

**APPLICATION FOR
SPECIAL USE PERMIT**

**FOR
Crossbow Court Daycare &
Neighborhood Center
Washoe County, NV**

Address:

**2500 & 2540 Crossbow Court
Reno, NV 89511**

Parcel Number (APN):

152-921-01 and 152-921-02

Prepared for:

**Russell Montessori LLC
2510 E Sunset Road, Str. 6-147
Las Vegas, NV 89120**

Prepared by:



**730 Sandhill Road, Suite 250
Reno, Nevada 89521**

February 9th, 2026

Table of Contents

1 Project Description	2
2 Site and Surrounding Context.....	2
3 Consistency with the Washoe County Master Plan and Zoning	4
4 Public Facilities and Infrastructure	5
5 Traffic, Access, and Public Safety	5
6 Site Suitability and Physical Characteristics	7
7 Landscaping, Architecture, and Lighting	8
8 Community Context and Public Welfare	10
9 Findings for Approval.....	10
10 Conclusion.....	12

List Of Figures

- Fg-1. Project Location
- Fg-2. Surrounding Property Designation
- Fg-3. Existing Zoning Designations
- Fg-4. Existing Master Plan Designation
- Fg-5. Landscaping Area

Appendix

- A – Application
- B – Civil Plans
- C – Landscape Plans
- D – Architectural Site and Lighting Plan
- E – Elevations, Floor Plans
- F – Drainage Memo
- G – Traffic Impact Study

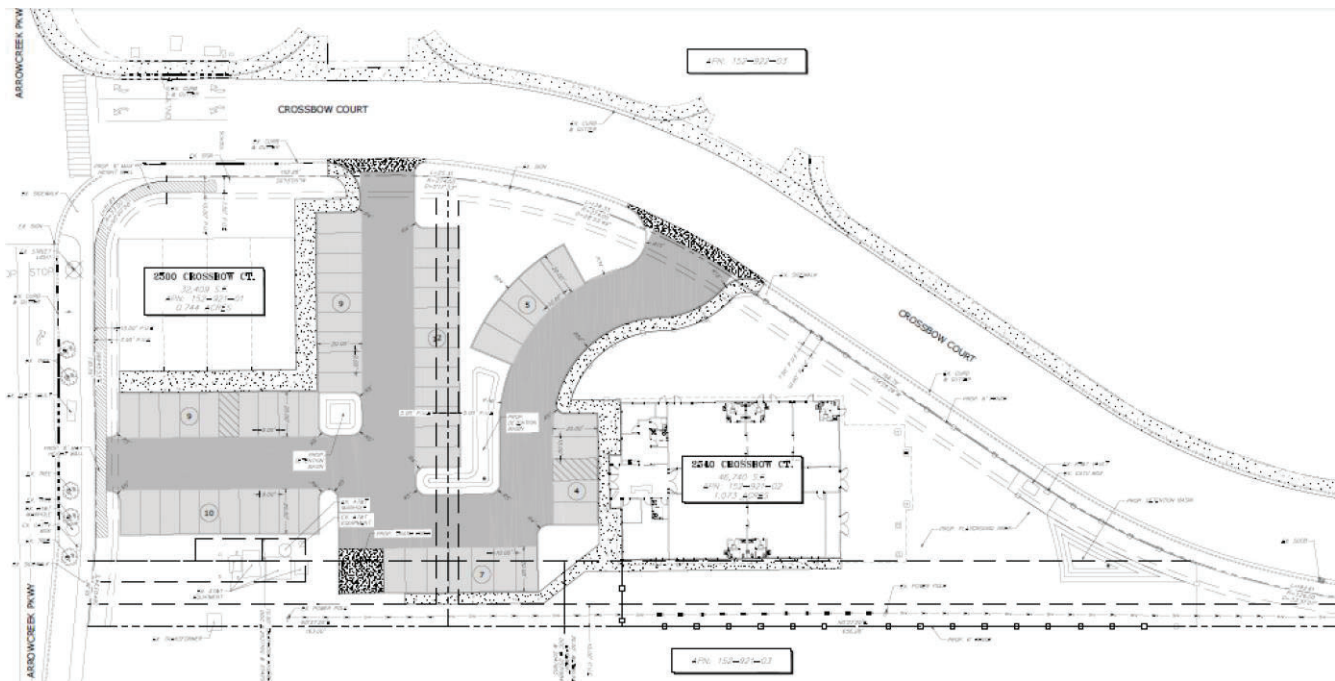
1 Project Description

The Crossbow Court Daycare & Neighborhood Center project proposes development of a child daycare facility and a neighborhood center commercial use on two vacant parcels located at 2500 and 2540 Crossbow Court in Washoe County. The site consists of APNs 152-921-01 and 152-921-02, totaling approximately 1.82 acres, and is zoned Low Density Suburban (LDS).

The project includes a 7,219 square-foot child daycare facility and a 4,800 square-foot neighborhood center, along with associated site improvements including parking, internal circulation, landscaping, lighting, utilities, and stormwater management. The proposed uses are intended to serve the surrounding neighborhood and operate at a scale compatible with nearby residential development and schools.

Development is proposed in two phases. Phase 1 includes site improvements and construction of the daycare facility, with anticipated completion in Q2 2027. Phase 2 includes construction of the neighborhood center. Each phase is designed to function independently and comply with applicable County requirements.

