Neighborhood Impact Assessment (NIA)
Mark Armijo Academy

Draft Report

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Prepared for:

Archis Architects

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EXECUTIVE SUMMARY

This report documents a Neighborhood Impact Assessment (NIA) for a Mark Armijo Academy on Gonzales Road near Coors Boulevard in southwest Albuquerque, New Mexico. Lee Engineering has completed this report for Archis Architects. All analyses and items contained herein conform to scoping requirements outlined in a scoping meeting held on April 15th, 2024, with Archis Architects, the City of Albuquerque (CABQ), and the New Mexico Department of Transportation (NMDOT).

BACKGROUND

The proposed development is an expansion of a currently existing charter school, Mark Armijo Academy, adding another building to accommodate an additional 180 students. The development expects to generate 74 ingress and 45 egress trips during the AM peak hour and 43 ingress and 68 egress trips during the PM peak hour. The number of vehicle trips generated by the proposed development was based on the trip generation rates and equations from the Trip Generation Manual, 11th Edition, by the Institute of Transportation Engineers using (ITE) 534 – Private High School.

The proposed development includes an additional site access driveway on Gonzales Road, west of the existing access driveways for Mark Armijo Academy. The development team anticipates completing construction in one phase in 2026. **Figure 1** shows a vicinity map of the proposed development.

Turning movement counts were collected on May 2nd, 2024, for the following study intersections:

- Central Avenue & Coors Boulevard
- Gonzales Road & Coors Boulevard
- Bataan Drive & Gonzales Road
- Bridge Boulevard & Coors Boulevard

Study intersections include:

1) Central Avenue & Coors Boulevard
2) Gonzales Road & Coors Boulevard
3) Site Access & Gonzales Road
4) Bataan Drive & Gonzales Road
5) Bridge Boulevard & Coors Boulevard

The Existing 2024 scenario uses these volumes unaltered for the Level of Service (LOS) and Queueing analysis. Site trips for the development are from ITE 534 – Private High School, Peak Hour Generator. Scenarios for Build-Out 2026 Total, Horizon Year 2026 Total, and Horizon Year 2036 Mitigated use the proposed development-generated trip volumes.

Analysis scenarios are:

- Existing 2024 – Analyzes current traffic volumes and intersections.
- Build-Out Year 2026 Background – Analyzes Existing 2024 traffic volumes grown by applying a growth factor developed by the Mid-Region Council of Governments (MRCOG) Metropolitan Transportation Plan (MTP) CUBE/2 Regional Model to estimate 2026 traffic volumes at existing intersections.
- Build-Out Year 2026 Total – Analyzes the sum of site-generated trips and Build-Out Year 2026 Background volumes at existing intersections and the proposed development access driveway.
- Horizon Year 2036 Total – Analyzes the sum of site-generated trips and Horizon Year 2036 Background volumes at existing intersections and the proposed development access driveway.

SUMMARY OF TRAFFIC ANALYSIS AND RECOMMENDATIONS

Traffic operations for Gonzales Road and Coors Boulevard are summarized as follows:

- WBL and WBR operate at LOS F during the AM peak hour under the Horizon Year 2036 Total scenario.
- All other movements operate at acceptable LOS levels and have adequate storage to accommodate the 95th percentile queue lengths under all scenarios.

Traffic operations for Central Avenue and Coors Boulevard are summarized as follows:

- NBL, SBL, EBL, and WBL operate at LOS E and LOS F during the AM and PM peak hours for the Existing 2024, Build-Out Year 2026 Background, Build-Out Year 2026 Total, and Horizon Year 2036 Total scenarios.
    - Queue storage is anticipated to be exceeded for the EBL movement during the AM and PM peak hours for the Existing 2024, Build-Out Year 2026 Background, Build-Out Year 2036 Total, and Horizon Year 2036 Total scenarios.
    - Queue storage is anticipated to be exceeded for the WBL movement during the AM and PM peak hours for the Existing 2024, Build-Out Year 2026 Background, Build-Out Year 2026 Total, and Horizon Year 2036 Total scenarios.
- NBT operates at LOS E during the AM peak hour for the Existing 2024, Build-Out Year 2026 Background, and Build-Out Year 2026 Total scenarios and LOS F for the AM peak hour in the Horizon Year 2036 Total scenarios.
- SBT and SBR operate at LOS E during the PM peak hour in the Build-Out Year 2026 Total scenario and LOS F during the PM peak hour in the Horizon Year 2036 Total scenario.
- All other movements operate at acceptable levels of service (LOS) and have adequate storage to accommodate the 95th percentile queue lengths under the analyzed scenarios.

All other intersections operate at acceptable LOS and accommodate 95th percentile queue lengths during the AM and PM peak hours for all scenarios except:

- At Bridge Boulevard and Coors Boulevard, WBR 95th percentile queue lengths are anticipated to exceed storage lengths for the Existing 2024, Build-Out Year 2026 Background, Build-Out Year 2026 Total, and Horizon Year 2036 Total scenarios.

SITE RECOMMENDATIONS

Recommendations for study intersections directly serving and primarily impacted by the proposed development are as follows:

- Proposed Access Driveway and Gonzales Road:
    - The proposed access driveway on Gonzales Road meets CABQ DPM requirements.
    - Right-in operations should are recommended for the proposed access driveway.
    - The access driveway should provide adequate site distance, circulation for ingress and egress trips, and sufficient storage to accommodate school drop-off/pick-up operations.
- Multimodal Facilities
    - A marked pedestrian crossing across Gonzales Road can provide a safe location for student pedestrians to use when accessing the school's campus.
    - The Mark Armijo Academy development should ensure that pedestrian facilities comply with American Disabilities Act (ADA) standards and adhere to the guidelines outlined in the COA DPM.
    - At each entrance, secure and convenient bicycle storage facilities on the school campus should be provided.

- Queuing
    - The drop-off/pick-up loop is anticipated to accommodate the maximum queue length of drop-off/pick-up operations.
- Air Quality
    - Establish a policy to minimize vehicle idling during drop-off/pick-up operations.
    - Encourage students to walk or bicycle to school.

OFF-SITE INTERSECTION RECOMMENDATIONS

Recommendations for intersections within the study area that do not directly serve the proposed development are as follows:

- Gonzales Road & Coors Boulevard
    - For the Horizon Year 2036 scenario, the westbound movements are anticipated to experience unacceptable delays and queuing. Traffic control via a traffic signal is warranted at this intersection under the existing traffic conditions per the findings of a signal warrant documented in this analysis. Am HCS analysis of this intersection with a traffic signal does mitigate the Horizon Year 2036 queuing and delay challenges.
    - Using a roundabout for traffic control is another option to mitigate this intersection's delay and queuing challenges per an HCS analysis of Horizon Year 2036 volumes.
    - The proposed development contributes 3.0% of the total Build-Out Year Full-Build intersection traffic volumes in the AM peak hour and 2.9% in the PM peak hour.

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INTRODUCTION

This report details the procedures and findings of a Neighborhood Impact Assessment (NIA) performed by Lee Engineering for Archis Architects. This report and the analyses herein were performed for an existing charter school, Mark Armijo Academy, to be expanded with a new building to accommodate 180 additional students on Gonzales Road near Coors Boulevard in Albuquerque, NM. This study examines the proposed development's impacts on surrounding traffic conditions. It discusses the potential effects of trips generated by the development on the study intersections.

The scope of this report and the analyses performed were completed in agreement with the scoping requirements set forth by the City of Albuquerque. Scoping meeting notes from the scoping meeting held on April 15th, 2024, are included in Appendix A. Analysis procedures, conclusions, and recommendations for this study were developed according to the *Highway Capacity Manual (HCM) 6th Edition* and the *Manual on Uniform Traffic Control Devices (MUTCD) 2009 Edition*.

The development is planned to be completed in one phase and to reach full construction by 2026. The site plan displayed in **Figure 1** shows the proposed development. Traffic generated by the site is anticipated to be 74 ingress and 45 egress trips during the AM peak hour and 43 ingress trips and 68 egress trips during the PM peak hour.

Figure 2 shows the site plan for the development. Lee Engineering conducted a Level of Service (LOS) and Queuing Analysis for the following AM and PM peak hour scenarios:

- Existing 2024 – Analyzes current traffic volumes and intersections.
- Build-Out Year 2026 Background – Analyzes Existing 2024 traffic volumes grown by applying a growth factor developed by the Mid-Region Council of Governments (MRCOG) Metropolitan Transportation Plan (MTP) CUBE/2 Regional Model to estimate 2026 traffic volumes at existing intersections.
- Build-Out Year 2026 Total – Analyzes the sum of site-generated trips and Build-Out Year 2026 Background volumes at existing intersections and the proposed development access driveway.
- Horizon Year 2036 Total – Analyzes the sum of site-generated trips and Horizon Year 2036 Background volumes at existing intersections and the proposed development access driveway.

The Level of Service and Queuing Analysis Reports are in Appendix D.

BACKGROUND INFORMATION

PROJECT LOCATION & SITE PLAN

The proposed development will be on the existing campus of Mark Armijo Academy on Gonzales Road, east of Coors Boulevard. **Figure 1** shows the proposed site plan, and **Figure 2** shows the site location, study intersections, and the surrounding area. Study intersections include:

1. Central Ave & Coors Blvd
2. Gonzales Rd & Coors Blvd
3. Proposed Access Driveway & Gonzales Rd
4. Bataan Dr & Gonzales Rd
5. Bridge Blvd & Coors Blvd

The proposed project will develop new buildings and a parking lot on approximately 3.3 acres of Mark Armijo Academy's 6-acre campus. The proposed access driveway is on Gonzales Road, west of the existing access driveways.

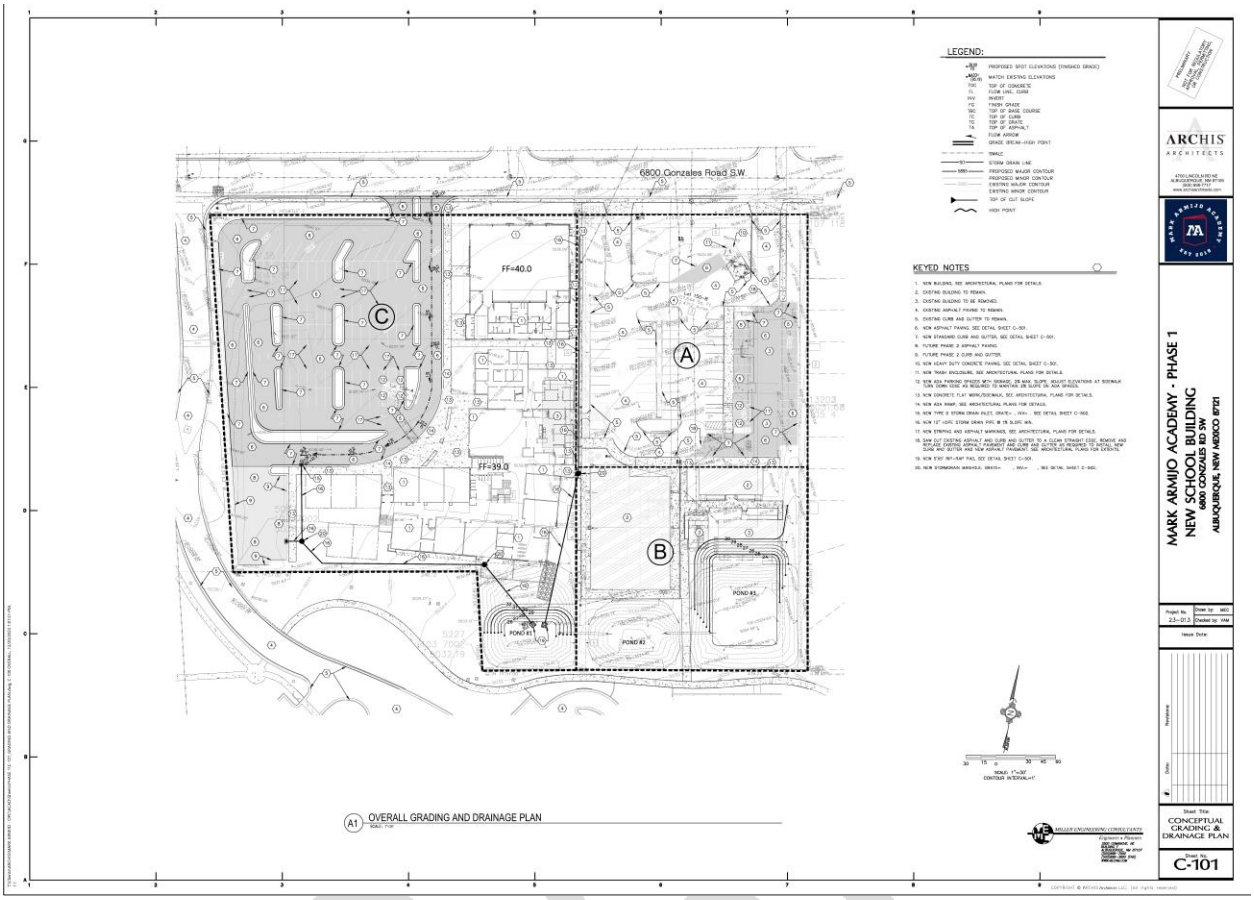


Figure 1: Site Plan

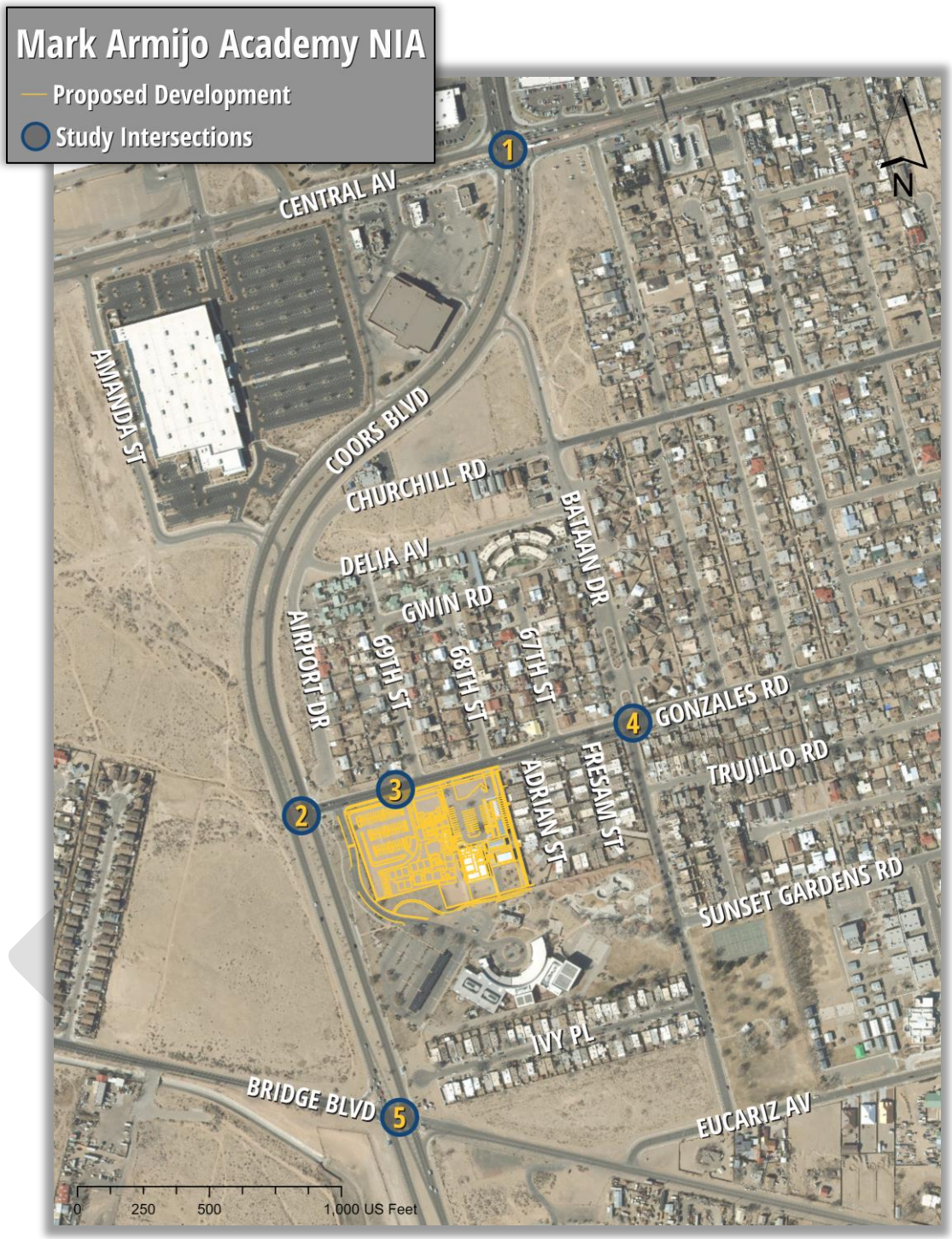


Figure 2: Vicinity Map

Study Area

Central Avenue and Bridge Boulevard bind the study area on the north and south, and Coors Boulevard and Bataan Drive on the west and east. This study analyzes the following intersections per discussions during the scoping meeting:

1. Central Ave & Coors Blvd
2. Gonzales Rd & Coors Blvd
3. Proposed Access Driveway & Gonzales Rd
4. Bataan Dr & Gonzales Rd
5. Bridge Blvd & Coors Blvd

Area Land Use

The development will be on the south side of Gonzales Road and east of Coors Boulevard. Adjacent to and surrounding the project site are land uses consisting of the following:

- Residential: The land immediately north and east of the proposed development is primarily single-family detached housing with some multi-family residences.
- Vacant: A large land area is immediately west of the study area.
- Educational: Alamosa Elementary School is adjacent to the study area, east of Bataan Drive.
- Community: The Ted M. Gallegos Community Center is southwest of the development with an access drive on Gonzales Road, west of the proposed access driveway.

The boundary between Albuquerque and Bernalillo County runs along Bridge Boulevard, south of the study area.

Streets

The following details the characteristics and features of streets included in the study area:

Gonzales Road is a two-lane local road that runs east and west. Its posted speed limit is 30 miles per hour (MPH). The road comprises one 12-foot travel lane, with parking lanes marked in each direction and 3.5-foot sidewalks on both sides. Speed cushions are present at two locations between Coors Boulevard and Bataan Drive. Standard curb and gutter are present.

Coors Boulevard is a four-lane, divided road that runs north and south. MRCOG classifies the road as a principal arterial, and the posted speed limit is 45 MPH within the study area. There are two 12-foot-wide travel lanes in each direction. Sidewalks are on the west side of the road from Central Avenue to Gonzales Road and on the east side from Bridge Boulevard to Gonzales Road. Six-foot-wide bicycle lanes are striped in both directions. Standard curb and gutter are present.

Intersections

The following details the traffic control and characteristics of the existing intersections in the study area:

Central Avenue & Coors Boulevard is a four-legged, signalized intersection. The east and west legs comprise a left-turn lane, two through lanes, and a right-turn lane. The north and south legs comprise two left-turn lanes, two through lanes, and a right-turn lane. Sidewalks, marked crosswalks, and pedestrian signals are present on every leg of the intersection.

Gonzales Road & Coors Boulevard is a three-legged, minor street stop-controlled intersection with a stop sign for westbound travelers on Gonzales Road. The east leg comprises a shared through, left, and right-turn lane. The north leg comprises an exclusive left turn lane, two through lanes, and a bicycle lane. The south leg comprises two through lanes and a bicycle lane. Marked crosswalks and cub ramps are available on the west leg of the intersection.

Bataan Drive & Gonzales Road is a four-legged, all-way stop-controlled intersection with a traffic circle. All legs comprise a shared through, left, and right turn lane. There are curb ramps at all approaches, with detectable warning surfaces only at the northeast and northwest ramps. There are no marked crosswalks or pedestrian signals present. Sidewalks are present at all legs of the intersection.

Coors & Bridge Boulevards is a four-legged, signalized intersection. The east and west legs of the intersection comprise a left-turn lane, a through lane, and a right-turn lane. The north and south legs comprise a left-turn lane, two through lanes, and a right-turn lane. Sidewalks, marked crosswalks, and pedestrian signals are present on every leg of the intersection.

Pedestrian Facilities

Standard 3.5-foot sidewalks are present along either side of Gonzales Road for the length of the study area. The only crosswalk found in the study area is located at the east approach of the Gonzales Road & Coors Boulevard intersection. Curb ramps with detectable warning surfaces are on either side of the crosswalk. Curb ramps are present at all other cross streets along the corridor, the majority of which have detectable warning surfaces.

Bicycle Facilities

The City of Albuquerque designates Gonzales Road as a bicycle route. This designation means the travel lanes are marked for bicycle use via sharrows and shared by motor vehicles and bicycles. Six-foot bicycle lanes are along Coors Boulevard, and five-foot bicycle lanes are along Central Avenue. According to the Mid-Region Metropolitan Planning Organization (MRMPO) Long Range Bikeway System, there are proposed bicycle lanes on Bridge Boulevard and protected bicycle lanes on Central Avenue.

Transit Facilities

An ABQ RIDE bus stop is along Coors Boulevard just north of Gonzales Road. This stop serves bus route 155 northbound.

Adjacent Developments

Two new adjacent developments are near the study area: Chuze Fitness on the southwest corner of Central Avenue and Coors Boulevard and a housing development, Villa de San Marcos, east of Coors Boulevard Road. Per the scoping meeting, traffic studies were not required for these developments. Therefore, no specific considerations were made in this report for this development. Rather, MRCOG growth projections were used to analyze background growth for future scenarios.

DATA COLLECTION

The following section details the data collection methods used in the analyses documented in this report. The data was collected via field observations and video recordings.

Field Data Collection

On-Street Parking

Dedicated on-street parking is marked along Gonzales Road.

Pedestrians and Bicycles

Pedestrian and bicycle volumes were collected at all study intersections via turning movement counts (see Turning Movement Counts section). Pedestrian and bicycle hourly volumes are in Appendix B.

Transit

Motor Vehicle volumes were collected at all study intersections with turning movement counts (see Turning Movement Counts section). Hourly bus volumes are in Appendix B.

Signal Timings

The City of Albuquerque Traffic Engineering Division provided signal timing for the signalized intersections of Central Avenue & Coors Boulevard and Coors & Bridge Boulevards. Signal timing sheets used in the capacity analyses are in Appendix E.

TRAFFIC SCENARIO DEVELOPMENT

The following sections detail the methods and calculations used to obtain traffic volumes for the Existing 2024, Build-Out Year 2026 Background, Build-Out Year 2026 Total, and Horizon Year 2036 Total analysis scenarios. This process used Traffic Projections, Site Trip Generation, and Trip Distribution and Assignment.

TURNING MOVEMENT COUNTS

Turning Movement Counts (TMC) were collected for seven and a half hours in three periods: 6:00 AM-9:00 AM, 11:00 AM-2:00 PM, and 2:00 PM-3:30 PM on Thursday, May 2nd, 2024, for the existing study intersections. Turning movement volumes collected at the study intersections show a typical commuter directionally biased distribution with observable AM and PM peak hour periods. This analysis considers AM and PM peak hours relative to the bell schedule of Mark Armijo Academy; zero-hour begins at 7:30 AM and dismissal is at 2:30 PM. **Table 1** shows the observed peak hours for each existing study intersection and the calculated peak hours for the entire study area (network peak). Balanced AM and PM peak-hour traffic volumes are in **Figure 3,** and complete turning movement counts are in Appendix B.

Table 1: Intersection and Network Peak Hours

Intersection	AM Peak Hour	PM Peak Hour
Central Ave & Coors Blvd	7:30 AM	2:30 PM
Gonzales Rd & Coors Blvd	7:15 AM	2:30 PM
Bataan Dr & Gonzales Rd	7:15 AM	2:15 PM
Bridge Blvd & Coors Blvd	7:15 AM	2:30 PM
Network Peak Hours:	**7:15 AM**	**2:30 PM**

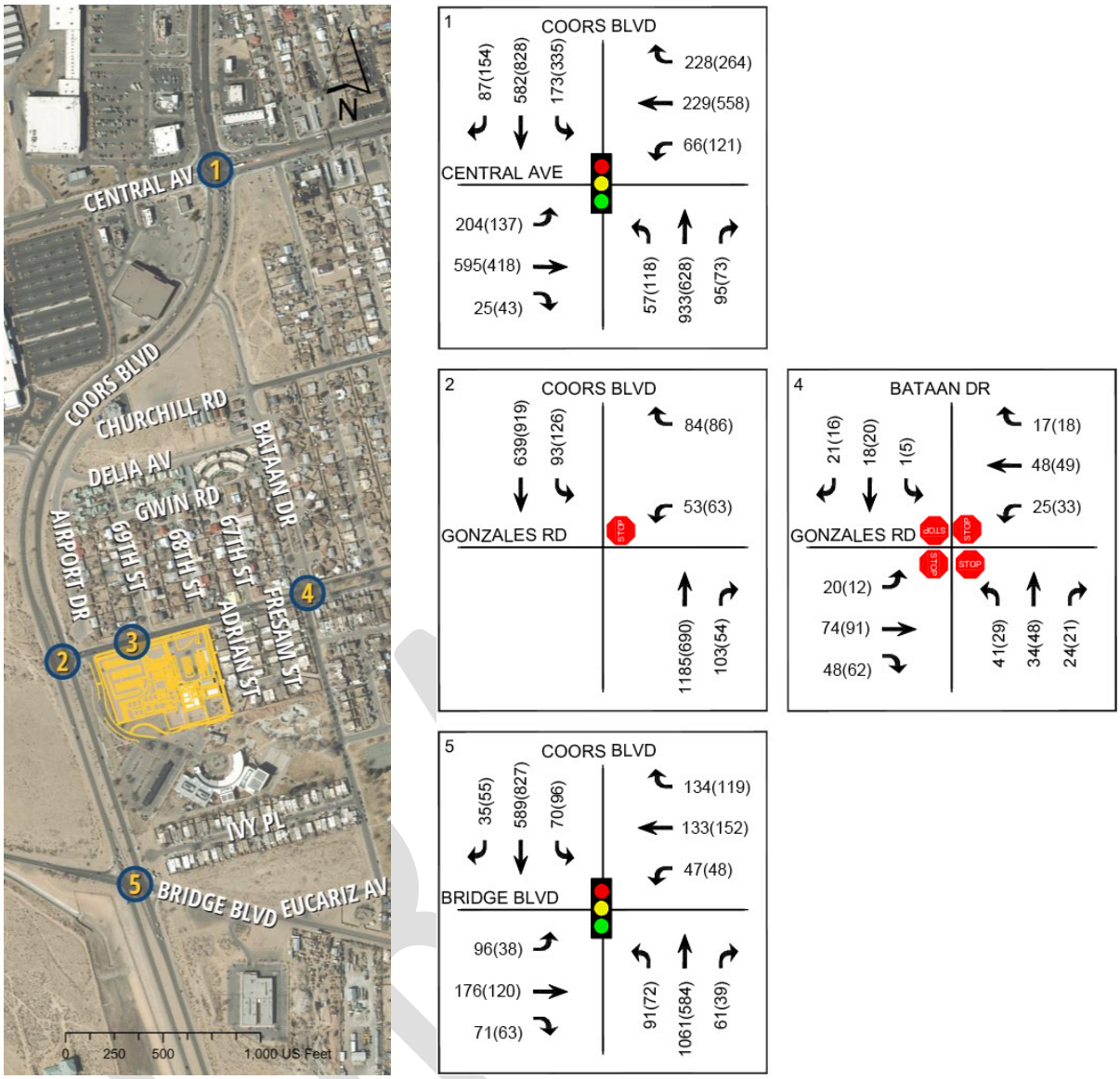


Figure 3: Existing Peak Hour Turning Movement Counts

Traffic Growth

The future year scenario volumes are forecasted from the existing traffic volumes using values from 2016 and 2040 (updated) travel demand models by MRCOG. These models contain AM and PM peak hour directional volumes (AMPH LOAD and PMPH LOAD) that are used to calculate traffic growth rates in the study area. Roads with an annual growth rate of less than 1% are analyzed assuming a 1% annual growth rate to facilitate a conservative analysis. Growth rates are then converted to growth factors for specific analysis scenarios. Values from the MRCOG models and the calculated growth rates used in the analyses are in **Table 2**. Existing 2024 traffic volume growth rates are applied to forecast future-year scenario volumes. Projected turning movement volumes are used with adjacent developments' site-generated trips for the Build-Out Year 2026 Background scenario. Build-Out Year 2026 Background volumes plus the proposed development's site-generated trips comprise the Build-Out Year 2026 Total scenario volumes.

Table 2: Yearly Growth Rates - Source: MRCOG 2016 and 2040 Models

Intersection	Approach	Period	2016	2040	Annual Growth Rate	Average Growth	Growth Rate for Analysis
Gonzales Rd & Coors Blvd	East	AM	54	64	0.7%	0.4%	1.0%
		PM	59	64	0.3%		
	North	AM	672	807	0.8%		
		PM	878	954	0.3%		
	South	AM	835	905	0.3%		
		PM	789	941	0.7%		
Bridge Blvd & Coors Blvd	North	AM	641	794	0.9%		
		PM	833	1014	0.8%		
	South	AM	863	958	0.4%		
		PM	921	1003	0.4%		
	West	AM	466	519	0.4%		
		PM	380	508	1.2%		
	East	AM	169	236	1.4%		
		PM	225	336	1.7%		
Central Ave & Coors Blvd	North	AM	1017	1051	0.1%		
		PM	1454	1566	0.3%		
	South	AM	888	965	0.3%		
		PM	849	903	0.3%		
	West	AM	903	823	-0.4%		
		PM	551	537	-0.1%		
	East	AM	658	605	-0.3%		
		PM	907	907	0.0%		
Gonzales Rd & Bataan Dr	North	AM	0	0	0.0%		
		PM	5	99	13.2%		
	West	AM	131	127	-0.1%		
		PM	164	76	-3.2%		

Site Trip Generation

Trip generation for the Proposed Development was performed using the procedures and methodologies in the ITE Trip Generation Manual, 11th Edition. The land use category Private High School (ITE 534) determined the number of anticipated trips for Weekday AM and PM Peak Hour Traffic. Trips generated by the proposed development are summarized in **Table 3**. Site-generated trips are added to the Build-Out Year 2026 Background traffic volumes to create the Build-Out Year 2026 Total and Horizon Year 2036 Total traffic volumes. **Table 3** shows the trip generation volumes and percentages.

Table 3: Proposed Development Trip Generation

Use	Units		Weekday AM Peak Hour					Weekday PM Peak Hour				
			Total	Enter	Exit	In	Out	Total	Enter	Exit	In	Out
ITE 534: Private High School	180	Students	119	62%	38%	74	45	111	39%	61%	43	68

Trip Distribution and Assignment

The proposed site-generated trip distribution was determined by analyzing existing intersection demand characteristics within the study area. These direct trips are routed within the roadway network to and from the development based on the proportions of existing turning movement counts during the AM and PM peak hours. This study evaluates the impacts of site-generated trips resulting from an additional 180 students. The school's current traffic is captured in the TMC data and only the anticipated peak hour trips shown in **Table 3** are assigned to the site access driveway in Build-Out Year 2026 Total and Horizon Year 2036 Total. **Figure 1** and **Figure 5** show the distribution percentages and trips generated by the development.

TRAFFIC VOLUME CALCULATIONS

Traffic volumes used in the Build-Out Year and Horizon Year analyses were calculated as follows:

- Build-Out Year 2026 Background – Analyzes Existing 2024 traffic volumes grown by applying a growth factor developed by the Mid-Region Council of Governments (MRCOG) Metropolitan Transportation Plan (MTP) CUBE/2 Regional Model to estimate 2026 traffic volumes at existing intersections.
- Build-Out Year 2026 Total – Analyzes the sum of site-generated trips and Build-Out Year 2026 Background volumes at existing intersections and the proposed development access driveway.
- Horizon Year 2036 Total – Analyzes the sum of site-generated trips and Horizon Year 2036 Background volumes at existing intersections and the proposed development access driveway.

Figure 4 through **Figure 8** show the site-generated trip proportions, site-generated trips, and volumes for Build-Out and Horizon Year scenarios.

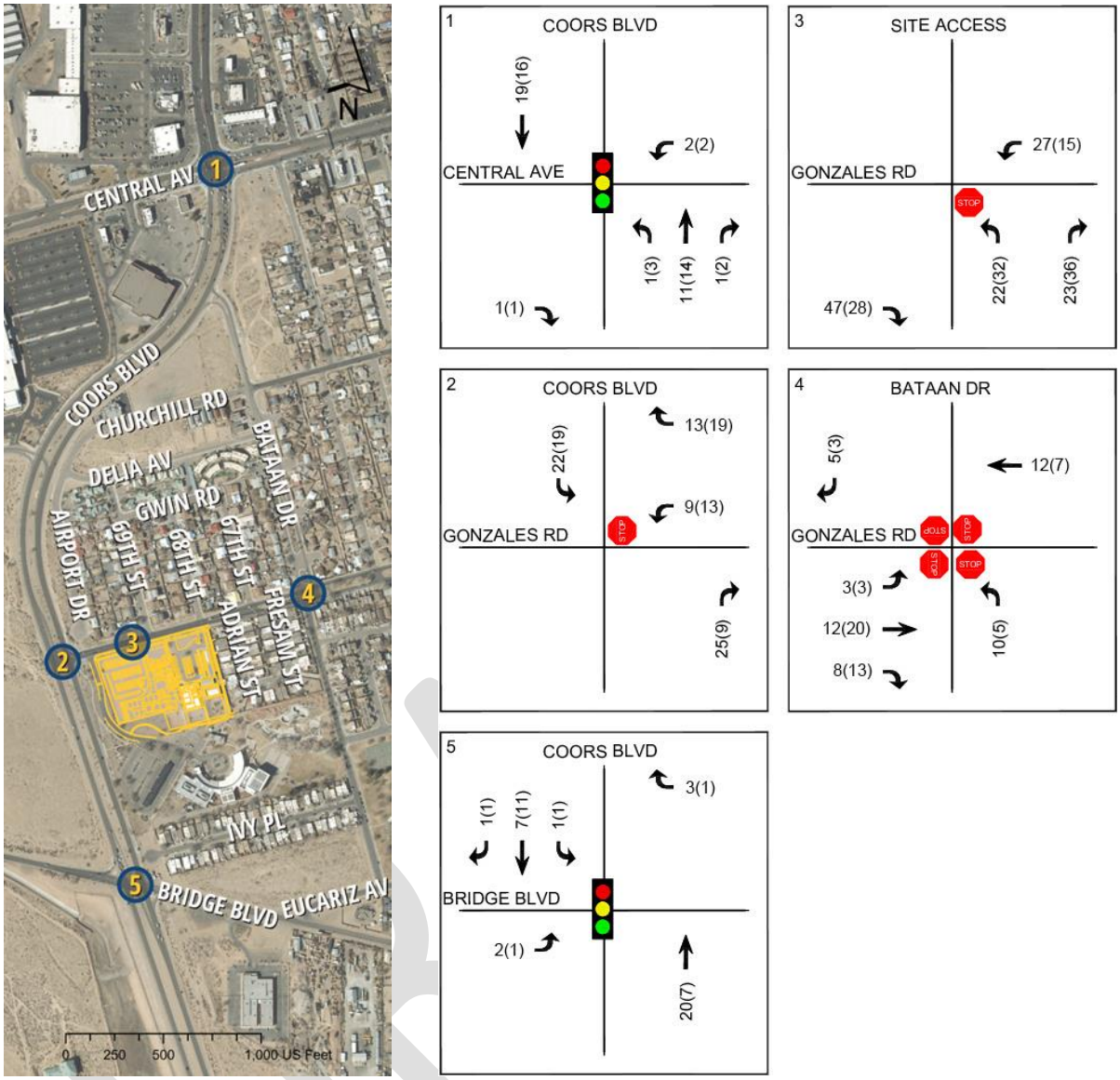


Figure 4: Site-Generated Direct Trip Routing Percentages

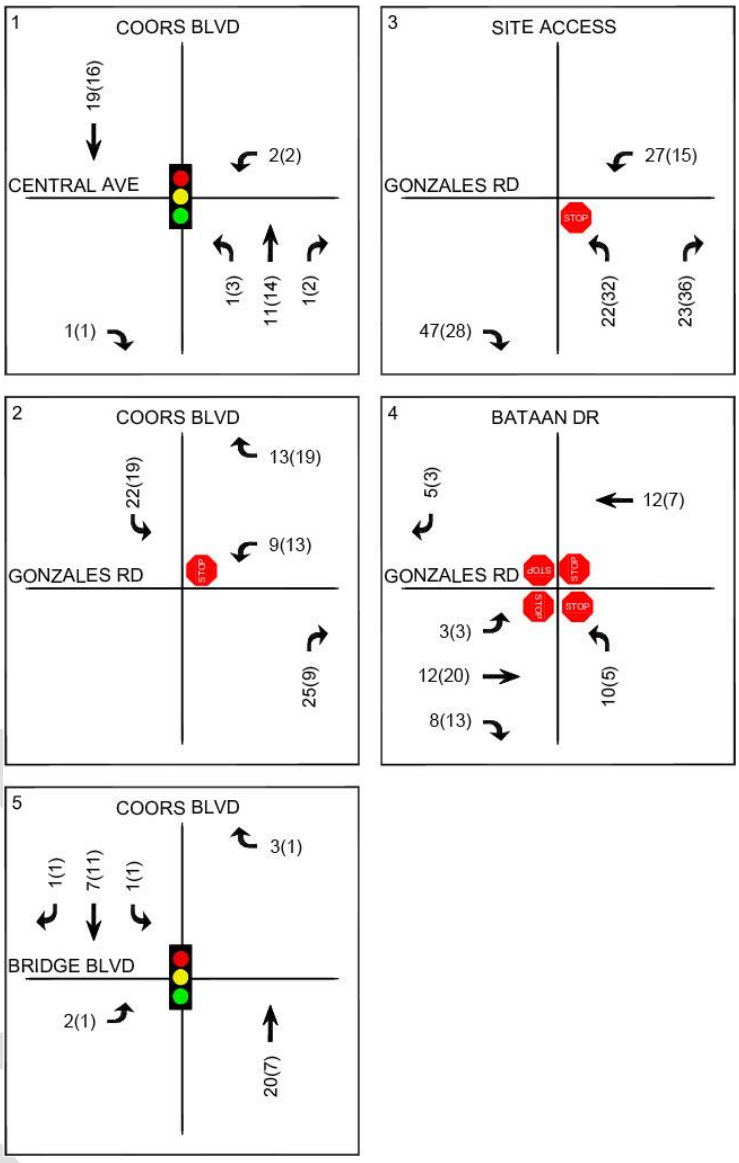
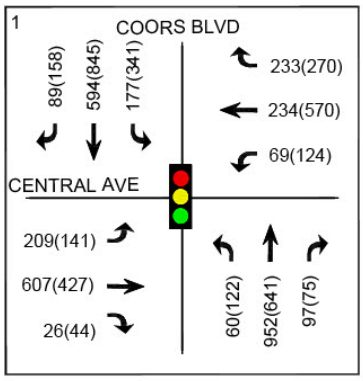
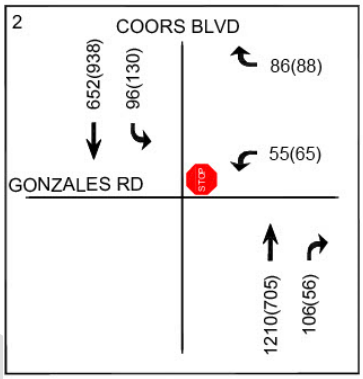
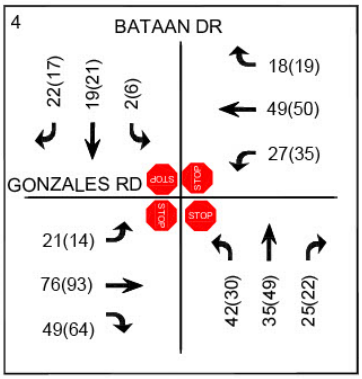


