh	0.0	3.1		0.0	0.2		0.2	0.4	0.8	2.2	0.4	0.1
Initial Queue Delay (d_3), s/veh	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	34.7	40.5		0.0	37.9		5.1	6.0	6.4	45.3	7.7	5.5
Level of Service (LOS)	C	D			D		A	A	A	D	A	A
Approach Delay, s/veh / LOS	40.4		D	37.9		D	6.1		A	8.2		A
Intersection Delay, s/veh / LOS	9.4						A					

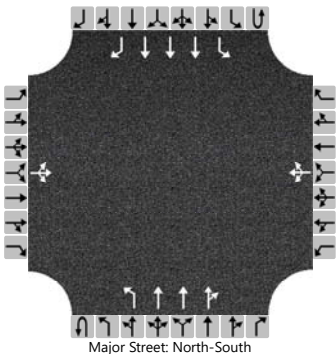
Multimodal Results

	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	2.59		C	2.73		C	1.86		B	1.86		B
Bicycle LOS Score / LOS	0.82		A	0.54		A	1.36		A	1.29		A

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AG	Intersection	Carlisle & Phoenix
Agency/Co.	BH	Jurisdiction	CoA
Date Performed	6/5/2024	East/West Street	Phoenix Ave
Analysis Year	2036	North/South Street	Carlisle Blvd
Time Analyzed	NBAM	Peak Hour Factor	0.85
Intersection Orientation	North-South	Analysis Time Period (hrs)	1.00
Project Description	Menaul & Carlisle TIA		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	1	3	0	0	1	3	1
Configuration			LTR				LTR			L	T	TR		L	T	R
Volume (veh/h)		2	0	73		8	2	15	0	86	958	4	0	10	1031	18
Percent Heavy Vehicles (%)		2	2	2		0	0	0	0	0			1	1		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized													No			
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		6.4	6.5	7.1		6.4	6.5	7.1		5.3				5.3		
Critical Headway (sec)		6.43	6.53	7.14		6.40	6.50	7.10		5.30				5.32		
Base Follow-Up Headway (sec)		3.8	4.0	3.9		3.8	4.0	3.9		3.1				3.1		
Follow-Up Headway (sec)		3.82	4.02	3.92		3.80	4.00	3.90		3.10				3.11		

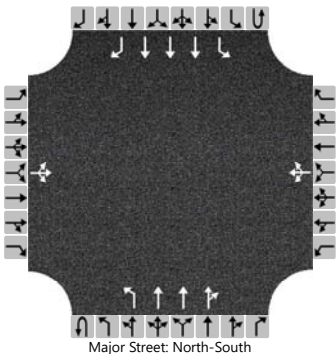
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			88			29				101				12		
Capacity, c (veh/h)			310			70				306				341		
v/c Ratio			0.28			0.42				0.33				0.03		
95% Queue Length, Q ₉₅ (veh)			1.2			2.0				1.5				0.1		
95% Queue Length, Q ₉₅ (ft)			30.5			50.0				37.5				2.5		
Control Delay (s/veh)			21.2			92.6				22.5				15.9		
Level of Service (LOS)			C			F				C				C		
Approach Delay (s/veh)	21.2				92.6				1.8				0.2			
Approach LOS	C				F				A				A			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AG	Intersection	Carlisle & Phoenix
Agency/Co.	BH	Jurisdiction	CoA
Date Performed	6/5/2024	East/West Street	Phoenix Ave
Analysis Year	2036	North/South Street	Carlisle Blvd
Time Analyzed	NBPM	Peak Hour Factor	0.82
Intersection Orientation	North-South	Analysis Time Period (hrs)	1.00
Project Description	Menaul & Carlisle TIA		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	1	3	0	0	1	3	1
Configuration			LTR				LTR			L	T	TR		L	T	R
Volume (veh/h)		4	1	195		0	1	31	0	148	1409	26	0	21	1402	39
Percent Heavy Vehicles (%)		0	0	0		0	0	0	0	0			0	0		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized													No			
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		6.4	6.5	7.1		6.4	6.5	7.1		5.3				5.3		
Critical Headway (sec)		6.40	6.50	7.10		6.40	6.50	7.10		5.30				5.30		
Base Follow-Up Headway (sec)		3.8	4.0	3.9		3.8	4.0	3.9		3.1				3.1		
Follow-Up Headway (sec)		3.80	4.00	3.90		3.80	4.00	3.90		3.10				3.10		

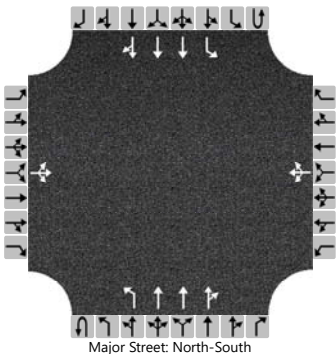
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			244				39			180				26		
Capacity, c (veh/h)			0				0			170				171		
v/c Ratio										1.06				0.15		
95% Queue Length, Q ₉₅ (veh)										19.4				0.5		
95% Queue Length, Q ₉₅ (ft)										485.0				12.5		
Control Delay (s/veh)										294.3				29.8		
Level of Service (LOS)										F				D		
Approach Delay (s/veh)									27.5				0.4			
Approach LOS									F				A			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AG	Intersection	Carlisle & Prospect
Agency/Co.	BH	Jurisdiction	CoA
Date Performed	6/5/2024	East/West Street	Prospect Ave
Analysis Year	2036	North/South Street	Carlisle Blvd
Time Analyzed	NBAM	Peak Hour Factor	0.84
Intersection Orientation	North-South	Analysis Time Period (hrs)	1.00
Project Description	Menaul & Carlisle TIA		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	1	3	0	0	1	3	0
Configuration			LTR				LTR			L	T	TR		L	T	TR
Volume (veh/h)		17	0	58		50	1	44	0	128	1235	21	0	38	1053	38
Percent Heavy Vehicles (%)		2	2	2		0	0	0	1	1			0	0		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		6.4	6.5	7.1		6.4	6.5	7.1		5.3				5.3		
Critical Headway (sec)		6.44	6.54	7.14		6.40	6.50	7.10		5.32				5.30		
Base Follow-Up Headway (sec)		3.8	4.0	3.9		3.8	4.0	3.9		3.1				3.1		
Follow-Up Headway (sec)		3.82	4.02	3.92		3.80	4.00	3.90		3.11				3.10		

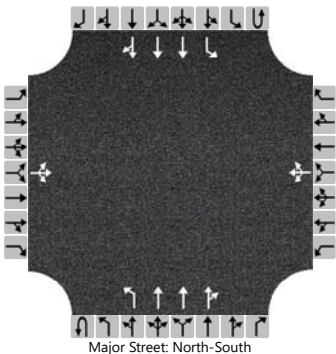
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			89			113				152				45		
Capacity, c (veh/h)			45			19				283				229		
v/c Ratio			1.99			5.97				0.54				0.20		
95% Queue Length, Q ₉₅ (veh)			27.1			50.4				3.3				0.7		
95% Queue Length, Q ₉₅ (ft)			688.3			1260.0				83.2				17.5		
Control Delay (s/veh)			2008.7			9356.4				32.4				24.6		
Level of Service (LOS)			F			F				D				C		
Approach Delay (s/veh)	2008.7				9356.4				3.0				0.8			
Approach LOS	F				F				A				A			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AG	Intersection	Carlisle & Prospect
Agency/Co.	BH	Jurisdiction	CoA
Date Performed	6/5/2024	East/West Street	Prospect Ave
Analysis Year	2036	North/South Street	Carlisle Blvd
Time Analyzed	NBPM	Peak Hour Factor	0.85
Intersection Orientation	North-South	Analysis Time Period (hrs)	1.00
Project Description	Menaul & Carlisle TIA		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	1	3	0	0	1	3	0
Configuration			LTR				LTR			L	T	TR		L	T	TR
Volume (veh/h)		13	0	103		35	0	31	0	110	1644	53	0	62	1643	47
Percent Heavy Vehicles (%)		0	0	0		0	0	0	1	1			0	0		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		6.4	6.5	7.1		6.4	6.5	7.1		5.3				5.3		
Critical Headway (sec)		6.40	6.50	7.10		6.40	6.50	7.10		5.32				5.30		
Base Follow-Up Headway (sec)		3.8	4.0	3.9		3.8	4.0	3.9		3.1				3.1		
Follow-Up Headway (sec)		3.80	4.00	3.90		3.80	4.00	3.90		3.11				3.10		

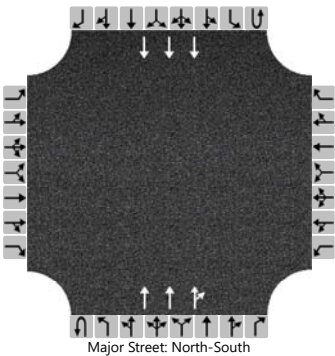
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			136				78			129				73		
Capacity, c (veh/h)			0				0			128				129		
v/c Ratio										1.01				0.57		
95% Queue Length, Q ₉₅ (veh)										14.2				3.5		
95% Queue Length, Q ₉₅ (ft)										357.8				87.5		
Control Delay (s/veh)										266.3				68.0		
Level of Service (LOS)										F				F		
Approach Delay (s/veh)									16.2				2.4			
Approach LOS									F				A			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AG	Intersection	Carlisle & Cutler
Agency/Co.	BH	Jurisdiction	CoA
Date Performed	6/5/2024	East/West Street	Cutler Ave
Analysis Year	2036	North/South Street	Carlisle Blvd
Time Analyzed	NBAM	Peak Hour Factor	0.90
Intersection Orientation	North-South	Analysis Time Period (hrs)	1.00
Project Description	Carlisle & Menaul TIA		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	0	0	0	0	3	0	0	0	3	0
Configuration											T	TR			T	
Volume (veh/h)											1384	185			1138	
Percent Heavy Vehicles (%)																
Proportion Time Blocked																
Percent Grade (%)																
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)																
Critical Headway (sec)																
Base Follow-Up Headway (sec)																
Follow-Up Headway (sec)																

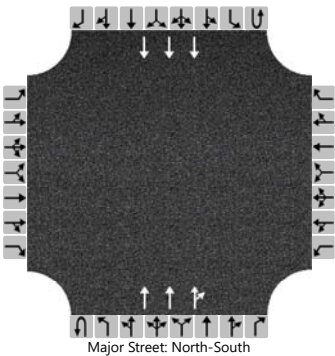
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)																
Capacity, c (veh/h)																
v/c Ratio																
95% Queue Length, Q ₉₅ (veh)																
95% Queue Length, Q ₉₅ (ft)																
Control Delay (s/veh)																
Level of Service (LOS)																
Approach Delay (s/veh)																
Approach LOS																

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AG	Intersection	Carlisle & Cutler
Agency/Co.	BH	Jurisdiction	CoA
Date Performed	6/5/2024	East/West Street	Cutler Ave
Analysis Year	2036	North/South Street	Carlisle Blvd
Time Analyzed	NBPM	Peak Hour Factor	0.62
Intersection Orientation	North-South	Analysis Time Period (hrs)	1.00
Project Description	Carlisle & Menaul TIA		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	0	0	0	0	3	0	0	0	3	0
Configuration											T	TR			T	
Volume (veh/h)											1807	146			1715	
Percent Heavy Vehicles (%)																
Proportion Time Blocked																
Percent Grade (%)																
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)																
Critical Headway (sec)																
Base Follow-Up Headway (sec)																
Follow-Up Headway (sec)																

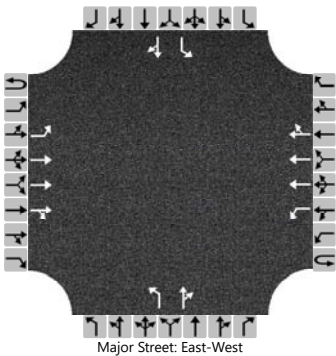
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)																
Capacity, c (veh/h)																
v/c Ratio																
95% Queue Length, Q ₉₅ (veh)																
95% Queue Length, Q ₉₅ (ft)																
Control Delay (s/veh)																
Level of Service (LOS)																
Approach Delay (s/veh)																
Approach LOS																

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AG	Intersection	Menaul & Bryn Mawr
Agency/Co.	BH	Jurisdiction	CoA
Date Performed	6/5/2024	East/West Street	Menaul Blvd
Analysis Year	2036	North/South Street	Bryn Mawr/American Dr
Time Analyzed	NBAM	Peak Hour Factor	0.73
Intersection Orientation	East-West	Analysis Time Period (hrs)	1.00
Project Description	Carlisle & Menaul TIA		

Lanes



Vehicle Volumes and Adjustments

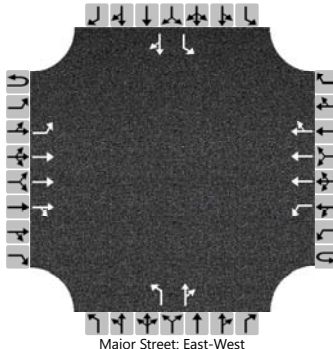
Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	3	0	0	1	3	0		1	1	0		1	1	0
Configuration		L	T	TR		L	T	TR		L		TR		L		TR
Volume (veh/h)	0	42	675	16	0	22	879	7		11	0	26		7	1	39
Percent Heavy Vehicles (%)	1	1			1	1				0	0	0		2	2	2
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		5.3				5.3				6.4	6.5	7.1		6.4	6.5	7.1
Critical Headway (sec)		5.32				5.32				6.40	6.50	7.10		6.44	6.54	7.14
Base Follow-Up Headway (sec)		3.1				3.1				3.8	4.0	3.9		3.8	4.0	3.9
Follow-Up Headway (sec)		3.11				3.11				3.80	4.00	3.90		3.82	4.02	3.92

Delay, Queue Length, and Level of Service

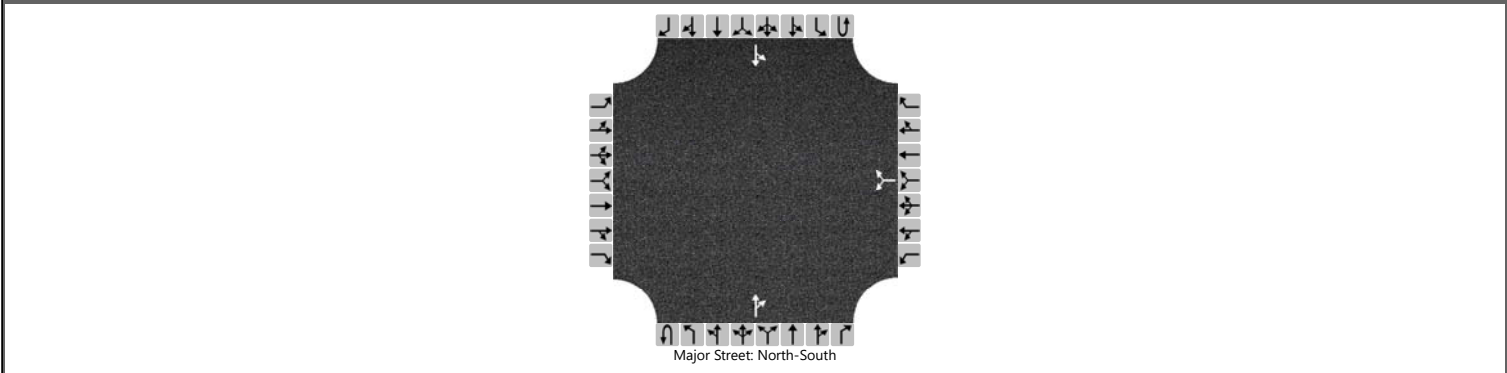
Flow Rate, v (veh/h)		58				30				15		36		10		55
Capacity, c (veh/h)		311				418				71		464		62		286
v/c Ratio		0.19				0.07				0.21		0.08		0.15		0.19
95% Queue Length, Q ₉₅ (veh)		0.7				0.2				0.8		0.2		0.5		0.7
95% Queue Length, Q ₉₅ (ft)		17.6				5.0				20.0		5.0		12.7		17.8
Control Delay (s/veh)		19.2				14.3				68.7		13.4		73.7		20.6
Level of Service (LOS)		C				B				F		B		F		C
Approach Delay (s/veh)	1.1				0.3				29.9				28.5			
Approach LOS	A				A				D				D			

HCS Two-Way Stop-Control Report																	
General Information						Site Information											
Analyst	AG					Intersection				Menaul & Bryn Mawr							
Agency/Co.	BH					Jurisdiction				CoA							
Date Performed	6/5/2024					East/West Street				Menaul Blvd							
Analysis Year	2036					North/South Street				Bryn Mawr/American Dr							
Time Analyzed	NBPM					Peak Hour Factor				0.74							
Intersection Orientation	East-West					Analysis Time Period (hrs)				1.00							
Project Description	Carlisle & Menaul TIA																
Lanes																	
																	
Vehicle Volumes and Adjustments																	
Approach	Eastbound				Westbound				Northbound				Southbound				
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12	
Number of Lanes	0	1	3	0	0	1	3	0		1	1	0		1	1	0	
Configuration		L	T	TR		L	T	TR		L		TR		L		TR	
Volume (veh/h)	0	70	1060	21	0	49	1414	13		1	0	13		19	0	103	
Percent Heavy Vehicles (%)	0	0			1	1				0	0	0		0	0	0	
Proportion Time Blocked																	
Percent Grade (%)									0				0				
Right Turn Channelized																	
Median Type Storage	Undivided																
Critical and Follow-up Headways																	
Base Critical Headway (sec)		5.3				5.3				6.4	6.5	7.1		6.4	6.5	7.1	
Critical Headway (sec)		5.30				5.32				6.40	6.50	7.10		6.40	6.50	7.10	
Base Follow-Up Headway (sec)		3.1				3.1				3.8	4.0	3.9		3.8	4.0	3.9	
Follow-Up Headway (sec)		3.10				3.11				3.80	4.00	3.90		3.80	4.00	3.90	
Delay, Queue Length, and Level of Service																	
Flow Rate, v (veh/h)		95				66				1		18		26		139	
Capacity, c (veh/h)		139				235				3		316		4		222	
v/c Ratio		0.68				0.28				0.53		0.06		6.05		0.63	
95% Queue Length, Q ₉₅ (veh)		5.2				1.2				1.2		0.2		13.6		4.5	
95% Queue Length, Q ₉₅ (ft)		130.0				30.2				30.0		5.0		340.0		112.5	
Control Delay (s/veh)		81.2				26.3				2216.9		17.0		10859.6		47.4	
Level of Service (LOS)		F				D				F		C		F		E	
Approach Delay (s/veh)	4.9				0.9				174.2				1731.2				
Approach LOS	A				A				F				F				

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AG	Intersection	Phoenix & Bryn Mawr
Agency/Co.	BH	Jurisdiction	CoA
Date Performed	6/5/2024	East/West Street	Phoenix Ave
Analysis Year	2036	North/South Street	American Ave (Bryn Mawr)
Time Analyzed	NBAM	Peak Hour Factor	0.83
Intersection Orientation	North-South	Analysis Time Period (hrs)	1.00
Project Description	Carlisle & Menaul TIA		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	1	0	0	0	1	0
Configuration							LR					TR		LT		
Volume (veh/h)						50		21			12	46		15	6	
Percent Heavy Vehicles (%)						3		3						6		
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						7.1		6.2						4.1		
Critical Headway (sec)						6.43		6.23						4.16		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.53		3.33						2.25		

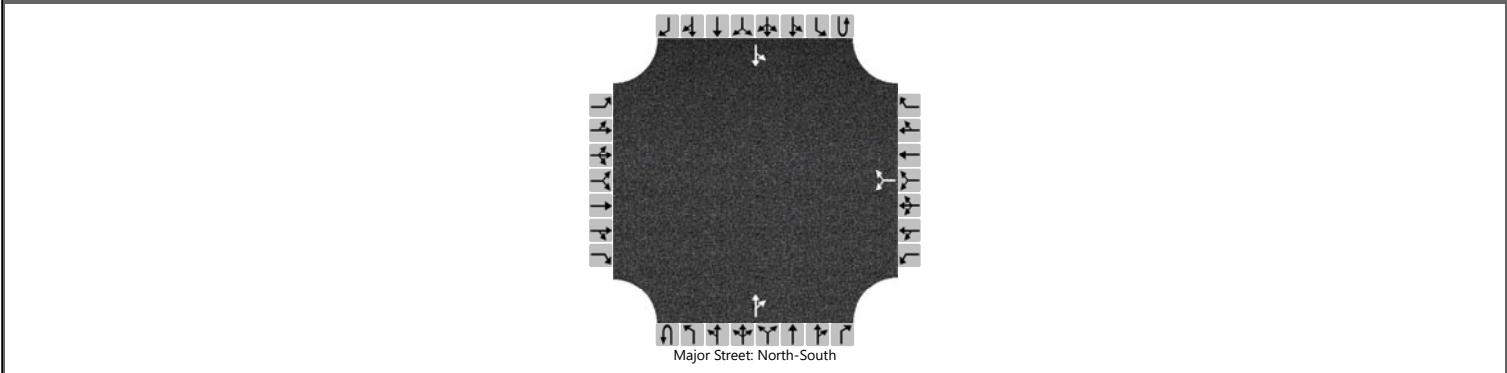
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						86								18		
Capacity, c (veh/h)						936								1506		
v/c Ratio						0.09								0.01		
95% Queue Length, Q ₉₅ (veh)						0.3								0.0		
95% Queue Length, Q ₉₅ (ft)						7.7								0.0		
Control Delay (s/veh)						9.2								7.4	0.1	
Level of Service (LOS)						A								A	A	
Approach Delay (s/veh)					9.2								5.3			
Approach LOS					A								A			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AG	Intersection	Phoenix & Bryn Mawr
Agency/Co.	BH	Jurisdiction	CoA
Date Performed	6/5/2024	East/West Street	Phoenix Ave
Analysis Year	2036	North/South Street	American Ave (Bryn Mawr)
Time Analyzed	NBPM	Peak Hour Factor	0.80
Intersection Orientation	North-South	Analysis Time Period (hrs)	1.00
Project Description	Carlisle & Menaul TIA		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	1	0	0	0	1	0
Configuration							LR					TR		LT		
Volume (veh/h)						96		16			19	85		19	3	
Percent Heavy Vehicles (%)						0		0						0		
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						7.1		6.2						4.1		
Critical Headway (sec)						6.40		6.20						4.10		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.50		3.30						2.20		

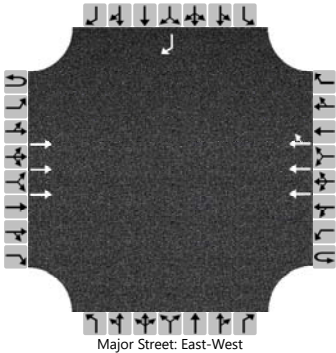
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						140								24		
Capacity, c (veh/h)						874								1468		
v/c Ratio						0.16								0.02		
95% Queue Length, Q ₉₅ (veh)						0.6								0.0		
95% Queue Length, Q ₉₅ (ft)						15.0								0.0		
Control Delay (s/veh)						9.9								7.5	0.1	
Level of Service (LOS)						A								A	A	
Approach Delay (s/veh)					9.9								6.5			
Approach LOS					A								A			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AG	Intersection	Menaul & Access 1
Agency/Co.	BH	Jurisdiction	CoA
Date Performed	6/5/2024	East/West Street	Menaul Blvd
Analysis Year	2036	North/South Street	Access 1
Time Analyzed	NBAM	Peak Hour Factor	0.77
Intersection Orientation	East-West	Analysis Time Period (hrs)	1.00
Project Description	Carlisle & Menaul TIA		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	3	0	0	0	3	0		0	0	0		0	0	1
Configuration			T				T	TR								R
Volume (veh/h)			708				914	11								9
Percent Heavy Vehicles (%)																0
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized													No			
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)																7.1
Critical Headway (sec)																7.10
Base Follow-Up Headway (sec)																3.9
Follow-Up Headway (sec)																3.90