Figure 1 : Site Plan



2 Site and Surrounding Context

The project site consists of two vacant parcels totaling approximately 1.82 acres, located along Crossbow Court within the Arrowcreek neighborhood area of Washoe County. The

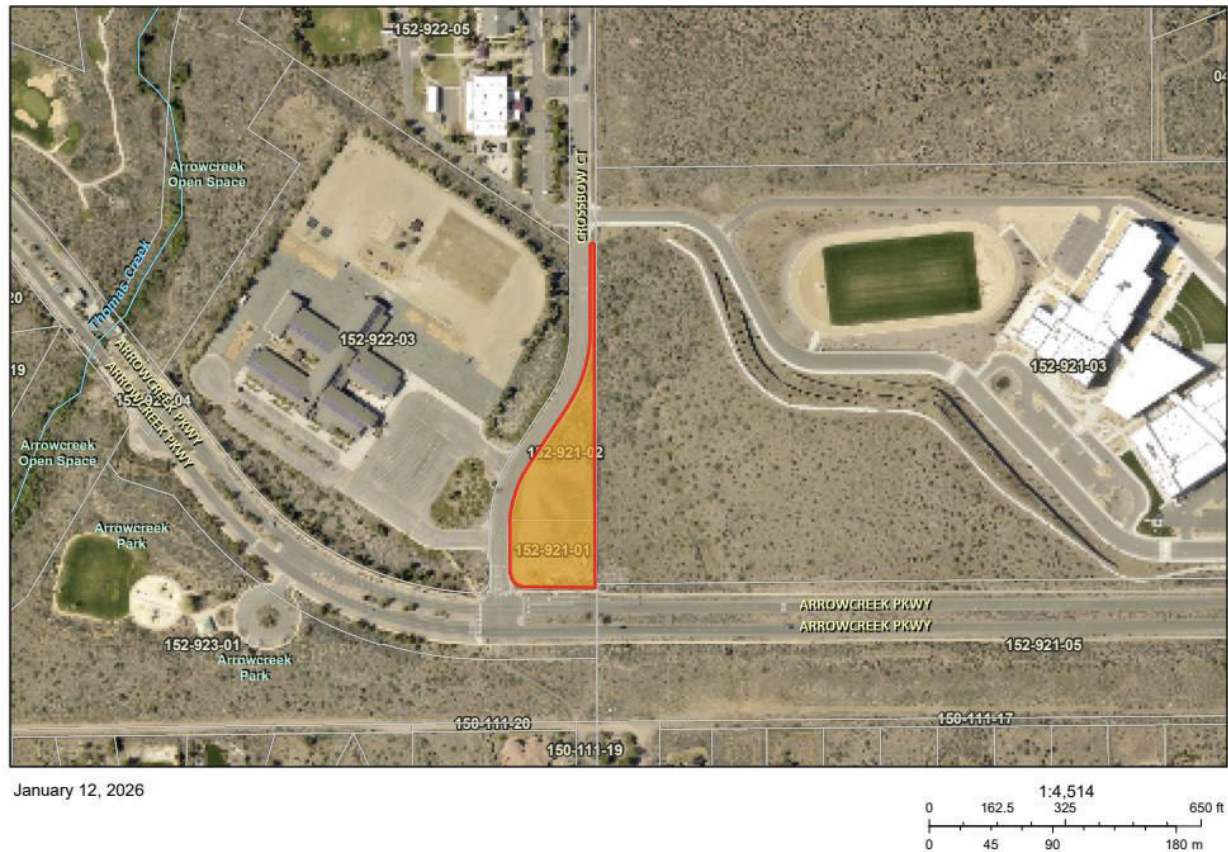
surrounding area is characterized by established residential neighborhoods and nearby schools, which informed the project's neighborhood-serving scale and overall site planning approach.

Arrowcreek Parkway functions as the primary arterial roadway serving the broader Arrowcreek neighborhood. Crossbow Court intersects Arrowcreek Parkway and serves as a local roadway, providing access primarily to nearby schools. This roadway hierarchy establishes Crossbow Court as a neighborhood-scale street with traffic patterns largely tied to school-related activities, rather than through traffic.

The project site is zoned Low Density Suburban (LDS), a zoning district intended to accommodate low-density residential development while allowing select neighborhood-serving nonresidential uses when designed to be compatible with surrounding residential areas. The site's location within the Arrowcreek neighborhood, combined with its zoning designation, establishes a context where carefully scaled and well-designed neighborhood-serving uses are appropriate.

The parcels are currently vacant, allowing the proposed development to be planned comprehensively with respect to site layout, access, buffering, and compatibility with surrounding residential development and nearby schools.