Figure 5: Site Generated Direct Trips







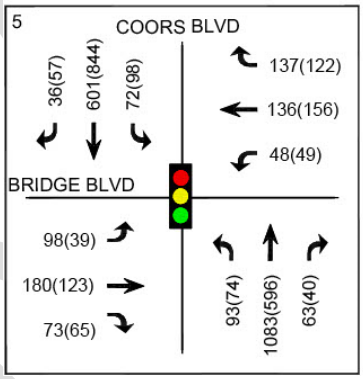


Figure 6: Build-Out Year 2026 Background Volumes

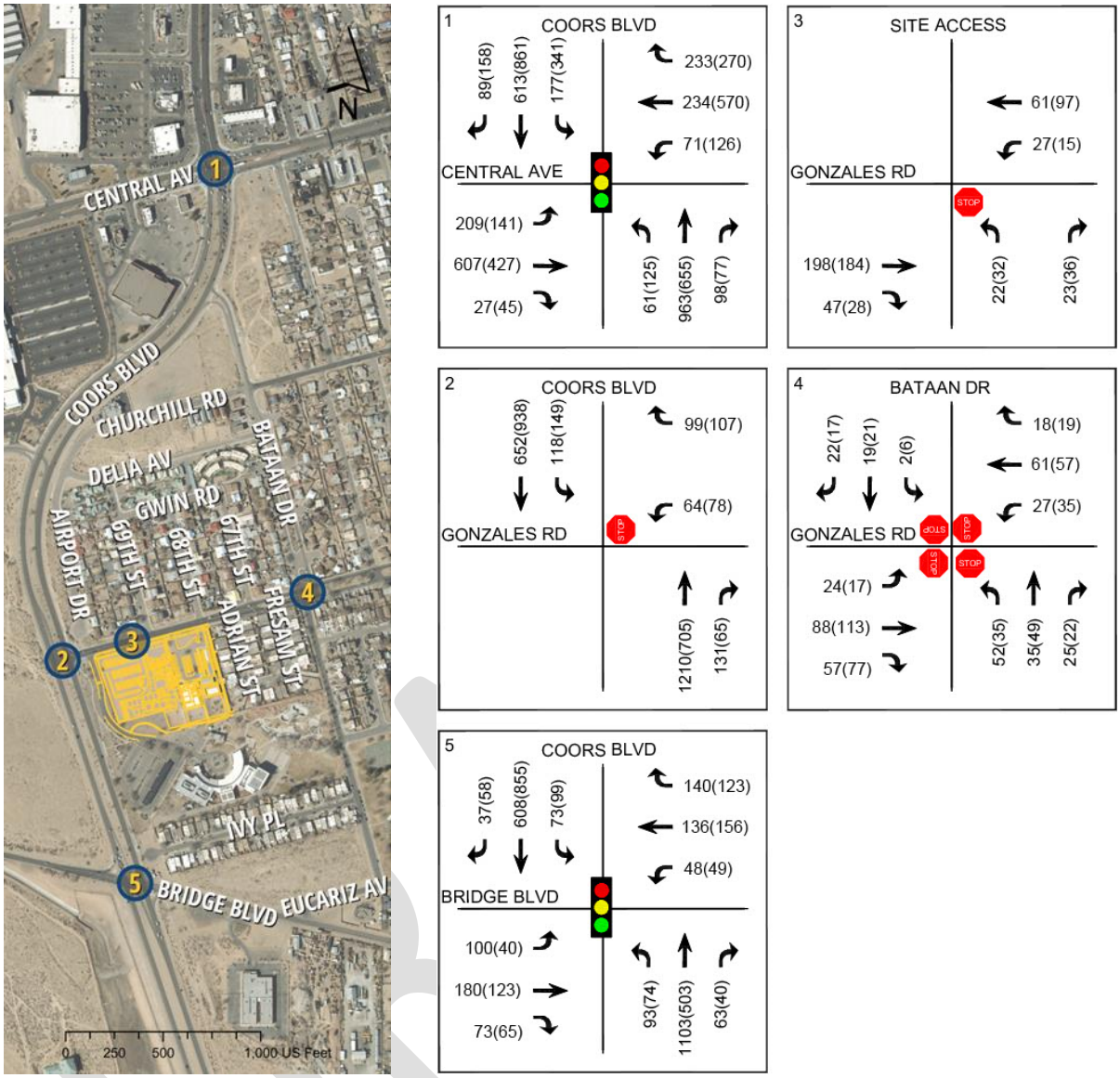


Figure 7: Build-Out Year 2026 Total Volumes

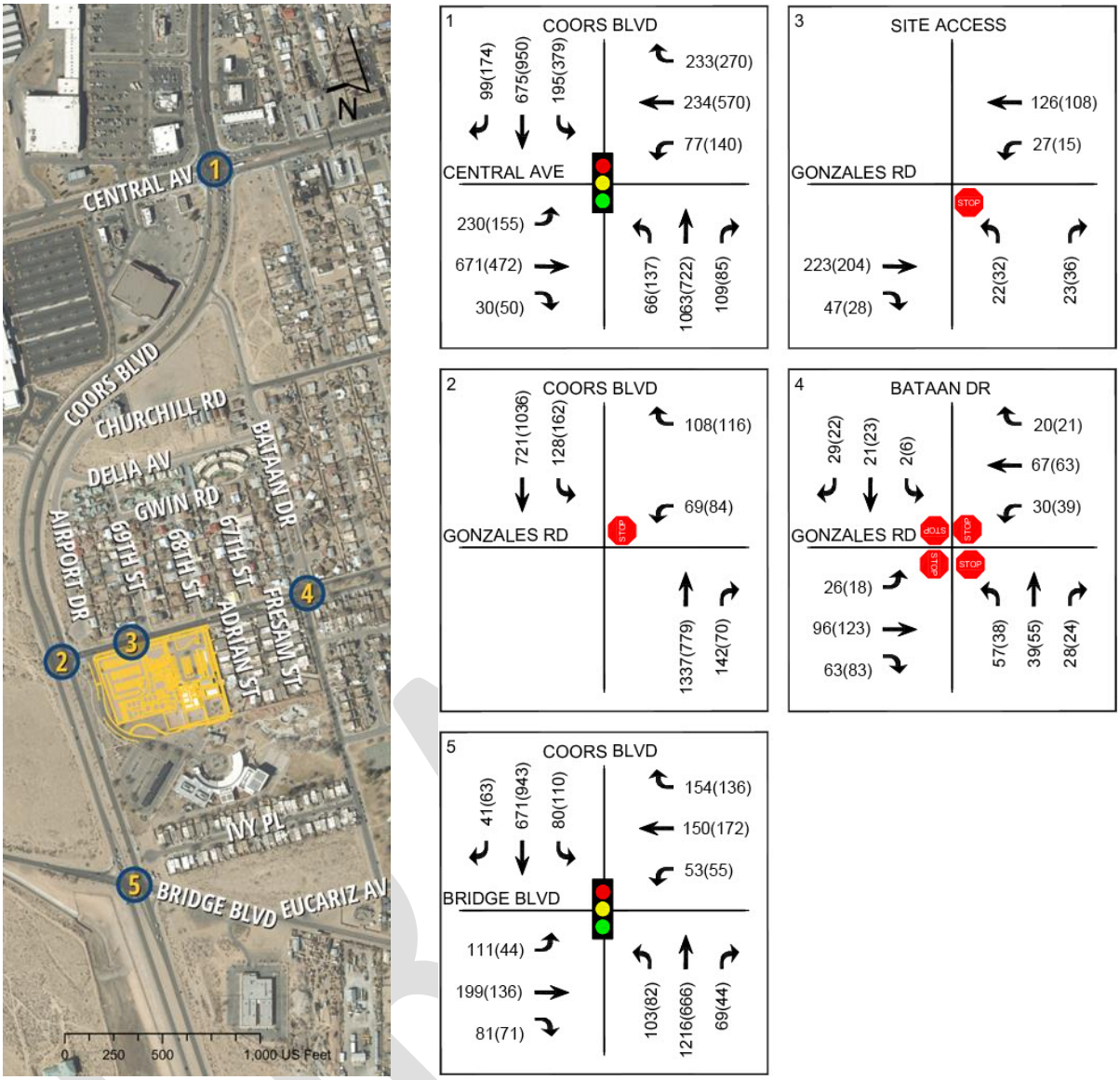


Figure 8: Horizon Year 2036 Volumes

SITE CONDITIONS AND SITE ANALYSIS

SITE ACCESS JUSTIFICATION

The proposed site driveway provides direct access to student parking and student drop-off/pick-up queue storage. The access configuration shown in the site plan will accommodate anticipated ingress and egress movements. The proposed site driveway will accommodate ingress and egress operations during peak drop-off/pickup hours; these movements are physically separated, as shown in **Figure 1**.

SITE ACCESS ANALYSIS

The development proposes a new access driveway on Gonzales Road, west of the existing access driveways. CABQ DPM Table 7.4.45 provides a minimum distance between commercial site access points and intersections. DPM Table 7.4.46 provides the maximum number of commercial site access points per site. The results of this analysis are in **Table 4**.

Table 4: Access Spacing Requirements from CABQ DPM

City of Albuquerque Development Process Manual Recommended Access Spacing						
Major Street	Cross Street	Design Speed (MPH)	Minimum Distance Between Commercial Site Access and Intersection (ft)		Maximum number of commercial Site Access Points per Site	Distance Between Site Access Point and Intersection (ft)
			Approach Distance	Departure Distance		
Gonzales Rd	Coors Blvd	30	75 ft	75 ft	None	320

The proposed access driveway on Gonzales Road meets CABQ DPM requirements.

AUXILIARY LANE ANALYSIS

Auxiliary lane analysis warrants are performed using guidance in the NMDOT State Access Management Manual (SAMM) for Gonzales Road at Coors Boulevard and CABQ DPM for the proposed access driveway on Gonzales Road. Road and traffic data are compared to criteria in SAMM Table 17B-2 to determine whether right or left-turn auxiliary lanes are required on Coors Boulevard at Gonzales Road. Similarly, road and traffic data are compared against criteria in DPM Table 7.4.67 to determine if right or left-turn auxiliary lanes are required for the proposed site access on Gonzales Road. Furthermore, SAMM Table 18K-1 and DPM Tables 7.4.68 and 7.4.70 are used to assess deceleration and taper length where applicable. 2026 Build-Out traffic volumes are used in the analyses. The results of these analyses are in **Table 5**.

Table 5: Site Driveway Auxiliary Lane Warrants

Location	Access/ Turn Type	Speed (MPH)	Minimum Required Turning Volume per Hour	Turning Volume per Hour (Build-Out Year 2026 Total)	Warrant Result	Minimum Storage Length	Lane Transition	Total Deceleration Length
Access Driveway	Right In	30	50	94 (56)	Required	240 ft	150-150 Reverse Curve	---

Site Driveways Sight Distance

The following presents a narrative detailing the development's recommended intersection sight distance requirements. Intersection sight distance requirements are based on the CABQ DPM Section 7-4(I)(5)(iii) and the 2018 AASHTO "Green Book" chapter 9.5. Two sight distance cases are used for this analysis:

- Case B1 – A stopped vehicle turning left from a minor street approach onto a major road.
- Case B2 – A stopped vehicle turning right from a minor street approach onto a major road.

The intersection sight distance for Case B2 at all access driveways is based on the assumption that the design vehicle turns into the nearest traffic lane. A combination truck is used as the design vehicle. The required sight distance values in **Table 6** are rounded up to the nearest 5-foot increment. CABQ roadway characteristic cases are right turns (RT), left turns (LT), two-lane (2L), four-lane (4L), divided (D), and undivided (U). Formulas, values, and calculations used in the sight distance analysis are in Appendix F.

Table 6: Required Sight Distance Values

Intersection Location	Posted Speed Limit (MPH)	AASHTO Case	AASHTO Sight Distance (ft)	CABQ Case	CABQ DPM Sight Distance (ft)
Site Access & Gonzales Road	30	B1	335	LT 2L-D	340
		B2	290	RT 2L-D	290

All development driveways should adhere to the sight distance provisions detailed in the AASHTO "Green Book" and CABQ DPM Section 7-4(I)(5)(iii). An area bounded by the sight distances in **Table 6** from a decision point placed 14.5 feet from the edge of the nearest traffic lane and midway between the outbound driving lane should remain clear of any obstructions.

TRAFFIC ANALYSIS

Highway Capacity Software (HCS) analyzes all study intersections for Level of Service (LOS) and 95th percentile queueing conditions. HCS implements methods and procedures detailed by the Highway Capacity Manual (HCM). The HCS output sheets showing all individual movements are in Appendix D.

LOS, CAPACITY, AND QUEUING ANALYSIS

The HCM indicates LOS as a letter grade (A through F) based on the calculated average delay for an intersection or movement. Delay is a function of several variables, including signal phasing operations, cycle length, traffic volumes, and opposing traffic volumes. However, it measures the average wait time a driver can expect when moving through an intersection. Factors such as total cycle time (for all movements), queueing restrictions, and vehicle volumes can affect delay measurements, especially for lower-volume movements and side streets. Generally, these factors are only realized when delays reach or exceed LOS E thresholds. In such cases, subsequent sections offer a narrative specific to the individual movement in question.

Table 7 and **Table 8**, reproduced from the HCM, show delay thresholds and the associated LOS assigned to delay ranges for signalized intersections and stop-controlled intersections, respectively. Generally, a LOS of D or better is considered an acceptable level of service.

Table 7: LOS Criteria and Descriptions for Signalized Intersections

Level of Service	Average Control Delay (sec/vehicle)	General Description (Signalized Intersections)
A	≤10	Free flow
B	>10 – 20	Stable flow (slight delays)
C	>20 – 35	Stable flow (acceptable delays)
D	>35 – 55	Approaching unstable flow (tolerable delay, occasionally wait through more than one signal cycle before proceeding)
E	>55 – 80	Unstable flow (intolerable delay)
F	>80	Forced flow (jammed)

Table 8: LOS Criteria for Unsignalized Intersections

Level of Service	Average Control Delay (sec/vehicle)
A	≤10
B	>10 – 15
C	>15 – 25
D	>25 – 35
E	>35 – 50
F	>50

Queueing is reported in feet for all intersections when queue lengths are longer than one vehicle. The assumption is that 20 feet queue length is the equivalent of one vehicle. Queues are reported for queue measurements falling within the 95th percentile. The 95th percentile queues are statistically anticipated to occur during only 5% of the peak hour's signal cycles. Additionally, unreported average queueing at an intersection would statistically be much shorter than 95th-percentile queueing.

The volume-to-capacity (V/C) ratio is a performance measure that shows the ratio of traffic volume to the lane group capacity. A V/C ratio greater than 1.00 indicates that demand creates a residual queue for the analysis period.

For this analysis, acceptable LOSs are LOS D or better. Based on procedures outlined in the HCM, intersection delay and level of service for stop-controlled intersections are reported as the delay and level of service for the worst-case movement at each intersection. For signalized intersections, these metrics are reported for the whole intersection. HCS output sheets are in Appendix D.

EXISTING 2024 CONDITIONS

Table 9 summarizes the intersection delay, level of service, and queueing under Existing 2024 conditions.

Table 9: HCM Results for Existing 2024 Conditions

	Movement	95% Queue Length (ft/lane)	V/C	Delay (s/veh)	LOS	Intersection Delay (s/veh)	Intersection LOS		Movement	95% Queue Length (ft/lane)	V/C	Delay (s/veh)	LOS	Intersection Delay (s/veh)	Intersection LOS
Central Ave & Coors Blvd (Signalized)															
AM Peak	NBL	52.2	0.55	76.3	E	51.9	D	PM Peak	NBL	83.6	0.66	59.9	E	43.7	D
	NBT	668.4	0.94	72.9	E				NBT	329.0	0.69	42.9	D		
	NBR	122.2	0.22	42.1	D				NBR	74.7	0.18	35.5	D		
	SBL	144.0	0.53	66.2	E				SBL	223.5	0.82	59.0	E		
	SBT	389.6	0.54	41.0	D				SBT	551.9	0.86	51.0	D		
	SBR	371.6	0.54	41.1	D				SBR	521.0	0.86	51.9	D		
	EBL	327.6	0.88	75.4	E				EBL	206.4	0.83	68.1	E		
	EBT	303.0	0.36	28.2	C				EBT	212.2	0.32	27.1	C		
	EBR	300.6	0.36	28.2	C				EBR	208.7	0.32	27.2	C		
	WBL	131.2	0.79	88.2	F				WBL	180.7	0.81	65.1	E		
	WBT	129.7	0.17	32.1	C				WBT	251.3	0.41	28.7	C		
	WBR	267.6	0.40	37.0	D				WBR	252.9	0.46	31.0	C		
Gonzales Rd & Coors Blvd (Stop-Controlled)															
AM Peak	NBT	---	---	---	---	26.6	D	PM Peak	NBT	---	---	---	---	17.9	C
	NBR	---	---	---	---				NBR	---	---	---	---		
	SBL	15.0	0.17	13.0	B				SBL	12.5	0.14	9.8	A		
	SBT	---	---	---	---				SBT	---	---	---	---		
	WBL/R	60.0	0.45	26.6	D				WBL/R	40.0	0.35	17.9	C		
Bataan Dr & Gonzales Rd (Stop-Controlled)															
AM Peak	NBL/T/R	10.0	---	8.0	A	7.9	A	PM Peak	NBL/T/R	10.0	---	8.1	A	8.0	A
	SBL/T/R	2.5	---	7.4	A				SBL/T/R	5.0	---	7.6	A		
	EBL/T/R	15.0	---	8.0	A				EBL/T/R	17.5	---	8.1	A		
	WBL/T/R	10.0	---	7.8	A				WBL/T/R	10.0	---	8.0	A		
Bridge Blvd & Coors Blvd (Signalized)															
AM Peak	NBL	29.5	0.15	6.4	A	18.1	B	PM Peak	NBL	19.6	0.15	6.1	A	16.6	B
	NBT	272.9	0.45	10.9	B				NBT	120.1	0.25	7.7	A		
	NBR	266.8	0.45	10.9	B				NBR	117.4	0.25	7.8	A		
	SBL	22.9	0.19	8.0	A				SBL	25.5	0.16	5.5	A		
	SBT	141.7	0.25	8.9	A				SBT	181.9	0.35	8.4	A		
	SBR	138.3	0.25	8.9	A				SBR	176.8	0.35	8.4	A		
	EBL	127.4	0.48	53.1	D				EBL	45.6	0.24	49.4	D		
	EBT	211.2	0.54	46.8	D				EBT	134.6	0.43	43.6	D		
	EBR	30.2	0.09	38.8	D				EBR	65.8	0.22	39.3	D		
	WBL	61.3	0.28	52.8	D				WBL	56.5	0.26	48.0	D		
	WBT	159.5	0.41	45.1	D				WBT	174.6	0.54	45.0	D		
	WBR	68.9	0.19	40.4	D				WBR	128.6	0.41	40.7	D		

The Existing Conditions analysis indicates:

Delay and LOS Results

At all other intersections where LOS results are present, all movements operate at acceptable LOS during the AM and PM peaks except:

- At the signalized intersection of Central Avenue & Coors Boulevard
    - NBL operates at LOS E during the AM and PM peak hours.
    - NBT operates at LOS E during the AM peak hour.
    - SBL operates at LOS E during the AM and PM peak hours.
    - EBL operates at LOS E during the AM and PM peak hours.
    - WBL operates at LOS F and LOS E during the AM and PM peak hours, respectively.

Queuing Results

At all intersections where queue length results are present, existing storage lengths are sufficient to accommodate 95th percentile queue lengths except:

- At the signalized intersection of Central Avenue & Coors Boulevard
    - EBL does not accommodate the 95th percentile queue lengths during the AM and PM peak hours.
    - WBL does not accommodate the 95th percentile queue lengths during the PM peak hour.
- At the signalized intersection of Bridge Boulevard & Coors Boulevard
    - WBR does not accommodate the 95th percentile queue lengths during the PM peak hour.

BUILD-OUT YEAR 2026 BACKGROUND CONDITIONS

For the 2026 background volumes, existing TMCs are used with an applied annual growth rate developed from the MRCOG MTP CUBE/2 Regional Model. **Table 10** summarizes the intersection delay, level of service, and queueing under Build-Out Year 2026 Background conditions.

Table 10: HCM Results for Build-Out Year 2026 Background Conditions

	Movement	95% Queue Length (ft/lane)	V/C	Delay (s/veh)	LOS	Intersection Delay (s/veh)	Intersection LOS		Movement	95% Queue Length (ft/lane)	V/C	Delay (s/veh)	LOS	Intersection Delay (s/veh)	Intersection LOS
Central Ave & Coors Blvd (Signalized)															
AM Peak	NBL	55.1	0.57	76.6	E	53.3	D	PM Peak	NBL	86.3	0.66	59.8	E	44.8	D
	NBT	695.9	0.95	76.7	E				NBT	335.6	0.70	43.1	D		
	NBR	124.5	0.22	41.9	D				NBR	76.7	0.19	35.4	D		
	SBL	147.5	0.54	66.4	E				SBL	229.7	0.83	60.0	E		
	SBT	396.8	0.55	41.0	D				SBT	573.0	0.87	53.3	D		
	SBR	378.6	0.55	41.2	D				SBR	541.6	0.87	54.2	D		
	EBL	333.9	0.88	75.2	E				EBL	214.2	0.83	70.1	E		
	EBT	311.2	0.37	28.7	C				EBT	217.9	0.33	27.7	C		
	EBR	308.5	0.37	28.8	C				EBR	214.2	0.33	27.8	C		
	WBL	141.5	0.79	92.1	F				WBL	186.2	0.82	65.6	E		
	WBT	134.1	0.18	32.7	C				WBT	258.5	0.43	29.3	C		
	WBR	275.4	0.41	37.9	D				WBR	260.8	0.48	31.8	C		
Gonzales Rd & Coors Blvd (Stop-Controlled)															
AM Peak	NBT	---	---	---	---	28.5	D	PM Peak	NBT	---	---	---	---	18.6	C
	NBR	---	---	---	---				NBR	---	---	---	---		
	SBL	17.5	0.20	14.2	B				SBL	12.5	0.15	10.0	B		
	SBT	---	---	---	---				SBT	---	---	---	---		
	WBL/R	67.5	0.48	28.5	D				WBL/R	42.5	0.37	18.6	C		
Bataan Dr & Gonzales Rd (Stop-Controlled)															
AM Peak	NBL/T/R	10.0	---	8.1	A	8.0	A	PM Peak	NBL/T/R	10.0	---	8.1	A	8.1	A
	SBL/T/R	5.0	---	7.5	A				SBL/T/R	5.0	---	7.7	A		
	EBL/T/R	15.0	---	8.1	A				EBL/T/R	17.5	---	8.2	A		
	WBL/T/R	10.0	---	7.9	A				WBL/T/R	10.0	---	8.0	A		
Bridge Blvd & Coors Blvd (Signalized)															
AM Peak	NBL	30.7	0.16	6.6	A	18.3	B	PM Peak	NBL	20.4	0.15	6.3	A	16.8	B
	NBT	282.8	0.47	11.3	B				NBT	125.2	0.25	8.0	A		
	NBR	277.0	0.47	11.3	B				NBR	122.3	0.25	8.0	A		
	SBL	24.0	0.20	8.3	A				SBL	26.6	0.16	5.6	A		
	SBT	147.3	0.26	9.1	A				SBT	189.6	0.35	8.7	A		
	SBR	144.5	0.26	9.2	A				SBR	184.7	0.35	8.7	A		
	EBL	130.0	0.48	53.0	D				EBL	46.6	0.24	49.3	D		
	EBT	214.4	0.54	46.5	D				EBT	137.4	0.43	43.4	D		
	EBR	31.1	0.09	38.5	D				EBR	67.5	0.22	39.0	D		
	WBL	62.6	0.28	52.7	D				WBL	57.7	0.26	47.8	D		
	WBT	162.7	0.41	44.8	D				WBT	178.4	0.54	44.8	D		
	WBR	69.8	0.19	10.0	D				WBR	131.3	0.41	40.4	D		

The Build-Out Year 2026 Background analysis indicates:

Delay and LOS Results

At all other intersections where LOS results are present, all movements operate at acceptable LOS during the AM and PM peaks except:

- At the signalized intersection of Central Avenue & Coors Boulevard
    - NBL operates at LOS E during the AM and PM peak hours.
    - NBT operates at LOS E during the AM peak hour.
    - SBL operates at LOS E during the AM and PM peak hours.
    - EBL operates at LOS E during the AM and PM peak hours.
    - WBL operates at LOS F and LOS E during the AM and PM peak hours, respectively.

Queuing Results

At all intersections where queue length results are present, existing storage lengths are sufficient to accommodate 95th percentile queue lengths except:

- At the signalized intersection of Central Avenue & Coors Boulevard
    - EBL is anticipated to not accommodate the 95th percentile queue lengths during the AM and PM peak hours.
    - WBL is anticipated not to accommodate the 95th percentile queue lengths during the PM peak hour.
- At the signalized intersection of Bridge Boulevard & Coors Boulevard
    - WBR is anticipated not to accommodate the 95th percentile queue lengths during the PM peak hour.

BUILD-OUT YEAR 2026 TOTAL CONDITIONS

Trips generated by the proposed development are added to the Build-Out Year 2026 Background volumes for analysis. Trip generation was performed using the ITE Trip Generation Manual, 11th Edition. **Table 11** summarizes the intersection delay, level of service, and queueing under Build-Out Year 2026 Total conditions.

Table 11: HCM Results for Build-Out Year 2026 Total Conditions

	Movement	95% Queue Length (ft/lane)	V/C	Delay (s/veh)	LOS	Intersection Delay (s/veh)	Intersection LOS		Movement	95% Queue Length (ft/lane)	V/C	Delay (s/veh)	LOS	Intersection Delay (s/veh)	Intersection LOS
Central Ave & Coors Blvd (Signalized)															
AM Peak	NBL	56.0	0.58	76.8	E	52.3	D	PM Peak	NBL	88.5	0.66	59.7	E	45.5	D
	NBT	672.2	0.94	73.4	E				NBT	342.9	0.71	43.3	D		
	NBR	126.3	0.22	42.1	D				NBR	78.6	0.19	35.3	D		
	SBL	147.5	0.54	66.4	E				SBL	229.7	0.83	60.0	E		
	SBT	410.1	0.56	41.7	D				SBT	591.4	0.88	55.2	E		
	SBR	391.2	0.57	41.8	D				SBR	559.5	0.88	56.3	E		
	EBL	333.9	0.88	75.2	E				EBL	215.2	0.83	70.7	E		
	EBT	311.6	0.37	28.7	C				EBT	219.6	0.33	28.0	C		
	EBR	308.8	0.37	28.7	C				EBR	215.7	0.34	28.0	C		
	WBL	145.4	0.79	91.9	F				WBL	190.8	0.82	66.7	E		
	WBT	133.6	0.18	32.5	C				WBT	259.3	0.43	29.5	C		
	WBR	274.7	0.41	37.7	D				WBR	261.5	0.48	32.0	C		
Gonzales Rd & Coors Blvd (Stop-Controlled)															
AM Peak	NBT	---	---	---	---	34.5	D	PM Peak	NBT	---	---	---	---	18.6	C
	NBR	---	---	---	---				NBR	---	---	---	---		
	SBL	25.0	0.24	14.9	B				SBL	12.5	0.14	10.1	B		
	SBT	---	---	---	---				SBT	---	---	---	---		
	WBL/R	95.0	0.57	34.5	D				WBL/R	52.5	0.41	18.6	C		
Site Access & Gonzales Rd (Stop-Controlled)															
AM Peak	NBL/R	5.0	0.06	10.3	B	10.3	B	PM Peak	NBL/R	7.5	0.09	10.3	B	10.3	B
	EBT/R	---	---	---	---				EBT/R	---	---	---	---		
	WBL	2.5	0.02	7.8	A				WBL	0.0	0.01	7.7	A		
	WBT	---	---	0.2	A				WBT	---	---	0.1	A		
Bataan Dr & Gonzales Rd (Stop-Controlled)															
AM Peak	NBL/T/R	12.5	---	8.3	A	8.2	A	PM Peak	NBL/T/R	12.5	---	8.3	A	8.3	A
	SBL/T/R	5.0	---	7.6	A				SBL/T/R	5.0	---	7.8	A		
	EBL/T/R	17.5	---	8.3	A				EBL/T/R	25.0	---	8.6	A		
	WBL/T/R	10.0	---	8.1	A				WBL/T/R	12.5	---	8.2	A		
Bridge Blvd & Coors Blvd (Signalized)															
AM Peak	NBL	30.9	0.16	6.6	A	18.4	B	PM Peak	NBL	20.5	0.16	6.4	A	16.8	B
	NBT	290.8	0.47	11.5	B				NBT	127.4	0.26	8.0	A		
	NBR	284.9	0.48	11.5	B				NBR	124.5	0.26	8.0	A		
	SBL	24.6	0.21	8.5	A				SBL	26.8	0.16	5.7	A		
	SBT	151.3	0.26	9.2	A				SBT	193.2	0.37	8.8	A		
	SBR	147.5	0.27	9.3	A				SBR	189.0	0.37	8.8	A		
	EBL	132.5	0.49	52.9	D				EBL	47.8	0.25	49.3	D		
	EBT	213.8	0.54	46.3	D				EBT	137.4	0.43	43.3	D		
	EBR	31.0	0.09	38.3	D				EBR	67.4	0.22	38.9	D		
	WBL	62.5	0.28	52.4	D				WBL	57.6	0.26	47.7	D		
	WBT	162.1	0.41	44.7	D				WBT	178.3	0.54	44.7	D		
	WBR	73.0	0.20	39.9	D				WBR	132.4	0.41	40.3	D		

The analysis of Build-Out Year 2026 Total indicates:

Delay and LOS Results

At all other intersections where LOS results are present, all movements operate at acceptable LOS during the AM and PM peaks except:

- At the signalized intersection of Central Avenue & Coors Boulevard
  - NBL operates at LOS E during the AM and PM peak hours.
  - NBT operates at LOS E during the AM peak hour.
  - SBL operates at LOS E during the AM and PM peak hours.
  - SBT operates at LOS E during the PM peak hour.
  - SBR operates at LOS E during the PM peak hour.
  - EBL operates at LOS E during the AM and PM peak hours.
  - WBL operates at LOS F and LOS E during the AM and PM peak hours, respectively.

Queuing Results

At all intersections where queue length results are present, existing storage lengths are sufficient to accommodate 95th percentile queue lengths except:

- At the signalized intersection of Central Avenue & Coors Boulevard
  - EBL is anticipated to not accommodate the 95th percentile queue lengths during the AM and PM peak hours.
  - WBL is anticipated not to accommodate the 95th percentile queue lengths during the PM peak hour.
- At the signalized intersection of Bridge Boulevard & Coors Boulevard
  - WBR is anticipated not to accommodate the 95th percentile queue lengths during the PM peak hour.

HORIZON YEAR 2036 CONDITIONS

Trips generated by the proposed development are added to Build-Out Year 2026 Background volumes for analysis. **Table 12** summarizes the intersection delay, level of service, and queueing under Horizon Year 2036 Total conditions. Horizon Year 2036 Total Conditions are analyzed with existing signal timing.

Table 12: HCM Results for Horizon Year (2036) Conditions

	Movement	95% Queue Length (ft/lane)	V/C	Delay (s/veh)	LOS	Intersection Delay (s/veh)	Intersection LOS		Movement	95% Queue Length (ft/lane)	V/C	Delay (s/veh)	LOS	Intersection Delay (s/veh)	Intersection LOS
Central Ave & Coors Blvd (Signalized)															
AM Peak	NBL	60.9	0.61	77.3	E	81.5	F	PM Peak	NBL	96.6	0.68	59.4	E	56.7	E
	NBT	1158.6	1.05	171.6	F				NBT	390.6	0.80	47.7	D		
	NBR	140.7	0.24	42.0	D				NBR	87.9	0.21	36.0	D		
	SBL	164.1	0.60	67.1	E				SBL	253.5	0.85	61.9	E		
	SBT	455.8	0.62	42.9	D				SBT	806.9	0.97	87.9	F		
	SBR	433.9	0.62	43.1	D				SBR	771.4	0.97	91.2	F		
	EBL	360.4	0.89	74.2	E				EBL	242.0	0.85	76.5	E		
	EBT	349.1	0.42	30.4	C				EBT	246.2	0.38	29.8	C		
	EBR	345.8	0.42	30.4	C				EBR	241.5	0.39	29.9	C		
	WBL	167.1	0.80	99.6	F				WBL	216.3	0.83	72.2	E		
	WBT	153.3	0.21	34.5	C				WBT	291.2	0.49	31.5	C		
	WBR	310.4	0.47	40.9	D				WBR	296.3	0.55	34.9	C		
Gonzales Rd & Coors Blvd (Stop-Controlled)															
AM Peak	NBT	---	---	---	---	54.5	F	PM Peak	NBT	---	---	---	---	26.6	D
	NBR	---	---	---	---				NBR	---	---	---	---		
	SBL	32.5	0.30	17.2	C				SBL	20.0	0.21	10.8	B		
	SBT	---	---	---	---				SBT	---	---	---	---		
	WBL/R	162.5	0.72	54.5	F				WBL/R	87.5	0.55	26.6	D		
Site Access & Gonzales Rd (Stop-Controlled)															
AM Peak	NBL/R	7.5	0.09	10.6	B	10.6	B	PM Peak	NBL/R	7.5	0.09	10.5	B	10.5	B
	EBT/R	---	---	---	---				EBT/R	---	---	---	---		
	WBL	2.5	0.02	7.8	A				WBL	0.0	0.01	7.7	A		
	WBT	---	---	0.2	A				WBT	---	---	0.1	A		
Bataan Dr & Gonzales Rd (Stop-Controlled)															
AM Peak	NBL/T/R	15.0	---	8.5	A	8.4	A	PM Peak	NBL/T/R	12.5	---	8.5	A	8.6	A
	SBL/T/R	5.0	---	7.7	A				SBL/T/R	5.0	---	7.9	A		
	EBL/T/R	22.5	---	8.5	A				EBL/T/R	27.5	---	8.8	A		
	WBL/T/R	12.5	---	8.2	A				WBL/T/R	12.5	---	8.3	A		
Bridge Blvd & Coors Blvd (Signalized)															
AM Peak	NBL	37.2	0.19	7.5	A	19.5	B	PM Peak	NBL	24.4	0.20	7.3	A	17.4	B
	NBT	348.7	0.54	13.6	B				NBT	154.5	0.29	9.0	A		
	NBR	341.9	0.54	13.7	B				NBR	150.3	0.29	9.1	A		
	SBL	29.2	0.26	10.3	B				SBL	31.9	0.20	6.3	A		
	SBT	183.7	0.30	10.6	B				SBT	225.7	0.41	1.0	B		
	SBR	179.4	0.30	10.6	B				SBR	220.6	0.41	10.0	B		
	EBL	146.8	0.51	52.3	D				EBL	52.6	0.27	49.0	D		
	EBT	229.4	0.54	45.0	D				EBT	150.0	0.44	42.4	D		
	EBR	33.3	0.09	36.5	D				EBR	72.4	0.27	37.6	D		
	WBL	68.6	0.30	51.8	D				WBL	64.4	0.29	47.3	D		
	WBT	176.3	0.41	43.2	D				WBT	193.7	0.55	43.8	D		
	WBR	77.9	0.20	38.2	D				WBR	144.2	0.42	39.1	D		

The Horizon Year 2036 Total analysis indicates:

Delay and LOS Results

At all intersections where LOS results are present, all movements operate at acceptable LOS during the AM and PM peaks except:

- At the signalized intersection of Central Avenue & Coors Boulevard
    - NBL operates at LOS E during the AM and PM peak hours.
    - NBT operates at LOS F during the AM peak hour.
    - SBL operates at LOS E during the AM and PM peak hours.
    - SBT operates at LOS F during the PM peak hour.
    - SBR operates at LOS F during the PM peak hour.
    - EBL operates at LOS E during the AM and PM peak hours.
    - WBL operates at LOS F and LOS E during the AM and PM peak hours, respectively.
- At the stop-controlled intersection of Gonzales Road and Coors Boulevard
    - WBL and WBR operate at LOS F at the AM peak hour

Queuing Results

At all intersections where queue length results are present, existing storage lengths are sufficient to accommodate 95th percentile queue lengths except:

- At the signalized intersection of Central Avenue & Coors Boulevard
    - EBL is anticipated to not accommodate the 95th percentile queue lengths during the AM and PM peak hours.
    - WBL is anticipated to not accommodate the 95th percentile queue lengths during the AM and PM peak hours.
- At the signalized intersection of Bridge Boulevard & Coors Boulevard
    - EBL is anticipated to not accommodate the 95th percentile queue lengths during the AM peak hour.
    - WBR is anticipated to not accommodate the 95th percentile queue lengths during the PM peak hour.

OFF-SITE CAPACITY MITIGATIONS

Under Existing 2024 traffic conditions, the left-turn and northbound through movements at Central Avenue and Coors Boulevard experience long queues and excessive delays. These movements continue to experience queuing and LOS challenges in all scenarios. The additional school-generated traffic does not appear to contribute to the queuing and LOS challenges compared to overall traffic growth.

However, per the Horizon Year 2036 Total analysis, the westbound movements at Gonzales Road and Coors Boulevard are anticipated to experience considerable delay and queuing. The following sections analyze and discuss several mitigation strategies.

TRAFFIC SIGNAL WARRANT

Implementing a traffic signal at the intersection of Gonzales Road and Coors Boulevard may mitigate the delay and queuing challenges for westbound in Horizon Year 2036. The following sections document a signal warrant analysis under the existing conditions to determine if a traffic signal is feasible for this intersection.

SIGNAL WARRANT ANALYSIS

This traffic signal warrant analysis is based on the traffic signal warrants in Chapter 4C, Traffic Control Signal Needs Studies, of the 2009 Manual on Uniform Traffic Control Devices (MUTCD). Nine warrants are included in the manual for warranting a traffic signal installation. These warrants are:

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

This analysis was performed using existing turning movement volumes collected over 13 hours at Gonzales Road and Coors Boulevard, summarized in **Table 13**. TMC data is in Appendix B.

Table 13: Volume Summary

Hour Begin	Coors Boulevard			Gonzales Road				Total Minor Volume	Pedestrians Crossing Major Roadway
	NB Volume	SB Volume	Total Volume	EB Volume		WB Volume			
				LT	RT	LT	RT		
0:00									
1:00									
2:00									
3:00									
4:00									
5:00									
6:00	707	366	1,073	0	0	24	53	77	0
7:00	1,210	667	1,877	0	0	47	77	124	0
8:00	1,057	696	1,753	0	0	76	84	160	0
9:00	802	588	1,390	0	0	57	49	106	0
10:00	678	659	1,337	0	0	31	60	91	0
11:00	641	680	1,321	0	0	35	60	95	0
12:00	674	810	1,484	0	0	53	51	104	0
13:00	696	877	1,573	0	0	48	67	115	0
14:00	731	952	1,683	0	0	63	79	142	0
15:00	833	1,153	1,986	0	0	60	100	160	1
16:00	826	1,218	2,044	0	0	86	75	161	0
17:00	825	1,158	1,983	0	0	69	65	134	0
18:00	688	1,033	1,721	0	0	46	42	88	0
19:00									
20:00									
21:00									
22:00									
23:00									
TOTAL	**10,368**	**10,857**	**21,225**	**0**	**0**	**695**	**862**	**1,557**	**1**

The MUTCD recommends considering the effects of right-turn volumes on the minor street approach if the movement enters the major street with minimal conflict, primarily with a right-turn lane. Based on the traffic volumes at this intersection, Coors Boulevard is considered the Major Roadway for this analysis, with multi-lane approaches. Gonzales Road is evaluated as a Minor Roadway with a single-lane approach. **Table 14** summarizes the volume warrant results, as discussed in the next section.

Table 14: Volume for Analysis and Warrant Summary

Hour Begin	Coors Boulevard			Gonzales Road		Max Volume	Meets Warrants?					
	NB Volume	SB Volume	Total Volume	EB Volume	WB Volume		1A	1B	1-Combo		2	3
									A	B		
0:00							-	-	-	-	-	-
1:00							-	-	-	-	-	-
2:00							-	-	-	-	-	-
3:00							-	-	-	-	-	-
4:00							-	-	-	-	-	-
5:00							-	-	-	-	-	-
6:00	707	366	1,073	0	77	77	-	Y	-	Y	Y	-
7:00	1,210	667	1,877	0	124	124	Y	Y	Y	Y	Y	-
8:00	1,057	696	1,753	0	160	160	Y	Y	Y	Y	Y	-
9:00	802	588	1,390	0	106	106	Y	Y	Y	Y	Y	-
10:00	678	659	1,337	0	91	91	-	Y	Y	Y	Y	-
11:00	641	680	1,321	0	95	95	-	Y	Y	Y	Y	-
12:00	674	810	1,484	0	104	104	-	Y	Y	Y	Y	-
13:00	696	877	1,573	0	115	115	Y	Y	Y	Y	Y	-
14:00	731	952	1,683	0	142	142	Y	Y	Y	Y	Y	-
15:00	833	1,153	1,986	0	160	160	Y	Y	Y	Y	Y	-
16:00	826	1,218	2,044	0	161	161	Y	Y	Y	Y	Y	-
17:00	825	1,158	1,983	0	134	134	Y	Y	Y	Y	Y	-
18:00	688	1,033	1,721	0	88	88	-	Y	Y	Y	Y	-
19:00							-	-	-	-	-	-
20:00							-	-	-	-	-	-
21:00							-	-	-	-	-	-
22:00							-	-	-	-	-	-
23:00							-	-	-	-	-	-
TOTAL	10,368	10,857	21,225	0	1,557	1,557	8	13	12	13	13	0
									12			

Warrant 1 – Eight-Hour Vehicular Volume

Warrant 1 is based on the volumes from both approaches on the major street and the higher approach volume on the minor street. It also uses the number of lanes for moving traffic on each approach. Either Condition A or Condition B of this warrant must be met for Warrant 1 to be satisfied.