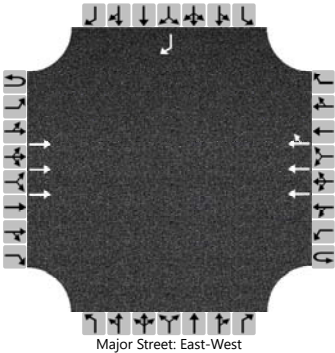
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)																12
Capacity, c (veh/h)																384
v/c Ratio																0.03
95% Queue Length, Q ₉₅ (veh)																0.1
95% Queue Length, Q ₉₅ (ft)																2.5
Control Delay (s/veh)																14.7
Level of Service (LOS)																B
Approach Delay (s/veh)													14.7			
Approach LOS													B			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AG	Intersection	Menaul & Access 1
Agency/Co.	BH	Jurisdiction	CoA
Date Performed	6/5/2024	East/West Street	Menaul Blvd
Analysis Year	2036	North/South Street	Access 1
Time Analyzed	NBPM	Peak Hour Factor	0.67
Intersection Orientation	East-West	Analysis Time Period (hrs)	1.00
Project Description	Carlisle & Menaul TIA		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	3	0	0	0	3	0		0	0	0		0	0	1
Configuration			T				T	TR								R
Volume (veh/h)			1093				1324	13								9
Percent Heavy Vehicles (%)																0
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized													No			
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)																7.1
Critical Headway (sec)																7.10
Base Follow-Up Headway (sec)																3.9
Follow-Up Headway (sec)																3.90

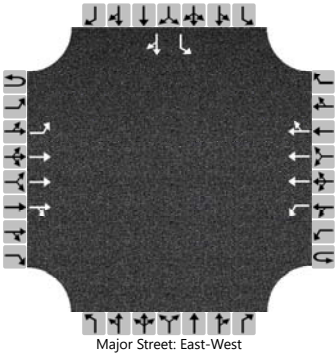
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)																13
Capacity, c (veh/h)																211
v/c Ratio																0.06
95% Queue Length, Q ₉₅ (veh)																0.2
95% Queue Length, Q ₉₅ (ft)																5.0
Control Delay (s/veh)																23.2
Level of Service (LOS)																C
Approach Delay (s/veh)													23.2			
Approach LOS													C			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AG	Intersection	Menaul & Access 2
Agency/Co.	BH	Jurisdiction	CoA
Date Performed	6/5/2024	East/West Street	Menaul Blvd
Analysis Year	2036	North/South Street	Access 2
Time Analyzed	NBAM	Peak Hour Factor	0.78
Intersection Orientation	East-West	Analysis Time Period (hrs)	1.00
Project Description	Carlisle & Menaul TIA		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	3	0	0	1	3	0		0	0	0		1	1	0
Configuration		L	T	TR		L	T	TR						L		TR
Volume (veh/h)	0	28	676	9	0	37	865	52						9	1	61
Percent Heavy Vehicles (%)	1	1			0	0								2	2	2
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		5.3				5.3								6.4	6.5	7.1
Critical Headway (sec)		5.32				5.30								6.44	6.54	7.14
Base Follow-Up Headway (sec)		3.1				3.1								3.8	4.0	3.9
Follow-Up Headway (sec)		3.11				3.10								3.82	4.02	3.92

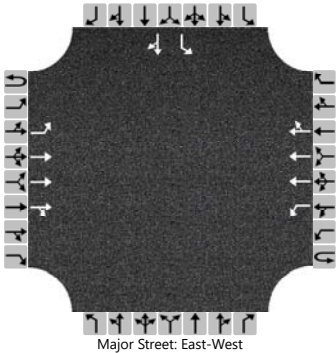
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		36				47								12		79
Capacity, c (veh/h)		324				454								82		335
v/c Ratio		0.11				0.10								0.14		0.24
95% Queue Length, Q ₉₅ (veh)		0.4				0.3								0.5		0.9
95% Queue Length, Q ₉₅ (ft)		10.1				7.5								12.7		22.9
Control Delay (s/veh)		17.5				13.8								56.2		19.1
Level of Service (LOS)		C				B								F		C
Approach Delay (s/veh)	0.7				0.5								23.8			
Approach LOS	A				A								C			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AG	Intersection	Menaul & Access 2
Agency/Co.	BH	Jurisdiction	CoA
Date Performed	6/5/2024	East/West Street	Menaul Blvd
Analysis Year	2036	North/South Street	Access 2
Time Analyzed	NBPM	Peak Hour Factor	0.88
Intersection Orientation	East-West	Analysis Time Period (hrs)	1.00
Project Description	Carlisle & Menaul TIA		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	3	0	0	1	3	0		0	0	0		1	1	0
Configuration		L	T	TR		L	T	TR						L		TR
Volume (veh/h)	0	33	1077	0	0	37	1271	82						27	0	42
Percent Heavy Vehicles (%)	0	0			0	0								0	0	0
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		5.3				5.3								6.4	6.5	7.1
Critical Headway (sec)		5.30				5.30								6.40	6.50	7.10
Base Follow-Up Headway (sec)		3.1				3.1								3.8	4.0	3.9
Follow-Up Headway (sec)		3.10				3.10								3.80	4.00	3.90

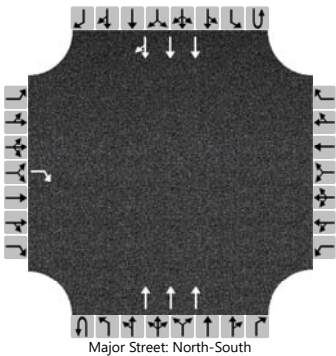
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		38				42								31		48
Capacity, c (veh/h)		218				310								38		299
v/c Ratio		0.17				0.14								0.81		0.16
95% Queue Length, Q ₉₅ (veh)		0.6				0.5								5.2		0.6
95% Queue Length, Q ₉₅ (ft)		15.0				12.5								130.0		15.0
Control Delay (s/veh)		25.0				18.4								333.6		19.3
Level of Service (LOS)		C				C								F		C
Approach Delay (s/veh)	0.7				0.5								142.3			
Approach LOS	A				A								F			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AG	Intersection	Carlisle & Access 3
Agency/Co.	BH	Jurisdiction	CoA
Date Performed	6/5/2024	East/West Street	Access 3
Analysis Year	2036	North/South Street	Carlisle Blvd
Time Analyzed	NBAM	Peak Hour Factor	0.90
Intersection Orientation	North-South	Analysis Time Period (hrs)	1.00
Project Description	Carlisle & Menaul TIA		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	1		0	0	0	0	0	3	0	0	0	3	0
Configuration				R							T				T	TR
Volume (veh/h)				34							1172				1120	40
Percent Heavy Vehicles (%)				0												
Proportion Time Blocked																
Percent Grade (%)	0															
Right Turn Channelized	No															
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)				7.1												
Critical Headway (sec)				7.10												
Base Follow-Up Headway (sec)				3.9												
Follow-Up Headway (sec)				3.90												

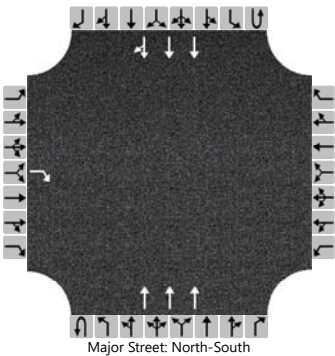
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)				38												
Capacity, c (veh/h)				360												
v/c Ratio				0.10												
95% Queue Length, Q ₉₅ (veh)				0.4												
95% Queue Length, Q ₉₅ (ft)				10.0												
Control Delay (s/veh)				16.2												
Level of Service (LOS)				C												
Approach Delay (s/veh)	16.2															
Approach LOS	C															

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AG	Intersection	Carlisle & Access 3
Agency/Co.	BH	Jurisdiction	CoA
Date Performed	6/5/2024	East/West Street	Access 3
Analysis Year	2036	North/South Street	Carlisle Blvd
Time Analyzed	NBPM	Peak Hour Factor	0.85
Intersection Orientation	North-South	Analysis Time Period (hrs)	1.00
Project Description	Carlisle & Menaul TIA		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	1		0	0	0	0	0	3	0	0	0	3	0
Configuration				R							T				T	TR
Volume (veh/h)				9							1689				1654	12
Percent Heavy Vehicles (%)				0												
Proportion Time Blocked																
Percent Grade (%)	0															
Right Turn Channelized	No															
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)				7.1												
Critical Headway (sec)				7.10												
Base Follow-Up Headway (sec)				3.9												
Follow-Up Headway (sec)				3.90												

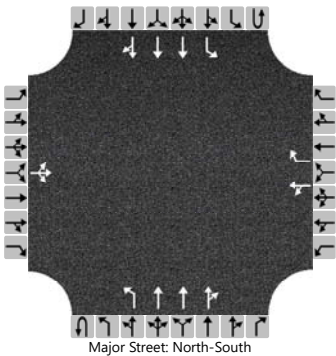
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)				11												
Capacity, c (veh/h)				217												
v/c Ratio				0.05												
95% Queue Length, Q ₉₅ (veh)				0.2												
95% Queue Length, Q ₉₅ (ft)				5.0												
Control Delay (s/veh)				22.5												
Level of Service (LOS)				C												
Approach Delay (s/veh)	22.5															
Approach LOS	C															

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AG	Intersection	Carlisle & Access 4
Agency/Co.	BH	Jurisdiction	CoA
Date Performed	6/5/2024	East/West Street	Access 4
Analysis Year	2036	North/South Street	Carlisle Blvd
Time Analyzed	NBAM	Peak Hour Factor	0.80
Intersection Orientation	North-South	Analysis Time Period (hrs)	1.00
Project Description	Carlisle & Menaul TIA		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	1	0	1	3	0	0	1	3	0
Configuration			LTR			LT		R		L	T	TR		L	T	TR
Volume (veh/h)		7	1	4		0	0	6	0	8	1170	2	0	9	1142	2
Percent Heavy Vehicles (%)		0	0	0		0	0	0	1	1			0	0		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized					No											
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		6.4	6.5	7.1		6.4	6.5	7.1		5.3				5.3		
Critical Headway (sec)		6.40	6.50	7.10		6.40	6.50	7.10		5.32				5.30		
Base Follow-Up Headway (sec)		3.8	4.0	3.9		3.8	4.0	3.9		3.1				3.1		
Follow-Up Headway (sec)		3.80	4.00	3.90		3.80	4.00	3.90		3.11				3.10		

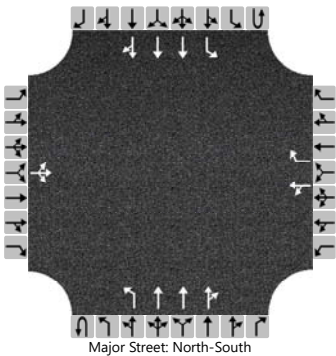
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			15		0		8		10					11		
Capacity, c (veh/h)			56		0		315		244					236		
v/c Ratio			0.27				0.02		0.04					0.05		
95% Queue Length, Q ₉₅ (veh)			1.1				0.1		0.1					0.1		
95% Queue Length, Q ₉₅ (ft)			27.5				2.5		2.5					2.5		
Control Delay (s/veh)			93.0				16.7		20.4					21.0		
Level of Service (LOS)			F				C		C					C		
Approach Delay (s/veh)	93.0								0.1				0.2			
Approach LOS	F								A				A			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AG	Intersection	Carlisle & Access 4
Agency/Co.	BH	Jurisdiction	CoA
Date Performed	6/5/2024	East/West Street	Access 4
Analysis Year	2036	North/South Street	Carlisle Blvd
Time Analyzed	NBPM	Peak Hour Factor	0.78
Intersection Orientation	North-South	Analysis Time Period (hrs)	1.00
Project Description	Carlisle & Menaul TIA		

Lanes



Vehicle Volumes and Adjustments

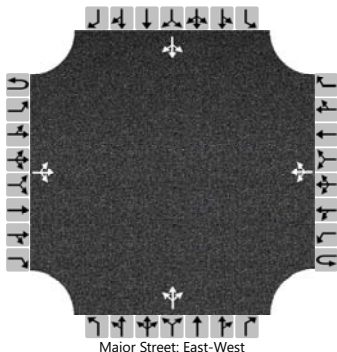
Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	1	0	1	3	0	0	1	3	0
Configuration			LTR			LT		R		L	T	TR		L	T	TR
Volume (veh/h)		1	0	6		8	1	58	0	7	1675	15	0	47	1653	2
Percent Heavy Vehicles (%)		0	0	0		0	0	0	0	0			0	0		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized					No											
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		6.4	6.5	7.1		6.4	6.5	7.1		5.3				5.3		
Critical Headway (sec)		6.40	6.50	7.10		6.40	6.50	7.10		5.30				5.30		
Base Follow-Up Headway (sec)		3.8	4.0	3.9		3.8	4.0	3.9		3.1				3.1		
Follow-Up Headway (sec)		3.80	4.00	3.90		3.80	4.00	3.90		3.10				3.10		

Delay, Queue Length, and Level of Service

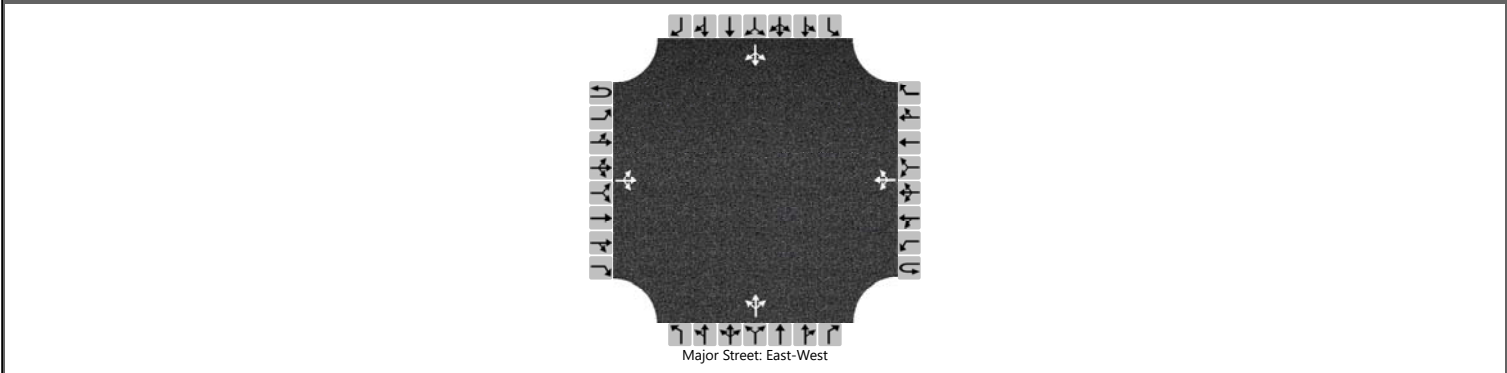
Flow Rate, v (veh/h)			9			12		74		9				60		
Capacity, c (veh/h)			59			3		185		111				106		
v/c Ratio			0.15			4.35		0.40		0.08				0.57		
95% Queue Length, Q ₉₅ (veh)			0.5			6.9		1.9		0.3				3.5		
95% Queue Length, Q ₉₅ (ft)			12.5			172.5		47.5		7.5				87.5		
Control Delay (s/veh)			76.2			8811.0		37.3		40.2				82.1		
Level of Service (LOS)			F			F		E		E				F		
Approach Delay (s/veh)	76.2				1215.9				0.2				2.3			
Approach LOS	F				F				A				A			

HCS Two-Way Stop-Control Report																
General Information							Site Information									
Analyst	AG						Intersection				Phoenix & Access 5					
Agency/Co.	BH						Jurisdiction				CoA					
Date Performed	6/5/2024						East/West Street				Phoenix Ave					
Analysis Year	2036						North/South Street				Access 5/Prive Driveway					
Time Analyzed	NBAM						Peak Hour Factor				0.77					
Intersection Orientation	East-West						Analysis Time Period (hrs)				1.00					
Project Description	Carlisle & Menaul TIA															
Lanes																
																
Vehicle Volumes and Adjustments																
Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		6	85	1		0	141	43		0	6	0		31	2	11
Percent Heavy Vehicles (%)		0				1				0	0	0		0	0	0
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized																
Median Type Storage	Undivided															
Critical and Follow-up Headways																
Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.10				4.11				7.10	6.50	6.20		7.10	6.50	6.20
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.20				2.21				3.50	4.00	3.30		3.50	4.00	3.30
Delay, Queue Length, and Level of Service																
Flow Rate, v (veh/h)		8				0					8				57	
Capacity, c (veh/h)		1340				1484					562				648	
v/c Ratio		0.01				0.00					0.01				0.09	
95% Queue Length, Q ₉₅ (veh)		0.0				0.0					0.0				0.3	
95% Queue Length, Q ₉₅ (ft)											0.0				7.5	
Control Delay (s/veh)		7.7	0.0	0.0		7.4	0.0	0.0			11.5				11.1	
Level of Service (LOS)		A	A	A		A	A	A			B				B	
Approach Delay (s/veh)	0.5				0.0				11.5				11.1			
Approach LOS	A				A				B				B			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AG	Intersection	Phoenix & Access 5
Agency/Co.	BH	Jurisdiction	CoA
Date Performed	6/5/2024	East/West Street	Phoenix Ave
Analysis Year	2036	North/South Street	Access 5/Prive Driveway
Time Analyzed	NBPM	Peak Hour Factor	0.85
Intersection Orientation	East-West	Analysis Time Period (hrs)	1.00
Project Description	Carlisle & Menaul TIA		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		7	178	3		1	138	61		3	1	2		40	1	18
Percent Heavy Vehicles (%)		0				1				0	0	0		0	0	0
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.10				4.11				7.10	6.50	6.20		7.10	6.50	6.20
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.20				2.21				3.50	4.00	3.30		3.50	4.00	3.30

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		8				1					7				69	
Capacity, c (veh/h)		1345				1363					584				600	
v/c Ratio		0.01				0.00					0.01				0.12	
95% Queue Length, Q ₉₅ (veh)		0.0				0.0					0.0				0.4	
95% Queue Length, Q ₉₅ (ft)											0.0				10.0	
Control Delay (s/veh)		7.7	0.1	0.1		7.6	0.0	0.0			11.2				11.8	
Level of Service (LOS)		A	A	A		A	A	A			B				B	
Approach Delay (s/veh)	0.3				0.0				11.2				11.8			
Approach LOS	A				A				B				B			

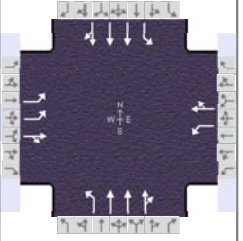
APPENDIX H
2036 BUILD INTERSECTION CAPACITY ANALYSIS

HCS Signalized Intersection Results Summary

General Information

Agency	BH		
Analyst	AG	Analysis Date	Jul 1, 2024
Jurisdiction	CoA	Time Period	BAM
Urban Street	Carlisle Blvd	Analysis Year	2036
Intersection	Carlisle & Claremont	File Name	2036 BAM Signalized Network.xus
Project Description	Carlisle & Menaul TIA		

Intersection Information



Demand Information

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	74	12	98	49	17	17	119	866	25	13	860	59

Signal Information

Cycle, s	110.0	Reference Phase	2									
Offset, s	53	Reference Point	End									
Uncoordinated	No	Simult. Gap E/W	On	Green	1.0	3.9	78.0	13.5	0.0	0.0		
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	3.5	0.0	4.0	3.5	0.0	0.0		
				Red	0.5	0.0	1.0	1.0	0.0	0.0		

Timer Results

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4		8	5	2	1	6
Case Number		6.0		6.0	1.1	4.0	1.1	4.0
Phase Duration, s		18.0		18.0	8.9	87.0	5.0	83.0
Change Period, ($Y+R_c$), s		4.5		4.5	4.0	5.0	4.0	5.0
Max Allow Headway (MAH), s		3.3		3.3	3.1	0.0	3.1	0.0
Queue Clearance Time (g_s), s		9.0		13.0	4.7		2.2	
Green Extension Time (g_e), s		0.5		0.5	0.3	0.0	0.0	0.0
Phase Call Probability		1.00		1.00	0.99		0.33	
Max Out Probability		0.00		0.00	0.00		0.00	

Movement Group Results

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	74	110		49	34		163	819	403	13	619	300
Adjusted Saturation Flow Rate (s), veh/h/ln	1386	1625		1293	1730		1795	1885	1857	1795	1885	1821
Queue Service Time (g_s), s	2.7	7.0		4.1	1.9		2.7	3.1	3.1	0.2	6.3	6.3
Cycle Queue Clearance Time (g_c), s	4.5	7.0		11.0	1.9		2.7	3.1	3.1	0.2	6.3	6.3
Green Ratio (g/C)	0.12	0.12		0.12	0.12		0.77	0.75	0.75	0.72	0.71	0.71
Capacity (c), veh/h	426	201		144	214		545	2808	1383	403	2673	1291
Volume-to-Capacity Ratio (X)	0.174	0.548		0.341	0.159		0.300	0.291	0.292	0.032	0.232	0.233
Back of Queue (Q), ft/ln (95 th percentile)	42	129		60	38		30	39	42	3	101	101
Back of Queue (Q), veh/ln (95 th percentile)	1.7	5.1		2.4	1.5		1.2	1.5	1.7	0.1	4.0	4.0
Queue Storage Ratio (RQ) (95 th percentile)	0.24	0.00		1.50	0.94		0.16	0.00	0.00	0.05	0.00	0.00
Uniform Delay (d_1), s/veh	45.1	45.3		50.4	43.1		3.4	1.5	1.5	4.4	5.6	5.6
Incremental Delay (d_2), s/veh	0.1	0.9		0.5	0.1		0.1	0.2	0.4	0.0	0.2	0.4
Initial Queue Delay (d_3), s/veh	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	45.2	46.2		51.0	43.2		3.5	1.7	1.9	4.4	5.8	6.0
Level of Service (LOS)	D	D		D	D		A	A	A	A	A	A
Approach Delay, s/veh / LOS	45.8	D		47.8	D		2.0	A		5.8	A	
Intersection Delay, s/veh / LOS	7.9						A					

Multimodal Results

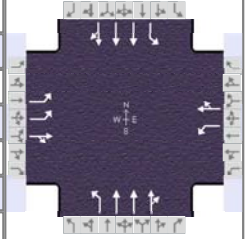
	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.60	C	2.60	C	1.85	B	2.05	B
Bicycle LOS Score / LOS	0.79	A	0.62	A	1.04	A	1.00	A

HCS Signalized Intersection Results Summary

General Information

Agency	BH		
Analyst	AG	Analysis Date	Jul 1, 2024
Jurisdiction	CoA	Time Period	BPM
Urban Street	Carlisle Blvd	Analysis Year	2036
Intersection	Carlisle & Claremont	File Name	2036 BPM Signali
Project Description	Carlisle & Menaul TIA		

Intersection Information



Demand Information

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	215	25	158	45	18	26	123	1230	49	39	1241	117

Signal Information

Cycle, s	120.0	Reference Phase	2									
Offset, s	53	Reference Point	End									
Uncoordinated	No	Simult. Gap E/W	On	Green	2.2	3.5	81.2	19.7	0.0	0.0		
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	3.5	0.0	4.0	3.5	0.0	0.0		
				Red	0.5	0.0	1.0	1.0	0.0	0.0		

