

CARLISLE & MENAUL DEVELOPMENT

INITIAL SUBMITTAL

JULY 12, 2024

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

INITIAL SUBMITTAL

Date:

July 12, 2024

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	9
A.	Land Use and Intensity.....	9
B.	Development Phasing and Timing	9
III.	STUDY AREA CONDITIONS.....	9
A.	Study Area	9
B.	Site Accessibility	10
C.	Data Sources	10
IV.	EXISTING CONDITIONS ANALYSIS.....	11
A.	Background	11
1.	Adjacent Roadways.....	11
B.	2024 Existing Traffic Conditions.....	12
C.	Level of Service Definitions	12
D.	Existing Intersection Capacity Analysis.....	13
V.	PROJECTED TRAFFIC.....	17
A.	Site Traffic Forecasting	17
1.	Trip Generation	17
2.	Trip Distribution and Assignment	18
3.	Traffic Projections	19
VI.	TRAFFIC AND IMPROVEMENT ANALYSIS	22
1.	2026 No Build Intersection Capacity Analysis	22
2.	2026 Build Intersection Capacity Analysis.....	26
3.	2036 Horizon Year No Build Intersection Capacity Analysis.....	31
4.	2036 Horizon Year Build Intersection Capacity Analysis	35
VII.	CONCLUSIONS AND RECOMMENDATIONS.....	40

A. Conclusions	40
1. Existing Conditions	40
2. 2026 Build	41
3. 2036 Build	42
B. Recommendations	43

FIGURES

Figure 1 Vicinity Map	7
Figure 2 Site Map	8
Figure 3 2024 AM(PM) Existing Peak Hour Traffic Volumes	16
Figure 4 Residential Trip Assignment Percentages	20
Figure 5 Residential Trip Assignment Volumes	21
Figure 6 2026 AM(PM) No Build Peak Hour Traffic Volumes	25
Figure 7 2026 AM(PM) Build Peak Hour Traffic Volumes	30
Figure 8 2036 AM(PM) No Build Peak Hour Traffic Volumes	34
Figure 9 2036 AM(PM) Build Peak Hour Traffic Volumes	39

TABLES

Table 1 LOS Definitions	12
Table 2 2024 Existing Signalized Intersection Results	14
Table 3 Existing Unsignalized Intersection Results	15
Table 4 Trip Generation	18
Table 5 2026 No Build Signalized Intersection Results	22
Table 6 2026 No Build Unsignalized Intersection Results	24
Table 7 2026 Build Signalized Intersection Results	26
Table 8 2026 Build Unsignalized Intersection Results	28
Table 9 2036 Horizon Year No Build Signalized Intersection Results	31
Table 10 2036 Horizon Year No Build Unsignalized Intersection Results	33
Table 11 2036 Horizon Year Build Signalized Intersection Results	35
Table 12 2036 Horizon Year Build Unsignalized Intersection Results	37

APPENDICES

Appendix A Existing Traffic Data
Appendix B 2024 Existing Intersection Capacity Analysis
Appendix C Turning Movement Counts
Appendix D 2026 No Build Intersection Capacity Analysis
Appendix E 2026 Build Intersection Capacity Analysis
Appendix F 2036 No Build Intersection Warrant Analysis
Appendix G 2036 Build Intersection Capacity Analysis

I. INTRODUCTION AND SUMMARY

Vista Oriente is looking to redevelop the 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 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 when the development is built. During the PM peak hour the eastbound left, westbound left, northbound left, northbound right, and southbound left will all operate at LOS E similar to results seen during the 2026 no build scenario. A very small signal timing adjustment will result in the improvement of the northbound left to LOS D, which makes all movements at LOS D or better for the AM 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.

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. 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. In signalized conditions both peak hours will continue to 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, 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 declines to LOS F in the AM peak hour, where the southbound left operates at LOS F. In the PM peak hour, the intersection continues to operate 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 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 the through/right lane. This analysis showed that the delay would still be very high, although right turning vehicle delay is substantially lowered.

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 in both peak hours at LOS D. During the PM peak hour the eastbound left, westbound left, northbound left, northbound right, 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. 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 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 continues to operate at LOS F in both the AM and PM peak hours. The southbound left operates at LOS F during both peak periods. The eastbound left will operate at LOS E.

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 left, northbound left, and the

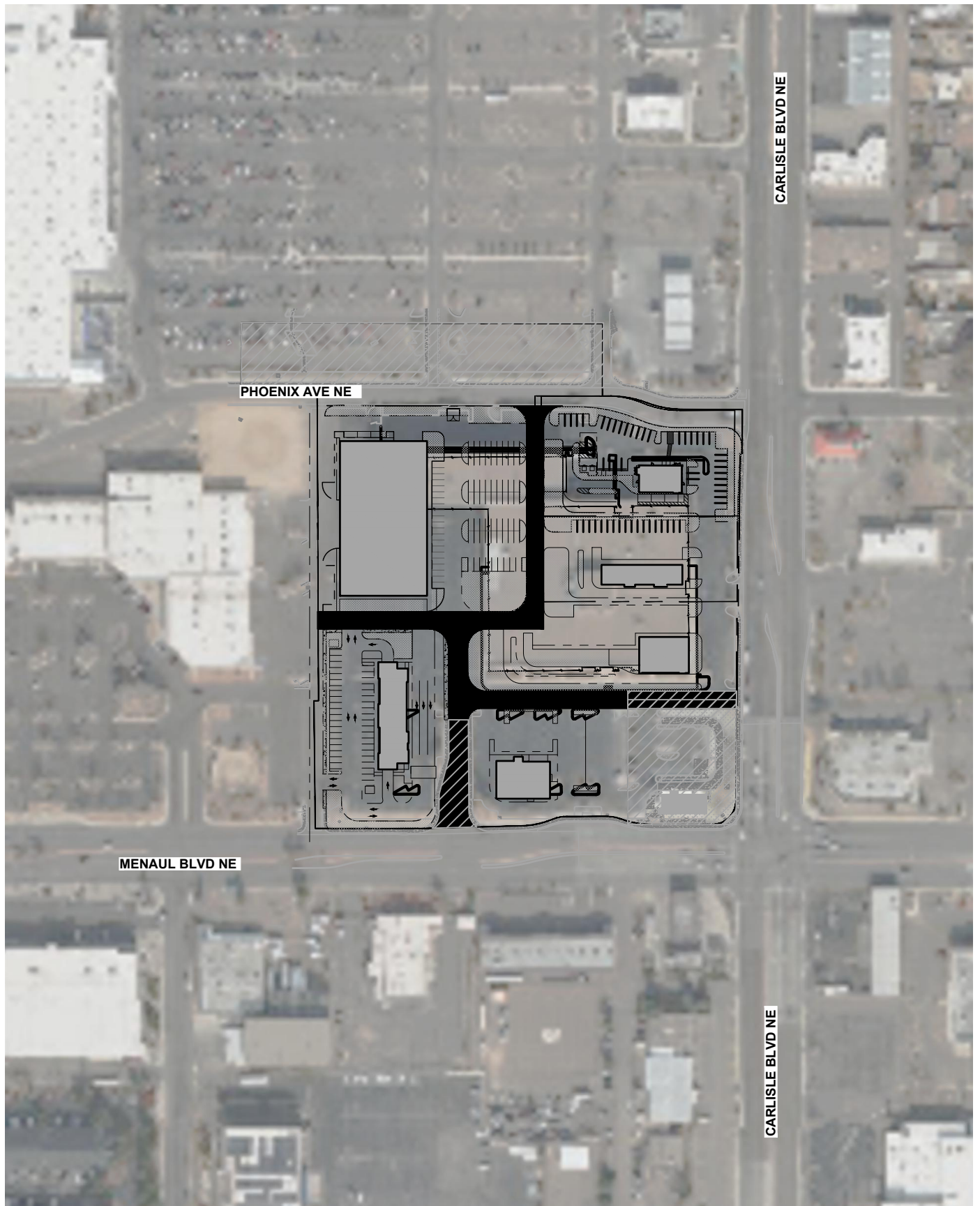
southbound left continuing to operate at LOS F similarly to the no build conditions. Additionally, the westbound through/right will operate at LOS E. In implementing the development build out an alternative analysis widened this access point to allow a dedicated eastbound left turn lane with the through/right lane. This analysis showed that the delay would still be very high, although eastbound right turning vehicle delay is substantially lowered.

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

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 peak hour. This work shall be coordinated with the City of Albuquerque.
- The Carlisle and Access 4 intersection should be designed and striped to accommodate a dedicated left turn lane and a through/right lane to minimize delay as much as possible.
- 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 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 the through/right lane. This analysis showed that the delay would still be very high, although right turning vehicle delay is substantially lowered.
- All designs shall satisfy the Manual on Uniform Traffic Control Devices (MUTCD), NMDOT and City of Albuquerque requirements.





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 in 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 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.

To further evaluate this intersection, an alternative with this intersection signalized is presented 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
Carlisle and Menaul	34.2	C	0.792	43.5	D	0.847
Carlisle and I-40 WB Ramp	21.2	C	0.882	51.8	D**	1.099
Carlisle and I-40 EB Ramp	23.7	C	0.819	23.3	C*	0.811
<i>Carlisle & Phoenix Signalized Alternative</i>	6.5	A	0.706	8.7	A	0.822
* 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 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 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.

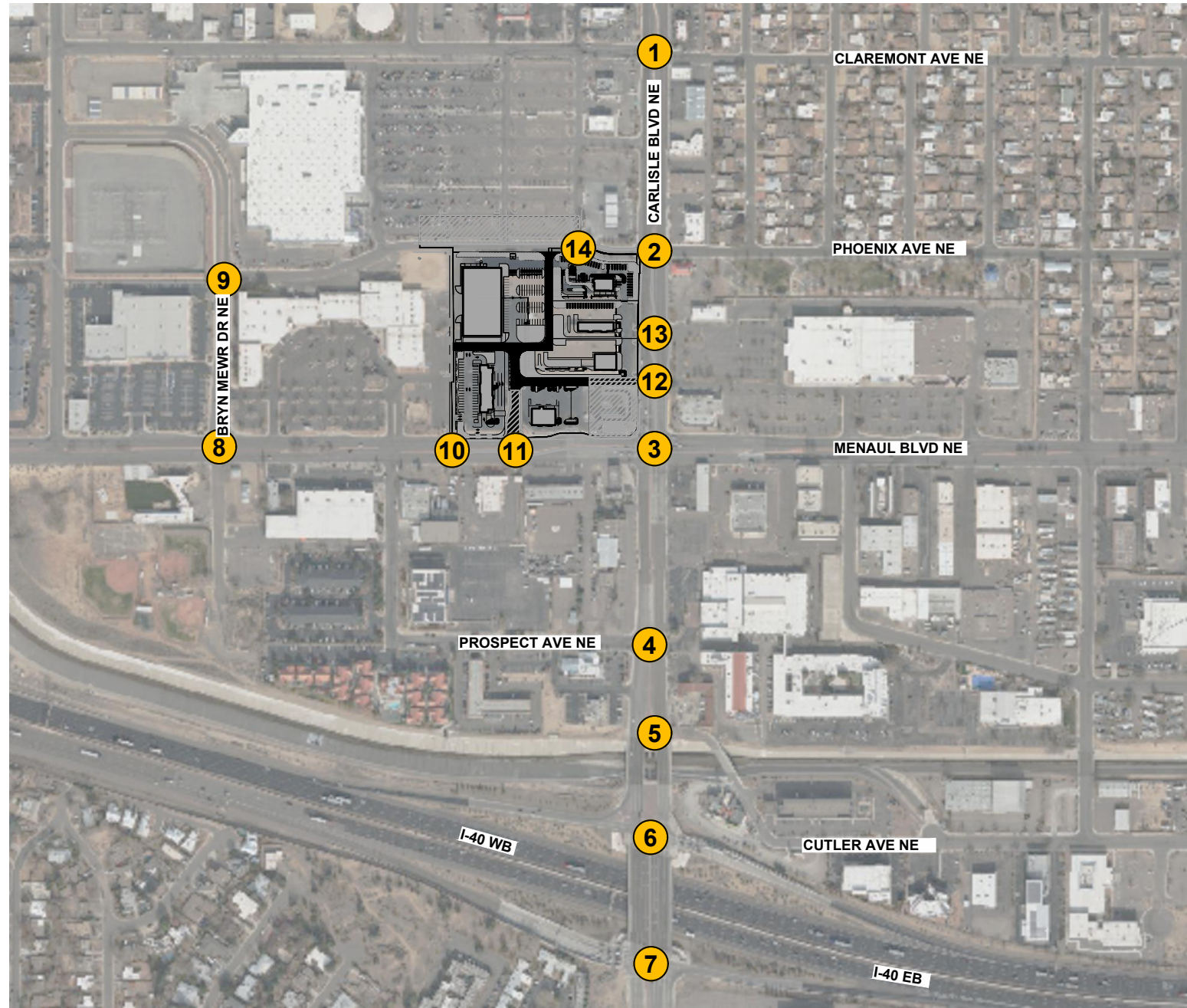
Menaul & Bryn Mawr experiences LOS E in the AM peak hour, where the northbound left and southbound left operate at LOS E. In the PM peak hour, the eastbound left operates at LOS E, while the northbound left and southbound left operate at LOS F.

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.

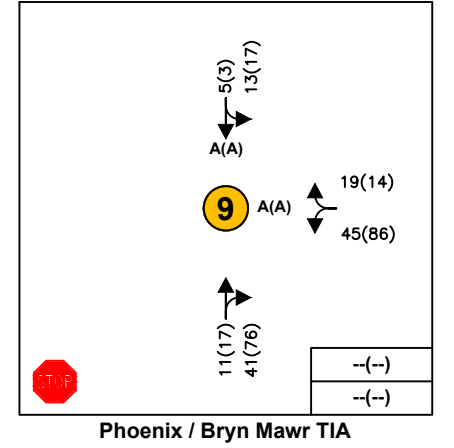
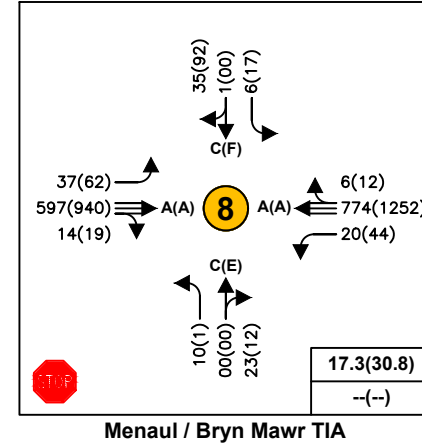
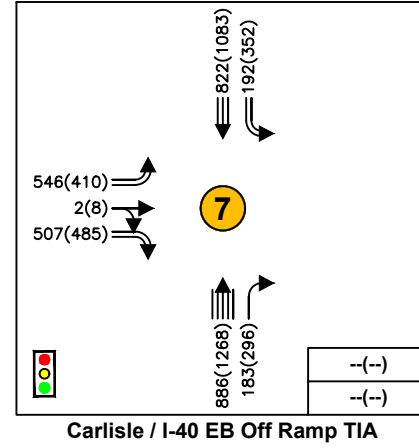
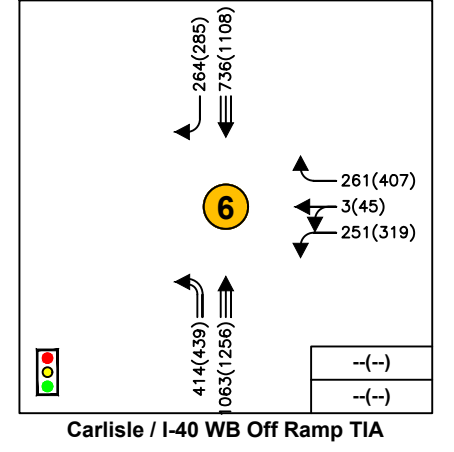
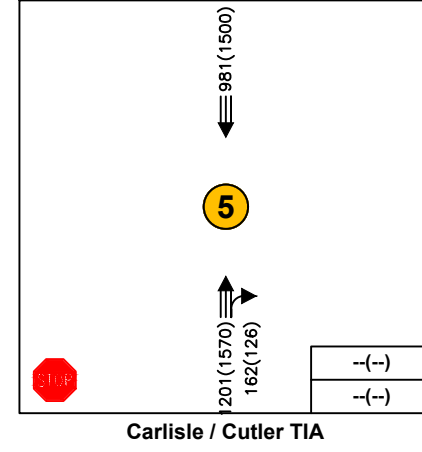
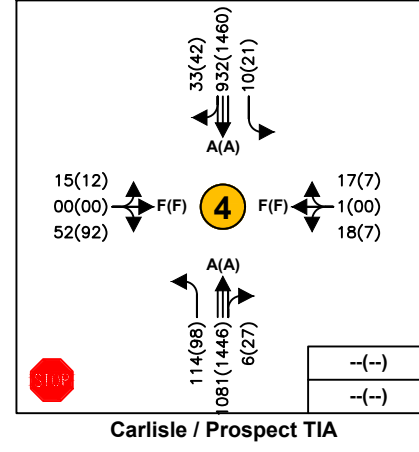
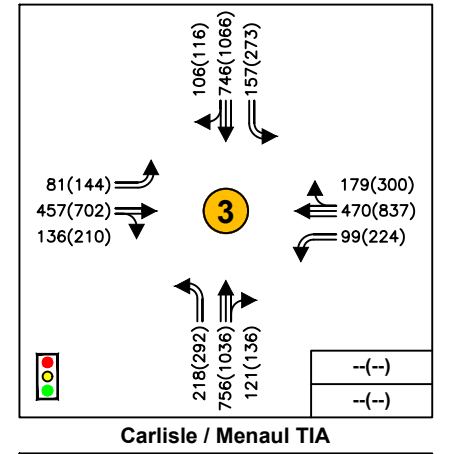
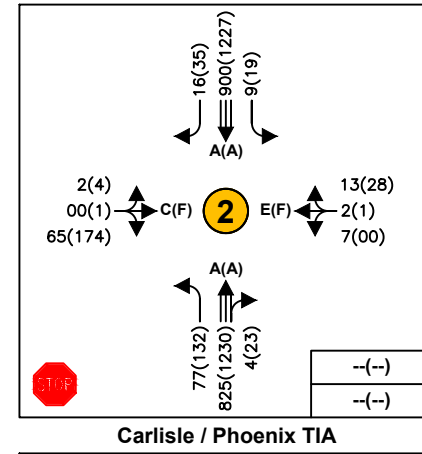
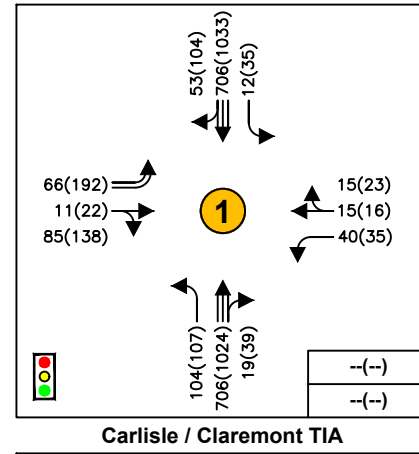
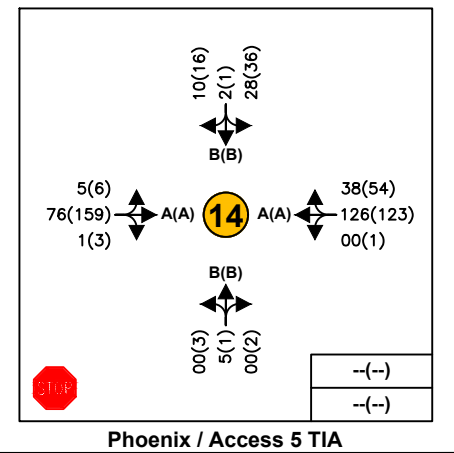
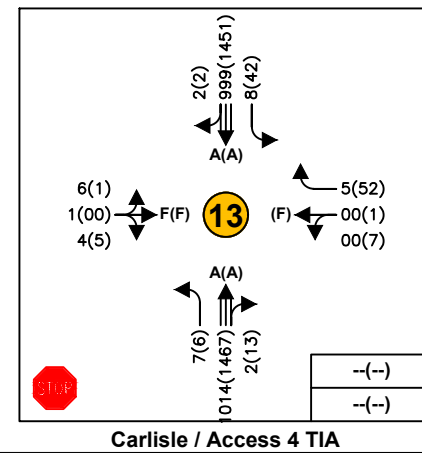
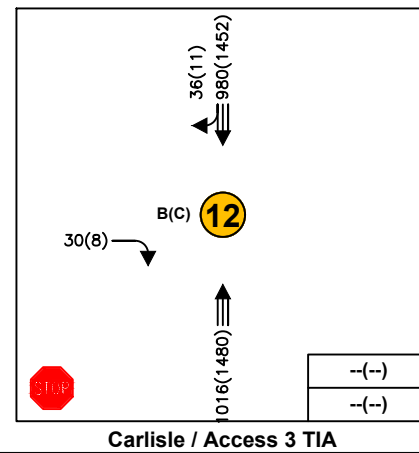
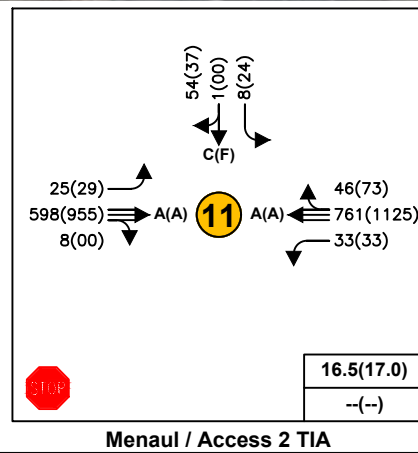
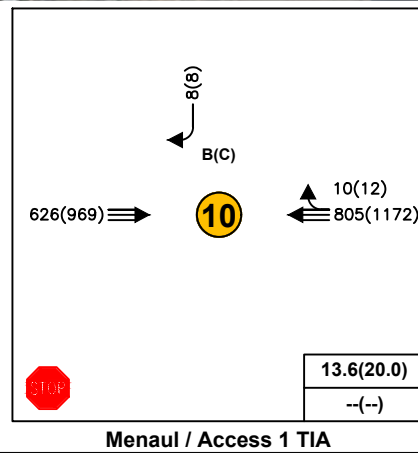
All other unsignalized intersections will have an overall operation at or above LOS C.

Table 3 Existing Unsignalized Intersection Results								
	2024 AM Peak				2024 PM Peak			
Intersection/Movement	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								



LEGEND

- Thru Lanes
(# as indicated)
- Turning Lanes
(# as indicated)
- 1234(1234) AM(PM) Traffic Counts
- X(X) AM(PM) Level of Service (LOS)



AMERICAN FURNITURE SITE ALBUQUERQUE, NEW MEXICO SITE TRAFFIC ANALYSIS

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 E: 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 C.

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.

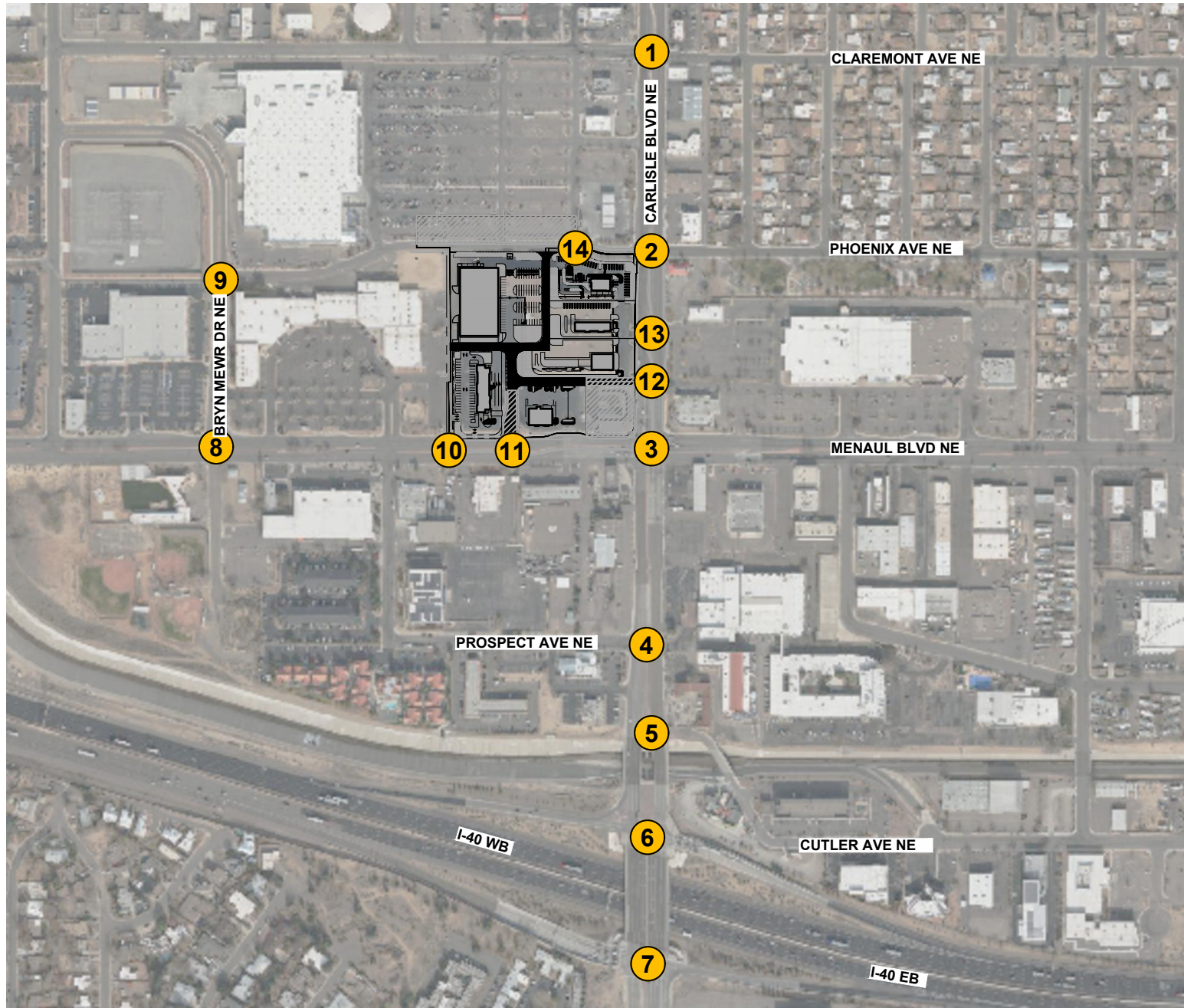
The gravity model utilized socioeconomic data obtained from the Mid-Region Council of Government (MRCOG), which included population and employment estimates for each subarea within the Metropolitan Planning jurisdiction to develop the trip distribution.

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 C. The trip distribution percentages and assigned traffic volumes is shown in Figure 4 and Figure 5.

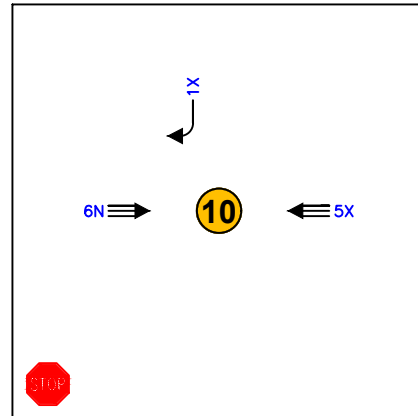
3. TRAFFIC PROJECTIONS

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 C.