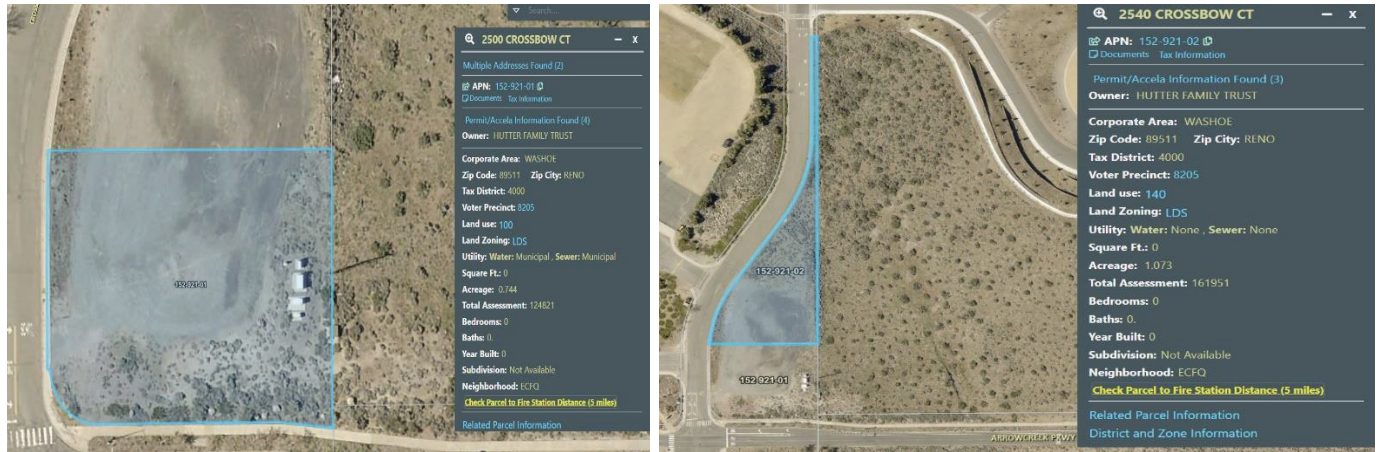
Figure 1 : Project Location



3 Consistency with the Washoe County Master Plan and Zoning

The proposed Crossbow Court Daycare & Neighborhood Center is consistent with the Washoe County Master Plan designation of Suburban Residential and the intent of the Low Density Suburban (LDS) zoning district.

Figure 2 : Existing Zoning Designation (LDS)



While the LDS zoning district is primarily intended to accommodate single-family residential development, it also allows neighborhood-serving nonresidential uses when such uses are designed to be compatible with surrounding residential development. The proposed child daycare and neighborhood center are intended to serve the immediate surrounding neighborhood and provide services that meet daily needs at a scale appropriate for the area.

The project site is located within an established residential area with nearby schools, which supports the suitability of carefully designed neighborhood-serving uses. The proposed development reflects the intent of the LDS zoning district through its scale, building placement, site layout, and operational characteristics, all of which are designed to maintain compatibility with surrounding residential uses.

Figure 3 : Existing Surrounding Zoning Designations

	Existing Zoning	Existing Master Plan	Current Land Use
North	Low Density Suburban (LDS)	Suburban Residential	Sage Ridge School
East	Low Density Suburban (LDS)	Suburban Residential	Hunsberger Elementary School
South	Low Density Suburban (LDS)	Suburban Residential	Park, Residential
West	Low Density Suburban (LDS)	Suburban Residential	Marce Herz Middle School

Applicable master plan policies supporting new development are identified below:

- o **LUT.4.1** Maintain a balanced distribution of land use patterns to:
 - o Provide opportunities for a variety of land uses, facilities and services that serve present and future population;
 - o Promote integrated communities with opportunities for employment, housing, schools, park civic facilities, and services essential to the daily life of residents.
- o **LUT.21.2** Nonresidential development shall be compatible with the nearby neighborhoods, service and facility capacities, and the surrounding environment.

Accordingly, the proposed project is consistent with the Washoe County Master Plan and the intent of the Low Density Suburban zoning district.

4 Public Facilities and Infrastructure

Adequate public facilities and infrastructure exist, or will be provided, to support the proposed development.

The project will be served by existing public utilities, including water, sewer, and power, which are available in the surrounding area and will be extended to serve the site as necessary. Solid waste service, fire protection, and emergency services are also available to serve the proposed uses.

Stormwater management for the site has been evaluated through a Drainage Memorandum prepared for the project. Existing drainage conditions consist of sheet flow across the undeveloped parcels. Post-development runoff will be collected, conveyed, and detained on-site in accordance with Washoe County standards, with controlled release to existing downstream discharge points. Post-development peak runoff rates will not exceed pre-development conditions, ensuring that drainage impacts to adjacent properties are avoided.

5 Traffic, Access, and Public Safety

Traffic conditions along Crossbow Court and at its intersection with Arrowcreek Parkway represent the primary public safety consideration associated with the proposed project. The site is located within an area that already experiences concentrated, school-related traffic activity, particularly during weekday morning and afternoon peak periods associated with school drop-off and pick-up. These existing conditions were acknowledged and evaluated as part of the project's traffic analysis.

A Traffic Impact Study (TIS) was prepared to evaluate existing and future traffic operations associated with the proposed development. The study analyzed daily and peak hour traffic volumes,

site access operations, nearby intersections, pedestrian conditions, and crash history, with specific attention given to overlapping school-related peak traffic patterns.

The TIS indicates that the proposed development is anticipated to generate approximately 988 daily trips, with 88 trips during the AM peak hour and 118 trips during the PM peak hour. Unlike school-related traffic, project-generated trips are more evenly distributed throughout the peak hour, and represent a relatively small proportion of total peak hour volumes in the study area. The analysis demonstrates that the addition of project traffic does not result in failing levels of service at any of the analyzed intersections.

Figure 4 : Trip Generation from TIS

ITE Code	Description	Size	AM Peak Hour			PM Peak Hour			Daily Trips
			In	Out	Total	In	Out	Total	
720	Medical-Dental Office Building	2,400 SF	6	2	8	2	6	8	82
930	Fast Casual Restaurant	2,400 SF	3	1	4	18	16	34	542
585	Day Care Center	96 students	40	36	76	36	40	76	364
Net Total Trips			49	39	88	56	62	118	988

Source: ITE Trip Generation Manual, 12th Edition

Vehicular access to the site is provided via two driveways from Crossbow Court, each serving a distinct function. The northern driveway is designed as a right-in only access, limiting turning movements and reducing potential conflicts along Crossbow Court, while a second driveway provides full ingress and egress to accommodate primary site access and internal circulation. On-site parking and circulation are designed to accommodate daycare drop-off and pick-up activity entirely on site, minimizing reliance on the public roadway.