Timer Results

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4		8	5	2	1	6
Case Number		6.0		6.0	1.1	4.0	1.1	4.0
Phase Duration, s		24.2		24.2	9.7	89.7	6.2	86.2
Change Period, ($Y+R_c$), s		4.5		4.5	4.0	5.0	4.0	5.0
Max Allow Headway (MAH), s		3.2		3.2	3.1	0.0	3.1	0.0
Queue Clearance Time (g_s), s		14.6		18.8	5.5		2.8	
Green Extension Time (g_e), s		1.0		0.8	0.2	0.0	0.0	0.0
Phase Call Probability		1.00		1.00	1.00		0.73	
Max Out Probability		0.00		0.03	0.00		0.00	

Movement Group Results

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	215	183		45	44		162	1127	552	39	919	439
Adjusted Saturation Flow Rate (s), veh/h/ln	1384	1644		1220	1717		1810	1900	1861	1810	1900	1813
Queue Service Time (g_s), s	8.7	12.6		4.3	2.6		3.5	8.2	8.4	0.8	12.4	12.4
Cycle Queue Clearance Time (g_c), s	11.2	12.6		16.8	2.6		3.5	8.2	8.4	0.8	12.4	12.4
Green Ratio (g/C)	0.16	0.16		0.16	0.16		0.74	0.71	0.71	0.69	0.68	0.68
Capacity (c), veh/h	515	270		133	282		378	2680	1313	276	2570	1226
Volume-to-Capacity Ratio (X)	0.418	0.679		0.338	0.156		0.427	0.421	0.421	0.141	0.358	0.358
Back of Queue (Q), ft/ln (95 th percentile)	134	223		60	51		41	101	104	13	210	207
Back of Queue (Q), veh/ln (95 th percentile)	5.4	8.9		2.4	2.0		1.6	4.0	4.2	0.5	8.4	8.3
Queue Storage Ratio (RQ) (95 th percentile)	0.77	0.00		1.51	1.27		0.22	0.00	0.00	0.18	0.00	0.00
Uniform Delay (d_1), s/veh	47.8	47.2		55.1	43.0		5.4	3.2	3.3	6.0	8.3	8.3
Incremental Delay (d_2), s/veh	0.2	1.1		0.6	0.1		0.1	0.2	0.5	0.1	0.4	0.8
Initial Queue Delay (d_3), s/veh	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	48.0	48.3		55.6	43.1		5.5	3.4	3.8	6.1	8.7	9.1
Level of Service (LOS)	D	D		E	D		A	A	A	A	A	A
Approach Delay, s/veh / LOS	48.2	D		49.4	D		3.7	A		8.7	A	
Intersection Delay, s/veh / LOS	11.4						B					

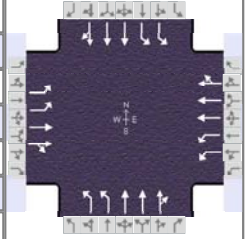
Multimodal Results

	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.60	C	2.60	C	1.86	B	2.06	B
Bicycle LOS Score / LOS	1.14	A	0.63	A	1.26	A	1.26	A

HCS Signalized Intersection Results Summary

General Information

Agency	BH		
Analyst	AG	Analysis Date	Apr 28, 2025
Jurisdiction	CoA	Time Period	BAM
Urban Street	Carlisle Blvd	Analysis Year	2036
Intersection	Carlisle & Menaul	File Name	2036 BAM Signalized Network.xus
Project Description	Carlisle & Menaul TIA		



Demand Information

Approach Movement	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	94	517	158	119	561	239	333	914	145	242	924	119

Signal Information

Cycle, s	110.0	Reference Phase	2									
Offset, s	98	Reference Point	End									
Uncoordinated	No	Simult. Gap E/W	On	Green	8.0	2.1	33.8	4.7	0.9	38.9		
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	3.0	3.0	4.2	3.0	0.0	4.8		
				Red	0.5	0.5	1.0	0.5	0.0	1.0		

Timer Results

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	5	2	1	6
Case Number	2.0	4.0	2.0	4.0	2.0	4.0	2.0	4.0
Phase Duration, s	8.2	44.7	9.2	45.7	17.1	44.6	11.5	39.0
Change Period, ($Y+R_c$), s	3.5	5.8	3.5	5.8	3.5	5.2	3.5	5.2
Max Allow Headway (MAH), s	3.1	3.1	3.1	3.1	3.1	0.0	3.1	0.0
Queue Clearance Time (g_s), s	4.9	18.4	5.7	14.5	13.4		7.8	
Green Extension Time (g_e), s	0.1	3.3	0.1	3.4	0.2	0.0	0.2	0.0
Phase Call Probability	0.94	1.00	0.97	1.00	1.00		1.00	
Max Out Probability	0.00	0.02	0.00	0.01	1.00		0.01	

Movement Group Results

Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	94	350	325	119	556	244	374	812	378	190	554	263
Adjusted Saturation Flow Rate (s), veh/h/ln	1743	1885	1733	1757	1900	1615	1743	1885	1749	1757	1900	1786
Queue Service Time (g_s), s	2.9	16.2	16.4	3.7	12.0	12.5	11.4	21.3	21.1	5.8	13.7	14.3
Cycle Queue Clearance Time (g_c), s	2.9	16.2	16.4	3.7	12.0	12.5	11.4	21.3	21.1	5.8	13.7	14.3
Green Ratio (g/C)	0.04	0.35	0.35	0.05	0.36	0.36	0.12	0.36	0.36	0.07	0.31	0.31
Capacity (c), veh/h	150	667	614	181	1377	585	431	1349	626	257	1168	549
Volume-to-Capacity Ratio (X)	0.625	0.525	0.529	0.659	0.404	0.417	0.869	0.602	0.603	0.738	0.474	0.480
Back of Queue (Q), ft/ln (95 th percentile)	59	309	290	73	234	219	219	394	371	117	271	280
Back of Queue (Q), veh/ln (95 th percentile)	2.3	12.3	11.6	2.9	9.4	8.7	8.7	15.6	14.8	4.7	10.8	11.2
Queue Storage Ratio (RQ) (95 th percentile)	0.27	0.00	0.00	0.37	0.00	0.00	0.80	0.00	0.00	0.52	0.00	0.00
Uniform Delay (d_1), s/veh	51.8	28.2	28.2	51.2	26.2	26.3	42.1	35.9	34.7	50.2	33.9	35.9
Incremental Delay (d_2), s/veh	1.6	3.0	3.3	1.5	0.9	2.2	13.5	1.8	3.8	1.5	1.4	2.9
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	53.4	31.2	31.5	52.8	27.1	28.5	55.6	37.7	38.6	51.7	35.2	38.9
Level of Service (LOS)	D	C	C	D	C	C	E	D	D	D	D	D
Approach Delay, s/veh / LOS	34.0	C		30.8	C		42.2	D		39.3	D	
Intersection Delay, s/veh / LOS	37.6						D					

Multimodal Results

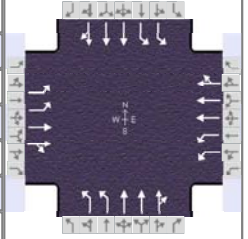
	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	2.71	C		2.71	C		2.58	C		2.58	C	
Bicycle LOS Score / LOS	1.12	A		0.99	A		1.25	A		1.19	A	

HCS Signalized Intersection Results Summary

General Information

Agency	BH		
Analyst	AG	Analysis Date	May 1, 2025
Jurisdiction	CoA	Time Period	BPM
Urban Street	Carlisle Blvd	Analysis Year	2036
Intersection	Carlisle & Menaul	File Name	2036 BPM Signal
Project Description	Carlisle & Menaul TIA		

Intersection Information



Demand Information

Approach Movement	EB			WB			NB			SB		
	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	164	791	243	262	980	383	458	1207	160	389	1306	130

Signal Information

Cycle, s	120.0	Reference Phase	2									
Offset, s	98	Reference Point	End									
Uncoordinated	No	Simult. Gap E/W	On	Green	12.6	3.1	33.2	7.6	3.4	42.0		
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	3.0	0.0	4.2	3.0	0.0	4.8		
				Red	0.5	0.0	1.0	0.5	0.0	1.0		

Timer Results

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	5	2	1	6
Case Number	2.0	4.0	2.0	4.0	2.0	4.0	2.0	4.0
Phase Duration, s	11.1	47.8	14.6	51.3	19.2	41.5	16.1	38.4
Change Period, ($Y+R_c$), s	3.5	5.8	3.5	5.8	3.5	5.2	3.5	5.2
Max Allow Headway (MAH), s	3.1	3.1	3.1	3.1	3.1	0.0	3.1	0.0
Queue Clearance Time (g_s), s	7.5	32.9	10.8	27.0	17.7		12.3	
Green Extension Time (g_e), s	0.2	4.5	0.3	6.2	0.0	0.0	0.3	0.0
Phase Call Probability	1.00	1.00	1.00	1.00	1.00		1.00	
Max Out Probability	0.03	0.53	0.16	0.20	1.00		0.80	

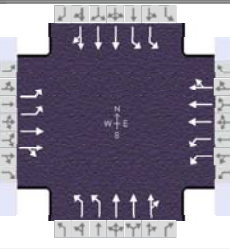
Movement Group Results

Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	164	539	495	262	954	409	470	955	448	308	769	367
Adjusted Saturation Flow Rate (s), veh/h/ln	1757	1900	1746	1757	1900	1626	1757	1900	1782	1757	1900	1809
Queue Service Time (g_s), s	5.5	30.9	30.9	8.8	25.0	25.0	15.7	29.2	29.1	10.3	22.6	22.9
Cycle Queue Clearance Time (g_c), s	5.5	30.9	30.9	8.8	25.0	25.0	15.7	29.2	29.1	10.3	22.6	22.9
Green Ratio (g/C)	0.06	0.35	0.35	0.09	0.38	0.38	0.13	0.30	0.30	0.10	0.28	0.28
Capacity (c), veh/h	223	666	612	324	1440	616	460	1150	539	369	1051	500
Volume-to-Capacity Ratio (X)	0.734	0.809	0.810	0.809	0.663	0.663	1.021	0.830	0.830	0.835	0.732	0.734
Back of Queue (Q), ft/ln (95 th percentile)	111	564	530	183	433	398	420	521	514	214	418	432
Back of Queue (Q), veh/ln (95 th percentile)	4.4	22.6	21.2	7.3	17.3	15.9	16.8	20.8	20.6	8.5	16.7	17.3
Queue Storage Ratio (RQ) (95 th percentile)	0.51	0.00	0.00	0.91	0.00	0.00	1.53	0.00	0.00	0.95	0.00	0.00
Uniform Delay (d_1), s/veh	55.2	35.3	35.3	53.4	30.9	30.9	45.7	47.6	46.8	53.3	42.5	44.4
Incremental Delay (d_2), s/veh	1.8	11.1	12.1	4.9	2.4	5.7	92.4	5.4	11.2	8.7	4.3	9.0
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	57.0	46.5	47.4	58.3	33.4	36.6	138.2	53.0	58.0	62.0	46.8	53.4
Level of Service (LOS)	E	D	D	E	C	D	F	D	E	E	D	D
Approach Delay, s/veh / LOS	48.3	D		38.2	D		75.6	E		51.7	D	
Intersection Delay, s/veh / LOS	54.7						D					

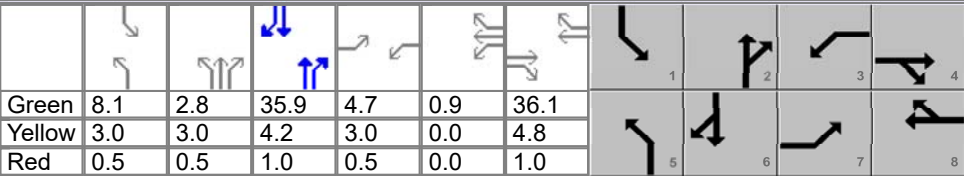
Multimodal Results

	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	2.71	C		2.71	C		2.59	C		2.59	C	
Bicycle LOS Score / LOS	1.48	A		1.38	A		1.49	A		1.49	A	

HCS Signalized Intersection Results Summary

General Information				Intersection Information		
Agency	BH			Duration, h	1.000	
Analyst	AG	Analysis Date	Apr 28, 2025	Area Type	Other	
Jurisdiction	CoA	Time Period	BAM	PHF	1.00	
Urban Street	Carlisle Blvd	Analysis Year	2036	Analysis Period	1> 7:00	
Intersection	Carlisle & Menaul	File Name	2036 BAM Signalized Network_Menaul_Carlisle...			
Project Description	Carlisle & Menaul TIA - Optimized Signal Timing					

Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	94	517	158	119	561	239	333	914	145	242	924	119

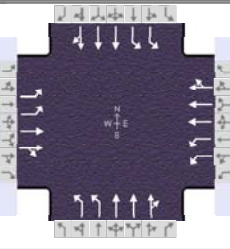
Signal Information											
Cycle, s	110.0	Reference Phase	2								
Offset, s	109	Reference Point	End								
Uncoordinated	No	Simult. Gap E/W	On								
Force Mode	Fixed	Simult. Gap N/S	On	Green	8.1	2.8	35.9	4.7	0.9	36.1	
				Yellow	3.0	3.0	4.2	3.0	0.0	4.8	
				Red	0.5	0.5	1.0	0.5	0.0	1.0	

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	5	2	1	6
Case Number	2.0	4.0	2.0	4.0	2.0	4.0	2.0	4.0
Phase Duration, s	8.2	41.9	9.1	42.8	17.9	47.4	11.6	41.1
Change Period, ($Y+R_c$), s	3.5	5.8	3.5	5.8	3.5	5.2	3.5	5.2
Max Allow Headway (MAH), s	3.1	3.1	3.1	3.1	3.1	0.0	3.1	0.0
Queue Clearance Time (g_s), s	4.9	19.0	5.7	15.0	13.5		7.8	
Green Extension Time (g_e), s	0.1	3.2	0.1	3.4	0.9	0.0	0.3	0.0
Phase Call Probability	0.94	1.00	0.97	1.00	1.00		1.00	
Max Out Probability	0.02	0.04	1.00	0.01	0.00		0.00	

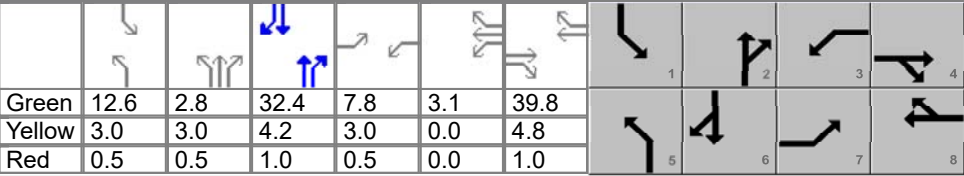
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	94	350	325	119	556	244	374	812	378	190	554	263
Adjusted Saturation Flow Rate (s), veh/h/ln	1743	1885	1733	1757	1900	1615	1743	1885	1749	1757	1900	1786
Queue Service Time (g_s), s	2.9	16.9	17.0	3.7	12.5	13.0	11.5	20.8	20.5	5.8	13.3	13.3
Cycle Queue Clearance Time (g_c), s	2.9	16.9	17.0	3.7	12.5	13.0	11.5	20.8	20.5	5.8	13.3	13.3
Green Ratio (g/C)	0.04	0.33	0.33	0.05	0.34	0.34	0.13	0.38	0.38	0.07	0.33	0.33
Capacity (c), veh/h	149	619	569	178	1278	543	457	1448	672	258	1240	583
Volume-to-Capacity Ratio (X)	0.630	0.566	0.570	0.669	0.435	0.449	0.819	0.561	0.562	0.736	0.447	0.452
Back of Queue (Q), ft/ln (95 th percentile)	59	323	303	74	244	228	217	383	357	116	262	255
Back of Queue (Q), veh/ln (95 th percentile)	2.3	12.8	12.1	2.9	9.7	9.1	8.6	15.2	14.3	4.7	10.5	10.2
Queue Storage Ratio (RQ) (95 th percentile)	0.27	0.00	0.00	0.37	0.00	0.00	0.79	0.00	0.00	0.52	0.00	0.00
Uniform Delay (d_1), s/veh	51.8	30.5	30.5	51.3	28.4	28.5	47.7	33.6	32.3	50.1	31.8	31.2
Incremental Delay (d_2), s/veh	1.6	3.8	4.2	1.6	1.1	2.7	1.3	1.4	3.0	1.5	1.1	2.5
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	53.4	34.2	34.7	53.0	29.5	31.2	49.0	35.0	35.3	51.6	32.9	33.6
Level of Service (LOS)	D	C	C	D	C	C	D	C	D	D	C	C
Approach Delay, s/veh / LOS	36.8	D		33.0	C		38.4	D		36.6	D	
Intersection Delay, s/veh / LOS	36.5						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.71	C	2.71	C	2.57	C	2.58	C
Bicycle LOS Score / LOS	1.12	A	0.99	A	1.25	A	1.19	A

HCS Signalized Intersection Results Summary

General Information				Intersection Information		
Agency	BH			Duration, h	1.000	
Analyst	AG	Analysis Date	May 1, 2025	Area Type	Other	
Jurisdiction	CoA	Time Period	BPM	PHF	1.00	
Urban Street	Carlisle Blvd	Analysis Year	2036	Analysis Period	1> 7:00	
Intersection	Carlisle & Menaul	File Name	2036 BPM Signalized Network_Menaul_Carlisle...			
Project Description	Carlisle & Menaul TIA - Optimized Signal Timing					

Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	164	791	243	262	980	383	458	1207	160	389	1306	130

Signal Information											
Cycle, s	120.0	Reference Phase	2								
Offset, s	98	Reference Point	End								
Uncoordinated	No	Simult. Gap E/W	On								
Force Mode	Fixed	Simult. Gap N/S	On	Green	12.6	2.8	32.4	7.8	3.1	39.8	
				Yellow	3.0	3.0	4.2	3.0	0.0	4.8	
				Red	0.5	0.5	1.0	0.5	0.0	1.0	

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	5	2	1	6
Case Number	2.0	4.0	2.0	4.0	2.0	4.0	2.0	4.0
Phase Duration, s	11.3	45.6	14.4	48.7	22.4	43.9	16.1	37.6
Change Period, ($Y+R_c$), s	3.5	5.8	3.5	5.8	3.5	5.2	3.5	5.2
Max Allow Headway (MAH), s	3.1	3.1	3.1	3.1	3.1	0.0	3.1	0.0
Queue Clearance Time (g_s), s	7.5	33.8	10.8	27.9	17.9		12.3	
Green Extension Time (g_e), s	0.3	3.5	0.1	5.8	1.0	0.0	0.2	0.0
Phase Call Probability	1.00	1.00	1.00	1.00	1.00		1.00	
Max Out Probability	0.00	0.74	1.00	0.29	0.00		0.95	

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	164	539	495	262	954	409	501	1017	477	308	769	367
Adjusted Saturation Flow Rate (s), veh/h/ln	1757	1900	1746	1757	1900	1626	1757	1900	1782	1757	1900	1809
Queue Service Time (g_s), s	5.5	31.7	31.8	8.8	25.9	25.9	15.9	30.1	29.8	10.3	22.6	22.9
Cycle Queue Clearance Time (g_c), s	5.5	31.7	31.8	8.8	25.9	25.9	15.9	30.1	29.8	10.3	22.6	22.9
Green Ratio (g/C)	0.06	0.33	0.33	0.09	0.36	0.36	0.16	0.32	0.32	0.10	0.27	0.27
Capacity (c), veh/h	228	630	579	319	1359	581	553	1227	575	368	1027	489
Volume-to-Capacity Ratio (X)	0.719	0.855	0.855	0.821	0.702	0.703	0.905	0.829	0.829	0.836	0.749	0.751
Back of Queue (Q), ft/ln (95 th percentile)	111	600	565	195	450	416	201	514	500	214	419	433
Back of Queue (Q), veh/ln (95 th percentile)	4.4	24.0	22.6	7.8	18.0	16.6	8.0	20.5	20.0	8.5	16.8	17.3
Queue Storage Ratio (RQ) (95 th percentile)	0.50	0.00	0.00	0.98	0.00	0.00	0.73	0.00	0.00	0.95	0.00	0.00
Uniform Delay (d_1), s/veh	55.0	37.4	37.4	53.6	33.1	33.1	31.9	40.0	37.9	53.0	42.7	44.2
Incremental Delay (d_2), s/veh	1.6	15.9	17.2	11.9	3.1	7.2	5.2	5.3	11.2	9.1	4.8	10.1
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	56.6	53.3	54.7	65.5	36.2	40.3	37.2	45.3	49.1	62.2	47.5	54.3
Level of Service (LOS)	E	D	D	E	D	D	D	D	D	E	D	D
Approach Delay, s/veh / LOS	54.3	D		41.9	D		44.2	D		52.3	D	
Intersection Delay, s/veh / LOS	47.4						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.71	C	2.71	C	2.58	C	2.59	C
Bicycle LOS Score / LOS	1.48	A	1.38	A	1.49	A	1.49	A

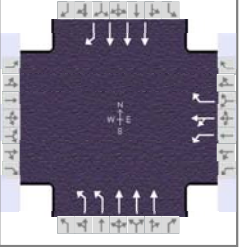
HCS Signalized Intersection Results Summary

General Information

Agency	BH		
Analyst	AG	Analysis Date	Jul 1, 2024
Jurisdiction	CoA	Time Period	BAM
Urban Street	Carlisle Blvd	Analysis Year	2036
Intersection	Carlisle & I-40 WB	File Name	2036 BAM Signalized Network.xus
Project Description	Carlisle & Menaul TIA		

Intersection Information

Duration, h	1.000
Area Type	Other
PHF	1.00
Analysis Period	1> 7:00
Signalized Network.xus	



Demand Information

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h				282	3	319	465	1282			907	305

Signal Information

Cycle, s	110.0	Reference Phase	2									
Offset, s	92	Reference Point	End									
Uncoordinated	No	Simult. Gap E/W	On	Green	16.9	53.5	24.0	0.0	0.0	0.0		
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	4.0	4.0	4.0	0.0	0.0	0.0		
				Red	0.5	1.0	2.0	0.0	0.0	0.0		

Timer Results

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase				8	5	2		6
Case Number				9.0	2.0	4.0		7.3
Phase Duration, s				30.0	21.4	80.0		58.5
Change Period, (Y+R _c), s				6.0	4.5	5.0		5.0
Max Allow Headway (MAH), s				3.2	3.1	0.0		0.0
Queue Clearance Time (g _s), s				23.2	16.0			
Green Extension Time (g _e), s				0.8	1.0	0.0		0.0
Phase Call Probability				1.00	1.00			
Max Out Probability				0.25	0.00			

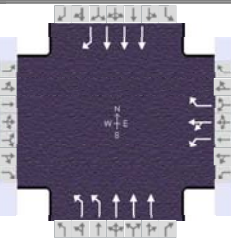
Movement Group Results

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement				3	8	18	5	2		6		16
Adjusted Flow Rate (v), veh/h				141	144	319	452	1245		749		252
Adjusted Saturation Flow Rate (s), veh/h/ln				1810	1811	1610	1743	1712		1725		
Queue Service Time (g _s), s				7.3	7.4	21.2	14.0	14.5		10.6		
Cycle Queue Clearance Time (g _c), s				7.3	7.4	21.2	14.0	14.5		10.6		
Green Ratio (g/C)				0.22	0.22	0.22	0.15	0.68		0.49		
Capacity (c), veh/h				395	396	352	537	3500		2518		
Volume-to-Capacity Ratio (X)				0.357	0.364	0.907	0.841	0.356		0.298		
Back of Queue (Q), ft/ln (95 th percentile)				144	147	396	258	234		187		
Back of Queue (Q), veh/ln (95 th percentile)				5.8	5.9	15.9	10.3	9.3		7.5		
Queue Storage Ratio (RQ) (95 th percentile)				0.85	0.87	2.33	0.98	0.00		0.00		
Uniform Delay (d ₁), s/veh				36.4	36.5	41.9	48.0	10.7		19.5		
Incremental Delay (d ₂), s/veh				0.2	0.2	23.3	1.3	0.3		0.3		
Initial Queue Delay (d ₃), s/veh				0.0	0.0	0.0	0.0	0.0		0.0		
Control Delay (d), s/veh				36.6	36.7	65.2	49.2	11.0		19.8		0.0
Level of Service (LOS)				D	D	E	D	B		B		A
Approach Delay, s/veh / LOS	0.0			51.7		D	21.2	C		14.8		B
Intersection Delay, s/veh / LOS				24.8				C				