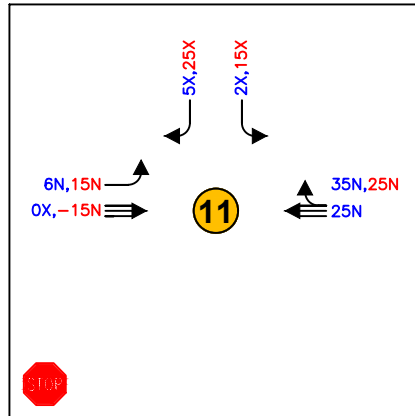


LEGEND

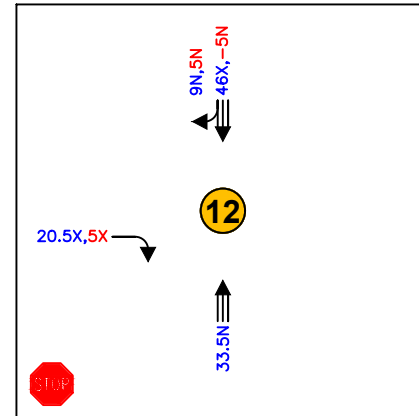
- Thru Lanes
(# as indicated)
- Turning Lanes
(# as indicated)
- 1234(1234) Trip Assignment Percentages
- N Entering
- X Exiting



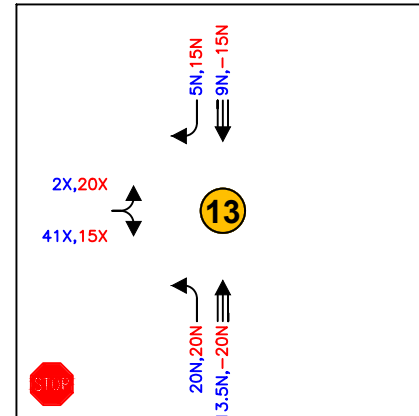
Menaul / Access 1 TIA



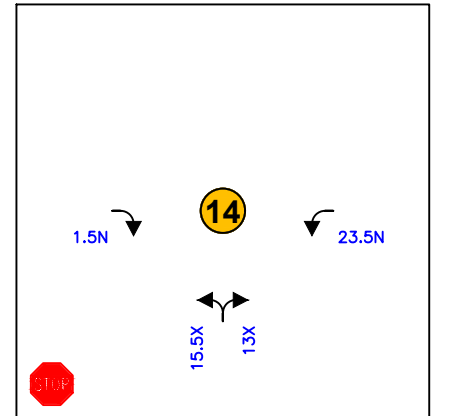
Menaul / Access 2 TIA



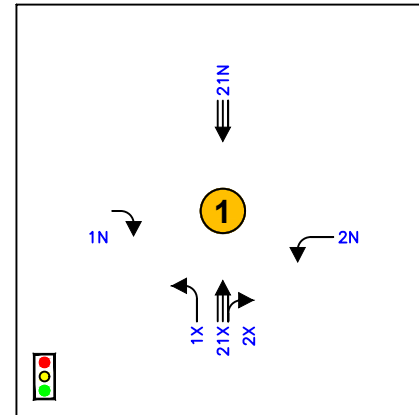
Carlisle / Access 3 TIA



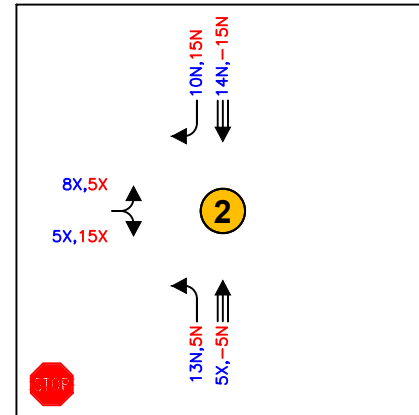
Carlisle / Access 4 TIA



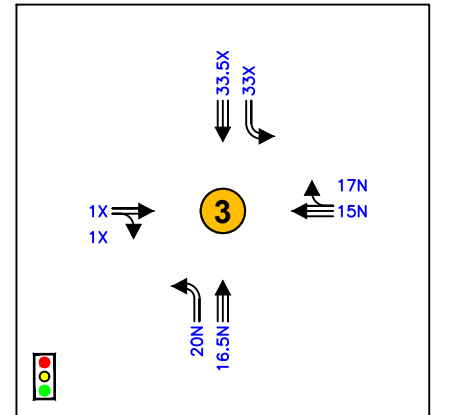
Phoenix / Access 5 TIA



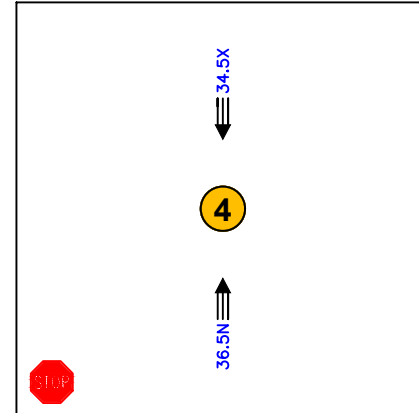
Carlisle / Claremont TIA



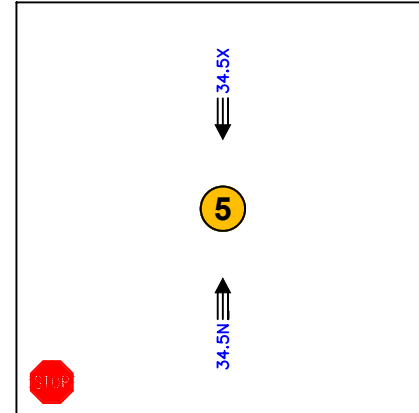
Carlisle / Phoenix TIA



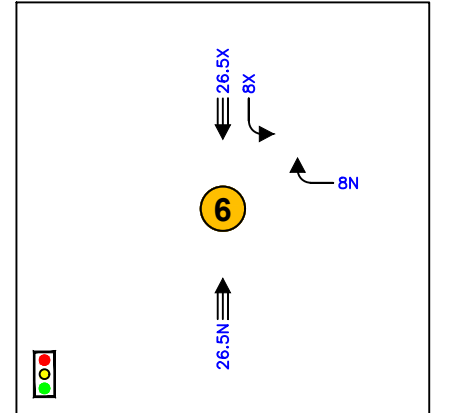
Carlisle / Menaul TIA



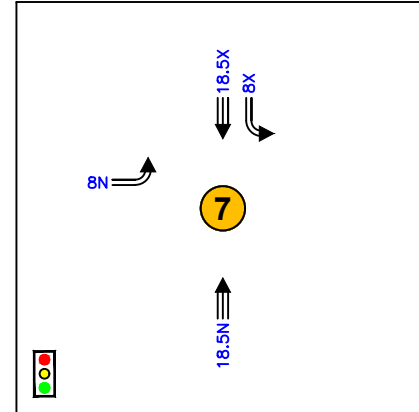
Carlisle / Prospect TIA



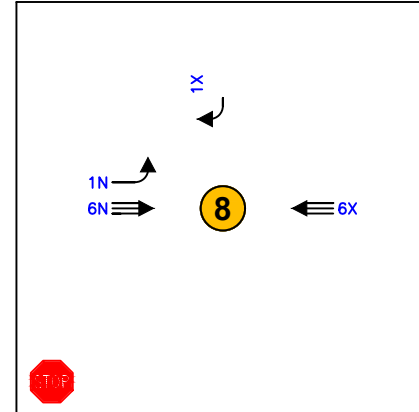
Carlisle / Cutler TIA



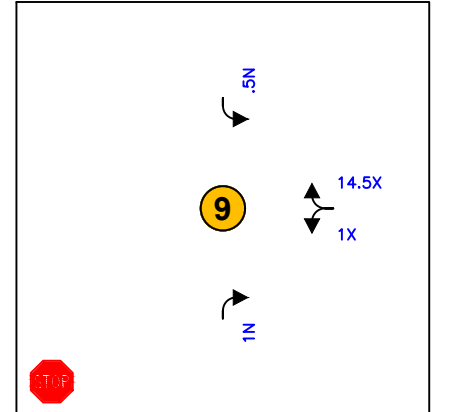
Carlisle / I-40 WB Off Ramp TIA



Carlisle / I-40 EB Off Ramp TIA



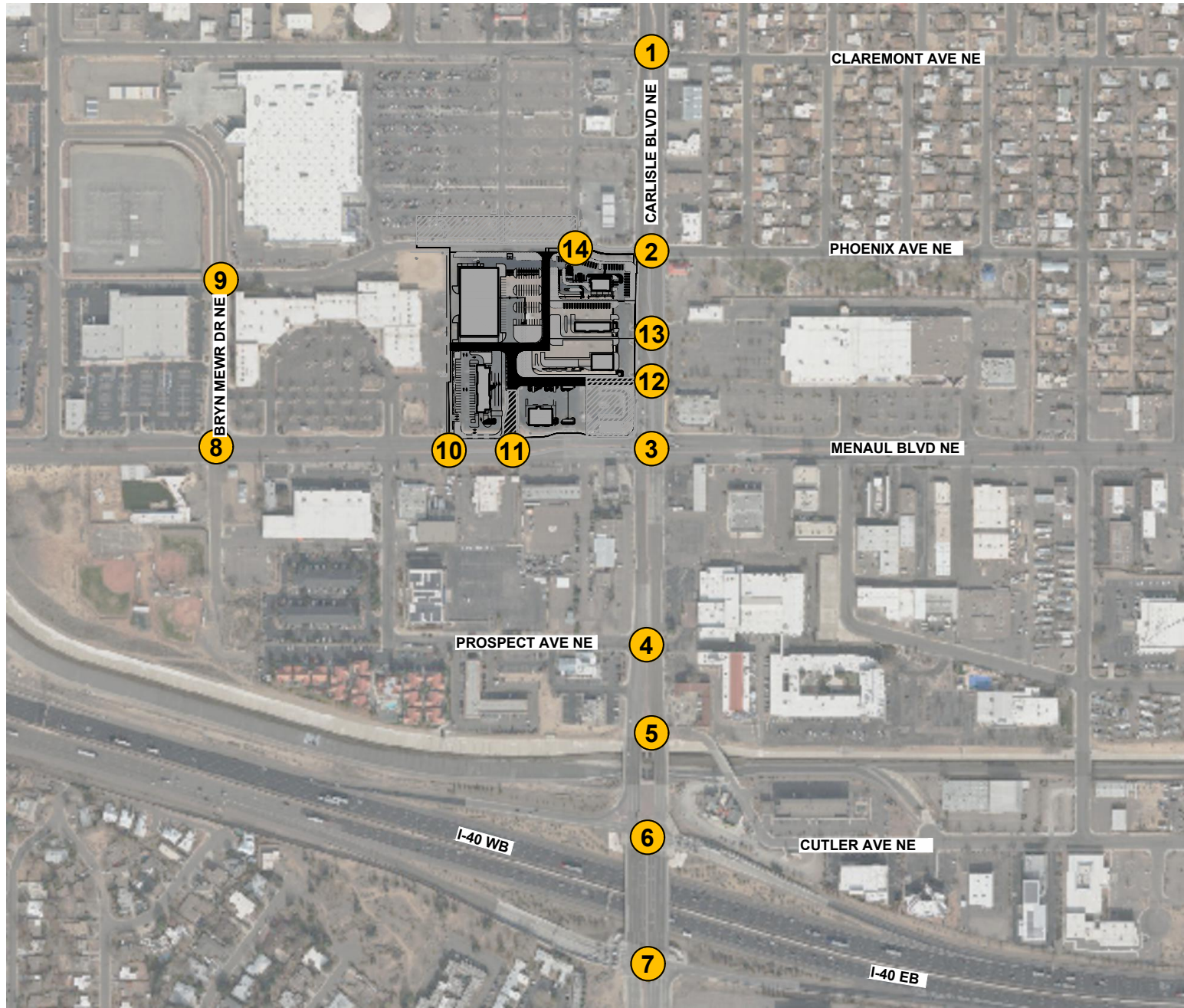
Menaul / Bryn Mawr TIA



Phoenix / Bryn Mawr TIA

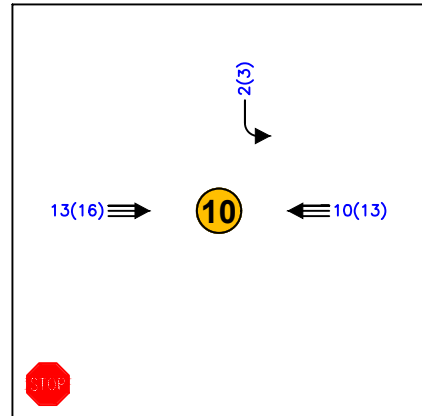
AMERICAN FURNITURE SITE
ALBUQUERQUE, NEW MEXICO
SITE TRAFFIC ANALYSIS

FIGURE 4
RESIDENTIAL TRIP ASSIGNMENT
PERCENTAGES

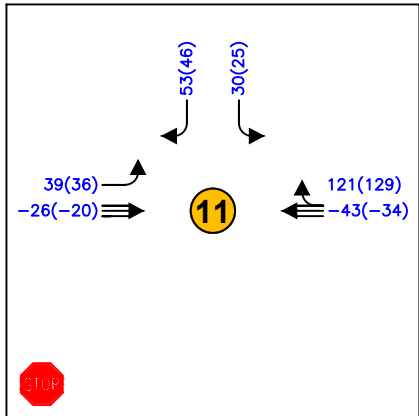


LEGEND

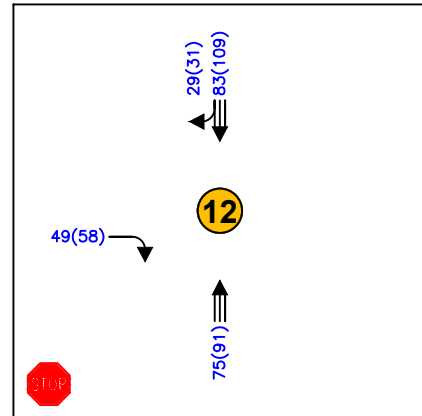
- Thru Lanes
(# as indicated)
- Turning Lanes
(# as indicated)
- 1234(1234)
AM(PM) Traffic Counts



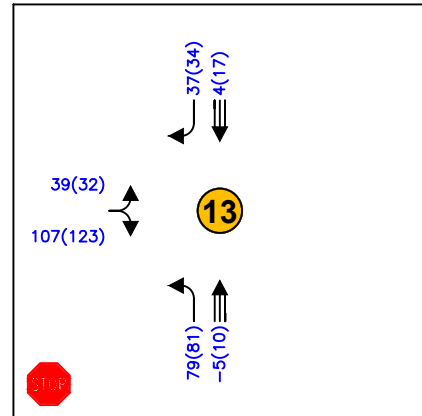
Menaul / Access 1 TIA



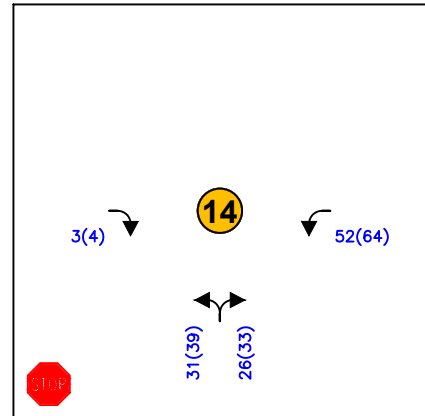
Menaul / Access 2 TIA



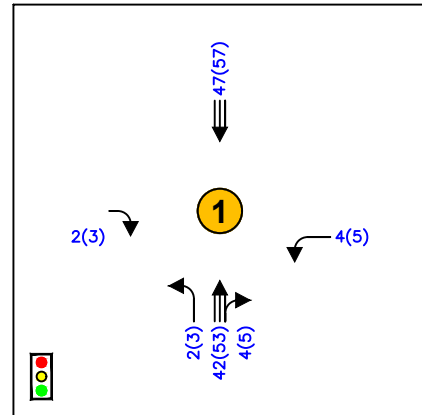
Carlisle / Access 3 TIA



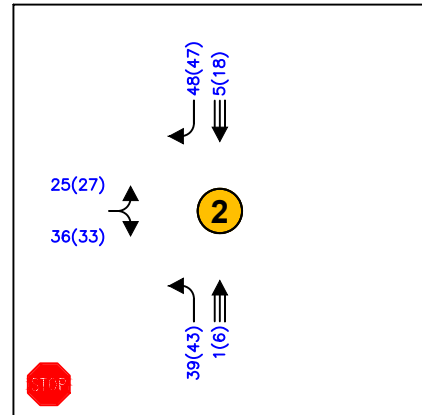
Carlisle / Access 4 TIA



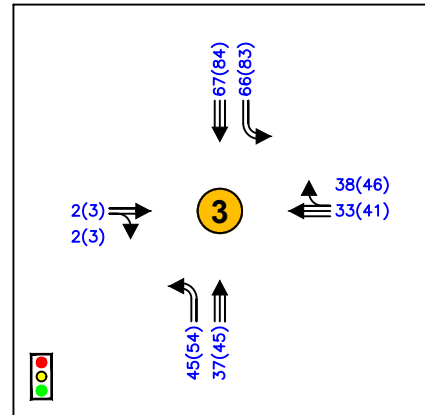
Phoenix / Access 5 TIA



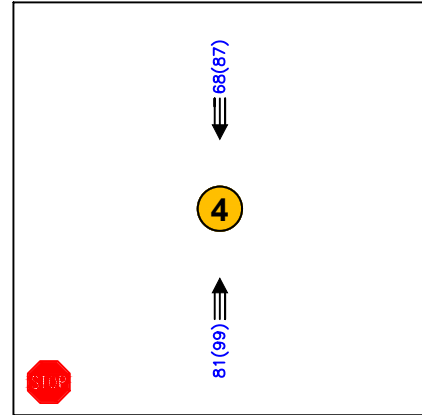
Carlisle / Claremont TIA



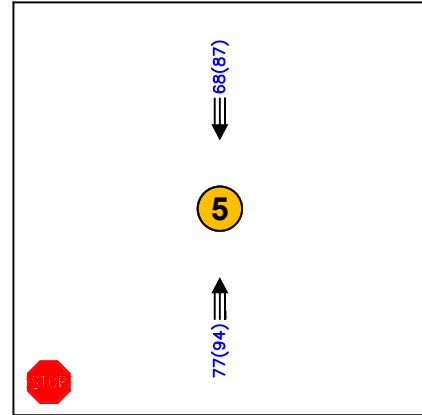
Carlisle / Phoenix TIA



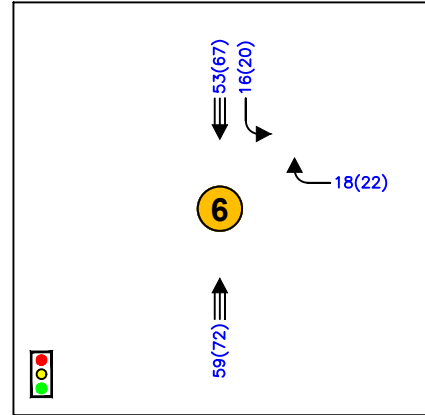
Carlisle / Menaul TIA



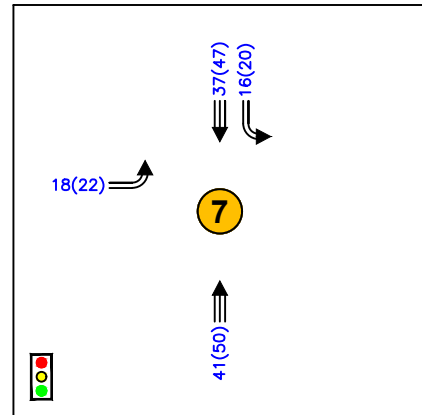
Carlisle / Prospect TIA



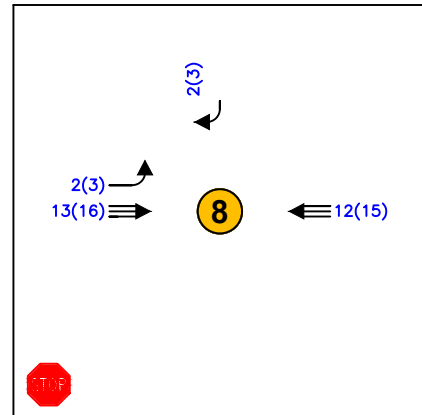
Carlisle / Cutler TIA



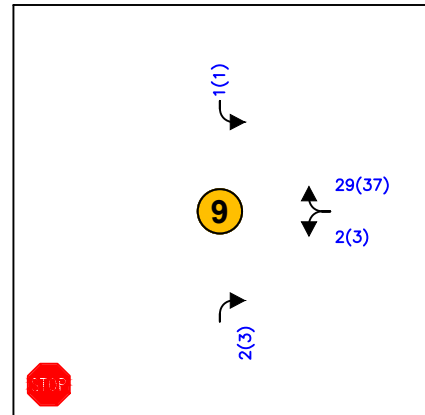
Carlisle / I-40 WB Off Ramp TIA



Carlisle / I-40 EB Off Ramp TIA



Menaul / Bryn Mawr TIA



Phoenix / Bryn Mawr TIA

AMERICAN FURNITURE SITE ALBUQUERQUE, NEW MEXICO SITE TRAFFIC ANALYSIS

FIGURE 5 RESIDENTIAL 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 D.

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
Carlisle and Menaul	34.8	C	0.802	44.3	D*	0.855
Carlisle and I-40 WB Ramp	21.8	C*	0.888	62.1	E**	1.156
Carlisle and I-40 EB Ramp	23.9	C	0.822	23.6	C*	0.814
<i>Carlisle & Phoenix Signalized Alternative</i>	6.5	A	0.714	8.7	A	0.824

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.

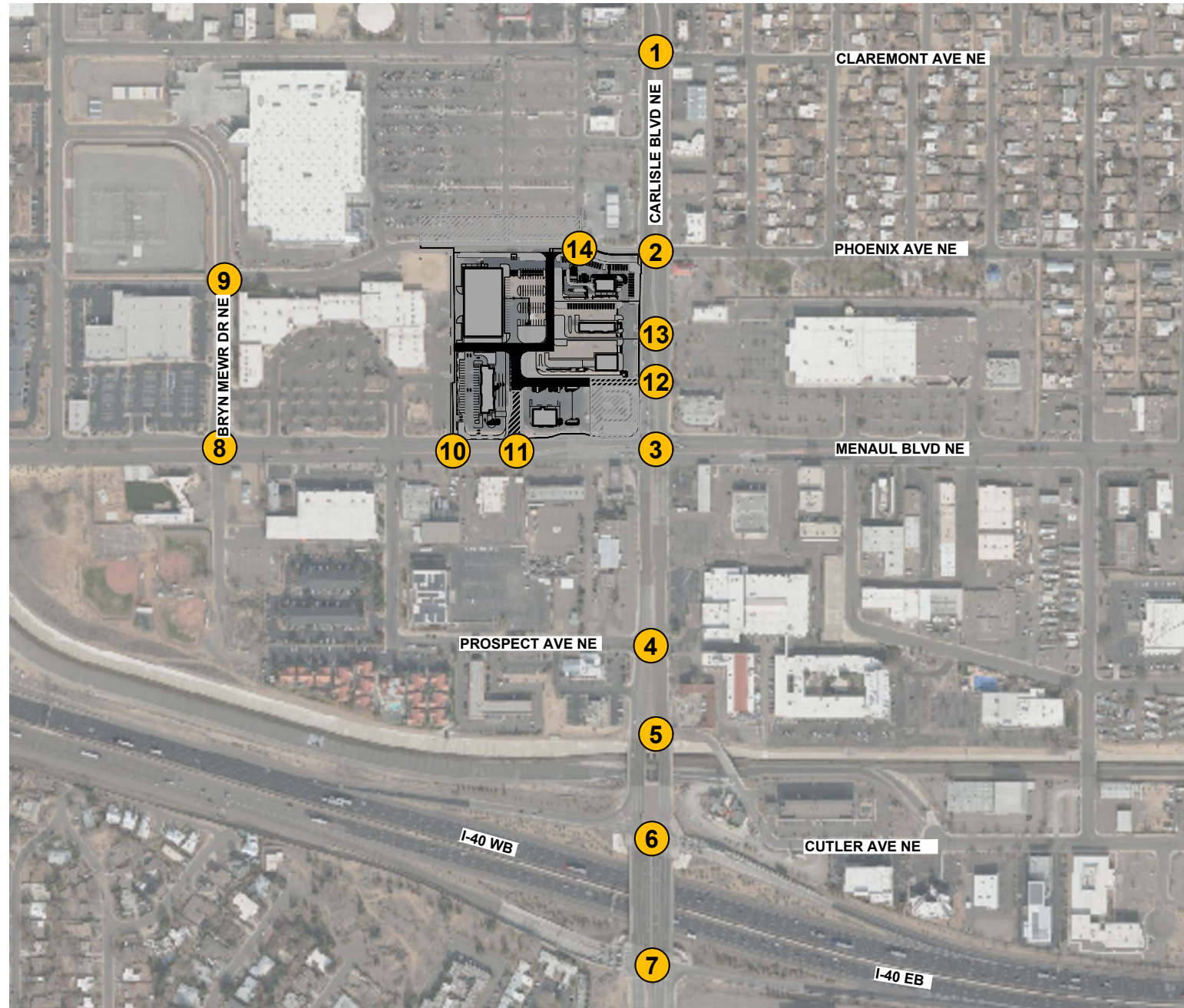
Menaul & Access 2 experiences LOS E in the AM peak hour, where the southbound left operates at LOS E. In the PM peak hour, the intersection operates at LOS F due to the southbound left operating at LOS F.

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.

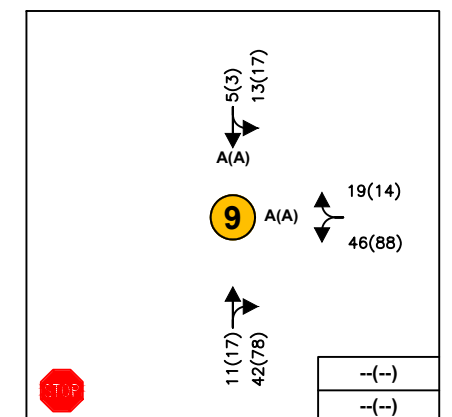
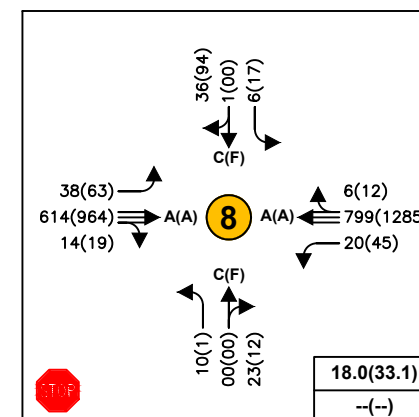
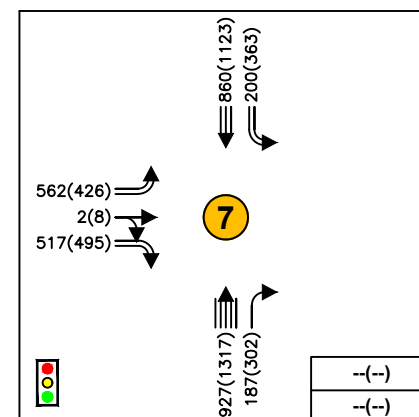
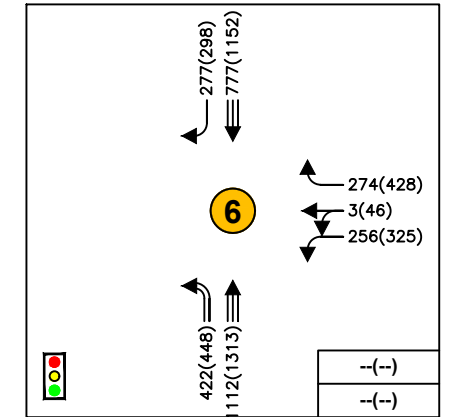
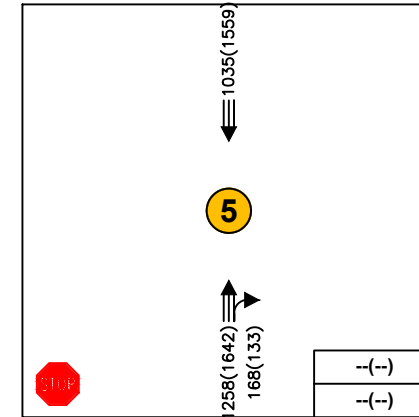
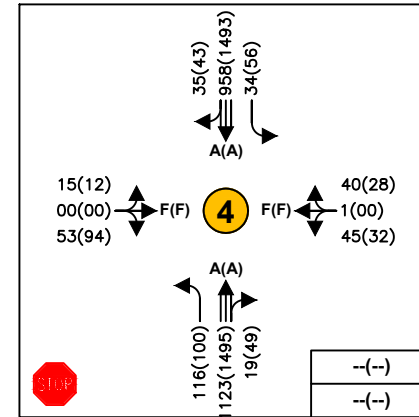
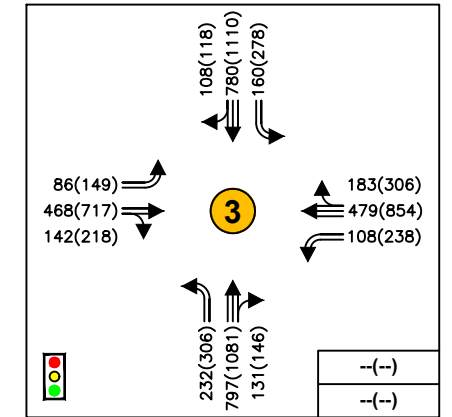
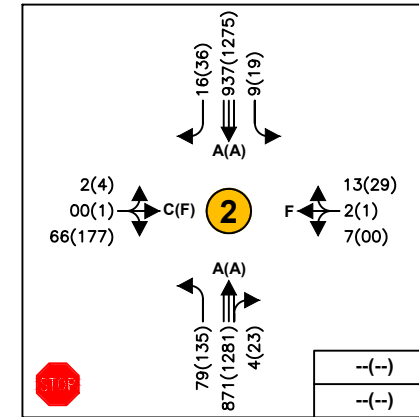
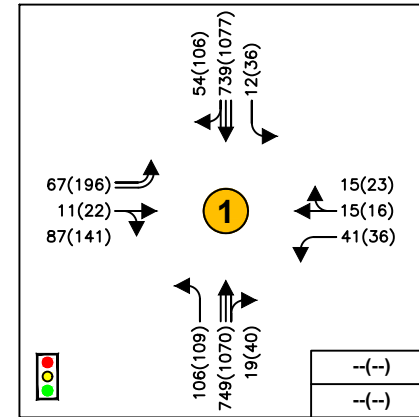
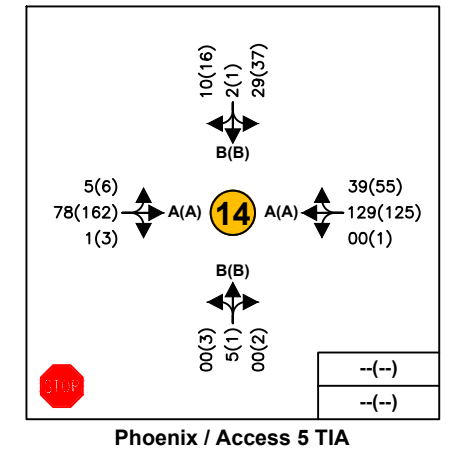
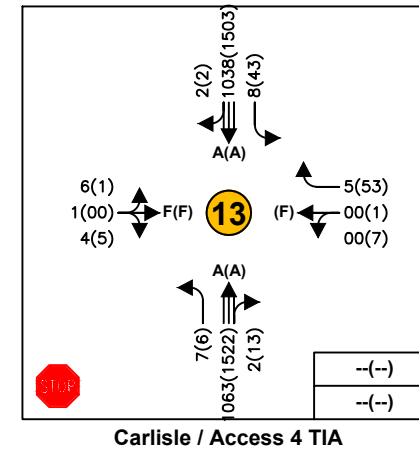
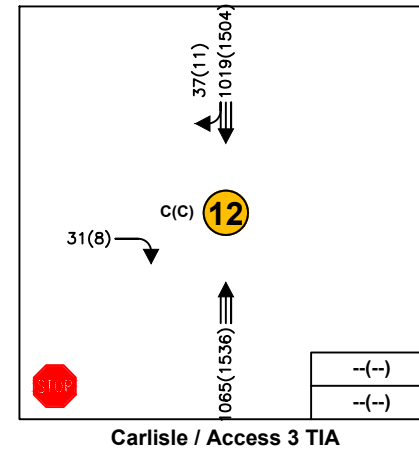
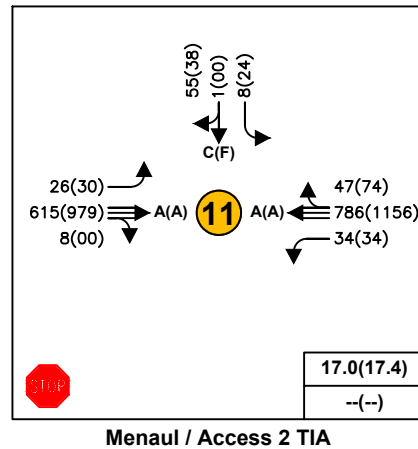
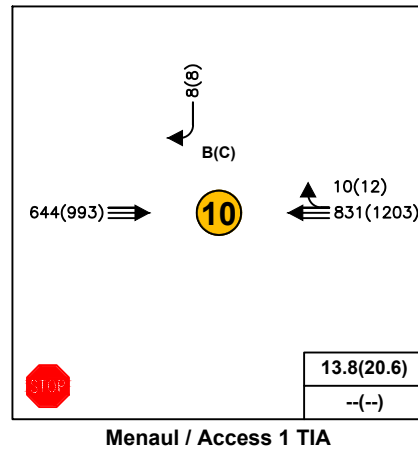
Table 6 2026 No Build Unsignalized Intersection Results								
Intersection/Movement	2026 AM Peak				2026 PM Peak			
	Delay (sec)	V/C	Queue* (ft)	LOS	Delay (sec)	V/C	Queue* (ft)	LOS
Carlisle & Phoenix								
Eastbound Approach	18.3	0.23	25	C	1830.7	1.96	1500	F
Westbound Approach	55.5	0.27	50	F	0	-	-	
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								

C:\Users\COVERMILLION\appdata\local\temp\AcPublish_16612\20240281_Figures.dwg Jul 11, 2024 - 5:27pm



LEGEND

- Thru Lanes
(# as indicated)
- Turning Lanes
(# as indicated)
- 1234(1234) AM(PM) Traffic Counts
- X(X) AM(PM) Level of Service (LOS)



AMERICAN FURNITURE SITE ALBUQUERQUE, NEW MEXICO SITE TRAFFIC ANALYSIS

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 E.