The MUTCD allows for a reduced warranting threshold (70%) for intersections where the posted or 85th-percentile speed exceeds 40 MPH or if the intersection is located in a community with a population under 10,000. Since the posted speed limit on the Coors Boulevard is greater than 40 MPH (45 MPH), the reduced warranting threshold is used for this warrant.

Condition A of Warrant 1 is met when, for each of any eight hours of an average day, the warranting volumes exist on the major street and the higher-volume minor street approach to the intersection during the same eight hours. The warranting threshold for an approach with two or more lanes on the major street and an approach with one lane on the minor street:

Major Street: 420 vph (total for both directions)
Minor Street: 105 vph (higher volume approach)

Warrant 1A threshold volumes are exceeded for eight (8) hours of the day. Eight (8) hours are required for this warrant condition. Warrant 1A is satisfied at this location.

Condition B of Warrant 1 applies to operating conditions where the major street traffic is so heavy that it creates excessive delay or hazardous conditions for minor street traffic when entering or crossing the

major street. The warrant condition is met when, for each of any eight hours of an average day, the warranting volumes exist on the major street and on the higher-volume minor street approach to an intersection. The warranting threshold for an approach with two or more lanes on the major street and an approach with one lane on the minor street is:

Major Street: 630 vph (total for both directions)
Minor Street: 53 vph (higher volume approach)

Warrant 1B threshold volumes are exceeded for 13 hours of the day. Eight (8) hours are required for this warrant condition. Warrant 1B is satisfied at this location.

A combination of Conditions A and B may be applied at locations where Conditions A and B are not satisfied. The same eight hours of the day are not required to be used for meeting both conditions. Under the combination warrant, the warranting thresholds are:

Major Street: 336 vph and 504 vph for Conditions A and B, respectively
(total for both directions)
Minor Street: 84 vph and 42 vph for Conditions A and B, respectively
(higher volume approach)

Combination threshold volumes are exceeded for 12 hours of the day. Eight (8) hours are required for this warrant condition. The combination warrant is satisfied at this location.

Based on these results and as shown in **Table 14**, **Warrant 1 is MET for this intersection**.

Warrant 2 – Four-Hour Volumes

Warrant 2 is satisfied when the volumes for any four (4) hours of an average day, when plotted in Figure 4C-1 (or 4C-2 when applicable) of the MUTCD, fall above the curve for the appropriate number of lanes. The minor street approach is evaluated as two lanes because approximately half of the traffic on the approach turns left, and the left-turn lane accommodates all left-turning vehicles. Since the posted speed limit on the major street is over 40 mph (45 mph), the reduced warranting threshold is used for this warrant, and Figure 4C-1 is used for this analysis. **Figure 9** shows the results of this analysis.

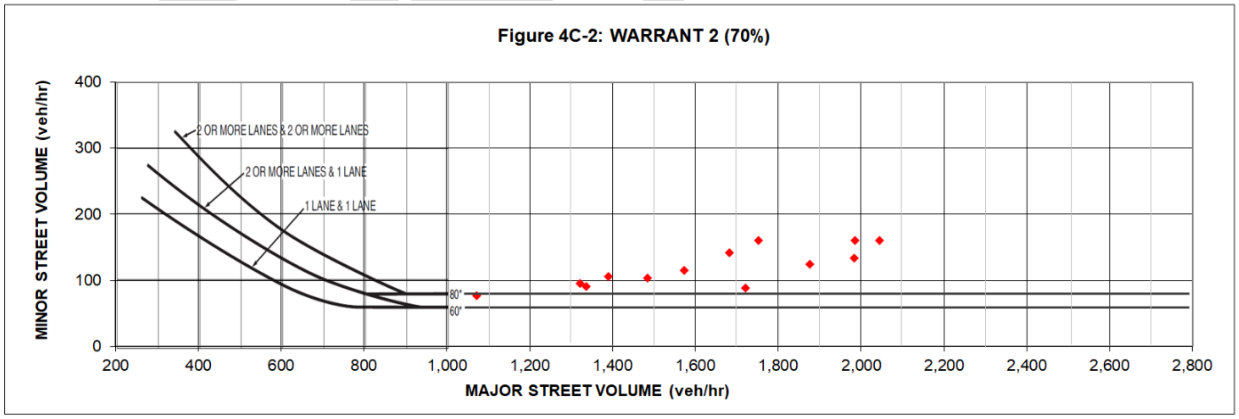


Figure 9: Four-Hour Vehicular Volume Warrant (Warrant 2) – Gonzales Road and Coors Boulevard

Based on the traffic volumes presented in **Table 14** and plotted in **Figure 9**, 13 hours of the day fall above the curve for the appropriate number of lanes when plotted in Figure 4C-2 of the MUTCD. Four (4) hours are required for this warrant condition. Under these circumstances, **Warrant 2 is MET for this intersection**.

Warrant 3 – Peak Hour Volume

Warrant 3 is intended for application when traffic conditions are such that for at least one (1) hour of the day, the minor street traffic experiences undue delays entering or crossing the major street. Warrant 3 is satisfied when either of the following conditions is met:

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

As further specified in the MUTCD:

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

Traffic characteristics at this intersection do not fall under the unusual cases identified above. Therefore, **Warrant 3 was NOT evaluated for this intersection and is not APPLICABLE**.

Warrant 4 – Minimum Pedestrian Volume

Warrant 4 applies to conditions where the major street traffic is so heavy that pedestrians experience excessive delay in crossing the major street. It is intended for application at an intersection or midblock location and requires that one (1) of the following conditions be met:

A. For each of any 4 hours of an average day, the plotted points representing the vehicles per hour on the major street (total of both approaches) and the corresponding pedestrians per hour crossing the major street (total of all crossings) fall above the curve in Figure 4C-5 (or Figure 4C-6 for speeds greater than 35 MPH); or

B. For one (1) hour (any four consecutive 15-minute periods) of an average day, the plotted point representing the vehicles per hour on the major street (total of both approaches) and the corresponding pedestrians per hour crossing the major street (total of all crossings) fall above the curve in Figure 4C-7 (or Figure 4C-8 for speeds greater than 35 MPH).

This warrant applies only to those locations where the nearest traffic signal along the major street is greater than 300 feet away. A traffic signal at the study intersection would not unduly restrict platooned traffic flow.

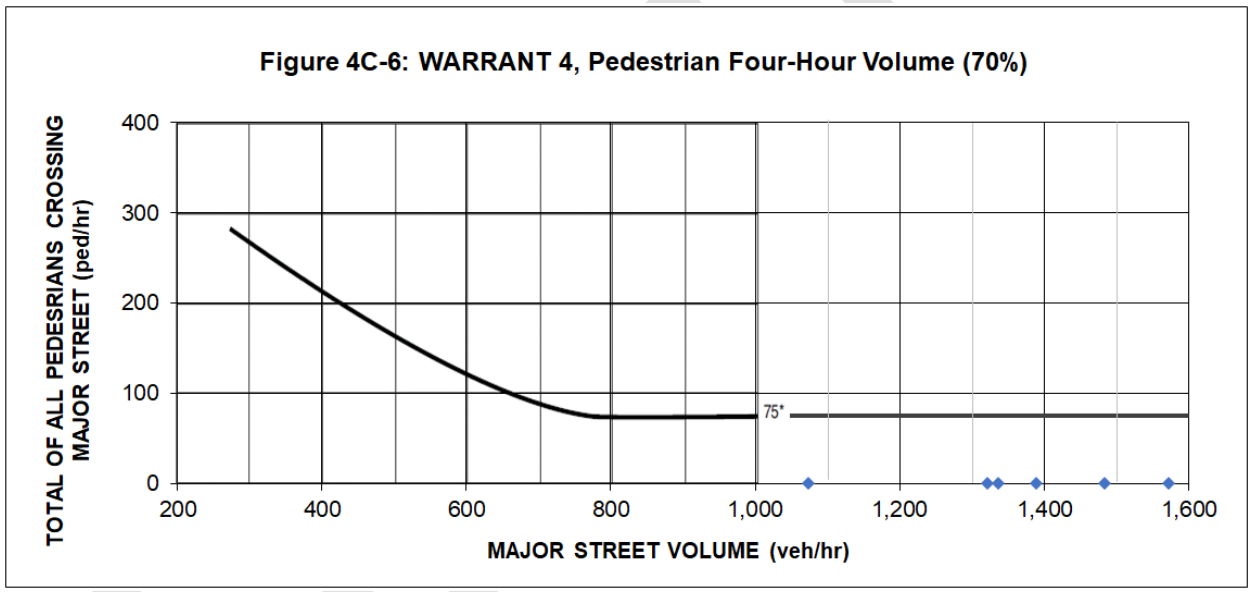


Figure 10: Warrant 4 Minimum Pedestrian Volume Gonzales Road Approaches at Coors Boulevard

Based on the pedestrian volumes crossing Coors Boulevard, as shown in **Table 13** and plotted in **Figure 10**, pedestrians crossing Coors Boulevard do not experience excessive delay, and the threshold volumes are not met. **Warrant 4 is NOT MET at this intersection.**

Warrant 5 – School Crossing

This warrant applies at an established school crossing where a traffic engineering study of the frequency and adequacy of gaps in the vehicular traffic stream as related to the number and size of groups of school children at the school crossing shows that the number of adequate gaps in the traffic during the period when the children are using the crossing is less than the number of minutes in the same period.

Since this intersection is not an established school crossing, **Warrant 5 is NOT APPLICABLE.**

Warrant 6 – Coordinated Signal System

Progressive movement control sometimes requires traffic signal installations at intersections where they would not otherwise be warranted to maintain proper vehicle platooning and regulate group speed effectively. This warrant is met when one (1) of the following requirements are met:

1. On a one-way street or a street which has predominantly unidirectional traffic, the adjacent signals are so far apart that they do not provide the required degree of platooning.
2. On a two-way street, adjacent signals do not provide the necessary degree of platooning and the proposed and adjacent signals could constitute a progressive signal system.

This warrant should not be applied where the ultimate signal spacing would be less than 1,000 feet. The nearest signalized intersections along Coors Boulevard are located approximately 2,800 feet to the north and approximately 1,200 feet to the south. As a traffic signal at Gonzales Road and Coors Boulevard intersection is not necessary for a progressive signal system, **Warrant 6 is NOT MET at this intersection.**

Warrant 7 – Crash Experience

The warrant is satisfied when:

1. Adequate trial of less restrictive remedies with satisfactory observance and enforcement has failed to reduce the crash frequency;
   and
2. Five or more reported crashes, of types susceptible to correction by traffic signal control, have occurred within a 12-month period, each crash involving personal injury or property damage apparently exceeding the applicable requirements for a reportable crash;
   and
3. For each of any 8 hours of an average day, the vehicles per hour (vph) given in both of the 80 percent columns of Condition A in Table 4C-1, or the vph in both of the 80 percent columns of Condition B in Table 4C-1 exists on the major-street and the higher-volume minor-street approach, respectively, to the intersection, or the volume of pedestrian traffic is not less than 80 percent of the requirements specified in the Pedestrian Volume warrant. These major-street and minor-street volumes shall be for the same 8 hours. On the minor street, the higher volume shall not be required to be on the same approach during each of the 8 hours. If the posted or statutory speed limit or the 85th-percentile speed on the major street exceeds 40 MPH, or if the intersection lies within the built-up area of an isolated community having a population of less than 10,000, the traffic volumes in the 56 percent columns in Table 4C-1 may be used in place of the 80 percent columns.

Crash data between 2018 and 2022 did not include a 12-month period with five or more crashes susceptible to correction by a traffic signal. **Warrant 7 is NOT MET for this intersection.**

Warrant 8 – Roadway Network

The systems warrant is intended to encourage concentration and organization of traffic flow networks. This warrant is applicable when the common intersection of two major routes:

1. The intersection has a total existing, or immediately projected, entering volume of at least 1,000 vehicles during the peak hour of a typical weekday and has five-year projected traffic volumes, based on an engineering study, which meet one or more of Warrants 1, 2, and 3 during an average weekday; or
2. Has a total existing or immediately projected entering volume of at least 1,000 vehicles for each of any five hours of a Saturday and/or Sunday.

A major route as used in this signal warrant shall have one or more of the following characteristics:

1. It is part of the street or highway system that serves as the principal roadway network for through traffic flow; or
2. It includes rural or suburban highways outside, entering or traversing a City; or
3. It appears as a major route on an official plan, such as a major street plan in an urban area traffic and transportation study; or
4. It connects areas of principal traffic generation; or
5. It has street freeway or expressway ramp terminals.

In the Mid-Region Metropolitan Planning Organization Long Range Rodway System, Coors Boulevard is classified as a principal arterial. Gonzales Road is considered a local street. In addition, Warrant 3 is not met. Therefore, **Warrant 8 is NOT MET at this intersection.**

Warrant 9 – Intersection Near a Grade Crossing

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

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

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

A railroad grade crossing is not located within 140 feet of this intersection. **Warrant 9 is NOT APPLICABLE for this intersection**.

Intersection Sight Distance

As part of this study, sight distance on the minor street (Gonzales Road) approach to the intersection was assessed. On stop-controlled approaches, the motorist should be able to see if and when adequate gaps exist to perform their desired maneuver.

The sight distance required for the stop-controlled approaches was estimated using the procedures developed by the American Association of State Highway and Transportation Officials (AASHTO) and published in the 2018 edition of A Policy on Geometric Design of Highways and Streets. **Table 15** presents the required and available sight distance for vehicles turning onto Coors Boulevard from Gonzales Road.

Table 15: Sight Distance Evaluation

Major Roadway	Coors Boulevard
Posted Speed Limit	45 MPH
Minor Roadway	Gonzales Road
Approach	Westbound
Required Intersection Sight Distance to the Left	430 feet
Required Intersection Sight Distance to the Right	695 feet
Available Sight Distance to the Left	475 feet
Available Sight Distance to the Right	550 feet
Sight Distance Available > Required	
To the Left	Yes
To the Right	No

As shown in **Table 15** Based on a comparison of the field investigation results of the available sight distance to the required sight distance, the available sight distance is insufficient for motorists on the west approach who are making left turns.

SIGNAL WARRANT RESULTS

Based on the existing traffic volumes and this traffic signal warrant analysis, traffic signal Warrants 1 and 2 are met for the Gonzales Road and Coors Boulevard intersection. **Table 16** is a summary of the traffic signal warrants.

Table 16: Signal Warrant Summary – Gonzales Road and Coors Boulevard

Warrant	Warrant Met?	Notes
1 – Eight-Hour Vehicular Volume	Yes	Condition A – 8 hours met (8 required)
		Condition B – 13 hours met (8 required)
		Combination – 12 hours met (8 required)
2 – Four-Hour Vehicular Volume	Yes	13 hours met (4 required)
3 – Peak Hour	No	0 hours met (1 required)
4 – Pedestrian Volume	No	0 hours met for 4-hour and peak hour
5 – School Crossing	N/A	Not an established school crossing
6 – Coordinated Signal System	No	Not needed for progressive signal system
7 – Crash Experience	No	Not Evaluated
8 – Roadway Network	No	Intersection of two major routes
9 – Near a Grade Crossing	N/A	Not adjacent to a grade crossing

Based on this traffic signal warrant analysis, a traffic signal is recommended at this intersection.

In the Horizon Year 2036 Total conditions, the westbound approach of Gonzales Road at Coors Boulevard is anticipated to experience delay and queueing issues. Installing a traffic signal or converting the intersection to a roundabout are options that are anticipated to resolve these issues. **Table 17** and **Table 18** show the delay and queueing results for Gonzales Road at Coors Boulevard for a traffic signal and a roundabout under Horizon Year 2036 Total conditions.

Table 17: Gonzales Rd and Coors Blvd Summary with Traffic Signal

Gonzales Rd & Coors Blvd (Signalized)															
AM Peak	Movement	95% Queue Length (ft/lane)	V/C	Delay (s/veh)	LOS	Intersection Delay (s/veh)	Intersection LOS	PM Peak	Movement	95% Queue Length (ft/lane)	V/C	Delay (s/veh)	LOS	Intersection Delay (s/veh)	Intersection LOS
	NBT	359.4	0.72	18.1	B	15.6	B		NBT	155.2	0.39	9.8	A	9.8	A
	NBR	356.3	0.73	18.5	B				NBR	151.2	0.39	9.9	A		
	SBL	54.8	0.55	17.7	B				SBL	31.0	0.35	7.4	A		
	SBT	86.3	0.30	6.1	A				SBT	102.8	0.40	5.3	A		
	WBL/R	137.9	0.52	30.0	C				WBL/R	169.0	0.77	34.6	C		

Delay and LOS Results

All movements operate at acceptable LOS during the AM and PM peak hours.

Queuing Results

The existing storage lengths are sufficient to accommodate 95th-percentile queue lengths.

Table 18: Gonzales Rd and Coors Blvd Summary with Roundabout

Gonzales Rd & Coors Blvd (Roundabout)															
AM Peak	Movement	95% Queue Length (ft/lane)	V/C	Delay (s/veh)	LOS	Intersection Delay (s/veh)	Intersection LOS	PM Peak	Movement	95% Queue Length (ft/lane)	V/C	Delay (s/veh)	LOS	Intersection Delay (s/veh)	Intersection LOS
	NBT	102.5	0.58	10.0	B	9.0	A		NBT	40.0	0.34	6.4	A	7.2	A
	NBT/R	117.5	0.62	10.4	B				NBT/R	42.5	0.36	6.4	A		
	SBL/T	35.0	0.32	5.8	B				SBL/T	62.5	0.46	7.6	A		
	SBT	37.5	0.34	5.8	A				SBT	70.0	0.49	7.8	A		
	WBL/R	42.5	0.36	14.1	B				WBL/R	27.5	0.27	8.1	A		

Delay and LOS Results

All movements operate at acceptable LOS during the AM and PM peak hours.

Queuing Results

The existing storage lengths are sufficient to accommodate 95th-percentile queue lengths.

MITIGATION SUMMARY

Per the Horizon Year 2036 Total analysis, the westbound movements at Gonzales Road and Coors Boulevard are anticipated to experience considerable delay and queuing; additional traffic control at this intersection is recommended.

A traffic signal is warranted under existing 2024 conditions. As such, a traffic signal is analyzed as a potential strategy to mitigate westbound delay on Gonzales Road at Coors Boulevard under Horizon Year 2036 conditions. Signalizing this intersection will improve LOS for the intersection and the westbound approach under Horizon Year 2036 conditions.

Similarly, converting the intersection to a two-lane roundabout will improve delay and LOS while also minimizing 95th-percentile queue lengths and proactively addressing safety.

Pedestrian and Bicycle Circulation

Mark Armijo Academy estimates that 40 to 60 percent of students arrive by walking or riding bicycles. There are adequate sidewalks in the vicinity of the development site. However, there are no marked crossing facilities for student pedestrians walking from north of Gonzales Road. A marked pedestrian crossing across Gonzales Road can provide a safe location for student pedestrians to use when accessing the school's campus. Additionally, the Mark Armijo Academy development should ensure that pedestrian facilities throughout the property comply with American Disabilities Act (ADA) standards and adhere to the guidelines outlined in Chapter 23, Section 3.5, of the COA DPM, which describes standards for pedestrian facilities for sidewalks and curb ramps.

At each entrance, secure and convenient bicycle storage facilities on the school campus should be provided.

By providing safe pedestrian and bicycle facilities, the school can communicate its investment in its students and community by encouraging physical activity, sustainability, and equitable transportation.

Drop-off/Pick-up Routing and Circulation

Right-in operations are recommended for the proposed access driveway to minimize congestion and delays associated with traffic circulation during student drop-off/pick-up. Right-in operations will also direct school trips to use the principal arterial rather than the adjacent local streets.

Additionally, the maximum queue length is estimated for the anticipated student enrollment of 380 students. The available storage space is approximately 960 feet. Using methodology developed by observing drop-off/pick-up operations of 55 elementary schools in Texas, the maximum queue length during drop-off and pick-up was determined for each drop-off area[1]. The maximum queue length and available storage are shown in **Table 19**.

Table 19: Queuing Analysis

Enrollment (n)	380
Max. Queue Length (ft)	525
Available Vehicle Storage (ft)	960

The queuing analysis indicates that the drop-off/pick-up loop is anticipated to accommodate the maximum queue length resulting from drop-off/pick-up operations.

Queuing Methodology Applicability and Variances

While these analyses provide the best estimate of maximum queue lengths during drop-off/pick-up operations, they are based on some assumptions. The linear model used to determine maximum queue lengths is derived from the busiest time of day at sample Texas elementary schools. Presumably, all elementary school students are driven to school rather than driving their own vehicle as a high schooler might. MAA estimates that 30 percent of students drive themselves to MAA, making this a conservative estimate of the maximum queue length.

Noise and Air Quality Impacts

School drop-off and pick-up operations are accompanied by vehicle idling, which generates noise and excessive carbon dioxide (CO_2) emissions, degrading air quality. The Environmental Protection Agency (EPA) published the Idle-Free Schools Toolkit. Inspired by idling reduction programs such as the American Lung Association in Colorado's Clean Air at Schools (CASEO) Program, the EPA Clean School Bus Program Idle Reduction Campaign, and The Idle Free Utah Program, the Idle-Free Schools Toolkit,

[1] Qualls, "Strategies for the Greening of Student Pick-Ups at School Dismissal."

“includes all of the information needed to run an effective idling reduction campaign at a school to reduce student exposure to toxic vehicle exhaust.” This program aims to reduce noise and CO2 emissions and contributes to safety since noise from idling vehicles can adversely impact a student’s hearing ability. It also promotes public health by reducing unnecessary pollutants. Mark Armijo Academy should review the EPA Idle-Free Schools Toolkit and implement an idling reduction campaign. The EPA has several recommendations for implementing this campaign, including conducting observations, publishing idling policies for the school, talking to drivers when they are in the parent loop, and making it a student project. Additionally, encouraging students to walk or bicycle to school can help reduce motor vehicle trips, effectively reducing negative air quality, noise, and traffic impacts.

Summary of Off-Site Mitigations

In the Horizon Year 2026 Total scenario, Gonzales Road's westbound movement at Coors Boulevard is anticipated to experience capacity and queueing issues.

Signalization of the intersection would resolve these issues. Likewise, using a roundabout foro traffic control at this intersection will improve delay and queueing while proactively enhancing safety.

CRASH SUMMARY

Crash data for the intersection of Gonzales Road and Coors Boulevard area was reviewed to highlight crash trends and safety challenges that may be present. Crash data provided by the City of Albuquerque for 2018 to 2022 is summarized in **Table 20**.

Table 20: Crash Summary

Crash Summary		Coors & Central	Coors & Gonzales	Bataan & Gonzales	Coors & Bridge
	Total Crashes	**304**	**40**	**5**	**97**
By Year	2018	78	4	1	29
	2019	62	8	0	21
	2020	55	11	0	20
	2021	57	8	1	15
	2022	52	9	3	12
CONTRIBUTING FACTORS	Avoid No Contact Other	4	0	0	0
	Avoid No Contact Vehicle	6	3	1	4
	Cell Phone	3	0	0	0
	Defective Tires	0	1	0	0
	Disregarded Traffic Signal	26	0	0	15
	Driver Inattention	147	18	1	57
	Driverless Moving Vehicle	2	0	0	0
	Drove Left Of Center	2	1	0	1
	Excessive Speed	17	3	1	11
	Failed To Yield For Emergency Vehicle	1	0	0	0
	Failed To Yield For Police Vehicle	1	0	0	0
	Failed To Yield Right Of Way	43	7	1	18
	Following Too Closely	39	5	0	11
	Improper Backing	1	0	1	1
	Improper Lane Change	20	1	0	4
	Improper Overtaking	7	0	1	1
	Inadequate Brakes	4	1	0	0
	Made Improper Turn	11	3	1	1
	None	96	10	0	48
	Other Improper Driving	29	6	0	8
	Other Mechanical Defect	3	1	0	0
	Other, No Driver Error	134	17	3	29
	Passed Stop Sign	0	1	1	0
	Pedestrian Error	10	0	0	0
	Speed Too Fast For Conditions	6	1	0	3
	Under The Influence Of Drugs	0	3	0	0
	Under The Influence Of Alcohol	11	3	0	2
	Backup - Prior Incident	1	0	0	0
	Lights (Head, Signal, Tail)	1	0	0	0
	Driver Distracted By Other Activity	5	0	0	2
	Driver Distracted By Passenger	1	0	0	0
	Obstruction In Road	1	0	1	0
	Driver Distracted By Talking On Cell Phone	0	1	0	0
	Other Visual Obstruction(S)	2	0	0	4
	Weather Conditions	0	2	0	0
	Wheels	1	0	0	0
	Wipers	0	0	0	2
	%Driver Inattention	23%	20%	8%	26%
	%Failure To Yield Right Of Way	7%	8%	8%	8%
	%Disregarded Traffic Signal	4%	0%	0%	7%
	%Following Too Closely	6%	6%	0%	5%

SEVERITY	Fatal Injury (Killed) (K)	**1**	**1**	**0**	**2**
	Suspected Serious Injury (A)	**5**	**0**	**0**	**3**
	Visible Injury (B)	**20**	**1**	**0**	**6**
	Complaint of Injury (C)	**53**	**13**	**0**	**27**
	Property Damage Only (O)	**225**	**25**	**5**	**59**
	%Property Damage Only (O)	74%	63%	100%	61%
	%Complaint of Injury (C)	17%	33%	0%	28%
	%Visible Injury (B)	7%	3%	0%	6%
LIGHTING CONDITION	Daylight	156	24	2	49
	Dawn	4	1	0	2
	Dusk	8	3	0	6
	Dark-Lighted	66	7	1	22
	Dark-Not Lighted	7	1	1	4
	Left Blank	62	4	1	14
	%Daylight	51%	60%	40%	51%
	%Dark-Lighted	22%	18%	20%	23%
	%Dark-Not Lighted	2%	3%	20%	4%
BIKE/ PED	Pedestrian Involved	14	1	0	2
	Bicyclist Involved	0	0	0	0
	%Pedestrian Involved	5%	3%	0%	2%
	%Bicyclist Involved	0%	0%	0%	0%
CRASH TYPE	Fixed Object	0	0	1	0
	Left Blank	146	18	3	33
	Invalid Code	16	2	0	3
	Other Vehicle - From Same Direction/One Stopped	4	0	0	2
	Other Vehicle - From Same Direction/Rear End Collision	23	0	0	11
	Other Vehicle - From Same Direction/Sideswipe Collision	4	0	0	1
	Other Vehicle - From Same Direction/Both Going Straight	17	1	0	9
	Other Vehicle – From Same Direction/All Others	0	0	0	1
	Other Vehicle - One Left Turn/Entering At Angle	9	2	0	7
	Other Vehicle - One Right Turn/Entering At Angle	6	1	0	2
	Other Vehicle - Both Going Straight/Entering At Angle	22	5	0	9
	Other Vehicle – From Opposite Direction/All Others	0	0	0	1
	Other Vehicle - From Opposite Direction/Both Going Straight	3	1	0	1
	Other Vehicle - From Opposite Direction/One Left Turn	6	0	0	4
	Other Vehicle - From Opposite Direction/Sideswipe Collision	1	0	0	1
	Other Vehicle - From Opposite Direction	28	3	1	8
	%Other Vehicle - From Same Direction/Both Going Straight	6%	3%	0%	9%
	%Other Vehicle - One Left Turn/Entering At Angle	3%	5%	0%	7%
	Other Vehicle - Both Going Straight/Entering At Angle	7%	13%	0%	9%

The crash summary indicates:

- Central Avenue & Coors Boulevard
  - 304 crashes were reported.
  - The most common crash type was *Other Vehicle – From Opposite Direction*
  - 51% of reported crashes occurred during daylight hours, and 24% occurred under *Dark-Lighted* or *Dark-Not Lighted* conditions.
  - One fatal crash occurred.
  - Five serious injury crashes occurred.
  - There were 14 pedestrian-involved crashes.
  - The most common contributing factors were *Driver Inattention* and *Failed to Yield Right of Way*.
- Gonzales Road & Coors Boulevard
  - 40 crashes were reported.
  - The most common crash type was *Other Vehicle – Both Going Straight/Entering at Angle*
  - 60% of reported crashes occurred during daylight hours, and 21% occurred under *Dark-Lighted* or *Dark-Not Lighted* conditions.

    - One fatal crash occurred.
    - There was one pedestrian-involved crash.
    - The most common contributing factors were *Driver Inattention* and *Failed to Yield Right of Way*.
- Bataan Drive and Gonzales Road
    - 5 crashes were reported.
    - 40% of reported crashes occurred during daylight hours, and 40% occurred under *Dark-Lighted* or *Dark-Not Lighted* conditions.
    - No fatal or injury crashes occurred.
    - All crashes were classified as Property Damage Only.
- Bridge Boulevard and Coors Boulevard
    - 97 crashes were reported.
    - The most common crash type was *Other Vehicle - From Same Direction/Rear End Collision*
    - 51% of reported crashes occurred during daylight hours, and 27% occurred under *Dark-Lighted* or *Dark-Not Lighted* conditions.
    - Two fatal crashes occurred.
    - Three serious injury crashes occurred.
    - There were two pedestrian-involved crashes.
    - The most common contributing factors were *Driver Inattention* and *Failed to Yield Right of Way*.

CONCLUSIONS AND RECOMMENDATIONS

This section summarizes this report's traffic analysis, mitigations, and recommendations.

Traffic operations for Gonzales Road and Coors Boulevard are summarized as follows:

- WBL and WBR operate at LOS F during the AM peak hour under the Horizon Year 2036 Total scenario.
- All other movements operate at acceptable LOS levels and have adequate storage to accommodate the 95th percentile queue lengths under all scenarios.

Traffic operations for Central Avenue and Coors Boulevard are summarized as follows:

- NBL, SBL, EBL, and WBL operate at LOS E and LOS F during the AM and PM peak hours for the Existing 2024, Build-Out Year 2026 Background, Build-Out Year 2026 Total, and Horizon Year 2036 Total scenarios.
    - Queue storage is anticipated to be exceeded for the EBL movement during the AM and PM peak hours for the Existing 2024, Build-Out Year 2026 Background, Build-Out Year 2036 Total, and Horizon Year 2036 Total scenarios.
    - Queue storage is anticipated to be exceeded for the WBL movement during the AM and PM peak hours for the Existing 2024, Build-Out Year 2026 Background, Build-Out Year 2026 Total, and Horizon Year 2036 Total scenarios.
- NBT operates at LOS E during the AM peak hour for the Existing 2024, Build-Out Year 2026 Background, and Build-Out Year 2026 Total scenarios and LOS F for the AM peak hour in the Horizon Year 2036 Total scenarios.
- SBT and SBR operate at LOS E during the PM peak hour in the Build-Out Year 2026 Total scenario and LOS F during the PM peak hour in the Horizon Year 2036 Total scenario.
- All other movements operate at an acceptable LOS and have adequate storage to accommodate the 95th percentile queue lengths under the analyzed scenarios.

All other intersections operate at acceptable LOS and accommodate 95th percentile queue lengths during the AM and PM peak hours for all scenarios except:

- At Bridge Boulevard and Coors Boulevard, WBR 95th percentile queue lengths are anticipated to exceed storage lengths for the Existing 2024, Build-Out Year 2026 Background, Build-Out Year 2026 Total, and Horizon Year 2036 Total scenarios.

SITE RECOMMENDATIONS

Recommendations for study intersections directly serving and primarily impacted by the proposed development are as follows:

- Proposed Access Driveway and Gonzales Road:
    - The proposed access driveway on Gonzales Road meets CABQ DPM requirements.
    - Right-in operations should are recommended for the proposed access driveway.
    - The access driveway should provide adequate site distance, circulation for ingress and egress trips, and sufficient storage to accommodate school drop-off/pick-up operations.
- Multimodal Facilities
    - A marked pedestrian crossing across Gonzales Road can provide a safe location for student pedestrians to use when accessing the school's campus.
    - The Mark Armijo Academy development should ensure that pedestrian facilities comply with American Disabilities Act (ADA) standards and adhere to the guidelines outlined in the COA DPM.
    - At each entrance, secure and convenient bicycle storage facilities on the school campus should be provided.

- Queuing
    - The drop-off/pick-up loop is anticipated to accommodate the maximum queue length of drop-off/pick-up operations.
- Air Quality
    - Establish a policy to minimize vehicle idling during drop-off/pick-up operations.
    - Encourage students to walk or bicycle to school.

OFF-SITE INTERSECTION RECOMMENDATIONS

Recommendations for intersections within the study area that do not directly serve the proposed development are as follows:

- Gonzales Road & Coors Boulevard
    - For the Horizon Year 2036 scenario, the westbound movements are anticipated to experience unacceptable delays and queuing. Traffic control via a traffic signal is warranted at this intersection under the existing traffic conditions per the findings of a signal warrant documented in this analysis. Am HCS analysis of this intersection with a traffic signal does mitigate the Horizon Year 2036 queuing and delay challenges.
    - Using a roundabout for traffic control is another option to mitigate this intersection's delay and queuing challenges per an HCS analysis of Horizon Year 2036 volumes.
    - The proposed development contributes 3.0% of the total Build-Out Year Full-Build intersection traffic volumes in the AM peak hour and 2.9% in the PM peak hour.

Appendix A: Scoping Meeting Notes

Agenda for Mark Armijo Academy Scoping Meeting
Gonzales Road & Coors Boulevard
April 15, 2024
Meeting Notes in Red

Attendees:

Nancy Perea – NMDOT
Margaret Haynes – NMDOT
Matt Grush – CABQ
Curtis Churne - CABQ
Julie Luna – Bernalillo County
Jeremy Ortiz – Archis Architects
Ashly Hartshorn – Archis Architects
Stephen Montaño – Lee Engineering
Jonathon Kruse – Lee Engineering

1. Introductions
2. Review of Site Plan
    a. Site Plan
3. Discussion of Scope for NIA
    a. Study Intersections
        i. Coors Blvd & Gonzales Rd
        ii. Gonzales Rd & Bataan Dr
        iii. Proposed Access Driveway & Gonzales Rd
        iv. Coors Blvd & Bridge Blvd
        v. Coors Blvd & Central Ave
            1. NMDOT SAMM for Coors Blvd & Central Ave governance.
    b. Data Collection
        i. Existing Study Intersections
            1. Collect for "school hours"
            2. Count bikes on road.
    c. Trip Generation, Pass By, & Internal Capture
        i. Trip Generation Manual (11th Edition) Land Use
        ii. No buses
        iii. Jeremy to ask school for neighborhood information and demographics.
            a. Here are the general breakdowns for site circulation for Mark Armijo from the school:
                i. Percentage of students who come from the neighborhood 40 to 60%
                ii. Percentage of students who come from offsite 40 to 50%
                iii. Percentage of students who drive themselves 30%
                iv. Percentage of students who are picked up and dropped off 40%
                v. Is there a specific place where neighborhood students cross Gonzales to access the site? They usually

cross somewhere in front of our property, but most usually cross Gonzales east of the school.

b.