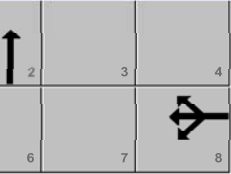
Multimodal Results

	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	2.74		C	2.61		C	1.87		B	1.68		B
Bicycle LOS Score / LOS				1.48		A	1.45		A	1.15		A

HCS Signalized Intersection Results Summary

General Information				Intersection Information		
Agency	BH			Duration, h	1.000	
Analyst	AG	Analysis Date	Jul 1, 2024	Area Type	Other	
Jurisdiction	CoA	Time Period	BPM	PHF	1.00	
Urban Street	Carlisle Blvd	Analysis Year	2036	Analysis Period	1> 7:00	
Intersection	Carlisle & I-40 WB	File Name	2036 BPM Signalized Network.xus			
Project Description	Carlisle & Menaul TIA					

Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h				358	50	493	493	1517			1334	327

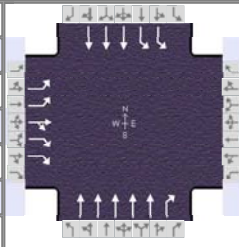
Signal Information											
Cycle, s	120.0	Reference Phase	2								
Offset, s	92	Reference Point	End								
Uncoordinated	No	Simult. Gap E/W	On								
Force Mode	Fixed	Simult. Gap N/S	On	Green	19.7	57.2	27.6	0.0	0.0	0.0	
				Yellow	4.0	4.0	4.0	0.0	0.0	0.0	
				Red	0.5	1.0	2.0	0.0	0.0	0.0	

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase				8	5	2		6
Case Number				9.0	2.0	4.0		7.3
Phase Duration, s				33.6	24.2	86.4		62.2
Change Period, ($Y+R_c$), s				6.0	4.5	5.0		5.0
Max Allow Headway (MAH), s				3.2	3.1	0.0		0.0
Queue Clearance Time (g_s), s				29.6	18.6			
Green Extension Time (g_e), s				0.0	1.1	0.0		0.0
Phase Call Probability				1.00	1.00			
Max Out Probability				1.00	0.00			

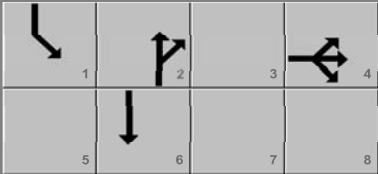
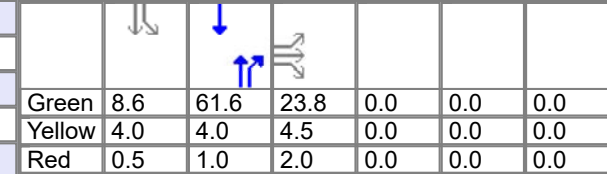
Movement Group Results	EB			WB			NB			SB			
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R	
Assigned Movement				3	8	18	5	2			6	16	
Adjusted Flow Rate (v), veh/h				179	229	493	488	1502			1163	285	
Adjusted Saturation Flow Rate (s), veh/h/ln				1810	1829	1610	1757	1725			1725		
Queue Service Time (g_s), s				10.1	13.2	27.6	16.6	23.0			22.1		
Cycle Queue Clearance Time (g_c), s				10.1	13.2	27.6	16.6	23.0			22.1		
Green Ratio (g/C)				0.23	0.23	0.23	0.16	0.68			0.48		
Capacity (c), veh/h				416	421	370	576	3511			2468		
Volume-to-Capacity Ratio (X)				0.430	0.544	1.331	0.847	0.428			0.471		
Back of Queue (Q), ft/ln (95 th percentile)				200	250	2579	315	368			347		
Back of Queue (Q), veh/ln (95 th percentile)				8.0	10.0	103.2	12.6	14.7			13.9		
Queue Storage Ratio (RQ) (95 th percentile)				1.18	1.47	15.17	1.19	0.00			0.00		
Uniform Delay (d_1), s/veh				39.5	40.7	46.2	57.2	16.3			29.9		
Incremental Delay (d_2), s/veh				0.3	0.8	615.1	1.5	0.3			0.4		
Initial Queue Delay (d_3), s/veh				0.0	0.0	0.0	0.0	0.0			0.0		
Control Delay (d), s/veh				39.7	41.5	661.3	58.8	16.6			30.3	0.0	
Level of Service (LOS)				D	D	F	E	B			C	A	
Approach Delay, s/veh / LOS	0.0			380.3			27.0		C		24.4		C
Intersection Delay, s/veh / LOS	99.5						F						

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.75	C	2.62	C	1.87	B	1.68	B
Bicycle LOS Score / LOS			1.97	B	1.59	B	1.40	A

HCS Signalized Intersection Results Summary

General Information				Intersection Information		
Agency	BH			Duration, h	1.000	
Analyst	AG	Analysis Date	Jul 1, 2024	Area Type	Other	
Jurisdiction	CoA	Time Period	BAM	PHF	1.00	
Urban Street	Carlisle Blvd	Analysis Year	2036	Analysis Period	1> 7:00	
Intersection	Carlisle & I-40 EB	File Name	2036 BAM Signalized Network.xus			
Project Description	Carlisle & Menaul TIA					

Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	636	2	569					1061	205	236	983	

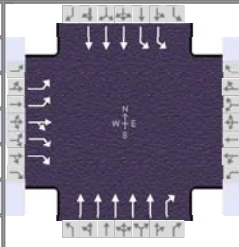
Signal Information												
Cycle, s	110.0	Reference Phase	2									
Offset, s	92	Reference Point	End									
Uncoordinated	No	Simult. Gap E/W	On									
Force Mode	Fixed	Simult. Gap N/S	On									
Green	8.6	61.6	23.8	0.0	0.0	0.0						
Yellow	4.0	4.0	4.5	0.0	0.0	0.0						
Red	0.5	1.0	2.0	0.0	0.0	0.0						

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4				2	1	6
Case Number		9.0				7.3	2.0	4.0
Phase Duration, s		30.3				66.6	13.1	79.7
Change Period, ($Y+R_c$), s		6.5				5.0	4.5	5.0
Max Allow Headway (MAH), s		3.2				0.0	3.1	0.0
Queue Clearance Time (g_s), s		21.1					8.2	
Green Extension Time (g_e), s		2.7				0.0	0.4	0.0
Phase Call Probability		1.00					1.00	
Max Out Probability		0.07					0.00	

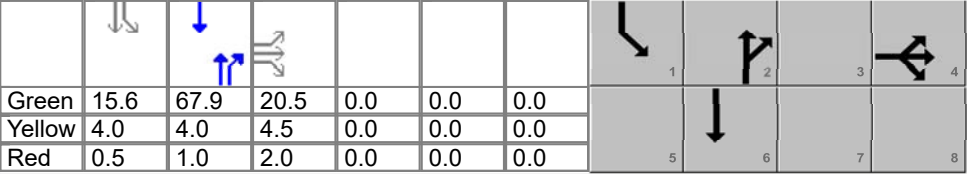
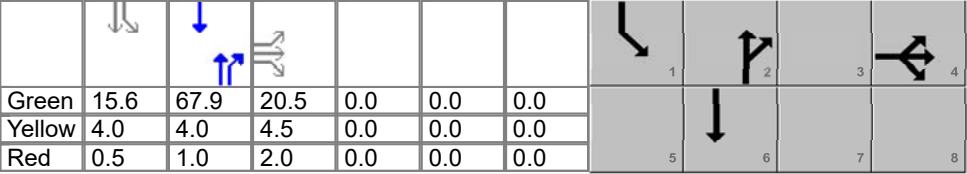
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14					2	12	1	6	
Adjusted Flow Rate (v), veh/h	636	201	370					1061	205	200	832	
Adjusted Saturation Flow Rate (s), veh/h/ln	1757	1613	1610					1725	1610	1757	1725	
Queue Service Time (g_s), s	19.1	12.3	11.2					6.8	7.1	6.2	10.2	
Cycle Queue Clearance Time (g_c), s	19.1	12.3	11.2					6.8	7.1	6.2	10.2	
Green Ratio (g/C)	0.22	0.22	0.22					0.56	0.56	0.08	0.68	
Capacity (c), veh/h	759	349	696					4831	902	275	3516	
Volume-to-Capacity Ratio (X)	0.837	0.577	0.531					0.220	0.227	0.725	0.237	
Back of Queue (Q), ft/ln (95 th percentile)	330	211	195					114	116	130	179	
Back of Queue (Q), veh/ln (95 th percentile)	13.2	8.5	7.8					4.5	4.6	5.2	7.2	
Queue Storage Ratio (RQ) (95 th percentile)	0.75	0.48	0.44					0.00	0.41	0.42	0.00	
Uniform Delay (d_1), s/veh	41.3	38.6	38.2					12.1	12.2	52.8	11.6	
Incremental Delay (d_2), s/veh	3.2	0.6	0.2					0.1	0.6	1.3	0.1	
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Control Delay (d), s/veh	44.5	39.2	38.4					12.2	12.8	54.1	11.8	
Level of Service (LOS)	D	D	D					B	B	D	B	
Approach Delay, s/veh / LOS	41.7	D		0.0			12.3	B		20.0	B	
Intersection Delay, s/veh / LOS	24.7						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.87	C	2.98	C	1.67	B	2.23	B
Bicycle LOS Score / LOS	2.48	B			0.91	A	1.16	A

HCS Signalized Intersection Results Summary

General Information				Intersection Information		
Agency	BH			Duration, h	1.000	
Analyst	AG	Analysis Date	Jul 1, 2024	Area Type	Other	
Jurisdiction	CoA	Time Period	BPM	PHF	1.00	
Urban Street	Carlisle Blvd	Analysis Year	2036	Analysis Period	1> 7:00	
Intersection	Carlisle & I-40 EB	File Name	2036 BPM Signalized Network.xus			
Project Description	Carlisle & Menaul TIA					

Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	491	9	544					1499	332	420	1282	

Signal Information											
Cycle, s	120.0	Reference Phase	2								
Offset, s	92	Reference Point	End								
Uncoordinated	No	Simult. Gap E/W	On								
Force Mode	Fixed	Simult. Gap N/S	On								
Green	15.6	67.9	20.5	0.0	0.0	0.0					
Yellow	4.0	4.0	4.5	0.0	0.0	0.0					
Red	0.5	1.0	2.0	0.0	0.0	0.0					

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		4				2	1	6
Case Number		9.0				7.3	2.0	4.0
Phase Duration, s		27.0				72.9	20.1	93.0
Change Period, ($Y+R_c$), s		6.5				5.0	4.5	5.0
Max Allow Headway (MAH), s		3.2				0.0	3.1	0.0
Queue Clearance Time (g_s), s		18.2					14.7	
Green Extension Time (g_e), s		2.4				0.0	0.9	0.0
Phase Call Probability		1.00					1.00	
Max Out Probability		0.03					0.00	

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14					2	12	1	6	
Adjusted Flow Rate (v), veh/h	491	199	354					1499	332	375	1146	
Adjusted Saturation Flow Rate (s), veh/h/ln	1757	1623	1610					1725	1610	1757	1725	
Queue Service Time (g_s), s	16.2	13.9	12.3					11.0	13.5	12.7	13.7	
Cycle Queue Clearance Time (g_c), s	16.2	13.9	12.3					11.0	13.5	12.7	13.7	
Green Ratio (g/C)	0.17	0.17	0.17					0.57	0.57	0.13	0.73	
Capacity (c), veh/h	602	278	551					4881	911	456	3794	
Volume-to-Capacity Ratio (X)	0.816	0.718	0.641					0.307	0.364	0.824	0.302	
Back of Queue (Q), ft/ln (95 th percentile)	288	240	213					188	218	242	225	
Back of Queue (Q), veh/ln (95 th percentile)	11.5	9.6	8.5					7.5	8.7	9.7	9.0	
Queue Storage Ratio (RQ) (95 th percentile)	0.65	0.54	0.48					0.00	0.78	0.78	0.00	
Uniform Delay (d_1), s/veh	47.9	47.0	46.3					13.7	14.2	55.7	9.8	
Incremental Delay (d_2), s/veh	1.7	1.3	0.5					0.2	1.1	1.2	0.2	
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0					0.0	0.0	0.0	0.0	
Control Delay (d), s/veh	49.6	48.3	46.8					13.9	15.4	56.9	10.0	
Level of Service (LOS)	D	D	D					B	B	E	A	
Approach Delay, s/veh / LOS	48.4	D		0.0			14.1	B		21.6	C	
Intersection Delay, s/veh / LOS	24.8						C					

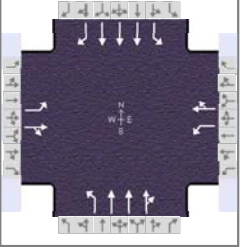
Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.87	C	2.99	C	1.67	B	2.22	B
Bicycle LOS Score / LOS	2.21	B			1.09	A	1.42	A

HCS Signalized Intersection Results Summary

General Information

Agency	BH		
Analyst	AG	Analysis Date	May 1, 2025
Jurisdiction	CoA	Time Period	BAM
Urban Street	Carlisle Blvd	Analysis Year	2036
Intersection	Carlisle & Phoenix	File Name	2036 BAM Carlisle
Project Description	Carlisle & Menaul TIA Signalized Alt		

Intersection Information



Demand Information

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	68	0	109	8	2	15	144	924	4	10	1036	66

Signal Information

Cycle, s	90.0	Reference Phase	2									
Offset, s	0	Reference Point	End									
Uncoordinated	No	Simult. Gap E/W	On	Green	1.3	0.5	57.5	1.1	3.8	5.8		
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	4.0	4.0	4.0	4.0	0.0	4.0		
				Red	0.0	0.0	0.0	0.0	0.0	0.0		

Timer Results

	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	5	2	1	6
Case Number	1.1	4.0	1.1	4.0	1.1	4.0	2.0	3.0
Phase Duration, s	8.9	13.6	5.1	9.8	9.8	66.0	5.3	61.5
Change Period, ($Y+R_c$), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Allow Headway (MAH), s	3.1	3.4	3.1	3.4	3.1	0.0	3.1	0.0
Queue Clearance Time (g_s), s	5.1	7.9	2.4	2.9	4.1		2.5	
Green Extension Time (g_e), s	0.1	0.2	0.0	0.2	0.3	0.0	0.0	0.0
Phase Call Probability	0.82	0.99	0.18	0.96	0.97		0.22	
Max Out Probability	0.00	0.00	0.02	0.00	0.00		0.00	

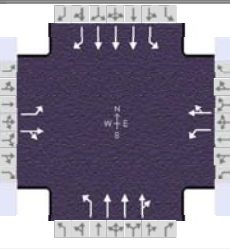
Movement Group Results

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	68	109		8	17		144	619	309	10	1036	66
Adjusted Saturation Flow Rate (s), veh/h/ln	1781	1585		1810	1640		1810	1900	1896	1795	1712	1598
Queue Service Time (g_s), s	3.1	5.9		0.4	0.9		2.1	5.5	5.5	0.5	8.2	1.4
Cycle Queue Clearance Time (g_c), s	3.1	5.9		0.4	0.9		2.1	5.5	5.5	0.5	8.2	1.4
Green Ratio (g/C)	0.14	0.11		0.08	0.06		0.73	0.69	0.69	0.01	0.64	0.64
Capacity (c), veh/h	253	169		126	105		500	2617	1305	27	3279	1020
Volume-to-Capacity Ratio (X)	0.269	0.644		0.063	0.161		0.288	0.237	0.237	0.377	0.316	0.065
Back of Queue (Q), ft/ln (95 th percentile)	60	106		7	16		27	81	85	11	120	20
Back of Queue (Q), veh/ln (95 th percentile)	2.4	4.2		0.3	0.6		1.1	3.3	3.4	0.4	4.8	0.8
Queue Storage Ratio (RQ) (95 th percentile)	0.00	0.00		0.07	0.16		0.24	0.00	0.00	0.12	0.00	0.22
Uniform Delay (d_1), s/veh	34.7	38.6		38.7	39.8		4.5	5.2	5.2	43.9	7.4	6.1
Incremental Delay (d_2), s/veh	0.2	1.5		0.1	0.3		0.1	0.2	0.4	3.3	0.3	0.1
Initial Queue Delay (d_3), s/veh	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	34.9	40.1		38.7	40.1		4.6	5.4	5.6	47.2	7.6	6.3
Level of Service (LOS)	C	D		D	D		A	A	A	D	A	A
Approach Delay, s/veh / LOS	38.1		D	39.6		D	5.4		A	7.9		A
Intersection Delay, s/veh / LOS	9.3						A					

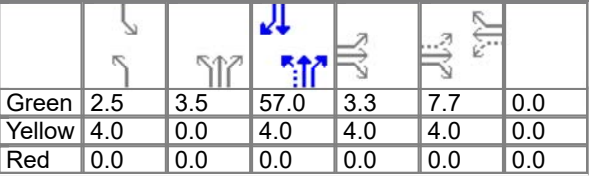
Multimodal Results

	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	2.59		C	2.73		C	1.86		B	1.87		B
Bicycle LOS Score / LOS	0.78		A	0.53		A	1.08		A	1.10		A

HCS Signalized Intersection Results Summary

General Information				Intersection Information		
Agency	BH			Duration, h	1.000	
Analyst	AG	Analysis Date	May 1, 2025	Area Type	Other	
Jurisdiction	CoA	Time Period	BPM	PHF	1.00	
Urban Street	Carlisle Blvd	Analysis Year	2036	Analysis Period	1> 7:00	
Intersection	Carlisle & Phoenix	File Name	2036 BPM Carlisle & Phoenix ALT.xus			
Project Description	Carlisle & Menaul TIA Signalized Alt					

Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	32	1	228	0	1	31	212	1415	26	21	1420	87

Signal Information											
Cycle, s	90.0	Reference Phase	2		Green	2.5	3.5	57.0	3.3	7.7	0.0
Offset, s	0	Reference Point	End								
Uncoordinated	No	Simult. Gap E/W	On								
Force Mode	Fixed	Simult. Gap N/S	On								
				Yellow	4.0	0.0	4.0	4.0	4.0	0.0	
				Red	0.0	0.0	0.0	0.0	0.0	0.0	

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	7	4	3	8	5	2	1	6
Case Number	1.1	4.0	1.1	4.0	1.1	4.0	2.0	3.0
Phase Duration, s	7.3	19.0	0.0	11.7	10.0	64.6	6.5	61.0
Change Period, ($Y+R_c$), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Allow Headway (MAH), s	3.1	3.4	0.0	3.4	3.1	0.0	3.1	0.0
Queue Clearance Time (g_s), s	3.4	14.4		3.7	5.4		3.0	
Green Extension Time (g_e), s	0.0	0.6	0.0	0.6	0.4	0.0	0.0	0.0
Phase Call Probability	0.55	1.00		1.00	1.00		0.41	
Max Out Probability	0.01	0.00		0.00	0.00		0.00	

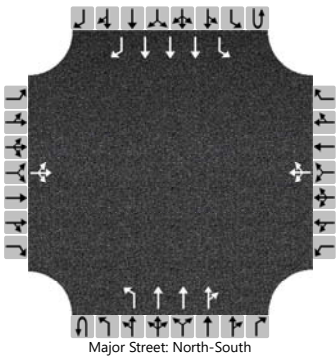
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14	3	8	18	5	2	12	1	6	16
Adjusted Flow Rate (v), veh/h	32	229		0	32		212	964	477	21	1420	87
Adjusted Saturation Flow Rate (s), veh/h/ln	1810	1611		1810	1618		1810	1900	1882	1810	1725	1610
Queue Service Time (g_s), s	1.4	12.4		0.0	1.7		3.4	10.0	10.0	1.0	12.5	1.9
Cycle Queue Clearance Time (g_c), s	1.4	12.4		0.0	1.7		3.4	10.0	10.0	1.0	12.5	1.9
Green Ratio (g/C)	0.14	0.17		0.04	0.09		0.72	0.67	0.67	0.03	0.63	0.63
Capacity (c), veh/h	240	268		89	138		390	2557	1266	49	3280	1020
Volume-to-Capacity Ratio (X)	0.133	0.853		0.000	0.231		0.544	0.377	0.377	0.426	0.433	0.085
Back of Queue (Q), ft/ln (95 th percentile)	27	215		0	30		44	154	160	22	183	27
Back of Queue (Q), veh/ln (95 th percentile)	1.1	8.6		0.0	1.2		1.8	6.2	6.4	0.9	7.3	1.1
Queue Storage Ratio (RQ) (95 th percentile)	0.00	0.00		0.00	0.30		0.40	0.00	0.00	0.24	0.00	0.30
Uniform Delay (d_1), s/veh	33.6	36.4		0.0	38.4		6.5	6.5	6.5	43.1	8.3	6.4
Incremental Delay (d_2), s/veh	0.1	3.1		0.0	0.3		0.4	0.4	0.9	2.2	0.4	0.2
Initial Queue Delay (d_3), s/veh	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	33.7	39.5		0.0	38.7		7.0	6.9	7.3	45.3	8.7	6.5
Level of Service (LOS)	C	D			D		A	A	A	D	A	A
Approach Delay, s/veh / LOS	38.8		D	38.7		D	7.0		A	9.1		A
Intersection Delay, s/veh / LOS	10.6						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.59	C	2.73	C	1.86	B	1.87	B
Bicycle LOS Score / LOS	0.92	A	0.54	A	1.40	A	1.33	A

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AG	Intersection	Carlisle & Phoenix
Agency/Co.	BH	Jurisdiction	CoA
Date Performed	5/1/2025	East/West Street	Phoenix Ave
Analysis Year	2036	North/South Street	Carlisle Blvd
Time Analyzed	BAM	Peak Hour Factor	0.85
Intersection Orientation	North-South	Analysis Time Period (hrs)	1.00
Project Description	Menaul & Carlisle TIA		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	1	3	0	0	1	3	1
Configuration			LTR				LTR			L	T	TR		L	T	R
Volume (veh/h)		68	0	109		8	2	15	0	144	924	4	0	10	1036	66
Percent Heavy Vehicles (%)		2	2	2		0	0	0	0	0			1	1		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized													No			
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		6.4	6.5	7.1		6.4	6.5	7.1		5.3				5.3		
Critical Headway (sec)		6.43	6.53	7.14		6.40	6.50	7.10		5.30				5.32		
Base Follow-Up Headway (sec)		3.8	4.0	3.9		3.8	4.0	3.9		3.1				3.1		
Follow-Up Headway (sec)		3.82	4.02	3.92		3.80	4.00	3.90		3.10				3.11		