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, northbound left, northbound right, and southbound left will all operate at LOS E. As the decline in the AM peak hour for the northbound left occurred during the build scenario, a very small signal timing adjustment was done to improve the northbound left to LOS D, which makes all movements at LOS D or better for the AM 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.

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
Carlisle and Menaul	36.1	D*	0.831	46.1	D*	0.883
Carlisle and Menaul – Timing Optimized	36.0	D	0.726			
Carlisle and I-40 WB Ramp	23.1	C*	0.896	74.7	E**	1.215
Carlisle and I-40 EB Ramp	24.0	C	0.827	23.8	C*	0.818
<i>Carlisle & Phoenix Signalized Alternative</i>	8.2	A	0.751	9.9	A	0.844

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 westbound approach operates at LOS F. In the PM peak hour, the eastbound approach, and northbound left will operate at LOS F. In signalized conditions both peak hours will continue to 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, 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 declines to LOS F in the AM peak hour, where the southbound left operates at LOS F. In the PM peak hour, the intersection continues to operate 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 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 the through/right lane. This analysis showed that the delay would still be very high, although right turning vehicle delay is substantially lowered.

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

Table 8 2026 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	330.1	1.07	475	F	-	-	-	-
Westbound Approach	106.3	0.43	75	F	-	-	-	-
Northbound Left	24.3	0.43	75	C	429.9	1.17	700	F
Southbound Left	14.7	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	19.8	0.25	50	C	28.8	0.33	50	D
Westbound Left	12.7	0.08	25	B	16.2	0.11	25	C
Southbound Left	135.9	0.66	125	F	1377.9	1.58	400	F
Southbound Thru/Right	21.5	0.39	50	C	22.1	0.31	50	C
Carlisle & Access 3								
Eastbound Right	18.4	0.25	50	C	30.6	0.36	50	D
Carlisle & Access 4								
Eastbound Approach	2440.6	2.29	1525	F	101678.2	56.39	2650	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	50	D	152.8	0.87	250	F
Southbound Left	18.5	0.04	25	C	52.0	0.42	75	F
Carlisle & Access 4 Build								
Eastbound Left	1690.1	1.75	425	F	107640.7	55.6	600	F
Eastbound Through/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

**CARLISLE & MENAUL DEVELOPMENT
TRAFFIC IMPACT ANALYSIS**

TRAFFIC AND IMPROVEMENT ANALYSIS

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								

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 F.

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
Carlisle and Menaul	35.9	D	0.823	47.2	D*	0.873
Carlisle and I-40 WB Ramp	23.5	C*	0.899	85.0	F**	1.272
Carlisle and I-40 EB Ramp	24.5	C	0.833	24.4	C*	0.826
<i>Carlisle & Phoenix Signalized Alternative</i>	6.8	A	0.741	9.4	A	0.835

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.

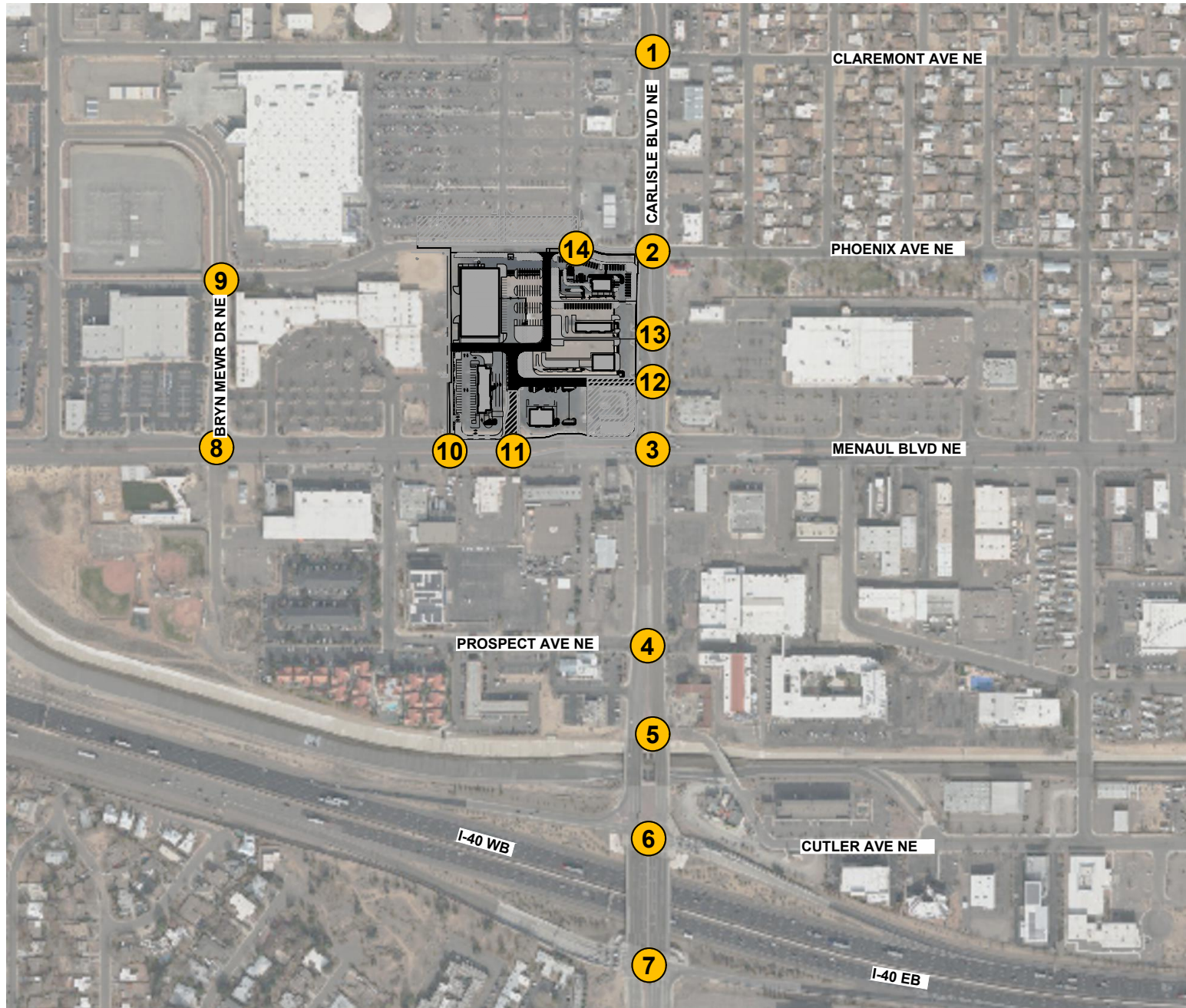
Menaul & Bryn Mawr continues to experience overall LOS F in the AM peak hour, where the northbound left and southbound left operate at LOS F. In the PM peak hour, the eastbound left, northbound left, and southbound left all continue to operate at LOS F. The southbound through/right will also operate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

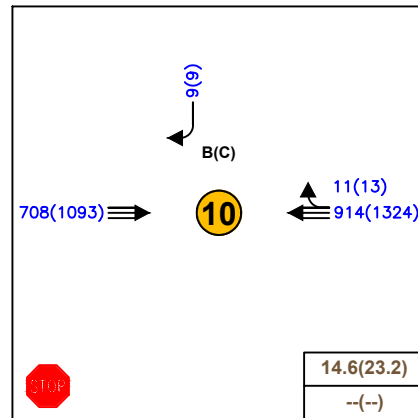
All other unsignalized intersections continue to have an overall operation at or above LOS C.

Table 10 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								

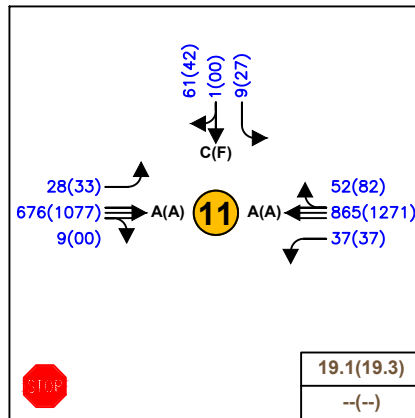


LEGEND

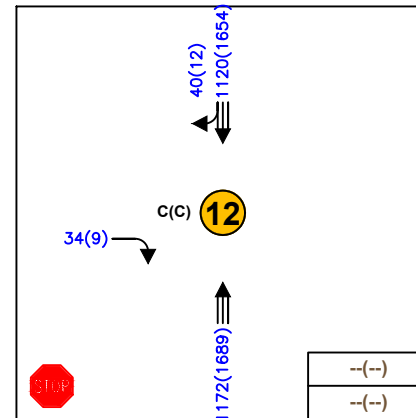
- Thru Lanes (# as indicated)
- Turning Lanes (# as indicated)
- 1234(1234) AM(PM) Traffic Counts
- X(X) AM(PM) Level of Service (LOS)



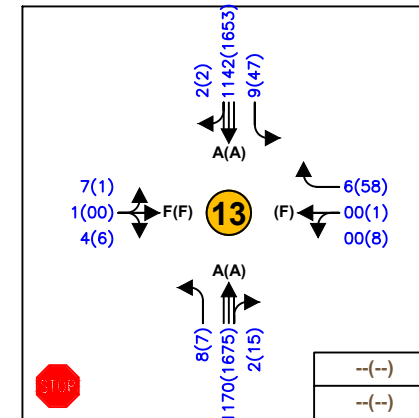
Menaul / Access 1 TIA



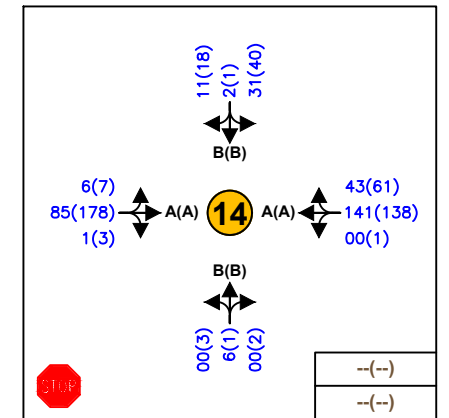
Menaul / Access 2 TIA



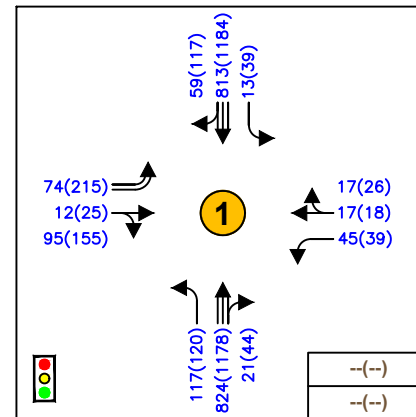
Carlisle / Access 3 TIA



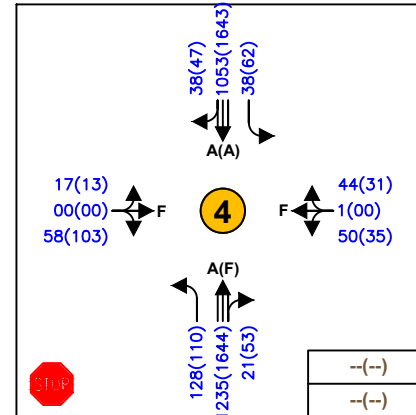
Carlisle / Access 4 TIA



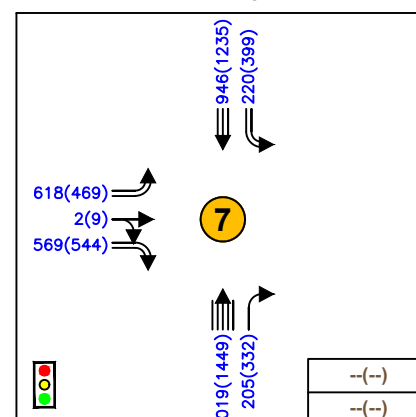
Phoenix / Access 5 TIA



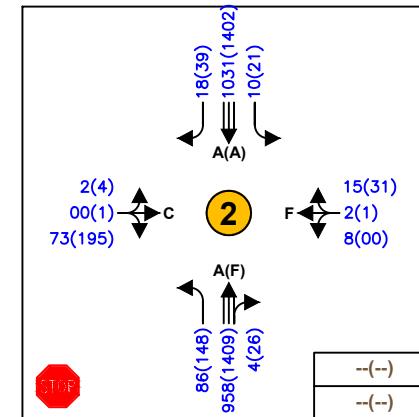
Carlisle / Claremont TIA



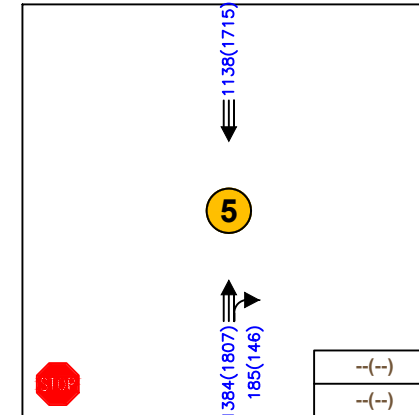
Carlisle / Prospect TIA



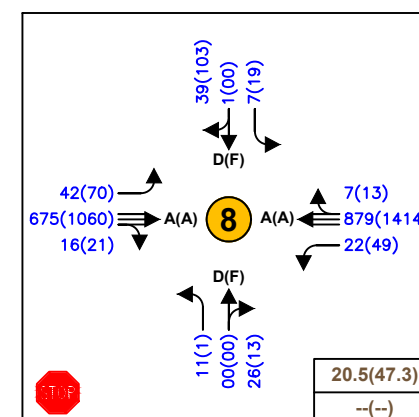
Carlisle / I-40 EB Off Ramp TIA



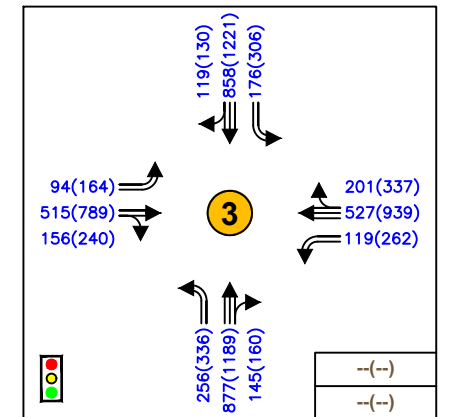
Carlisle / Phoenix TIA



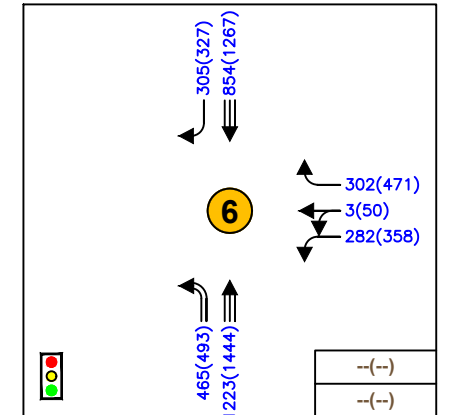
Carlisle / Cutler TIA



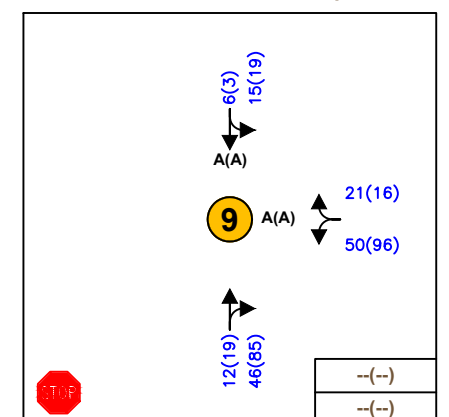
Menaul / Bryn Mawr TIA



Carlisle / Menaul TIA



Carlisle / I-40 WB Off Ramp TIA



Phoenix / Bryn Mawr TIA

AMERICAN FURNITURE SITE ALBUQUERQUE, NEW MEXICO SITE TRAFFIC ANALYSIS

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 11 and Table 12 and the full individual intersection output is included in Appendix F.

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 PM peak hour the eastbound left, westbound left, northbound left, northbound right, 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.

Table 11 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
Carlisle and Menaul	37.2	D	0.855	48.4	D*	0.898
Carlisle and I-40 WB Ramp	24.8	C*	0.907	99.5	F**	1.331
Carlisle and I-40 EB Ramp	24.7	C	0.837	24.8	C*	0.824
<i>Carlisle & Phoenix Signalized Alternative</i>	8.5	A	0.766	10.6	B	0.853

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 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 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 continues to operate at LOS F in both the AM and PM peak hours. The southbound left operates at LOS F during both peak periods. The eastbound left will operate at LOS E.

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 left, northbound 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. In implementing the development build out an alternative analysis widened this access point to allow a dedicated eastbound left turn lane with the through/right lane. This analysis showed that the delay would still be very high, although eastbound right turning vehicle delay is substantially lowered.

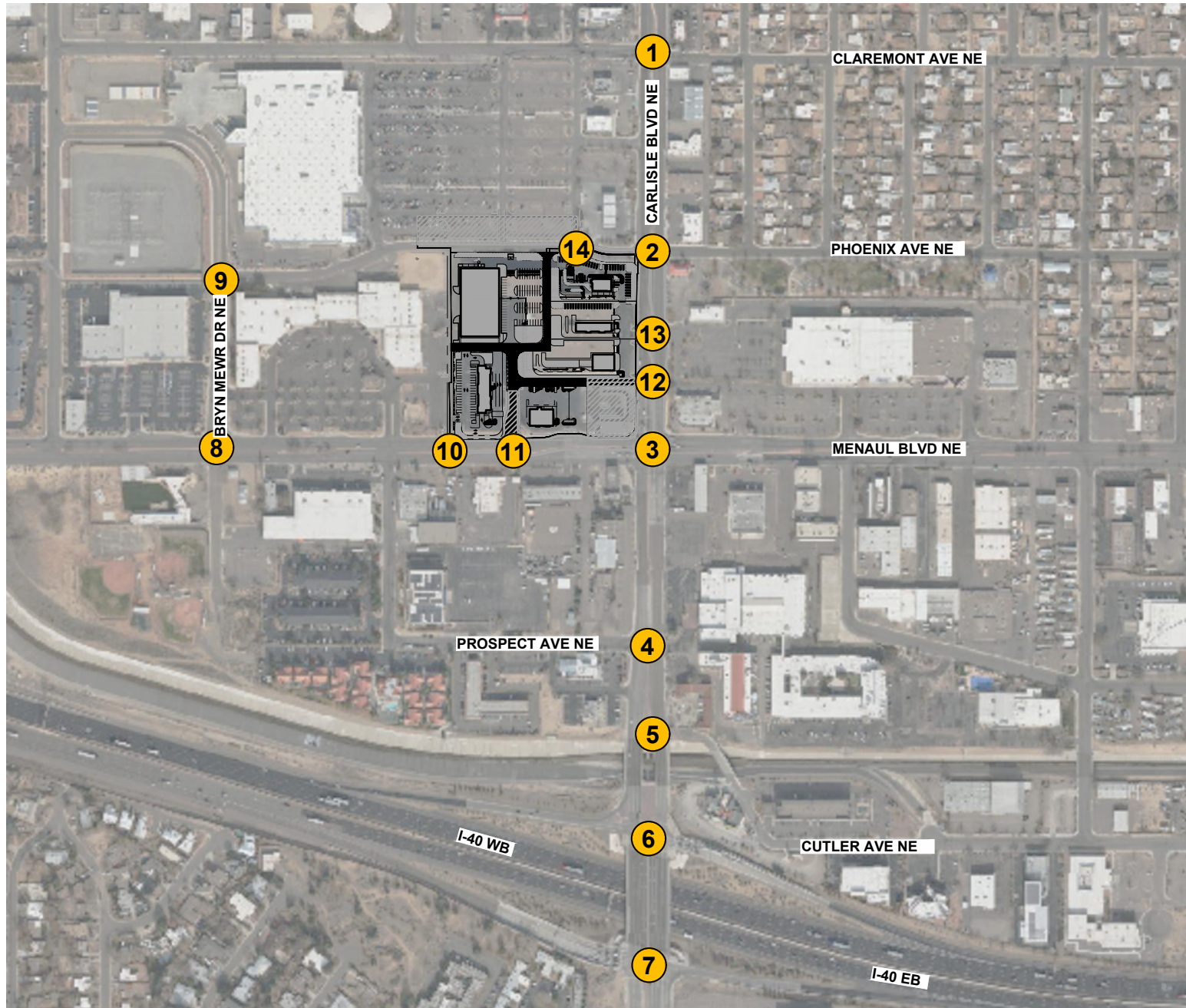
All other unsignalized intersections continue to have an overall operation at or above LOS D.

Table 12 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	1221.7	1.61	925	F	-	-	-	-
Westbound Approach	283.8	0.74	125	F	-	-	-	-
Northbound Left	30.7	0.51	100	D	1019.1	1.51	1200	F
Southbound Left	16.0	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	22.6	0.30	50	C	36.4	0.41	75	E
Westbound Left	13.5	0.10	25	B	18.0	0.13	25	C
Southbound Left	311.0	0.90	200	F	3133.5	2.52	550	F
Southbound Thru/Right	25.5	0.46	75	D	25.5	0.36	50	D
Carlisle & Access 3								
Eastbound Right	20.3	0.28	50	C	37.0	0.41	75	E
Carlisle & Access 4								
Eastbound Approach	4321.4	3.32	1850	F	-	-	-	-
Westbound Left	-	-	-	-	-	-	-	-
Westbound Thru/Right	16.6	0.02	25	C	37.8	0.41	75	E
Northbound Left	34.5	0.47	75	D	401.0	1.09	400	F
Southbound Left	20.9	0.05	25	C	84.4	0.58	100	F
Carlisle & Access 4 Build								
Eastbound Left	3376.1	2.64	550	F	-	-	-	-
Eastbound Through/Right	56.5	0.68	150	F	-	-	-	-
Westbound Left	-	-	-	-	-	-	-	-
Westbound Thru/Right	16.6	0.02	25	C	37.8	0.41	50	E
Northbound Left	34.5	0.47	50	D	401.0	1.09	400	F
Southbound Left	20.9	0.05	25	C	84.4	0.58	100	F

**CARLISLE & MENAUL DEVELOPMENT
TRAFFIC IMPACT ANALYSIS**

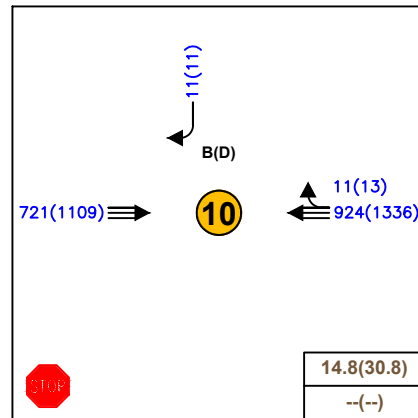
TRAFFIC AND IMPROVEMENT ANALYSIS

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								

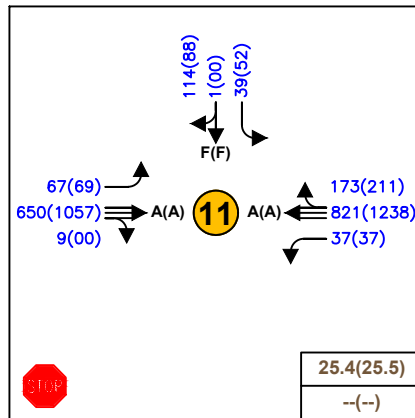


LEGEND

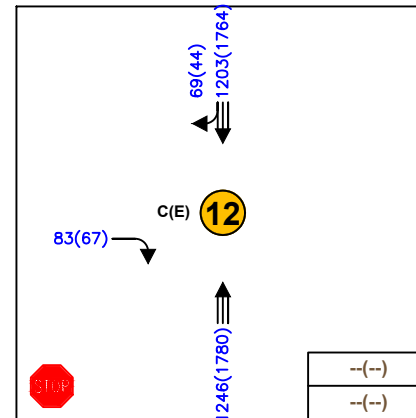
- Thru Lanes (# as indicated)
- Turning Lanes (# as indicated)
- 1234(1234) AM(PM) Traffic Counts
- X(X) AM(PM) Level of Service (LOS)



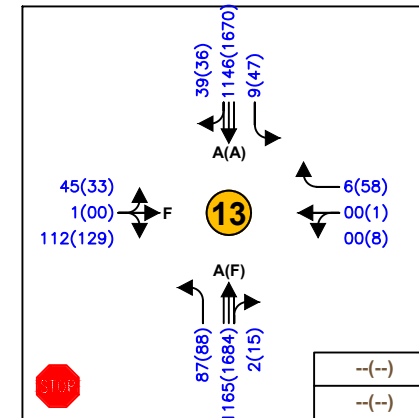
Menaul / Access 1 TIA



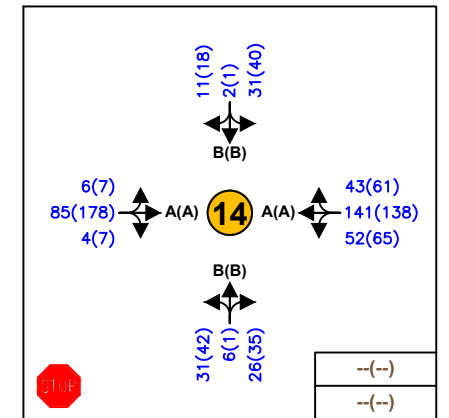
Menaul / Access 2 TIA



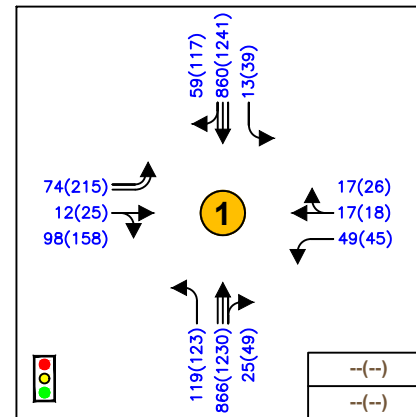
Carlisle / Access 3 TIA



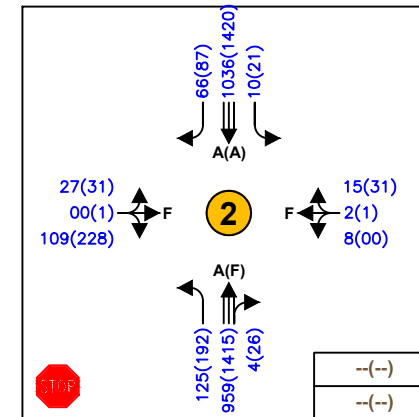
Carlisle / Access 4 TIA



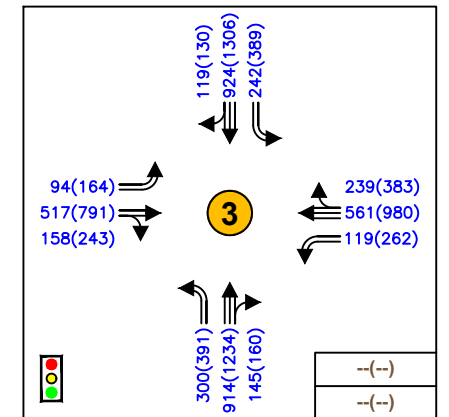
Phoenix / Access 5 TIA



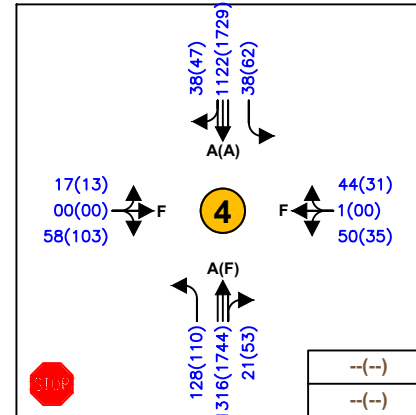
Carlisle / Claremont TIA



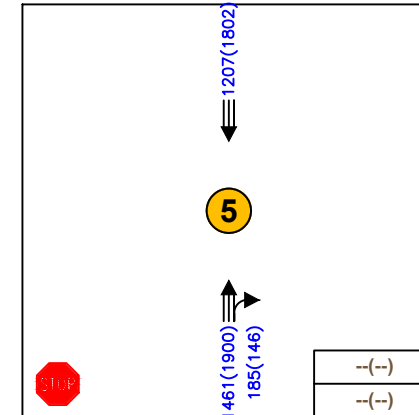
Carlisle / Phoenix TIA



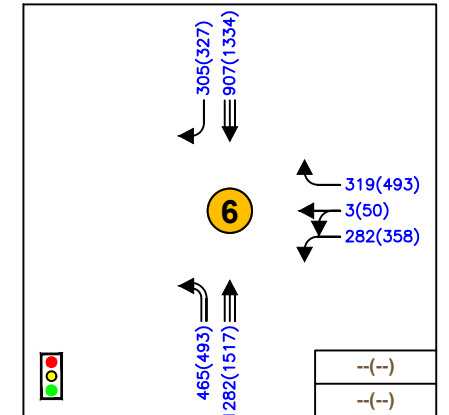
Carlisle / Menaul TIA



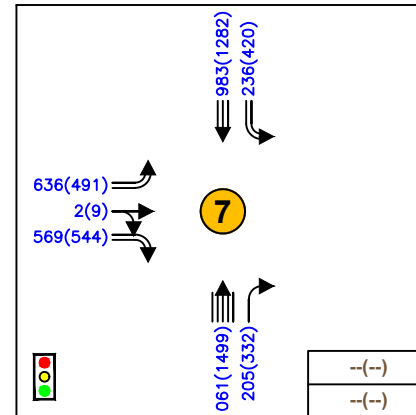
Carlisle / Prospect TIA



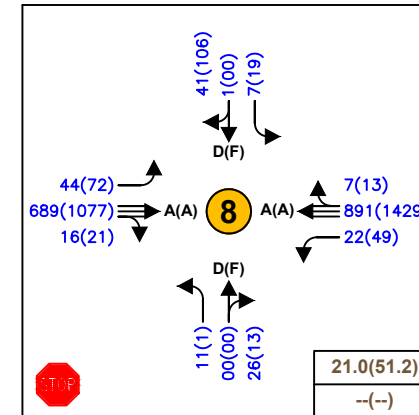
Carlisle / Cutler TIA



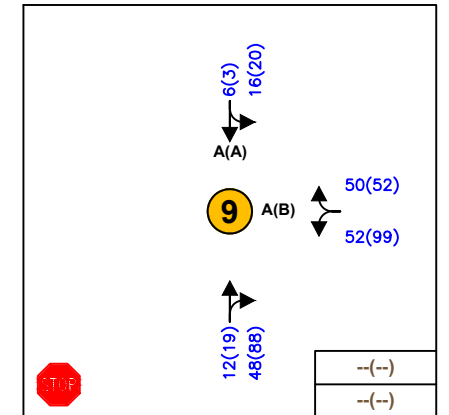
Carlisle / I-40 WB Off Ramp TIA



Carlisle / I-40 EB Off Ramp TIA



Menaul / Bryn Mawr TIA



Phoenix / Bryn Mawr TIA

AMERICAN FURNITURE SITE ALBUQUERQUE, NEW MEXICO SITE TRAFFIC ANALYSIS

FIGURE 9 2036 AM(PM) BUILD PEAK HOUR TRAFFIC VOLUMES

VII. 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 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 when the development is built. During the PM peak hour the eastbound left, westbound left, northbound left, northbound right, and southbound left will all operate at LOS E similar to results seen during the 2026 no build scenario. A very small signal timing adjustment will result in the improvement of the northbound left to LOS D, which makes all movements at LOS D or better for the AM 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.