2. ITE 534 – Private High School

Trip Generation Tables

Use	Units		Trip Generation							Peak Hour Trips			
			Weekday	AM Peak			PM Peak			AM Peak		PM Peak	
			Trips	Total	Enter	Exit	Total	Enter	Exit	In	Out	In	Out
ITE 534 Private High School	380	Students	825	251	62%	38%	152	39%	61%	156	95	59	93

Notes:

ITE Trip Generation Manual Rates
Daily Rate: Weekday
Average Rate: 2.17(x)
AM Peak: Peak Hour of Generator
Average Rate: 0.66(x)
PM Peak: Peak Hour of Generator
Average Rate: 0.40(x)

iv. No Pass-by/Diverted trips
v. No Internal Capture
vi. Trips distributed based on existing traffic patterns

d. Known Developments or Pending Improvements in Area
   i. Chuze Fitness (Margaret to provide study)
   ii. Via De San Marcos (Julie to provide study)

e. Build-out Year and Growth Rate
   i. Build-Out Year (2026)
      1. Will look at historic traffic volumes and calculate the growth rate; if it is less than 1%, we will assume 1% growth per year.

f. Analysis scenarios
   i. Existing Conditions
   ii. Opening Year Background (No Build)
   iii. Opening Year Buildout (Full Build)
   iv. Opening Year Buildout Optimized (if needed)
      1. All scenarios with existing signal timings except opening year buildout optimized.
   v. Horizon year – 10 Years from opening

g. Required Analysis & Methodology
   i. LOS Capacity analysis based on HCM 6th Edition
      1. HCS Software
   ii. 95th Percentile Queue demands
      1. Capacity & Queueing for network peaks rather than individual intersection peaks
   iii. Auxiliary Lane Analysis
      1. SAMM for Coors. DPM for Gonzales driveway.
   iv. Signal warrant for Coors Blvd & Gonzales Rd
      1. If warranted, access at Coors and Gonzales would be restricted.
   v. Sight Distance Analysis at Driveways
   vi. NIA Specific Analyses/Data Review

1. Impacts on pedestrian and bike circulation
2. Pickup/Drop-off routing and circulation
3. Noise and air quality impacts from idling vehicles

vii. Safety Crash Summary 5-years

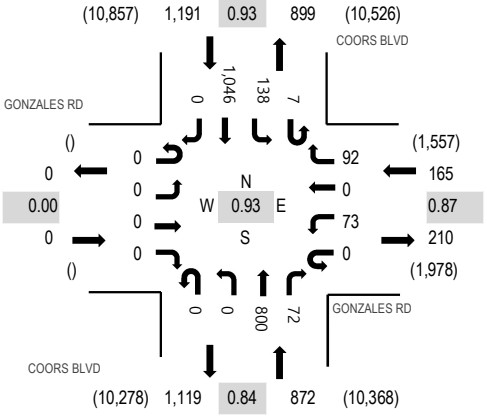
4. Agency Input (Comments & Issues)
5. Meeting Notes (distributed by Lee Engineering)

Appendix B: Turning Movement Counts

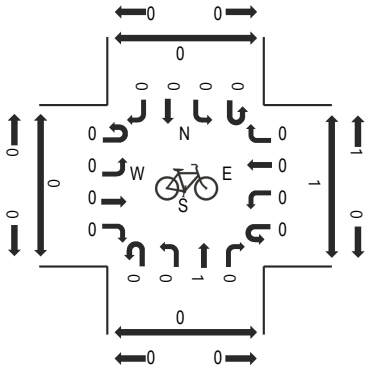
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 1 COORS BLVD & GONZALES RD AM
Date: Thursday, May 2, 2024
Peak Hour: 03:30 PM - 04:30 PM
Peak 15-Minutes: 03:45 PM - 04:00 PM

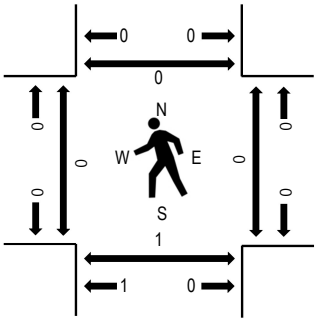
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

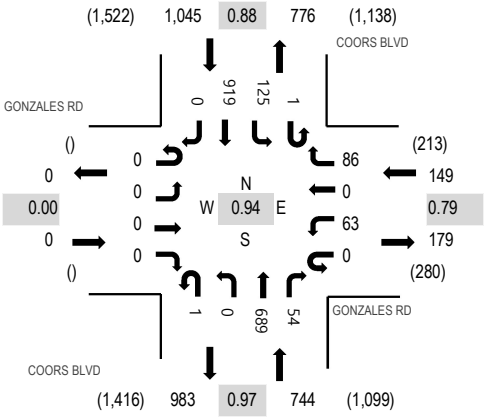
Interval Start Time	GONZALES RD Eastbound				GONZALES RD Westbound				COORS BLVD Northbound				COORS BLVD Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
6:00 AM	0	0	0	0	0	5	0	3	0	0	132	3	0	3	56	0	202	1,150	0	0	0	0
6:15 AM	0	0	0	0	0	5	0	10	0	0	147	2	0	4	62	0	230	1,316	0	0	0	0
6:30 AM	0	0	0	0	0	7	0	17	1	0	203	4	0	3	105	0	340	1,601	0	0	0	0
6:45 AM	0	0	0	0	0	7	0	23	0	0	211	4	0	10	123	0	378	1,869	0	0	0	0
7:00 AM	0	0	0	0	0	9	0	13	0	0	218	13	0	11	104	0	368	2,001	1	0	0	0
7:15 AM	0	0	0	0	0	10	0	12	0	0	314	21	2	25	131	0	515	2,157	0	0	0	0
7:30 AM	0	0	0	0	0	19	0	26	1	0	349	34	0	20	159	0	608	2,154	0	0	0	0
7:45 AM	0	0	0	0	0	9	0	26	0	0	237	23	1	25	189	0	510	2,009	0	0	0	0
8:00 AM	0	0	0	0	0	15	0	20	0	0	284	25	0	20	160	0	524	1,913	0	0	0	0
8:15 AM	0	0	0	0	0	19	0	26	0	0	242	28	0	28	169	0	512	1,801	0	0	0	0
8:30 AM	0	0	0	0	0	23	0	19	1	0	221	25	0	33	141	0	463	1,658	0	1	0	0
8:45 AM	0	0	0	0	0	19	0	19	1	0	204	26	1	19	125	0	414	1,536	0	2	0	0
9:00 AM	0	0	0	0	0	13	0	7	0	0	216	21	0	18	137	0	412	1,496	0	0	0	0
9:15 AM	0	0	0	0	0	11	0	16	0	0	187	13	0	19	123	0	369	1,460	0	1	0	0
9:30 AM	0	0	0	0	0	8	0	12	0	0	171	11	0	15	124	0	341	1,438	2	0	0	0
9:45 AM	0	0	0	0	0	25	0	14	1	0	167	15	1	23	128	0	374	1,452	0	0	0	0
10:00 AM	0	0	0	0	0	7	0	15	0	0	161	12	0	24	157	0	376	1,428	0	0	0	0
10:15 AM	0	0	0	0	0	12	0	12	0	0	163	7	0	18	135	0	347	1,440	0	1	0	0
10:30 AM	0	0	0	0	0	4	0	22	0	0	166	5	0	20	138	0	355	1,405	0	0	0	0
10:45 AM	0	0	0	0	0	8	0	11	0	0	157	7	2	15	150	0	350	1,436	0	0	0	0
11:00 AM	0	0	0	0	0	7	0	16	1	0	155	13	0	18	178	0	388	1,416	0	0	0	0
11:15 AM	0	0	0	0	0	6	0	13	0	0	137	7	2	15	132	0	312	1,434	0	0	0	0
11:30 AM	0	0	0	0	0	7	0	18	1	0	157	7	1	13	182	0	386	1,502	0	0	0	0
11:45 AM	0	0	0	0	0	15	0	13	1	0	157	5	0	8	131	0	330	1,530	0	1	0	0
12:00 PM	0	0	0	0	0	18	0	16	0	0	168	7	0	26	171	0	406	1,588	0	0	0	0
12:15 PM	0	0	0	0	0	11	0	15	0	0	148	10	1	22	173	0	380	1,603	0	1	0	0
12:30 PM	0	0	0	0	0	11	0	5	1	0	155	17	0	25	200	0	414	1,630	0	0	0	0
12:45 PM	0	0	0	0	0	13	0	15	0	0	154	14	0	25	167	0	388	1,628	0	0	0	0
1:00 PM	0	0	0	0	0	10	0	19	0	0	154	17	0	28	193	0	421	1,688	0	1	0	0
1:15 PM	0	0	0	0	0	15	0	17	1	0	161	14	0	21	178	0	407	1,698	1	0	0	0
1:30 PM	0	0	0	0	0	11	0	16	0	0	155	10	1	24	195	0	412	1,756	0	0	0	0
1:45 PM	0	0	0	0	0	12	0	15	0	0	173	11	0	33	204	0	448	1,806	0	0	0	0
2:00 PM	0	0	0	0	0	13	0	16	0	0	162	16	0	32	192	0	431	1,825	0	0	0	0
2:15 PM	0	0	0	0	0	15	0	20	0	0	162	15	2	38	213	0	465	1,888	0	0	0	0

2:30 PM	0	0	0	0	0	25	0	25	0	0	170	19	0	24	199	0	462	1,938	0	0	0	0
2:45 PM	0	0	0	0	0	10	0	18	1	0	167	19	0	26	226	0	467	2,016	0	0	0	0
3:00 PM	0	0	0	0	0	18	0	26	0	0	169	7	1	40	233	0	494	2,146	0	0	0	0
3:15 PM	0	0	0	0	0	10	0	17	0	0	183	9	0	35	261	0	515	2,203	0	0	0	0
3:30 PM	0	0	0	0	0	16	0	24	0	0	207	22	1	35	235	0	540	2,228	0	0	0	0
3:45 PM	0	0	0	0	0	16	0	33	0	0	217	19	2	40	270	0	597	2,215	0	0	1	0
4:00 PM	0	0	0	0	0	23	0	18	0	0	204	17	2	27	260	0	551	2,205	0	0	0	0
4:15 PM	0	0	0	0	0	18	0	17	0	0	172	14	2	36	281	0	540	2,201	0	0	0	0
4:30 PM	0	0	0	0	0	24	0	22	0	0	185	17	0	34	245	0	527	2,201	0	0	0	0
4:45 PM	0	0	0	0	0	21	0	18	0	0	206	11	1	34	296	0	587	2,173	0	0	0	0
5:00 PM	0	0	0	0	0	18	0	18	0	0	192	15	2	34	268	0	547	2,117	0	2	0	0
5:15 PM	0	0	0	0	0	24	0	15	1	0	203	16	0	28	253	0	540	2,094	0	0	0	0
5:30 PM	0	0	0	0	0	14	0	13	1	0	178	11	0	40	242	0	499	1,996	0	0	0	0
5:45 PM	0	0	0	0	0	13	0	19	0	0	193	15	0	34	257	0	531	1,946	0	0	0	0
6:00 PM	0	0	0	0	0	16	0	10	0	0	192	18	0	38	250	0	524	1,809	0	0	0	0
6:15 PM	0	0	0	0	0	15	0	11	0	0	149	11	2	24	230	0	442		0	0	0	0
6:30 PM	0	0	0	0	0	8	0	10	0	0	153	11	3	21	243	0	449		0	0	0	0
6:45 PM	0	0	0	0	0	7	0	11	1	0	144	9	2	25	195	0	394		0	0	0	0
Count Total	0	0	0	0	0	695	0	862	14	0	9,632	722	32	1,256	9,569	0	22,782		4	10	1	0
Peak Hour	0	0	0	0	0	73	0	92	0	0	800	72	7	138	1,046	0	2,228		0	0	1	0

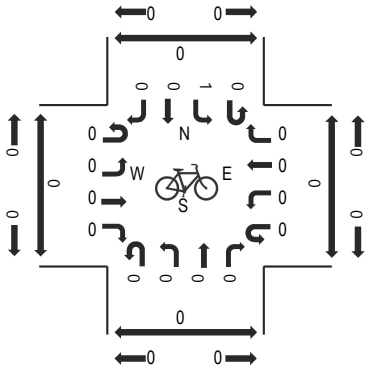
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 1 COORS BLVD & GONZALES RD PM
Date: Thursday, May 2, 2024
Peak Hour: 02:30 PM - 03:30 PM
Peak 15-Minutes: 03:15 PM - 03:30 PM

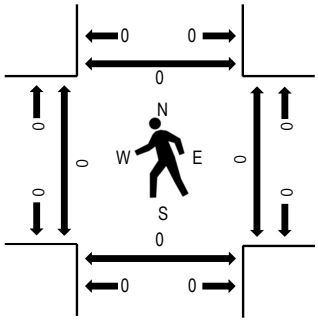
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	GONZALES RD Eastbound				GONZALES RD Westbound				COORS BLVD Northbound				COORS BLVD Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
2:00 PM	0	0	0	0	0	13	0	16	0	0	162	16	0	32	192	0	431	1,825	0	0	0	0
2:15 PM	0	0	0	0	0	15	0	20	0	0	162	15	2	38	213	0	465	1,888	0	0	0	0
2:30 PM	0	0	0	0	0	25	0	25	0	0	170	19	0	24	199	0	462	1,938	0	0	0	0
2:45 PM	0	0	0	0	0	10	0	18	1	0	167	19	0	26	226	0	467		0	0	0	0
3:00 PM	0	0	0	0	0	18	0	26	0	0	169	7	1	40	233	0	494		0	0	0	0
3:15 PM	0	0	0	0	0	10	0	17	0	0	183	9	0	35	261	0	515		0	0	0	0
Count Total	0	0	0	0	0	91	0	122	1	0	1,013	85	3	195	1,324	0	2,834		0	0	0	0
Peak Hour	0	0	0	0	0	63	0	86	1	0	689	54	1	125	919	0	1,938		0	0	0	0

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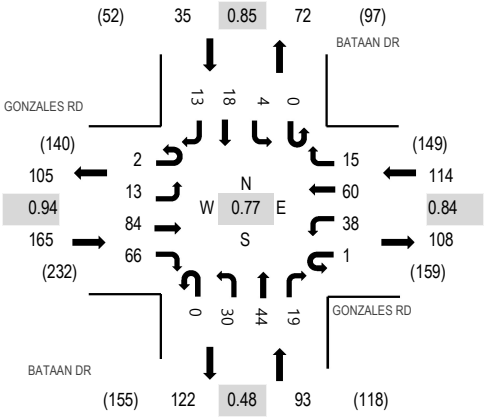
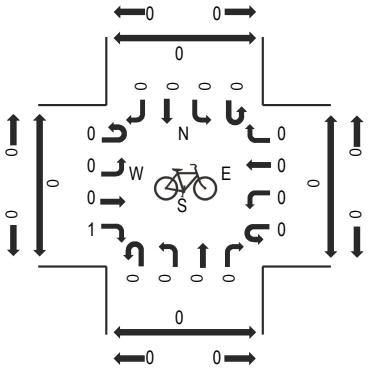
Location: 2 BATAAN DR & GONZALES RD PM
Date: Thursday, May 2, 2024
Peak Hour: 02:15 PM - 03:15 PM
Peak 15-Minutes: 03:00 PM - 03:15 PM

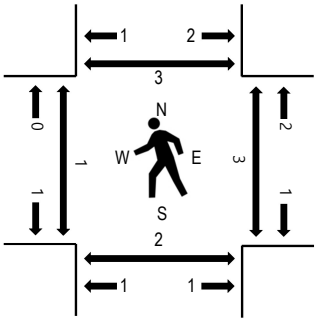
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	GONZALES RD Eastbound				GONZALES RD Westbound				BATAAN DR Northbound				BATAAN DR Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
2:00 PM	1	0	21	9	1	4	12	4	0	1	5	2	0	0	4	3	67	341	0	0	0	0
2:15 PM	1	4	16	15	0	6	20	2	0	6	5	1	0	0	3	1	80	407	0	2	0	1
2:30 PM	1	2	28	12	1	11	17	5	0	5	5	4	0	1	4	2	98	404	0	0	1	2
2:45 PM	0	4	15	23	0	13	10	3	0	3	12	1	0	2	6	4	96		1	1	0	0
3:00 PM	0	3	25	16	0	8	13	5	0	16	22	13	0	1	5	6	133		0	0	1	0
3:15 PM	0	2	23	11	0	0	9	5	0	5	9	3	0	1	5	4	77		1	1	0	5
Count Total	3	15	128	86	2	42	81	24	0	36	58	24	0	5	27	20	551		2	4	2	8
Peak Hour	2	13	84	66	1	38	60	15	0	30	44	19	0	4	18	13	407		1	3	2	3

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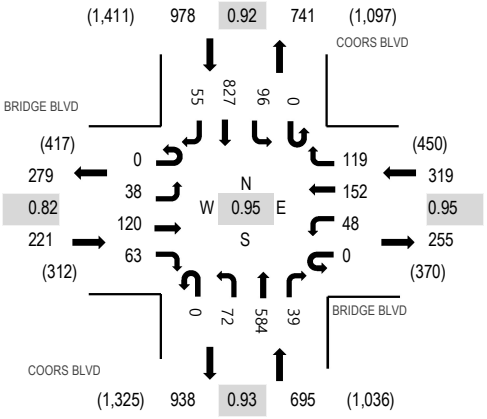
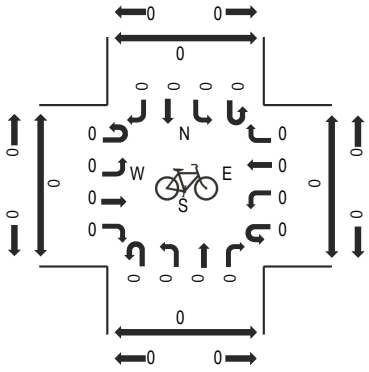
Location: 3 COORS BLVD & BRIDGE BLVD PM
Date: Thursday, May 2, 2024
Peak Hour: 02:30 PM - 03:30 PM
Peak 15-Minutes: 03:15 PM - 03:30 PM

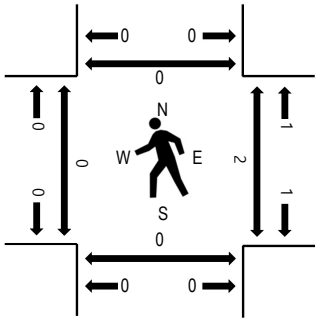
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	BRIDGE BLVD Eastbound				BRIDGE BLVD Westbound				COORS BLVD Northbound				COORS BLVD Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
2:00 PM	0	9	30	14	0	15	40	22	0	16	145	4	0	19	151	14	479	2,060	0	0	0	0
2:15 PM	0	7	24	7	0	3	29	22	0	20	150	6	1	32	197	19	517	2,148	0	1	0	0
2:30 PM	0	5	27	14	0	9	31	37	0	12	144	11	0	26	185	8	509	2,213	0	0	0	0
2:45 PM	0	11	32	14	0	11	34	36	0	21	141	13	0	23	205	14	555		0	1	0	0
3:00 PM	0	12	30	25	0	15	49	20	0	18	145	3	0	22	207	21	567		0	1	0	0
3:15 PM	0	10	31	10	0	13	38	26	0	21	154	12	0	25	230	12	582		0	0	0	0
Count Total	0	54	174	84	0	66	221	163	0	108	879	49	1	147	1,175	88	3,209		0	3	0	0
Peak Hour	0	38	120	63	0	48	152	119	0	72	584	39	0	96	827	55	2,213		0	2	0	0

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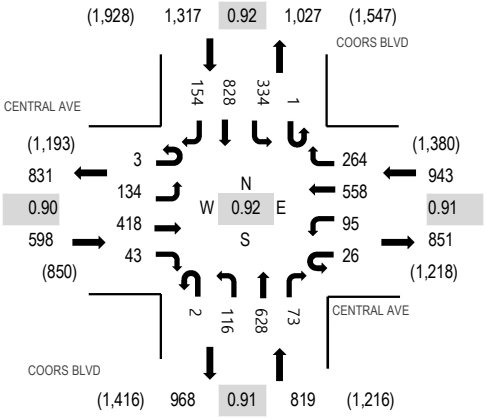
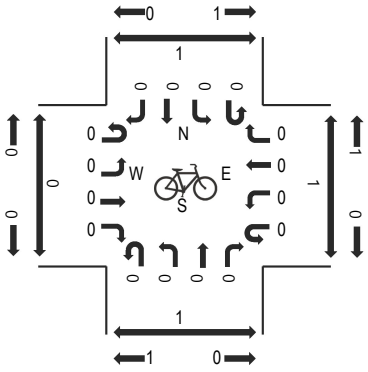
Location: 4 COORS BLVD & CENTRAL AVE PM
Date: Thursday, May 2, 2024
Peak Hour: 02:30 PM - 03:30 PM
Peak 15-Minutes: 03:15 PM - 03:30 PM

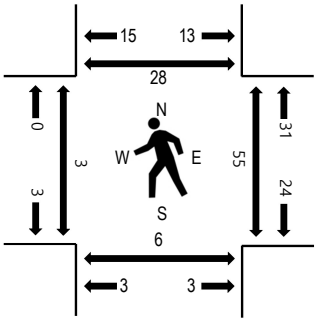
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	CENTRAL AVE Eastbound				CENTRAL AVE Westbound				COORS BLVD Northbound				COORS BLVD Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
2:00 PM	1	28	92	13	4	14	126	72	0	26	143	12	0	72	174	28	805	3,435	2	17	6	8
2:15 PM	0	34	71	13	10	28	115	68	1	24	175	16	0	90	205	42	892	3,569	0	15	0	6
2:30 PM	0	32	87	13	8	18	152	69	1	36	131	18	0	99	166	34	864	3,677	0	9	2	3
2:45 PM	1	23	102	11	4	25	120	60	1	28	174	12	1	76	198	38	874		0	14	0	5
3:00 PM	2	33	117	10	6	28	121	73	0	22	145	25	0	86	222	49	939		0	13	2	11
3:15 PM	0	46	112	9	8	24	165	62	0	30	178	18	0	73	242	33	1,000		3	19	2	9
Count Total	4	196	581	69	40	137	799	404	3	166	946	101	1	496	1,207	224	5,374		5	87	12	42
Peak Hour	3	134	418	43	26	95	558	264	2	116	628	73	1	334	828	154	3,677		3	55	6	28

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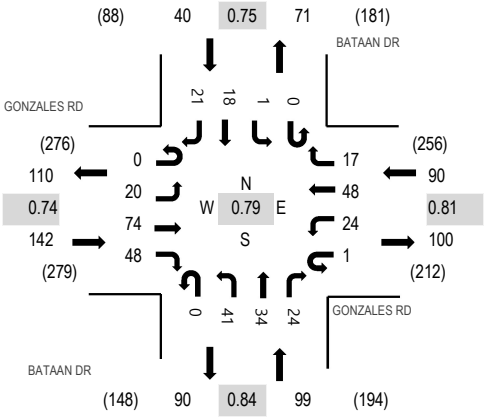
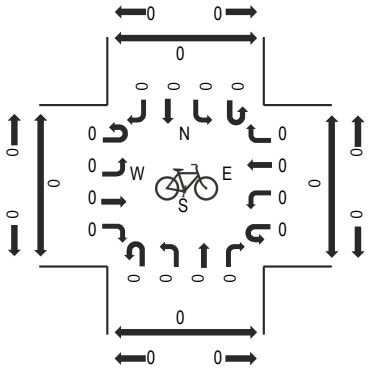
Location: 2 BATAAN DR & GONZALES RD AM
Date: Thursday, May 2, 2024
Peak Hour: 07:15 AM - 08:15 AM
Peak 15-Minutes: 07:30 AM - 07:45 AM

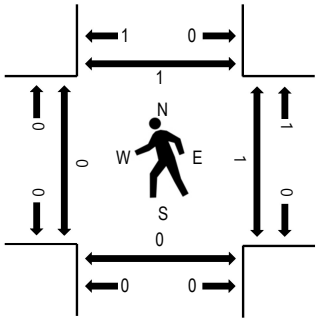
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	GONZALES RD Eastbound				GONZALES RD Westbound				BATAAN DR Northbound				BATAAN DR Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
6:00 AM	0	0	7	0	0	0	5	6	0	0	6	2	0	0	0	1	27	147	0	0	0	1
6:15 AM	0	0	2	1	0	1	9	4	0	2	7	1	0	2	0	3	32	180	0	0	0	0
6:30 AM	0	2	6	0	0	0	11	6	0	3	6	2	0	0	1	4	41	250	0	0	0	0
6:45 AM	0	2	8	6	0	0	15	6	0	3	5	1	0	0	0	1	47	327	0	1	0	0
7:00 AM	1	2	9	5	0	6	10	4	0	4	13	1	0	0	3	2	60	363	0	0	0	0
7:15 AM	0	4	14	19	1	11	5	2	0	15	9	7	0	0	10	5	102	371	0	0	0	0
7:30 AM	0	8	26	14	0	5	20	4	0	12	9	10	0	0	4	6	118	354	0	0	0	0
7:45 AM	0	4	16	5	0	3	14	7	0	9	11	4	0	1	4	5	83	324	0	1	0	1
8:00 AM	0	4	18	10	0	5	9	4	0	5	5	3	0	0	0	5	68	307	0	0	0	0
8:15 AM	0	4	19	6	1	4	19	3	0	6	9	1	0	2	2	9	85		0	0	0	0
8:30 AM	0	1	22	8	0	1	24	6	0	4	7	1	0	2	6	6	88		1	2	0	0
8:45 AM	0	2	20	4	0	4	17	4	0	4	5	2	0	1	0	3	66		0	0	0	0
Count Total	1	33	167	78	2	40	158	56	0	67	92	35	0	8	30	50	817		1	4	0	2
Peak Hour	0	20	74	48	1	24	48	17	0	41	34	24	0	1	18	21	371		0	1	0	1

ALL TRAFFIC DATA SERVICES
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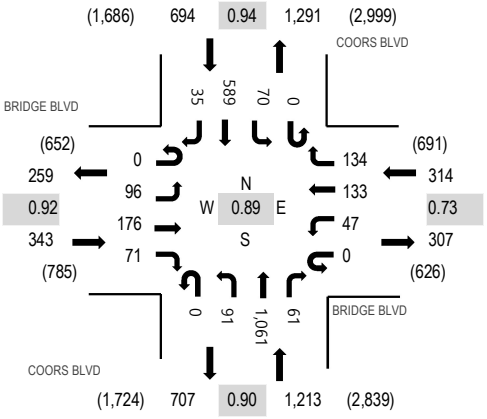
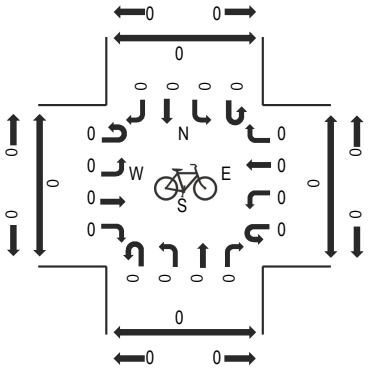
Location: 3 COORS BLVD & BRIDGE BLVD AM
Date: Thursday, May 2, 2024
Peak Hour: 07:15 AM - 08:15 AM
Peak 15-Minutes: 07:30 AM - 07:45 AM

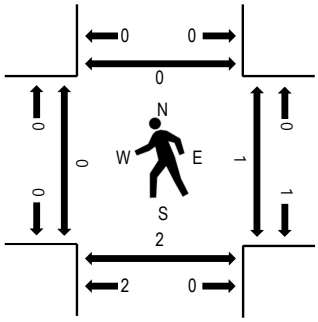
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	BRIDGE BLVD Eastbound				BRIDGE BLVD Westbound				COORS BLVD Northbound				COORS BLVD Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
6:00 AM	0	7	13	12	0	1	13	11	0	13	113	2	1	1	54	7	248	1,386	0	0	0	0
6:15 AM	0	6	22	12	0	2	18	12	0	11	130	5	0	0	65	2	285	1,594	0	0	0	0
6:30 AM	0	9	23	19	0	1	20	20	0	16	176	2	0	10	100	2	398	1,938	0	0	0	0
6:45 AM	0	12	27	22	0	1	22	16	0	26	189	7	0	11	115	7	455	2,257	0	0	2	0
7:00 AM	0	23	38	17	0	5	26	26	0	20	180	9	0	7	93	12	456	2,428	0	2	0	1
7:15 AM	0	20	49	12	0	14	30	27	0	22	293	20	0	11	124	7	629	2,564	0	0	0	0
7:30 AM	0	33	40	19	0	17	51	40	0	17	309	12	0	19	152	8	717	2,522	0	1	2	0
7:45 AM	0	24	49	21	0	10	31	36	0	25	211	20	0	25	161	13	626	2,334	0	0	0	0
8:00 AM	0	19	38	19	0	6	21	31	0	27	248	9	0	15	152	7	592	2,187	0	0	0	0
8:15 AM	0	19	31	25	0	8	25	29	0	20	226	9	0	10	169	16	587		0	0	1	0
8:30 AM	0	19	33	14	0	5	31	24	0	18	216	6	1	14	133	15	529		0	1	0	0
8:45 AM	0	11	17	11	0	11	31	19	0	12	213	7	0	15	122	10	479		0	2	0	0
Count Total	0	202	380	203	0	81	319	291	0	227	2,504	108	2	138	1,440	106	6,001		0	6	5	1
Peak Hour	0	96	176	71	0	47	133	134	0	91	1,061	61	0	70	589	35	2,564		0	1	2	0

ALL TRAFFIC DATA SERVICES
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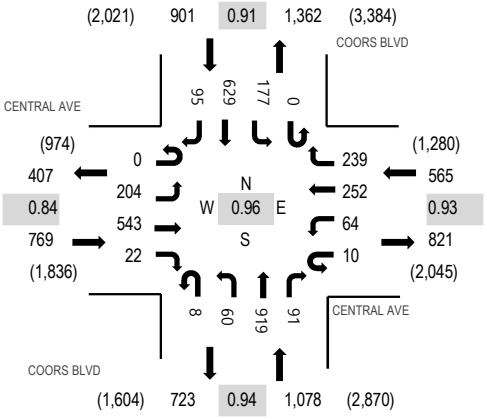
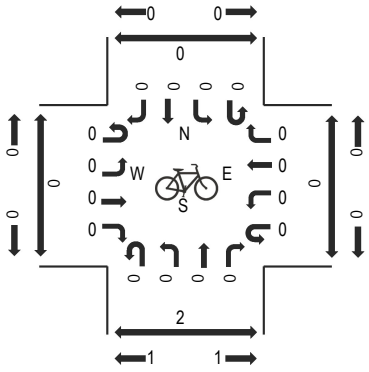
Location: 4 COORS BLVD & CENTRAL AVE AM
Date: Thursday, May 2, 2024
Peak Hour: 07:30 AM - 08:30 AM
Peak 15-Minutes: 07:45 AM - 08:00 AM

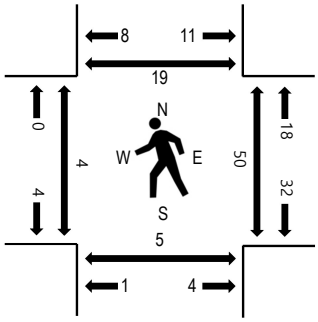
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	CENTRAL AVE Eastbound				CENTRAL AVE Westbound				COORS BLVD Northbound				COORS BLVD Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
6:00 AM	0	15	51	2	2	10	23	22	1	15	119	7	0	8	34	9	318	1,836	0	2	1	1
6:15 AM	0	15	66	4	0	3	34	22	0	5	152	11	0	16	58	9	395	2,131	0	7	0	0
6:30 AM	0	16	107	4	2	6	25	16	1	4	219	16	0	24	92	9	541	2,513	0	1	0	0
6:45 AM	0	20	93	3	4	7	41	35	0	12	197	16	0	23	115	16	582	2,830	0	6	1	2
7:00 AM	0	27	136	5	0	10	40	45	0	19	170	25	0	24	100	12	613	3,108	1	2	1	1
7:15 AM	0	46	160	8	1	13	46	45	1	14	250	24	0	34	122	13	777	3,274	0	5	1	1
7:30 AM	0	61	177	6	3	14	51	61	1	12	241	30	0	34	149	18	858	3,313	1	16	1	7
7:45 AM	0	57	123	4	2	25	68	57	2	9	241	23	0	58	165	26	860	3,193	1	11	2	3
8:00 AM	0	40	135	7	0	8	64	65	1	17	201	18	0	47	146	30	779	3,063	2	11	1	4
8:15 AM	0	46	108	5	5	17	69	56	4	22	236	20	0	38	169	21	816		0	12	1	5
8:30 AM	0	32	107	9	2	14	57	58	0	19	209	22	0	55	129	25	738		1	6	2	11
8:45 AM	0	31	101	9	3	13	63	53	2	32	208	22	0	62	106	25	730		2	14	2	6
Count Total	0	406	1,364	66	24	140	581	535	13	180	2,443	234	0	423	1,385	213	8,007		8	93	13	41
Peak Hour	0	204	543	22	10	64	252	239	8	60	919	91	0	177	629	95	3,313		4	50	5	19

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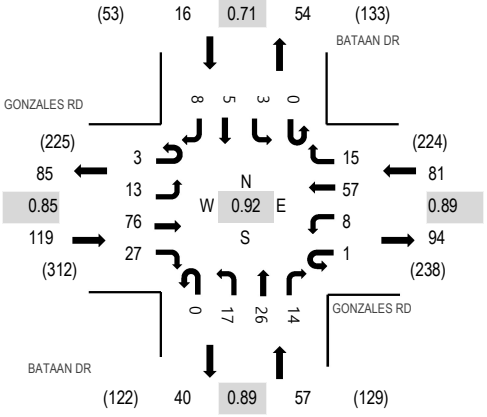
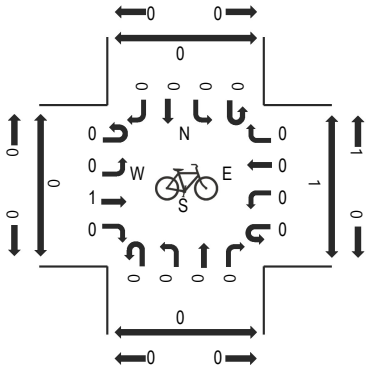
Location: 2 BATAAN DR & GONZALES RD Noon
Date: Thursday, May 2, 2024
Peak Hour: 12:45 PM - 01:45 PM
Peak 15-Minutes: 01:15 PM - 01:30 PM

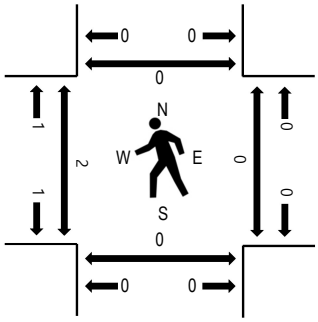
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

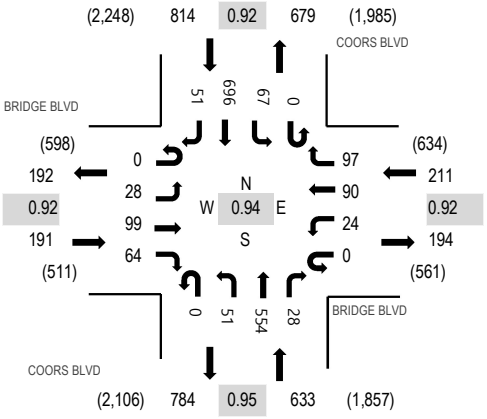
Traffic Counts - Motorized Vehicles

Interval Start Time	GONZALES RD Eastbound				GONZALES RD Westbound				BATAAN DR Northbound				BATAAN DR Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
11:00 AM	1	2	14	5	0	2	9	3	0	4	2	1	0	1	4	2	50	201	0	1	2	0
11:15 AM	0	0	20	6	0	2	7	6	0	2	6	2	0	0	2	1	54	216	1	0	0	0
11:30 AM	0	1	10	8	1	0	12	5	1	4	7	0	0	0	0	4	53	220	0	1	0	0
11:45 AM	0	1	11	1	1	2	15	4	0	3	2	1	0	1	0	2	44	225	0	0	0	0
12:00 PM	0	3	17	8	0	1	15	4	1	4	6	1	0	0	2	3	65	247	1	1	1	0
12:15 PM	1	2	19	6	0	4	10	2	0	1	5	1	0	0	1	6	58	255	0	0	0	0
12:30 PM	0	3	16	9	2	1	13	2	0	3	3	2	0	2	1	1	58	271	0	0	0	0
12:45 PM	0	4	18	7	1	2	15	2	0	5	5	3	0	2	0	2	66	273	0	0	0	0
1:00 PM	2	3	27	4	0	2	16	3	0	1	9	3	0	1	1	1	73	270	0	0	0	0
1:15 PM	0	5	18	7	0	3	14	6	0	6	5	5	0	0	1	4	74		2	0	0	0
1:30 PM	1	1	13	9	0	1	12	4	0	5	7	3	0	0	3	1	60		0	0	0	0
1:45 PM	0	0	18	11	1	2	14	3	1	0	7	2	0	0	1	3	63		0	0	0	0
Count Total	5	25	201	81	6	22	152	44	3	38	64	24	0	7	16	30	718		4	3	3	0
Peak Hour	3	13	76	27	1	8	57	15	0	17	26	14	0	3	5	8	273		2	0	0	0

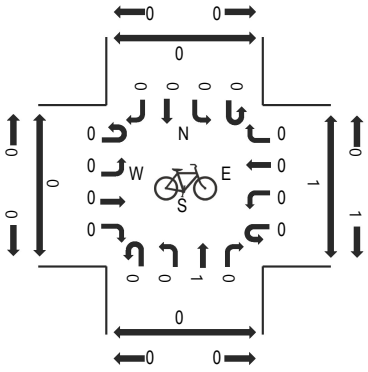
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 3 COORS BLVD & BRIDGE BLVD Noon
Date: Thursday, May 2, 2024
Peak Hour: 01:00 PM - 02:00 PM
Peak 15-Minutes: 01:45 PM - 02:00 PM

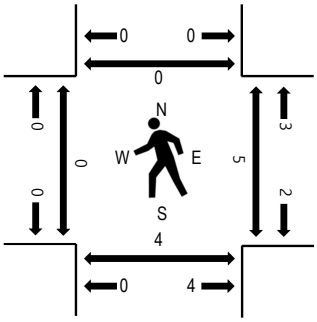
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

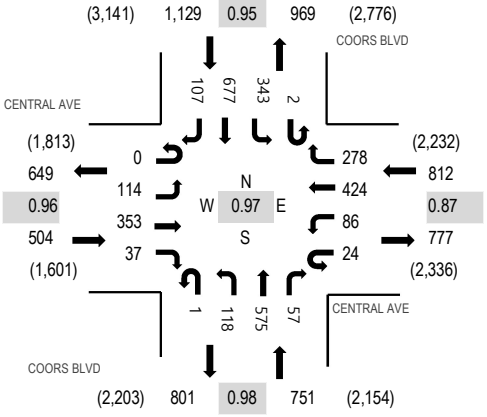
Traffic Counts - Motorized Vehicles

Interval Start Time	BRIDGE BLVD Eastbound				BRIDGE BLVD Westbound				COORS BLVD Northbound				COORS BLVD Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
11:00 AM	0	10	20	9	0	8	25	23	0	10	136	12	0	22	152	10	437	1,604	0	0	0	0
11:15 AM	0	8	11	16	0	4	15	19	0	12	113	2	0	18	122	8	348	1,603	0	0	0	0
11:30 AM	0	9	19	6	0	4	31	18	0	10	135	7	0	16	161	14	430	1,705	0	2	1	0
11:45 AM	0	5	25	8	0	6	23	26	0	8	131	6	0	12	125	14	389	1,746	0	1	0	1
12:00 PM	0	8	22	12	0	6	24	31	0	17	130	7	1	14	152	12	436	1,797	0	2	0	0
12:15 PM	0	8	23	14	0	7	27	22	0	21	129	7	1	18	167	6	450	1,809	0	0	0	0
12:30 PM	0	16	21	15	0	3	27	22	0	21	133	5	0	25	166	17	471	1,827	0	1	0	0
12:45 PM	0	5	20	10	0	3	25	24	0	12	143	17	0	18	146	17	440	1,795	0	0	0	0
1:00 PM	0	8	16	24	0	10	26	21	0	19	133	5	0	15	156	15	448	1,849	0	4	0	0
1:15 PM	0	5	27	20	0	5	16	23	0	15	141	8	0	17	179	12	468		0	0	0	0
1:30 PM	0	9	26	8	0	2	24	23	0	7	132	9	0	16	170	13	439		0	1	4	0
1:45 PM	0	6	30	12	0	7	24	30	0	10	148	6	0	19	191	11	494		0	0	0	0
Count Total	0	97	260	154	0	65	287	282	0	162	1,604	91	2	210	1,887	149	5,250		0	11	5	1
Peak Hour	0	28	99	64	0	24	90	97	0	51	554	28	0	67	696	51	1,849		0	5	4	0

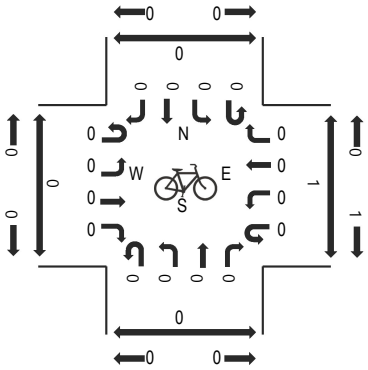
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 4 COORS BLVD & CENTRAL AVE Noon
Date: Thursday, May 2, 2024
Peak Hour: 01:00 PM - 02:00 PM
Peak 15-Minutes: 01:30 PM - 01:45 PM

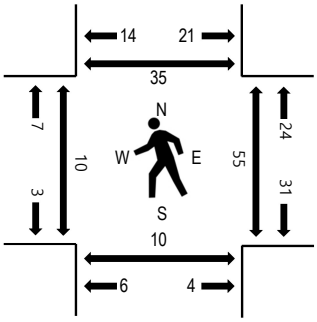
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

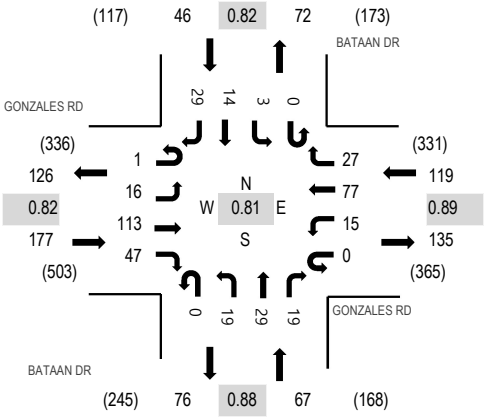
Traffic Counts - Motorized Vehicles

Interval Start Time	CENTRAL AVE Eastbound				CENTRAL AVE Westbound				COORS BLVD Northbound				COORS BLVD Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
11:00 AM	0	27	85	10	5	18	66	61	0	30	136	18	0	72	156	24	708	2,835	6	11	0	7
11:15 AM	0	35	84	10	6	16	92	53	0	19	119	20	1	75	117	32	679	2,922	1	14	2	9
11:30 AM	0	34	86	8	6	21	72	67	0	21	152	21	1	87	151	34	761	3,005	0	19	1	9
11:45 AM	0	35	99	15	4	16	100	56	0	27	129	9	0	66	107	24	687	3,005	2	14	3	6
12:00 PM	1	25	110	15	1	8	78	76	1	36	140	22	0	96	159	27	795	3,097	1	20	11	13
12:15 PM	0	34	101	14	3	24	112	63	0	15	138	17	1	73	147	20	762	3,097	2	13	1	9
12:30 PM	0	27	85	12	4	32	95	62	0	25	121	19	0	78	164	37	761	3,101	4	12	1	8
12:45 PM	1	35	100	9	5	22	113	63	2	31	114	21	2	81	148	32	779	3,163	3	22	7	15
1:00 PM	0	22	93	6	3	16	104	72	0	35	135	11	0	94	178	26	795	3,196	1	25	4	6
1:15 PM	0	32	77	10	6	33	84	63	0	24	150	17	1	88	158	23	766		1	8	3	9
1:30 PM	0	29	93	7	9	23	141	63	1	34	136	17	1	83	156	30	823		6	10	1	10
1:45 PM	0	31	90	14	6	14	95	80	0	25	154	12	0	78	185	28	812		2	12	2	10
Count Total	2	366	1,103	130	58	243	1,152	779	4	322	1,624	204	7	971	1,826	337	9,128		29	180	36	111
Peak Hour	0	114	353	37	24	86	424	278	1	118	575	57	2	343	677	107	3,196		10	55	10	35

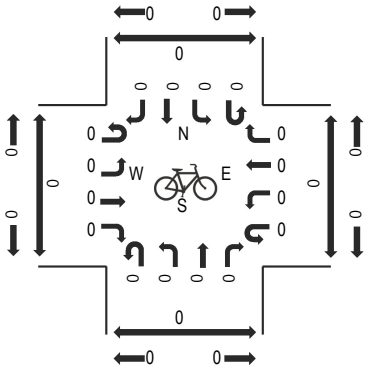
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 2 BATAAN DR & GONZALES RD PM
Date: Thursday, May 2, 2024
Peak Hour: 03:45 PM - 04:45 PM
Peak 15-Minutes: 03:45 PM - 04:00 PM

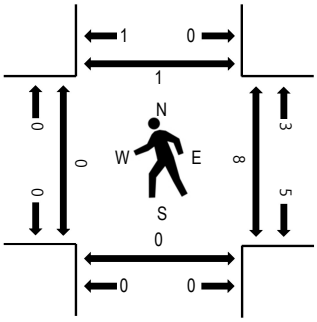
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