Based on the traffic analysis, the TIS identifies the following safety and operational improvements, which are incorporated into the project design:

- *An R7-1 "NO PARKING ANY TIME" sign shall be installed along the project frontage on Crossbow Court.*
- *A marked pedestrian crosswalk shall be provided across Crossbow Court at the intersection of Crossbow Court and Hunsberger Elementary School North Access/Project Access Drive (A), consistent with Washoe County standards and the Manual on Uniform Traffic Control Devices (MUTCD).*
- *ADA-compliant pedestrian curb ramps shall be installed at the crosswalk termini in accordance with applicable ADA accessibility requirements and Washoe County standards.*
- *An R1-1 "STOP" sign with appropriate pavement markings shall be installed for the westbound egress at the project access drives.*

- *All on-site and off-site signing and striping improvements shall be incorporated into the civil drawings and conform to the current MUTCD, as applicable.*

With these measures in place, the Traffic Impact Study concludes that the surrounding roadway network can safely accommodate project-generated traffic. The proposed access configuration and safety improvements ensure that the project will operate in a safe and orderly manner and will not be significantly detrimental to public health or safety.

6 Site Suitability and Physical Characteristics

The physical characteristics of the site make it well suited to accommodate the proposed uses and the associated intensity of development. The project site consists of two vacant parcels totaling approximately 1.82 acres, with sufficient area and frontage along Crossbow Court to support controlled vehicular access, internal circulation, and on-site parking.

Vehicular access to the site is provided via two driveways from Crossbow Court, each serving a distinct and intentional function. The northern driveway is designed as a right-in only access, limiting turning movements and reducing potential conflicts along Crossbow Court. A second driveway provides full ingress and egress, accommodating primary site access and supporting internal circulation for the proposed uses. This access configuration establishes a clear hierarchy of movements and supports orderly site operations, including peak daycare drop-off and pick-up periods.

The site exhibits a notable topographic change, with an overall elevation drop of approximately 30 feet across the combined parcels, generally sloping from south to north. These existing grade conditions are addressed through site design and grading that respond to the natural terrain, allowing development to be accommodated entirely on-site without reliance on adjacent properties. The site's size, configuration, and topography support appropriate building placement, circulation, and buffering consistent with neighborhood-serving development.

Taken together, the site's physical characteristics including access configuration, topography, and parcel configuration demonstrate that the site is suitable for the proposed uses and capable of accommodating the associated intensity in a manner compatible with surrounding residential development.

Figure 5 : Photo of the existing site



7 Landscaping, Architecture, and Lighting

The proposed development incorporates landscaping, architectural design, and lighting features intended to enhance compatibility with the surrounding residential neighborhood and nearby schools. These elements are designed to meet or exceed applicable Washoe County Development Code standards and to provide appropriate buffering, visual interest, and pedestrian-scale design.

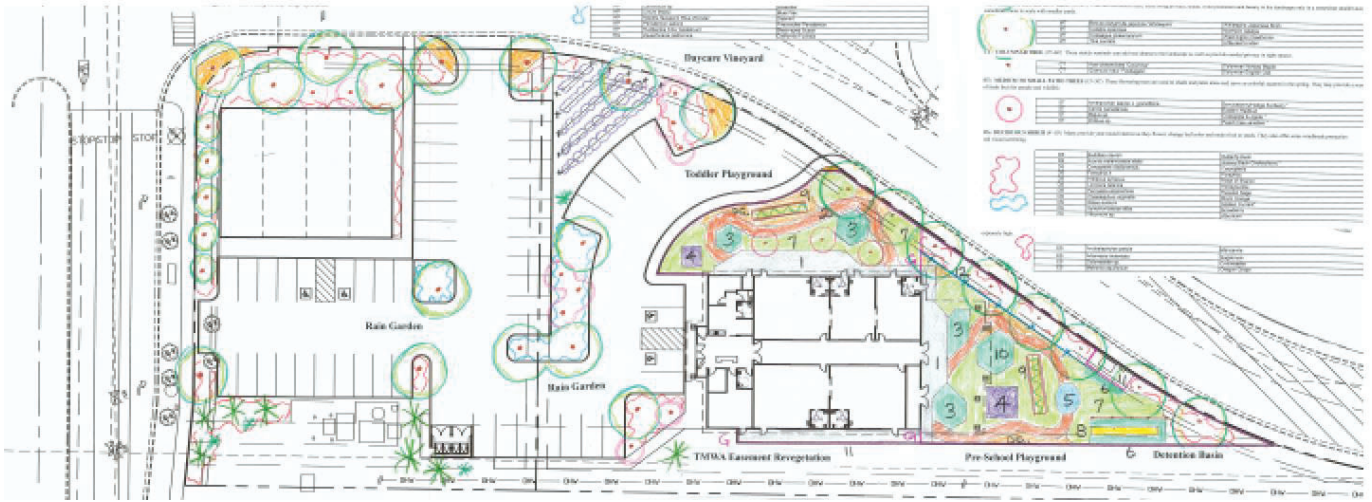
Landscaping

Landscaping is provided throughout the site in accordance with Washoe County requirements. Based on the preliminary Landscape Plan, the project is required to provide approximately 12,600 square feet of landscaping, and proposed landscaping meets and/or exceeds minimum code requirements.