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. 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. In signalized conditions both peak hours will continue to 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, 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 declines to LOS F in the AM peak hour, where the southbound left operates at LOS F. In the PM peak hour, the intersection continues to operate 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 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 the through/right lane. This analysis showed that the delay would still be very high, although right turning vehicle delay is substantially lowered.

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 in both peak hours at LOS D. During the PM peak hour the eastbound left, westbound left, northbound left, northbound right, 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. 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 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 continues to operate at LOS F in both the AM and PM peak hours. The southbound left operates at LOS F during both peak periods. The eastbound left will operate at LOS E.

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 left, northbound 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. In implementing the development build out an alternative analysis widened this access point to allow a dedicated eastbound left turn lane with the through/right lane. This analysis showed that the delay would still be very high, although eastbound right turning vehicle delay is substantially lowered.

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

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 peak hour. This work shall be coordinated with the City of Albuquerque.
- The Carlisle and Access 4 intersection should be designed and striped to accommodate a dedicated left turn lane and a through/right lane to minimize delay as much as possible.
- 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 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 the through/right lane. This analysis showed that the delay would still be very high, although right turning vehicle delay is substantially lowered.
- 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

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	
07:00 AM	8	45	32	0	1	86	19	73	24	1	0	117	52	153	18	1	0	224	22	113	8	0	1	144	571	
07:15 AM	17	76	29	0	0	122	29	70	25	0	1	125	37	173	22	0	0	232	33	149	21	0	1	204	683	
07:30 AM	12	97	32	0	1	142	39	109	29	0	2	179	55	198	18	0	0	271	40	163	19	0	0	222	814	
07:45 AM	19	120	32	0	0	171	29	151	41	0	1	222	66	209	30	0	0	305	35	167	27	0	0	229	927	
Total	56	338	125	0	2	521	116	403	119	1	4	643	210	733	88	1	0	1032	130	592	75	0	2	799	2995	
08:00 AM	24	111	35	0	0	170	21	111	42	0	2	176	60	189	31	0	1	281	38	183	24	0	1	246	873	
08:15 AM	17	126	24	0	0	167	22	112	52	0	0	186	45	198	31	0	0	274	41	198	31	0	1	271	898	
08:30 AM	21	100	45	0	2	168	27	96	44	0	0	167	47	160	29	0	0	236	43	198	24	0	0	265	836	
08:45 AM	26	106	36	0	1	169	32	120	40	0	1	193	31	178	22	0	2	233	37	166	26	0	0	229	824	
Total	88	443	140	0	3	674	102	439	178	0	3	722	183	725	113	0	3	1024	159	745	105	0	2	1011	3431	
09:00 AM	21	121	39	0	0	181	31	109	43	0	0	183	35	151	28	0	0	214	41	173	27	1	0	242	820	
09:15 AM	18	109	36	0	1	164	29	83	50	0	2	164	56	151	23	1	0	231	47	145	20	0	0	212	771	
09:30 AM	16	106	26	0	0	148	36	88	50	0	0	174	38	138	30	0	0	206	47	148	27	0	3	225	753	
09:45 AM	26	101	46	0	0	173	37	86	34	0	0	157	42	155	40	0	0	237	39	176	29	0	1	245	812	
Total	81	437	147	0	1	666	133	366	177	0	2	678	171	595	121	1	0	888	174	642	103	1	4	924	3156	
*** BREAK ***																										
11:00 AM	31	145	38	0	0	214	48	127	44	0	2	221	37	164	38	0	1	240	54	158	23	0	0	235	910	
11:15 AM	22	134	49	1	3	209	65	125	60	0	0	250	56	166	34	0	0	256	66	168	23	0	3	260	975	
11:30 AM	39	137	43	0	1	220	56	154	65	0	0	275	45	154	41	0	0	240	55	162	17	0	0	234	969	
11:45 AM	32	150	46	0	2	230	48	134	59	0	4	245	39	175	31	0	0	245	79	181	27	0	0	287	1007	
Total	124	566	176	1	6	873	217	540	228	0	6	991	177	659	144	0	1	981	254							

*** 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

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
07:00 AM	3	0	11	0	0	14	9	0	0	0	0	9	20	204	3	0	0	227	1	143	5	0	0	149	399
07:15 AM	5	0	14	0	0	19	5	0	3	0	1	9	43	241	1	0	0	285	1	201	7	0	1	210	523
07:30 AM	4	0	16	0	0	20	5	0	3	0	2	10	32	257	2	0	0	291	3	248	10	0	2	263	584
07:45 AM	4	0	11	0	0	15	7	1	4	0	0	12	38	296	1	0	0	335	2	225	7	0	0	234	596
Total	16	0	52	0	0	68	26	1	10	0	3	40	133	998	7	0	0	1138	7	817	29	0	3	856	2102
08:00 AM	2	0	9	0	0	11	3	0	5	0	0	8	24	265	1	0	0	290	4	244	8	0	2	258	567
08:15 AM	5	0	16	0	0	21	3	0	5	0	1	9	20	263	2	0	0	285	1	215	8	0	0	224	539
08:30 AM	3	0	13	0	0	16	4	0	2	0	0	6	28	273	1	0	0	302	2	216	6	0	2	226	550
08:45 AM	5	0	9	0	0	14	6	0	7	0	0	13	23	285	1	0	0	309	2	227	6	0	2	237	573
Total	15	0	47	0	0	62	16	0	19	0	1	36	95	1086	5	0	0	1186	9	902	28	0	6	945	2229
09:00 AM	1	0	10	0	0	11	3	0	5	0	0	8	24	228	1	1	0	254	4	237	5	2	1	249	522
09:15 AM	5	0	13	0	1	19	2	0	4	0	0	6	26	237	4	0	0	267	4	222	4	0	0	230	522
09:30 AM	4	0	24	0	1	29	2	0	4	0	0	6	29	202	4	0	0	235	0	215	6	0	3	224	494
09:45 AM	9	0	12	0	0	21	4	0	5	0	0	9	19	238	2	0	0	259	6	204	10	0	2	222	511
Total	19	0	59	0	2	80	11	0	18	0	0	29	98	905	11	1	0	1015	14	878	25	2	6	925	2049
*** BREAK ***																									
11:00 AM	7	0	24	0	0	31	3	0	4	0	0	7	40	227	4	0	2	273	1	234	14	1	4	254	565
11:15 AM	5	0	15	0	0	20	1	0	7	0	0	8	29	223	5	0	0	257	3	265	18	0	0	286	571
11:30 AM	4	0	30	3	0	37	0	0	1	0	0	1	26	254	0	2	2	284	1	224	14	0	3	242	564
11:45 AM	6	0	25	0	0	31	4	0	4	0	0	8	29	268	3	1	0	301	2	301	14	0	1	318	658
Total	22	0	94	3	0	119	8	0	16	0	0	24	124	972	12	3	4	1115	7	1024	60	1	8	1100	2358
12:00 PM	7	0	17	0	0	24	2	0	3	0	0	5	23	312	2	0	2	339	3	307	8	0	2	320	688
12:15 PM	9	0	18	0	0	27																			

*** 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													
Start Time	Eastbound			Cutler Ave Westbound				Carlisle Blvd. Northbound					Int. Total
	Bikes	Peds	App. Total	Right	Bikes	Peds	App. Total	Thru	Right	Bikes	Peds	App. 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]

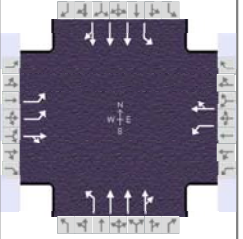
APPENDIX B
2024 EXISTING INTERSECTION CAPACITY ANALYSIS

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	

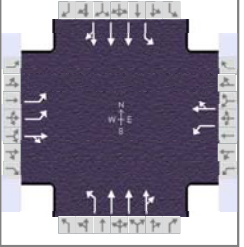
HCS Signalized Intersection Results Summary

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

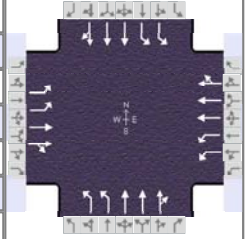
	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	2.60	C		2.60	C		1.86	B		2.06	B	
Bicycle LOS Score / LOS	1.07	A		0.61	A		1.13	A		1.13	A	

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 Signa
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

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

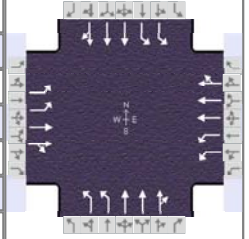
	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	2.71	C		2.71	C		2.57	C		2.58	C	
Bicycle LOS Score / LOS	1.04	A		0.90	A		1.09	A		1.04	A	

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

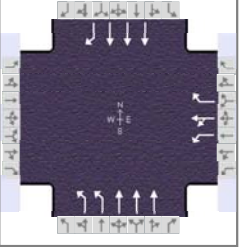
HCS Signalized Intersection Results Summary

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

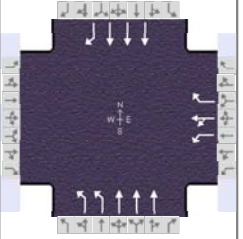
	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	2.74		C	2.61		C	1.86		B	1.67		B
Bicycle LOS Score / LOS				1.34		A	1.30		A	1.04		A

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

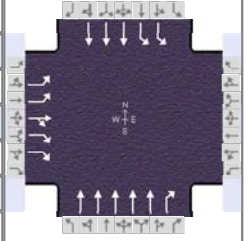
HCS Signalized Intersection Results Summary

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

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



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

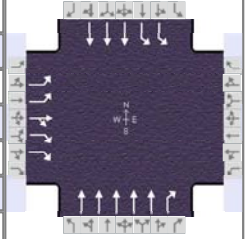
	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	2.87		C	2.98		C	1.66		B	2.22		B
Bicycle LOS Score / LOS	2.23		B				0.84		A	1.05		A

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



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	

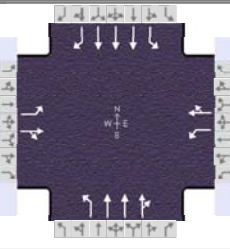
Movement Group Results

	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					

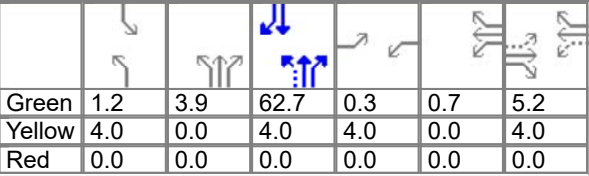
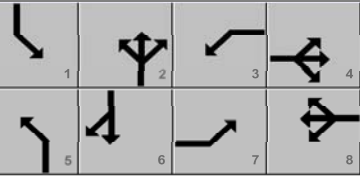
Multimodal Results

	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		1.2	3.9	62.7	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								
				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					

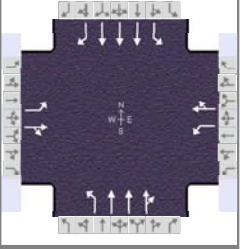
Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.60	C	2.73	C	1.84	B	1.85	B
Bicycle LOS Score / LOS	0.60	A	0.52	A	0.99	A	1.00	A

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					

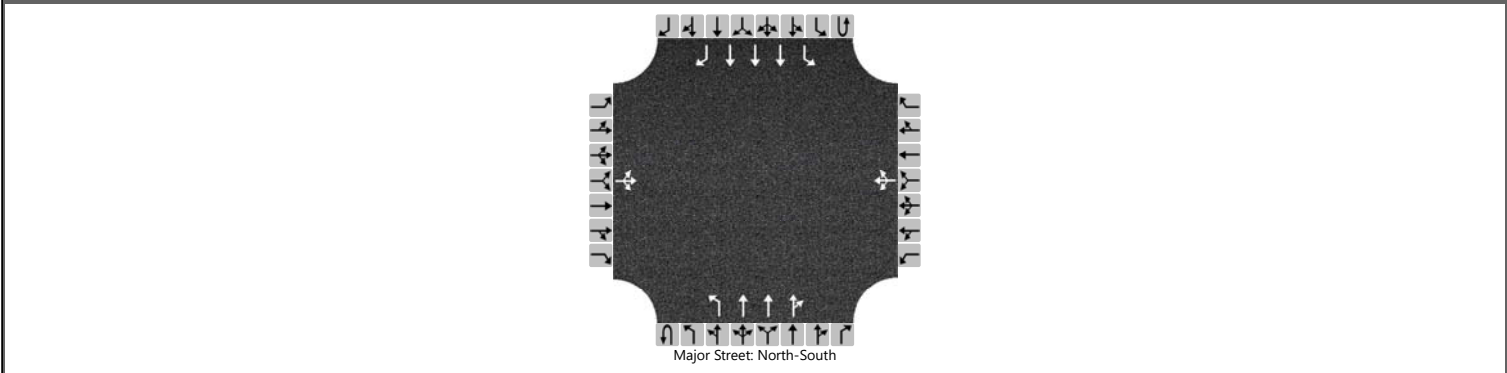
Multimodal Results

	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		

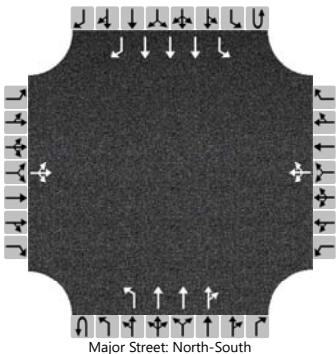
Delay, Queue Length, and Level of Service

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		

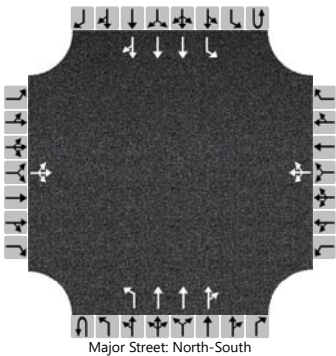
Delay, Queue Length, and Level of Service

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		

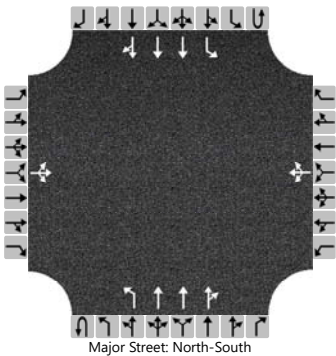
Delay, Queue Length, and Level of Service

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		

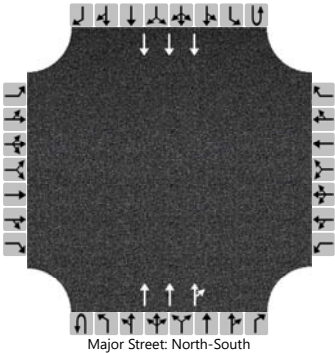
Delay, Queue Length, and Level of Service

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)																

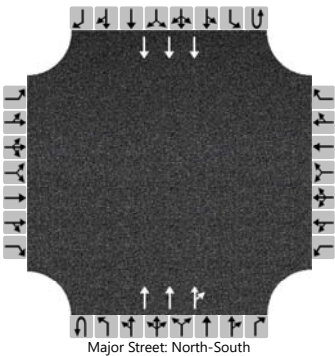
Delay, Queue Length, and Level of Service

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

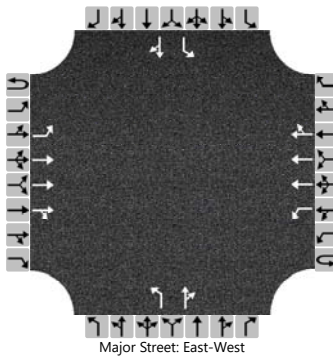
Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	0	0	0	0	3	0	0	0	3	0
Configuration											T	TR			T	
Volume (veh/h)											1201	162			981	
Percent Heavy Vehicles (%)																
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

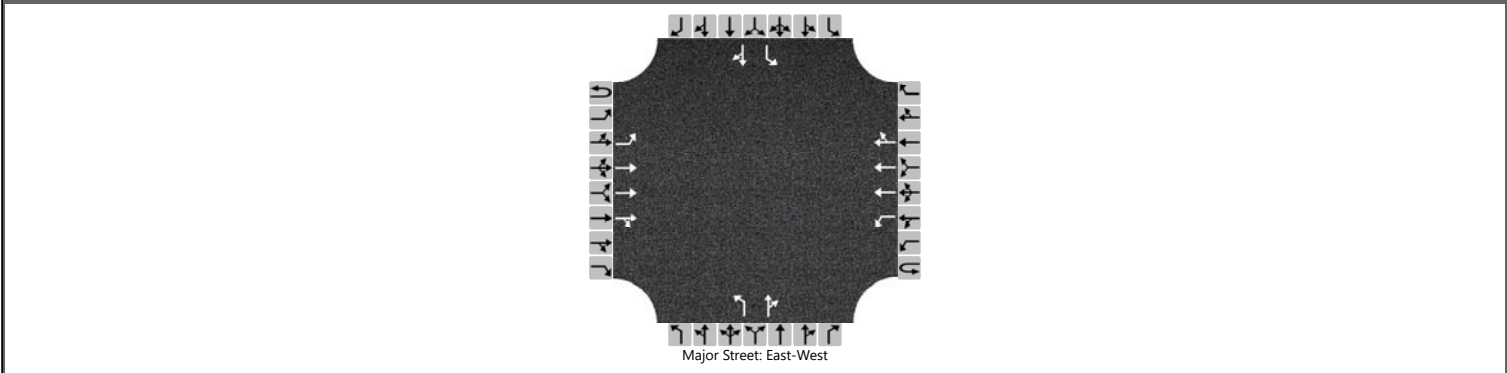
Flow Rate, v (veh/h)																
Capacity, c (veh/h)																
v/c Ratio																
95% Queue Length, Q ₉₅ (veh)																
95% Queue Length, Q ₉₅ (ft)																
Control Delay (s/veh)																
Level of Service (LOS)																
Approach Delay (s/veh)													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

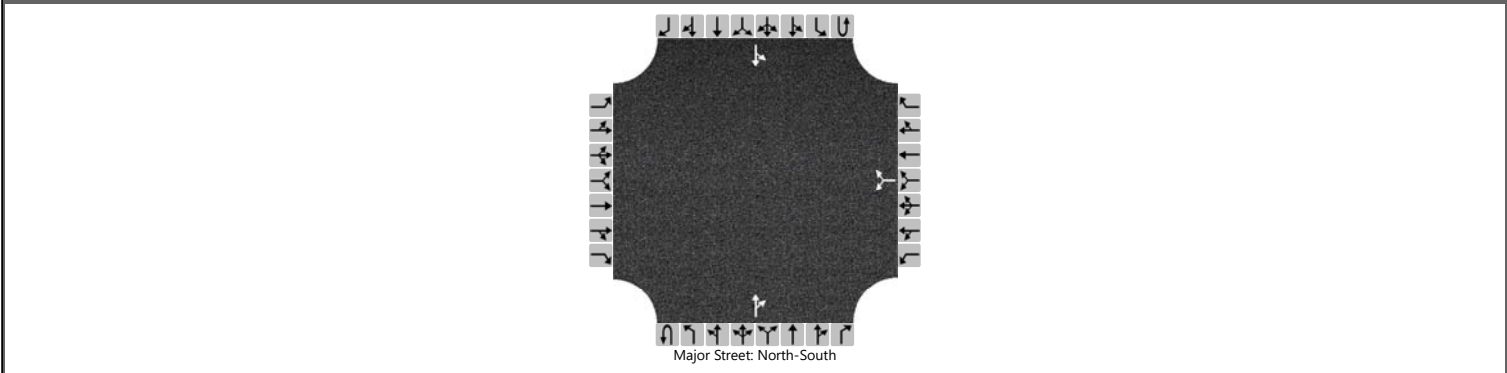
Delay, Queue Length, and Level of Service

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		

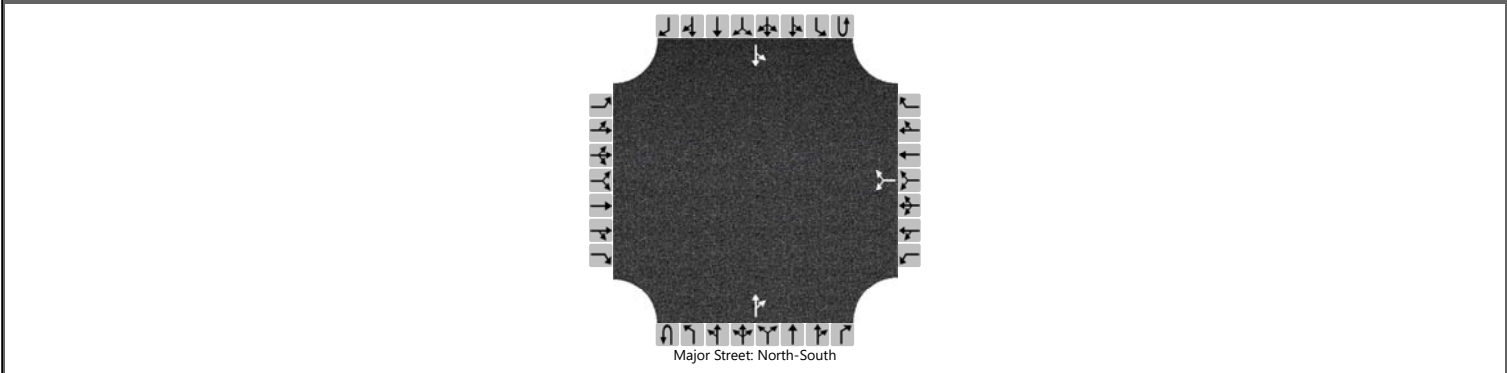
Delay, Queue Length, and Level of Service

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		

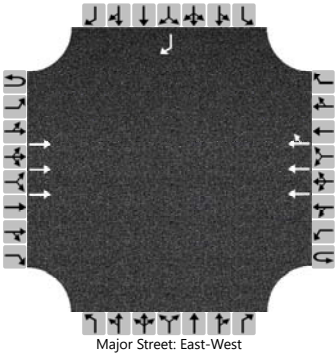
Delay, Queue Length, and Level of Service

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

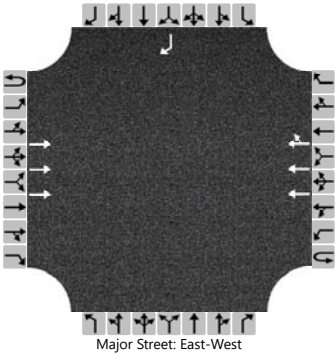
Delay, Queue Length, and Level of Service

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

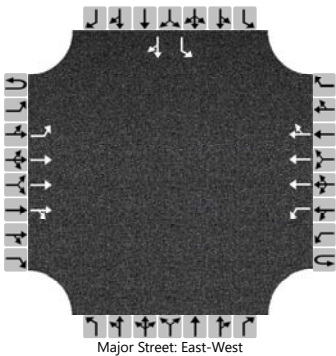
Delay, Queue Length, and Level of Service

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

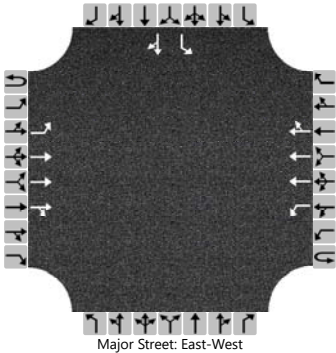
Delay, Queue Length, and Level of Service

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

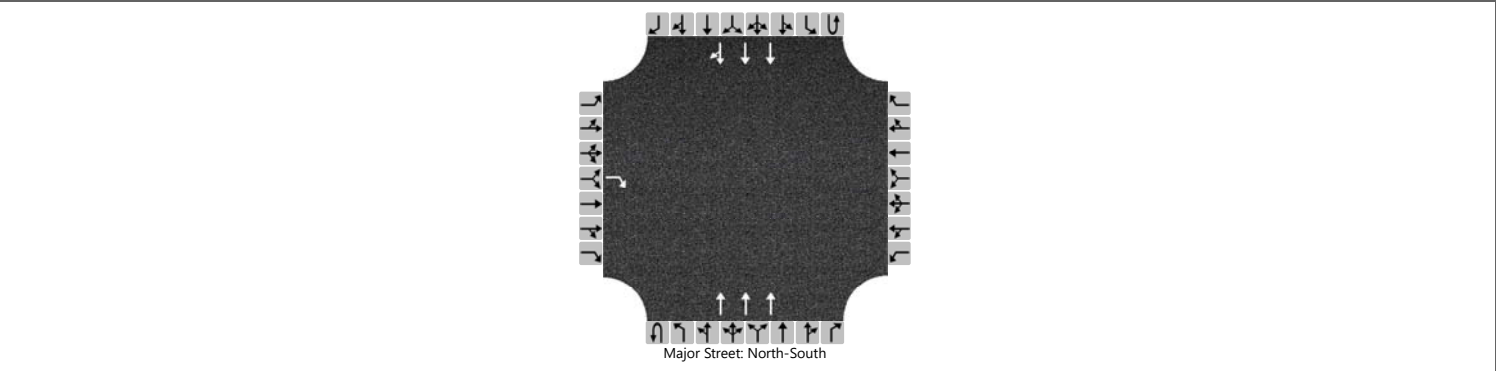
Delay, Queue Length, and Level of Service

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												

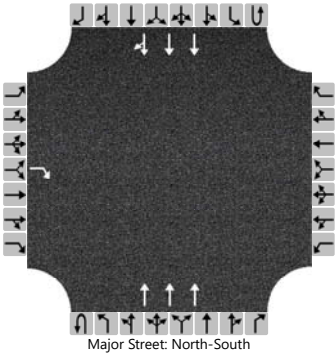
Delay, Queue Length, and Level of Service

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												

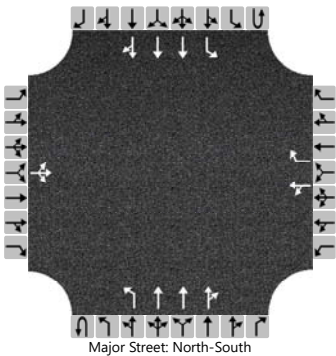
Delay, Queue Length, and Level of Service

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		

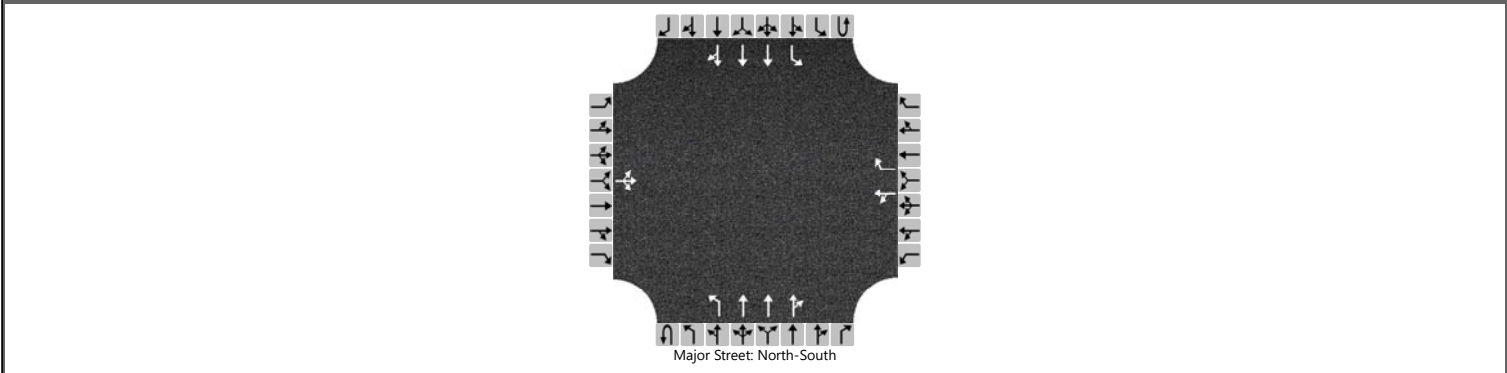
Delay, Queue Length, and Level of Service

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		

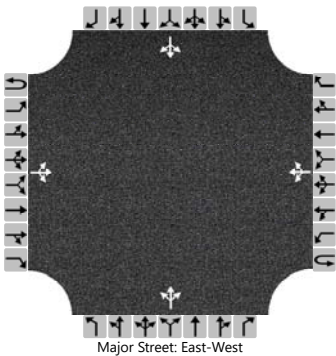
Delay, Queue Length, and Level of Service

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

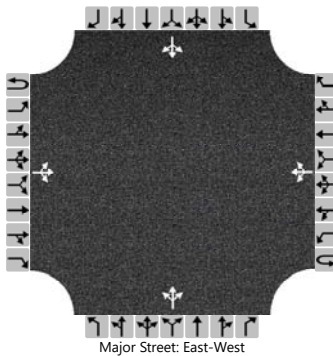
Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		5	76	1		0	126	38		0	5	0		28	2	10
Percent Heavy Vehicles (%)		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			