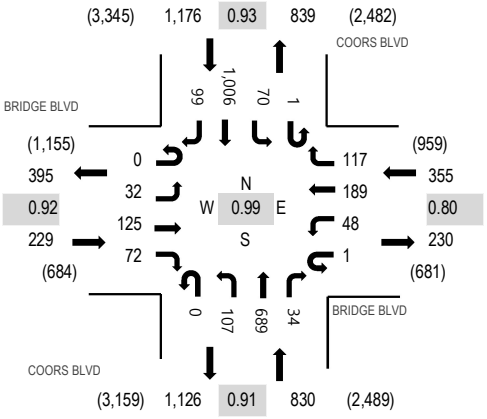
Traffic Counts - Motorized Vehicles

Interval Start Time	GONZALES RD Eastbound				GONZALES RD Westbound				BATAAN DR Northbound				BATAAN DR Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
3:30 PM	0	3	29	13	1	4	21	6	0	4	9	3	0	1	0	0	94	394	1	4	0	0
3:45 PM	1	5	33	15	0	2	28	9	0	6	8	5	0	2	6	6	126	409	0	3	0	1
4:00 PM	0	4	19	10	0	4	14	7	0	4	8	4	0	0	3	11	88	380	0	2	0	0
4:15 PM	0	2	33	10	0	2	13	5	0	3	4	7	0	0	1	6	86	387	0	0	0	0
4:30 PM	0	5	28	12	0	7	22	6	0	6	9	3	0	1	4	6	109	400	0	3	0	0
4:45 PM	1	2	18	22	1	4	20	4	0	5	6	3	0	1	3	7	97	384	0	1	0	0
5:00 PM	0	3	28	12	0	5	17	7	0	3	7	6	0	0	0	7	95	371	1	0	2	2
5:15 PM	0	1	31	12	0	3	21	7	0	4	6	3	0	1	5	5	99	362	0	0	0	0
5:30 PM	0	2	26	17	0	5	20	3	0	5	2	0	0	1	7	5	93	325	0	0	0	0
5:45 PM	1	1	20	12	0	6	17	3	0	6	7	3	0	1	4	3	84		0	0	0	0
6:00 PM	1	3	25	11	0	4	9	4	0	1	11	4	0	3	4	6	86		0	0	0	0
6:15 PM	1	3	17	11	0	2	17	1	0	0	0	3	0	1	3	3	62		1	0	0	1
Count Total	5	34	307	157	2	48	219	62	0	47	77	44	0	12	40	65	1,119		3	13	2	4
Peak Hour	1	16	113	47	0	15	77	27	0	19	29	19	0	3	14	29	409		0	8	0	1

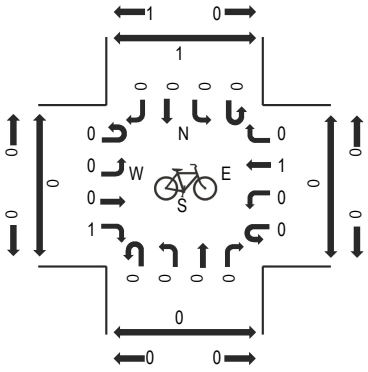
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 3 COORS BLVD & BRIDGE BLVD PM
Date: Thursday, May 2, 2024
Peak Hour: 04:30 PM - 05:30 PM
Peak 15-Minutes: 05:15 PM - 05:30 PM

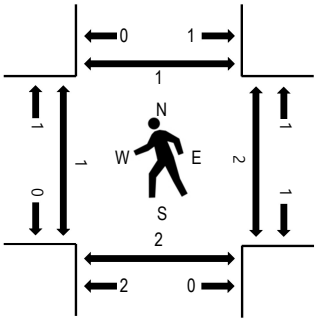
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

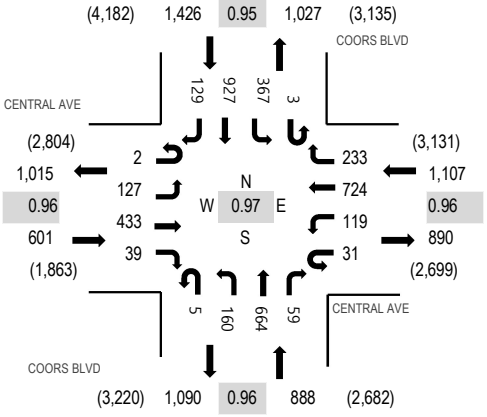
Traffic Counts - Motorized Vehicles

Interval Start Time	BRIDGE BLVD Eastbound				BRIDGE BLVD Westbound				COORS BLVD Northbound				COORS BLVD Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
3:30 PM	0	11	27	18	0	5	38	28	0	32	200	8	0	12	230	19	628	2,553	0	1	1	0
3:45 PM	0	13	25	12	0	16	33	34	0	27	183	12	0	22	231	30	638	2,564	0	0	0	0
4:00 PM	0	17	28	15	0	11	68	33	0	23	168	19	0	18	236	23	659	2,575	1	1	1	0
4:15 PM	0	9	36	20	0	4	42	14	0	30	163	8	0	16	260	26	628	2,566	0	1	0	0
4:30 PM	0	9	36	19	0	12	53	27	0	32	162	11	1	17	237	23	639	2,590	0	0	0	1
4:45 PM	0	8	24	15	0	11	39	27	0	22	180	7	0	20	268	28	649	2,527	0	0	2	0
5:00 PM	0	9	35	20	0	20	55	36	0	23	161	7	0	19	243	22	650	2,483	1	2	0	0
5:15 PM	0	6	30	18	1	5	42	27	0	30	186	9	0	14	258	26	652	2,455	0	0	0	0
5:30 PM	0	4	30	20	0	8	30	24	0	35	160	10	0	11	215	29	576	2,334	0	0	0	0
5:45 PM	0	11	22	22	0	9	35	25	0	22	173	12	0	27	225	22	605		0	2	0	0
6:00 PM	0	18	35	9	0	10	46	26	0	37	168	10	0	11	226	26	622		0	0	0	0
6:15 PM	0	12	30	11	0	4	40	21	1	25	128	5	0	17	215	22	531		1	0	1	0
Count Total	0	127	358	199	1	115	521	322	1	338	2,032	118	1	204	2,844	296	7,477		3	7	5	1
Peak Hour	0	32	125	72	1	48	189	117	0	107	689	34	1	70	1,006	99	2,590		1	2	2	1

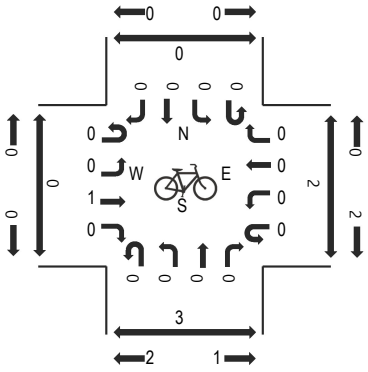
ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

Location: 4 COORS BLVD & CENTRAL AVE PM
Date: Thursday, May 2, 2024
Peak Hour: 04:45 PM - 05:45 PM
Peak 15-Minutes: 04:45 PM - 05:00 PM

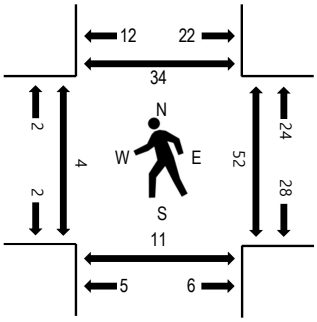
Peak Hour - Motorized Vehicles



Peak Hour - Bicycles



Peak Hour - Pedestrians



Note: Total study counts contained in parentheses.

Traffic Counts - Motorized Vehicles

Interval Start Time	CENTRAL AVE Eastbound				CENTRAL AVE Westbound				COORS BLVD Northbound				COORS BLVD Southbound					Rolling Hour	Pedestrian Crossings			
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total		West	East	South	North
3:30 PM	0	38	113	14	12	31	147	60	0	37	193	19	0	92	217	19	992	4,003	1	26	7	3
3:45 PM	2	30	126	13	12	18	139	50	1	32	195	13	0	99	247	24	1,001	3,979	0	15	2	5
4:00 PM	1	34	101	20	10	35	174	66	2	41	187	19	0	87	212	29	1,018	4,011	2	13	1	5
4:15 PM	2	37	117	6	7	38	148	61	1	27	166	19	0	87	244	32	992	4,010	1	15	6	3
4:30 PM	0	26	116	15	5	30	141	62	2	37	168	17	1	100	214	34	968	4,021	3	24	2	11
4:45 PM	1	24	112	9	5	38	164	59	2	43	177	16	1	107	254	21	1,033	4,022	0	14	1	14
5:00 PM	1	35	106	7	10	32	192	54	0	37	167	17	0	84	234	41	1,017	3,967	0	9	2	3
5:15 PM	0	32	105	10	8	20	180	66	2	45	173	18	0	93	219	32	1,003	3,922	0	8	0	5
5:30 PM	0	36	110	13	8	29	188	54	1	35	147	8	2	83	220	35	969	3,834	4	21	8	12
5:45 PM	0	38	104	12	11	36	158	62	1	42	165	18	0	82	217	32	978		3	9	5	7
6:00 PM	0	21	106	9	6	31	163	64	1	37	168	11	0	86	218	51	972		1	9	5	3
6:15 PM	1	33	116	11	3	27	160	57	1	31	126	17	0	78	206	48	915		3	8	2	10
Count Total	8	384	1,332	139	97	365	1,954	715	14	444	2,032	192	4	1,078	2,702	398	11,858		18	171	41	81
Peak Hour	2	127	433	39	31	119	724	233	5	160	664	59	3	367	927	129	4,022		4	52	11	34

Appendix C: ITE Trip Generation

Private High School
(534)

Vehicle Trip Ends vs: **Students**
On a: **Weekday,**
AM Peak Hour of Generator

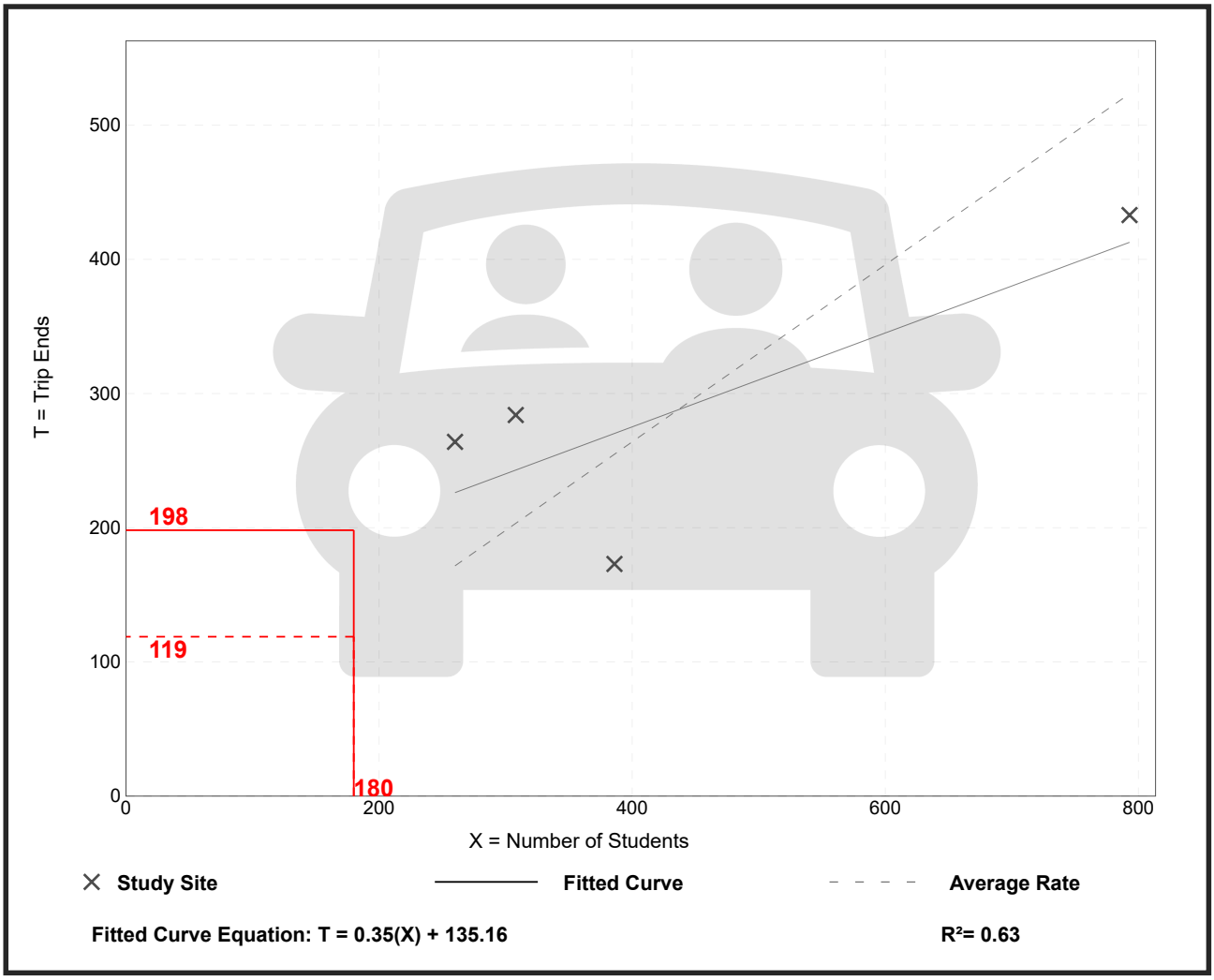
Setting/Location: **General Urban/Suburban**
Number of Studies: 4
Avg. Num. of Students: 437
Directional Distribution: 62% entering, 38% exiting

Vehicle Trip Generation per Student

Average Rate	Range of Rates	Standard Deviation
0.66	0.45 - 1.02	0.25

Data Plot and Equation

Caution – Small Sample Size



Fitted Curve Equation: T = 0.35(X) + 135.16

R^2= 0.63

Trip Gen Manual, 11th Edition ● Institute of Transportation Engineers

Private High School
(534)

Vehicle Trip Ends vs: **Students**
On a: **Weekday**

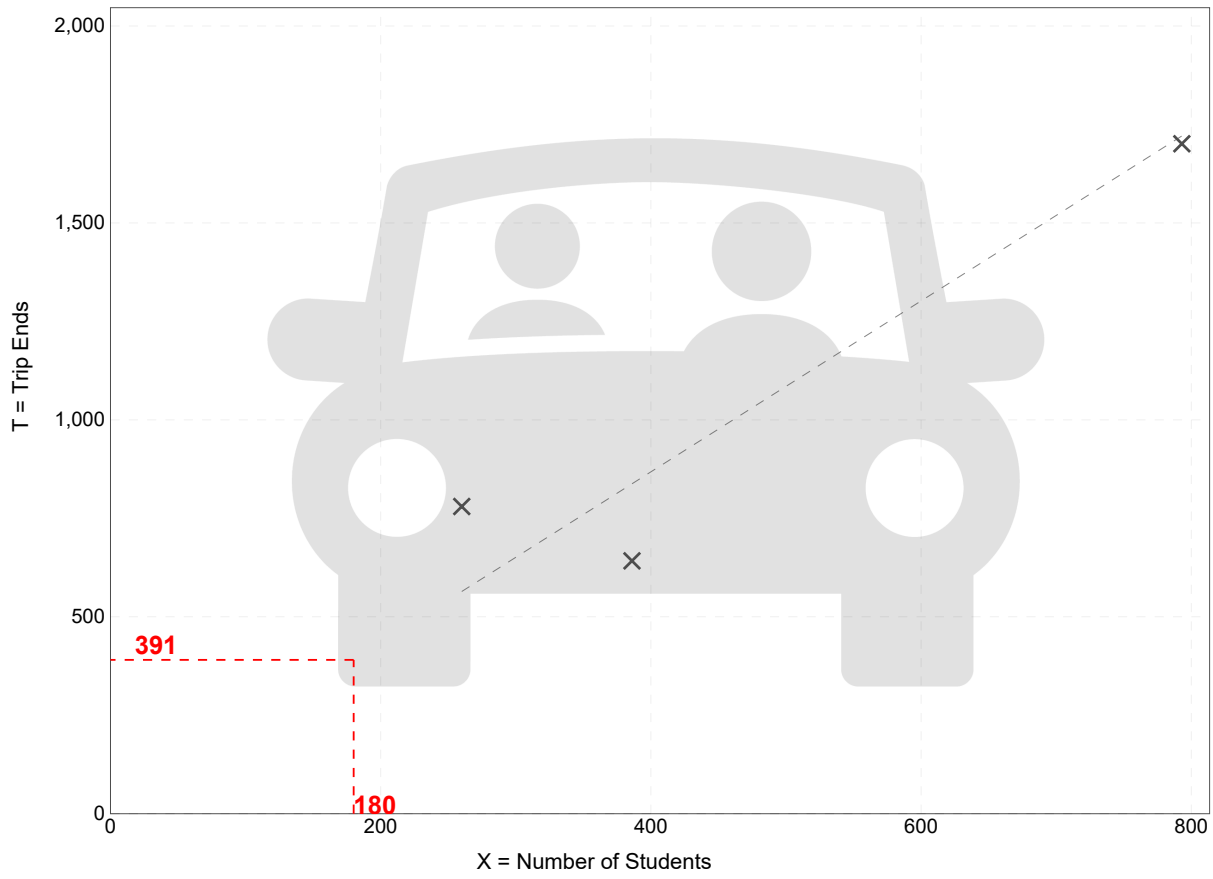
Setting/Location: **General Urban/Suburban**
Number of Studies: 3
Avg. Num. of Students: 480
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Student

Average Rate	Range of Rates	Standard Deviation
2.17	1.66 - 3.00	0.54

Data Plot and Equation

Caution – Small Sample Size



Fitted Curve Equation: Not Given

R^2= **

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Private High School
(534)

Vehicle Trip Ends vs: **Students**
On a: **Weekday,**
PM Peak Hour of Generator

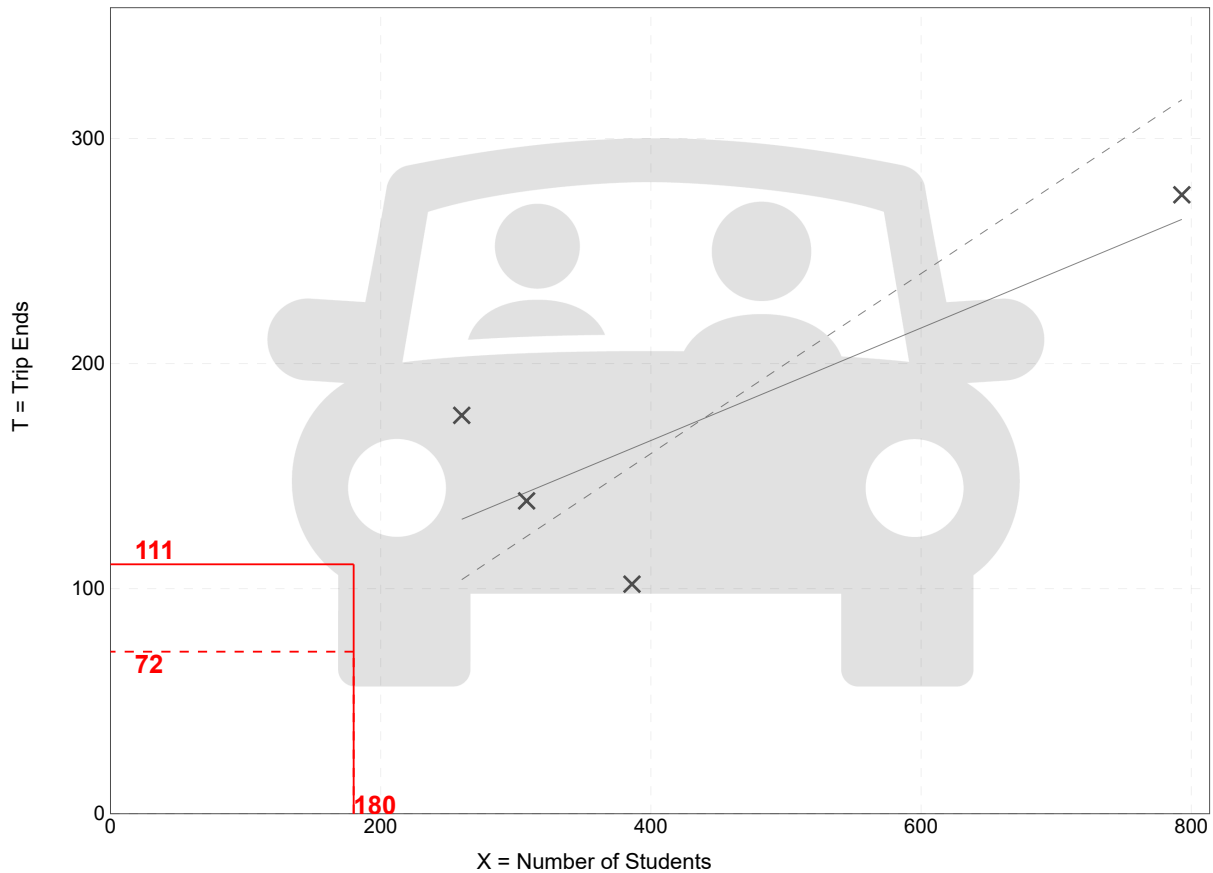
Setting/Location: **General Urban/Suburban**
Number of Studies: 4
Avg. Num. of Students: 437
Directional Distribution: 39% entering, 61% exiting

Vehicle Trip Generation per Student

Average Rate	Range of Rates	Standard Deviation
0.40	0.26 - 0.68	0.15

Data Plot and Equation

Caution – Small Sample Size



Fitted Curve Equation: T = 0.25(X) + 65.82

R^2= 0.65

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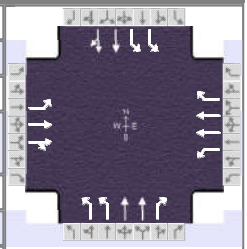
Appendix D: HCM Analysis Output Sheets

HCS Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Lee Engineering			Duration, h	1.000
Analyst	BW	Analysis Date	Jun 25, 2024	Area Type	Other
Jurisdiction	CABQ	Time Period	Existing AM (7:15 AM)	PHF	1.00
Urban Street	Central Avenue	Analysis Year	2024	Analysis Period	1> 7:15
Intersection	Coors Boulevard	File Name	01 Coors Central Existing AM.xus		
Project Description	Existing AM (7:15 AM)				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	204	595	25	66	229	228	57	933	95	173	582	87

Signal Information			
Cycle, s	150.0	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	7.0	7.3	55.4	4.5	4.5	41.3			
Yellow	4.0	4.0	4.0	3.5	3.5	3.5			
Red	1.0	1.0	1.0	1.5	1.5	1.5			

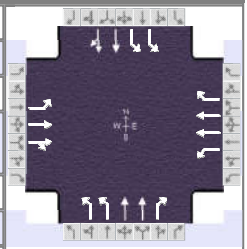
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6	7	4	3	8
Case Number	2.0	4.0	2.0	3.0	2.0	3.0	2.0	4.0
Phase Duration, s	24.3	72.7	12.0	60.4	9.5	46.3	19.0	55.8
Change Period, ($Y+R_c$), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Allow Headway (*MAH*), s	4.1	0.0	4.1	0.0	4.0	4.0	4.0	4.0
Queue Clearance Time (g_s), s	18.6		7.4		4.5	39.8	9.1	24.2
Green Extension Time (g_e), s	0.7	0.0	0.0	0.0	0.2	1.5	0.4	7.9
Phase Call Probability	1.00		0.94		0.91	1.00	1.00	1.00
Max Out Probability	0.00		1.00		0.00	1.00	0.01	0.09

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	7	4	14	3	8	18
Adjusted Flow Rate (*v*), veh/h	204	310	307	66	229	228	57	933	95	173	343	326
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1810	1900	1875	1810	1809	1554	1716	1809	1600	1743	1885	1785
Queue Service Time (g_s), s	16.6	16.1	16.1	5.4	6.4	16.3	2.5	37.8	6.9	7.1	22.1	22.2
Cycle Queue Clearance Time (g_c), s	16.6	16.1	16.1	5.4	6.4	16.3	2.5	37.8	6.9	7.1	22.1	22.2
Green Ratio (*g/C*)	0.13	0.45	0.45	0.05	0.37	0.37	0.03	0.28	0.28	0.09	0.34	0.34
Capacity (*c*), veh/h	233	858	847	84	1336	574	104	996	441	325	638	604
Volume-to-Capacity Ratio (*X*)	0.876	0.362	0.362	0.785	0.171	0.397	0.549	0.937	0.216	0.532	0.537	0.540
Back of Queue (*Q*), ft/ln (95 th percentile)	327.6	303	300.6	131.2	129.7	267.6	52.2	668.4	122.2	144	389.6	371.6
Back of Queue (*Q*), veh/ln (95 th percentile)	13.1	12.1	12.0	5.2	5.2	10.7	2.0	26.7	4.9	5.7	15.5	14.9
Queue Storage Ratio (*RQ*) (95 th percentile)	2.34	0.00	0.00	0.87	0.00	0.00	0.15	0.00	0.00	0.40	0.00	0.00
Uniform Delay (d_1), s/veh	64.2	27.0	27.0	70.8	31.8	35.0	71.7	53.1	41.9	64.9	40.1	40.2
Incremental Delay (d_2), s/veh	11.3	1.2	1.2	17.4	0.3	2.1	4.5	19.9	0.2	1.4	0.9	0.9
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	75.4	28.2	28.2	88.2	32.1	37.0	76.3	72.9	42.1	66.2	41.0	41.1
Level of Service (LOS)	E	C	C	F	C	D	E	E	D	E	D	D
Approach Delay, s/veh / LOS	39.9	D		41.3	D		70.4	E		46.2	D	
Intersection Delay, s/veh / LOS	51.9						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.62	C	2.48	B	2.48	B	2.33	B
Bicycle LOS Score / LOS	3.80	D	2.94	C	3.22	C	3.91	D

HCS Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Lee Engineering			Duration, h	1.000
Analyst	BW	Analysis Date	Jun 25, 2024	Area Type	Other
Jurisdiction	CABQ	Time Period	Existing PM (2:30 PM)	PHF	1.00
Urban Street	Central Avenue	Analysis Year	2024	Analysis Period	1> 14:30
Intersection	Coors Boulevard	File Name	01 Coors Central Existing PM.xus		
Project Description	Existing PM (2:30 PM)				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	137	418	43	121	558	264	118	628	73	335	828	154

Signal Information			
Cycle, s	120.0	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	9.9	1.1	44.9	6.3	2.7	30.1	
Yellow	4.0	0.0	4.0	3.5	3.5	3.5	
Red	1.0	0.0	1.0	1.5	1.5	1.5	

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6	7	4	3	8
Case Number	2.0	4.0	2.0	3.0	2.0	3.0	2.0	4.0
Phase Duration, s	16.0	51.0	14.9	49.9	11.3	35.1	19.0	42.8
Change Period, ($Y+R_c$), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Allow Headway (*MAH*), s	4.1	0.0	4.1	0.0	4.0	4.0	4.0	4.0
Queue Clearance Time (g_s), s	10.9		9.9		6.0	20.9	13.2	32.3
Green Extension Time (g_e), s	0.2	0.0	0.2	0.0	0.4	5.0	0.7	3.7
Phase Call Probability	0.99		0.98		0.98	1.00	1.00	1.00
Max Out Probability	0.29		0.11		0.00	0.52	0.34	0.76

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	7	4	14	3	8	18
Adjusted Flow Rate (*v*), veh/h	137	233	228	121	558	264	118	628	73	335	507	475
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1810	1900	1837	1810	1809	1538	1716	1809	1597	1757	1885	1763
Queue Service Time (g_s), s	8.9	10.4	10.5	7.9	13.7	15.6	4.0	18.9	4.3	11.2	30.3	30.3
Cycle Queue Clearance Time (g_c), s	8.9	10.4	10.5	7.9	13.7	15.6	4.0	18.9	4.3	11.2	30.3	30.3
Green Ratio (*g/C*)	0.09	0.38	0.38	0.08	0.37	0.37	0.05	0.25	0.25	0.12	0.31	0.31
Capacity (*c*), veh/h	166	729	705	149	1355	576	180	907	400	410	594	555
Volume-to-Capacity Ratio (*X*)	0.827	0.320	0.323	0.812	0.412	0.458	0.656	0.693	0.182	0.817	0.855	0.855
Back of Queue (*Q*), ft/ln (95 th percentile)	206.4	212.2	208.7	180.7	251.3	252.9	83.6	329	74.7	223.5	551.9	521
Back of Queue (*Q*), veh/ln (95 th percentile)	8.3	8.5	8.3	7.2	10.1	10.1	3.3	13.2	3.0	8.9	21.9	20.8
Queue Storage Ratio (*RQ*) (95 th percentile)	1.47	0.00	0.00	1.20	0.00	0.00	0.23	0.00	0.00	0.62	0.00	0.00
Uniform Delay (d_1), s/veh	53.6	26.0	26.0	54.1	27.8	28.3	55.8	40.8	35.3	51.7	38.5	38.5
Incremental Delay (d_2), s/veh	14.6	1.2	1.2	10.9	0.9	2.6	4.1	2.1	0.2	7.2	12.5	13.3
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	0.0	0.0
Control Delay (*d*), s/veh	68.1	27.1	27.2	65.1	28.7	31.0	59.9	42.9	35.5	59.0	51.0	51.9
Level of Service (LOS)	E	C	C	E	C	C	E	D	D	E	D	D
Approach Delay, s/veh / LOS	36.6	D		34.0	C		44.7	D		53.4	D	
Intersection Delay, s/veh / LOS	43.7						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.61	C	2.47	B	2.47	B	2.31	B
Bicycle LOS Score / LOS	3.61	D	3.29	C	3.00	C	4.30	D

HCS Two-Way Stop-Control Report

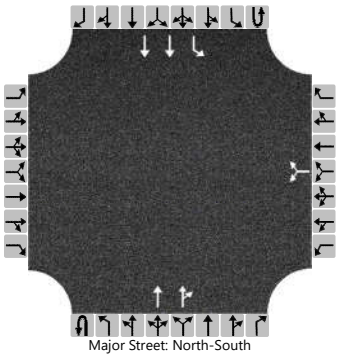
General Information

Analyst	BW
Agency/Co.	Lee Engingeering
Date Performed	6/11/2024
Analysis Year	2024
Time Analyzed	Existing AM (7:15 AM)
Intersection Orientation	North-South
Project Description	Mark Armijo Academy NIA

Site Information

Intersection	Coors Blvd & Gonzales Rd
Jurisdiction	CABQ
East/West Street	Gonzales Road
North/South Street	Coors Boulevard
Peak Hour Factor	1.00
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	0	0		0	1	0	0	0	2	0	0	1	2	0
Configuration							LR				T	TR		L	T	
Volume (veh/h)						53		84			1185	103	0	93	639	
Percent Heavy Vehicles (%)						0		0					0	0		
Proportion Time Blocked																
Percent Grade (%)						0										
Right Turn Channelized																
Median Type | Storage		Left + Thru								2						

Critical and Follow-up Headways

Base Critical Headway (sec)						7.5		6.9						4.1		
Critical Headway (sec)						6.80		6.90						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)							137							93		
Capacity, c (veh/h)							303							545		
v/c Ratio							0.45							0.17		
95% Queue Length, Q_{95} (veh)							2.4							0.6		
Control Delay (s/veh)							26.6							13.0		
Level of Service (LOS)							D							B		
Approach Delay (s/veh)						26.6								1.6		
Approach LOS						D								A		

HCS Two-Way Stop-Control Report

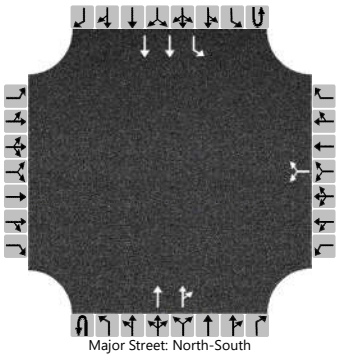
General Information

Analyst	BW
Agency/Co.	Lee Engingeering
Date Performed	6/11/2024
Analysis Year	2024
Time Analyzed	Existing PM (2:30 PM)
Intersection Orientation	North-South
Project Description	Mark Armijo Academy

Site Information

Intersection	Coors Blvd & Gonzales Rd
Jurisdiction	CABQ
East/West Street	Gonzales Road
North/South Street	Coors Boulevard
Peak Hour Factor	1.00
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	0	0		0	1	0	0	0	2	0	0	1	2	0
Configuration							LR				T	TR		L	T	
Volume (veh/h)						63		86			690	54	0	126	919	
Percent Heavy Vehicles (%)						0		0					0	0		
Proportion Time Blocked																
Percent Grade (%)						0										
Right Turn Channelized																
Median Type | Storage		Left + Thru								2						

Critical and Follow-up Headways

Base Critical Headway (sec)						7.5		6.9						4.1		
Critical Headway (sec)						6.80		6.90						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

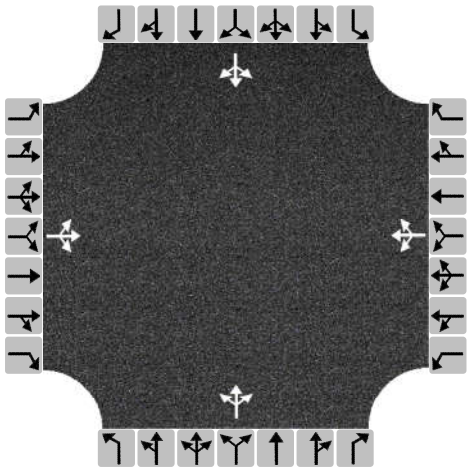
Flow Rate, v (veh/h)							149							126		
Capacity, c (veh/h)							428							873		
v/c Ratio							0.35							0.14		
95% Queue Length, Q_{95} (veh)							1.6							0.5		
Control Delay (s/veh)							17.9							9.8		
Level of Service (LOS)							C							A		
Approach Delay (s/veh)						17.9								1.2		
Approach LOS						C								A		

HCS All-Way Stop Control Report

General and Site Information

Analyst	BW
Agency/Co.	Lee Engineering
Date Performed	6/11/2024
Analysis Year	2024
Analysis Time Period (hrs)	1.00
Time Analyzed	Existing AM (7:15 AM)
Project Description	Mark Armijo Academy
Intersection	Bataan Dr & Gonzales Rd
Jurisdiction	CABQ
East/West Street	Gonzales Road
North/South Street	Bataan Drive
Peak Hour Factor	1.00

Lanes



Turning Movement Demand Volumes

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume (veh/h)	20	74	48	25	48	17	41	34	24	1	18	21
% Thrus in Shared Lane												

Lane Flow Rate and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	142			90			99			40		
Percent Heavy Vehicles	2			0			0			0		
Initial Departure Headway, h_d (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.126			0.080			0.088			0.036		
Final Departure Headway, h_d (s)	4.18			4.31			4.39			4.21		
Final Degree of Utilization, x	0.165			0.108			0.121			0.047		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, t_s (s)	2.18			2.31			2.39			2.21		

Capacity, Delay and Level of Service

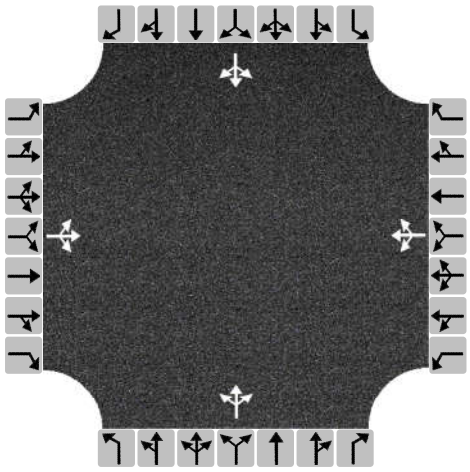
Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	142			90			99			40		
Capacity (veh/h)	862			836			820			855		
95% Queue Length, Q_{95} (veh)	0.6			0.4			0.4			0.1		
Control Delay (s/veh)	8.0			7.8			8.0			7.4		
Level of Service, LOS	A			A			A			A		
Approach Delay (s/veh) | LOS	8.0	A		7.8	A		8.0	A		7.4	A	
Intersection Delay (s/veh) | LOS	7.9						A					

HCS All-Way Stop Control Report

General and Site Information

Analyst	BW
Agency/Co.	Lee Engineering
Date Performed	6/11/2024
Analysis Year	2024
Analysis Time Period (hrs)	1.00
Time Analyzed	Existing PM (2:30 PM)
Project Description	Mark Armijo Academy
Intersection	Bataan Dr & Gonzales Rd
Jurisdiction	CABQ
East/West Street	Gonzales Road
North/South Street	Bataan Drive
Peak Hour Factor	1.00

Lanes



Turning Movement Demand Volumes

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume (veh/h)	12	91	62	33	49	18	29	48	21	5	20	16
% Thrus in Shared Lane												

Lane Flow Rate and Adjustments

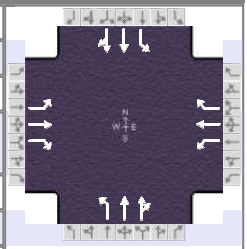
Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	165			100			98			41		
Percent Heavy Vehicles	2			0			0			0		
Initial Departure Headway, h_d (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.147			0.089			0.087			0.036		
Final Departure Headway, h_d (s)	4.16			4.36			4.47			4.40		
Final Degree of Utilization, x	0.191			0.121			0.122			0.050		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, t_s (s)	2.16			2.36			2.47			2.40		

Capacity, Delay and Level of Service

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	165			100			98			41		
Capacity (veh/h)	866			826			806			819		
95% Queue Length, Q_{95} (veh)	0.7			0.4			0.4			0.2		
Control Delay (s/veh)	8.1			8.0			8.1			7.6		
Level of Service, LOS	A			A			A			A		
Approach Delay (s/veh) | LOS	8.1	A		8.0	A		8.1	A		7.6	A	
Intersection Delay (s/veh) | LOS	8.0						A					

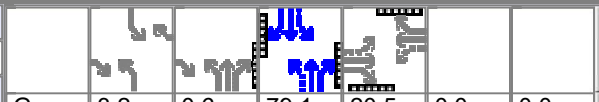
HCS Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Lee Engineering			Duration, h	1.000
Analyst	BW	Analysis Date	Jun 25, 2024	Area Type	Other
Jurisdiction	CABQ	Time Period	Existing AM (7:15 AM)	PHF	1.00
Urban Street	Coors Boulevard	Analysis Year	2024	Analysis Period	1> 7:15
Intersection	Bridge Boulevard	File Name	05 Coors Bridge Existing AM.xus		
Project Description	Existing AM (7:15 AM)				

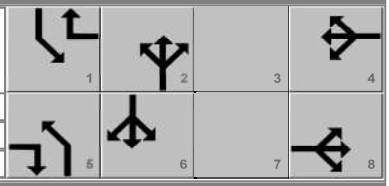


Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	96	176	71	47	133	134	91	1061	61	70	589	35

Signal Information			
Cycle, s	120.0	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	3.2	0.6	79.1	20.5	0.0	0.0
Yellow	3.5	0.0	4.5	4.0	0.0	0.0
Red	1.5	0.0	1.0	2.0	0.0	0.0



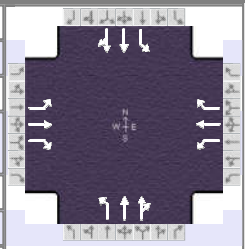
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		8		4	5	2	1	6
Case Number		5.0		5.0	1.1	4.0	1.1	4.0
Phase Duration, s		26.5		26.5	8.9	85.3	8.2	84.6
Change Period, ($Y+R_c$), s		6.0		6.0	5.0	5.5	5.0	5.5
Max Allow Headway (*MAH*), s		4.1		4.1	2.5	0.0	2.5	0.0
Queue Clearance Time (g_s), s		18.0		16.4	4.0		3.5	
Green Extension Time (g_e), s		1.9		2.0	0.1	0.0	0.1	0.0
Phase Call Probability		1.00		1.00	0.95		0.90	
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	3	8	18	7	4	14	5	2	12	1	6	16
Adjusted Flow Rate (*v*), veh/h	96	176	28	47	133	61	91	566	556	70	315	309
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1275	1900	1610	1228	1900	1582	1795	1885	1848	1810	1885	1848
Queue Service Time (g_s), s	8.7	10.1	1.7	4.4	7.5	3.9	2.0	17.3	17.3	1.5	8.2	8.2
Cycle Queue Clearance Time (g_c), s	16.0	10.1	1.7	14.4	7.5	3.9	2.0	17.3	17.3	1.5	8.2	8.2
Green Ratio (*g/C*)	0.17	0.17	0.20	0.17	0.17	0.20	0.69	0.66	0.66	0.69	0.66	0.66
Capacity (*c*), veh/h	201	326	328	168	326	314	593	1252	1227	364	1242	1217
Volume-to-Capacity Ratio (*X*)	0.478	0.540	0.085	0.279	0.408	0.194	0.153	0.453	0.453	0.192	0.254	0.254
Back of Queue (*Q*), ft/ln (95 th percentile)	127.4	211.2	30.2	61.3	159.5	68.9	29.5	272.9	266.8	22.9	141.7	138.3
Back of Queue (*Q*), veh/ln (95 th percentile)	5.1	8.4	1.2	2.5	6.4	2.7	1.2	10.8	10.7	0.9	5.6	5.5
Queue Storage Ratio (*RQ*) (95 th percentile)	0.91	0.00	0.15	0.47	0.00	0.57	0.11	0.00	0.00	0.10	0.00	0.00
Uniform Delay (d_1), s/veh	51.3	45.4	38.7	51.9	44.3	40.1	6.4	9.7	9.7	7.9	8.4	8.4
Incremental Delay (d_2), s/veh	1.8	1.4	0.1	0.9	0.8	0.3	0.0	1.2	1.2	0.1	0.5	0.5
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	53.1	46.8	38.8	52.8	45.1	40.4	6.4	10.9	10.9	8.0	8.9	8.9
Level of Service (LOS)	D	D	D	D	D	D	A	B	B	A	A	A
Approach Delay, s/veh / LOS	48.1	D		45.4	D		10.6	B		8.8	A	
Intersection Delay, s/veh / LOS	18.1						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.31	B	2.31	B	2.25	B	2.21	B
Bicycle LOS Score / LOS	3.03	C	2.94	C	2.79	C	2.57	C