The landscape design includes a combination of canopy trees, ornamental trees, shrubs, and groundcover, strategically located along site frontages, parking areas, and building perimeters to soften views of development and enhance compatibility with adjacent residential uses. The plan proposes approximately 55 new trees, including both shade and accent species, which contribute to visual screening, shade, and long-term site character.

Landscaping is also utilized to define pedestrian pathways, separate parking areas from buildings, and reinforce the neighborhood-scale nature of the development. All landscaping will be installed and maintained in accordance with County standards.

Figure 5 : Landscaping Area

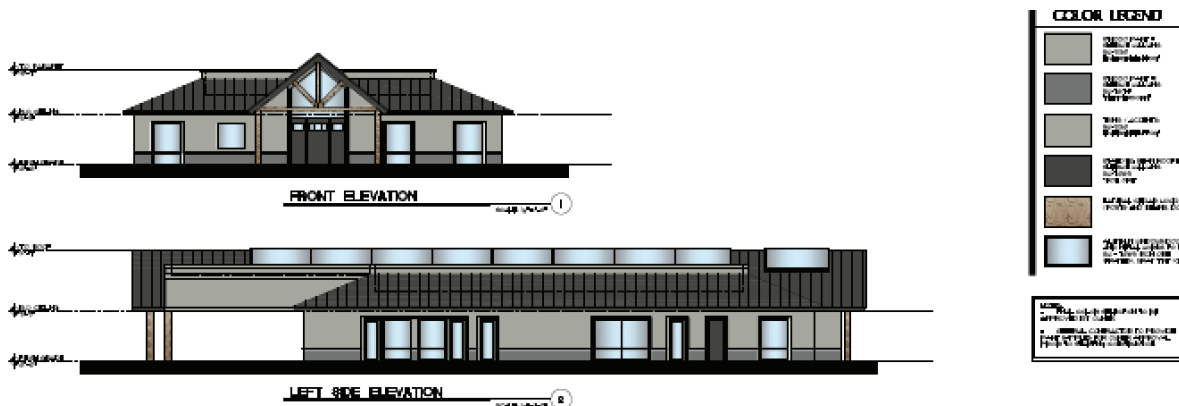


Architectural Design

Architectural elevations reflect a low-profile, neighborhood-scaled design appropriate for the surrounding Low Density Suburban area. Building massing is articulated to reduce visual bulk, with variations in rooflines, façade treatments, and material transitions.

The proposed buildings incorporate materials and finishes that are compatible with the surrounding residential character, including natural-toned exterior materials, articulated façades, and varied roof forms, as illustrated in the submitted architectural elevations. Building placement and orientation are designed to minimize visual impacts from Crossbow Court and adjacent properties while maintaining a cohesive site layout.

Figure 6 : Colored Elevation (front and side)



Lighting

Exterior lighting for the project is designed to comply with Washoe County lighting standards. All exterior light fixtures will be fully shielded and directed downward to minimize glare and light spillover onto adjacent properties.

Lighting levels are designed to provide adequate visibility for safety and security while maintaining a low-impact, neighborhood-appropriate character. Photometric plans demonstrate that light levels at property lines comply with County requirements, and all fixtures will conform to applicable dark-sky standards, as required by code.

No monument signage is proposed. Any building-mounted signage will comply with applicable Washoe County Development Code standards.

8 Community Context and Public Welfare

The proposed Crossbow Court Daycare & Neighborhood Center has been developed with consideration for the surrounding neighborhood and public welfare. As part of the project review process, the applicant conducted a neighborhood meeting to introduce the project, describe proposed site features and operations, and receive community input.

During the neighborhood meeting, key topics included traffic conditions along Crossbow Court, site access, and exterior lighting. Questions and concerns raised during the meeting were addressed directly, including discussion of the Traffic Impact Study recommendations and the project's lighting design, which incorporates shielded fixtures and compliance with Washoe County residential adjacency standards.

In addition to the neighborhood meeting, the applicant received direct communication from nearby residents expressing support for the project, including phone calls in favor of the proposed daycare and neighborhood-serving uses. The applicant has also received written testimony from parents with children attending nearby schools, expressing support for the project and identifying the benefit of having accessible childcare and neighborhood services within the community.

The proposed development responds to community input by incorporating safety-focused traffic measures, code-compliant lighting, and site design features intended to minimize impacts to adjacent properties. The project provides services that support daily neighborhood needs and contributes to public welfare by enhancing access to childcare and neighborhood-serving uses within an established residential area.

9 Findings for Approval

Pursuant to **Section 110.810.30 (Findings)** of the Washoe County Development Code, the following findings are required prior to approval of a Special Use Permit. As discussed below, each finding is satisfied by the proposed Crossbow Court Daycare & Neighborhood Center.

(a) Consistency

The proposed use is consistent with the action programs, policies, standards and maps of the Master Plan and the applicable area plan.

As discussed in **Section 3**, the proposed daycare and neighborhood center are consistent with the Washoe County Master Plan designation of Suburban Residential and the intent of the Low Density Suburban (LDS) zoning district. The project is designed as a neighborhood-serving use at an appropriate scale and is supported by applicable Master Plan policies encouraging integrated communities and compatible nonresidential development.

(b) Improvements

Adequate utilities, roadway improvements, sanitation, water supply, drainage, and other necessary facilities have been provided, the proposed improvements are properly related to existing and proposed roadways, and an adequate public facilities determination has been made in accordance with Division Seven.