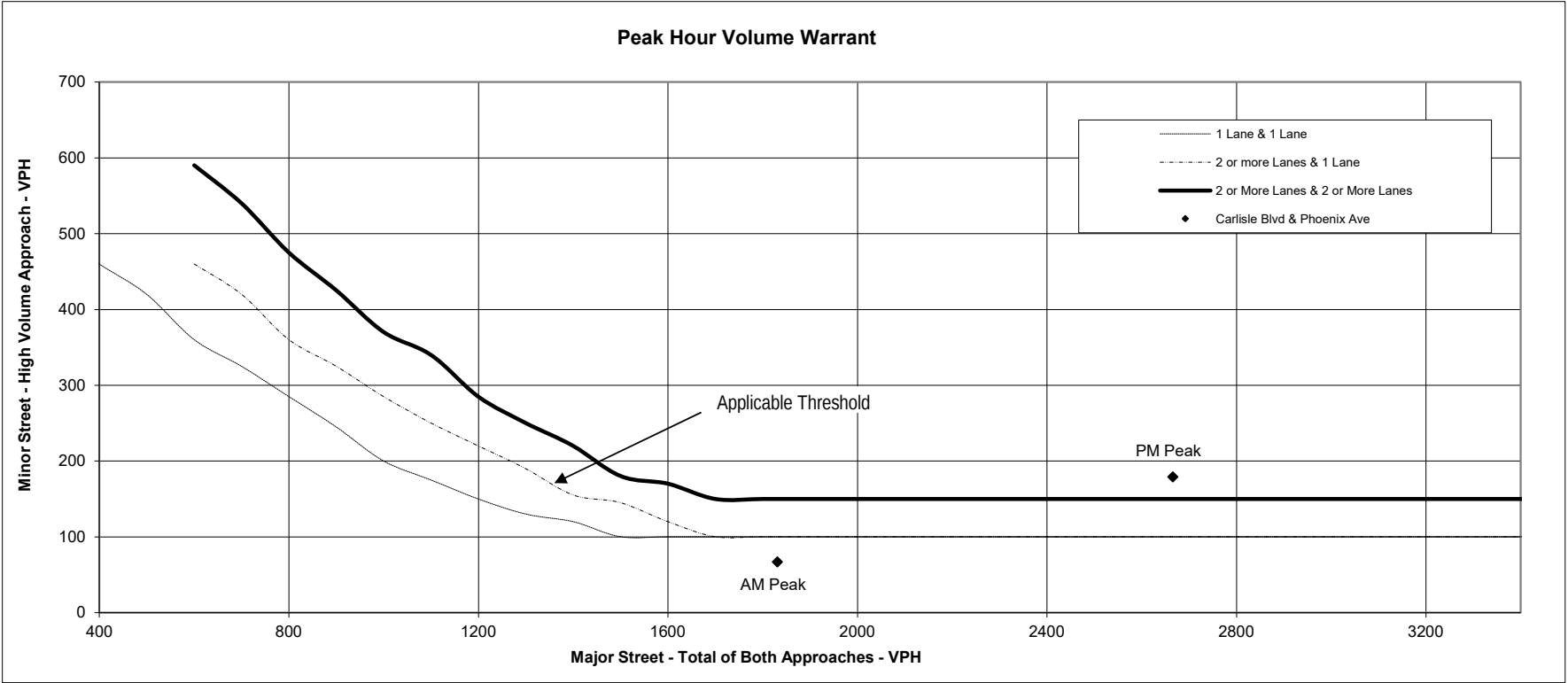
PEAK HOUR VOLUME SIGNAL WARRANT ANALYSIS

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 C

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%

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%

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%

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

To Date

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 _____

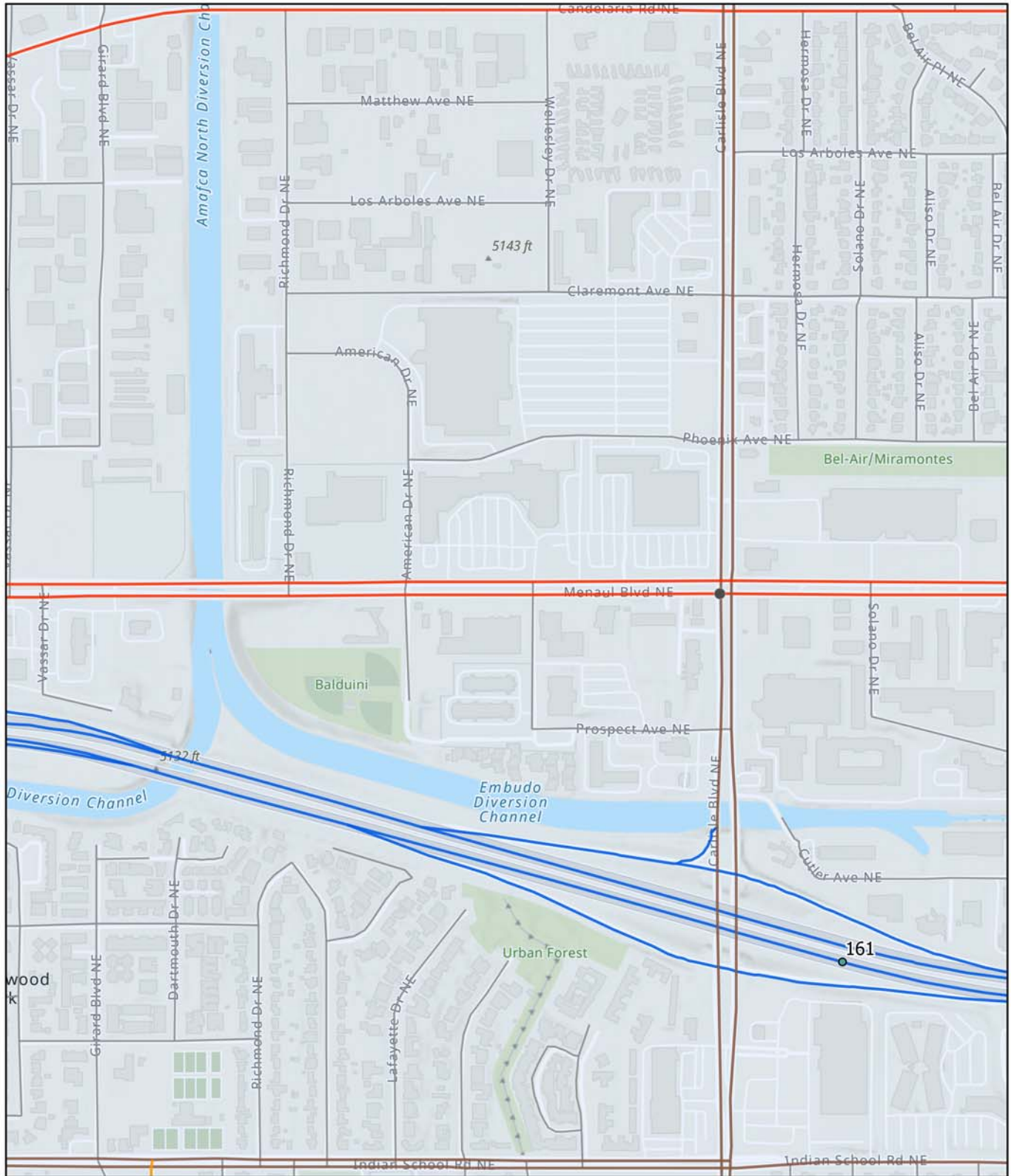
Int

24-Hr Total

NOTES/FILES

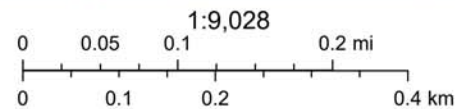
	Note	Date
--	------	------

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

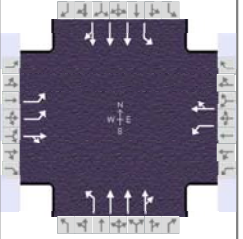
APPENDIX D
2026 NO BUILD INTERSECTION CAPACITY ANALYSIS

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

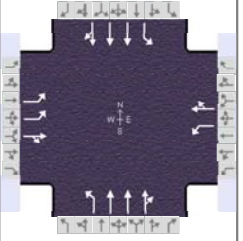
	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	2.60	C		2.60	C		1.84	B		2.05	B	
Bicycle LOS Score / LOS	0.76	A		0.60	A		0.97	A		0.93	A	

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

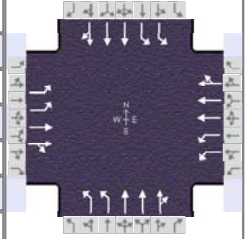
	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	2.60	C		2.60	C		1.86	B		2.06	B	
Bicycle LOS Score / LOS	1.08	A		0.61	A		1.16	A		1.16	A	

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

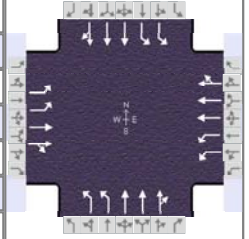
	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	2.71	C		2.71	C		2.57	C		2.58	C	
Bicycle LOS Score / LOS	1.06	A		0.91	A		1.13	A		1.06	A	

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

Approach Movement	EB			WB			NB			SB		
	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	

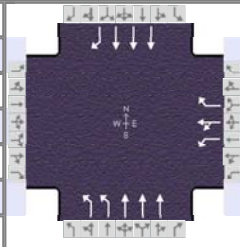
Movement Group Results

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					

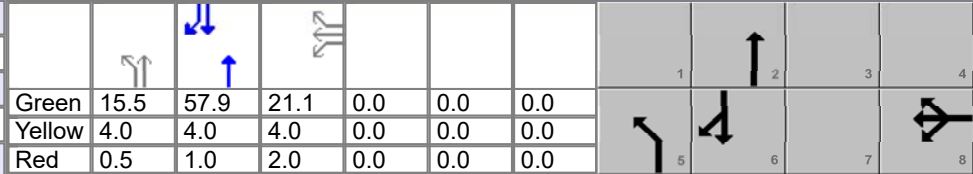
Multimodal Results

	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	Green	15.5	57.9	21.1	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				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						

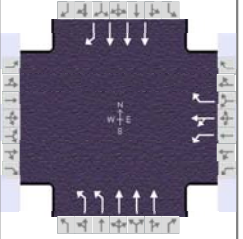
Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.74	C	2.61	C	1.86	B	1.67	B
Bicycle LOS Score / LOS			1.37	A	1.33	A	1.07	A

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

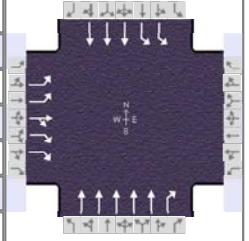
	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	2.75		C	2.62		C	1.87		B	1.68		B
Bicycle LOS Score / LOS				1.81		B	1.46		A	1.29		A

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

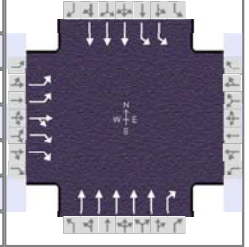
	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	2.87		C	2.98		C	1.66		B	2.22		B
Bicycle LOS Score / LOS	2.27		B				0.86		A	1.07		A

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	

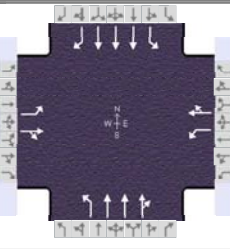
Movement Group Results

	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					

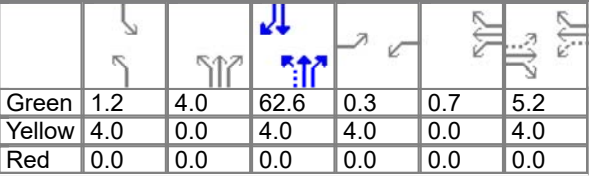
Multimodal Results

	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					

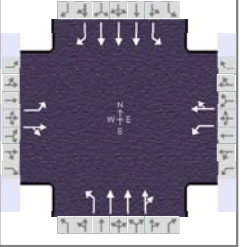
Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.60	C	2.73	C	1.84	B	1.85	B
Bicycle LOS Score / LOS	0.60	A	0.52	A	1.01	A	1.02	A

HCS Signalized Intersection Results Summary

General Information

Agency	BH		
Analyst	AG	Analysis Date	7/2/2024
Jurisdiction	CoA	Time Period	NBPM
Urban Street	Carlisle Blvd	Analysis Year	2026
Intersection	Carlisle & Phoenix	File Name	2026 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	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	Green	2.3	3.5	60.1	0.6	7.5	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	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					

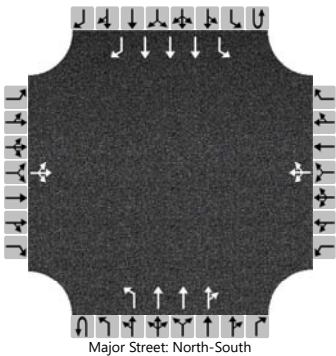
Multimodal Results

	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		

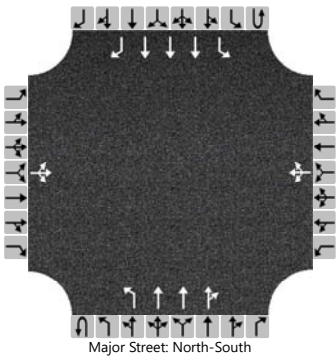
Delay, Queue Length, and Level of Service

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		

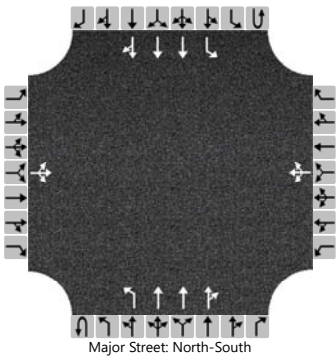
Delay, Queue Length, and Level of Service

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		

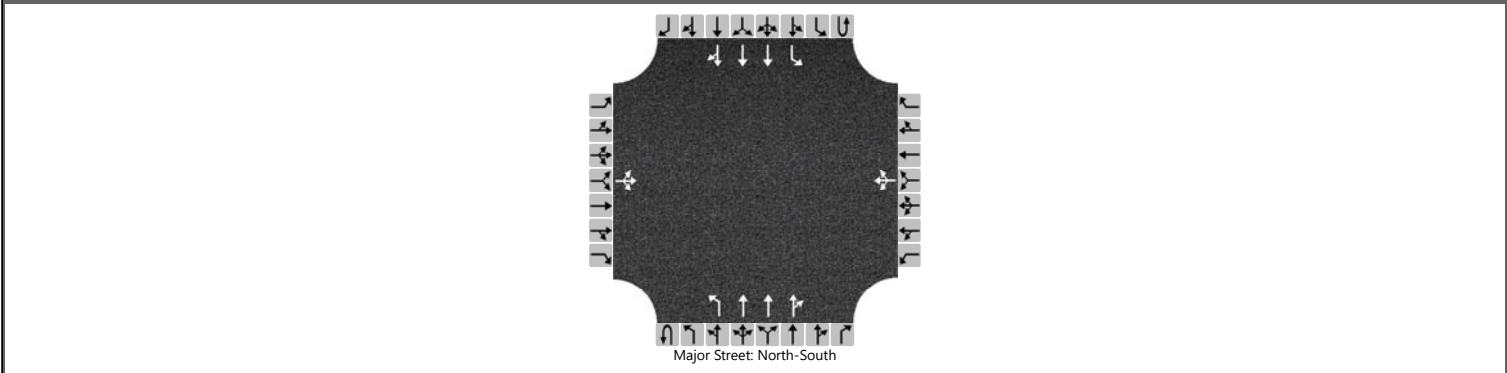
Delay, Queue Length, and Level of Service

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		

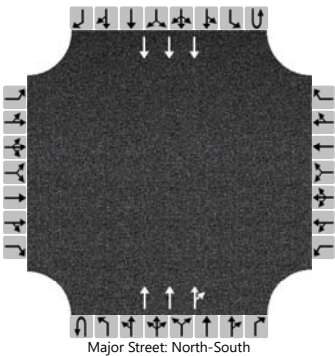
Delay, Queue Length, and Level of Service

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)																

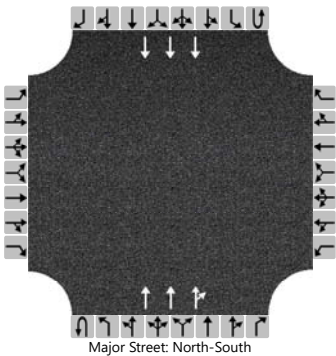
Delay, Queue Length, and Level of Service

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

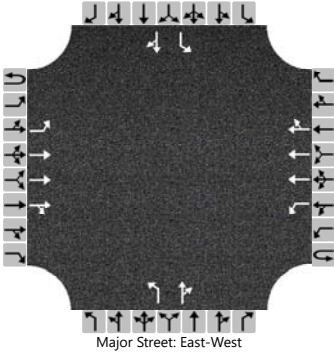
Peak Hour Factor

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.

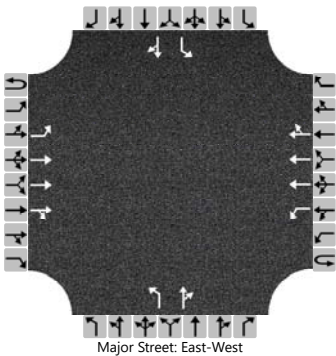
HCS™ TWSC Version 2024
2026 NBAM Menaul & Bryn Mawr.xtw

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

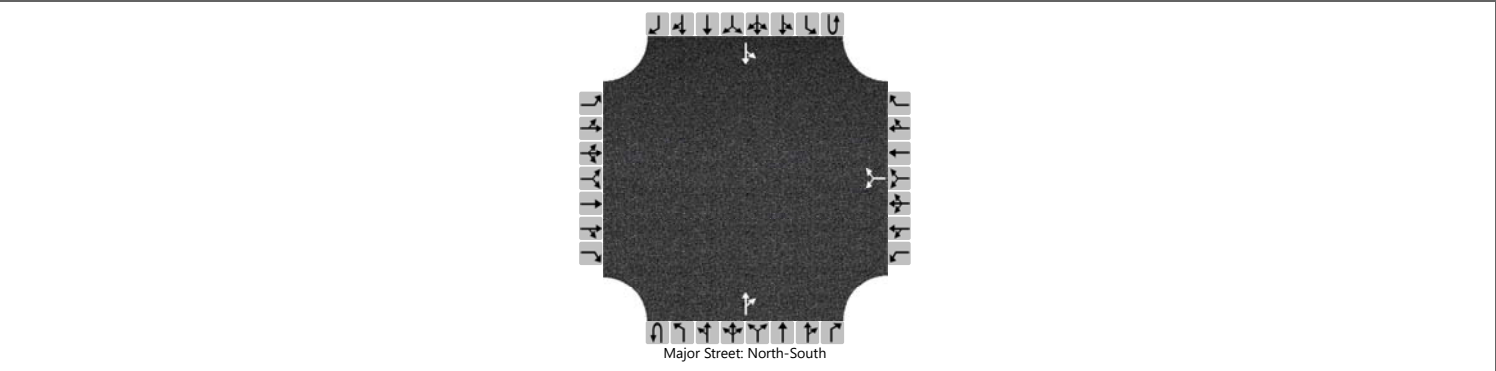
Delay, Queue Length, and Level of Service

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		

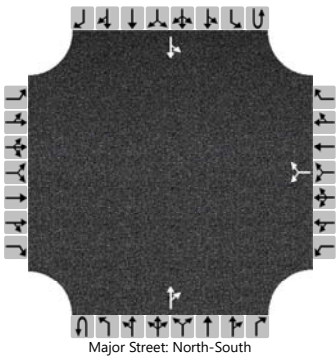
Delay, Queue Length, and Level of Service

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		

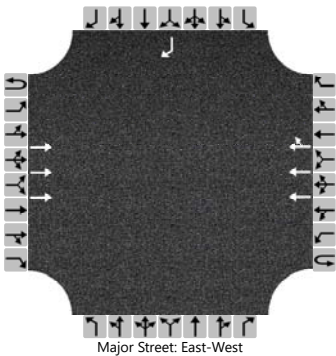
Delay, Queue Length, and Level of Service

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

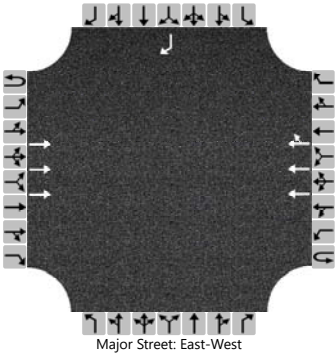
Delay, Queue Length, and Level of Service

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

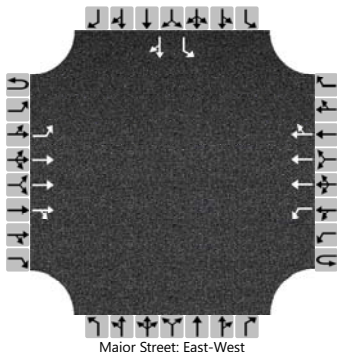
Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	3	0	0	0	3	0		0	0	0		0	0	1
Configuration			T				T	TR								R
Volume (veh/h)			993				1203	12								8
Percent Heavy Vehicles (%)																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

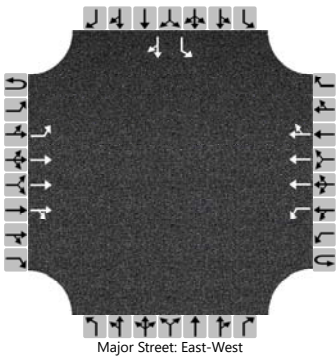
Flow Rate, v (veh/h)																14
Capacity, c (veh/h)																190
v/c Ratio																0.07
95% Queue Length, Q ₉₅ (veh)																0.2
95% Queue Length, Q ₉₅ (ft)																5.0
Control Delay (s/veh)																25.4
Level of Service (LOS)																D
Approach Delay (s/veh)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

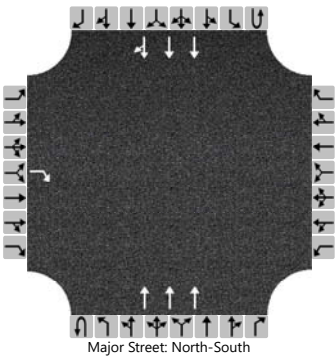
Delay, Queue Length, and Level of Service

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												

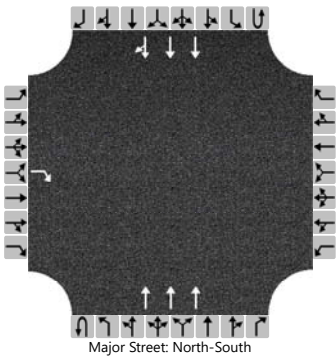
Delay, Queue Length, and Level of Service

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												

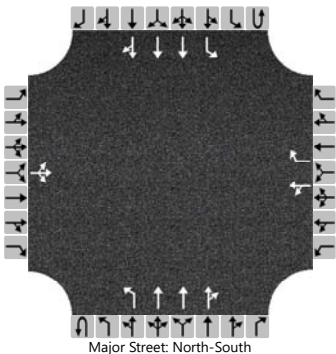
Delay, Queue Length, and Level of Service

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

Major Street: North-South

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															

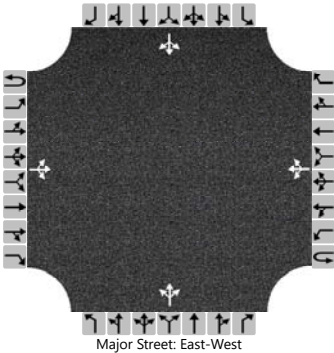
Critical and Follow-up Headways																
Base Critical Headway (sec)		6.4	6.5	7.1		6.4	6.5	7.1		5.3				5.3		
Critical Headway (sec)		6.40	6.50	7.10		6.40	6.50	7.10		5.30				5.30		
Base Follow-Up Headway (sec)		3.8	4.0	3.9		3.8	4.0	3.9		3.1				3.1		
Follow-Up Headway (sec)		3.80	4.00	3.90		3.80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

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

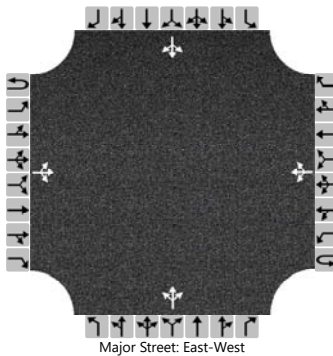
Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		5	78	1		0	129	39		0	5	0		29	2	10
Percent Heavy Vehicles (%)		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			

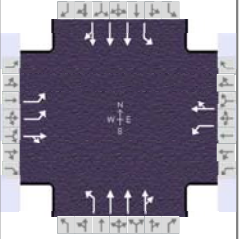
APPENDIX E
2026 BUILD INTERSECTION CAPACITY ANALYSIS

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

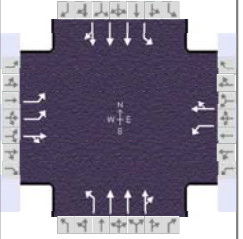
	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.60	C	2.60	C	1.85	B	2.05	B
Bicycle LOS Score / LOS	0.76	A	0.61	A	0.99	A	0.96	A

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

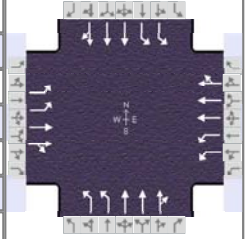
	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	2.60	C		2.60	C		1.86	B		2.06	B	
Bicycle LOS Score / LOS	1.08	A		0.62	A		1.19	A		1.19	A	

HCS Signalized Intersection Results Summary

General Information

Agency	BH		
Analyst	AG	Analysis Date	Jun 4, 2024
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

	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	86	470	144	108	513	220	277	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	Green	7.6	1.0	35.3	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	15.6	45.0	11.1	40.5
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	11.8		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	0.80		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	319	758	353	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	9.8	19.5	19.2	5.4	12.1	12.7
Cycle Queue Clearance Time (g_c), s	2.7	14.3	14.5	3.3	10.8	11.3	9.8	19.5	19.2	5.4	12.1	12.7
Green Ratio (g/C)	0.04	0.36	0.36	0.05	0.37	0.37	0.11	0.36	0.36	0.07	0.32	0.32
Capacity (c), veh/h	140	674	620	168	1388	590	384	1365	634	243	1219	573
Volume-to-Capacity Ratio (X)	0.613	0.472	0.477	0.644	0.366	0.381	0.831	0.555	0.558	0.726	0.413	0.419
Back of Queue (Q), ft/ln (95 th percentile)	54	278	262	67	214	201	200	363	342	108	245	254
Back of Queue (Q), veh/ln (95 th percentile)	2.1	11.0	10.5	2.7	8.6	8.1	7.9	14.4	13.7	4.3	9.8	10.1
Queue Storage Ratio (RQ) (95 th percentile)	0.24	0.00	0.00	0.38	0.00	0.00	1.05	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	47.5	34.3	33.1	50.2	32.3	34.2
Incremental Delay (d_2), s/veh	1.6	2.4	2.6	1.6	0.7	1.9	7.6	1.5	3.2	1.5	1.0	2.2
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	0.0	0.0
Control Delay (d), s/veh	53.6	29.7	30.0	53.0	26.3	27.6	55.2	35.8	36.3	51.7	33.3	36.5
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		40.3	D		37.6	D	
Intersection Delay, s/veh / LOS	36.1						D					

Multimodal Results

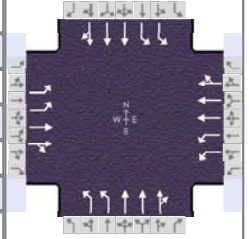
	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	2.71	C		2.71	C		2.58	C		2.58	C	
Bicycle LOS Score / LOS	1.07	A		0.95	A		1.17	A		1.14	A	

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 & Menaul	File Name	2026 BPM 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	149	720	221	238	895	352	360	1126	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									
Force Mode	Fixed	Simult. Gap N/S	On									
				Green	11.8	3.0	34.0	7.1	3.1	42.9		
				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	18.4	42.3	15.3	39.2
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	7.0	28.8	10.0	24.1	14.7		11.6	
Green Extension Time (g_e), s	0.2	5.0	0.3	5.7	0.1	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	384	924	434	285	699	334
Adjusted Saturation Flow Rate (s), veh/h/ln	1757	1900	1746	1757	1900	1625	1757	1900	1785	1757	1900	1810
Queue Service Time (g_s), s	5.0	26.8	26.8	8.0	22.1	22.1	12.7	28.1	28.0	9.6	20.0	20.4
Cycle Queue Clearance Time (g_c), s	5.0	26.8	26.8	8.0	22.1	22.1	12.7	28.1	28.0	9.6	20.0	20.4
Green Ratio (g/C)	0.06	0.36	0.36	0.09	0.38	0.38	0.12	0.31	0.31	0.10	0.28	0.28
Capacity (c), veh/h	208	679	623	300	1457	623	435	1174	551	347	1078	513
Volume-to-Capacity Ratio (X)	0.717	0.723	0.723	0.793	0.599	0.601	0.883	0.787	0.788	0.822	0.648	0.651
Back of Queue (Q), ft/ln (95 th percentile)	101	485	455	162	388	356	239	506	498	199	374	385
Back of Queue (Q), veh/ln (95 th percentile)	4.0	19.4	18.2	6.5	15.5	14.2	9.6	20.3	19.9	8.0	15.0	15.4
Queue Storage Ratio (RQ) (95 th percentile)	0.46	0.00	0.00	0.93	0.00	0.00	1.26	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	47.0	47.0	46.1	53.8	40.8	42.6
Incremental Delay (d_2), s/veh	1.8	6.8	7.4	2.6	1.8	4.3	15.7	4.3	9.2	6.6	2.9	6.1
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	40.2	40.8	56.4	31.5	34.0	62.7	51.3	55.2	60.4	43.7	48.7
Level of Service (LOS)	E	D	D	E	C	C	E	D	E	E	D	D
Approach Delay, s/veh / LOS	42.8	D		36.1	D		54.8	D		48.6	D	
Intersection Delay, s/veh / LOS	46.1						D					

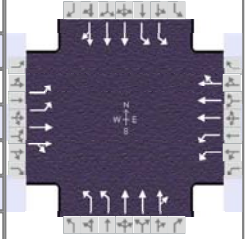
Multimodal Results

	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		1.39	A		1.41	A	

HCS Signalized Intersection Results Summary

General 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 & Menaul	File Name	2026 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	86	470	144	108	513	220	277	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	Green	7.6	3.9	32.4	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	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	11.6		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	0.62		0.00	

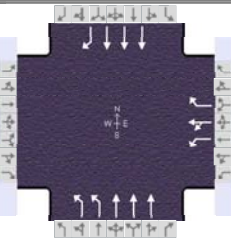
Movement Group Results

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	319	758	353	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	9.6	19.5	19.2	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	9.6	19.5	19.2	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	0.671	0.555	0.558	0.726	0.450	0.456
Back of Queue (Q), ft/ln (95 th percentile)	54	278	262	67	214	201	188	363	342	108	252	262
Back of Queue (Q), veh/ln (95 th percentile)	2.1	11.0	10.5	2.7	8.6	8.1	7.5	14.4	13.7	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	0.99	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	45.0	34.3	33.1	50.2	34.5	36.6
Incremental Delay (d_2), s/veh	1.6	2.4	2.6	1.6	0.7	1.9	2.6	1.5	3.2	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	47.6	35.8	36.3	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		38.6	D		39.8	D	
Intersection Delay, s/veh / LOS	36.0						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		1.17	A		1.14	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								
Offset, s	92	Reference Point	End								
Uncoordinated	No	Simult. Gap E/W	On	Green	15.6	56.7	22.3	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				28.3	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					