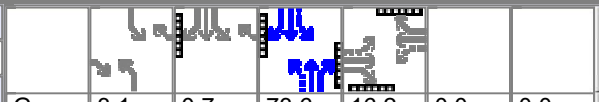
HCS Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Lee Engineering			Duration, h	1.000
Analyst	BW	Analysis Date	Jun 25, 2024	Area Type	Other
Jurisdiction	CABQ	Time Period	Existing PM (2:30 PM)	PHF	1.00
Urban Street	Coors Boulevard	Analysis Year	2024	Analysis Period	1> 14:30
Intersection	Bridge Boulevard	File Name	05 Coors Bridge Existing PM.xus		
Project Description	Existing PM (2:30 PM)				

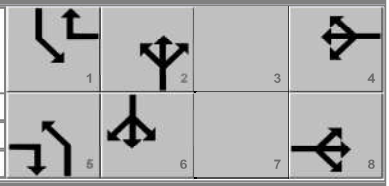


Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	38	120	63	48	152	119	72	584	39	96	827	55

Signal Information			
Cycle, s	110.0	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	3.1	0.7	73.6	16.2	0.0	0.0
Yellow	3.5	0.0	4.5	4.0	0.0	0.0
Red	1.5	0.0	1.0	2.0	0.0	0.0



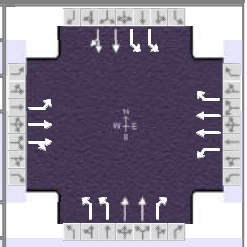
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		8		4	5	2	1	6
Case Number		5.0		5.0	1.1	4.0	1.1	4.0
Phase Duration, s		22.2		22.2	8.1	79.1	8.7	79.7
Change Period, ($Y+R_c$), s		6.0		6.0	5.0	5.5	5.0	5.5
Max Allow Headway (*MAH*), s		4.1		4.1	2.5	0.0	2.5	0.0
Queue Clearance Time (g_s), s		13.3		12.1	3.4		3.8	
Green Extension Time (g_e), s		1.9		1.9	0.1	0.0	0.1	0.0
Phase Call Probability		1.00		1.00	0.89		0.95	
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	3	8	18	7	4	14	5	2	12	1	6	16
Adjusted Flow Rate (*v*), veh/h	38	120	63	48	152	119	72	315	308	96	446	436
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1252	1900	1610	1292	1900	1604	1810	1885	1843	1810	1885	1843
Queue Service Time (g_s), s	3.2	6.3	3.7	3.9	8.1	7.2	1.4	7.3	7.3	1.8	11.1	11.1
Cycle Queue Clearance Time (g_c), s	11.3	6.3	3.7	10.1	8.1	7.2	1.4	7.3	7.3	1.8	11.1	11.1
Green Ratio (*g/C*)	0.15	0.15	0.18	0.15	0.15	0.18	0.70	0.67	0.67	0.70	0.67	0.67
Capacity (*c*), veh/h	158	281	283	183	281	292	470	1260	1232	616	1271	1243
Volume-to-Capacity Ratio (*X*)	0.240	0.427	0.222	0.262	0.541	0.408	0.153	0.250	0.250	0.156	0.351	0.351
Back of Queue (*Q*), ft/ln (95 th percentile)	45.6	134.6	65.8	56.5	174.6	128.6	19.6	120.1	117.4	25.5	181.9	176.8
Back of Queue (*Q*), veh/ln (95 th percentile)	1.8	5.4	2.6	2.3	7.0	5.1	0.8	4.8	4.7	1.0	7.2	7.1
Queue Storage Ratio (*RQ*) (95 th percentile)	0.33	0.00	0.33	0.43	0.00	1.07	0.07	0.00	0.00	0.11	0.00	0.00
Uniform Delay (d_1), s/veh	48.6	42.6	38.9	47.2	43.4	39.8	6.1	7.3	7.3	5.4	7.7	7.7
Incremental Delay (d_2), s/veh	0.8	1.0	0.4	0.8	1.6	0.9	0.1	0.5	0.5	0.0	0.8	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	0.0	0.0
Control Delay (*d*), s/veh	49.4	43.6	39.3	48.0	45.0	40.7	6.1	7.7	7.8	5.5	8.4	8.4
Level of Service (LOS)	D	D	D	D	D	D	A	A	A	A	A	A
Approach Delay, s/veh / LOS	43.4	D		43.8	D		7.6	A		8.1	A	
Intersection Delay, s/veh / LOS	16.6						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.31	B	2.31	B	2.14	B	2.14	B
Bicycle LOS Score / LOS	2.90	C	3.07	C	2.36	B	2.81	C

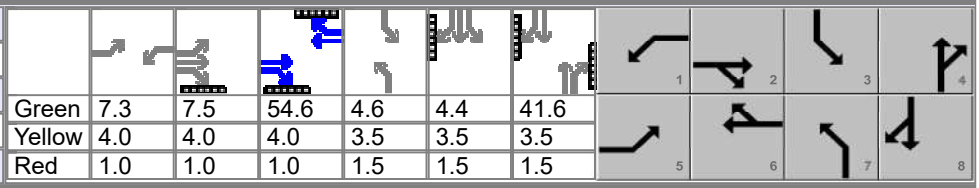
HCS Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Lee Engineering			Duration, h	1.000
Analyst	BW	Analysis Date	Jun 25, 2024	Area Type	Other
Jurisdiction	CABQ	Time Period	Buildout Background AM (7:15 AM)	PHF	1.00
Urban Street	Central Avenue	Analysis Year	2024	Analysis Period	1> 7:15
Intersection	Coors Boulevard	File Name	01 Coors Central Buildout BG AM.xus		
Project Description	Buildout Background AM (7:15 AM)				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	209	607	26	69	234	233	60	952	97	177	594	89

Signal Information			
Cycle, s	150.0	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	7.3	7.5	54.6	4.6	4.4	41.6		
Yellow	4.0	4.0	4.0	3.5	3.5	3.5		
Red	1.0	1.0	1.0	1.5	1.5	1.5		

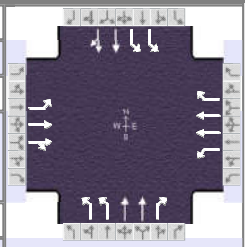
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6	7	4	3	8
Case Number	2.0	4.0	2.0	3.0	2.0	3.0	2.0	4.0
Phase Duration, s	24.7	72.1	12.3	59.6	9.6	46.6	19.0	56.0
Change Period, ($Y+R_c$), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Allow Headway (*MAH*), s	4.1	0.0	4.1	0.0	4.0	4.0	4.0	4.0
Queue Clearance Time (g_s), s	19.0		7.7		4.6	40.7	9.3	24.7
Green Extension Time (g_e), s	0.7	0.0	0.0	0.0	0.2	0.9	0.4	8.0
Phase Call Probability	1.00		0.94		0.92	1.00	1.00	1.00
Max Out Probability	0.00		1.00		0.00	1.00	0.01	0.10

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	7	4	14	3	8	18
Adjusted Flow Rate (*v*), veh/h	209	316	313	69	234	233	60	952	97	177	350	333
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1810	1900	1876	1810	1809	1553	1716	1809	1600	1743	1885	1785
Queue Service Time (g_s), s	17.0	16.6	16.6	5.7	6.6	16.8	2.6	38.7	7.0	7.3	22.6	22.7
Cycle Queue Clearance Time (g_c), s	17.0	16.6	16.6	5.7	6.6	16.8	2.6	38.7	7.0	7.3	22.6	22.7
Green Ratio (*g/C*)	0.13	0.45	0.45	0.05	0.36	0.36	0.03	0.28	0.28	0.09	0.34	0.34
Capacity (*c*), veh/h	238	850	839	88	1318	566	105	1004	444	325	642	607
Volume-to-Capacity Ratio (*X*)	0.879	0.372	0.373	0.788	0.178	0.412	0.571	0.948	0.218	0.544	0.546	0.548
Back of Queue (*Q*), ft/ln (95 th percentile)	333.9	311.2	308.5	141.5	134.1	275.4	55.1	695.9	124.5	147.5	396.8	378.6
Back of Queue (*Q*), veh/ln (95 th percentile)	13.4	12.4	12.3	5.7	5.4	11.0	2.2	27.8	5.0	5.9	15.7	15.1
Queue Storage Ratio (*RQ*) (95 th percentile)	2.38	0.00	0.00	0.94	0.00	0.00	0.15	0.00	0.00	0.41	0.00	0.00
Uniform Delay (d_1), s/veh	64.0	27.5	27.5	70.6	32.4	35.7	71.7	53.1	41.7	65.0	40.1	40.1
Incremental Delay (d_2), s/veh	11.2	1.3	1.3	21.5	0.3	2.2	4.9	23.6	0.2	1.4	0.9	1.0
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	75.2	28.7	28.8	92.1	32.7	37.9	76.6	76.7	41.9	66.4	41.0	41.2
Level of Service (LOS)	E	C	C	F	C	D	E	E	D	E	D	D
Approach Delay, s/veh / LOS	40.3	D		42.6	D		73.6	E		46.3	D	
Intersection Delay, s/veh / LOS	53.3						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.62	C	2.48	B	2.48	B	2.33	B
Bicycle LOS Score / LOS	3.81	D	2.95	C	3.24	C	3.92	D

HCS Signalized Intersection Results Summary

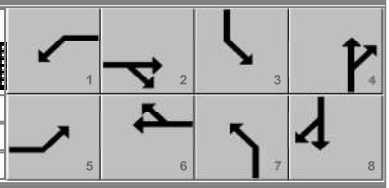
General Information				Intersection Information	
Agency	Lee Engineering			Duration, h	1.000
Analyst	BW	Analysis Date	Jun 25, 2024	Area Type	Other
Jurisdiction	CABQ	Time Period	Buildout Background PM (2:30 PM)	PHF	1.00
Urban Street	Central Avenue	Analysis Year	2024	Analysis Period	1> 14:30
Intersection	Coors Boulevard	File Name	01 Coors Central Buildout BG PM.xus		
Project Description	Buildout Background PM (2:30 PM)				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	141	427	44	124	570	270	122	641	75	343	845	158

Signal Information			
Cycle, s	120.0	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	10.1	1.2	44.4	6.5	2.7	30.3						
Yellow	4.0	0.0	4.0	3.5	3.5	3.5						
Red	1.0	0.0	1.0	1.5	1.5	1.5						



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6	7	4	3	8
Case Number	2.0	4.0	2.0	3.0	2.0	3.0	2.0	4.0
Phase Duration, s	16.3	50.5	15.1	49.4	11.5	35.3	19.1	42.9
Change Period, ($Y+R_c$), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Allow Headway (*MAH*), s	4.1	0.0	4.1	0.0	4.0	4.0	4.0	4.0
Queue Clearance Time (g_s), s	11.2		10.1		6.2	21.3	13.5	33.1
Green Extension Time (g_e), s	0.2	0.0	0.2	0.0	0.4	5.0	0.7	3.4
Phase Call Probability	0.99		0.98		0.98	1.00	1.00	1.00
Max Out Probability	0.48		0.17		0.00	0.57	0.41	0.85

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	7	4	14	3	8	18
Adjusted Flow Rate (*v*), veh/h	141	238	233	124	570	270	122	641	75	343	518	485
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1810	1900	1836	1810	1809	1537	1716	1809	1597	1757	1885	1763
Queue Service Time (g_s), s	9.2	10.7	10.8	8.1	14.1	16.1	4.2	19.3	4.4	11.5	31.1	31.1
Cycle Queue Clearance Time (g_c), s	9.2	10.7	10.8	8.1	14.1	16.1	4.2	19.3	4.4	11.5	31.1	31.1
Green Ratio (*g/C*)	0.09	0.38	0.38	0.08	0.37	0.37	0.05	0.25	0.25	0.12	0.32	0.32
Capacity (*c*), veh/h	170	721	697	152	1337	568	185	913	403	413	596	557
Volume-to-Capacity Ratio (*X*)	0.831	0.331	0.334	0.815	0.426	0.475	0.661	0.702	0.186	0.830	0.870	0.870
Back of Queue (*Q*), ft/ln (95 th percentile)	214.2	217.9	214.2	186.2	258.5	260.8	86.3	335.6	76.7	229.7	573	541.6
Back of Queue (*Q*), veh/ln (95 th percentile)	8.6	8.7	8.6	7.4	10.3	10.4	3.4	13.4	3.1	9.2	22.7	21.7
Queue Storage Ratio (*RQ*) (95 th percentile)	1.53	0.00	0.00	1.24	0.00	0.00	0.24	0.00	0.00	0.64	0.00	0.00
Uniform Delay (d_1), s/veh	53.4	26.4	26.5	54.0	28.3	28.9	55.7	40.8	35.2	51.8	38.7	38.7
Incremental Delay (d_2), s/veh	16.6	1.2	1.3	11.5	1.0	2.9	4.1	2.3	0.2	8.2	14.6	15.5
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	70.1	27.7	27.8	65.6	29.3	31.8	59.8	43.1	35.4	60.0	53.3	54.2
Level of Service (LOS)	E	C	C	E	C	C	E	D	D	E	D	D
Approach Delay, s/veh / LOS	37.5	D		34.7	C		44.8	D		55.3	E	
Intersection Delay, s/veh / LOS	44.8						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.61	C	2.47	B	2.47	B	2.31	B
Bicycle LOS Score / LOS	3.63	D	3.30	C	3.01	C	4.32	D

HCS Two-Way Stop-Control Report

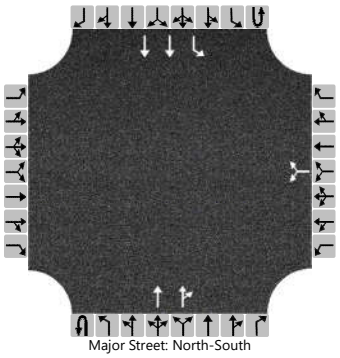
General Information

Analyst	BW
Agency/Co.	Lee Engingeering
Date Performed	6/11/2024
Analysis Year	2024
Time Analyzed	Buildout BG AM (7:15 AM)
Intersection Orientation	North-South
Project Description	Mark Armijo Academy NIA

Site Information

Intersection	Coors Blvd & Gonzales Rd
Jurisdiction	CABQ
East/West Street	Gonzales Road
North/South Street	Coors Boulevard
Peak Hour Factor	1.00
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	0	0		0	1	0	0	0	2	0	0	1	2	0
Configuration							LR				T	TR		L	T	
Volume (veh/h)						55		86			1210	106	4	92	652	
Percent Heavy Vehicles (%)						0		0					0	0		
Proportion Time Blocked																
Percent Grade (%)						0										
Right Turn Channelized																
Median Type | Storage						Left + Thru					2					

Critical and Follow-up Headways

Base Critical Headway (sec)						7.5		6.9					6.4	4.1		
Critical Headway (sec)						6.80		6.90					6.40	4.10		
Base Follow-Up Headway (sec)						3.5		3.3					2.5	2.2		
Follow-Up Headway (sec)						3.50		3.30					2.50	2.20		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)							141							96		
Capacity, c (veh/h)							293							488		
v/c Ratio							0.48							0.20		
95% Queue Length, Q_{95} (veh)							2.7							0.7		
Control Delay (s/veh)							28.5							14.2		
Level of Service (LOS)							D							B		
Approach Delay (s/veh)						28.5							1.8			
Approach LOS						D							A			

HCS Two-Way Stop-Control Report

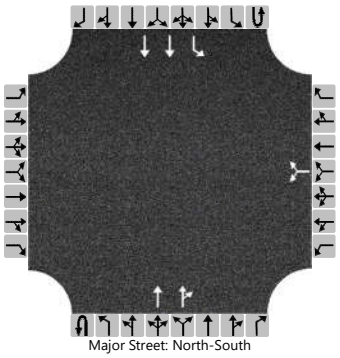
General Information

Analyst	BW
Agency/Co.	Lee Engingeering
Date Performed	6/11/2024
Analysis Year	2024
Time Analyzed	Buildout BG PM (2:30 PM)
Intersection Orientation	North-South
Project Description	Mark Armijo Academy

Site Information

Intersection	Coors Blvd & Gonzales Rd
Jurisdiction	CABQ
East/West Street	Gonzales Road
North/South Street	Coors Boulevard
Peak Hour Factor	1.00
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	0	0		0	1	0	0	0	2	0	0	1	2	0
Configuration							LR				T	TR		L	T	
Volume (veh/h)						65		88			703	56	2	128	938	
Percent Heavy Vehicles (%)						0		0					0	0		
Proportion Time Blocked																
Percent Grade (%)						0										
Right Turn Channelized																
Median Type | Storage		Left + Thru								2						

Critical and Follow-up Headways

Base Critical Headway (sec)						7.5		6.9					6.4	4.1		
Critical Headway (sec)						6.80		6.90					6.40	4.10		
Base Follow-Up Headway (sec)						3.5		3.3					2.5	2.2		
Follow-Up Headway (sec)						3.50		3.30					2.50	2.20		

Delay, Queue Length, and Level of Service

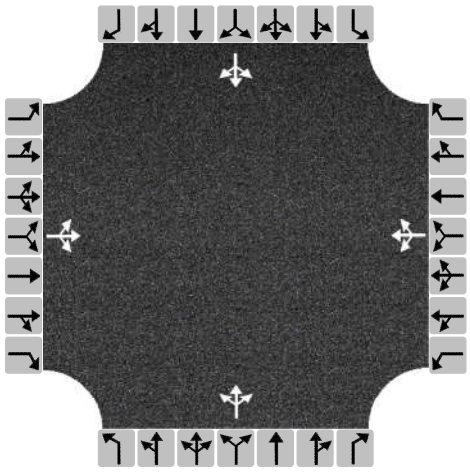
Flow Rate, v (veh/h)							153							130		
Capacity, c (veh/h)							418							847		
v/c Ratio							0.37							0.15		
95% Queue Length, Q_{95} (veh)							1.7							0.5		
Control Delay (s/veh)							18.6							10.0		
Level of Service (LOS)							C							B		
Approach Delay (s/veh)					18.6								1.2			
Approach LOS					C								A			

HCS All-Way Stop Control Report

General and Site Information

Analyst	BW
Agency/Co.	Lee Engineering
Date Performed	6/11/2024
Analysis Year	2024
Analysis Time Period (hrs)	1.00
Time Analyzed	Buildout BG AM (7:15 AM)
Project Description	Mark Armijo Academy
Intersection	Bataan Dr & Gonzales Rd
Jurisdiction	CABQ
East/West Street	Gonzales Road
North/South Street	Bataan Drive
Peak Hour Factor	1.00

Lanes



Turning Movement Demand Volumes

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume (veh/h)	21	76	49	27	49	18	42	35	25	2	19	22
% Thrus in Shared Lane												

Lane Flow Rate and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	146			94			102			43		
Percent Heavy Vehicles	2			0			0			0		
Initial Departure Headway, h_d (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.130			0.084			0.091			0.038		
Final Departure Headway, h_d (s)	4.20			4.33			4.42			4.26		
Final Degree of Utilization, x	0.170			0.113			0.125			0.051		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, t_s (s)	2.20			2.33			2.42			2.26		

Capacity, Delay and Level of Service

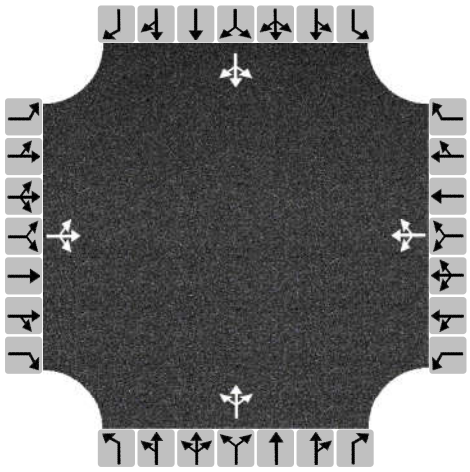
Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	146			94			102			43		
Capacity (veh/h)	857			831			815			846		
95% Queue Length, Q_{95} (veh)	0.6			0.4			0.4			0.2		
Control Delay (s/veh)	8.1			7.9			8.1			7.5		
Level of Service, LOS	A			A			A			A		
Approach Delay (s/veh) | LOS	8.1	A		7.9	A		8.1	A		7.5	A	
Intersection Delay (s/veh) | LOS	8.0						A					

HCS All-Way Stop Control Report

General and Site Information

Analyst	BW
Agency/Co.	Lee Engineering
Date Performed	6/11/2024
Analysis Year	2024
Analysis Time Period (hrs)	1.00
Time Analyzed	Buildout BG PM (2:30 PM)
Project Description	Mark Armijo Academy
Intersection	Bataan Dr & Gonzales Rd
Jurisdiction	CABQ
East/West Street	Gonzales Road
North/South Street	Bataan Drive
Peak Hour Factor	1.00

Lanes



Turning Movement Demand Volumes

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume (veh/h)	14	93	64	35	50	19	30	49	22	6	21	17
% Thrus in Shared Lane												

Lane Flow Rate and Adjustments

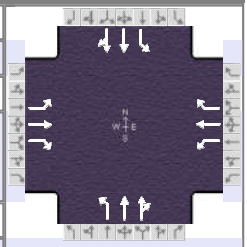
Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	171			104			101			44		
Percent Heavy Vehicles	2			0			0			0		
Initial Departure Headway, h_d (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.152			0.092			0.090			0.039		
Final Departure Headway, h_d (s)	4.18			4.38			4.49			4.43		
Final Degree of Utilization, x	0.199			0.127			0.126			0.054		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, t_s (s)	2.18			2.38			2.49			2.43		

Capacity, Delay and Level of Service

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	171			104			101			44		
Capacity (veh/h)	861			822			801			813		
95% Queue Length, Q_{95} (veh)	0.7			0.4			0.4			0.2		
Control Delay (s/veh)	8.2			8.0			8.1			7.7		
Level of Service, LOS	A			A			A			A		
Approach Delay (s/veh) | LOS	8.2	A		8.0	A		8.1	A		7.7	A	
Intersection Delay (s/veh) | LOS	8.1						A					

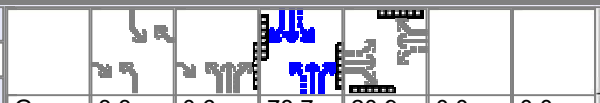
HCS Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Lee Engineering			Duration, h	1.000
Analyst	BW	Analysis Date	Jun 25, 2024	Area Type	Other
Jurisdiction	CABQ	Time Period	Buildout Background AM (7:15 AM)	PHF	1.00
Urban Street	Coors Boulevard	Analysis Year	2024	Analysis Period	1> 7:15
Intersection	Bridge Boulevard	File Name	05 Coors Bridge Buildout BG AM.xus		
Project Description	Buildout Background AM (7:15 AM)				

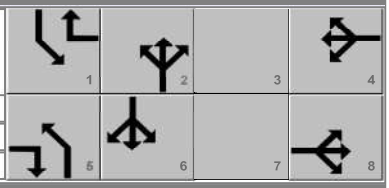


Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	98	180	73	48	136	137	93	1083	63	72	601	36

Signal Information			
Cycle, s	120.0	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	3.3	0.6	78.7	20.9	0.0	0.0
Yellow	3.5	0.0	4.5	4.0	0.0	0.0
Red	1.5	0.0	1.0	2.0	0.0	0.0



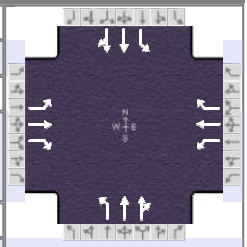
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		8		4	5	2	1	6
Case Number		5.0		5.0	1.1	4.0	1.1	4.0
Phase Duration, s		26.9		26.9	9.0	84.8	8.3	84.2
Change Period, ($Y+R_c$), s		6.0		6.0	5.0	5.5	5.0	5.5
Max Allow Headway (*MAH*), s		4.1		4.1	2.5	0.0	2.5	0.0
Queue Clearance Time (g_s), s		18.4		16.7	4.0		3.6	
Green Extension Time (g_e), s		2.0		2.0	0.1	0.0	0.1	0.0
Phase Call Probability		1.00		1.00	0.95		0.91	
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	3	8	18	7	4	14	5	2	12	1	6	16
Adjusted Flow Rate (*v*), veh/h	98	180	29	48	136	62	93	579	567	72	321	316
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1272	1900	1610	1223	1900	1582	1795	1885	1848	1810	1885	1847
Queue Service Time (g_s), s	8.9	10.4	1.7	4.5	7.6	3.9	2.0	18.1	18.1	1.6	8.5	8.5
Cycle Queue Clearance Time (g_c), s	16.4	10.4	1.7	14.7	7.6	3.9	2.0	18.1	18.1	1.6	8.5	8.5
Green Ratio (*g/C*)	0.17	0.17	0.21	0.17	0.17	0.20	0.69	0.66	0.66	0.68	0.66	0.66
Capacity (*c*), veh/h	203	332	335	170	332	320	583	1244	1220	355	1234	1209
Volume-to-Capacity Ratio (*X*)	0.483	0.542	0.087	0.283	0.410	0.193	0.159	0.465	0.465	0.203	0.260	0.261
Back of Queue (*Q*), ft/ln (95 th percentile)	130	214.4	31.1	62.6	162.7	69.8	30.7	282.8	277	24	147.3	144.5
Back of Queue (*Q*), veh/ln (95 th percentile)	5.2	8.6	1.2	2.5	6.5	2.7	1.2	11.2	11.1	1.0	5.8	5.8
Queue Storage Ratio (*RQ*) (95 th percentile)	0.93	0.00	0.16	0.48	0.00	0.58	0.11	0.00	0.00	0.10	0.00	0.00
Uniform Delay (d_1), s/veh	51.2	45.1	38.3	51.7	44.0	39.7	6.5	10.0	10.0	8.2	8.6	8.6
Incremental Delay (d_2), s/veh	1.8	1.4	0.1	0.9	0.8	0.3	0.0	1.3	1.3	0.1	0.5	0.5
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	53.0	46.5	38.5	52.7	44.8	40.0	6.6	11.3	11.3	8.3	9.1	9.2
Level of Service (LOS)	D	D	D	D	D	D	A	B	B	A	A	A
Approach Delay, s/veh / LOS	47.8	D		45.1	D		10.9	B		9.1	A	
Intersection Delay, s/veh / LOS	18.3						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.31	B	2.31	B	2.25	B	2.21	B
Bicycle LOS Score / LOS	3.05	C	2.94	C	2.81	C	2.59	C

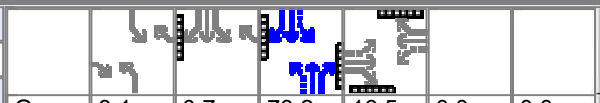
HCS Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Lee Engineering			Duration, h	1.000
Analyst	BW	Analysis Date	Jun 25, 2024	Area Type	Other
Jurisdiction	CABQ	Time Period	Buildout Background PM (2:30 PM)	PHF	1.00
Urban Street	Coors Boulevard	Analysis Year	2024	Analysis Period	1> 14:30
Intersection	Bridge Boulevard	File Name	05 Coors Bridge Buildout BG PM.xus		
Project Description	Buildout Background PM (2:30 PM)				

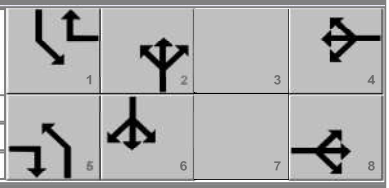


Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	39	123	65	49	156	122	74	596	40	98	844	57

Signal Information			
Cycle, s	110.0	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	3.1	0.7	73.2	16.5	0.0	0.0
Yellow	3.5	0.0	4.5	4.0	0.0	0.0
Red	1.5	0.0	1.0	2.0	0.0	0.0



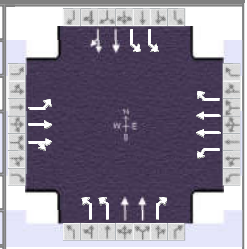
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		8		4	5	2	1	6
Case Number		5.0		5.0	1.1	4.0	1.1	4.0
Phase Duration, s		22.5		22.5	8.1	78.7	8.8	79.3
Change Period, (*Y+R c*), s		6.0		6.0	5.0	5.5	5.0	5.5
Max Allow Headway (*MAH*), s		4.1		4.1	2.5	0.0	2.5	0.0
Queue Clearance Time (*g s*), s		13.6		12.4	3.4		3.9	
Green Extension Time (*g e*), s		2.0		2.0	0.1	0.0	0.1	0.0
Phase Call Probability		1.00		1.00	0.90		0.95	
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	3	8	18	7	4	14	5	2	12	1	6	16
Adjusted Flow Rate (*v*), veh/h	39	123	65	49	156	122	74	321	315	98	456	445
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1247	1900	1610	1288	1900	1604	1810	1885	1843	1810	1885	1843
Queue Service Time (*g s*), s	3.3	6.5	3.8	3.9	8.4	7.4	1.4	7.6	7.6	1.9	11.6	11.6
Cycle Queue Clearance Time (*g c*), s	11.6	6.5	3.8	10.4	8.4	7.4	1.4	7.6	7.6	1.9	11.6	11.6
Green Ratio (*g/C*)	0.15	0.15	0.18	0.15	0.15	0.18	0.69	0.67	0.67	0.70	0.67	0.67
Capacity (*c*), veh/h	160	287	289	185	287	298	460	1253	1225	606	1264	1235
Volume-to-Capacity Ratio (*X*)	0.244	0.429	0.225	0.265	0.544	0.410	0.161	0.256	0.257	0.162	0.360	0.361
Back of Queue (*Q*), ft/ln (95 th percentile)	46.6	137.4	67.5	57.7	178.4	131.3	20.4	125.2	122.3	26.6	189.6	184.7
Back of Queue (*Q*), veh/ln (95 th percentile)	1.9	5.5	2.7	2.3	7.1	5.3	0.8	5.0	4.9	1.1	7.5	7.4
Queue Storage Ratio (*RQ*) (95 th percentile)	0.33	0.00	0.34	0.44	0.00	1.09	0.07	0.00	0.00	0.11	0.00	0.00
Uniform Delay (*d 1*), s/veh	48.5	42.4	38.6	47.1	43.2	39.5	6.3	7.5	7.5	5.6	7.9	7.9
Incremental Delay (*d 2*), s/veh	0.8	1.0	0.4	0.8	1.6	0.9	0.1	0.5	0.5	0.0	0.8	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	0.0	0.0
Control Delay (*d*), s/veh	49.3	43.4	39.0	47.8	44.8	40.4	6.3	8.0	8.0	5.6	8.7	8.7
Level of Service (LOS)	D	D	D	D	D	D	A	A	A	A	A	A
Approach Delay, s/veh / LOS	43.1	D		43.6	D		7.8	A		8.4	A	
Intersection Delay, s/veh / LOS	16.8						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.31	B	2.31	B	2.14	B	2.14	B
Bicycle LOS Score / LOS	2.91	C	3.08	C	2.37	B	2.83	C

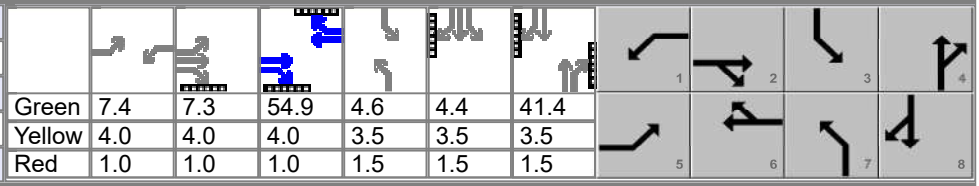
HCS Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Lee Engineering			Duration, h	1.000
Analyst	BW	Analysis Date	Jun 25, 2024	Area Type	Other
Jurisdiction	CABQ	Time Period	Buildout Total AM (7:15 AM)	PHF	1.00
Urban Street	Central Avenue	Analysis Year	2024	Analysis Period	1> 7:15
Intersection	Coors Boulevard	File Name	01 Coors Central Buildout Total AM.xus		
Project Description	Buildout Total AM (7:15 AM)				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	209	607	27	71	234	233	61	936	98	177	613	89

Signal Information			
Cycle, s	150.0	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	7.4	7.3	54.9	4.6	4.4	41.4			
Yellow	4.0	4.0	4.0	3.5	3.5	3.5			
Red	1.0	1.0	1.0	1.5	1.5	1.5			

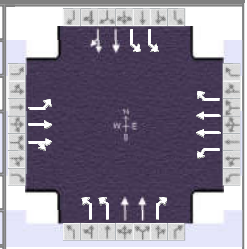
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6	7	4	3	8
Case Number	2.0	4.0	2.0	3.0	2.0	3.0	2.0	4.0
Phase Duration, s	24.7	72.2	12.4	59.9	9.6	46.4	19.0	55.8
Change Period, ($Y+R_c$), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Allow Headway (*MAH*), s	4.1	0.0	4.1	0.0	4.0	4.0	4.0	4.0
Queue Clearance Time (g_s), s	19.0		7.8		4.6	39.9	9.3	25.5
Green Extension Time (g_e), s	0.7	0.0	0.0	0.0	0.2	1.5	0.4	8.0
Phase Call Probability	1.00		0.95		0.92	1.00	1.00	1.00
Max Out Probability	0.00		1.00		0.00	1.00	0.01	0.11

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	7	4	14	3	8	18
Adjusted Flow Rate (*v*), veh/h	209	317	313	71	234	233	61	936	98	177	360	342
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1810	1900	1875	1810	1809	1553	1716	1809	1600	1743	1885	1787
Queue Service Time (g_s), s	17.0	16.6	16.6	5.8	6.6	16.8	2.6	37.9	7.1	7.3	23.4	23.5
Cycle Queue Clearance Time (g_c), s	17.0	16.6	16.6	5.8	6.6	16.8	2.6	37.9	7.1	7.3	23.4	23.5
Green Ratio (*g/C*)	0.13	0.45	0.45	0.05	0.37	0.37	0.03	0.28	0.28	0.09	0.34	0.34
Capacity (*c*), veh/h	238	851	840	90	1324	569	105	998	441	325	638	605
Volume-to-Capacity Ratio (*X*)	0.878	0.372	0.373	0.790	0.177	0.410	0.579	0.938	0.222	0.544	0.564	0.566
Back of Queue (*Q*), ft/ln (95 th percentile)	333.9	311.6	308.8	145.4	133.6	274.7	56	672.2	126.3	147.5	410.1	391.2
Back of Queue (*Q*), veh/ln (95 th percentile)	13.4	12.5	12.4	5.8	5.3	11.0	2.2	26.9	5.1	5.9	16.3	15.6
Queue Storage Ratio (*RQ*) (95 th percentile)	2.38	0.00	0.00	0.97	0.00	0.00	0.16	0.00	0.00	0.41	0.00	0.00
Uniform Delay (d_1), s/veh	64.0	27.4	27.4	70.5	32.2	35.5	71.7	53.1	41.9	65.0	40.6	40.6
Incremental Delay (d_2), s/veh	11.2	1.3	1.3	21.4	0.3	2.2	5.0	20.3	0.3	1.4	1.1	1.2
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	75.2	28.7	28.7	91.9	32.5	37.7	76.8	73.4	42.1	66.4	41.7	41.8
Level of Service (LOS)	E	C	C	F	C	D	E	E	D	E	D	D
Approach Delay, s/veh / LOS	40.3	D		42.6	D		70.7	E		46.7	D	
Intersection Delay, s/veh / LOS	52.3						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.62	C	2.48	B	2.48	B	2.33	B
Bicycle LOS Score / LOS	3.81	D	2.95	C	3.23	C	3.94	D

HCS Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Lee Engineering			Duration, h	1.000
Analyst	BW	Analysis Date	Jun 25, 2024	Area Type	Other
Jurisdiction	CABQ	Time Period	Buildout Total PM (2:30 PM)	PHF	1.00
Urban Street	Central Avenue	Analysis Year	2024	Analysis Period	1> 14:30
Intersection	Coors Boulevard	File Name	01 Coors Central Buildout Total PM.xus		
Project Description	Buildout Total PM (2:30 PM)				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	141	427	45	126	570	270	125	655	77	343	861	158

Signal Information			
Cycle, s	120.0	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	10.2	1.0	44.1	6.6	2.5	30.5			
Yellow	4.0	0.0	4.0	3.5	3.5	3.5			
Red	1.0	0.0	1.0	1.5	1.5	1.5			

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6	7	4	3	8
Case Number	2.0	4.0	2.0	3.0	2.0	3.0	2.0	4.0
Phase Duration, s	16.2	50.2	15.2	49.1	11.6	35.5	19.1	43.0
Change Period, ($Y+R_c$), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Allow Headway (*MAH*), s	4.1	0.0	4.1	0.0	4.0	4.0	4.0	4.0
Queue Clearance Time (g_s), s	11.2		10.2		6.3	21.8	13.5	33.8
Green Extension Time (g_e), s	0.2	0.0	0.2	0.0	0.4	4.9	0.7	3.0
Phase Call Probability	0.99		0.99		0.98	1.00	1.00	1.00
Max Out Probability	0.57		0.24		0.00	0.60	0.41	0.92

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	7	4	14	3	8	18
Adjusted Flow Rate (*v*), veh/h	141	239	233	126	570	270	125	655	77	343	526	493
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1810	1900	1835	1810	1809	1537	1716	1809	1597	1757	1885	1764
Queue Service Time (g_s), s	9.2	10.8	10.9	8.2	14.2	16.2	4.3	19.8	4.5	11.5	31.7	31.8
Cycle Queue Clearance Time (g_c), s	9.2	10.8	10.9	8.2	14.2	16.2	4.3	19.8	4.5	11.5	31.7	31.8
Green Ratio (*g/C*)	0.09	0.38	0.38	0.09	0.37	0.37	0.05	0.25	0.25	0.12	0.32	0.32
Capacity (*c*), veh/h	170	715	691	154	1331	565	188	919	406	413	598	559
Volume-to-Capacity Ratio (*X*)	0.831	0.334	0.337	0.818	0.428	0.478	0.664	0.712	0.190	0.830	0.881	0.881
Back of Queue (*Q*), ft/ln (95 th percentile)	215.2	219.6	215.7	190.8	259.3	261.5	88.5	342.9	78.6	229.7	591.4	559.5
Back of Queue (*Q*), veh/ln (95 th percentile)	8.6	8.8	8.6	7.6	10.4	10.5	3.5	13.7	3.1	9.2	23.5	22.4
Queue Storage Ratio (*RQ*) (95 th percentile)	1.54	0.00	0.00	1.27	0.00	0.00	0.25	0.00	0.00	0.64	0.00	0.00
Uniform Delay (d_1), s/veh	53.4	26.7	26.7	54.0	28.5	29.1	55.6	40.8	35.1	51.8	38.8	38.8
Incremental Delay (d_2), s/veh	17.3	1.3	1.3	12.7	1.0	2.9	4.1	2.5	0.2	8.2	16.4	17.4
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	70.7	28.0	28.0	66.7	29.5	32.0	59.7	43.3	35.3	60.0	55.2	56.3
Level of Service (LOS)	E	C	C	E	C	C	E	D	D	E	E	E
Approach Delay, s/veh / LOS	37.8	D		35.0	D		45.0	D		56.8	E	
Intersection Delay, s/veh / LOS	45.5						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.61	C	2.47	B	2.47	B	2.31	B
Bicycle LOS Score / LOS	3.63	D	3.30	C	3.03	C	4.34	D

HCS Two-Way Stop-Control Report

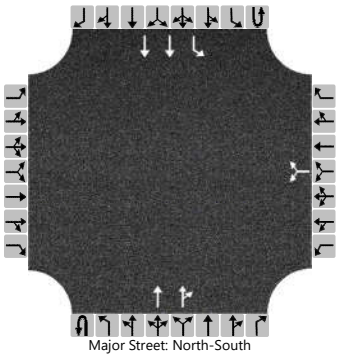
General Information

Analyst	BW
Agency/Co.	Lee Engingeering
Date Performed	6/11/2024
Analysis Year	2024
Time Analyzed	BO Total AM (7:15 AM)
Intersection Orientation	North-South
Project Description	Mark Armijo Academy NIA