As described in **Section 4**, adequate public facilities and infrastructure are available to serve the proposed development, including water, sewer, power, sanitation, and emergency services. Stormwater management has been evaluated through a Drainage Memorandum and will be managed on-site in accordance with Washoe County standards. Roadway access and related improvements are appropriately related to existing roadway conditions.

(c) Site Suitability

The site is physically suitable for the type of development and for the intensity of development.

As discussed in **Section 6**, the site's size, configuration, access layout, and topography make it physically suitable to accommodate the proposed uses and associated intensity. The project provides controlled access, on-site parking and circulation, and appropriate building placement and buffering consistent with neighborhood-serving development.

(d) Issuance Not Detrimental

Issuance of the permit will not be significantly detrimental to the public health, safety or welfare; injurious to the property or improvements of adjacent properties; or detrimental to the character of the surrounding area.

As detailed in **Sections 5, 7, and 8**, traffic and safety impacts have been evaluated through a Traffic Impact Study, which concludes that the surrounding roadway network can safely

accommodate project-generated traffic with the implementation of recommended safety measures. Landscaping, architectural design, and lighting are designed to maintain neighborhood character, and community outreach efforts demonstrate responsiveness to public concerns. The project will not be detrimental to public health, safety, welfare, or surrounding properties.

(e) Effect on a Military Installation

Issuance of the permit will not have a detrimental effect on the location, purpose or mission of the military installation.

The project is not located within or adjacent to a military installation, and issuance of the Special Use Permit will not have a detrimental effect on the location, purpose, or mission of any military installation.

10 Conclusion

The proposed Crossbow Court Daycare & Neighborhood Center has been designed to function as a compatible, neighborhood-serving development within the Arrowcreek area of unincorporated Washoe County. The project responds to the surrounding residential and school context through its scale, site layout, access configuration, traffic safety measures, and architectural and landscape design.

As demonstrated throughout this narrative, the project is consistent with the Washoe County Master Plan and the intent of the Low Density Suburban zoning district, is supported by adequate public facilities and infrastructure, is physically suited to the site, and will not be detrimental to the public health, safety, or welfare or to the character of the surrounding area. Community input has been considered and incorporated through project design and safety measures.

Based on the information provided and the findings outlined in Section 9, approval of the Special Use Permit for the Crossbow Court Daycare & Neighborhood Center is respectfully requested.



Veronica Sharma | Planner | **Tectonics Design Group**
730 Sandhill Rd, Suite 250 | Reno, Nevada 89521
(775) 234-5142 | www.tectonicsdesigngroup.com

Appendix A

Application

Washoe County Development Application

Your entire application is a public record. If you have a concern about releasing personal information, please contact Planning and Building staff at 775.328.6100.

Project Information		Staff Assigned Case No.: _____	
Project Name: Crossbow Ct Daycare & Neighborhood Center			
Project Description: Special Use Permit approval requested for the construction of a Child Daycare and Neighborhood Center in Low-Density Suburban (LDS) Zoning.			
Project Address: 2500 & 2540 Crossbow Court, Reno, NV 89511			
Project Area (acres or square feet): 1.817 acres			
Project Location (with point of reference to major cross streets AND area locator): Vacant lot at the northeast corner of Arrowcreek Parkway and Crossbow Court.			
Assessor's Parcel No.(s):	Parcel Acreage:	Assessor's Parcel No.(s):	Parcel Acreage:
152-921-01	0.774 acres		
152-921-02	1.073 acres		
Indicate any previous Washoe County approvals associated with this application: Case No.(s). WSUP20-0009			
Applicant Information (attach additional sheets if necessary)			
Property Owner:		Professional Consultant:	
Name: Hutter Family Trust		Name: Tectonics Design Group	
Address: [REDACTED]		Address: [REDACTED]	
Reno	Zip: NV 89511	[REDACTED]	Zip: NV 89521
Phone: [REDACTED]	Fax: NA	Phone: [REDACTED]	Fax: NA
Email: [REDACTED]		Email: Veronica	
Cell: NA	Other: NA	Cell: NA	Other: NA
Contact Person: Jen Hutter		Contact Person: Veronica Sharma	
Applicant/Developer:		Other Persons to be Contacted:	
Name: Russell Montessori LLC		Name:	
Address: [REDACTED]		Address:	
[REDACTED]	Zip: NV 89120		Zip:
Phone: [REDACTED]	Fax:	Phone:	Fax:
Email: [REDACTED]		Email:	
Cell: NA	Other: NA	Cell:	Other:
Contact Person: Alexandra Magliarditi		Contact Person:	
For Office Use Only			
Date Received:		Planning Area:	
County Commission District:		Master Plan Designation(s):	
CAB(s):		Regulatory Zoning(s):	

Special Use Permit Application Supplemental Information

(All required information may be separately attached)

1. What is the project being requested?

The applicant is requesting approval of a Special Use Permit to allow development of a Child Daycare and Neighborhood Center on two vacant parcels located at 2500 and 2540 Crossbow Court within the Low Density Suburban (LDS) zoning district. The project includes a 7,219 square-foot child daycare facility and a 4,800 square-foot neighborhood center, along with associated site improvements.

2. Provide a site plan with all existing and proposed structures (e.g. new structures, roadway improvements, utilities, sanitation, water supply, drainage, parking, signs, etc.)