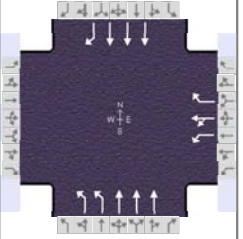
Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.74	C	2.61	C	1.86	B	1.67	B
Bicycle LOS Score / LOS			1.40	A	1.36	A	1.10	A

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			

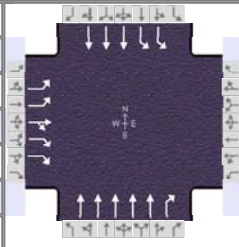
Movement Group Results

	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			

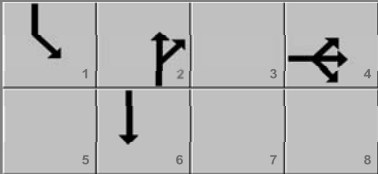
Multimodal Results

	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				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 EB	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	580	2	517					968	187	216	897	

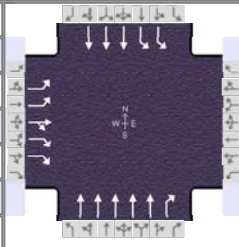
Signal Information												
Cycle, s	110.0	Reference Phase	2									
Offset, s	92	Reference Point	End	Green	8.0	64.0	21.9	0.0	0.0	0.0		
Uncoordinated	No	Simult. Gap E/W	On	Yellow	4.0	4.0	4.5	0.0	0.0	0.0		
Force Mode	Fixed	Simult. Gap N/S	On	Red	0.5	1.0	2.0	0.0	0.0	0.0		

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		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	

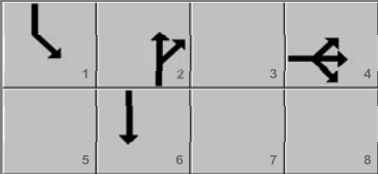
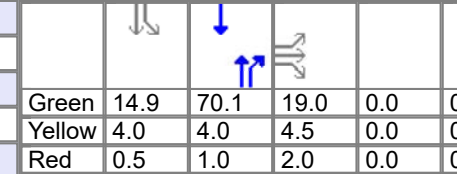
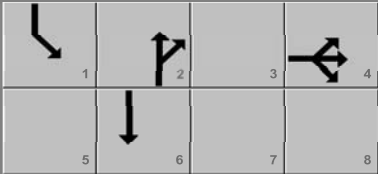
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14					2	12	1	6	
Adjusted Flow Rate (v), veh/h	580	183	336					968	187	182	757	
Adjusted Saturation Flow Rate (s), veh/h/ln	1757	1613	1610					1725	1610	1757	1725	
Queue Service Time (g_s), s	17.4	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										
Uncoordinated	No	Simult. Gap E/W	On	Green	14.9	70.1	19.0	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		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					

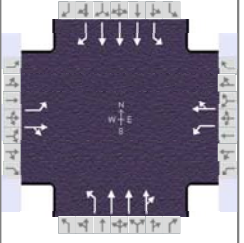
Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.87	C	2.99	C	1.67	B	2.21	B
Bicycle LOS Score / LOS	2.06	B			1.04	A	1.34	A

HCS Signalized Intersection Results Summary

General Information

Agency	BH		
Analyst	AG	Analysis Date	7/2/2024
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	27	0	102	7	2	13	117	872	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	0.5	59.6	1.0	2.0	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	6.9	11.7	5.0	9.7	9.7	68.1	5.2	63.6
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	3.3	7.7	2.3	2.8	3.6		2.4	
Green Extension Time (g_e), s	0.0	0.2	0.0	0.2	0.2	0.0	0.0	0.0
Phase Call Probability	0.49	0.97	0.16	0.95	0.95		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	27	102		7	15		117	584	292	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	1.3	5.7		0.3	0.8		1.6	4.7	4.7	0.4	6.8	1.3
Cycle Queue Clearance Time (g_c), s	1.3	5.7		0.3	0.8		1.6	4.7	4.7	0.4	6.8	1.3
Green Ratio (g/C)	0.10	0.09		0.07	0.06		0.75	0.71	0.71	0.01	0.66	0.66
Capacity (c), veh/h	215	136		100	105		549	2707	1350	24	3403	1059
Volume-to-Capacity Ratio (X)	0.125	0.751		0.070	0.143		0.213	0.216	0.216	0.373	0.277	0.061
Back of Queue (Q), ft/ln (95 th percentile)	25	104		6	14		18	66	69	10	96	18
Back of Queue (Q), veh/ln (95 th percentile)	1.0	4.1		0.3	0.6		0.7	2.7	2.8	0.4	3.8	0.7
Queue Storage Ratio (RQ) (95 th percentile)	0.00	0.00		0.06	0.14		0.17	0.00	0.00	0.11	0.00	0.20
Uniform Delay (d_1), s/veh	37.3	40.2		38.9	39.8		3.6	4.4	4.4	44.0	6.3	5.3
Incremental Delay (d_2), s/veh	0.1	3.2		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	37.4	43.4		39.0	40.0		3.7	4.6	4.8	47.6	6.5	5.4
Level of Service (LOS)	D	D		D	D		A	A	A	D	A	A
Approach Delay, s/veh / LOS	42.1		D	39.7		D	4.5		A	6.8		A
Intersection Delay, s/veh / LOS	8.2						A					

Multimodal Results

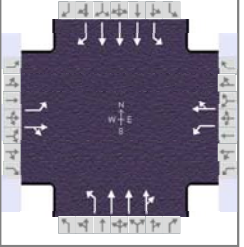
	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.60	C	2.73	C	1.85	B	1.86	B
Bicycle LOS Score / LOS	0.70	A	0.52	A	1.03	A	1.05	A

HCS Signalized Intersection Results Summary

General Information

Agency	BH		
Analyst	AG	Analysis Date	7/2/2024
Jurisdiction	CoA	Time Period	BPM
Urban Street	Carlisle Blvd	Analysis Year	2026
Intersection	Carlisle & Phoenix	File Name	2026 BPM 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	31	1	210	0	1	29	178	1287	23	19	1293	83

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	3.7	58.1	3.2	6.7	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	7.2	18.0	0.0	10.7	9.9	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	4.7		2.9	
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	0.54	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	31	211		0	30		178	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		2.7	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		2.7	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	121		428	2608	1292	46	3341	1039
Volume-to-Capacity Ratio (X)	0.137	0.844		0.000	0.248		0.416	0.336	0.336	0.416	0.387	0.080
Back of Queue (Q), ft/ln (95 th percentile)	27	202		0	28		33	127	132	20	154	25
Back of Queue (Q), veh/ln (95 th percentile)	1.1	8.1		0.0	1.1		1.3	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		0.30	0.00	0.00	0.22	0.00	0.27
Uniform Delay (d_1), s/veh	34.5	37.0		0.0	39.2		5.1	5.8	5.8	43.2	7.5	6.0
Incremental Delay (d_2), s/veh	0.1	3.1		0.0	0.4		0.2	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	39.6		5.3	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		39.6	D		6.1	A		8.3	A	
Intersection Delay, s/veh / LOS	9.9						A					

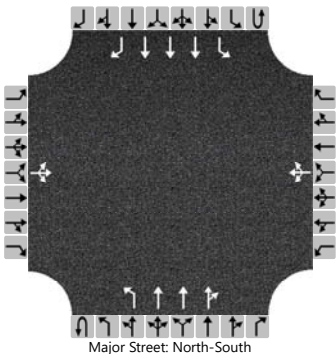
Multimodal Results

	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	1.31	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	6/5/2024	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)		27	0	102		7	2	13	0	117	872	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		

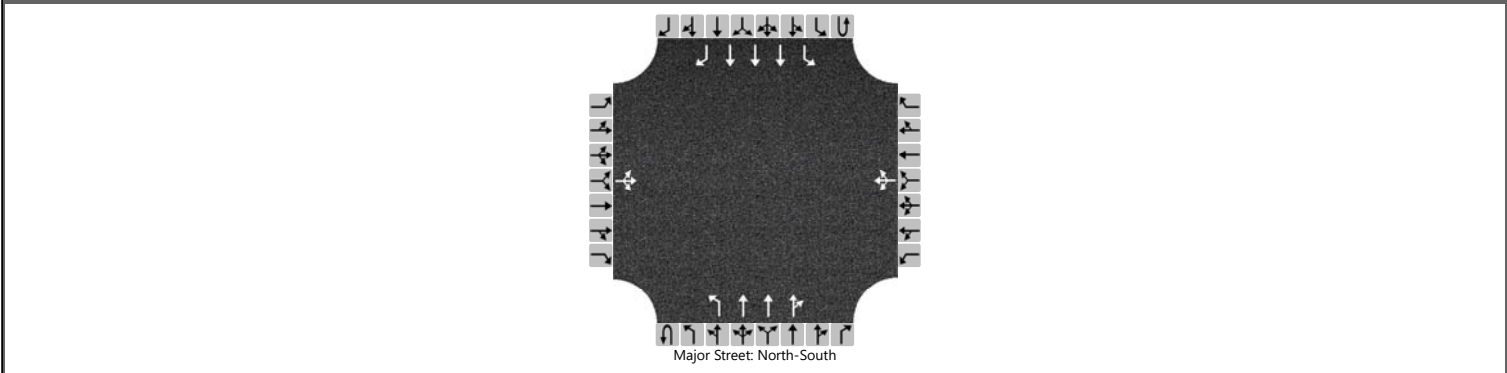
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			152			26				138				11		
Capacity, c (veh/h)			141			61				324				381		
v/c Ratio			1.07			0.43				0.43				0.03		
95% Queue Length, Q ₉₅ (veh)			18.0			2.0				2.2				0.1		
95% Queue Length, Q ₉₅ (ft)			456.8			50.0				55.0				2.5		
Control Delay (s/veh)			330.1			106.3				24.3				14.7		
Level of Service (LOS)			F			F				C				B		
Approach Delay (s/veh)	330.1				106.3				2.9				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	6/5/2024	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)		31	1	210		0	1	29	0	178	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		

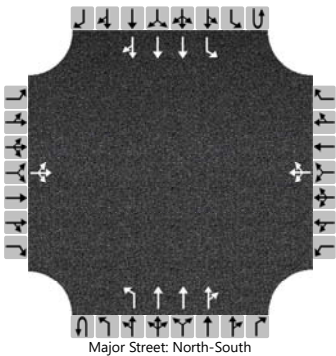
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			295			37				217				23		
Capacity, c (veh/h)			0			0				186				203		
v/c Ratio										1.17				0.11		
95% Queue Length, Q ₉₅ (veh)										27.5				0.4		
95% Queue Length, Q ₉₅ (ft)										687.5				10.0		
Control Delay (s/veh)										429.9				25.0		
Level of Service (LOS)										F				C		
Approach Delay (s/veh)									51.4				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		

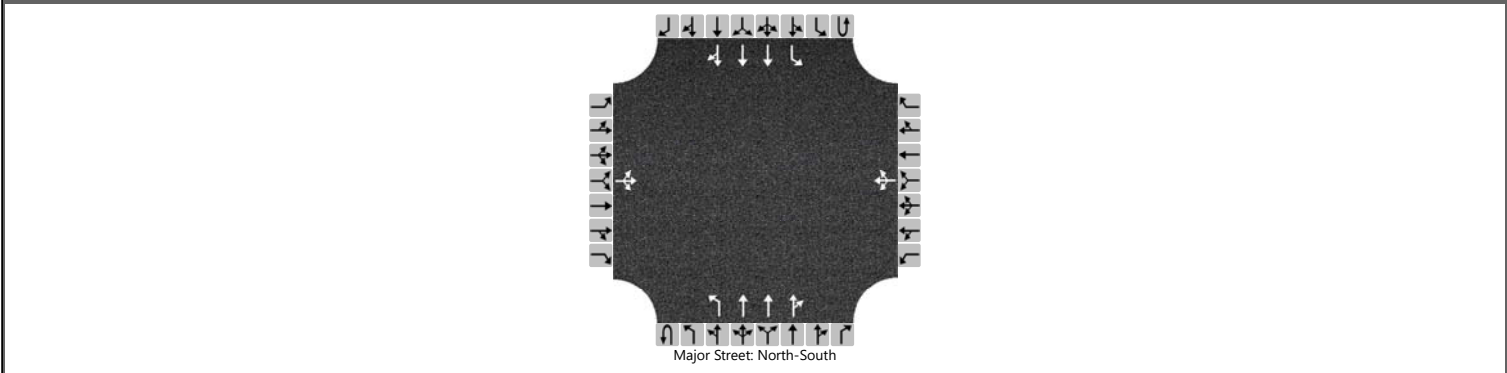
Delay, Queue Length, and Level of Service

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		

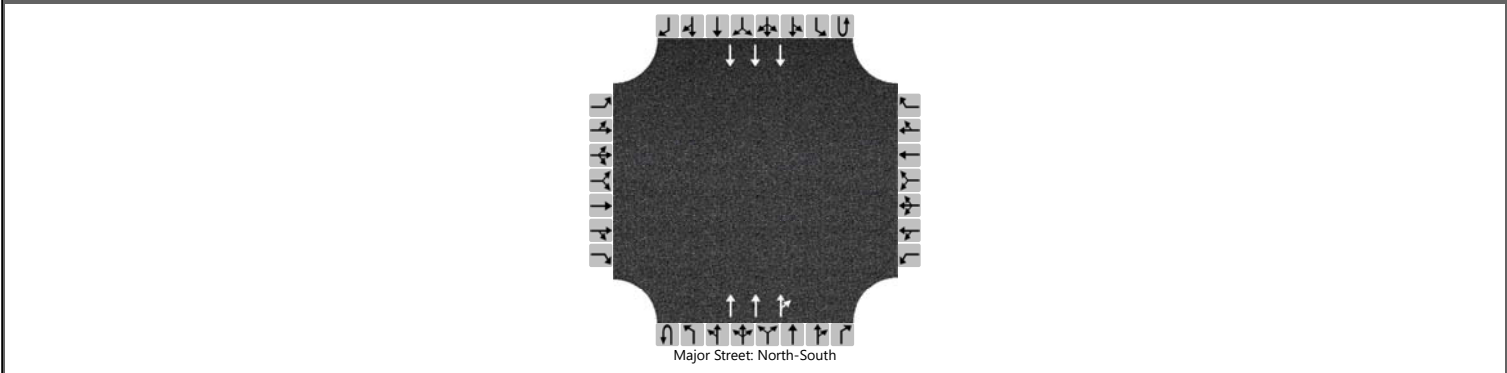
Delay, Queue Length, and Level of Service

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)																

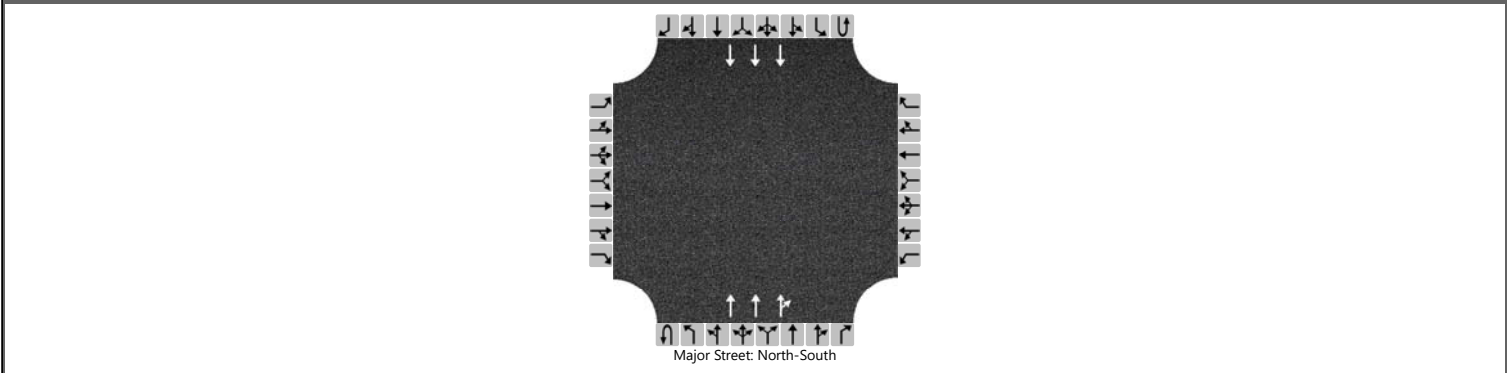
Delay, Queue Length, and Level of Service

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)																

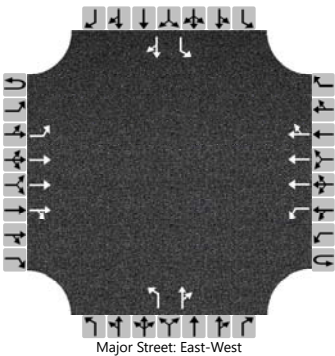
Delay, Queue Length, and Level of Service

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

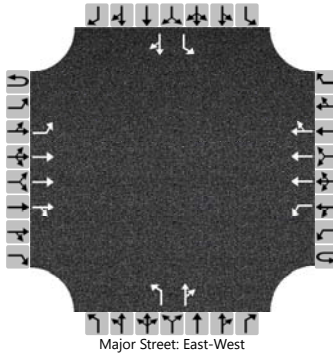
Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	3	0	0	1	3	0		1	1	0		1	1	0
Configuration		L	T	TR		L	T	TR		L		TR		L		TR
Volume (veh/h)	0	40	627	14	0	20	811	6		10	0	23		6	1	38
Percent 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															

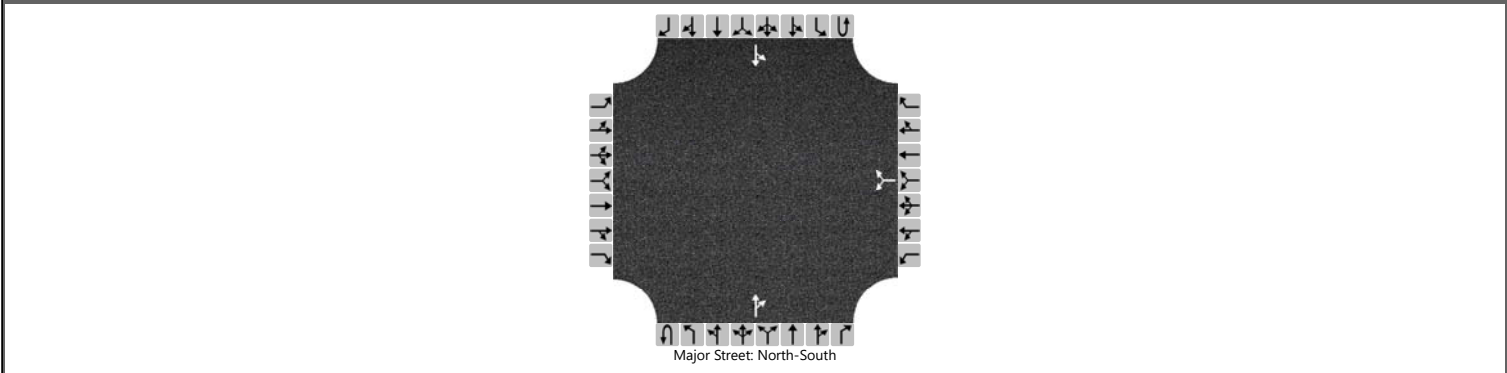
Critical and Follow-up Headways																
Base Critical Headway (sec)		5.3				5.3				6.4	6.5	7.1		6.4	6.5	7.1
Critical Headway (sec)		5.30				5.32				6.40	6.50	7.10		6.40	6.50	7.10
Base Follow-Up Headway (sec)		3.1				3.1				3.8	4.0	3.9		3.8	4.0	3.9
Follow-Up Headway (sec)		3.10				3.11				3.80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

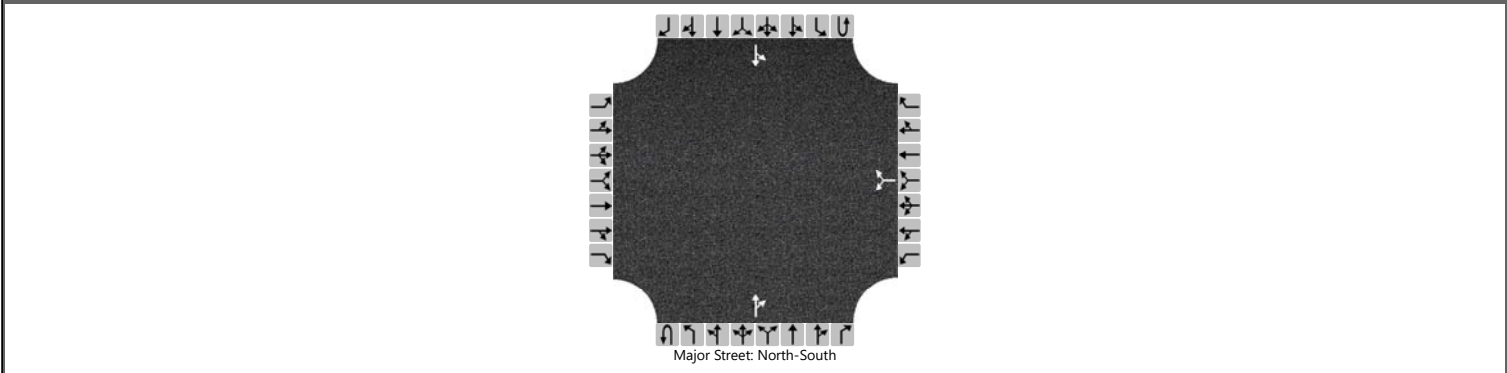
Delay, Queue Length, and Level of Service

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		

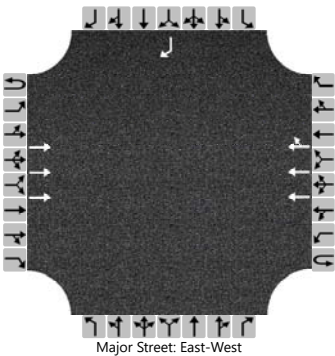
Delay, Queue Length, and Level of Service

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

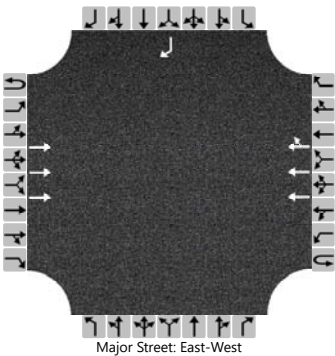
Delay, Queue Length, and Level of Service

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

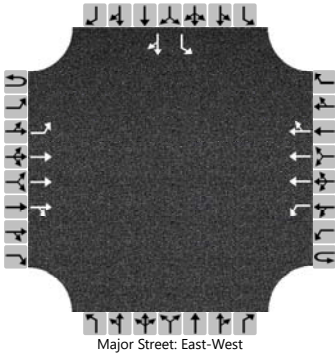
Delay, Queue Length, and Level of Service

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	6/5/2024	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	168						38	1	108
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

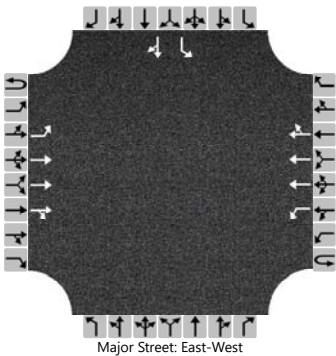
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		83				44								49		140
Capacity, c (veh/h)		327				514								74		358
v/c Ratio		0.25				0.08								0.66		0.39
95% Queue Length, Q ₉₅ (veh)		1.0				0.3								4.3		1.9
95% Queue Length, Q ₉₅ (ft)		25.2				7.5								109.2		48.3
Control Delay (s/veh)		19.8				12.7								135.9		21.5
Level of Service (LOS)		C				B								F		C
Approach Delay (s/veh)	1.9				0.5								51.1			
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	6/5/2024	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	203						50	0	84
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

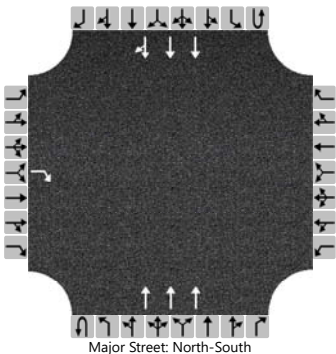
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		75				39								57		95
Capacity, c (veh/h)		226				360								36		306
v/c Ratio		0.33				0.11								1.58		0.31
95% Queue Length, Q ₉₅ (veh)		1.5				0.4								15.8		1.3
95% Queue Length, Q ₉₅ (ft)		37.5				10.0								395.0		32.5
Control Delay (s/veh)		28.8				16.2								1377.9		22.1
Level of Service (LOS)		D				C								F		C
Approach Delay (s/veh)	1.9				0.4								528.0			
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	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												

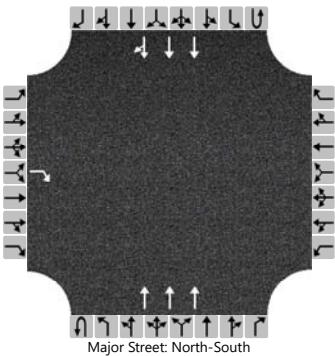
Delay, Queue Length, and Level of Service

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												

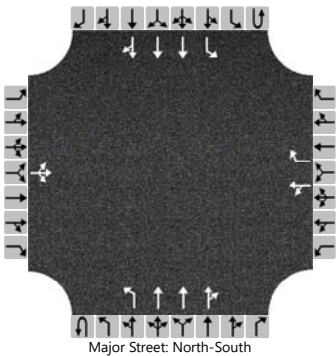
Delay, Queue Length, and Level of Service

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	6/5/2024	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	1	3	0	0	1	3	0
Configuration			LTR			LT		R		L	T	TR		L	T	TR
Volume (veh/h)		45	1	112		0	0	5	0	86	1059	2	0	8	1042	39
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		

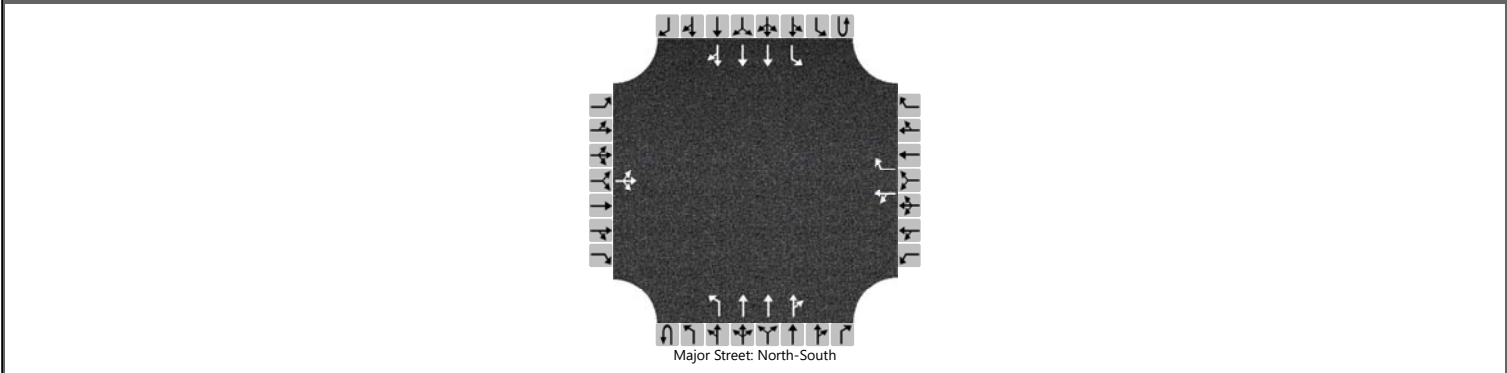
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			198			0		6		108				10		
Capacity, c (veh/h)			86			0		350		266				276		
v/c Ratio			2.29					0.02		0.40				0.04		
95% Queue Length, Q ₉₅ (veh)			60.5					0.1		2.0				0.1		
95% Queue Length, Q ₉₅ (ft)			1512.5					2.5		50.4				2.5		
Control Delay (s/veh)			2440.6					15.5		27.6				18.5		
Level of Service (LOS)			F					C		D				C		
Approach Delay (s/veh)	2440.6								2.1				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	6/5/2024	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	1	3	0	0	1	3	0
Configuration			LTR			LT		R		L	T	TR		L	T	TR
Volume (veh/h)		33	0	129		7	1	53	0	87	1532	13	0	43	1520	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		

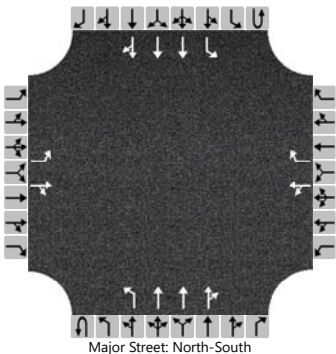
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			208			10		68		112				55		
Capacity, c (veh/h)			4			0		213		129				131		
v/c Ratio			56.39			50.11		0.32		0.87				0.42		
95% Queue Length, Q ₉₅ (veh)			105.0			7.2		1.4		9.3				2.1		
95% Queue Length, Q ₉₅ (ft)			2625.0			180.0		35.0		232.5				52.5		
Control Delay (s/veh)			101678.2			121296.2		29.7		152.8				52.0		
Level of Service (LOS)			F			F		D		F				F		
Approach Delay (s/veh)	101678.2				15933.5				8.1				1.4			
Approach LOS	F				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	7/3/2024	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 Buildout Alternative		

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		1	1	0		0	1	1	0	1	3	0	0	1	3	0
Configuration		L		TR		LT		R		L	T	TR		L	T	TR
Volume (veh/h)		45	1	112		0	0	5	0	86	1059	2	0	8	1042	39
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		