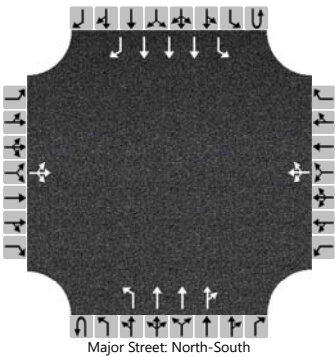
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			208			29				169				12		
Capacity, c (veh/h)			48			33				286				356		
v/c Ratio			4.32			0.88				0.59				0.03		
95% Queue Length, Q ₉₅ (veh)			83.8			5.7				4.1				0.1		
95% Queue Length, Q ₉₅ (ft)			2125.3			142.5				102.5				2.5		
Control Delay (s/veh)			6157.2			431.3				35.5				15.5		
Level of Service (LOS)			F			F				E				C		
Approach Delay (s/veh)	6157.2				431.3				4.8				0.1			
Approach LOS	F				F				A				A			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AG	Intersection	Carlisle & Phoenix
Agency/Co.	BH	Jurisdiction	CoA
Date Performed	5/1/2025	East/West Street	Phoenix Ave
Analysis Year	2036	North/South Street	Carlisle Blvd
Time Analyzed	BPM	Peak Hour Factor	0.82
Intersection Orientation	North-South	Analysis Time Period (hrs)	1.00
Project Description	Menaul & Carlisle TIA		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	1	3	0	0	1	3	1
Configuration			LTR				LTR			L	T	TR		L	T	R
Volume (veh/h)		32	1	228		0	1	31	0	212	1415	26	0	21	1420	87
Percent Heavy Vehicles (%)		0	0	0		0	0	0	0	0			0	0		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized													No			
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		6.4	6.5	7.1		6.4	6.5	7.1		5.3				5.3		
Critical Headway (sec)		6.40	6.50	7.10		6.40	6.50	7.10		5.30				5.30		
Base Follow-Up Headway (sec)		3.8	4.0	3.9		3.8	4.0	3.9		3.1				3.1		
Follow-Up Headway (sec)		3.80	4.00	3.90		3.80	4.00	3.90		3.10				3.10		

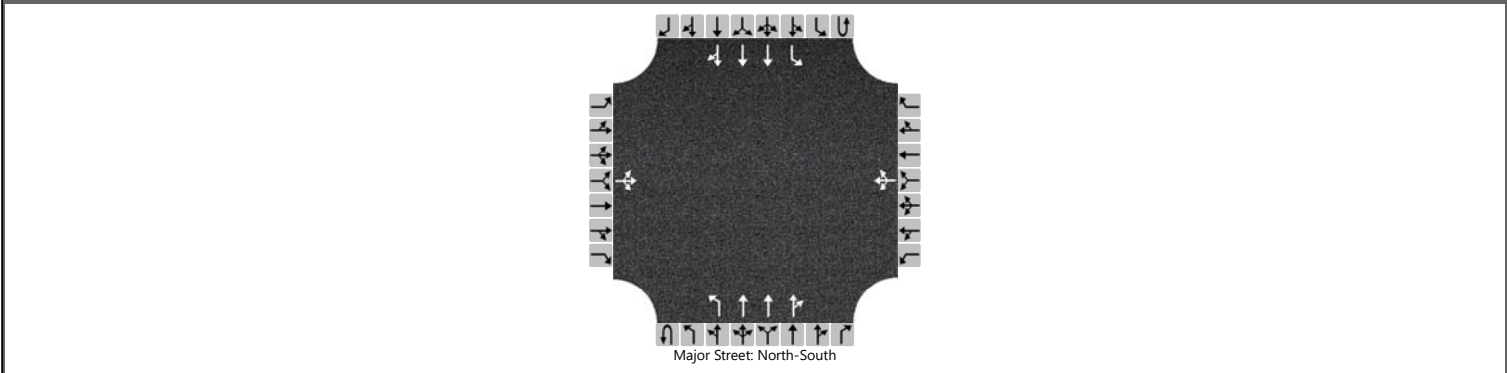
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			318				39			259				26		
Capacity, c (veh/h)			0				0			155				170		
v/c Ratio										1.67				0.15		
95% Queue Length, Q ₉₅ (veh)										58.6				0.5		
95% Queue Length, Q ₉₅ (ft)										1465.0				12.5		
Control Delay (s/veh)										1294.4				30.0		
Level of Service (LOS)										F				D		
Approach Delay (s/veh)									166.0				0.4			
Approach LOS									F				A			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AG	Intersection	Carlisle & Prospect
Agency/Co.	BH	Jurisdiction	CoA
Date Performed	6/5/2024	East/West Street	Prospect Ave
Analysis Year	2036	North/South Street	Carlisle Blvd
Time Analyzed	BAM	Peak Hour Factor	0.84
Intersection Orientation	North-South	Analysis Time Period (hrs)	1.00
Project Description	Menaul & Carlisle TIA		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	1	3	0	0	1	3	0
Configuration			LTR				LTR			L	T	TR		L	T	TR
Volume (veh/h)		17	0	58		50	1	44	0	128	1316	21	0	38	1122	38
Percent Heavy Vehicles (%)		2	2	2		0	0	0	1	1			0	0		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		6.4	6.5	7.1		6.4	6.5	7.1		5.3				5.3		
Critical Headway (sec)		6.44	6.54	7.14		6.40	6.50	7.10		5.32				5.30		
Base Follow-Up Headway (sec)		3.8	4.0	3.9		3.8	4.0	3.9		3.1				3.1		
Follow-Up Headway (sec)		3.82	4.02	3.92		3.80	4.00	3.90		3.11				3.10		

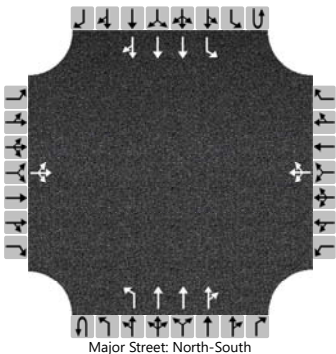
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			89			113				152				45		
Capacity, c (veh/h)			30			13				258				205		
v/c Ratio			2.98			8.47				0.59				0.22		
95% Queue Length, Q ₉₅ (veh)			33.6			53.1				4.0				0.8		
95% Queue Length, Q ₉₅ (ft)			853.4			1327.5				100.8				20.0		
Control Delay (s/veh)			3852.3			14015.0				38.7				27.5		
Level of Service (LOS)			F			F				E				D		
Approach Delay (s/veh)	3852.3				14015.0				3.4				0.9			
Approach LOS	F				F				A				A			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AG	Intersection	Carlisle & Prospect
Agency/Co.	BH	Jurisdiction	CoA
Date Performed	6/5/2024	East/West Street	Prospect Ave
Analysis Year	2036	North/South Street	Carlisle Blvd
Time Analyzed	BPM	Peak Hour Factor	0.85
Intersection Orientation	North-South	Analysis Time Period (hrs)	1.00
Project Description	Menaul & Carlisle TIA		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	1	3	0	0	1	3	0
Configuration			LTR				LTR			L	T	TR		L	T	TR
Volume (veh/h)		13	0	103		35	0	31	0	110	1744	53	0	62	1729	47
Percent Heavy Vehicles (%)		0	0	0		0	0	0	1	1			0	0		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		6.4	6.5	7.1		6.4	6.5	7.1		5.3				5.3		
Critical Headway (sec)		6.40	6.50	7.10		6.40	6.50	7.10		5.32				5.30		
Base Follow-Up Headway (sec)		3.8	4.0	3.9		3.8	4.0	3.9		3.1				3.1		
Follow-Up Headway (sec)		3.80	4.00	3.90		3.80	4.00	3.90		3.11				3.10		

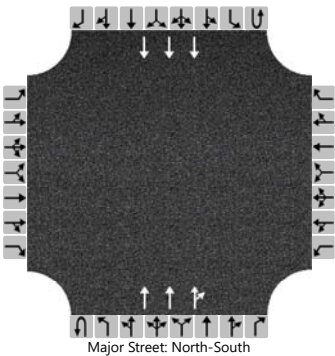
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			136				78			129				73		
Capacity, c (veh/h)			0				0			114				112		
v/c Ratio										1.13				0.65		
95% Queue Length, Q ₉₅ (veh)										18.3				4.5		
95% Queue Length, Q ₉₅ (ft)										461.2				112.5		
Control Delay (s/veh)										439.1				91.9		
Level of Service (LOS)										F				F		
Approach Delay (s/veh)									25.3				3.1			
Approach LOS									F				A			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AG	Intersection	Carlisle & Cutler
Agency/Co.	BH	Jurisdiction	CoA
Date Performed	6/5/2024	East/West Street	Cutler Ave
Analysis Year	2036	North/South Street	Carlisle Blvd
Time Analyzed	BAM	Peak Hour Factor	0.90
Intersection Orientation	North-South	Analysis Time Period (hrs)	1.00
Project Description	Carlisle & Menaul TIA		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	0	0	0	0	3	0	0	0	3	0
Configuration											T	TR			T	
Volume (veh/h)											1461	185			1207	
Percent Heavy Vehicles (%)																
Proportion Time Blocked																
Percent Grade (%)																
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)																
Critical Headway (sec)																
Base Follow-Up Headway (sec)																
Follow-Up Headway (sec)																

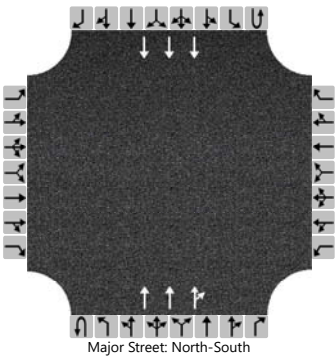
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)																
Capacity, c (veh/h)																
v/c Ratio																
95% Queue Length, Q ₉₅ (veh)																
95% Queue Length, Q ₉₅ (ft)																
Control Delay (s/veh)																
Level of Service (LOS)																
Approach Delay (s/veh)																
Approach LOS																

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AG	Intersection	Carlisle & Cutler
Agency/Co.	BH	Jurisdiction	CoA
Date Performed	6/5/2024	East/West Street	Cutler Ave
Analysis Year	2036	North/South Street	Carlisle Blvd
Time Analyzed	BPM	Peak Hour Factor	0.62
Intersection Orientation	North-South	Analysis Time Period (hrs)	1.00
Project Description	Carlisle & Menaul TIA		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	0	0	0	0	3	0	0	0	3	0
Configuration											T	TR			T	
Volume (veh/h)											1900	146			1802	
Percent Heavy Vehicles (%)																
Proportion Time Blocked																
Percent Grade (%)																
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)																
Critical Headway (sec)																
Base Follow-Up Headway (sec)																
Follow-Up Headway (sec)																

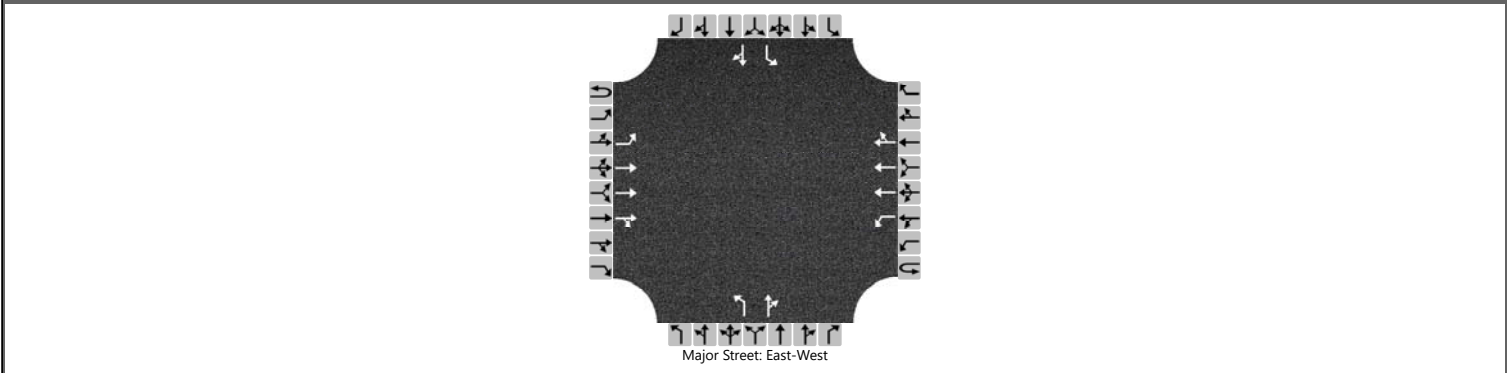
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)																
Capacity, c (veh/h)																
v/c Ratio																
95% Queue Length, Q ₉₅ (veh)																
95% Queue Length, Q ₉₅ (ft)																
Control Delay (s/veh)																
Level of Service (LOS)																
Approach Delay (s/veh)																
Approach LOS																

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AG	Intersection	Menaul & Bryn Mawr
Agency/Co.	BH	Jurisdiction	CoA
Date Performed	6/5/2024	East/West Street	Menaul Blvd
Analysis Year	2036	North/South Street	Bryn Mawr/American Dr
Time Analyzed	BAM	Peak Hour Factor	0.73
Intersection Orientation	East-West	Analysis Time Period (hrs)	1.00
Project Description	Carlisle & Menaul TIA		

Lanes



Vehicle Volumes and Adjustments

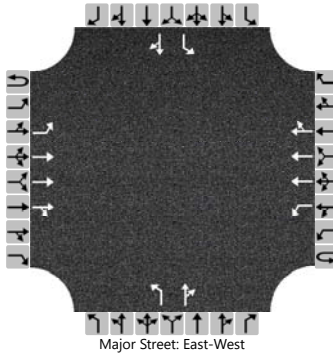
Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	3	0	0	1	3	0		1	1	0		1	1	0
Configuration		L	T	TR		L	T	TR		L		TR		L		TR
Volume (veh/h)	0	44	689	16	0	22	891	7		11	0	26		7	1	41
Percent Heavy Vehicles (%)	1	1			1	1				0	0	0		2	2	2
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		5.3				5.3				6.4	6.5	7.1		6.4	6.5	7.1
Critical Headway (sec)		5.32				5.32				6.40	6.50	7.10		6.44	6.54	7.14
Base Follow-Up Headway (sec)		3.1				3.1				3.8	4.0	3.9		3.8	4.0	3.9
Follow-Up Headway (sec)		3.11				3.11				3.80	4.00	3.90		3.82	4.02	3.92

Delay, Queue Length, and Level of Service

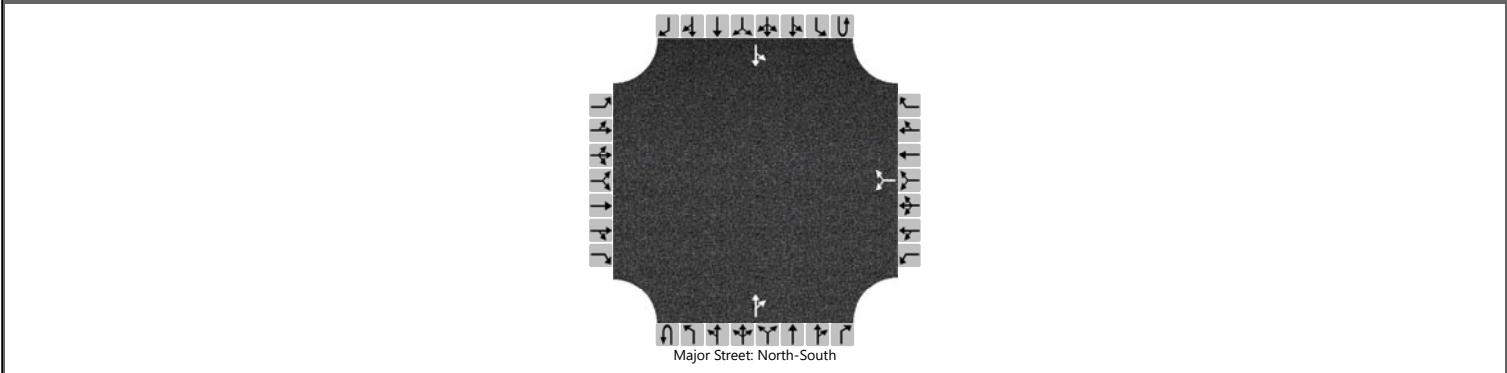
Flow Rate, v (veh/h)		60				30				15		36		10		58
Capacity, c (veh/h)		305				410				66		457		58		281
v/c Ratio		0.20				0.07				0.23		0.08		0.16		0.20
95% Queue Length, Q ₉₅ (veh)		0.7				0.2				0.9		0.3		0.6		0.8
95% Queue Length, Q ₉₅ (ft)		17.6				5.0				22.5		7.5		15.2		20.3
Control Delay (s/veh)		19.7				14.5				75.0		13.5		78.8		21.1
Level of Service (LOS)		C				B				F		B		F		C
Approach Delay (s/veh)	1.2			0.3			31.8			29.3						
Approach LOS	A			A			D			D						

HCS Two-Way Stop-Control Report																
General Information					Site Information											
Analyst	AG				Intersection				Menaul & Bryn Mawr							
Agency/Co.	BH				Jurisdiction				CoA							
Date Performed	6/5/2024				East/West Street				Menaul Blvd							
Analysis Year	2036				North/South Street				Bryn Mawr/American Dr							
Time Analyzed	BPM				Peak Hour Factor				0.74							
Intersection Orientation	East-West				Analysis Time Period (hrs)				1.00							
Project Description	Carlisle & Menaul TIA															
Lanes																
																
Vehicle Volumes and Adjustments																
Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	3	0	0	1	3	0		1	1	0		1	1	0
Configuration		L	T	TR		L	T	TR		L		TR		L		TR
Volume (veh/h)	0	72	1077	21	0	49	1429	13		1	0	13		19	0	106
Percent Heavy Vehicles (%)	0	0			1	1				0	0	0		0	0	0
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized																
Median Type Storage	Undivided															
Critical and Follow-up Headways																
Base Critical Headway (sec)		5.3				5.3				6.4	6.5	7.1		6.4	6.5	7.1
Critical Headway (sec)		5.30				5.32				6.40	6.50	7.10		6.40	6.50	7.10
Base Follow-Up Headway (sec)		3.1				3.1				3.8	4.0	3.9		3.8	4.0	3.9
Follow-Up Headway (sec)		3.10				3.11				3.80	4.00	3.90		3.80	4.00	3.90
Delay, Queue Length, and Level of Service																
Flow Rate, v (veh/h)		97				66				1		18		26		143
Capacity, c (veh/h)		136				229				2		311		4		219
v/c Ratio		0.72				0.29				0.69		0.06		7.25		0.65
95% Queue Length, Q ₉₅ (veh)		5.8				1.2				1.3		0.2		13.8		5.0
95% Queue Length, Q ₉₅ (ft)		145.0				30.2				32.5		5.0		345.0		125.0
Control Delay (s/veh)		91.1				27.1				3075.3		17.3		13357.6		51.3
Level of Service (LOS)		F				D				F		C		F		F
Approach Delay (s/veh)	5.6				0.9				235.7				2073.8			
Approach LOS	A				A				F				F			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AG	Intersection	Phoenix & Bryn Mawr
Agency/Co.	BH	Jurisdiction	CoA
Date Performed	6/5/2024	East/West Street	Phoenix Ave
Analysis Year	2036	North/South Street	American Ave (Bryn Mawr)
Time Analyzed	BAM	Peak Hour Factor	0.83
Intersection Orientation	North-South	Analysis Time Period (hrs)	1.00
Project Description	Carlisle & Menaul TIA		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	1	0	0	0	1	0
Configuration							LR					TR		LT		
Volume (veh/h)						52		50			12	48		16	6	
Percent Heavy Vehicles (%)						3		3						6		
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						7.1		6.2						4.1		
Critical Headway (sec)						6.43		6.23						4.16		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.53		3.33						2.25		

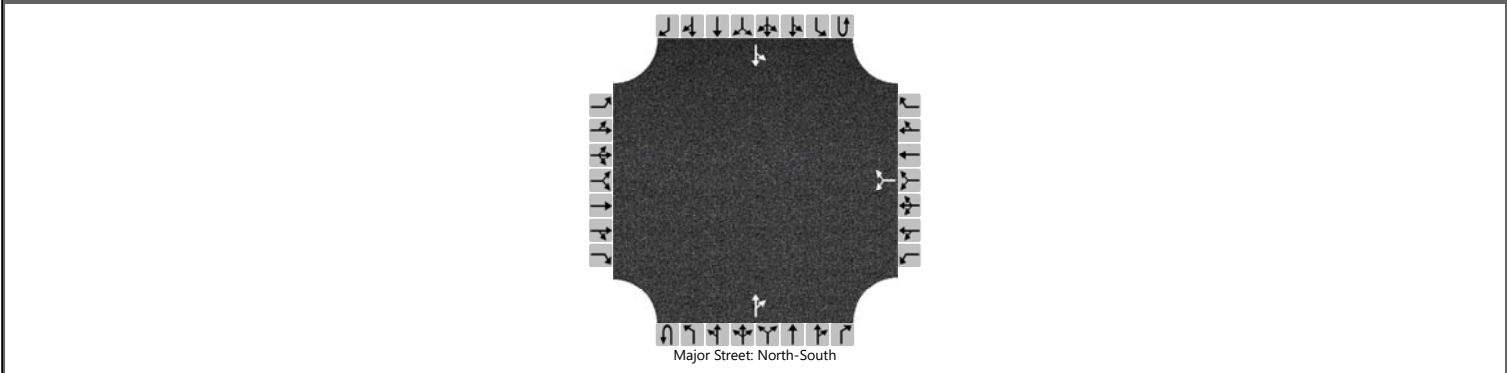
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						123								19		
Capacity, c (veh/h)						955								1503		
v/c Ratio						0.13								0.01		
95% Queue Length, Q ₉₅ (veh)						0.4								0.0		
95% Queue Length, Q ₉₅ (ft)						10.2								0.0		
Control Delay (s/veh)						9.3								7.4	0.1	
Level of Service (LOS)						A								A	A	
Approach Delay (s/veh)					9.3								5.4			
Approach LOS					A								A			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AG	Intersection	Phoenix & Bryn Mawr
Agency/Co.	BH	Jurisdiction	CoA
Date Performed	6/5/2024	East/West Street	Phoenix Ave
Analysis Year	2036	North/South Street	American Ave (Bryn Mawr)
Time Analyzed	BPM	Peak Hour Factor	0.80
Intersection Orientation	North-South	Analysis Time Period (hrs)	1.00
Project Description	Carlisle & Menaul TIA		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	1	0	0	0	1	0
Configuration							LR					TR		LT		
Volume (veh/h)						99		52			19	88		20	3	
Percent Heavy Vehicles (%)						0		0						0		
Proportion Time Blocked																
Percent Grade (%)					0											
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						7.1		6.2						4.1		
Critical Headway (sec)						6.40		6.20						4.10		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.50		3.30						2.20		

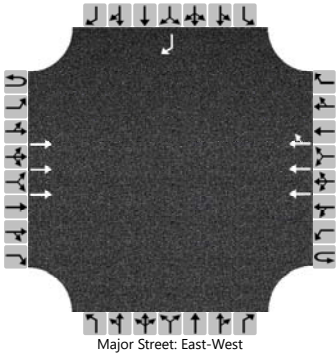
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						189								25		
Capacity, c (veh/h)						894								1463		
v/c Ratio						0.21								0.02		
95% Queue Length, Q ₉₅ (veh)						0.8								0.1		
95% Queue Length, Q ₉₅ (ft)						20.0								2.5		
Control Delay (s/veh)						10.1								7.5	0.1	
Level of Service (LOS)						B								A	A	
Approach Delay (s/veh)					10.1								6.5			
Approach LOS					B								A			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AG	Intersection	Menaul & Access 1
Agency/Co.	BH	Jurisdiction	CoA
Date Performed	6/5/2024	East/West Street	Menaul Blvd
Analysis Year	2036	North/South Street	Access 1
Time Analyzed	BAM	Peak Hour Factor	0.77
Intersection Orientation	East-West	Analysis Time Period (hrs)	1.00
Project Description	Carlisle & Menaul TIA		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	3	0	0	0	3	0		0	0	0		0	0	1
Configuration			T				T	TR								R
Volume (veh/h)			721				924	11								11
Percent Heavy Vehicles (%)																0
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized													No			
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)																7.1
Critical Headway (sec)																7.10
Base Follow-Up Headway (sec)																3.9
Follow-Up Headway (sec)																3.90