Site plan and additional exhibits/plans have been submitted showing all existing and proposed improvements, including buildings, parking, access and circulation, utilities, stormwater management, landscaping, lighting, and other supporting infrastructure.

3. What is the intended phasing schedule for the construction and completion of the project?

The project is proposed in two phases.
Phase 1: Site improvements and construction of the child daycare facility. Anticipated completion: Q2 2027
Phase 2: Construction of the neighborhood center building.
Each phase will function independently and will comply with applicable County requirements at the time of construction.

4. What physical characteristics of your location and/or premises are especially suited to deal with the impacts and the intensity of your proposed use?

The site is well suited to accommodate the proposed uses due to its size, configuration, and location within an area that includes nearby schools and residential development. The site's size and configuration allow vehicle access, parking, and circulation to occur entirely on-site, supporting safe and orderly operations. These physical characteristics allow the proposed uses to function at a neighborhood-serving scale while maintaining compatibility with surrounding residences.

5. What are the anticipated beneficial aspects or affects your project will have on adjacent properties and the community?

The proposed project will provide essential neighborhood-serving childcare and personal services that support local families and residents. By locating these services within the surrounding neighborhood, the project helps meet daily needs locally and can reduce the need for longer off-site trips. Development of the currently vacant site will introduce compatible, well-designed improvements and contribute to a more complete and functional neighborhood consistent with County planning objectives.

6. What are the anticipated negative impacts or affect your project will have on adjacent properties? How will you mitigate these impacts?

The primary anticipated impact associated with the project is increased vehicular activity during peak drop-off and pick-up periods of nearby schools. Traffic conditions have been evaluated through a Traffic Impact Study, which concludes that the surrounding roadway network can safely accommodate the proposed use. Recommended measures, including on-site circulation design, parking provision, and targeted traffic control and pedestrian safety improvements, are incorporated to support safe and orderly operations.

7. Provide specific information on landscaping, parking, type of signs and lighting, and all other code requirements pertinent to the type of use being purposed. Show and indicate these requirements on submitted drawings with the application.

Landscaping, parking, and lighting are designed to comply with applicable Washoe County Development Code requirements and are shown on the submitted plans. Parking is provided on-site to serve the proposed uses, and exterior lighting will be fully shielded and directed downward to minimize glare and light spillover. No monument signage is proposed. Any building-mounted signage will comply with applicable Washoe County signage standards.

8. Are there any restrictive covenants, recorded conditions, or deed restrictions (CC&Rs) that apply to the area subject to the special use permit request? (If so, please attach a copy.)

<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
------------------------------	--

9. Utilities:

a. Sewer Service	Truckee Meadows Water Reclamation Facility (TMWRF)
b. Electrical Service	NV Energy
c. Telephone Service	AT&T or Spectrum
d. LPG or Natural Gas Service	NV Energy
e. Solid Waste Disposal Service	Waste Management
f. Cable Television Service	Spectrum
g. Water Service	Truckee Meadows Water Authority (TMWA)

For most uses, Washoe County Code, Chapter 110, Article 422, Water and Sewer Resource Requirements, requires the dedication of water rights to Washoe County. Please indicate the type and quantity of water rights you have available should dedication be required.

h. Permit #	Not Applicable	acre-feet per year	Not Applicable
i. Certificate #	Not Applicable	acre-feet per year	Not Applicable
j. Surface Claim #	Not Applicable	acre-feet per year	Not Applicable
k. Other #	Not Applicable	acre-feet per year	Not Applicable

Title of those rights (as filed with the State Engineer in the Division of Water Resources of the Department of Conservation and Natural Resources).

TMWA will serve this site and if needed water rights will be purchased during project permitting
--

10. Community Services (provided and nearest facility):

a. Fire Station	Washoe County Fire Protection District – Fire Station No. 30 (Damonte Ranch)
b. Health Care Facility	Renown South Meadows Medical Center & ER at Damonte Ranch
c. Elementary School	Hunsberger Elementary School and Sage Ridge School
d. Middle School	Marce Herz Middle School
e. High School	Galena High School
f. Parks	South Valleys Regional Park
g. Library	South Valleys Library
h. Citifare Bus Stop	S Virginia Street and Damonte Ranch Parkway Bus Stop

Appendix B

Civil Plans

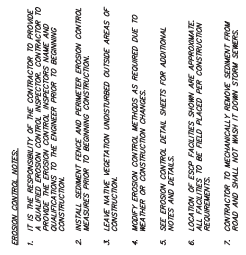


7. HANDPAID STAMPING: PAINT LINES AND HANDPAID SHALL BE IN ACCORDANCE WITH THE MANUAL ON ANTIPOIS TRAFFIC CONTROL, LATEST EDITION.
8. HANDPAID PAINT: PAINT LINES SHALL BE 4-INCH WIDE, WHITE STROKES.
9. HANDPAID PARKING SPACES SHALL BE HANDPAID WITH A HANDPAID PAINT. HANDPAID PARKING SPACES MUST CONTAIN A PAINTED WHITE, PULVERIZING SYMBOL.
10. HANDPAID PARKING LINES: LINES SHALL HAVE A 4-INCH WIDE, WHITE PAINT LINE WITH A 45 DEGREE ANGLE AND 18-INCHES ON CENTER.
11. PARKING SALT INSTALLATION: AN INTERNAL SALT AND WATER METER SHALL BE INSTALLED IN THE CENTER OF ALL C.D. AND SECTION 30 OF THE "CHANGE ROAD."
12. ALL EXTERIOR CONCRETE SURFACES TO BE FREEDING AND REPAIRING: CONCRETE SURFACES SHOULD BE PAINTED AT 1500 PSI MINIMUM.
13. REFERENCE: "GENERAL NOTES" ON SHEET 06.1.
14. REFERENCE: "AMERICAN NOTES" ON SHEET 06.1.
15. REFERENCE: "AMERICAN NOTES" ON SHEET 06.1.
16. REFERENCE: "GENERAL NOTES" ON SHEET 06.1.