Site Information

Intersection	Coors Blvd & Gonzales Rd
Jurisdiction	CABQ
East/West Street	Gonzales Road
North/South Street	Coors Boulevard
Peak Hour Factor	1.00
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	0	0		0	1	0	0	0	2	0	0	1	2	0
Configuration							LR				T	TR		L	T	
Volume (veh/h)						64		99			1210	131	4	114	652	
Percent Heavy Vehicles (%)						0		0					0	0		
Proportion Time Blocked																
Percent Grade (%)						0										
Right Turn Channelized																
Median Type | Storage		Left + Thru								2						

Critical and Follow-up Headways

Base Critical Headway (sec)						7.5		6.9					6.4	4.1		
Critical Headway (sec)						6.80		6.90					6.40	4.10		
Base Follow-Up Headway (sec)						3.5		3.3					2.5	2.2		
Follow-Up Headway (sec)						3.50		3.30					2.50	2.20		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)							163							118		
Capacity, c (veh/h)							284							482		
v/c Ratio							0.57							0.24		
95% Queue Length, Q_{95} (veh)							3.8							1.0		
Control Delay (s/veh)							34.5							14.9		
Level of Service (LOS)							D							B		
Approach Delay (s/veh)						34.5								2.3		
Approach LOS						D								A		

HCS Two-Way Stop-Control Report

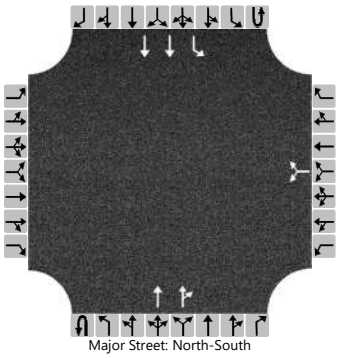
General Information

Analyst	BW
Agency/Co.	Lee Engingeering
Date Performed	6/11/2024
Analysis Year	2024
Time Analyzed	BO Total PM (2:30 PM)
Intersection Orientation	North-South
Project Description	Mark Armijo Academy

Site Information

Intersection	Coors Blvd & Gonzales Rd
Jurisdiction	CABQ
East/West Street	Gonzales Road
North/South Street	Coors Boulevard
Peak Hour Factor	1.00
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	0	0		0	1	0	0	0	2	0	0	1	2	0
Configuration							LR				T	TR		L	T	
Volume (veh/h)						78		107			705	65	4	114	652	
Percent Heavy Vehicles (%)						0		0					0	0		
Proportion Time Blocked																
Percent Grade (%)						0										
Right Turn Channelized																
Median Type | Storage		Left + Thru								2						

Critical and Follow-up Headways

Base Critical Headway (sec)						7.5		6.9					6.4	4.1		
Critical Headway (sec)						6.80		6.90					6.40	4.10		
Base Follow-Up Headway (sec)						3.5		3.3					2.5	2.2		
Follow-Up Headway (sec)						3.50		3.30					2.50	2.20		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)							185							118		
Capacity, c (veh/h)							450							821		
v/c Ratio							0.41							0.14		
95% Queue Length, Q_{95} (veh)							2.1							0.5		
Control Delay (s/veh)							18.6							10.1		
Level of Service (LOS)							C							B		
Approach Delay (s/veh)					18.6								1.6			
Approach LOS					C								A			

HCS Two-Way Stop-Control Report

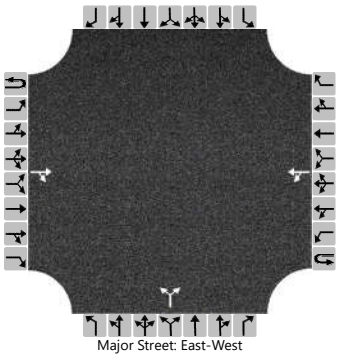
General Information

Analyst	BW
Agency/Co.	Lee Engineering
Date Performed	6/28/2024
Analysis Year	2024
Time Analyzed	BO Total AM (7:15 AM)
Intersection Orientation	East-West
Project Description	Mark Armijo Academy NIA

Site Information

Intersection	Site Access & Gonzales Rd
Jurisdiction	CABQ
East/West Street	Gonzales Road
North/South Street	Site Access
Peak Hour Factor	1.00
Analysis Time Period (hrs)	1.00

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	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	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			198	47		27	61			22		23				
Percent Heavy Vehicles (%)						0				0		0				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage																

Critical and Follow-up Headways

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

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						27					45					
Capacity, c (veh/h)						1333					728					
v/c Ratio						0.02					0.06					
95% Queue Length, Q_{95} (veh)						0.1					0.2					
Control Delay (s/veh)						7.8	0.2				10.3					
Level of Service (LOS)						A	A				B					
Approach Delay (s/veh)						2.5				10.3						
Approach LOS						A				B						

HCS Two-Way Stop-Control Report

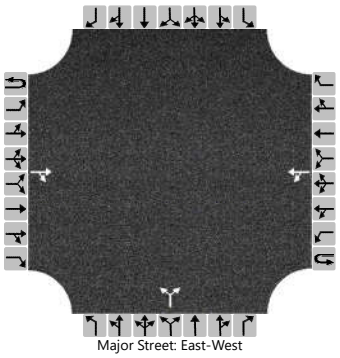
General Information

Analyst	BW
Agency/Co.	Lee Engineering
Date Performed	6/28/2024
Analysis Year	2024
Time Analyzed	BO Total PM (2:30 PM)
Intersection Orientation	East-West
Project Description	Mark Armijo Academy NIA

Site Information

Intersection	Site Access & Gonzales Rd
Jurisdiction	CABQ
East/West Street	Gonzales Road
North/South Street	Site Access
Peak Hour Factor	1.00
Analysis Time Period (hrs)	1.00

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	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	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			184	28		15	97			32		36				
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)						4.1				7.1		6.2				
Critical Headway (sec)						4.10				6.40		6.20				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.20				3.50		3.30				

Delay, Queue Length, and Level of Service

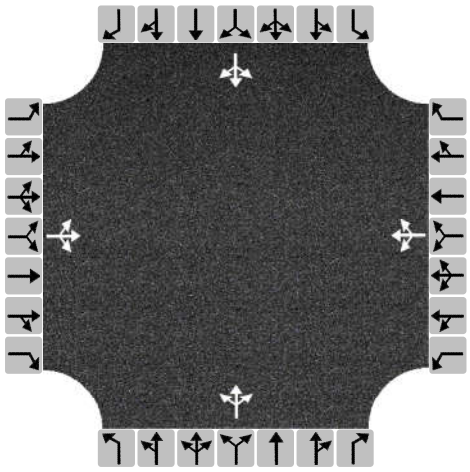
Flow Rate, v (veh/h)						15					68					
Capacity, c (veh/h)						1370					751					
v/c Ratio						0.01					0.09					
95% Queue Length, Q_{95} (veh)						0.0					0.3					
Control Delay (s/veh)						7.7	0.1				10.3					
Level of Service (LOS)						A	A				B					
Approach Delay (s/veh)					1.1				10.3							
Approach LOS					A				B							

HCS All-Way Stop Control Report

General and Site Information

Analyst	BW
Agency/Co.	Lee Engineering
Date Performed	6/11/2024
Analysis Year	2024
Analysis Time Period (hrs)	1.00
Time Analyzed	BO Total AM (7:15 AM)
Project Description	Mark Armijo Academy
Intersection	Bataan Dr & Gonzales Rd
Jurisdiction	CABQ
East/West Street	Gonzales Road
North/South Street	Bataan Drive
Peak Hour Factor	1.00

Lanes



Turning Movement Demand Volumes

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume (veh/h)	24	88	57	27	61	18	52	35	25	2	19	27
% Thrus in Shared Lane												

Lane Flow Rate and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	169			106			112			48		
Percent Heavy Vehicles	2			0			0			0		
Initial Departure Headway, h_d (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.150			0.094			0.100			0.043		
Final Departure Headway, h_d (s)	4.26			4.41			4.53			4.33		
Final Degree of Utilization, x	0.200			0.130			0.141			0.058		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, t_s (s)	2.26			2.41			2.53			2.33		

Capacity, Delay and Level of Service

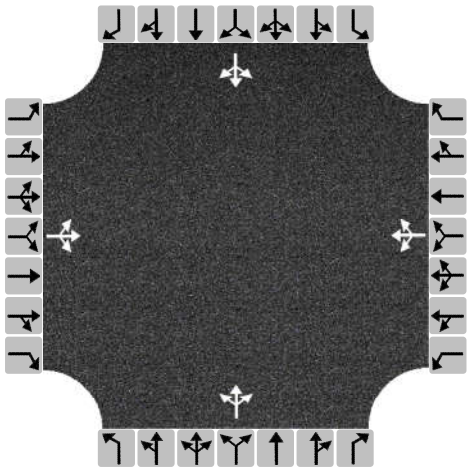
Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	169			106			112			48		
Capacity (veh/h)	846			816			794			832		
95% Queue Length, Q_{95} (veh)	0.7			0.4			0.5			0.2		
Control Delay (s/veh)	8.3			8.1			8.3			7.6		
Level of Service, LOS	A			A			A			A		
Approach Delay (s/veh) | LOS	8.3	A		8.1	A		8.3	A		7.6	A	
Intersection Delay (s/veh) | LOS	8.2						A					

HCS All-Way Stop Control Report

General and Site Information

Analyst	BW
Agency/Co.	Lee Engineering
Date Performed	6/11/2024
Analysis Year	2024
Analysis Time Period (hrs)	1.00
Time Analyzed	BO Total PM (2:30 PM)
Project Description	Mark Armijo Academy
Intersection	Bataan Dr & Gonzales Rd
Jurisdiction	CABQ
East/West Street	Gonzales Road
North/South Street	Bataan Drive
Peak Hour Factor	1.00

Lanes



Turning Movement Demand Volumes

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume (veh/h)	17	113	77	35	57	19	35	49	22	6	21	20
% Thrus in Shared Lane												

Lane Flow Rate and Adjustments

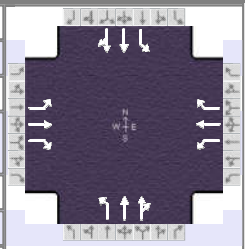
Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	207			111			106			47		
Percent Heavy Vehicles	2			0			0			0		
Initial Departure Headway, h_d (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.184			0.099			0.094			0.042		
Final Departure Headway, h_d (s)	4.22			4.45			4.61			4.52		
Final Degree of Utilization, x	0.243			0.137			0.136			0.059		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, t_s (s)	2.22			2.45			2.61			2.52		

Capacity, Delay and Level of Service

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	207			111			106			47		
Capacity (veh/h)	853			809			781			797		
95% Queue Length, Q_{95} (veh)	1.0			0.5			0.5			0.2		
Control Delay (s/veh)	8.6			8.2			8.3			7.8		
Level of Service, LOS	A			A			A			A		
Approach Delay (s/veh) | LOS	8.6	A		8.2	A		8.3	A		7.8	A	
Intersection Delay (s/veh) | LOS	8.3						A					

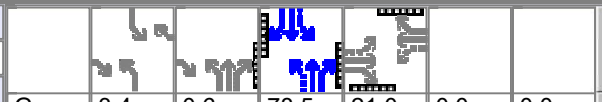
HCS Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Lee Engineering			Duration, h	1.000
Analyst	BW	Analysis Date	Jun 25, 2024	Area Type	Other
Jurisdiction	CABQ	Time Period	Buildout Total AM (7:15 AM)	PHF	1.00
Urban Street	Coors Boulevard	Analysis Year	2024	Analysis Period	1> 7:15
Intersection	Bridge Boulevard	File Name	05 Coors Bridge Buildout Total AM.xus		
Project Description	Buildout Total AM (7:15 AM)				

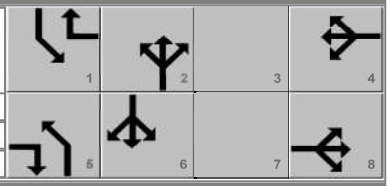


Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	100	180	73	48	136	140	93	1103	63	73	608	37

Signal Information			
Cycle, s	120.0	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	3.4	0.6	78.5	21.0	0.0	0.0
Yellow	3.5	0.0	4.5	4.0	0.0	0.0
Red	1.5	0.0	1.0	2.0	0.0	0.0



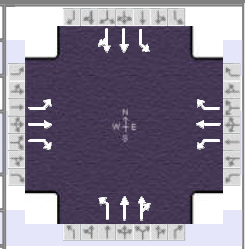
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		8		4	5	2	1	6
Case Number		5.0		5.0	1.1	4.0	1.1	4.0
Phase Duration, s		27.0		27.0	9.0	84.6	8.4	84.0
Change Period, ($Y+R_c$), s		6.0		6.0	5.0	5.5	5.0	5.5
Max Allow Headway (*MAH*), s		4.1		4.1	2.5	0.0	2.5	0.0
Queue Clearance Time (g_s), s		18.5		16.6	4.1		3.6	
Green Extension Time (g_e), s		2.0		2.0	0.1	0.0	0.1	0.0
Phase Call Probability		1.00		1.00	0.95		0.91	
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	3	8	18	7	4	14	5	2	12	1	6	16
Adjusted Flow Rate (*v*), veh/h	100	180	29	48	136	65	93	589	577	73	325	320
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1272	1900	1610	1223	1900	1582	1795	1885	1849	1810	1885	1847
Queue Service Time (g_s), s	9.1	10.3	1.7	4.5	7.6	4.1	2.1	18.6	18.6	1.6	8.7	8.7
Cycle Queue Clearance Time (g_c), s	16.5	10.3	1.7	14.6	7.6	4.1	2.1	18.6	18.6	1.6	8.7	8.7
Green Ratio (*g/C*)	0.18	0.18	0.21	0.18	0.18	0.20	0.69	0.66	0.66	0.68	0.65	0.65
Capacity (*c*), veh/h	205	335	337	172	335	323	578	1241	1217	348	1231	1206
Volume-to-Capacity Ratio (*X*)	0.488	0.538	0.086	0.279	0.406	0.201	0.161	0.474	0.475	0.210	0.264	0.265
Back of Queue (*Q*), ft/ln (95 th percentile)	132.5	213.8	31	62.5	162.1	73	30.9	290.8	284.9	24.6	151.3	147.5
Back of Queue (*Q*), veh/ln (95 th percentile)	5.3	8.6	1.2	2.5	6.5	2.9	1.2	11.5	11.4	1.0	6.0	5.9
Queue Storage Ratio (*RQ*) (95 th percentile)	0.95	0.00	0.16	0.48	0.00	0.61	0.11	0.00	0.00	0.10	0.00	0.00
Uniform Delay (d_1), s/veh	51.1	45.0	38.2	51.6	43.9	39.6	6.6	10.2	10.2	8.4	8.7	8.7
Incremental Delay (d_2), s/veh	1.8	1.3	0.1	0.9	0.8	0.3	0.0	1.3	1.3	0.1	0.5	0.5
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	52.9	46.3	38.3	52.4	44.7	39.9	6.6	11.5	11.5	8.5	9.2	9.3
Level of Service (LOS)	D	D	D	D	D	D	A	B	B	A	A	A
Approach Delay, s/veh / LOS	47.7	D		44.9	D		11.2	B		9.2	A	
Intersection Delay, s/veh / LOS	18.4						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.31	B	2.31	B	2.25	B	2.21	B
Bicycle LOS Score / LOS	3.05	C	2.95	C	2.83	C	2.59	C

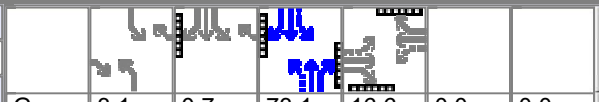
HCS Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Lee Engineering			Duration, h	1.000
Analyst	BW	Analysis Date	Jun 25, 2024	Area Type	Other
Jurisdiction	CABQ	Time Period	Buildout Total PM (2:30 PM)	PHF	1.00
Urban Street	Coors Boulevard	Analysis Year	2024	Analysis Period	1> 14:30
Intersection	Bridge Boulevard	File Name	05 Coors Bridge Buildout Total PM.xus		
Project Description	Buildout Total PM (2:30 PM)				

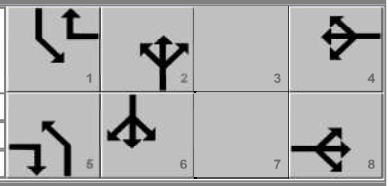


Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	40	123	65	49	156	123	74	603	40	99	855	58

Signal Information			
Cycle, s	110.0	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	3.1	0.7	73.1	16.6	0.0	0.0
Yellow	3.5	0.0	4.5	4.0	0.0	0.0
Red	1.5	0.0	1.0	2.0	0.0	0.0



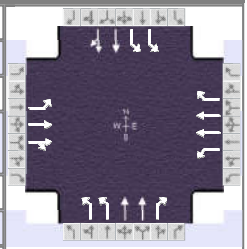
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		8		4	5	2	1	6
Case Number		5.0		5.0	1.1	4.0	1.1	4.0
Phase Duration, s		22.6		22.6	8.1	78.6	8.8	79.2
Change Period, ($Y+R_c$), s		6.0		6.0	5.0	5.5	5.0	5.5
Max Allow Headway (*MAH*), s		4.1		4.1	2.5	0.0	2.5	0.0
Queue Clearance Time (g_s), s		13.7		12.3	3.4		3.9	
Green Extension Time (g_e), s		2.0		2.0	0.1	0.0	0.1	0.0
Phase Call Probability		1.00		1.00	0.90		0.95	
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	3	8	18	7	4	14	5	2	12	1	6	16
Adjusted Flow Rate (*v*), veh/h	40	123	65	49	156	123	74	325	318	99	462	451
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1247	1900	1610	1288	1900	1604	1810	1885	1843	1810	1885	1843
Queue Service Time (g_s), s	3.4	6.5	3.8	3.9	8.3	7.4	1.4	7.7	7.7	1.9	11.8	11.8
Cycle Queue Clearance Time (g_c), s	11.7	6.5	3.8	10.3	8.3	7.4	1.4	7.7	7.7	1.9	11.8	11.8
Green Ratio (*g/C*)	0.15	0.15	0.18	0.15	0.15	0.19	0.69	0.66	0.66	0.70	0.67	0.67
Capacity (*c*), veh/h	161	288	290	186	288	299	455	1251	1223	602	1262	1234
Volume-to-Capacity Ratio (*X*)	0.249	0.427	0.224	0.264	0.541	0.411	0.163	0.260	0.260	0.164	0.366	0.366
Back of Queue (*Q*), ft/ln (95 th percentile)	47.8	137.4	67.5	57.6	178.3	132.4	20.5	127.4	124.5	26.8	193.2	189
Back of Queue (*Q*), veh/ln (95 th percentile)	1.9	5.5	2.7	2.3	7.1	5.3	0.8	5.1	5.0	1.1	7.7	7.6
Queue Storage Ratio (*RQ*) (95 th percentile)	0.34	0.00	0.34	0.44	0.00	1.10	0.07	0.00	0.00	0.11	0.00	0.00
Uniform Delay (d_1), s/veh	48.5	42.3	38.5	47.0	43.1	39.4	6.3	7.5	7.5	5.6	7.9	8.0
Incremental Delay (d_2), s/veh	0.8	1.0	0.4	0.7	1.6	0.9	0.1	0.5	0.5	0.0	0.8	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	0.0	0.0
Control Delay (*d*), s/veh	49.3	43.3	38.9	47.7	44.7	40.3	6.4	8.0	8.0	5.7	8.8	8.8
Level of Service (LOS)	D	D	D	D	D	D	A	A	A	A	A	A
Approach Delay, s/veh / LOS	43.1	D		43.5	D		7.9	A		8.5	A	
Intersection Delay, s/veh / LOS	16.8						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.31	B	2.31	B	2.14	B	2.14	B
Bicycle LOS Score / LOS	2.92	C	3.08	C	2.38	B	2.84	C

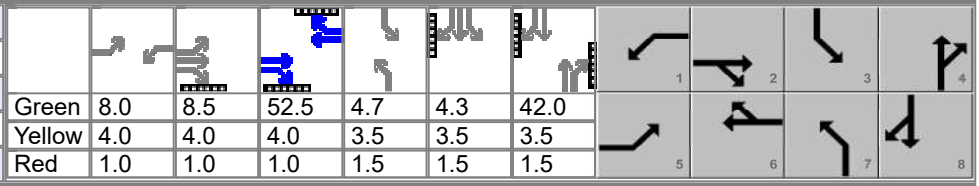
HCS Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Lee Engineering			Duration, h	1.000
Analyst	BW	Analysis Date	Jun 25, 2024	Area Type	Other
Jurisdiction	CABQ	Time Period	Horizon AM (7:15 AM)	PHF	1.00
Urban Street	Central Avenue	Analysis Year	2024	Analysis Period	1> 7:15
Intersection	Coors Boulevard	File Name	01 Coors Central Horizon AM.xus		
Project Description	Horizon AM (7:15 AM)				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	230	671	30	77	259	257	66	1063	109	195	675	99

Signal Information			
Cycle, s	150.0	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	8.0	8.5	52.5	4.7	4.3	42.0
Yellow	4.0	4.0	4.0	3.5	3.5	3.5
Red	1.0	1.0	1.0	1.5	1.5	1.5

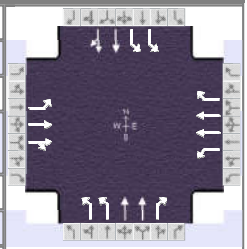
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6	7	4	3	8
Case Number	2.0	4.0	2.0	3.0	2.0	3.0	2.0	4.0
Phase Duration, s	26.5	71.0	13.0	57.5	9.7	47.0	19.0	56.3
Change Period, ($Y+R_c$), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Allow Headway (*MAH*), s	4.1	0.0	4.1	0.0	4.0	4.0	4.0	4.0
Queue Clearance Time (g_s), s	20.7		8.3		4.8	44.0	10.1	28.4
Green Extension Time (g_e), s	0.8	0.0	0.0	0.0	0.2	0.0	0.4	9.0
Phase Call Probability	1.00		0.96		0.94	1.00	1.00	1.00
Max Out Probability	0.00		1.00		0.00	1.00	0.02	0.22

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	7	4	14	3	8	18
Adjusted Flow Rate (*v*), veh/h	230	350	346	77	259	257	66	1063	109	195	397	377
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1810	1900	1875	1810	1809	1551	1716	1809	1600	1743	1885	1786
Queue Service Time (g_s), s	18.7	19.0	19.0	6.3	7.5	19.4	2.8	42.0	7.9	8.1	26.3	26.4
Cycle Queue Clearance Time (g_c), s	18.7	19.0	19.0	6.3	7.5	19.4	2.8	42.0	7.9	8.1	26.3	26.4
Green Ratio (*g/C*)	0.14	0.44	0.44	0.05	0.35	0.35	0.03	0.28	0.28	0.09	0.34	0.34
Capacity (*c*), veh/h	259	836	825	96	1266	543	108	1013	448	325	644	611
Volume-to-Capacity Ratio (*X*)	0.887	0.419	0.419	0.798	0.205	0.473	0.611	1.049	0.243	0.599	0.616	0.617
Back of Queue (*Q*), ft/ln (95 th percentile)	360.4	349.1	345.8	167.1	153.3	310.4	60.9	1158.6	140.7	164.1	455.8	433.9
Back of Queue (*Q*), veh/ln (95 th percentile)	14.4	14.0	13.8	6.7	6.1	12.4	2.4	46.3	5.6	6.5	18.1	17.4
Queue Storage Ratio (*RQ*) (95 th percentile)	2.57	0.00	0.00	1.11	0.00	0.00	0.17	0.00	0.00	0.46	0.00	0.00
Uniform Delay (d_1), s/veh	63.1	28.8	28.8	70.2	34.1	38.0	71.7	54.0	41.7	65.3	41.2	41.2
Incremental Delay (d_2), s/veh	11.2	1.5	1.6	29.4	0.4	3.0	5.6	117.6	0.3	1.8	1.8	1.9
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	74.2	30.4	30.4	99.6	34.5	40.9	77.3	171.6	42.0	67.1	42.9	43.1
Level of Service (LOS)	E	C	C	F	C	D	E	F	D	E	D	D
Approach Delay, s/veh / LOS	41.3	D		45.7	D		155.1	F		47.9	D	
Intersection Delay, s/veh / LOS	81.5						F					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.62	C	2.48	B	2.48	B	2.33	B
Bicycle LOS Score / LOS	3.88	D	3.00	C	3.34	C	4.01	D

HCS Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Lee Engineering			Duration, h	1.000
Analyst	BW	Analysis Date	Jun 25, 2024	Area Type	Other
Jurisdiction	CABQ	Time Period	Horizon PM (2:30 PM)	PHF	1.00
Urban Street	Central Avenue	Analysis Year	2024	Analysis Period	1> 14:30
Intersection	Coors Boulevard	File Name	01 Coors Central Horizon PM.xus		
Project Description	Horizon PM (2:30 PM)				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	155	472	50	140	629	298	137	722	85	379	950	174

Signal Information			
Cycle, s	120.0	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	11.2	1.0	42.6	7.1	3.2	29.9			
Yellow	4.0	0.0	4.0	3.5	3.5	3.5			
Red	1.0	0.0	1.0	1.5	1.5	1.5			

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	5	2	1	6	7	4	3	8
Case Number	2.0	4.0	2.0	3.0	2.0	3.0	2.0	4.0
Phase Duration, s	17.2	48.6	16.2	47.6	12.1	34.9	20.3	43.1
Change Period, ($Y+R_c$), s	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Max Allow Headway (*MAH*), s	4.1	0.0	4.1	0.0	4.0	4.0	4.0	4.0
Queue Clearance Time (g_s), s	12.1		11.1		6.7	24.5	14.7	38.5
Green Extension Time (g_e), s	0.1	0.0	0.1	0.0	0.4	3.6	0.6	0.0
Phase Call Probability	0.99		0.99		0.99	1.00	1.00	1.00
Max Out Probability	1.00		0.88		0.00	0.89	0.84	1.00

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	5	2	12	1	6	16	7	4	14	3	8	18
Adjusted Flow Rate (*v*), veh/h	155	265	257	140	629	298	137	722	85	379	580	544
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1810	1900	1835	1810	1809	1534	1716	1809	1597	1757	1885	1765
Queue Service Time (g_s), s	10.1	12.4	12.5	9.1	16.3	18.7	4.7	22.5	5.1	12.7	36.4	36.5
Cycle Queue Clearance Time (g_c), s	10.1	12.4	12.5	9.1	16.3	18.7	4.7	22.5	5.1	12.7	36.4	36.5
Green Ratio (*g/C*)	0.10	0.36	0.36	0.09	0.36	0.36	0.06	0.25	0.25	0.13	0.32	0.32
Capacity (*c*), veh/h	183	691	667	168	1285	545	202	902	398	448	599	561
Volume-to-Capacity Ratio (*X*)	0.845	0.383	0.386	0.831	0.489	0.547	0.679	0.801	0.214	0.847	0.968	0.970
Back of Queue (*Q*), ft/ln (95 th percentile)	242	246.2	241.5	216.3	291.2	296.3	96.6	390.6	87.9	253.5	806.9	771.4
Back of Queue (*Q*), veh/ln (95 th percentile)	9.7	9.8	9.7	8.7	11.6	11.9	3.8	15.6	3.5	10.1	32.0	30.9
Queue Storage Ratio (*RQ*) (95 th percentile)	1.73	0.00	0.00	1.44	0.00	0.00	0.27	0.00	0.00	0.70	0.00	0.00
Uniform Delay (d_1), s/veh	53.0	28.2	28.3	53.5	30.2	30.9	55.4	42.3	35.7	51.2	40.3	40.4
Incremental Delay (d_2), s/veh	23.5	1.6	1.7	18.7	1.3	4.0	4.0	5.4	0.3	10.7	47.6	50.8
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	76.5	29.8	29.9	72.2	31.5	34.9	59.4	47.7	36.0	61.9	87.9	91.2
Level of Service (LOS)	E	C	C	E	C	C	E	D	D	E	F	F
Approach Delay, s/veh / LOS	40.6	D		37.8	D		48.3	D		82.5	F	
Intersection Delay, s/veh / LOS	56.7						E					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.61	C	2.47	B	2.47	B	2.31	B
Bicycle LOS Score / LOS	3.68	D	3.39	C	3.10	C	4.45	D

HCS Two-Way Stop-Control Report

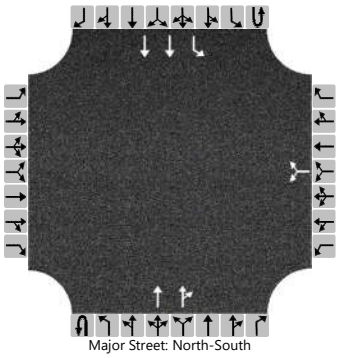
General Information

Analyst	BW
Agency/Co.	Lee Engingeering
Date Performed	6/11/2024
Analysis Year	2024
Time Analyzed	Horizon AM (7:15 AM)
Intersection Orientation	North-South
Project Description	Mark Armijo Academy NIA

Site Information

Intersection	Coors Blvd & Gonzales Rd
Jurisdiction	CABQ
East/West Street	Gonzales Road
North/South Street	Coors Boulevard
Peak Hour Factor	1.00
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	0	0		0	1	0	0	0	2	0	0	1	2	0
Configuration							LR				T	TR		L	T	
Volume (veh/h)						69		108			1337	142	4	124	721	
Percent Heavy Vehicles (%)						0		0					0	0		
Proportion Time Blocked																
Percent Grade (%)						0										
Right Turn Channelized																
Median Type | Storage		Left + Thru								2						

Critical and Follow-up Headways

Base Critical Headway (sec)						7.5		6.9					6.4	4.1		
Critical Headway (sec)						6.80		6.90					6.40	4.10		
Base Follow-Up Headway (sec)						3.5		3.3					2.5	2.2		
Follow-Up Headway (sec)						3.50		3.30					2.50	2.20		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)							177							128		
Capacity, c (veh/h)							246							422		
v/c Ratio							0.72							0.30		
95% Queue Length, Q_{95} (veh)							6.5							1.3		
Control Delay (s/veh)							54.5							17.2		
Level of Service (LOS)							F							C		
Approach Delay (s/veh)						54.5							2.6			
Approach LOS						F							A			

HCS Two-Way Stop-Control Report

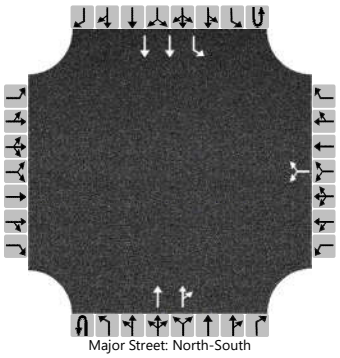
General Information

Analyst	BW
Agency/Co.	Lee Engingeering
Date Performed	6/11/2024
Analysis Year	2024
Time Analyzed	Horizon PM (2:30 PM)
Intersection Orientation	North-South
Project Description	Mark Armijo Academy

Site Information

Intersection	Coors Blvd & Gonzales Rd
Jurisdiction	CABQ
East/West Street	Gonzales Road
North/South Street	Coors Boulevard
Peak Hour Factor	1.00
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	0	0		0	1	0	0	0	2	0	0	1	2	0
Configuration							LR				T	TR		L	T	
Volume (veh/h)						84		116			779	70	2	160	1036	
Percent Heavy Vehicles (%)						0		0					0	0		
Proportion Time Blocked																
Percent Grade (%)						0										
Right Turn Channelized																
Median Type | Storage		Left + Thru								2						

Critical and Follow-up Headways

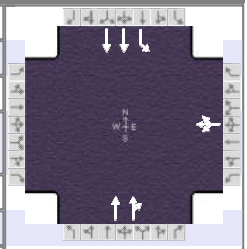
Base Critical Headway (sec)						7.5		6.9					6.4	4.1		
Critical Headway (sec)						6.80		6.90					6.40	4.10		
Base Follow-Up Headway (sec)						3.5		3.3					2.5	2.2		
Follow-Up Headway (sec)						3.50		3.30					2.50	2.20		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)							200							162		
Capacity, c (veh/h)							365							784		
v/c Ratio							0.55							0.21		
95% Queue Length, Q_{95} (veh)							3.5							0.8		
Control Delay (s/veh)							26.6							10.8		
Level of Service (LOS)							D							B		
Approach Delay (s/veh)					26.6								1.5			
Approach LOS					D								A			

HCS Signalized Intersection Results Summary

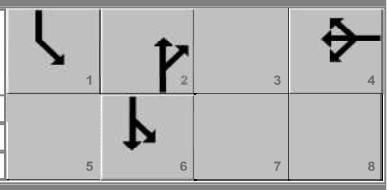
General Information				Intersection Information	
Agency	Lee Engineering			Duration, h	1.000
Analyst	BW	Analysis Date	7/1/2024	Area Type	Other
Jurisdiction	CABQ	Time Period	Mitigated Horizon AM (7:15 AM)	PHF	1.00
Urban Street	Coors Boulevard	Analysis Year	2024	Analysis Period	1> 7:15
Intersection	Gonzales Road	File Name	02 Coors Gonzales Horizon AM - Mitigated.xus		
Project Description	Mitigated Horizon AM (7:15 AM)				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h				69	0	108		1337	142	128	721	

Signal Information			
Cycle, s	80.0	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	4.1	43.7	15.7	0.0	0.0	0.0
Yellow	3.5	4.5	4.0	0.0	0.0	0.0
Red	1.5	1.0	2.0	0.0	0.0	0.0



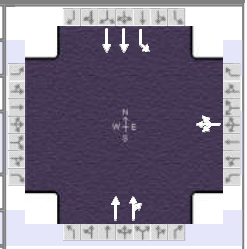
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase				4		2	1	6
Case Number				12.0		8.3	1.0	4.0
Phase Duration, s				21.7		49.2	9.1	58.3
Change Period, (*Y+R c*), s				6.0		5.5	5.0	5.5
Max Allow Headway (*MAH*), s				4.3		0.0	2.5	0.0
Queue Clearance Time (*g s*), s				9.2			4.3	
Green Extension Time (*g e*), s				0.5		0.0	0.1	0.0
Phase Call Probability				1.00			0.94	
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					177			749	730	128	721	
Adjusted Saturation Flow Rate (*s*), veh/h/ln					1750			1900	1836	1810	1795	
Queue Service Time (*g s*), s					7.2			32.6	24.0	2.3	6.8	
Cycle Queue Clearance Time (*g c*), s					7.2			32.6	24.0	2.3	6.8	
Green Ratio (*g/C*)					0.20			0.55	0.55	0.62	0.66	
Capacity (*c*), veh/h					343			1037	1002	234	2370	
Volume-to-Capacity Ratio (*X*)					0.516			0.722	0.729	0.547	0.304	
Back of Queue (*Q*), ft/ln (95 th percentile)					137.9			359.4	356.3	54.8	86.3	
Back of Queue (*Q*), veh/ln (95 th percentile)					5.5			14.4	14.3	2.2	3.4	
Queue Storage Ratio (*RQ*) (95 th percentile)					0.00			0.00	0.00	0.23	0.00	
Uniform Delay (*d 1*), s/veh					28.8			13.6	13.7	17.0	5.8	
Incremental Delay (*d 2*), s/veh					1.2			4.5	4.8	0.7	0.3	
Initial Queue Delay (*d 3*), s/veh					0.0			0.0	0.0	0.0	0.0	
Control Delay (*d*), s/veh					30.0			18.1	18.5	17.7	6.1	
Level of Service (LOS)					C			B	B	B	A	
Approach Delay, s/veh / LOS	0.0			30.0		C	18.3		B	7.9		A
Intersection Delay, s/veh / LOS	15.6						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.14	B	2.31	B	1.66	B	1.34	A
Bicycle LOS Score / LOS			0.78	A	1.71	B	1.19	A

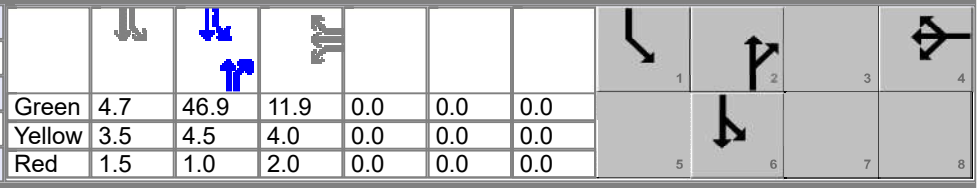
HCS Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Lee Engineering			Duration, h	1.000
Analyst	BW	Analysis Date	Jul 1, 2024	Area Type	Other
Jurisdiction	CABQ	Time Period	Mitigated Horizon PM (2:30 PM)	PHF	1.00
Urban Street	Coors Boulevard	Analysis Year	2024	Analysis Period	1> 14:30
Intersection	Gonzales Road	File Name	02 Coors Gonzales Horizon PM - Mitigated.xus		
Project Description	Mitigated Horizon PM (2:30 PM)				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h				84	0	116		779	70	162	1036	

Signal Information			
Cycle, s	80.0	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	4.7	46.9	11.9	0.0	0.0	0.0
Yellow	3.5	4.5	4.0	0.0	0.0	0.0
Red	1.5	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				12.0		8.3	1.0	4.0
Phase Duration, s				17.9		52.4	9.7	62.1
Change Period, (*Y+R c*), s				6.0		5.5	5.0	5.5
Max Allow Headway (*MAH*), s				3.3		0.0	3.0	0.0
Queue Clearance Time (*g s*), s				10.8			4.6	
Green Extension Time (*g e*), s				0.3		0.0	0.2	0.0
Phase Call Probability				0.99			0.97	
Max Out Probability				0.00			0.00	

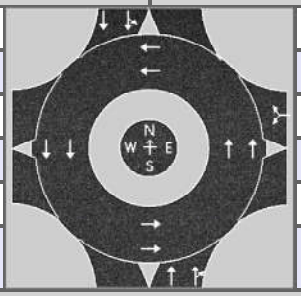
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement				7	4	14		2	12	1	6	
Adjusted Flow Rate (*v*), veh/h					200			431	418	162	1036	
Adjusted Saturation Flow Rate (*s*), veh/h/ln					1756			1900	1844	1810	1809	
Queue Service Time (*g s*), s					8.8			15.2	9.7	2.6	9.4	
Cycle Queue Clearance Time (*g c*), s					8.8			15.2	9.7	2.6	9.4	
Green Ratio (*g/C*)					0.15			0.59	0.59	0.67	0.71	
Capacity (*c*), veh/h					260			1115	1082	458	2561	
Volume-to-Capacity Ratio (*X*)					0.768			0.386	0.386	0.354	0.404	
Back of Queue (*Q*), ft/ln (95 th percentile)					169			155.2	151.2	31	102.8	
Back of Queue (*Q*), veh/ln (95 th percentile)					6.8			6.2	6.0	1.2	4.1	
Queue Storage Ratio (*RQ*) (95 th percentile)					0.00			0.00	0.00	0.13	0.00	
Uniform Delay (*d 1*), s/veh					32.7			8.8	8.8	7.2	4.8	
Incremental Delay (*d 2*), s/veh					1.8			1.0	1.0	0.2	0.5	
Initial Queue Delay (*d 3*), s/veh					0.0			0.0	0.0	0.0	0.0	
Control Delay (*d*), s/veh					34.6			9.8	9.9	7.4	5.3	
Level of Service (LOS)					C			A	A	A	A	
Approach Delay, s/veh / LOS	0.0			34.6		C	9.9		A	5.5		A
Intersection Delay, s/veh / LOS	9.8						A					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.14	B	2.31	B	1.65	B	1.33	A
Bicycle LOS Score / LOS			0.82	A	1.19	A	1.48	A

HCS Roundabouts Report

General Information

Analyst	SM
Agency or Co.	Lee Engineering
Date Performed	7/11/2024
Analysis Year	2024
Time Analyzed	Horizon AM (7:15 AM)
Project Description	Mark Armijo Academy



Site Information

Intersection	Coors Boulevard & Gonzales...
E/W Street Name	Gonzales Road
N/S Street Name	Coors Boulevard
Analysis Time Period, hrs	1.00
Peak Hour Factor	1.00
Jurisdiction	CABQ

Volume Adjustments and Site Characteristics

Approach	EB				WB				NB				SB			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Number of Lanes (N)	0	0	0	0	0	0	1	0	0	0	2	0	0	0	2	0
Lane Assignment							LR		T		TR		LT		T	
Volume (V), veh/h					0	64		99	2		1335	142	4	124	721	
Percent Heavy Vehicles, %					0	0		0	0		0	0	0	0	1	
Flow Rate (v_{PCE}), pc/h					0	64		99	2		1335	142	4	124	728	
Right-Turn Bypass	None				None				None				None			
Conflicting Lanes					2				2				2			
Pedestrians Crossing, p/h					0				0				0			
Proportion of CAVs	0															

Critical and Follow-Up Headway Adjustment

Approach	EB			WB			NB			SB		
Lane	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Critical Headway, s					4.3276		4.6453	4.3276		4.6453	4.3276	
Follow-Up Headway, s					2.5352		2.6667	2.5352		2.6667	2.5352	