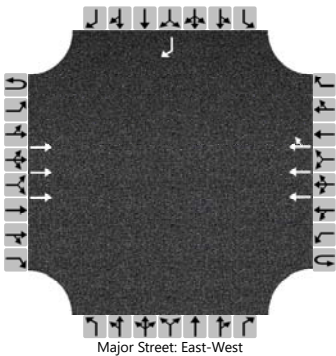
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)																14
Capacity, c (veh/h)																380
v/c Ratio																0.04
95% Queue Length, Q ₉₅ (veh)																0.1
95% Queue Length, Q ₉₅ (ft)																2.5
Control Delay (s/veh)																14.8
Level of Service (LOS)																B
Approach Delay (s/veh)													14.8			
Approach LOS													B			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AG	Intersection	Menaul & Access 1
Agency/Co.	BH	Jurisdiction	CoA
Date Performed	6/5/2024	East/West Street	Menaul Blvd
Analysis Year	2036	North/South Street	Access 1
Time Analyzed	BPM	Peak Hour Factor	0.57
Intersection Orientation	East-West	Analysis Time Period (hrs)	1.00
Project Description	Carlisle & Menaul TIA		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	3	0	0	0	3	0		0	0	0		0	0	1
Configuration			T				T	TR								R
Volume (veh/h)			1109				1336	13								11
Percent Heavy Vehicles (%)																0
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized													No			
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)																7.1
Critical Headway (sec)																7.10
Base Follow-Up Headway (sec)																3.9
Follow-Up Headway (sec)																3.90

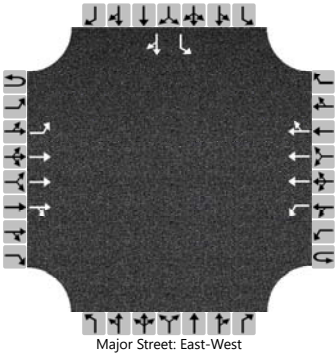
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)																19
Capacity, c (veh/h)																159
v/c Ratio																0.12
95% Queue Length, Q ₉₅ (veh)																0.4
95% Queue Length, Q ₉₅ (ft)																10.0
Control Delay (s/veh)																30.8
Level of Service (LOS)																D
Approach Delay (s/veh)													30.8			
Approach LOS													D			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AG	Intersection	Menaul & Access 2
Agency/Co.	BH	Jurisdiction	CoA
Date Performed	5/1/2025	East/West Street	Menaul Blvd
Analysis Year	2036	North/South Street	Access 2
Time Analyzed	BAM	Peak Hour Factor	0.78
Intersection Orientation	East-West	Analysis Time Period (hrs)	1.00
Project Description	Carlisle & Menaul TIA		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	3	0	0	1	3	0		0	0	0		1	1	0
Configuration		L	T	TR		L	T	TR						L		TR
Volume (veh/h)	0	67	650	9	0	37	821	208						43	1	149
Percent Heavy Vehicles (%)	1	1			0	0								2	2	2
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		5.3				5.3								6.4	6.5	7.1
Critical Headway (sec)		5.32				5.30								6.44	6.54	7.14
Base Follow-Up Headway (sec)		3.1				3.1								3.8	4.0	3.9
Follow-Up Headway (sec)		3.11				3.10								3.82	4.02	3.92

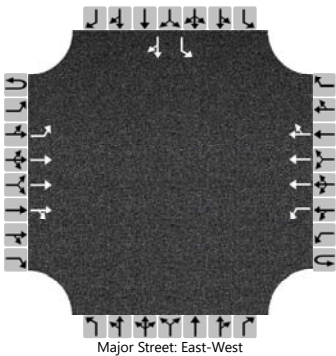
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		86				47								55		192
Capacity, c (veh/h)		276				471								53		319
v/c Ratio		0.31				0.10								1.04		0.60
95% Queue Length, Q ₉₅ (veh)		1.3				0.3								9.7		4.3
95% Queue Length, Q ₉₅ (ft)		32.8				7.5								246.4		109.2
Control Delay (s/veh)		23.9				13.5								469.6		33.0
Level of Service (LOS)		C				B								F		D
Approach Delay (s/veh)	2.2				0.5								130.3			
Approach LOS	A				A								F			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AG	Intersection	Menaul & Access 2
Agency/Co.	BH	Jurisdiction	CoA
Date Performed	5/1/2025	East/West Street	Menaul Blvd
Analysis Year	2036	North/South Street	Access 2
Time Analyzed	BPM	Peak Hour Factor	0.88
Intersection Orientation	East-West	Analysis Time Period (hrs)	1.00
Project Description	Carlisle & Menaul TIA		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	3	0	0	1	3	0		0	0	0		1	1	0
Configuration		L	T	TR		L	T	TR						L		TR
Volume (veh/h)	0	69	1057	0	0	37	1238	237						57	0	114
Percent Heavy Vehicles (%)	0	0			0	0								0	0	0
Proportion Time Blocked																
Percent Grade (%)													0			
Right Turn Channelized																
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		5.3				5.3								6.4	6.5	7.1
Critical Headway (sec)		5.30				5.30								6.40	6.50	7.10
Base Follow-Up Headway (sec)		3.1				3.1								3.8	4.0	3.9
Follow-Up Headway (sec)		3.10				3.10								3.80	4.00	3.90

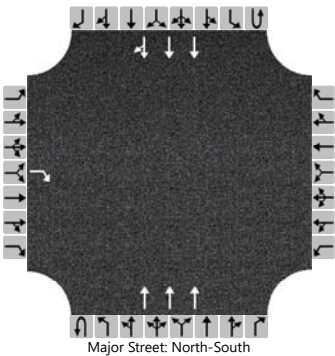
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		78				42								65		130
Capacity, c (veh/h)		186				318								22		269
v/c Ratio		0.42				0.13								2.89		0.48
95% Queue Length, Q ₉₅ (veh)		2.1				0.5								25.1		2.7
95% Queue Length, Q ₉₅ (ft)		52.5				12.5								627.5		67.5
Control Delay (s/veh)		38.3				18.0								3802.7		30.7
Level of Service (LOS)		E				C								F		D
Approach Delay (s/veh)	2.3				0.4								1288.0			
Approach LOS	A				A								F			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AG	Intersection	Carlisle & Access 3
Agency/Co.	BH	Jurisdiction	CoA
Date Performed	6/5/2024	East/West Street	Access 3
Analysis Year	2036	North/South Street	Carlisle Blvd
Time Analyzed	BAM	Peak Hour Factor	0.90
Intersection Orientation	North-South	Analysis Time Period (hrs)	1.00
Project Description	Carlisle & Menaul TIA		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	1		0	0	0	0	0	3	0	0	0	3	0
Configuration				R							T				T	TR
Volume (veh/h)				83							1246				1203	69
Percent Heavy Vehicles (%)				0												
Proportion Time Blocked																
Percent Grade (%)	0															
Right Turn Channelized	No															
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)				7.1												
Critical Headway (sec)				7.10												
Base Follow-Up Headway (sec)				3.9												
Follow-Up Headway (sec)				3.90												

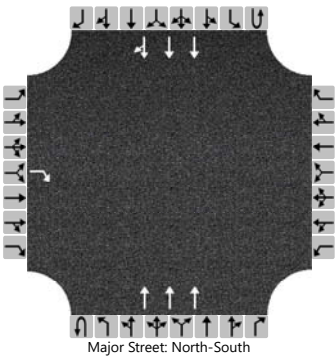
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)				92												
Capacity, c (veh/h)				328												
v/c Ratio				0.28												
95% Queue Length, Q ₉₅ (veh)				1.2												
95% Queue Length, Q ₉₅ (ft)				30.0												
Control Delay (s/veh)				20.3												
Level of Service (LOS)				C												
Approach Delay (s/veh)	20.3															
Approach LOS	C															

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AG	Intersection	Carlisle & Access 3
Agency/Co.	BH	Jurisdiction	CoA
Date Performed	6/5/2024	East/West Street	Access 3
Analysis Year	2036	North/South Street	Carlisle Blvd
Time Analyzed	BPM	Peak Hour Factor	0.85
Intersection Orientation	North-South	Analysis Time Period (hrs)	1.00
Project Description	Carlisle & Menaul TIA		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	1		0	0	0	0	0	3	0	0	0	3	0
Configuration				R							T				T	TR
Volume (veh/h)				67							1780				1764	44
Percent Heavy Vehicles (%)				0												
Proportion Time Blocked																
Percent Grade (%)	0															
Right Turn Channelized	No															
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)				7.1												
Critical Headway (sec)				7.10												
Base Follow-Up Headway (sec)				3.9												
Follow-Up Headway (sec)				3.90												

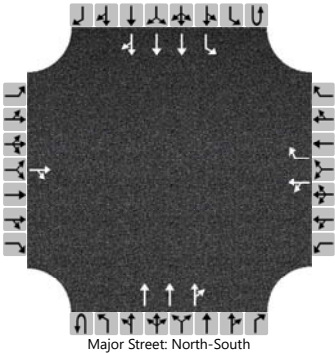
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)				79												
Capacity, c (veh/h)				191												
v/c Ratio				0.41												
95% Queue Length, Q ₉₅ (veh)				2.0												
95% Queue Length, Q ₉₅ (ft)				50.0												
Control Delay (s/veh)				37.0												
Level of Service (LOS)				E												
Approach Delay (s/veh)	37.0															
Approach LOS	E															

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AG	Intersection	Carlisle & Access 4
Agency/Co.	BH	Jurisdiction	CoA
Date Performed	5/1/2025	East/West Street	Access 4
Analysis Year	2036	North/South Street	Carlisle Blvd
Time Analyzed	BAM	Peak Hour Factor	0.80
Intersection Orientation	North-South	Analysis Time Period (hrs)	1.00
Project Description	Carlisle & Menaul TIA		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	1	0	0	3	0	0	1	3	0
Configuration				TR		LT		R			T	TR		L	T	TR
Volume (veh/h)			0	112		0	0	6			1176	2	0	9	1146	39
Percent Heavy Vehicles (%)			0	0		0	0	0					0	0		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized					No											
Median Type Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)			6.5	7.1		6.4	6.5	7.1						5.3		
Critical Headway (sec)			6.50	7.10		6.40	6.50	7.10						5.30		
Base Follow-Up Headway (sec)			4.0	3.9		3.8	4.0	3.9						3.1		
Follow-Up Headway (sec)			4.00	3.90		3.80	4.00	3.90						3.10		

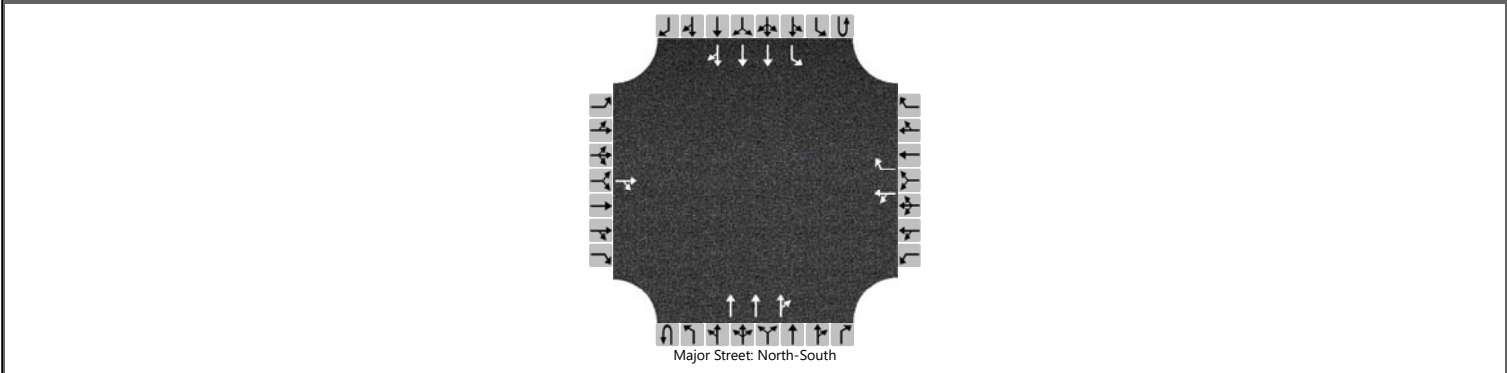
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)				140		0		8						11		
Capacity, c (veh/h)				312		0		314						234		
v/c Ratio				0.45				0.02						0.05		
95% Queue Length, Q ₉₅ (veh)				2.4				0.1						0.2		
95% Queue Length, Q ₉₅ (ft)				60.0				2.5						5.0		
Control Delay (s/veh)				25.9				16.8						21.1		
Level of Service (LOS)				D				C						C		
Approach Delay (s/veh)	25.9												0.2			
Approach LOS	D												A			

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	AG	Intersection	Carlisle & Access 4
Agency/Co.	BH	Jurisdiction	CoA
Date Performed	5/1/2025	East/West Street	Access 4
Analysis Year	2036	North/South Street	Carlisle Blvd
Time Analyzed	BPM	Peak Hour Factor	0.78
Intersection Orientation	North-South	Analysis Time Period (hrs)	1.00
Project Description	Carlisle & Menaul TIA		

Lanes



Vehicle Volumes and Adjustments

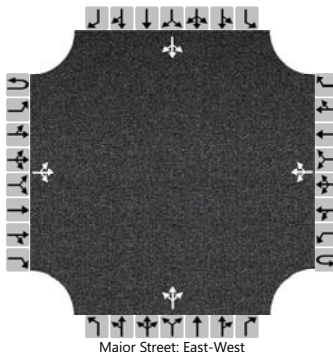
Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	1	0	0	3	0	0	1	3	0
Configuration				TR		LT		R			T	TR		L	T	TR
Volume (veh/h)			0	129		8	1	58			1725	15	0	47	1670	36
Percent Heavy Vehicles (%)			0	0		0	0	0					0	0		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized					No											
Median Type Storage	Undivided															

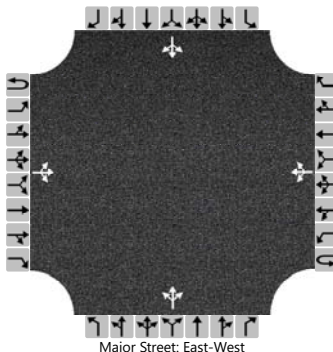
Critical and Follow-up Headways

Base Critical Headway (sec)			6.5	7.1		6.4	6.5	7.1						5.3		
Critical Headway (sec)			6.50	7.10		6.40	6.50	7.10						5.30		
Base Follow-Up Headway (sec)			4.0	3.9		3.8	4.0	3.9						3.1		
Follow-Up Headway (sec)			4.00	3.90		3.80	4.00	3.90						3.10		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)				165		12		74						60		
Capacity, c (veh/h)				182		0		176						98		
v/c Ratio				0.91		29.11		0.42						0.62		
95% Queue Length, Q ₉₅ (veh)				12.1		7.8		2.1						4.0		
95% Queue Length, Q ₉₅ (ft)				302.5		195.0		52.5						100.0		
Control Delay (s/veh)				139.4		67796.1		40.1						96.3		
Level of Service (LOS)				F		F		E						F		
Approach Delay (s/veh)	139.4				9141.7								2.6			
Approach LOS	F				F								A			

HCS Two-Way Stop-Control Report																
General Information							Site Information									
Analyst	AG						Intersection				Phoenix & Access 5					
Agency/Co.	BH						Jurisdiction				CoA					
Date Performed	6/5/2024						East/West Street				Phoenix Ave					
Analysis Year	2036						North/South Street				Access 5/Prive Driveway					
Time Analyzed	BAM						Peak Hour Factor				0.77					
Intersection Orientation	East-West						Analysis Time Period (hrs)				1.00					
Project Description	Carlisle & Menaul TIA															
Lanes																
																
Vehicle Volumes and Adjustments																
Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		6	85	4		52	141	43		31	6	26		31	2	11
Percent Heavy Vehicles (%)		0				1				0	0	0		0	0	0
Proportion Time Blocked																
Percent Grade (%)									0				0			
Right Turn Channelized																
Median Type Storage	Undivided															
Critical and Follow-up Headways																
Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2
Critical Headway (sec)		4.10				4.11				7.10	6.50	6.20		7.10	6.50	6.20
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3
Follow-Up Headway (sec)		2.20				2.21				3.50	4.00	3.30		3.50	4.00	3.30
Delay, Queue Length, and Level of Service																
Flow Rate, v (veh/h)		8				68					82				57	
Capacity, c (veh/h)		1340				1479					579				496	
v/c Ratio		0.01				0.05					0.14				0.12	
95% Queue Length, Q ₉₅ (veh)		0.0				0.1					0.5				0.4	
95% Queue Length, Q ₉₅ (ft)											12.5				10.0	
Control Delay (s/veh)		7.7	0.0	0.0		7.5	0.4	0.4			12.2				13.2	
Level of Service (LOS)		A	A	A		A	A	A			B				B	
Approach Delay (s/veh)	0.5				2.0				12.2				13.2			
Approach LOS	A				A				B				B			

HCS Two-Way Stop-Control Report																	
General Information						Site Information											
Analyst	AG					Intersection				Phoenix & Access 5							
Agency/Co.	BH					Jurisdiction				CoA							
Date Performed	6/5/2024					East/West Street				Phoenix Ave							
Analysis Year	2036					North/South Street				Access 5/Prive Driveway							
Time Analyzed	BPM					Peak Hour Factor				0.85							
Intersection Orientation	East-West					Analysis Time Period (hrs)				1.00							
Project Description	Carlisle & Menaul TIA																
Lanes																	
																	
Vehicle Volumes and Adjustments																	
Approach	Eastbound				Westbound				Northbound				Southbound				
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R	
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12	
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0	
Configuration			LTR				LTR				LTR				LTR		
Volume (veh/h)		7	178	7		65	138	61		42	1	35		40	1	18	
Percent Heavy Vehicles (%)		0				1				0	0	0		0	0	0	
Proportion Time Blocked																	
Percent Grade (%)									0				0				
Right Turn Channelized																	
Median Type Storage	Undivided																
Critical and Follow-up Headways																	
Base Critical Headway (sec)		4.1				4.1				7.1	6.5	6.2		7.1	6.5	6.2	
Critical Headway (sec)		4.10				4.11				7.10	6.50	6.20		7.10	6.50	6.20	
Base Follow-Up Headway (sec)		2.2				2.2				3.5	4.0	3.3		3.5	4.0	3.3	
Follow-Up Headway (sec)		2.20				2.21				3.50	4.00	3.30		3.50	4.00	3.30	
Delay, Queue Length, and Level of Service																	
Flow Rate, v (veh/h)		8				76					92				69		
Capacity, c (veh/h)		1345				1358					502				442		
v/c Ratio		0.01				0.06					0.18				0.16		
95% Queue Length, Q ₉₅ (veh)		0.0				0.2					0.7				0.6		
95% Queue Length, Q ₉₅ (ft)											17.5				15.0		
Control Delay (s/veh)		7.7	0.1	0.1		7.8	0.5	0.5			13.8				14.7		
Level of Service (LOS)		A	A	A		A	A	A			B				B		
Approach Delay (s/veh)	0.3				2.3				13.8				14.7				
Approach LOS	A				A				B				B				

APPENDIX I COMPILED CRASH DATA

Carlisle & Claremont

2018

FD	JCRNumbs	CrashDate	Year	Month	Hour	Day	Agency	County	City	AStreet	BStreet	Landmark	GIS_Road	36_Milep	Dir	Ldr	Measure	Killed	ClassA	ClassB	ClassC	Injured	Unhurt	Total	nVeh	Severity	Class	Analysis	TopFac	Weather	Light	HiRun	AccInv	DgrInv	PEDInv		
26084	2342091	#####	2018	September	6 p.m.	Saturday	STATION	BERNALIL	ALBUQUE	CARLISLE CLAREM					S		Northeast	0	0	0	0	0	3	3	2	Property D	Other Veh Left Bank	Disregard	Clear	Daylight	No		Not Involve	Not Involve	Not Involved		
26085	71045103	#####	2018	July	9 p.m.	Friday	ALBUQUE	BERNALIL	ALBUQUE	CAREM	CARLISLE				S			0	0	0	0	0	1	1	1	1	Property D	Other (Cn) Other Cdr Excessive	Rearang		Dark-Light	Yes		Not Involve	Not Involve	Not Involved	
26086	71045202	#####	2018	January	7 p.m.	Wednesday	ALBUQUE	BERNALIL	ALBUQUE	CARLISLE CLAREM					S		South	0	0	0	0	1	1	2	2	2	Injury Cras	Pedestrian/Pedestrian	Failed to Y Clear		Dark-Light	Yes		Not Involve	Not Involve	Involved	
26087	71045032	#####	2018	February	3 p.m.	Thursday	ALBUQUE	BERNALIL	ALBUQUE	CAREM	CARLISLE				E			0	0	0	0	0	4	4	2	Property D	Other Veh Other Veh Followed	Y Clear		Dark-Light	No		Not Involve	Not Involve	Not Involved		
26088	71053746	#####	2018	March	8 p.m.	Saturday	ALBUQUE	BERNALIL	ALBUQUE	CAREM	CARLISLE				S			0	0	0	0	0	2	2	2	2	Injury Cras	Left Bank Left Bank	Followed	Y Clear		Dark-Light	No		Not Involve	Not Involve	Not Involved
26089	71054035	#####	2018	March	4 p.m.	Friday	ALBUQUE	BERNALIL	ALBUQUE	CAREM	CARLISLE				N			0	0	0	0	1	1	4	5	2	Injury Cras	Other Veh Other Veh Failed to Y Clear			Daylight	No		Not Involve	Not Involve	Not Involved	
26090	71054106	#####	2018	May	1 p.m.	Thursday	ALBUQUE	BERNALIL	ALBUQUE	CAREM		CARLISLE			W		West	500 FT	0	0	0	0	0	3	3	2	Property D	Other Veh Other Veh Made Imp	Clear		Dark-Light	No		Not Involve	Not Involve	Not Involved	
26091	71054311	#####	2018	November	12 p.m.	Thursday	ALBUQUE	BERNALIL	ALBUQUE	CARLISLE CLAREM					N			0	0	0	0	0	1	1	2	2	2	Injury Cras	Other Veh Other Veh Driver Inst	Clear		Dark-Light	No		Not Involve	Not Involve	Not Involved
26092	71054485	#####	2018	August	12 p.m.	Thursday	ALBUQUE	BERNALIL	ALBUQUE	CAREM	CARLISLE				S			0	0	0	0	0	0	2	2	2	Property D	Other Veh Other Veh Followed	Y Clear		Daylight	No		Not Involve	Not Involve	Not Involved	
26093	2347627	#####	2018	August	8 a.m.	Wednesday	STATION	BERNALIL	ALBUQUE	CARLISLE CLAREM					99			0	0	0	0	0	0	2	2	2	Property D	Other Veh Left Bank	Awaiting No C	Clear	Daylight	No		Not Involve	Not Involve	Not Involved	