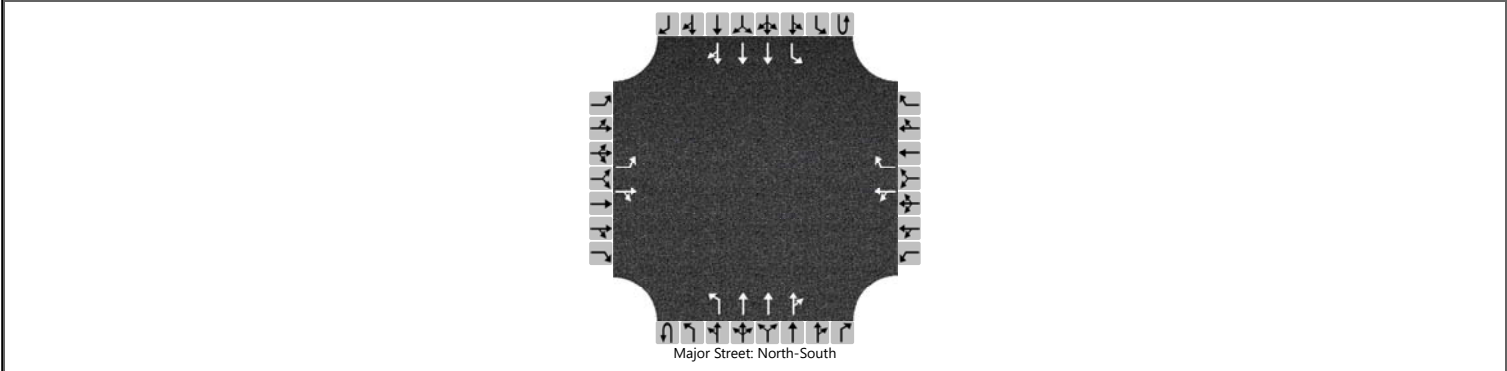
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		56		141		0		6		108				10		
Capacity, c (veh/h)		32		261		0		350		266				276		
v/c Ratio		1.75		0.54				0.02		0.40				0.04		
95% Queue Length, Q ₉₅ (veh)		17.0		3.3				0.1		2.0				0.1		
95% Queue Length, Q ₉₅ (ft)		425.0		82.5				2.5		50.4				2.5		
Control Delay (s/veh)		1690.1		34.7				15.5		27.6				18.5		
Level of Service (LOS)		F		D				C		D				C		
Approach Delay (s/veh)	506.1								2.1				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	7/3/2024	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 Buildout Alternative		

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		1	1	0		0	1	1	0	1	3	0	0	1	3	0
Configuration		L		TR		LT		R		L	T	TR		L	T	TR
Volume (veh/h)		33	0	129		7	1	53	0	87	1532	13	0	43	1520	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		

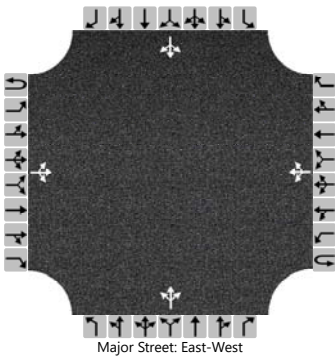
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		42		165		10		68		112				55		
Capacity, c (veh/h)		1		211		0		213		129				131		
v/c Ratio		55.61		0.78		50.11		0.32		0.87				0.42		
95% Queue Length, Q ₉₅ (veh)		23.5		8.0		7.2		1.4		9.3				2.1		
95% Queue Length, Q ₉₅ (ft)		587.5		200.0		180.0		35.0		232.5				52.5		
Control Delay (s/veh)		107640.7		76.1		121296.2		29.7		152.8				52.0		
Level of Service (LOS)		F		F		F		D		F				F		
Approach Delay (s/veh)	21987.4				15933.5				8.1				1.4			
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	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

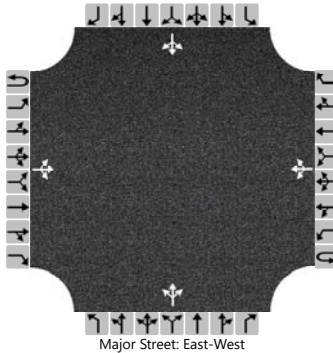
Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	1	0
Configuration			LTR				LTR				LTR				LTR	
Volume (veh/h)		5	78	4		52	129	39		31	5	26		29	2	10
Percent Heavy 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			

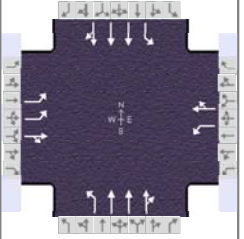
APPENDIX F
2036 NO BUILD INTERSECTION WARRANT ANALYSIS

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	

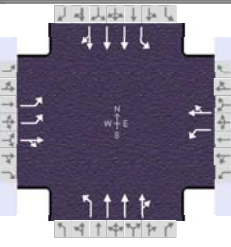
Movement Group Results

	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					

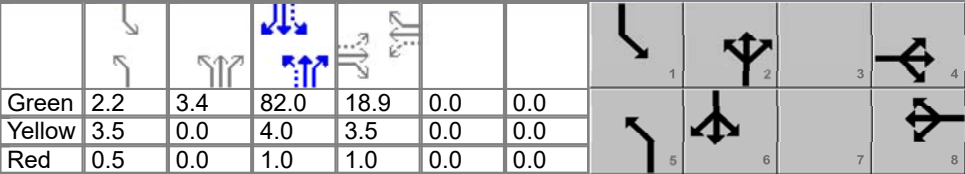
Multimodal Results

	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

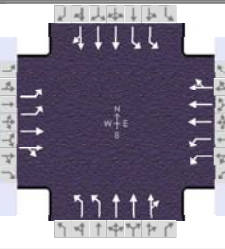
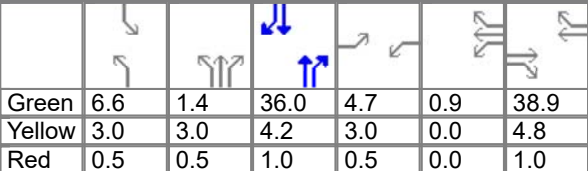
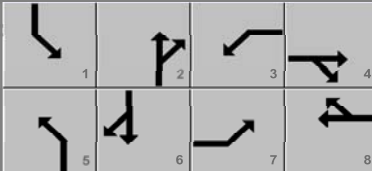
Signal Information																		
Cycle, s	120.0	Reference Phase	2															
Offset, s	53	Reference Point	End															
Uncoordinated	No	Simult. Gap E/W	On	Green	2.2	3.4	82.0	18.9	0.0	0.0								
Force Mode	Fixed	Simult. Gap N/S	On	Yellow	3.5	0.0	4.0	3.5	0.0	0.0								
				Red	0.5	0.0	1.0	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		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

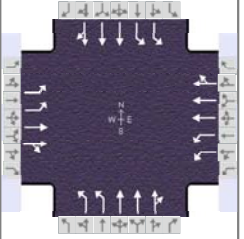
General Information						Intersection Information													
Agency	BH					Duration, h		1.000											
Analyst	AG		Analysis Date	Jun 4, 2024		Area Type		Other											
Jurisdiction	CoA		Time Period	NBAM		PHF		1.00											
Urban Street	Carlisle Blvd		Analysis Year	2036		Analysis Period		1> 7:00											
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 (ν), 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																
Force Mode	Fixed	Simult. Gap N/S	On																
				Green	6.6	1.4	36.0	4.7	0.9	38.9									
				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 (ν), 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

	EB			WB			NB			SB		
Approach Movement	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	Green	10.8	3.2	34.9	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	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

	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	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

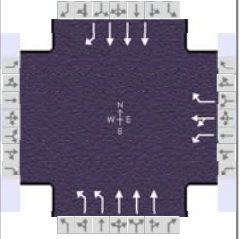
	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	2.71		C	2.71		C	2.58		C	2.59		C
Bicycle LOS Score / LOS	1.47		A	1.33		A	1.41		A	1.40		A

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

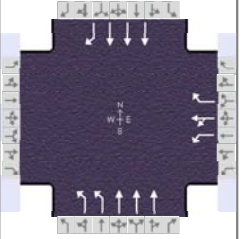
	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	2.74		C	2.61		C	1.86		B	1.68		B
Bicycle LOS Score / LOS				1.46		A	1.42		A	1.13		A

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



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

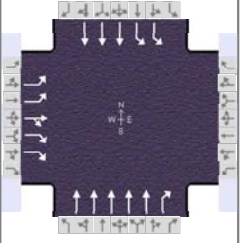
	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	2.75		C	2.62		C	1.87		B	1.68		B
Bicycle LOS Score / LOS				1.94		B	1.55		B	1.36		A

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

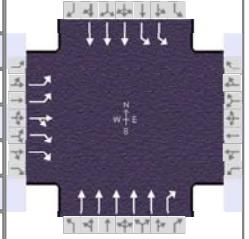
	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	2.87		C	2.98		C	1.67		B	2.23		B
Bicycle LOS Score / LOS	2.45		B				0.89		A	1.13		A

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	

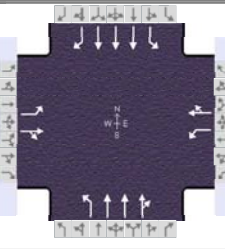
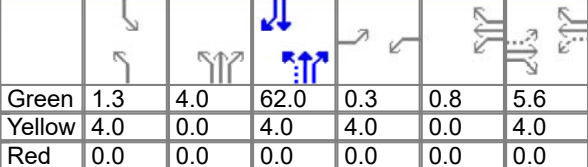
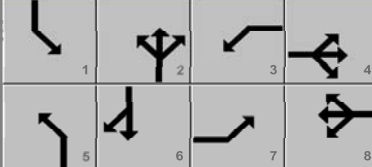
Movement Group Results

	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

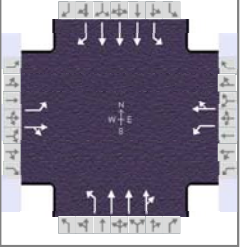
General Information						Intersection Information													
Agency	BH					Duration, h		1.000											
Analyst	AG		Analysis Date	7/2/2024		Area Type		Other											
Jurisdiction	CoA		Time Period	NBAM		PHF		1.00											
Urban Street	Carlisle Blvd		Analysis Year	2036		Analysis Period		1> 7:00											
Intersection	Carlisle & Phoenix		File Name	2036 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	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																
Force Mode	Fixed	Simult. Gap N/S	On																
				Green	1.3	4.0	62.0	0.3	0.8	5.6									
				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					

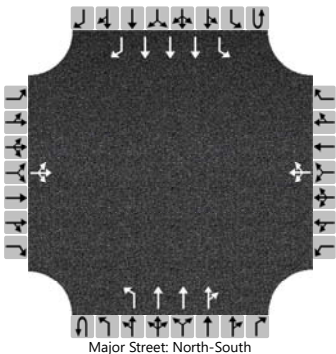
Multimodal Results

	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		

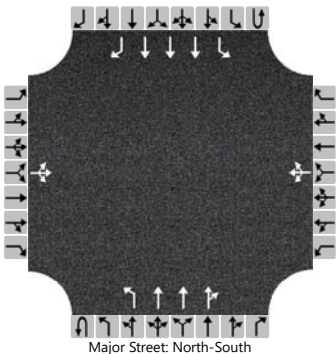
Delay, Queue Length, and Level of Service

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		

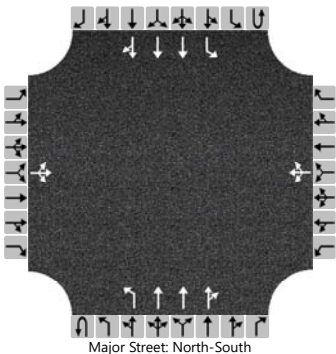
Delay, Queue Length, and Level of Service

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		

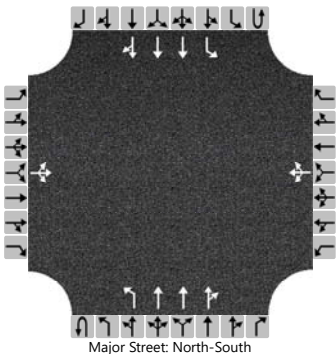
Delay, Queue Length, and Level of Service

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		

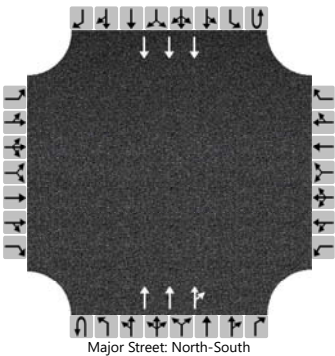
Delay, Queue Length, and Level of Service

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)																

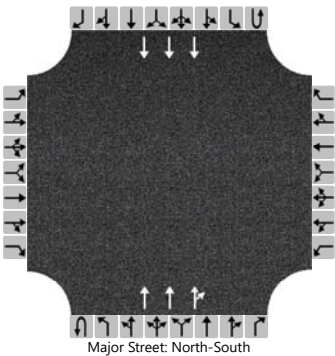
Delay, Queue Length, and Level of Service

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)																

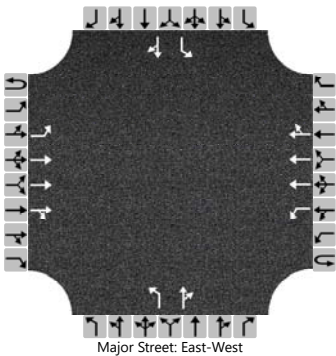
Delay, Queue Length, and Level of Service

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

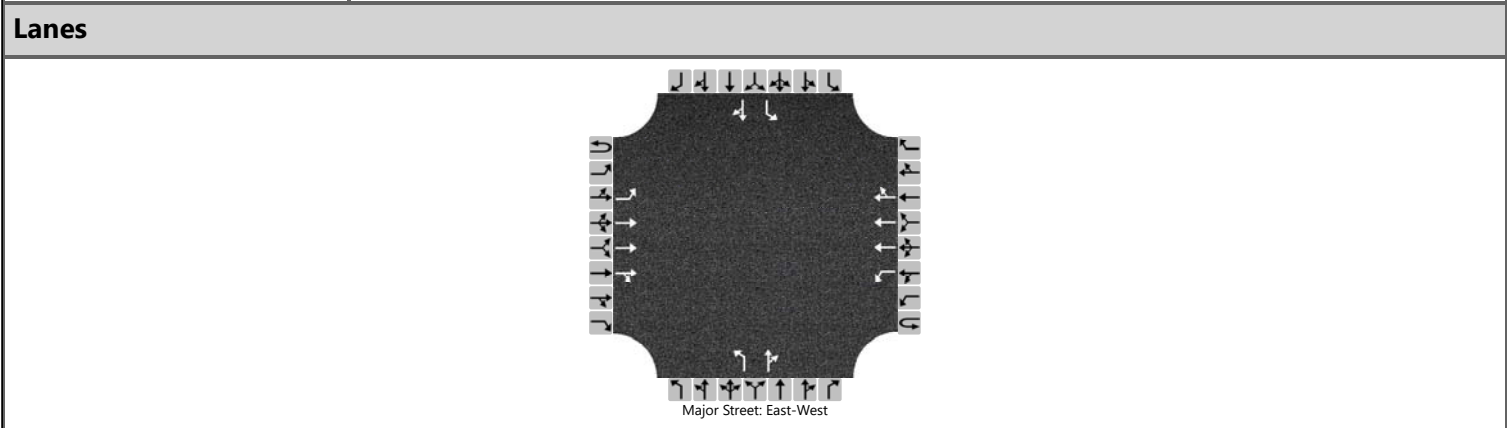
Base Critical Headway (sec)		5.3				5.3				6.4	6.5	7.1		6.4	6.5	7.1
Critical Headway (sec)		5.32				5.32				6.40	6.50	7.10		6.44	6.54	7.14
Base Follow-Up Headway (sec)		3.1				3.1				3.8	4.0	3.9		3.8	4.0	3.9
Follow-Up Headway (sec)		3.11				3.11				3.80	4.00	3.90		3.82	4.02	3.92

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		



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															

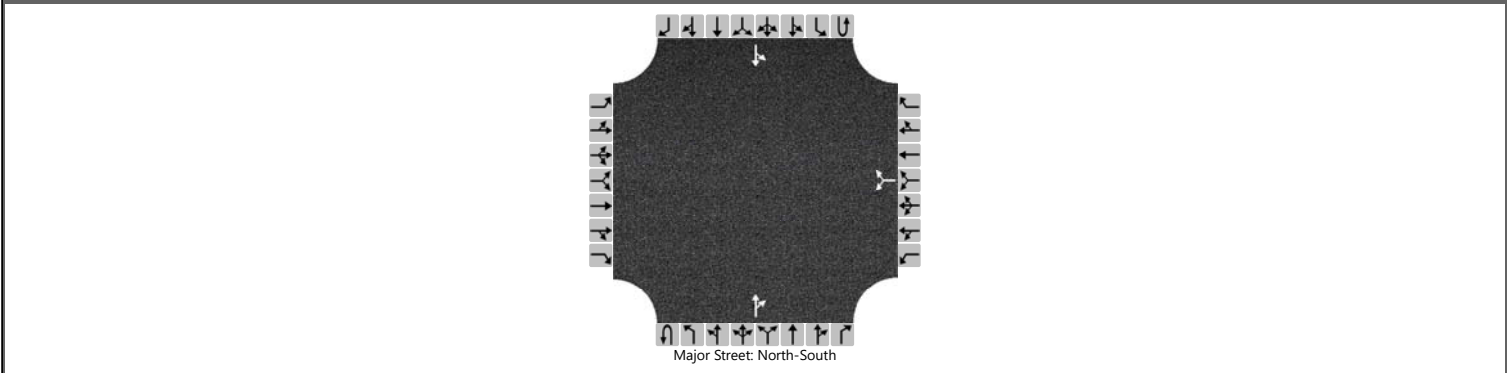
Critical and Follow-up Headways																
Base Critical Headway (sec)		5.3				5.3				6.4	6.5	7.1		6.4	6.5	7.1
Critical Headway (sec)		5.30				5.32				6.40	6.50	7.10		6.40	6.50	7.10
Base Follow-Up Headway (sec)		3.1				3.1				3.8	4.0	3.9		3.8	4.0	3.9
Follow-Up Headway (sec)		3.10				3.11				3.80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

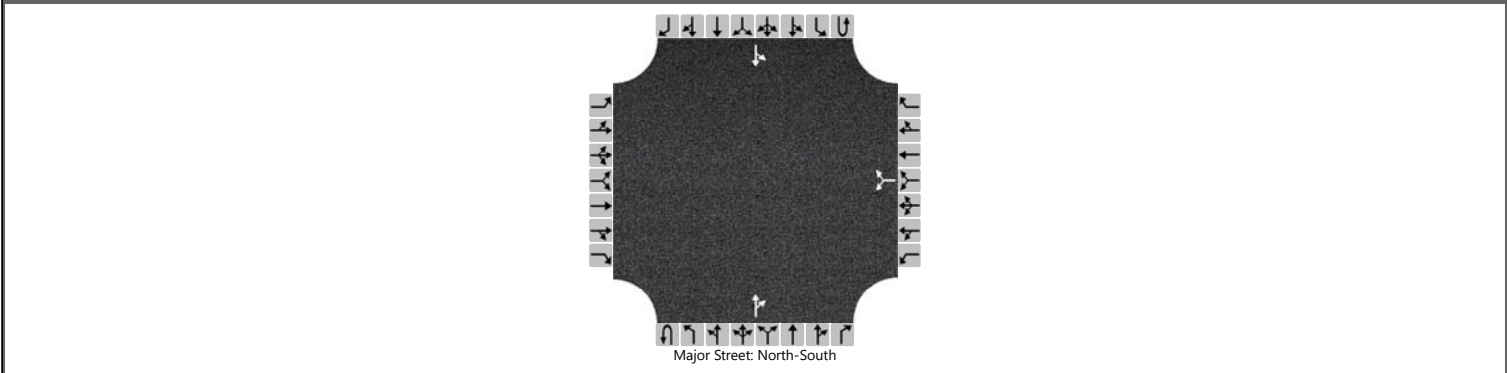
Delay, Queue Length, and Level of Service

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		

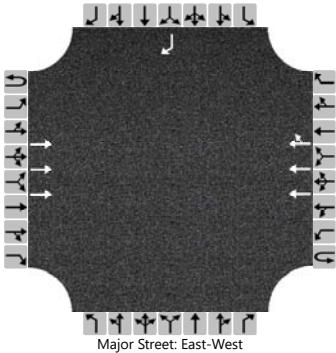
Delay, Queue Length, and Level of Service

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

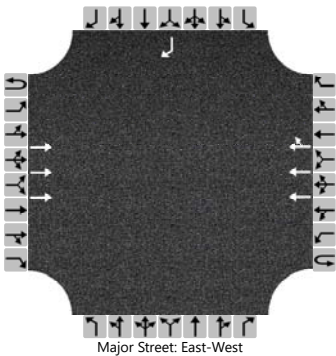
Delay, Queue Length, and Level of Service

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

Analyst

AG

Agency/Co.

BH

Date Performed

6/5/2024

Analysis Year

2036

Time Analyzed

NBAM

Intersection Orientation

East-West

Project Description

Carlisle & Menaul TIA

Site Information

Intersection

Menaul & Access 2

Jurisdiction

CoA

East/West Street

Menaul Blvd

North/South Street

Access 2

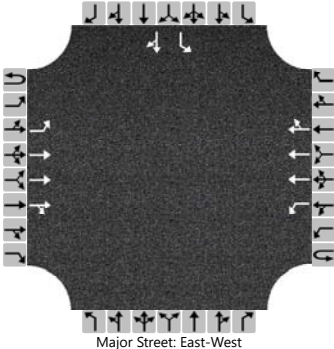
Peak Hour Factor

0.78

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		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			

Copyright © 2024 University of Florida. All Rights Reserved.

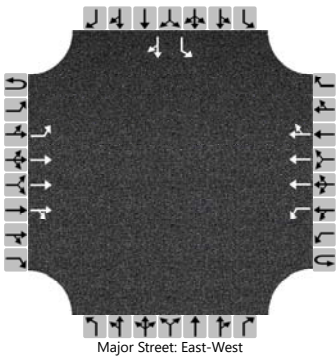
HCS™ TWSC Version 2024
2036 NBAM Menaul & Access 2.xtw

Generated: 6/27/2024 4:05:43 PM

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

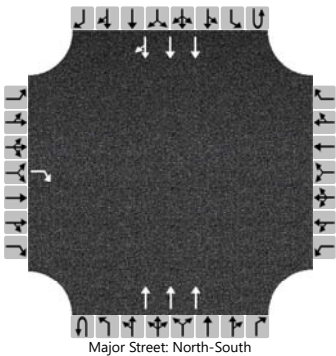
Delay, Queue Length, and Level of Service

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												

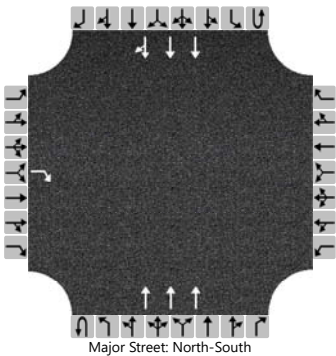
Delay, Queue Length, and Level of Service

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												

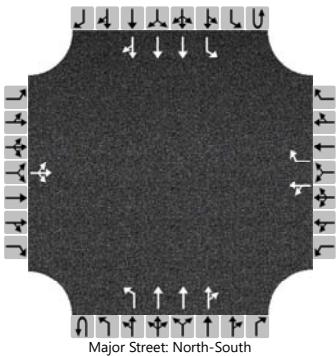
Delay, Queue Length, and Level of Service

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		

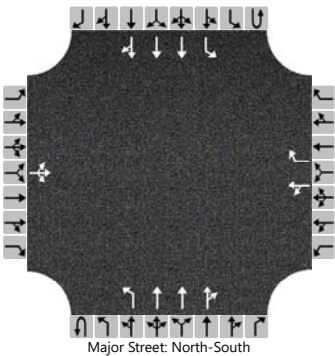
Delay, Queue Length, and Level of Service

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

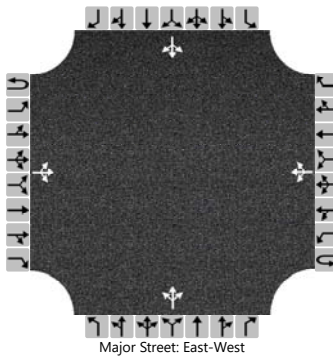
Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	1	0	1	3	0	0	1	3	0
Configuration			LTR			LT		R		L	T	TR		L	T	TR
Volume (veh/h)		1	0	6		8	1	58	0	7	1675	15	0	47	1653	2
Percent Heavy 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															

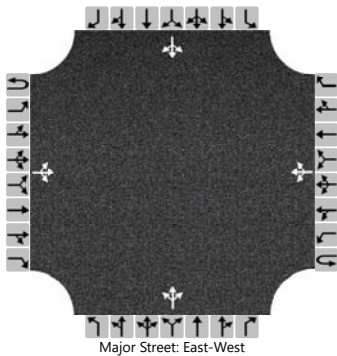
Critical and Follow-up Headways

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																
 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	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				

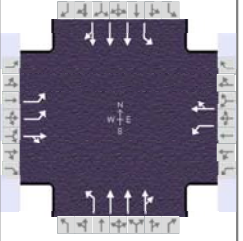
APPENDIX G
2036 BUILD INTERSECTION CAPACITY ANALYSIS

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

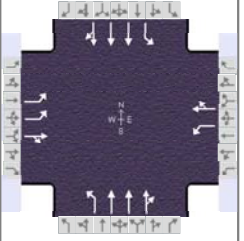
	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	2.60	C		2.60	C		1.85	B		2.05	B	
Bicycle LOS Score / LOS	0.79	A		0.62	A		1.04	A		1.00	A	

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

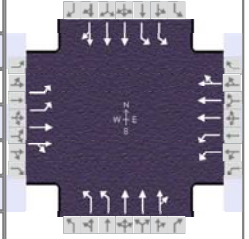
	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	2.60		C	2.60		C	1.86		B	2.06		B
Bicycle LOS Score / LOS	1.14		A	0.63		A	1.26		A	1.26		A

HCS Signalized Intersection Results Summary

General Information

Agency	BH		
Analyst	AG	Analysis Date	Jul 1, 2024
Jurisdiction	CoA	Time Period	BAM
Urban Street	Carlisle Blvd	Analysis Year	2036
Intersection	Carlisle & Menaul	File Name	2036 BAM Signalized Network
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	94	517	158	119	561	239	300	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	1.2	34.7	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	16.2	44.6	11.5	39.9
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	12.5		7.8	
Green Extension Time (g_e), s	0.1	3.3	0.1	3.4	0.3	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	345	832	387	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	10.5	21.9	21.7	5.8	13.6	14.2
Cycle Queue Clearance Time (g_c), s	2.9	16.2	16.4	3.7	12.0	12.5	10.5	21.9	21.7	5.8	13.6	14.2
Green Ratio (g/C)	0.04	0.35	0.35	0.05	0.36	0.36	0.12	0.36	0.36	0.07	0.32	0.32
Capacity (c), veh/h	150	667	614	181	1377	585	404	1349	626	257	1197	563
Volume-to-Capacity Ratio (X)	0.625	0.525	0.529	0.659	0.404	0.417	0.855	0.617	0.618	0.738	0.463	0.468
Back of Queue (Q), ft/ln (95 th percentile)	59	309	290	73	234	219	200	403	380	117	268	277
Back of Queue (Q), veh/ln (95 th percentile)	2.3	12.3	11.6	2.9	9.4	8.7	7.9	16.0	15.2	4.7	10.7	11.1
Queue Storage Ratio (RQ) (95 th percentile)	0.27	0.00	0.00	0.42	0.00	0.00	1.05	0.00	0.00	0.58	0.00	0.00
Uniform Delay (d_1), s/veh	51.8	28.2	28.2	51.2	26.2	26.3	42.5	36.1	34.9	50.2	33.1	35.2
Incremental Delay (d_2), s/veh	1.6	3.0	3.3	1.5	0.9	2.2	10.6	1.9	4.1	1.5	1.3	2.7
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	53.4	31.2	31.5	52.8	27.1	28.5	53.1	38.0	39.0	51.7	34.4	37.9
Level of Service (LOS)	D	C	C	D	C	C	D	D	D	D	C	D
Approach Delay, s/veh / LOS	34.0	C		30.8	C		41.6	D		38.6	D	
Intersection Delay, s/veh / LOS	37.2						D					

Multimodal Results

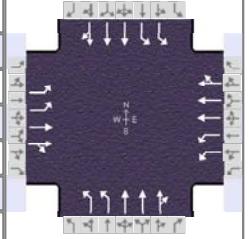
	EB			WB			NB			SB		
Pedestrian LOS Score / LOS	2.71	C		2.71	C		2.58	C		2.58	C	
Bicycle LOS Score / LOS	1.12	A		0.99	A		1.24	A		1.19	A	

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 & Menaul	File Name	2036 BPM Signalized Network
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	164	791	243	262	980	383	391	1234	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	11.7	0.4	33.3	7.6	3.4	42.0		
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	11.1	47.8	14.6	51.3	19.1	42.4	15.2	38.5
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	15.6		11.4	
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		0.33	

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	410	995	467	281	702	335
Adjusted Saturation Flow Rate (s), veh/h/ln	1757	1900	1746	1757	1900	1626	1757	1900	1785	1757	1900	1809
Queue Service Time (g_s), s	5.5	30.9	30.9	8.8	25.0	25.0	13.6	30.5	30.4	9.4	20.2	20.6
Cycle Queue Clearance Time (g_c), s	5.5	30.9	30.9	8.8	25.0	25.0	13.6	30.5	30.4	9.4	20.2	20.6
Green Ratio (g/C)	0.06	0.35	0.35	0.09	0.38	0.38	0.13	0.31	0.31	0.10	0.28	0.28
Capacity (c), veh/h	223	666	612	324	1440	616	457	1178	553	343	1055	502
Volume-to-Capacity Ratio (X)	0.734	0.809	0.810	0.809	0.663	0.663	0.898	0.845	0.845	0.819	0.665	0.668
Back of Queue (Q), ft/ln (95 th percentile)	111	564	530	183	433	398	245	542	537	196	379	391
Back of Queue (Q), veh/ln (95 th percentile)	4.4	22.6	21.2	7.3	17.3	15.9	9.8	21.7	21.5	7.8	15.2	15.6
Queue Storage Ratio (RQ) (95 th percentile)	0.51	0.00	0.00	1.04	0.00	0.00	1.29	0.00	0.00	0.98	0.00	0.00
Uniform Delay (d_1), s/veh	55.2	35.3	35.3	53.4	30.9	30.9	44.9	47.4	46.5	53.8	41.6	43.4
Incremental Delay (d_2), s/veh	1.8	11.1	12.1	4.9	2.4	5.7	18.1	5.8	12.1	6.2	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	57.0	46.5	47.4	58.3	33.4	36.6	63.0	53.2	58.6	60.0	44.7	50.2
Level of Service (LOS)	E	D	D	E	C	D	E	D	E	E	D	D
Approach Delay, s/veh / LOS	48.3	D		38.2	D		56.7	E		49.4	D	
Intersection Delay, s/veh / LOS	48.4						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		1.47	A		1.49	A	

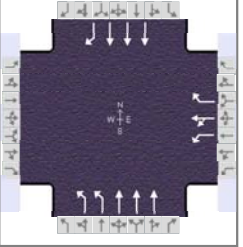
HCS Signalized Intersection Results Summary

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			

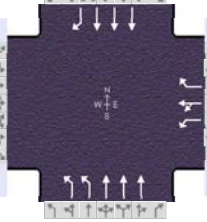
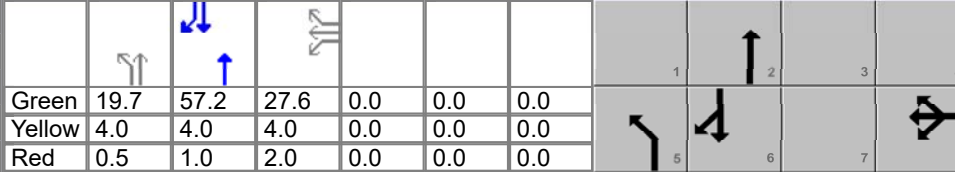
Movement Group Results