Flow Computations, Capacity and v/c Ratios

Approach	EB			WB			NB			SB		
Lane	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Entry Flow (v_e), pc/h					163		695	784		402	454	
Entry Volume, veh/h					163		695	784		399	450	
Circulating Flow (v_c), pc/h	922			1341			128			66		
Exiting Flow (v_{ex}), pc/h	266			0			1438			794		
Capacity (c_{pce}), pc/h					454		1200	1274		1270	1343	
Capacity (c), veh/h					454		1200	1274		1260	1331	
v/c Ratio (x)					0.36		0.58	0.62		0.32	0.34	

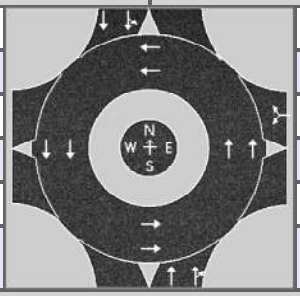
Delay and Level of Service

Approach	EB			WB			NB			SB		
Lane	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Lane Control Delay (d), s/veh					14.1		10.0	10.4		5.8	5.8	
Lane LOS					B		B	B		A	A	
95% Queue, veh					1.7		4.1	4.7		1.4	1.5	
Approach Delay, s/veh | LOS				14.1		B	10.2		B	5.8		A
Intersection Delay, s/veh | LOS	9.0						A					

HCS Roundabouts Report

General Information

Analyst	SM
Agency or Co.	Lee Engineering
Date Performed	7/11/2024
Analysis Year	2024
Time Analyzed	Horizon PM (2:30 PM)
Project Description	Mark Armijo Academy



Site Information

Intersection	Coors Boulevard & Gonzales...
E/W Street Name	Gonzales Road
N/S Street Name	Coors Boulevard
Analysis Time Period, hrs	1.00
Peak Hour Factor	1.00
Jurisdiction	CABQ

Volume Adjustments and Site Characteristics

Approach	EB				WB				NB				SB			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Number of Lanes (N)	0	0	0	0	0	0	1	0	0	0	2	0	0	0	2	0
Lane Assignment							LR		T		TR		LT		T	
Volume (V), veh/h					0	84		116	2		777	70	2	160	1036	
Percent Heavy Vehicles, %					0	0		0	0		0	0	0	0	1	
Flow Rate (v_{PCE}), pc/h					0	84		116	2		777	70	2	160	1046	
Right-Turn Bypass	None				None				None				None			
Conflicting Lanes					2				2				2			
Pedestrians Crossing, p/h					0				0				0			
Proportion of CAVs	0															

Critical and Follow-Up Headway Adjustment

Approach	EB			WB			NB			SB		
Lane	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Critical Headway, s					4.3276		4.6453	4.3276		4.6453	4.3276	
Follow-Up Headway, s					2.5352		2.6667	2.5352		2.6667	2.5352	

Flow Computations, Capacity and v/c Ratios

Approach	EB			WB			NB			SB		
Lane	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Entry Flow (v_e), pc/h					200		399	450		568	640	
Entry Volume, veh/h					200		399	450		563	635	
Circulating Flow (v_c), pc/h	1294			781			162			86		
Exiting Flow (v_{ex}), pc/h	230			0			895			1132		
Capacity (c_{pce}), pc/h					731		1163	1237		1247	1320	
Capacity (c), veh/h					731		1163	1237		1237	1309	
v/c Ratio (x)					0.27		0.34	0.36		0.46	0.49	

Delay and Level of Service

Approach	EB			WB			NB			SB		
Lane	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass	Left	Right	Bypass
Lane Control Delay (d), s/veh					8.1		6.4	6.4		7.6	7.8	
Lane LOS					A		A	A		A	A	
95% Queue, veh					1.1		1.6	1.7		2.5	2.8	
Approach Delay, s/veh | LOS				8.1		A	6.4		A	7.7		A
Intersection Delay, s/veh | LOS	7.2						A					

HCS Two-Way Stop-Control Report

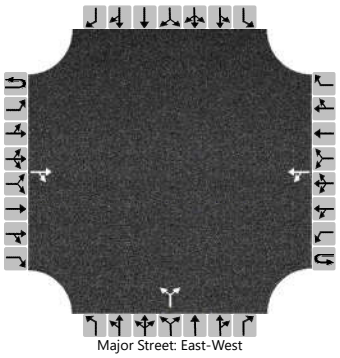
General Information

Analyst	BW
Agency/Co.	Lee Engineering
Date Performed	6/28/2024
Analysis Year	2024
Time Analyzed	Horizon AM (7:15 AM)
Intersection Orientation	East-West
Project Description	Mark Armijo Academy NIA

Site Information

Intersection	Site Access & Gonzales Rd
Jurisdiction	CABQ
East/West Street	Gonzales Road
North/South Street	Site Access
Peak Hour Factor	1.00
Analysis Time Period (hrs)	1.00

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	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	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			223	47		27	126			22		38				
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)						4.1				7.1		6.2				
Critical Headway (sec)						4.10				6.40		6.20				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.20				3.50		3.30				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						27					60					
Capacity, c (veh/h)						1305					699					
v/c Ratio						0.02					0.09					
95% Queue Length, Q_{95} (veh)						0.1					0.3					
Control Delay (s/veh)						7.8	0.2				10.6					
Level of Service (LOS)						A	A				B					
Approach Delay (s/veh)					1.5				10.6							
Approach LOS					A				B							

HCS Two-Way Stop-Control Report

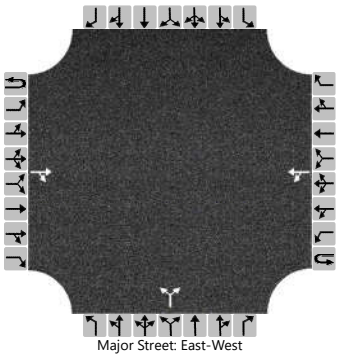
General Information

Analyst	BW
Agency/Co.	Lee Engineering
Date Performed	6/28/2024
Analysis Year	2024
Time Analyzed	Horizon PM (2:30 PM)
Intersection Orientation	East-West
Project Description	Mark Armijo Academy NIA

Site Information

Intersection	Site Access & Gonzales Rd
Jurisdiction	CABQ
East/West Street	Gonzales Road
North/South Street	Site Access
Peak Hour Factor	1.00
Analysis Time Period (hrs)	1.00

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	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	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			204	28		15	108			32		36				
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)						4.1				7.1		6.2				
Critical Headway (sec)						4.10				6.40		6.20				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.20				3.50		3.30				

Delay, Queue Length, and Level of Service

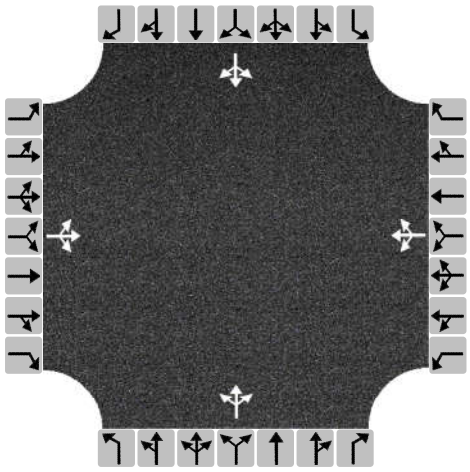
Flow Rate, v (veh/h)						15					68					
Capacity, c (veh/h)						1348					726					
v/c Ratio						0.01					0.09					
95% Queue Length, Q_{95} (veh)						0.0					0.3					
Control Delay (s/veh)						7.7	0.1				10.5					
Level of Service (LOS)						A	A				B					
Approach Delay (s/veh)					1.0				10.5							
Approach LOS					A				B							

HCS All-Way Stop Control Report

General and Site Information

Analyst	BW
Agency/Co.	Lee Engineering
Date Performed	6/11/2024
Analysis Year	2024
Analysis Time Period (hrs)	1.00
Time Analyzed	Horizon AM (7:15 AM)
Project Description	Mark Armijo Academy
Intersection	Bataan Dr & Gonzales Rd
Jurisdiction	CABQ
East/West Street	Gonzales Road
North/South Street	Bataan Drive
Peak Hour Factor	1.00

Lanes



Turning Movement Demand Volumes

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume (veh/h)	26	96	63	30	67	20	57	39	28	2	21	29
% Thrus in Shared Lane												

Lane Flow Rate and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	185			117			124			52		
Percent Heavy Vehicles	2			0			0			0		
Initial Departure Headway, h_d (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.164			0.104			0.110			0.046		
Final Departure Headway, h_d (s)	4.31			4.48			4.61			4.42		
Final Degree of Utilization, x	0.222			0.145			0.159			0.064		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, t_s (s)	2.31			2.48			2.61			2.42		

Capacity, Delay and Level of Service

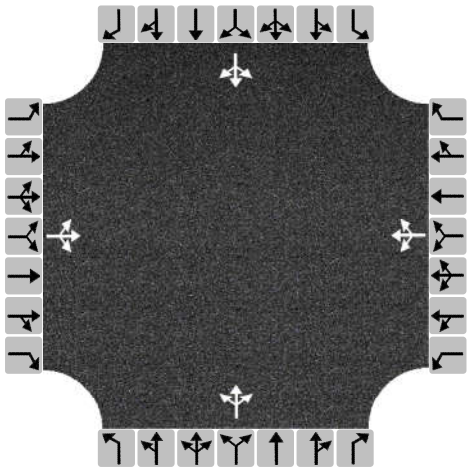
Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	185			117			124			52		
Capacity (veh/h)	834			804			781			815		
95% Queue Length, Q_{95} (veh)	0.9			0.5			0.6			0.2		
Control Delay (s/veh)	8.5			8.2			8.5			7.7		
Level of Service, LOS	A			A			A			A		
Approach Delay (s/veh) | LOS	8.5	A		8.2	A		8.5	A		7.7	A	
Intersection Delay (s/veh) | LOS	8.4						A					

HCS All-Way Stop Control Report

General and Site Information

Analyst	BW
Agency/Co.	Lee Engineering
Date Performed	6/11/2024
Analysis Year	2024
Analysis Time Period (hrs)	1.00
Time Analyzed	Horizon PM (2:30 PM)
Project Description	Mark Armijo Academy
Intersection	Bataan Dr & Gonzales Rd
Jurisdiction	CABQ
East/West Street	Gonzales Road
North/South Street	Bataan Drive
Peak Hour Factor	1.00

Lanes



Turning Movement Demand Volumes

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume (veh/h)	18	123	83	39	63	21	38	55	24	6	23	22
% Thrus in Shared Lane												

Lane Flow Rate and Adjustments

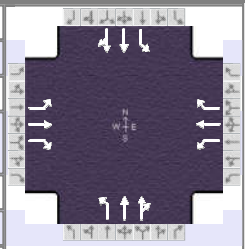
Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	224			123			117			51		
Percent Heavy Vehicles	2			0			0			0		
Initial Departure Headway, h_d (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.199			0.109			0.104			0.045		
Final Departure Headway, h_d (s)	4.28			4.52			4.69			4.61		
Final Degree of Utilization, x	0.266			0.154			0.153			0.065		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, t_s (s)	2.28			2.52			2.69			2.61		

Capacity, Delay and Level of Service

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	224			123			117			51		
Capacity (veh/h)	841			796			767			782		
95% Queue Length, Q_{95} (veh)	1.1			0.5			0.5			0.2		
Control Delay (s/veh)	8.8			8.3			8.5			7.9		
Level of Service, LOS	A			A			A			A		
Approach Delay (s/veh) | LOS	8.8	A		8.3	A		8.5	A		7.9	A	
Intersection Delay (s/veh) | LOS	8.6						A					

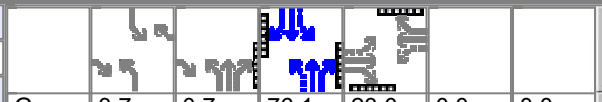
HCS Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Lee Engineering			Duration, h	1.000
Analyst	BW	Analysis Date	Jun 25, 2024	Area Type	Other
Jurisdiction	CABQ	Time Period	Horizon AM (7:15 AM)	PHF	1.00
Urban Street	Coors Boulevard	Analysis Year	2024	Analysis Period	1> 7:15
Intersection	Bridge Boulevard	File Name	05 Coors Bridge Horizon AM.xus		
Project Description	Horizon AM (7:15 AM)				

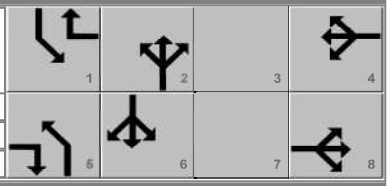


Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	111	199	81	53	150	154	103	1216	69	80	671	41

Signal Information			
Cycle, s	120.0	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	3.7	0.7	76.1	23.0	0.0	0.0
Yellow	3.5	0.0	4.5	4.0	0.0	0.0
Red	1.5	0.0	1.0	2.0	0.0	0.0



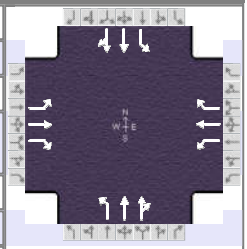
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		8		4	5	2	1	6
Case Number		5.0		5.0	1.1	4.0	1.1	4.0
Phase Duration, s		29.0		29.0	9.4	82.3	8.7	81.6
Change Period, ($Y+R_c$), s		6.0		6.0	5.0	5.5	5.0	5.5
Max Allow Headway (*MAH*), s		4.1		4.1	2.5	0.0	2.5	0.0
Queue Clearance Time (g_s), s		20.3		18.1	4.4		3.9	
Green Extension Time (g_e), s		2.2		2.3	0.1	0.0	0.1	0.0
Phase Call Probability		1.00		1.00	0.97		0.93	
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	3	8	18	7	4	14	5	2	12	1	6	16
Adjusted Flow Rate (*v*), veh/h	111	199	32	53	150	71	103	648	637	80	359	353
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1256	1900	1610	1202	1900	1583	1795	1885	1849	1810	1885	1847
Queue Service Time (g_s), s	10.2	11.3	1.9	5.0	8.3	4.4	2.4	22.7	22.7	1.9	10.4	10.4
Cycle Queue Clearance Time (g_c), s	18.3	11.3	1.9	16.1	8.3	4.4	2.4	22.7	22.7	1.9	10.4	10.4
Green Ratio (*g/C*)	0.19	0.19	0.23	0.19	0.19	0.22	0.67	0.64	0.64	0.66	0.63	0.63
Capacity (*c*), veh/h	217	366	369	180	366	353	531	1206	1182	304	1194	1170
Volume-to-Capacity Ratio (*X*)	0.513	0.544	0.087	0.295	0.410	0.201	0.194	0.538	0.539	0.264	0.301	0.301
Back of Queue (*Q*), ft/ln (95 th percentile)	146.8	229.4	33.3	68.6	176.3	77.9	37.2	348.7	341.9	29.2	183.7	179.4
Back of Queue (*Q*), veh/ln (95 th percentile)	5.9	9.2	1.3	2.7	7.1	3.1	1.5	13.8	13.7	1.2	7.3	7.2
Queue Storage Ratio (*RQ*) (95 th percentile)	1.05	0.00	0.17	0.53	0.00	0.65	0.13	0.00	0.00	0.12	0.00	0.00
Uniform Delay (d_1), s/veh	50.4	43.7	36.4	50.9	42.5	37.9	7.5	11.9	11.9	10.1	10.0	10.0
Incremental Delay (d_2), s/veh	1.9	1.3	0.1	0.9	0.7	0.3	0.1	1.7	1.8	0.2	0.6	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	0.0	0.0
Control Delay (*d*), s/veh	52.3	45.0	36.5	51.8	43.2	38.2	7.5	13.6	13.7	10.3	10.6	10.6
Level of Service (LOS)	D	D	D	D	D	D	A	B	B	B	B	B
Approach Delay, s/veh / LOS	46.6	D		43.6	D		13.2	B		10.6	B	
Intersection Delay, s/veh / LOS	19.5						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.31	B	2.31	B	2.26	B	2.21	B
Bicycle LOS Score / LOS	3.10	C	2.99	C	2.93	C	2.66	C

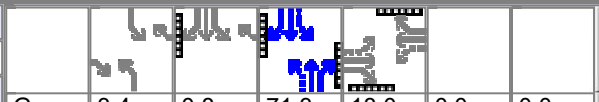
HCS Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	Lee Engineering			Duration, h	1.000
Analyst	BW	Analysis Date	Jun 25, 2024	Area Type	Other
Jurisdiction	CABQ	Time Period	Horizon PM (2:30 PM)	PHF	1.00
Urban Street	Coors Boulevard	Analysis Year	2024	Analysis Period	1> 14:30
Intersection	Bridge Boulevard	File Name	05 Coors Bridge Horizon PM.xus		
Project Description	Horizon PM (2:30 PM)				

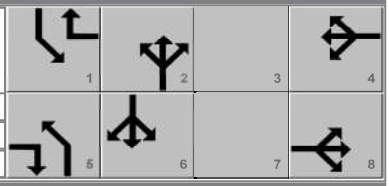


Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	44	136	71	55	172	136	82	666	44	110	943	63

Signal Information			
Cycle, s	110.0	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	3.4	0.8	71.3	18.0	0.0	0.0
Yellow	3.5	0.0	4.5	4.0	0.0	0.0
Red	1.5	0.0	1.0	2.0	0.0	0.0



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase		8		4	5	2	1	6
Case Number		5.0		5.0	1.1	4.0	1.1	4.0
Phase Duration, s		24.0		24.0	8.4	76.8	9.2	77.6
Change Period, ($Y+R_c$), s		6.0		6.0	5.0	5.5	5.0	5.5
Max Allow Headway (*MAH*), s		4.1		4.1	2.5	0.0	2.5	0.0
Queue Clearance Time (g_s), s		14.8		13.5	3.7		4.2	
Green Extension Time (g_e), s		2.2		2.2	0.1	0.0	0.1	0.0
Phase Call Probability		1.00		1.00	0.92		0.97	
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	3	8	18	7	4	14	5	2	12	1	6	16
Adjusted Flow Rate (*v*), veh/h	44	136	71	55	172	136	82	359	351	110	509	497
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1230	1900	1610	1273	1900	1604	1810	1885	1844	1810	1885	1843
Queue Service Time (g_s), s	3.7	7.1	4.1	4.5	9.2	8.1	1.7	9.1	9.1	2.2	14.0	14.0
Cycle Queue Clearance Time (g_c), s	12.8	7.1	4.1	11.5	9.2	8.1	1.7	9.1	9.1	2.2	14.0	14.0
Green Ratio (*g/C*)	0.16	0.16	0.19	0.16	0.16	0.20	0.68	0.65	0.65	0.69	0.66	0.66
Capacity (*c*), veh/h	166	312	315	193	312	325	411	1221	1194	558	1234	1207
Volume-to-Capacity Ratio (*X*)	0.266	0.436	0.226	0.285	0.552	0.419	0.199	0.294	0.294	0.197	0.412	0.412
Back of Queue (*Q*), ft/ln (95 th percentile)	52.6	150	72.4	64.4	193.7	144.2	24.4	154.5	150.3	31.9	225.7	220.6
Back of Queue (*Q*), veh/ln (95 th percentile)	2.1	6.0	2.9	2.6	7.7	5.8	1.0	6.1	6.0	1.3	9.0	8.8
Queue Storage Ratio (*RQ*) (95 th percentile)	0.38	0.00	0.36	0.50	0.00	1.20	0.09	0.00	0.00	0.13	0.00	0.00
Uniform Delay (d_1), s/veh	48.1	41.4	37.3	46.5	42.3	38.3	7.2	8.4	8.4	6.2	9.0	9.0
Incremental Delay (d_2), s/veh	0.8	1.0	0.4	0.8	1.5	0.9	0.1	0.6	0.6	0.1	1.0	1.0
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	49.0	42.4	37.6	47.3	43.8	39.1	7.3	9.0	9.1	6.3	10.0	10.0
Level of Service (LOS)	D	D	D	D	D	D	A	A	A	A	B	B
Approach Delay, s/veh / LOS	42.2	D		42.6	D		8.9	A		9.6	A	
Intersection Delay, s/veh / LOS	17.4						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.31	B	2.31	B	2.14	B	2.14	B
Bicycle LOS Score / LOS	2.95	C	3.14	C	2.44	B	2.92	C

Appendix E: Signal Timing Sheets

ASC3 COORDINATION PLAN DATA

9/24/2024 2:41 PM

419 - Bridge & Coors

COORDINATOR OPTIONS (MM 3-1)

MANUAL PATTERN	AUTO	ECPI COORD	YES
SYSTEM SOURCE	SYS	SYSTEM FORMAT	PTN
SPLITS IN	PERCENT	OFFSET IN	PERCENT
TRANSITION	SMOOTH	MAX SELECT	MAXINH
DWELL/ADD TIME	0	ENABLE MAN SYNC	NO
DLY COORD WK-LZ	NO	FORCE OFF	FLOAT
OFFSET REF	LEAD	CAL USE PED TM	NO
PED RECALL	NO	PED RESERVE	NO
LOCAL ZERO OVRD	NO	FO ADD INI GRN	NO
RE-SYNC COUNT	0	MULTISYNC	NO

COORDINATION PATTERN 21 (MM 3-2)

USE SPLIT PATTERN	21	SPLIT SUM	100%
TS2 (PAT-OFF)	0-1		
CYCLE	120s	STD (COS)	111
OFFSET VAL	51%		
ACTUATED COORD	YES	TIMING PLAN	0
ACT WALK REST	NO	SEQUENCE	0
PHASE RESRVCE	NO	ACTION PLAN	0

PHASE	1	2	3	4	5	6	7	8
DIRECTION	S-E	NB		WB	N-W	SB		EB
SPLITS	12	41		47	12	41		47

PHASE	1	2	3	4	5	6	7	8
COORD PHASE		X				X		
VEH RECALL								
MAX RECALL		X				X		

COORDINATION PATTERN 23

USE SPLIT PATTERN	23	SPLIT SUM	100%
TS2 (PAT-OFF)	0-3		
CYCLE	110s	STD (COS)	131
OFFSET VAL	57%		
ACTUATED COORD	YES	TIMING PLAN	0
ACT WALK REST	NO	SEQUENCE	0
PHASE RESRVCE	NO	ACTION PLAN	0

PHASE	1	2	3	4	5	6	7	8
DIRECTION	S-E	NB		WB	N-W	SB		EB
SPLITS	15	42		43	12	45		43

PHASE	1	2	3	4	5	6	7	8
COORD PHASE		X				X		
VEH RECALL								
MAX RECALL		X				X		

ASC3 COORDINATION PLAN DATA

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COORDINATION PATTERN 25

USE SPLIT PATTERN	25	SPLIT SUM	100%
TS2 (PAT-OFF)	0-5		
CYCLE	130s	STD (COS)	151
OFFSET VAL	52%		
ACTUATED COORD	YES	TIMING PLAN	0
ACT WALK REST	NO	SEQUENCE	0
PHASE RESRVCE	NO	ACTION PLAN	0

PHASE	1	2	3	4	5	6	7	8
DIRECTION	S-E	NB		WB	N-W	SB		EB
SPLITS	16	46		38	12	50		38

PHASE	1	2	3	4	5	6	7	8
COORD PHASE		X				X		
VEH RECALL								
MAX RECALL		X				X		

CLOCK / CALENDAR DATA (MM 5-1)

CURRENT DATE	CURRENT DOW		CURRENT TOD
ENA ACTION PLAN	0		
SYNC REF TIME	00:00	SYNC REF	REF TIME
TIME FROM GMT	+00	DAY LIGHT SAVE	NO
TIME RESET INPUT SET TIME		3:30:00	

ACTION PLAN 21 (MM 5-2)

PATTERN	21	SYS OVERRIDE	NO
TIMING PLAN	0	SEQUENCE	0
VEHICLE DETECTOR PLAN	0.00	DET LOG	NONE
FLASH	--	RED REST	NO
VEH DET DIAG PLN	0	PED DET DIAG PLN	0
DIMMING ENABLE	NO		

ACTION PLAN 23

PATTERN	23	SYS OVERRIDE	NO
TIMING PLAN	0	SEQUENCE	0
VEHICLE DETECTOR PLAN	0.00	DET LOG	NONE
FLASH	--	RED REST	NO
VEH DET DIAG PLN	0	PED DET DIAG PLN	0
DIMMING ENABLE	NO		

ACTION PLAN 25

PATTERN	25	SYS OVERRIDE	NO
TIMING PLAN	0	SEQUENCE	0
VEHICLE DETECTOR PLAN	0.00	DET LOG	NONE
FLASH	--	RED REST	NO
VEH DET DIAG PLN	0	PED DET DIAG PLN	0
DIMMING ENABLE	NO		

ASC3 COORDINATION PLAN DATA

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ACTION PLAN 100

PATTERN	254	SYS OVERRIDE	NO
TIMING PLAN	0	SEQUENCE	0
VEHICLE DETECTOR PLAN	0.00	DET LOG	NONE
FLASH	--	RED REST	NO
VEH DET DIAG PLN	0	PED DET DIAG PLN	0
DIMMING ENABLE	NO		

DAY PLAN/EVENT 1 (MM 5-3)

EVENT	ACTION PLAN	START TIME
1	23	10:00
2	100	18:00
3	0	00:00

DAY PLAN/EVENT 2

EVENT	ACTION PLAN	START TIME
1	21	6:30
2	23	9:00
3	25	15:00
4	23	18:30
5	100	22:00
6	0	00:00
7	0	00:00

DAY PLAN/EVENT 3

EVENT	ACTION PLAN	START TIME
1	23	9:00
2	100	22:00
3	0	00:00

SCHEDULE NUMBER 1 (MM 5-4)

SCHEDULE NUMBER	1	
DAY PLAN NO	1	CLEAR ALL FIELDS

SELECT ALL MONTHS DOW DOM

MONTH	J	F	M	A	M	J	J	A	S	O	N	D
	X	X	X	X	X	X	X	X	X	X	X	X

DAY(DOW)	SUN	MON	TUE	WED	THU	FRI	SAT
	X	.	.	.	.	.	.

DAY(DOM)	1	2	3	4	5	6	7	8	9	10	11
	X	X	X	X	X	X	X	X	X	X	X
	12	13	14	15	16	17	18	19	20	21	22
	X	X	X	X	X	X	X	X	X	X	X
	23	24	25	26	27	28	29	30	31		
	X	X	X	X	X	X	X	X	X		

ASC3 COORDINATION PLAN DATA

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SCHEDULE NUMBER 2

SCHEDULE NUMBER	2	
DAY PLAN NO	2	CLEAR ALL FIELDS

SELECT ALL MONTHS — DOW — DOM

MONTH	J	F	M	A	M	J	J	A	S	O	N	D
	X	X	X	X	X	X	X	X	X	X	X	X
DAY(DOW)	SUN	MON	TUE	WED	THU	FRI	SAT					
	.	X	X	X	X	X	.					
DAY(DOM)	1	2	3	4	5	6	7	8	9	10	11	
	X	X	X	X	X	X	X	X	X	X	X	
	12	13	14	15	16	17	18	19	20	21	22	
	X	X	X	X	X	X	X	X	X	X	X	
	23	24	25	26	27	28	29	30	31			
	X	X	X	X	X	X	X	X	X			

SCHEDULE NUMBER 3

SCHEDULE NUMBER	3	
DAY PLAN NO	3	CLEAR ALL FIELDS

SELECT ALL MONTHS — DOW — DOM

MONTH	J	F	M	A	M	J	J	A	S	O	N	D
	X	X	X	X	X	X	X	X	X	X	X	X
DAY(DOW)	SUN	MON	TUE	WED	THU	FRI	SAT					
	.	.	.	.	.	.	X					
DAY(DOM)	1	2	3	4	5	6	7	8	9	10	11	
	X	X	X	X	X	X	X	X	X	X	X	
	12	13	14	15	16	17	18	19	20	21	22	
	X	X	X	X	X	X	X	X	X	X	X	
	23	24	25	26	27	28	29	30	31			
	X	X	X	X	X	X	X	X	X			

1. Coordination sheet created for ASC3 form 11/15/2013.

Intersection No.: 419

Intersection Name: BRIDGE - COORS

Revision Date 9/26/2016

Timing Data

Phase I.D.:	1	2	3	4	5	6	7	8
Phase Dir.:	S-E	NB		WB	N-W	SB		EB
Min Grn	3	24		12	3	24		12
Walk:	0	7		7	0	7		7
Ped Clr:	0	16		37	0	16		37
Veh Ext:	1.5	4.0		3.0	1.5	4.0		3.0
Veh Ext2:	1.5	4.0		3.0	1.5	4.0		3.0
Max 1:	16	40		24	16	40		24
Max 2:	16	40		24	16	40		24
Max 3:								
Yellow:	3.5	4.5		4.0	3.5	4.5		4.0
Red Clr	1.5	1.0		2.0	1.5	1.0		2.0

Recall Data

Locking Memory:				X				X
Vehicle Recall:								
Ped Recall:								
Recall To Max:		X				X		

Flash Mode: ALL RED

Start Up Mode: ALL RED
Time: 8 SEC.
First Phases: 2 & 6
Start In: GREEN

Overlap Phases: NONE

Overlap	Par Ph	Grn	Yel	Red
A				
B				
C				
D				

NOTES:
1. Timings copied from field and timings adjusted as needed, 7/10/92.
2. For EB/WB detection, set amplifier for presence mode.
3. Clearance intervals updated to NMDOT standard by BB, 9/25/13.
4. Timing sheet updated to current timing sheet, 9/26/16 RS.

Intersection No.: 375

Intersection Name: Coors Blvd

Revision Date 2/8/2023

Timing Data

Phase I.D.:	1	2	3	4	5	6	7	8
Phase Dir.:	W-S	EB	S-E	NB	E-N	WB	N-W	SB
Min Grn	4	14	14	14	4	14	5	14
Walk:		7		7		7		7
Ped Clr:		30		28		27		29
Veh Ext:	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Veh Ext2:								
Max 1:	16	45	16	40	16	45	16	40
Max 2:	40	40	40	40	40	40	40	40
Max 3:								
Yellow:	4.0	4.0	3.5	3.5	4.0	4.0	3.5	3.5
Red Clr	1.0	1.0	1.5	1.5	1.0	1.0	1.5	1.5

Recall Data

Locking Memory:		X				X		
Vehicle Recall:								
Ped Recall:								
Recall To Max:		X				X		

Flash Mode: ALL RED

Start Up Mode: ALL RED
Time: 8 SEC.
First Phases: 2 & 6
Start In: GREEN

Overlap Phases: YES

Overlap	Par Ph	Grn	Yel	Red	Not OVLP
A	2				5
B					
C	11				1
D					

SEQ1	R1	1	2		3	4
	R2	5	11	6	7	8
SEQ4	R1	1	2		3	4
	R2	5	11	6	7	8
SEQ5	R1	1	2		3	4
	R2	5	11	6	7	8

NOTES:	
	1. Signal Start up Timings, adjustments may be necessary based on field review
	2. ART Timing updated by Lee Engineering 05/27/2020
	3. Lee Updated Ped Walk and Flashing Don't Walk Times 02/25/2021
	4. Lee Updated Ped Clear and Splits in Centracs 03/22/2021
	5. Lee Engineering Final Central ATSPM Project Timing Configuration 07-21-2022
	6. Configuration confirmed by Lee Engineering via Centracs 02/08/2023

Appendix G: AASHTO Green Book Intersection Sight Distance Calculations

Gonzales Drive @ Coors Boulevard Signal Warant

Coors Boulevard and Gonzales Drive

MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES

TRAFFIC CONTROL SIGNAL WARRANT STUDY SUMMARY

LOCATION:	**Albuquerque, New Mexico**
SPECIAL CONDITIONS:	**None**
DATE OF COUNT:	02 May 2024
DATE OF STUDY:	24 September 2024

NORTH/SOUTH STREET:	Coors Boulevard	MAJOR	MULTI-LANE
EAST/WEST STREET:	Gonzales Drive	MINOR	SINGLE LANE

POSTED SPEED LIMIT ON MAJOR STREET:	45 mph
85th PERCENTILE SPEED ON MAJOR STREET:	mph

WARRANT	EXISTING	REQUIRED	SATISFIED?
# 1. EIGHT-HOUR VEHICULAR VOLUME			
A. MINIMUM VEHICULAR VOLUME	9	8	YES
B. INTERRUPTION OF CONTINUOUS TRAFFIC	13	8	YES
COMBINATION OF WARRANTS 1A AND 1B (80% of Values)	-	-	Not Applicable
COMBINATION OF WARRANTS 1A AND 1B (56% of Values)	12	8	YES
# 2. FOUR-HOUR VEHICULAR VOLUME	13	4	YES
# 3. PEAK HOUR			
A. PEAK HOUR DELAY - AM	1	4.00	NO
A. PEAK HOUR DELAY - PM	1	4.00	NO
B. PEAK HOUR VOLUME	12	650	NO
# 4. PEDESTRIAN VOLUME - ONE HOUR	0	190	NO
# 4. PEDESTRIAN VOLUME - FOUR HOUR	0	100	NO
# 5. SCHOOL CROSSING - ARRIVAL TIME	-	-	Not Measured
# 5. SCHOOL CROSSING - DEPARTURE TIME	-	-	Not Measured
# 6. COORDINATED SIGNAL SYSTEM	-	-	Not Applicable
# 7. CRASH EXPERIENCE			
WITH WARRANT # 1A (Traffic Volumes at 80% of Original Values)	-	-	Not Applicable
WITH WARRANT # 1B (Traffic Volumes at 80% of Original Values)	-	-	Not Applicable
WITH WARRANT # 1A (Traffic Volumes at 56% of Original Values)	12	8	YES
WITH WARRANT # 1B (Traffic Volumes at 56% of Original Values)	0	8	NO
TOTAL NUMBER OF CRASHES	11	-	-
NUMBER OF POTENTIALLY PREVENTABLE CRASHES	4	5	NO
HAVE LESS RESTRICTIVE MEANS BEEN ATTEMPTED?	YES	-	YES
# 7. ENTIRE WARRANT	-	-	NO
# 8. ROADWAY NETWORK	-	-	Not Applicable

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

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Gonzales Drive @ Coors Boulevard Signal Warant

Coors Boulevard and Gonzales Drive

MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES

TRAFFIC CONTROL MULTIWAY STOP WARRANT STUDY SUMMARY

LOCATION:	**Albuquerque, New Mexico**
SPECIAL CONDITIONS:	**None**
DATE OF COUNT:	02 May 2024
DATE OF STUDY:	24 September 2024

NORTH/SOUTH STREET:	Coors Boulevard	MAJOR	MULTI-LANE
EAST/WEST STREET:	Gonzales Drive	MINOR	SINGLE LANE

POSTED SPEED LIMIT ON MAJOR STREET:	45 mph
85th PERCENTILE SPEED ON MAJOR STREET:	mph

WARRANT	EXISTING	REQUIRED	SATISFIED?
A. INTERIM MEASURE FOR TRAFFIC CONTROL SIGNAL			
TRAFFIC SIGNAL WARRANTS	4	1	YES
B. CRASH EXPERIENCE			
TOTAL NUMBER OF CRASHES	11	-	-
NUMBER OF POTENTIALLY PREVENTABLE CRASHES	4	5	NO
HAVE LESS RESTRICTIVE MEANS BEEN ATTEMPTED?	YES	-	YES
ENTIRE WARRANT			NO
C. MINIMUM VOLUMES			
EIGHT-HOUR PERIODS SATISFYING VOLUME WARRANT	0	1	NO
PEAK HOUR DELAY - AM	26	30	NO
PEAK HOUR DELAY - PM	32	30	YES
ENTIRE WARRANT			NO
D. COMBINATION OF WARRANTS B AND C (80% of Values)			
TOTAL NUMBER OF CRASHES	11	-	-
NUMBER OF POTENTIALLY PREVENTABLE CRASHES	4	4	YES
HAVE LESS RESTRICTIVE MEANS BEEN ATTEMPTED?	YES	-	YES
EIGHT-HOUR PERIODS SATISFYING VOLUME WARRANT	0	1	NO
PEAK HOUR DELAY - AM	26	24	YES
PEAK HOUR DELAY - PM	32	24	YES
ENTIRE WARRANT			YES

The decision to install multiway stop control should be based on an engineering study.

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Appendix G: AASHTO Green Book Intersection Sight Distance Calculations

Table 9-6. Time Gap for Case B1, Left Turn from Stop

Design Vehicle	Time Gap (t_g)(s) at Design Speed of Major Road
Passenger car	7.5
Single-unit truck	9.5
Combination truck	11.5

Note: Time gaps are for a stopped vehicle to turn left onto a two-lane highway with no median and with minor-road approach grades of 3 percent or less. The time gaps are applicable to determining sight distance to the right in left-turn maneuvers. The table values should be adjusted as follows:

For multilane roadways or medians—For left turns onto two-way roadways with more than two lanes, including turn lanes, add 0.5 s for passenger cars or 0.7 s for trucks for each additional lane, from the left, in excess of one, to be crossed by the turning vehicle. Median widths should be converted to an equivalent number of lanes in applying the 0.5 and 0.7 s criteria presented above; for example, an 18-ft [5.5-m] median is equivalent to one and a half lanes, and would require an additional 0.75 s for a passenger to cross and an additional 1.05 s for a truck to cross.

For minor-road approach grades—If the approach grade is an upgrade that exceeds 3 percent, add 0.2 s for each percent grade by which the approach grade exceeds zero percent.

Table 9-8. Time Gap for Case B2—Right Turn from Stop

Design Vehicle	Time Gap (t_g)(s) at Design Speed of Major Road
Passenger car	6.5
Single-unit truck	8.5
Combination truck	10.5

Note: Time gaps are for a stopped vehicle to turn right onto or to cross a two-lane roadway with no median and with minor-road approach grades of 3 percent or less. The table values should be adjusted as follows:

For minor-road approach grades—If the approach grade is an upgrade that exceeds 3 percent, add 0.1 s for each percent grade by which the approach grade exceeds zero percent.

U.S. Customary	Metric	
$ISD = 1.47\ V_{major}\ t_g$	$ISD = 0.278\ V_{major}\ t_g$	(9-1)
where:	where:	
ISD = intersection sight distance (length of the leg of sight triangle along the major road) (ft)	ISD = intersection sight distance (length of the leg of sight triangle along the major road) (m)	
V_{major} = design speed of major road (mph)	V_{major} = design speed of major road (km/h)	
t_g = time gap for minor road vehicle to enter the major road (s)	t_g = time gap for minor road vehicle to enter the major road (s)	

Table 9-7. Design Intersection Sight Distance—Case B1, Left Turn from Stop

U.S. Customary			
Design Speed (mph)	Stopping Sight Distance (ft)	Intersection Sight Distance for Passenger Cars	
		Calculated (ft)	Design (ft)
15	80	165.4	170
20	115	220.5	225
25	155	275.6	280
30	200	330.8	335
35	250	385.9	390
40	305	441.0	445
45	360	496.1	500
50	425	551.3	555
55	495	606.4	610
60	570	661.5	665
65	645	716.6	720
70	730	771.8	775
75	820	826.9	830
80	910	882.0	885

Metric			
Design Speed (km/h)	Stopping Sight Distance (m)	Intersection Sight Distance for Passenger Cars	
		Calculated (m)	Design (m)
20	20	41.7	45
30	35	62.6	65
40	50	83.4	85
50	65	104.3	105
60	85	125.1	130
70	105	146.0	150
80	130	166.8	170
90	160	187.7	190
100	185	208.5	210
110	220	229.4	230
120	250	250.2	255
130	285	271.1	275

Note: Intersection sight distance shown is for a stopped passenger car to turn left onto a two-lane highway with no median and grades 3 percent or less. For other conditions, the time gap should be adjusted and the sight distance recalculated.

Table 9-9. Design Intersection Sight Distance—Case B2, Right Turn from Stop

U.S. Customary			
Design Speed (mph)	Stopping Sight Distance (ft)	Intersection Sight Distance for Passenger Cars	
		Calculated (ft)	Design (ft)
15	80	143.3	145
20	115	191.1	195
25	155	238.9	240
30	200	286.7	290
35	250	334.4	335
40	305	382.2	385
45	360	430.0	430
50	425	477.8	480
55	495	525.5	530
60	570	573.3	575
65	645	621.1	625
70	730	668.9	670
75	820	716.6	720
80	910	764.4	765

Metric			
Design Speed (km/h)	Stopping Sight Distance (m)	Intersection Sight Distance for Passenger Cars	
		Calculated (m)	Design (m)
20	20	36.1	40
30	35	54.2	55
40	50	72.3	75
50	65	90.4	95
60	85	108.4	110
70	105	126.5	130
80	130	144.6	145
90	160	162.6	165
100	185	180.7	185
110	220	198.8	200
120	250	216.8	220
130	285	234.9	235

Note: Intersection sight distance shown is for a stopped passenger car to turn right onto or to cross a two-lane roadway with no median and with grades of 3 percent or less. For other conditions, the time gap should be adjusted and the sight distance recalculated.