2019

FD	JCRNumbs	CrashDate	Year	Month	Hour	Day	Agency	County	City	AStreet	BStreet	Landmark	Route	MilePost	Dir	Ldr	Measure	Killed	ClassA	ClassB	ClassC	Injured	Unhurt	Total	nVeh	Severity	Class	Analysis	TopFac	Weather	Light	HiRun	AccInv	DgrInv	PEDInv				
2181	23451841	#####	2019	March	12 p.m.	Friday	STATION	BERNALIL	ALBUQUE	CLAREM	CARLISLE				W			0	0	0	0	0	0	2	2	2	Property D	Other Veh Other Veh Made Imp	Clear		Daylight	No		Not Involve	Not Involve	Not Involved			
4216	23467410	#####	2019	September	12 p.m.	Thursday	STATION	BERNALIL	ALBUQUE	CAREM	CARLISLE				E			0	0	0	0	0	0	2	2	2	Property D	Other Veh Left Bank	Driver Inst	Clear		Daylight	No		Not Involve	Not Involve	Not Involved		
6205	23460734	#####	2019	August	3 p.m.	Monday	STATION	BERNALIL	ALBUQUE		CARLISLE				E			0	0	0	0	0	0	3	3	3	Property D	Left Bank Left Bank	Followed	Y Clear		Daylight	No		Not Involve	Not Involve	Not Involved		
6213	23460749	#####	2019	August	4 p.m.	Tuesday	STATION	BERNALIL	ALBUQUE	CAREM	CARLISLE				E			0	0	0	0	0	0	1	1	2	3	2	Injury Cras	Left Bank Left Bank	Followed	Y Clear		Daylight	No		Not Involve	Not Involve	Not Involved
6527	23481837	#####	2019	May	11 a.m.	Friday	STATION	BERNALIL	ALBUQUE	CAREM	CARLISLE				N			0	0	0	0	0	0	3	3	2	Property D	Other Veh Left Bank	Failed to Y Clear			Daylight	No		Not Involve	Not Involve	Not Involved		
26524	71050701	#####	2019	March	1 p.m.	Tuesday	ALBUQUE	BERNALIL	ALBUQUE	CAREM		CARLISLE			S	W		100 FT	0	0	0	0	0	2	2	2	Property D	Other Veh Other Veh Failed to Y Clear			Dark-Light	Yes		Not Involve	Not Involve	Not Involved			
26595	71050819	#####	2019	April	5 p.m.	Wednesday	ALBUQUE	BERNALIL	ALBUQUE	CAREM	CARLISLE				NW			0	0	0	0	0	0	2	2	2	Property D	Other Veh Other Veh Driver Inst	Rearang		Dark-Light	No		Not Involve	Not Involve	Not Involved			
27976	71056123	#####	2019	August	6 p.m.	Monday	ALBUQUE	BERNALIL	ALBUQUE	CAREM	CARLISLE	2839 CAR			N	E		0	0	0	0	0	0	2	2	2	Property D	Other Veh Other Veh Driver Inst	Clear		Daylight	Yes		Not Involve	Not Involve	Not Involved			
31213	71057017	#####	2019	July	11 a.m.	Saturday	ALBUQUE	BERNALIL	ALBUQUE	CAREM	CARLISLE				NE			0	0	0	0	0	0	2	2	2	Property D	Other Veh Other Veh Failed to Y Clear			Dark-Light	No		Not Involve	Not Involve	Not Involved			
31229	71057017	#####	2019	June	10 p.m.	Tuesday	ALBUQUE	BERNALIL	ALBUQUE	CAREM	CARLISLE				E			0	0	0	0	0	0	2	2	2	Property D	Other Veh Other Veh Failed to Y Clear			Dark-Light	No		Not Involve	Not Involve	Not Involved			
31438	71057009	#####	2019	July	5 p.m.	Monday	ALBUQUE	BERNALIL	ALBUQUE	CAREM	CARLISLE				N	N		0	0	0	0	0	0	2	2	2	Property D	Other Veh Other Veh Disregard	Clear		Daylight	No		Not Involve	Not Involve	Not Involved			
31889	71057177	#####	2019	August	12 p.m.	Saturday	ALBUQUE	BERNALIL	ALBUQUE	CAREM	CARLISLE				E			0	0	0	0	0	0	3	3	2	Property D	Other Veh Other Veh Disregard	Clear		Daylight	Yes		Not Involve	Not Involve	Not Involved			
32299	71057320	#####	2019	November	1 p.m.	Wednesday	ALBUQUE	BERNALIL	ALBUQUE	CAREM	CARLISLE				SW			0	0	0	0	0	0	1	1	1	Property D	Other Veh Other Veh Defective	Rearang		Daylight	No		Not Involve	Not Involve	Not Involved			
33585	71057936	#####	2019	December	2 p.m.	Saturday	ALBUQUE	BERNALIL	ALBUQUE	CAREM	CARLISLE				E			0	0	0	0	0	4	4	4	2	Property D	Other Veh Other Veh Made Imp	Clear		Daylight	Yes		Not Involve	Not Involve	Not Involved			
33663	71057980	#####	2019	December	7 p.m.	Thursday	ALBUQUE	BERNALIL	ALBUQUE	CAREM	CARLISLE				S			0	0	0	0	1	1	2	3	2	Property D	Other Veh Other Veh Excessive	Clear		Dark-Light	No		Not Involve	Not Involve	Not Involved			
33977	71058117	#####	2019	December	12 a.m.	Sunday	ALBUQUE	BERNALIL	ALBUQUE	CAREM	CARLISLE				SE			0	0	0	0	0	0	1	1	2	2	Property D	Other Veh Other Veh Awaiting No C	Clear		Dark-Light	No		Not Involve	Not Involve	Not Involved		
34001	71058162	#####	2019	December	4 p.m.	Monday	ALBUQUE	BERNALIL	ALBUQUE	CAREM	CARLISLE				SE			0	0	0	0	0	0	4	4	4	Property D	Other Veh Other Veh Failed to Y Clear			Daylight	No		Not Involve	Not Involve	Not Involved			

2020

FD	JCRNumbs	CrashDate	Year	Month	MilitaryTl	Hour	Day	Agency	County	City	AStreet	BStreet	Landmark	GIS_Road	36_Milep	Dir	Ldr	Measure	Severity	Killed	ClassA	ClassB	ClassC	Injured	Unhurt	Total	nVeh	MotoristsNonmotor	MotorVeh	CrashOcc	Class	Analysis	FHE	FHEAnalysis	HELocal	FHEmpac	HEManner	Weather	Weather2	Light	HiRun	Accinv	DgrInv	PEDInv		
4629	30261863	#####	2020	January	5:30	9 a.m.	Thursday	STATION	BERNALIL	ALBUQUE	CARLISLE						N			Injury Cras	0	0	0	0	0	3	3	1	4	2	4	0	2	On Roadside	Other Veh Other Veh	Collision w/ MV in Trar	Left Bank Left Bank	Left Bank	Clear	Left Bank	Daylight	No		Not Involve	Not Involve	Not Involved
4639	30261670	#####	2020	January	15:08	3 p.m.	Friday	STATION	BERNALIL	ALBUQUE	CARLISLE						W			Property D	0	0	0	0	0	0	4	2	4	0	2	On Roadside	Other Veh Other Veh	Collision w/ MV in Trar	Left Bank Left Bank	Left Bank	Clear	Left Bank	Daylight	No		Not Involve	Not Involve	Not Involved		
4882	30262050	#####	2020	February	Left Bank	Left Bank	Saturday	STATION	BERNALIL	ALBUQUE	CARLISLE CLAREM						S			Property D	0	0	0	0	0	0	2	2	2	0	2	On Roadside	Other Veh Other Veh	Collision w/ MV in Trar	Left Bank Left Bank	Left Bank	Clear	Left Bank	Daylight	Yes		Not Involve	Not Involve	Not Involved		
5575	30263247	#####	2020	April	20:35	8 p.m.	Thursday	STATION	BERNALIL	ALBUQUE	CAREM	CARLISLE CLAREM					N			Property D	0	0	0	0	0	0	2	2	2	0	2	On Roadside	Other Veh Other Veh	Collision w/ MV in Trar	Left Bank Left Bank	Left Bank	Clear	Left Bank	Dark-Light	No		Not Involve	Not Involve	Not Involved		
10363	71056200	#####	2020	March	19:40	7 p.m.	Wednesday	ALBUQUE	BERNALIL	ALBUQUE	CAREM	CARLISLE CLAREM					N			Injury Cras	0	0	0	0	1	1	2	2	2	0	2	On Roadside	Other Veh Other Veh	Collision w/ MV in Trar	Left Bank Left Bank	Left Bank	Clear	Left Bank	Dusk	No		Not Involve	Not Involve	Not Involved		
15601	71056761	#####	2020	July	7:20	7 a.m.	Saturday	ALBUQUE	BERNALIL	ALBUQUE	CAREM	CARLISLE CLAREM					N			Injury Cras	0	0	0	0	2	2	0	2	1	2	0	1	On Roadside	Fixed Obj	Fixed Obj	Collision w/ Utility Pole	Off Roadside	Left Bank Left Bank	Clear	Left Bank	Daylight	Yes		Involved	Not Involve	Not Involved
17021	71057970	#####	2020	August	8:37	8 a.m.	Wednesday	ALBUQUE	BERNALIL	ALBUQUE	CAREM	CARLISLE CLAREM					W	W		Injury Cras	0	0	0	0	1	1	1	2	2	0	2	On Roadside	Left Bank Left Bank	Collision w/ MV in Trar	On Shoulder	Front-to-Si	Intersect	Clear	Left Bank	Daylight	No		Not Involve	Not Involve	Not Involved	
17073	71057969	#####	2020	January	16:20	4 p.m.	Thursday	ALBUQUE	BERNALIL	ALBUQUE	CAREM	CARLISLE CLAREM					N			Property D	0	0	0	0	0	4	4	4	0	4	0	4	On Roadside	Other Veh Other Veh	Collision w/ MV in Trar	Left Bank Left Bank	Left Bank	Clear	Left Bank	Daylight	No		Not Involve	Not Involve	Not Involved	
17589	71058185	#####	2020	January	13:23	1 p.m.	Thursday	ALBUQUE	BERNALIL	ALBUQUE	CAREM	CARLISLE CLAREM					N			Injury Cras	0	0	0	0	1	1	2	2	1	1	1	1	On Roadside	Pedestrian/Pedestrian	Collision w/ Pedestrian	Left Bank Left Bank	Left Bank	Clear	Left Bank	Daylight	Yes		Not Involve	Not Involve	Involved	
17651	71058194	#####	2020	January	17:15	5 p.m.	Thursday	ALBUQUE	BERNALIL	ALBUQUE	2808 CAR					S			Property D	0	0	0	0	0	0	1	1	0	1	On Roadside	Fixed Obj	Fixed Obj	Collision w/ Fire Hydrant	Off Roadside	Left Bank Left Bank	Clear	Left Bank	Dark-Light	No		Not Involve	Not Involve	Not Involved			
18057	71058320	#####	2020	July	14:00	2 p.m.	Tuesday	ALBUQUE	BERNALIL	ALBUQUE	CAREM	CARLISLE CLAREM					N			Injury Cras	0	0	0	0	1	1	2	2	2	0	2	On Roadside	Other Veh Other Veh	Collision w/ MV in Trar	Left Bank Left Bank	Left Bank	Clear	Left Bank	Daylight	Yes		Not Involve	Not Involve	Not Involved		
33603	71076140	#####	2020	July	14:53	2 p.m.	Saturday	ALBUQUE	BERNALIL	ALBUQUE	CAREM	CARLISLE CLAREM					S			Injury Cras	0	0	0	0	2	2	1	3	2	0	2	On Roadside	Other Veh Other Veh	Collision w/ MV in Trar	Left Bank Front-to-R	From Sam	Clear	Left Bank	Daylight	No		Not Involve	Not Involve	Not Involved		
34772	71076558	#####	2020	August	18:46	3 p.m.	Friday	ALBUQUE	BERNALIL	ALBUQUE	CAREM	CARLISLE CLAREM					E			Property D	0	0	0	0	0	3	3	2	3	0	2	On Roadside	Left Bank Left Bank	Collision w/ MV in Trar	On Roadside	Front-to-Si	Intersect	Clear	Left Bank	Daylight	Yes		Not Involve	Not Involve	Not Involved	
35700	71077031	#####	2020	November	16:17	4 p.m.	Wednesday	ALBUQUE	BERNALIL	ALBUQUE	CAREM	CARLISLE CLAREM					S			Injury Cras	0	0	0	0	1	1	2	3	2	3	0	2	On Roadside	Left Bank Left Bank	Collision w/ MV in Trar	On Roadside	Front-to-Si	Intersect	Clear	Left Bank	Dusk	No		Not Involve	Not Involve	Not Involved

2021

FD	RASH

2018

2019

2020

20212022

2019

FD	JCRNums	CrashDate	Year	Month	Hour	Day	Agency	County	City	AltRst	BStRst	Landmark	Route	MI605	Dir	Ldr	Measure	Killed	ClassA	ClassB	ClassC	Injured	Unhurt	Total	nVeh	Severity	Class	Analysis	Traffic	To	Weather	Daylight	HRUn	Alcniv	Druginv	PDInv		
19865	71033932	#####	2019	January	4 p.m.	Monday	NEW	MEX	BERNAL	ALBUQUE	CARLISLE	PROSPECT		S					0	0	0	0	2	2	2	2	Property D	Other Veh	Other Veh	Faced	Y	Clear	Daylight	No	Not Invol	Not Invol	Not Invol	
19863	71033951	#####	2019	June	7 p.m.	Wednesday	NEW	MEX	BERNAL	ALBUQUE	CARLISLE	PROSPECT	PROSPECT	S	S		50 FT		0	0	0	0	0	3	3	3	2	Property D	Other Veh	Other Veh	Driver Inv	In	Clear	Daylight	No	Not Invol	Not Invol	Not Invol
30006	71056687	#####	2019	December	2 p.m.	Monday	ALBUQUE	BERNAL	ALBUQUE	CARLISLE	PROSPECT			S					0	0	0	0	0	2	2	2	2	Property D	Other Veh	Other Veh	Driver Inv	In	Clear	Daylight	Yes	Not Invol	Not Invol	Not Invol

FD	JCR#	C#	CrashDate	Year	Month	Military	Hour	Day	Agency	County	City	ASrnt	BSrnt	Landmark	GR	Route/GS	Milep	Dir	Ldr	Measure	Severity	Killed	ClassA	ClassB	ClassC	Injured	Unhurt	Total	veh	Motorists	comMotor	Motorist'sCrash	Class	Analysis	HE	HEAnalysis	HELocation	HEPth	HELane	Weather	Weather2	Light	HEColor	Altitude	Droger	PEDiv	
11187	10280247	#####	2020	November	16	15:01	4 p.m.	Tuesday	STATION BERNAL ALBUQUE CARLSLE PROSPE											Property C	0	0	0	0	0	1	1	0	2	On Roadside Other Veh	Other Veh	Colision	MV in Tr	Left	Left	Left	Left	Left	Clear	Left	Dark	Dark No	No	Not Invol	Not Invol	Not Invol	
19270	11056747	#####	2020	May	8	8 a.m.	Friday	ALBUQUE BERNAL ALBUQUE CARLSLE PROSPE											E	Property C	0	0	0	0	0	2	2	2	1	2	On Roadside Other Veh	Other Veh	Colision	MV in Tr	Left	Left	Left	Left	Left	Clear	Left	Dark	No	No	Not Invol	Not Invol	Not Invol
19504	11056772	#####	2020	May	8	8 a.m.	Friday	ALBUQUE BERNAL ALBUQUE CARLSLE PROSPE											S	Property C	0	0	0	0	0	2	2	2	1	2	On Roadside Other Veh	Other Veh	Colision	MV in Tr	Left	Left	Left	Left	Left	Clear	Left	Dark	No	No	Not Invol	Not Invol	Not Invol
23220	11056263	#####	2020	May	24	2 p.m.	Tuesday	NW MED BERNAL ALBUQUE 2501 CARLSLE												Property C	0	0	0	0	0	1	1	1	0	2	On Roadside Other Veh	Other Veh	Colision	MV in Tr	Left	Left	Left	Left	Left	Clear	Left	Dark	No	No	Not Invol	Not Invol	Not Invol
24087	11053070	#####	2020	November	12	11 a.m.	Wednesday	NW MED BERNAL ALBUQUE CARLSLE PROSPE											N	Injury Cras	0	0	0	0	1	1	2	2	0	2	On Roadside Left Bank	Left Bank	Colision	MV in Tr	On Roadside	Sidewalk	Intersec	Clear	Left	Dark	Daylight	Yes	No	Not Invol	Not Invol	Not Invol	
33014	11075846	#####	2020	December	11	11 a.m.	Saturday	ALBUQUE BERNAL ALBUQUE CARLSLE PROSPE											S	Injury Cras	0	0	1	0	1	2	3	2	0	2	On Roadside Left Bank	Left Bank	Colision	MV in Tr	On Roadside	Sidewalk	From S	Clear	Left	Dark	Daylight	No	No	Not Invol	Not Invol	Not Invol	

[illegible]

FD	Agency	CrashDate	Year	Month	Hour	Day	Agency	City	AStreet	BStreet	Landmark	Qs	Route	Sig	CrashDir	Dir	Severity	Killed	ClassA	ClassB	ClassC	Injured	Unhurt	Total	Veh	Motors	Nonmotor	MotorVeh	OnRoad	Class	Analysis	FCSH	HE	ME	HA	Locat	PH	EM	HE	ME	Intersect	Weather	Light	HfRun	Alc	Drug	Inv	PdInv	
15489	7106008	#####	2022	March	18:00	6 p.m.	Monday	New Mexico	Bernalillo	Abiquia	CARLISLE PROSPE		S	0	0	41 FT	Property C	0	0	0	0	0	0	2	2	2	2	2	0	2	On Road	Left	Black	Left	Black	Collision w/ MV in Tr	On Road	Front-to-R	From S	Intersect	Clear	Daylight	Not	Involved	Not	Involved	Not	Involved	
31058	7108147	#####	2022	February	12:00	12 p.m.	Thursday	Abiquia	Abiquia	CARLISLE PROSPE		S	0	0	0	0	Property C	0	0	0	0	0	0	0	0	0	0	0	0	0	On Road	Front-to-R	Left	Black	Collision w/ MV in Tr	On Road	Front-to-R	From S	Intersect	Clear	Daylight	Not	Involved	Not	Involved	Not	Involved		
31056	7108267	#####	2022	March	17:25	5 p.m.	Friday	Abiquia	Bernalillo	Abiquia	CARLISLE PROSPE		S	N	0	75 FT	Property C	0	0	0	0	0	0	0	4	4	3	4	0	0	3	On Road	Left	Black	Left	Black	Collision w/ MV in Tr	On Road	Front-to-R	From S	Intersect	Clear	Daylight	Not	Involved	Not	Involved	Not	Involved
31059	7108241	#####	2022	May	11:24	11 a.m.	Saturday	Abiquia	Bernalillo	Abiquia	CARLISLE PROSPE		S	N	0	0 FT	Property C	0	0	0	0	0	0	1	1	2	2	0	0	2	On Road	Left	Black	Left	Black	Collision w/ MV in Tr	On Road	Sideway	From Opp	Clear	Daylight	Not	Involved	Not	Involved	Not	Involved		
33006	7106990	#####	2022	June	12:30	12 p.m.	Friday	Abiquia	Bernalillo	Abiquia	CARLISLE PROSPE		S	0	0	0	Property C	0	0	0	0	0	0	1	1	4	5	2	0	2	On Road	Left	Black	Left	Black	Collision w/ MV in Tr	On Road	Front-to-S	Intersect	Clear	Daylight	Not	Involved	Not	Involved	Not	Involved		
33821	7106200	#####	2022	June	12:50	12 p.m.	Wednesday	Abiquia	Bernalillo	Abiquia	CARLISLE PROSPE		S	0	0	0	Injury C	0	0	0	0	0	0	1	1	2	2	0	0	2	On Road	Left	Black	Left	Black	Collision w/ MV in Tr	On Road	Front-to-S	Intersect	Clear	Daylight	Not	Involved	Not	Involved	Not	Involved		
34415	7109261	#####	2022	September	12:00	12 p.m.	Friday	Abiquia	Bernalillo	Abiquia	CARLISLE PROSPE		S	0	0	0	Property C	0	0	0	0	0	0	0	0	0	0	0	0	0	On Road	Front-to-R	Left	Black	Collision w/ MV in Tr	On Road	Front-to-R	From S	Intersect	Clear	Daylight	Not	Involved	Not	Involved	Not	Involved		
39621	7110343	#####	2022	August	16:00	4 p.m.	Monday	New Mexico	Bernalillo	Abiquia	CARLISLE PROSPE		S	W	N	302 FT	Property C	0	0	0	0	0	0	0	2	2	2	2	0	0	2	On Road	Left	Black	Left	Black	Collision w/ MV in Tr	On Road	Front-to-R	From S	Intersect	Clear	Daylight	Not	Involved	Not	Involved	Not	Involved
40532	71101149	#####	2022	December	16:06	4 p.m.	Monday	New Mexico	Bernalillo	Abiquia	CARLISLE PROSPE		S	S	0	0	0	Property C	0	0	0	0	0	0	2	2	2	2	0	0	2	On Road	Left	Black	Left	Black	Collision w/ MV in Tr	On Road	Sideway	From Sam	Clear	Daylight	Not	Involved	Not	Involved	Not	Involved	

Carlisle & Cutler

2020

FID	JCRnumb	CrashDate	Year	Month	MilitaryTI	Hour	Day	Agency	County	City	AStreet	BStreet	Landmark	GIS_Route	GIS_Milep	Dir	Ldir	Measure	Severity	Killed	ClassA	ClassB	ClassC	Injured	Unhurt	Total	nVeh	Motorists	Nonmotor	MotorVeh	CrashOcc	Class	Analysis	FHE	FHEAnalyt	FHELocati	FHEImpac	HEManner	Weather	Weather2	Light	HitRun	Alcinv	Druginv	
14900	710563661	#####	2020	January	8:29	8 a.m.	Monday	ALBUQUE	BERNALIL	ALBUQUE	CARLISLE	CUTLER	J			E			Property D	0	0	0	0	0	3	3	2	3	0	2	On Roadw	Other Veh	Other Veh	Other Veh	Collision w	MV in Tran	Left Blank	Left Blank	Left Blank	Clear	Left Blank	Daylight	No	Not Involve	Not Involved

FD	JCRN	CASR/CrdsData	Year	Month	Hour	Dag	Agency	County	City	AStress	BStreet	Landmark GIS_Road GIS_Mileps	Dir	Wdir	Left	Messure	Ft	Volume	Killed	Injured	Uninrted	Total	nVeh	Severity	Class	Analysis	TotOppac	Weather	Light	Hifrtn	Active	Inguine	PEDivne
26091	2001041238	#####	2018	October	7 a.m.	Thursday	ALBUQUE BERNAL ALBUQUE 140 WEST CARLSLE							W	Lstr	2000	FT	0	0	0	0	0	4	4	Property Other Vehl Other Vehl Other Vehl	Clear	Daylight	No	Not Invoke Not Invoke Not Invoke				
26092	2010050507	#####	2018	October	6 p.m.	Thursday	STATION BERNAL ALBUQUE 140 WEST BERNAL						SW		R	0	0	0	0	0	2	2	2	Property Other Vehl Other Vehl Other Vehl	Clear	Dark-Light No	Not Invoke Not Invoke Not Invoke						
26096	2010051401	#####	2018	August	8 p.m.	Friday	ALBUQUE BERNAL ALBUQUE 140 WEST CARLSLE					140 EBR FT		S	South	100	FT	0	0	0	0	0	4	4	Property Other Vehl Other Vehl Other Vehl	Clear	Dark-Light No	Not Invoke Not Invoke Not Invoke					
26097	2010051402	#####	2018	August	8 p.m.	Friday	ALBUQUE BERNAL ALBUQUE 140 WEST CARLSLE							S	South	100	FT	0	0	0	0	0	4	4	Property Other Vehl Other Vehl Other Vehl	Clear	Dark-Light No	Not Invoke Not Invoke Not Invoke					
26098	10050507	#####	2018	December	6 a.m.	Monday	ALBUQUE BERNAL ALBUQUE 140 WEST CARLSLE							W	Lstr	2000	FT	0	0	0	0	0	2	2	Property Other Vehl Other Vehl Other Vehl	Clear	Dark-Light No	Not Invoke Not Invoke Not Invoke					
26100	23482190	#####	2018	December	8 a.m.	Thursday	STATION BERNAL ALBUQUE 140 EAST CARLSLE							W	Lstr	2000	FT	0	0	0	0	0	2	2	Property Other Vehl Other Vehl Other Vehl	Clear	Daylight No	Not Invoke Not Invoke Not Invoke					
26101	2010051401	#####	2018	November	8 p.m.	Thursday	ALBUQUE BERNAL ALBUQUE 140 WEST CARLSLE							W	Lstr	2000	FT	0	0	0	0	0	2	2	Property Other Vehl Other Vehl Other Vehl	Clear	Daylight No	Not Invoke Not Invoke Not Invoke					
26102	2010050509	#####	2018	February	8 a.m.	Thursday	ALBUQUE BERNAL ALBUQUE 140 WEST CARLSLE							W	Lstr	2000	FT	0	0	0	0	0	2	2	Property Other Vehl Other Vehl Other Vehl	Clear	Daylight No	Not Invoke Not Invoke Not Invoke					
26118	2010051405	#####	2018	November	5 p.m.	Thursday	ALBUQUE BERNAL ALBUQUE 140 WEST CARLSLE							W	Lstr	2000	FT	0	0	0	1	1	2	3	2	Property Other Vehl Other Vehl Other Vehl	Clear	Dark-Act 1 No	Not Invoke Not Invoke Not Invoke				