	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				

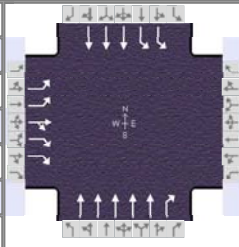
Multimodal Results

	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

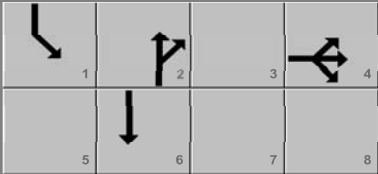
HCS Signalized Intersection Results Summary

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		F	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	

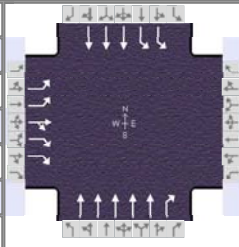
Signal Information											
Cycle, s	110.0	Reference Phase	2								
Offset, s	92	Reference Point	End								
Uncoordinated	No	Simult. Gap E/W	On								
Force Mode	Fixed	Simult. Gap N/S	On								
				Green	8.6	61.6	23.8	0.0	0.0	0.0	
				Yellow	4.0	4.0	4.5	0.0	0.0	0.0	
				Red	0.5	1.0	2.0	0.0	0.0	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	

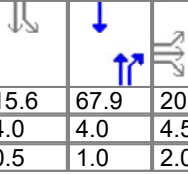
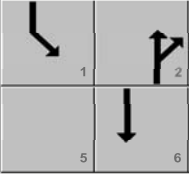
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14					2	12	1	6	
Adjusted Flow Rate (v), veh/h	636	201	370					1061	205	200	832	
Adjusted Saturation Flow Rate (s), veh/h/ln	1757	1613	1610					1725	1610	1757	1725	
Queue Service Time (g_s), s	19.1	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		15.6	67.9	20.5	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				Green	15.6	67.9	20.5	0.0	0.0	0.0	
Yellow				Yellow	4.0	4.0	4.5	0.0	0.0	0.0	
Red				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	

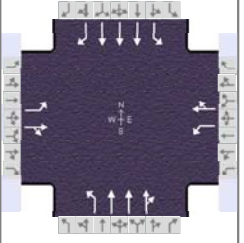
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	7	4	14					2	12	1	6	
Adjusted Flow Rate (v), veh/h	491	199	354					1499	332	375	1146	
Adjusted Saturation Flow Rate (s), veh/h/ln	1757	1623	1610					1725	1610	1757	1725	
Queue Service Time (g_s), s	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			Duration, h
Analyst	AG	Analysis Date	7/2/2024	Area Type
Jurisdiction	CoA	Time Period	BAM	PHF
Urban Street	Carlisle Blvd	Analysis Year	2036	Analysis Period
Intersection	Carlisle & Phoenix	File Name	2036 BAM 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	27	0	109	8	2	15	125	959	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	0.4	59.1	1.1	1.9	6.2		
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	6.9	12.1	5.1	10.2	9.7	67.5	5.3	63.1
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	3.1	3.4	3.1	0.0	3.1	0.0
Queue Clearance Time (g_s), s	3.2	8.0	2.4	2.9	3.7		2.5	
Green Extension Time (g_e), s	0.0	0.2	0.0	0.2	0.2	0.0	0.0	0.0
Phase Call Probability	0.49	0.98	0.18	0.96	0.96		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	27	109		8	17		125	642	321	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	1.2	6.0		0.4	0.9		1.7	5.4	5.4	0.5	7.8	1.3
Cycle Queue Clearance Time (g_c), s	1.2	6.0		0.4	0.9		1.7	5.4	5.4	0.5	7.8	1.3
Green Ratio (g/C)	0.10	0.09		0.08	0.07		0.74	0.71	0.71	0.01	0.66	0.66
Capacity (c), veh/h	221	142		102	113		510	2681	1338	27	3372	1049
Volume-to-Capacity Ratio (X)	0.122	0.766		0.078	0.150		0.245	0.240	0.240	0.377	0.307	0.063
Back of Queue (Q), ft/ln (95 th percentile)	24	111		7	16		20	77	81	11	111	19
Back of Queue (Q), veh/ln (95 th percentile)	1.0	4.4		0.3	0.6		0.8	3.1	3.2	0.4	4.4	0.7
Queue Storage Ratio (RQ) (95 th percentile)	0.00	0.00		0.07	0.16		0.19	0.00	0.00	0.12	0.00	0.21
Uniform Delay (d_1), s/veh	36.9	40.0		38.4	39.4		3.9	4.7	4.7	43.9	6.6	5.5
Incremental Delay (d_2), s/veh	0.1	3.3		0.1	0.2		0.1	0.2	0.4	3.3	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	37.0	43.3		38.5	39.6		4.0	4.9	5.1	47.2	6.9	5.6
Level of Service (LOS)	D	D		D	D		A	A	A	D	A	A
Approach Delay, s/veh / LOS	42.1		D	39.3		D	4.9		A	7.2		A
Intersection Delay, s/veh / LOS	8.5						A					

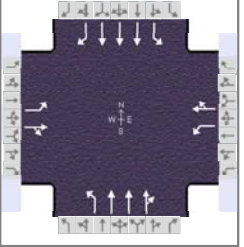
Multimodal Results

	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.60	C	2.73	C	1.85	B	1.86	B
Bicycle LOS Score / LOS	0.71	A	0.53	A	1.09	A	1.10	A

HCS Signalized Intersection Results Summary

General Information

Agency	BH			Duration, h
Analyst	AG	Analysis Date	7/2/2024	Area Type
Jurisdiction	CoA	Time Period	BPM	PHF
Urban Street	Carlisle Blvd	Analysis Year	2036	Analysis Period
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	31	1	228	0	1	31	192	1415	26	21	1420	87

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	3.5	57.1	3.2	7.8	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	7.2	19.0	0.0	11.8	10.0	64.6	6.5	61.1
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	3.3	14.4		3.7	5.0		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	0.54	1.00		1.00	0.99		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	31	229		0	32		192	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	1.3	12.4		0.0	1.7		3.0	10.0	10.0	1.0	12.5	1.9
Cycle Queue Clearance Time (g_c), s	1.3	12.4		0.0	1.7		3.0	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	139		390	2557	1266	49	3281	1021
Volume-to-Capacity Ratio (X)	0.129	0.853		0.000	0.229		0.493	0.377	0.377	0.426	0.433	0.085
Back of Queue (Q), ft/ln (95 th percentile)	26	215		0	30		40	154	160	22	183	27
Back of Queue (Q), veh/ln (95 th percentile)	1.0	8.6		0.0	1.2		1.6	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		0.36	0.00	0.00	0.24	0.00	0.30
Uniform Delay (d_1), s/veh	33.6	36.4		0.0	38.3		6.2	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	38.6		6.6	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	38.6		D	7.0		A	9.1		A
Intersection Delay, s/veh / LOS	10.6						B					

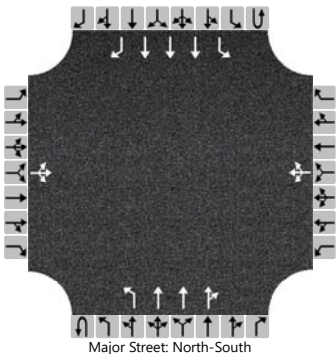
Multimodal Results

	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	1.39	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	6/5/2024	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)		27	0	109		8	2	15	0	125	959	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		

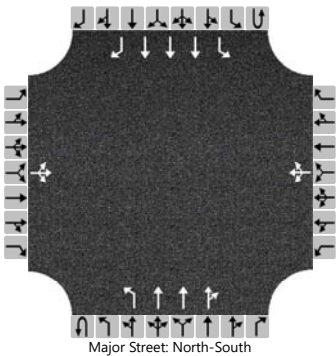
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			160			29				147				12		
Capacity, c (veh/h)			100			40				286				340		
v/c Ratio			1.61			0.74				0.51				0.03		
95% Queue Length, Q ₉₅ (veh)			36.7			4.6				3.0				0.1		
95% Queue Length, Q ₉₅ (ft)			931.5			115.0				75.0				2.5		
Control Delay (s/veh)			1221.7			283.8				30.7				16.0		
Level of Service (LOS)			F			F				D				C		
Approach Delay (s/veh)	1221.7				283.8				3.5				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	6/5/2024	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)		31	1	228		0	1	31	0	192	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		

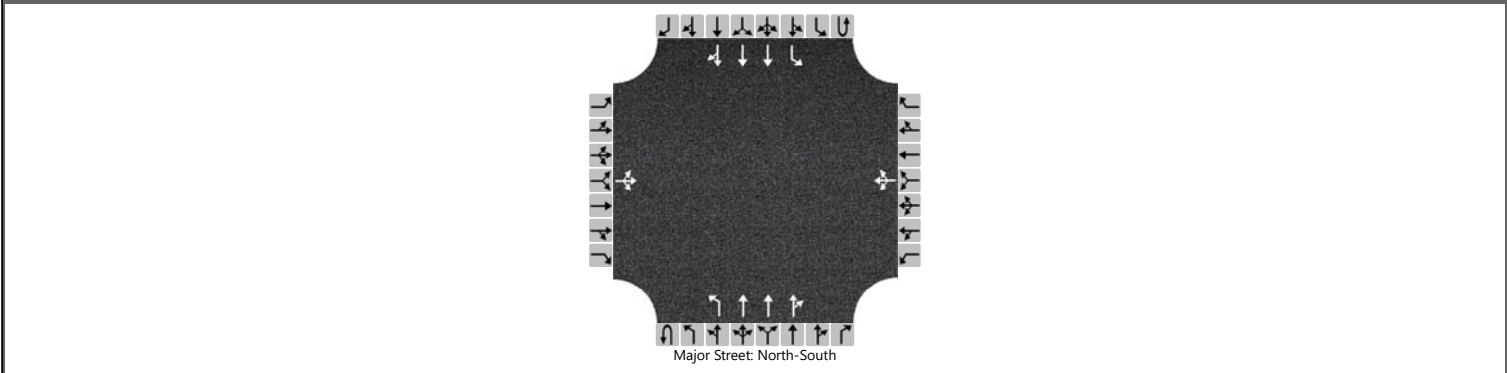
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			317				39			234				26		
Capacity, c (veh/h)			0				0			155				170		
v/c Ratio										1.51				0.15		
95% Queue Length, Q ₉₅ (veh)										47.2				0.5		
95% Queue Length, Q ₉₅ (ft)										1180.0				12.5		
Control Delay (s/veh)										1019.1				30.0		
Level of Service (LOS)										F				D		
Approach Delay (s/veh)									119.8				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		

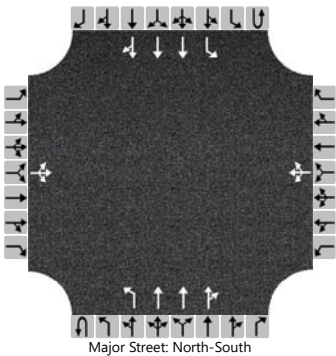
Delay, Queue Length, and Level of Service

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		

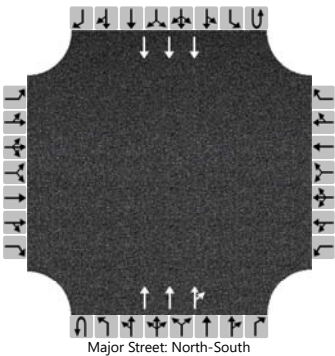
Delay, Queue Length, and Level of Service

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)																

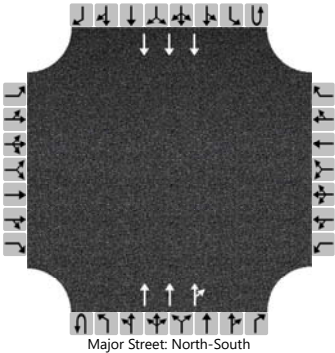
Delay, Queue Length, and Level of Service

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)																

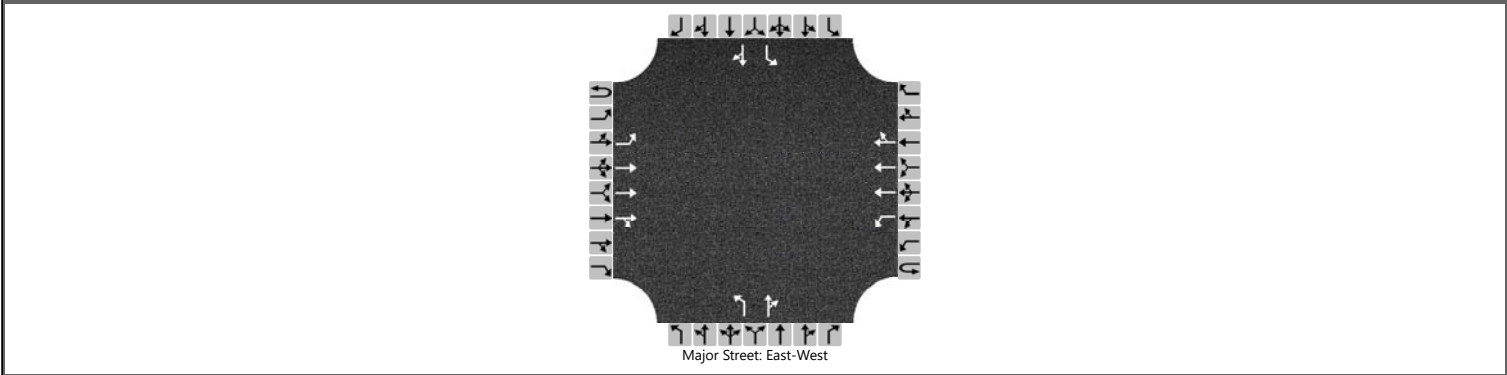
Delay, Queue Length, and Level of Service

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

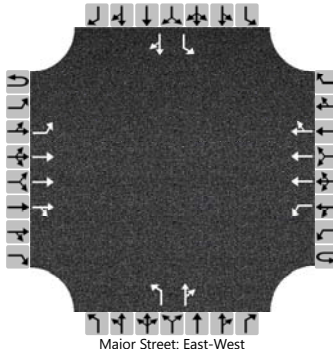
Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	1	3	0	0	1	3	0		1	1	0		1	1	0
Configuration		L	T	TR		L	T	TR		L		TR		L		TR
Volume (veh/h)	0	44	689	16	0	22	891	7		11	0	26		7	1	41
Percent 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

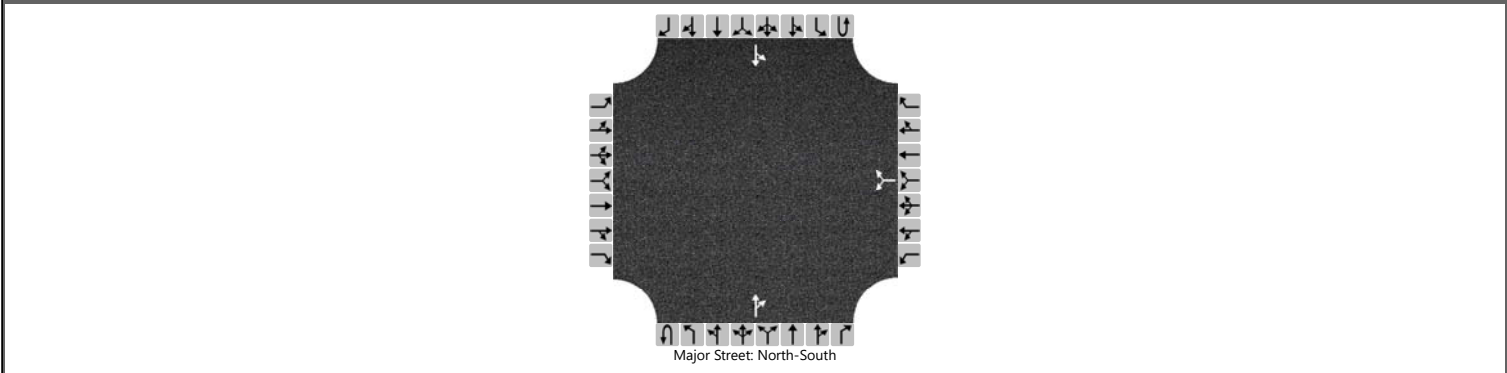
Flow Rate, v (veh/h)		60				30				15		36		10		58
Capacity, c (veh/h)		305				410				66		457		58		281
v/c Ratio		0.20				0.07				0.23		0.08		0.16		0.20
95% Queue Length, Q ₉₅ (veh)		0.7				0.2				0.9		0.3		0.6		0.8
95% Queue Length, Q ₉₅ (ft)		17.6				5.0				22.5		7.5		15.2		20.3
Control Delay (s/veh)		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		

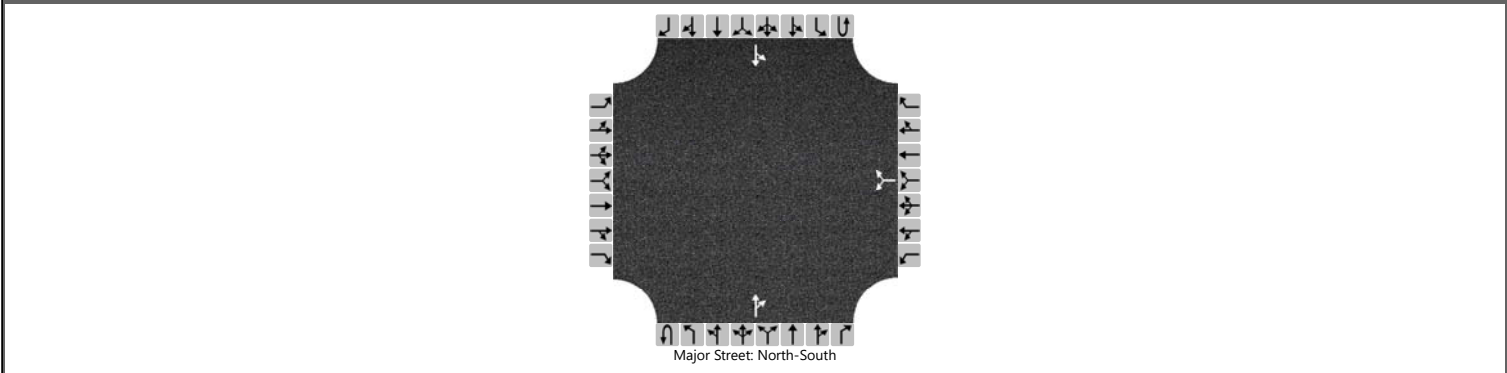
Delay, Queue Length, and Level of Service

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		

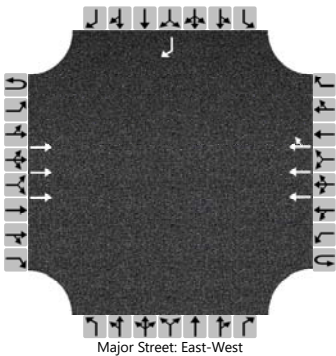
Delay, Queue Length, and Level of Service

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

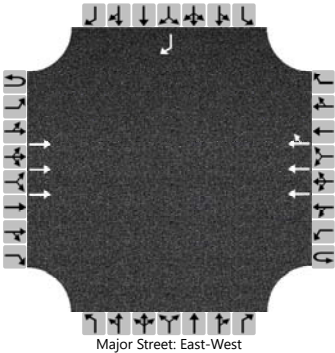
Delay, Queue Length, and Level of Service

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

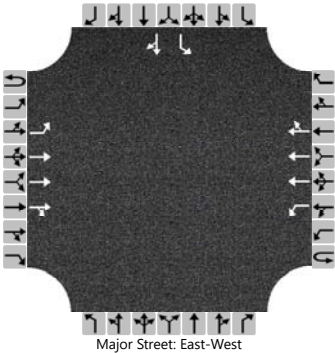
Delay, Queue Length, and Level of Service

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	6/5/2024	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	173						39	1	114
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

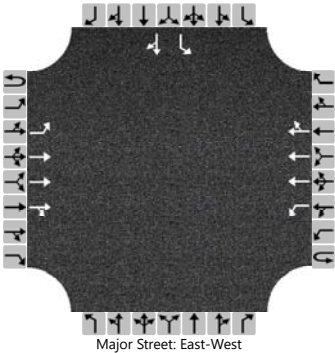
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		86				47								50		147
Capacity, c (veh/h)		290				471								56		322
v/c Ratio		0.30				0.10								0.90		0.46
95% Queue Length, Q ₉₅ (veh)		1.2				0.3								7.3		2.5
95% Queue Length, Q ₉₅ (ft)		30.2				7.5								185.4		63.5
Control Delay (s/veh)		22.6				13.5								311.0		25.5
Level of Service (LOS)		C				B								F		D
Approach Delay (s/veh)	2.1				0.5								97.8			
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	6/5/2024	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	211						52	0	88
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

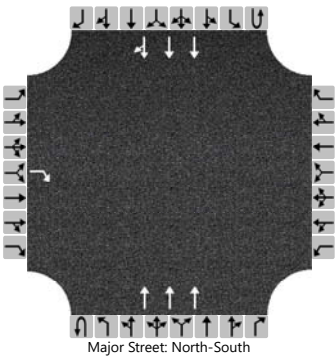
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		78				42								59		100
Capacity, c (veh/h)		192				318								23		275
v/c Ratio		0.41				0.13								2.52		0.36
95% Queue Length, Q ₉₅ (veh)		2.0				0.5								21.9		1.7
95% Queue Length, Q ₉₅ (ft)		50.0				12.5								547.5		42.5
Control Delay (s/veh)		36.4				18.0								3133.5		25.5
Level of Service (LOS)		E				C								F		D
Approach Delay (s/veh)	2.2				0.4								1179.9			
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	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												

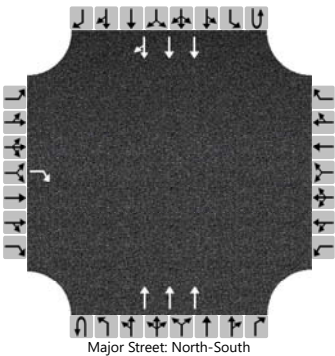
Delay, Queue Length, and Level of Service

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												

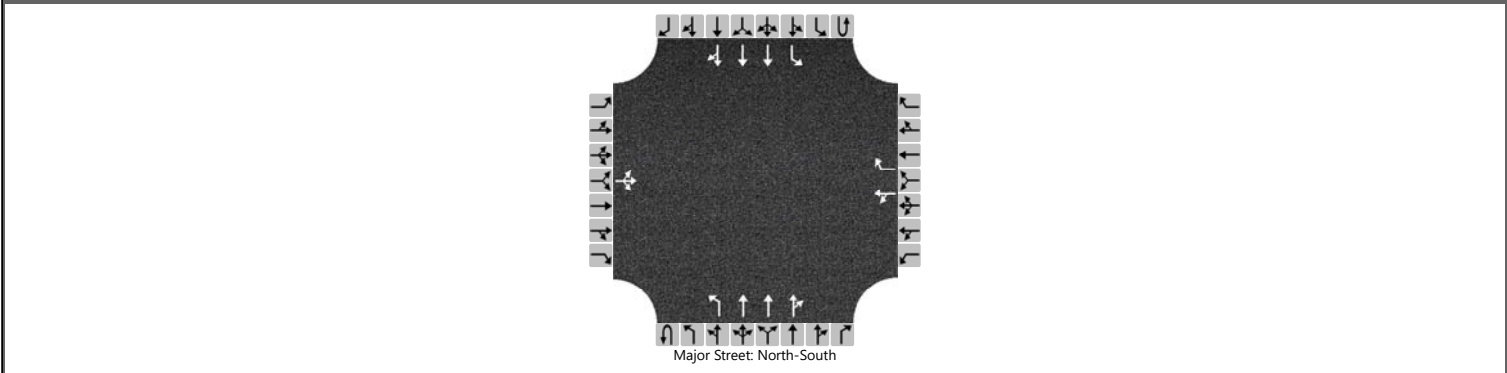
Delay, Queue Length, and Level of Service

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	6/5/2024	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	1	3	0	0	1	3	0
Configuration			LTR			LT		R		L	T	TR		L	T	TR
Volume (veh/h)		33	0	129		8	1	58	0	88	1684	15	0	47	1670	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		

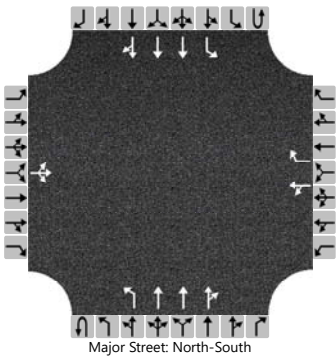
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			208		12		74		113				60			
Capacity, c (veh/h)			0		0		184		103				104			
v/c Ratio							0.41		1.09				0.58			
95% Queue Length, Q ₉₅ (veh)							2.0		15.7				3.5			
95% Queue Length, Q ₉₅ (ft)							50.0		392.5				87.5			
Control Delay (s/veh)							37.8		401.0				84.4			
Level of Service (LOS)							E		F				F			
Approach Delay (s/veh)									19.7				2.3			
Approach LOS									F				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	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	1	3	0	0	1	3	0
Configuration			LTR			LT		R		L	T	TR		L	T	TR
Volume (veh/h)		45	1	112		0	0	6	0	87	1165	2	0	9	1146	39
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		

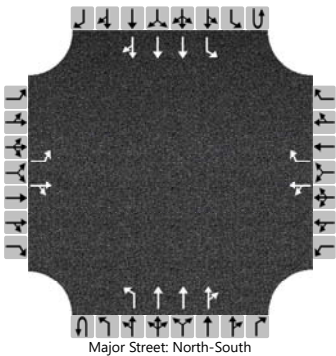
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			198			0		8		109				11		
Capacity, c (veh/h)			60			0		317		230				238		
v/c Ratio			3.32					0.02		0.47				0.05		
95% Queue Length, Q ₉₅ (veh)			73.0					0.1		2.6				0.1		
95% Queue Length, Q ₉₅ (ft)			1825.0					2.5		65.5				2.5		
Control Delay (s/veh)			4321.4					16.6		34.5				20.9		
Level of Service (LOS)			F					C		D				C		
Approach Delay (s/veh)	4321.4								2.4				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	7/3/2024	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 Buildout Alternative		

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		1	1	0		0	1	1	0	1	3	0	0	1	3	0
Configuration		L		TR		LT		R		L	T	TR		L	T	TR
Volume (veh/h)		45	1	112		0	0	6	0	87	1165	2	0	9	1146	39
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		

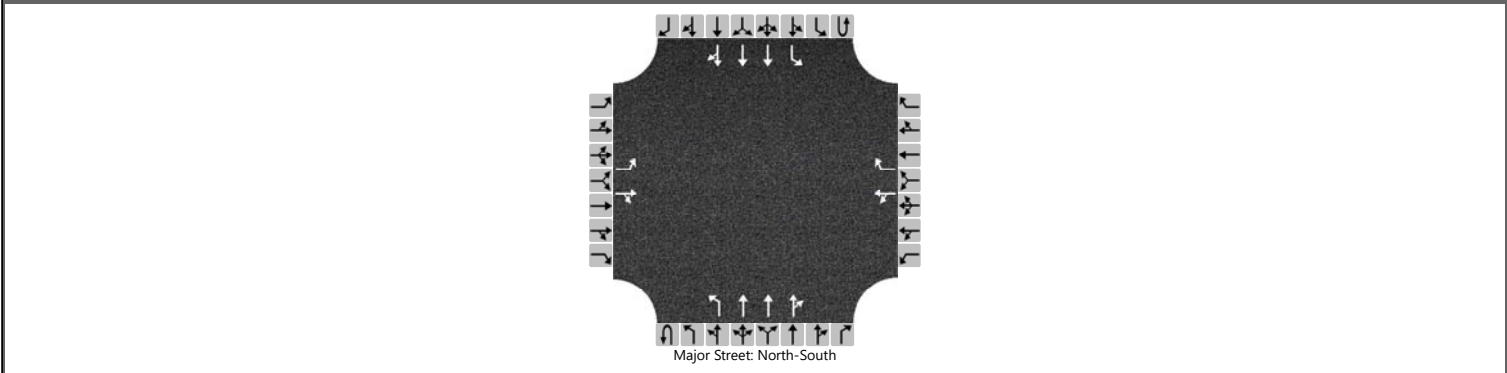
Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		56		141		0		8		109				11		
Capacity, c (veh/h)		21		208		0		317		230				238		
v/c Ratio		2.64		0.68				0.02		0.47				0.05		
95% Queue Length, Q ₉₅ (veh)		21.4		5.4				0.1		2.6				0.1		
95% Queue Length, Q ₉₅ (ft)		535.0		135.0				2.5		65.5				2.5		
Control Delay (s/veh)		3376.1		56.5				16.6		34.5				20.9		
Level of Service (LOS)		F		F				C		D				C		
Approach Delay (s/veh)	1002.0								2.4				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	7/3/2024	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 Buildout Alternative		

Lanes



Vehicle Volumes and Adjustments

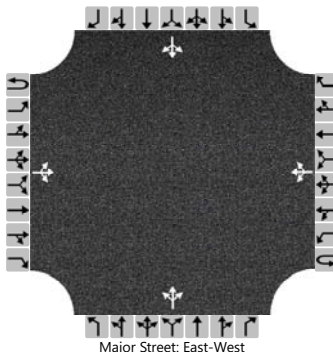
Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		1	1	0		0	1	1	0	1	3	0	0	1	3	0
Configuration		L		TR		LT		R		L	T	TR		L	T	TR
Volume (veh/h)		33	0	129		8	1	58	0	88	1684	15	0	47	1670	36
Percent 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															

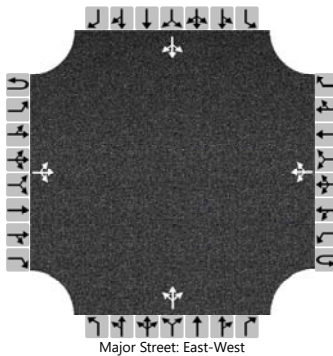
Critical and Follow-up Headways

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)		42		165		12		74		113				60		
Capacity, c (veh/h)		0		0		0		184		103				104		
v/c Ratio								0.41		1.09				0.58		
95% Queue Length, Q ₉₅ (veh)								2.0		15.7				3.5		
95% Queue Length, Q ₉₅ (ft)								50.0		392.5				87.5		
Control Delay (s/veh)								37.8		401.0				84.4		
Level of Service (LOS)								E		F				F		
Approach Delay (s/veh)									19.7				2.3			
Approach LOS									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																
 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)		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			