FD	IR#	CR#	Case Date	Year	Month	Hour	Day	Agency	County	City	Alt	SB	EB	LR	MS	Post	Dir	Ldr	Measure	Killed	Class A	Class B	Class C	Injured	Uninjt	Total	nVeh	Severity	Class	Analysis	Traffic	Weather	Light	Left	Hit	Active	Drugs	PD		
120	12014562	#####	1909	September	5	p.m.	Sunday	STATION	BERNAL	ALBUQUE	140 WEST	140	161	161	0	0	0	0	0	0	0	0	0	0	2	2	1	1	Property C Other Veh Left Bank	Left Bank	Impair	Clear	Daylight	No	Not Injured	Not Injured	Not Injured	Not Injured	Not Injured	
5744	23471153	#####	2019	October	4	p.m.	Thursday	STATION	BERNAL	ALBUQUE	140	CARLISLE	140	161	W	0	0	0	0	0	0	0	0	0	2	2	2	2	Property C Other Veh Other Veh	Other Veh	Other Veh	Clear	Daylight	No	Not Injured	Not Injured	Not Injured	Not Injured	Not Injured	
7431	23484554	#####	2019	August	2	p.m.	Wednesday	STATION	BERNAL	ALBUQUE	140	CARLISLE	140	161	W	0	0	0	0	0	0	0	0	0	2	2	2	2	Property C Other Veh Left Bank	Left Bank	Missng	Clear	Daylight	No	Not Injured	Not Injured	Not Injured	Not Injured	Not Injured	
1925	30260339	#####	2019	October	2	p.m.	Thursday	STATION	BERNAL	ALBUQUE	140	CARLISLE	140	161	W	0	0	0	0	0	0	0	0	0	0	2	2	2	Property C Other Veh Left Bank	Left Bank	Impair	Clear	Daylight	No	Not Injured	Not Injured	Not Injured	Not Injured	Not Injured	
1617	30260648	#####	2019	December	2	p.m.	Wednesday	STATION	BERNAL	ALBUQUE	140 WEST	CARLISLE	140	161	S	0	0	0	0	0	0	0	0	0	0	2	2	2	Property C Other Veh Left Bank	Left Bank	Driver Clear	Clear	Daylight	Yes	Not Injured	Not Injured	Not Injured	Not Injured	Not Injured	
1687	30260705	#####	2019	December	8	a.m.	Thursday	STATION	BERNAL	ALBUQUE	140 WEST	CARLISLE	140	161	W	0	0	0	0	0	0	0	0	0	0	2	2	2	Property C Other Veh Left Bank	Left Bank	Impair	Clear	Daylight	Yes	Not Injured	Not Injured	Not Injured	Not Injured	Not Injured	
1913	30260728	#####	2019	December	2	p.m.	Thursday	STATION	BERNAL	ALBUQUE	140 WEST	CARLISLE	140	161	W	0	0	0	0	0	0	0	0	0	0	2	2	2	Property C Other Veh Left Bank	Left Bank	Impair	Clear	Daylight	Yes	Not Injured	Not Injured	Not Injured	Not Injured	Not Injured	
15731	30260748	#####	2019	December	1	p.m.	Friday	STATION	BERNAL	ALBUQUE	WB 140	CARLISLE	140	161	W	0	0	0	0	0	0	0	0	0	2	2	2	2	Property C Other Veh Left Bank	Left Bank	Impair	Clear	Daylight	Yes	Not Injured	Not Injured	Not Injured	Not Injured	Not Injured	
20654	1044577	#####	2019	February	11	p.m.	Friday	ALBUQUE	BERNAL	ALBUQUE	140 ON R	CARLISLE	140	161	S	0	0	0	0	0	0	0	0	1	1	2	3	2	Many Cras Other Veh Other Veh	Dissegrate	Clear	Clear	Dark-Light	No	Not Injured	Not Injured	Not Injured	Not Injured	Not Injured	
20654	1044578	#####	2019	April	16	p.m.	Friday	ALBUQUE	BERNAL	ALBUQUE	140 ON R	CARLISLE	140	161	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Many Cras Other Veh Other Veh	Dissegrate	Clear	Clear	Dark-Light	No	Not Injured	Not Injured	Not Injured	Not Injured	Not Injured
21064	10445735	#####	2019	March	7	p.m.	Friday	ALBUQUE	BERNAL	ALBUQUE	140 FROM	CARLISLE	140	161	W	0	0	0	0	0	0	0	0	0	2	2	3	5	2	Many Cras Other Veh Other Veh	Other Veh	Other Veh	Clear	Dark-Light	Yes	Not Injured	Not Injured	Not Injured	Not Injured	Not Injured
21159	10445947	#####	2019	April	6	a.m.	Sunday	ALBUQUE	BERNAL	ALBUQUE	CARLISLE	140	161	N	0	0	0	0	0	0	0	0	0	0	3	3	3	3	2	Property C Other Veh Other Veh	Other Veh	Dissegrate	Clear	Dark-Light	Yes	Not Injured	Not Injured	Not Injured	Not Injured	Not Injured
21172	10445914	#####	2019	February	1	p.m.	Friday	ALBUQUE	BERNAL	ALBUQUE	140 WEST	CARLISLE	140	161	S	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Many Cras Other Veh Other Veh	Dissegrate	Clear	Clear	Dark-Light	No	Not Injured	Not Injured	Not Injured	Not Injured	Not Injured
24864																																								

[illegible][illegible][illegible]

2019

FD	Incident/Crash/Chase	Year	Month	Day	Agency	County	City	ASR#	Latitude	Longitude	Route	MilePost	Dir	Ldr	Measure	Killed	ClassA	ClassB	ClassC	Injured	Unhurt	Total	Vehicle	Severity	Class	Analysis	TCP	Weather	Light	HuRtn	Alcnv	Drugs	PDInv			
1952	33420819 #####	2019	August	1 p.m.	Thursday	STATION	BERNAL ALBUQUE	ALBUQUE 1400	1.40	161	E						0	0	0	0	0	2	2		2	Property D Other Veh	Left Bank	Missing	Clear	Daylight	No	Not Invol	Not Invol	Not Invol		
1953	33420753 #####	2019	August	1 p.m.	Thursday	STATION	BERNAL ALBUQUE	ALBUQUE 1400	1.40	161	E						0	0	0	0	0	2	2		2	Property D Other Veh	Left Bank	Missing	Clear	Daylight	No	Not Invol	Not Invol	Not Invol		
4626	23480808 #####	2019	August	2 p.m.	Monday	STATION	BERNAL ALBUQUE	ALBUQUE 1400 SB	NM 160 C	1.40	161	E					0	0	0	0	0	2	2		2	Property D Other Veh	Left Bank	Impover	Clear	Daylight	No	Not Invol	Not Invol	Not Invol		
6461	23416889 #####	2019	March	10 a.m.	Friday	STATION	BERNAL ALBUQUE	ALBUQUE		1.40	161	E					0	0	0	0	0	2	2		2	Property D Vehicle on	Left Bank	Miss Impr	Clear	Daylight	No	Not Invol	Not Invol	Not Invol		
15484	30020038 #####	2019	November	16 Sat	Friday	STATION	BERNAL ALBUQUE	ALBUQUE		1.40	161	N					0	0	0	0	0	3	3		3	Property D Other Veh	Other Veh	Mising	Clear	Dark-Lght	No	Not Invol	Not Invol	Not Invol		
1672	23064053 #####	2019	December	10 p.m.	Friday	STATION	BERNAL ALBUQUE	ALBUQUE		1.40	161	E					0	0	0	0	0	3	3		3	Property D Other Veh	Other Veh	Mising	Clear	Dark-Lght	No	Not Invol	Not Invol	Not Invol		
20801	71050165 #####	2019	July	6 a.m.	Friday	ALBUQUE	BERNAL ALBUQUE	ALBUQUE K1400		1.40	161	E					0	0	0	1	1	2	2		2	3 Injury Cras	Other Veh	Other Veh	Driver Invol	Clear	Daylight	Yes	Not Invol	Not Invol	Not Invol	
28908	71050227 #####	2019	April	4 p.m.	Monday	ALBUQUE	BERNAL ALBUQUE	ALBUQUE 1400 FRON	CARLISLE	1.40	161	E					0	0	0	0	0	3	3		3	Property D Other Veh	Other Veh	Other Veh	Other Mec	Clear	Daylight	Yes	Not Invol	Not Invol	Not Invol	
29101	71050311 #####	2019	March	2 a.m.	Friday	ALBUQUE	BERNAL ALBUQUE	ALBUQUE 1400	FRON CARLISLE	1.40	161	E					0	0	0	0	0	3	3		3	Property D Other Veh	Other Veh	Other Veh	Other Mec	Clear	Daylight	Yes	Not Invol	Not Invol	Not Invol	
29847	71050630 #####	2019	August	4 p.m.	Monday	ALBUQUE	BERNAL ALBUQUE	ALBUQUE 1400 EAST	CARLISLE	1.40	161	W					0	0	0	0	0	3	3		3	Property D Other Veh	Other Veh	Other Veh	Falled to Y	Clear	Daylight	Yes	Not Invol	Not Invol	Not Invol	
30303	71050760 #####	2019	June	2 p.m.	Saturday	ALBUQUE	BERNAL ALBUQUE	ALBUQUE 1400 EAST	CARLISLE	1.40	161	E					0	0	0	0	0	2	2		2	Property D Other Veh	Other Veh	Other Veh	Driver Invol	Clear	Daylight	No	Not Invol	Not Invol	Not Invol	
31766	71060501 #####	2019	December	10 p.m.	Saturday	ALBUQUE	BERNAL ALBUQUE	ALBUQUE 1400 EAST	CARLISLE	1.40	161	E					0	0	0	0	0	3	3		3	Property D Other Veh	Other Veh	Other Veh	Driver Invol	Clear	Daylight	No	Not Invol	Not Invol	Not Invol	
32320	71051742 #####	2019	November	7 a.m.	Saturday	ALBUQUE	BERNAL ALBUQUE	ALBUQUE 1400 EAST	CARLISLE	1.40	161	E					0	0	0	0	0	3	3		3	Property D Other Veh	Other Veh	Other Veh	Following	Clear	Dawn	Yes	Not Invol	Not Invol	Not Invol	
32363	71051780 #####	2019	October	8 a.m.	Monday	ALBUQUE	BERNAL ALBUQUE	ALBUQUE 1400 WB ON	CARLISLE	1.40	161	E					0	0	0	2	2	1	3		3	3 Injury Cras	Other Veh	Other Veh	Driver Invol	Clear	Daylight	No	Not Invol	Not Invol	Not Invol	
34696	71051754 #####	2019	September	10 a.m.	Monday	ALBUQUE	BERNAL ALBUQUE	ALBUQUE 1400 SB	CARLISLE	1.40	161	E					0	0	0	0	0	2	2		2	3 Injury Cras	Other Veh	Other Veh	Driver Invol	Clear	Daylight	No	Not Invol	Not Invol	Not Invol	
33353	71051770 #####	2019	October	10 a.m.	Monday	ALBUQUE	BERNAL ALBUQUE	ALBUQUE 1400 EB ON	CARLISLE	1.40	161	E					0	0	0	0	0	2	2		2	Property D Other Veh	Other Veh	Other Veh	Driver Invol	Clear	Daylight	No	Not Invol	Not Invol	Not Invol	
33397	71051775 #####	2019	November	4 p.m.	Thursday	ALBUQUE	BERNAL ALBUQUE	ALBUQUE 1400 OFF I		1.40	161	N					0	0	0	0	0	2	1	3		3	3 Injury Cras	Other Veh	Other Veh	Driver Invol	Clear	Daylight	No	Not Invol	Not Invol	Not Invol
35119	71051150 #####	2019	April	7 a.m.	Monday	NEW MEX	BERNAL ALBUQUE	ALBUQUE 1400	FRON CARLISLE	1.40	161	E					0	0	0	0	0	2	2		2	3 Injury Cras	Other Veh	Other Veh	Driver Invol	Clear	Daylight	No	Not Invol	Not Invol	Not Invol	
36966	71051318 #####	2019	May	1 p.m.	Friday	NEW MEX	BERNAL ALBUQUE	ALBUQUE K1600	CARLISLE	1.40	161	N					0	0	0	0	1	1	2	3		3	3 Injury Cras	Other Veh	Other Veh	Driver Invol	Clear	Daylight	No	Not Invol	Not Invol	Not Invol

FD	JCRnumb	CashDate	Year	Month	Miles	Ty	Hour	Day	Agt	County	City	Highway	Street	Landmark	RGS	GSM	Dir	Ldr	Measure	Severity	Killed	Inj	ClassA	ClassB	ClassC	Injured	Unhurt	Total	nVeh	Motorists	Comments	Motor/Veh	CrashOcc	Class	Anals	Vehs	PHE	Analysis	
5897	3024056	#####	2020	June	4:15	a.m.	Tuesday	STATION BERNALLI ALBUQUE HIGHWAY A-28											Property C	0	0	0	0	0	0	0	2	2	2	2	2	0	2 On Roadside Other Vehs Collison w/ MV In Trar Lk						
10618	3026004	#####	2020	September	9:45	a.m.	Monday	STATION BERNALLI ALBUQUE CARLSBURG OFF AT I-										S	Property C	0	0	0	0	0	0	0	2	2	2	2	2	0	2 On Roadside Other Vehs Collison w/ MV In Trar Lk						
11031	3028125	#####	2020	October	18:30	p.m.	Tuesday	STATION BERNALLI ALBUQUE 140 EAST CARLSBURG											Property C	0	0	0	0	0	0	0	2	2	2	2	2	0	2 On Roadside Left Bank Invold Crsh Left Bank Left Lk						
14372	3105701	#####	2020	October	20:45	p.m.	Fri	ALBUQUE BERNALLI ALBUQUE 140 EAST											Property C	0	0	0	0	0	0	0	2	2	2	2	2	0	2 On Roadside Left Bank Invold Crsh Left Bank Left Lk						
20825	3105108	#####	2020	February	2:08	a.m.	Sunday	NEW MD BERNALLI ALBUQUE CARLSBURG EB 40											Property C	0	0	0	0	0	0	0	5	5	2	5	0	2 On Roadside Other Vehs Collison w/ MV In Trar Lk							
33026	3107582	#####	2020	August	15:25	p.m.	Friday	STATION BERNALLI ALBUQUE CARLSBURG 140 EBOU										N	Property C	0	0	0	1	0	0	1	1	2	2	2	2	0	2 On Roadside Rolover Rolover - Non-Collis Overturn Lk						

[illegible][illegible][illegible]

Menaul & Bryn Mawr

2018

FD	JCRnumb	CrashDat	Year	Month	Hour	Day	Agency	County	City	AStreet	BStreet	Landmark	GIS_Route	GIS_Milep	Dir	Ldir	Measure	Killed	ClassA	ClassB	ClassC	Injured	Unhurt	Total	nVeh	Severity	Class	Analysis	TopCFact	Weather	Light	HitRun	Alcinv	Druginv	PEDinv
27708	23259496	#####	2018	June		Left Blank	Sunday	STATION	BERNALIL	ALBUQUE	MENAU	I	MENAU		E				0	0	0	0	0	2	2	2	Property D	Other Veh	Left Blank	Excessive Rainng	Daylight	No	Not Involve	Not Involve	Not Involved

2019

FD	JCRnumb	CrashDat	Year	Month	Hour	Day	Agency	County	City	AStreet	BStreet	Landmark	Route	MilePost	Dir	Ldir	Measure	Killed	ClassA	ClassB	ClassC	Injured	Unhurt	Total	nVeh	Severity	Class	Analysis	TopCFact	Weather	Light	HitRun	Alcinv	Druginv	PEDinv	
2637	23459485	#####	2019	May			Left Blank	Wednesday	STATION	BERNALIL	ALBUQUE					W			0	0	0	0	0	2	2	2	Property D	Vehicle on Left Blank	Made Imp	Clear	Daylight	No	Not Involve	Not Involve	Not Involved	
26131	71055214	#####	2019	July	8 a.m.	Monday	ALBUQUE	BERNALIL	ALBUQUE	MENAU	I	BRYN MA			E			0	0	0	0	0	3	3	2	Property D	Other Veh	Other Veh	Avoid No t	Clear	Daylight	Yes	Not Involve	Not Involve	Not Involved	
28113	71055402	#####	2019	April	11 a.m.	Wednesday	ALBUQUE	BERNALIL	ALBUQUE	MENAU	I	BRYN MA			W			0	0	0	1	1	2	3	2	Heavy Cras	Other Veh	Other Veh	Driver Inat	Left Blank	Left Blank	No	Not Involve	Not Involve	Not Involved	
30244	71056755	#####	2019	October	6 p.m.	Thursday	ALBUQUE	BERNALIL	ALBUQUE	MENAU	I	BRYN MA			N			0	0	0	0	0	2	2	2	2	Property D	Pedestrian	Pedestrian	AlcoholDr	Clear	Dusk	No	Involved	Not Involve	Involved

2021

FD	RASH_RE	RASH_DA	RASH_YE	MONTH	IME OF C	JOUR	OF	DAY	WVW	ENFOI	COUNTY	CITY	RMARY	ISCONDAR	INDMARK	IS_DERIV	IS_DERI	RASH_DF	DIRECTION	ISTANCE	ISTANCE	RASH_SE	JMBER	O_JMBER	O_JMBER	OUMBER	OUMBER	OUMBER	OUMBER	OJ TAL	NUJMBER	O_JMBER	O_JMBER	O_JMBER	O_RST	HARRASH	CLRASH	AN_RST	HA	RST_HA	RST_HA	RST_HA	RST_HA	WEATHER	DITIONA	LIGHTING	IT_AND	FLCONDL	RUG	INVE	DESTR	IAN
15504	#####	#####	2021	January	7:55		7 a.m.	Wednesday	Abuquerq	Bernalillo	Abuquerq	MENAU	I	BRYN MA				0	W		0	Property C	0	0	0	0	0	3	3	2	3	0	2	On Roadw	Left Blank	Left Blank	Collision w	MF in Trar	On Roadw	Front-to-S	Intersectn	Clear	Left Blank	Daylight	No	Not Involve	Not Involve	Not Involved				
30295	#####	#####	2021	October	11:25		11 a.m.	Wednesday	Abuquerq	Bernalillo	Abuquerq	MENAU	I	BRYN MA				0	W		0	Injury Cras	0	0	0	1	1	2	2	1	1	1	On Roadw	Left Blank	Left Blank	Collision w	Pedalcycl	On Roadw	Front-to-S	From Opp	Clear	Left Blank	Daylight	No	Not Involve	Not Involve	Not Involved					
35833	#####	#####	2021	September	10:42		10 a.m.	Friday	Abuquerq	Bernalillo	Abuquerq	MENAU	I	BRYN MA				0	W		0	Property C	0	0	0	0	0	2	2	2	2	0	2	On Roadw	Left Blank	Left Blank	Collision w	MF in Trar	On Roadw	Front-to-S	Intersectn	Clear	Left Blank	Daylight	No	Not Involve	Not Involve	Not Involved				

2022

FD	JCRnumb	CrashDat	Year	Month	MilitaryTi	Hour	Day	Agency	County	City	AStreet	BStreet	Landmark	GIS_Route	GIS_Milep	CrashDir	Direction	Feature	Measure	Severity	Killed	ClassA	ClassB	ClassC	Injured	Unhurt	Total	nVeh	Motorists	Knmotor	MotorVeh	CrashOcca	Class	Analysis	PHE	HEAnalyt	HELocat	PHEImpact	HEManne	Weather	Weather2	Light	HitRun	Alcinv	Druginv	PEDinv	
22172	71077644	#####	2022	March	6:25	6 a.m.	Tuesday	Abuquerq	Bernalillo	Abuquerq	MENALLI	I	BRYN MA	INTERSEI		N	E	200	FT	Fatal Cras	1	0	0	0	0	0	1	2	2	2	0	2	On Roadw	Left Blank	Left Blank	Collision w	MF in Trar	On Roadw	Front-to-S	Intersectn	Clear	Left Blank	Dawn	No	Not Involve	Involved	Not Involved

Phoenix & Bryn Mawr

2022

FD	JCRnumbr	CrashDate	Year	Month	MilitaryTl	Hour	Day	Agency	County	City	ASrct	BStreet	Landmark	GIS_Route	GIS_Milep	CrashDir	Direction	Measureme	Measurem	Severity	Killed	ClassA	ClassB	ClassC	Injured	Unhurt	Total	nVeh	Motorists	nonmotori	MotorVeh	TrashOccu	Class	Analysis	FHE	HEAnaly	HELocati	FHEmpac	HEManner	Weather	Weather2	Light	HitRun	Alcinv	Druginv	PEDInv
29953	711067369	#####	2022	December	19:38	7 p.m.	Sunday	Abuquerg	Bernalillo	Abuquerg	BRYN MA	PHOENIX	MENAU	L		W	W	0		Property C	0	0	0	0	0	1	1	1	1	0	1	Non-Traffic	Left Blank	Left Blank	Collision w/ Wall or Bu	Outside Tr	Left Blank	Left Blank	Cloudy	Left Blank	Dark-Light	Yes	Not Involve	Not Involve	Not Involved	

Menaul & Access 1

2020

FID	JCRnumb	CrashDate	Year	Month	MilitaryTl	Hour	Day	Agency	County	City	AShreet	BStreet	Landmark	GIS_Route	GIS_Milep	Dir	LDir	Measure	Severity	Killed	ClassA	ClassB	ClassC	Injured	Unhurt	Total	nVeh	Motorists	Nonmotor	MotorVeh	CrashOcc	Class	Analysis	FHE	FHEAnalyt	FHELocati	FHEImpac	HEManner	Weather	Weather2	Light	HirRun	Alcinv	Druginv	PEDinv
22313	710626221	#####	2020	January	10/24	10 a.m.	Monday	NEW MEX	BERNALIL	ALBUQUE	MENJUAL E		35.109417			W			Property D		0	0	0	0	0	1	1	1	1	0	1	On Roadw	Fixed Obje	Fixed Obje	Collision w/ Median	Left Blank	Left Blank	Left Blank	Clear	Left Blank	Left Blank	No	Not Involve	Not Involve	Not Involved