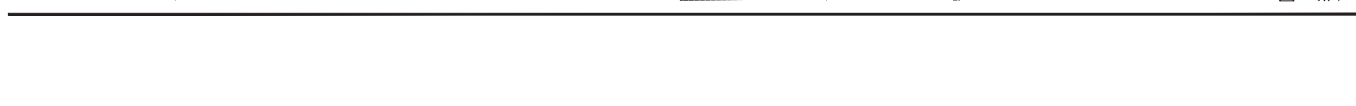
- LEGEND:**
- MEDIAN CURB & GUTTER
 - 6" MEDIAN CURB
 - CONCRETE VALLEY GUTTER
 - CONCRETE SIDEWALK
 - REINFORCED CONCRETE
 - LIGHT ASPHALT SECTION
 - HEAVY ASPHALT SECTION

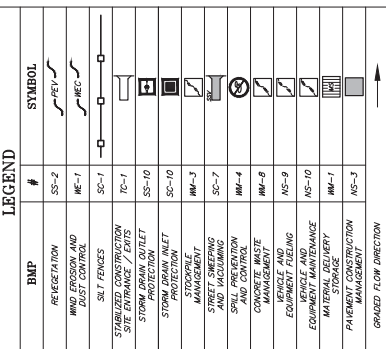
[illegible]

2 DAYS BEFORE
YOU DIG CALL USA
TOLL FREE 1-800-227-2600



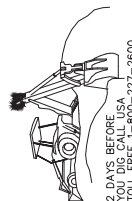
2 DAYS BEFORE
YOU DIG CALL USA
TOLL FREE 1-800-227-2600





BMP PLAN

- [illegible]



2 DAYS BEFORE
YOU DIG CALL USA
TOLL FREE 1-800-227-2600

Appendix C

Landscape Plans

Appendix D

Architectural Site and Lighting Plan

Appendix E

Elevations and Floor Plans

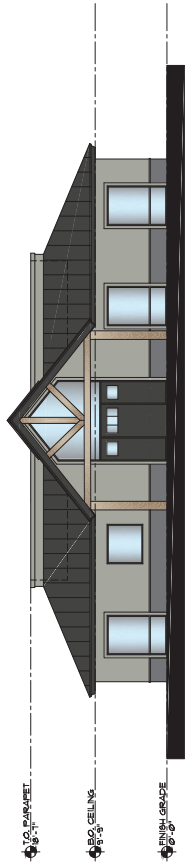
SCALE: 1/8"=1'-0"
01.09.2026
25341

Exterior Elevations

COLOR LEGEND

STUCCO PAINT 1 SANDY GREY SW-930	STUCCO PAINT 2 SANDY GREY SW-930	STUCCO PAINT 3 SANDY GREY SW-930	STUCCO PAINT 4 SANDY GREY SW-930	STUCCO PAINT 5 SANDY GREY SW-930	STUCCO PAINT 6 SANDY GREY SW-930	STUCCO PAINT 7 SANDY GREY SW-930	STUCCO PAINT 8 SANDY GREY SW-930	STUCCO PAINT 9 SANDY GREY SW-930	STUCCO PAINT 10 SANDY GREY SW-930	STUCCO PAINT 11 SANDY GREY SW-930	STUCCO PAINT 12 SANDY GREY SW-930	STUCCO PAINT 13 SANDY GREY SW-930	STUCCO PAINT 14 SANDY GREY SW-930	STUCCO PAINT 15 SANDY GREY SW-930	STUCCO PAINT 16 SANDY GREY SW-930	STUCCO PAINT 17 SANDY GREY SW-930	STUCCO PAINT 18 SANDY GREY SW-930	STUCCO PAINT 19 SANDY GREY SW-930	STUCCO PAINT 20 SANDY GREY SW-930	STUCCO PAINT 21 SANDY GREY SW-930	STUCCO PAINT 22 SANDY GREY SW-930	STUCCO PAINT 23 SANDY GREY SW-930	STUCCO PAINT 24 SANDY GREY SW-930	STUCCO PAINT 25 SANDY GREY SW-930	STUCCO PAINT 26 SANDY GREY SW-930	STUCCO PAINT 27 SANDY GREY SW-930	STUCCO PAINT 28 SANDY GREY SW-930	STUCCO PAINT 29 SANDY GREY SW-930	STUCCO PAINT 30 SANDY GREY SW-930	STUCCO PAINT 31 SANDY GREY SW-930	STUCCO PAINT 32 SANDY GREY SW-930	STUCCO PAINT 33 SANDY GREY SW-930	STUCCO PAINT 34 SANDY GREY SW-930	STUCCO PAINT 35 SANDY GREY SW-930	STUCCO PAINT 36 SANDY GREY SW-930	STUCCO PAINT 37 SANDY GREY SW-930	STUCCO PAINT 38 SANDY GREY SW-930	STUCCO PAINT 39 SANDY GREY SW-930	STUCCO PAINT 40 SANDY GREY SW-930	STUCCO PAINT 41 SANDY GREY SW-930	STUCCO PAINT 42 SANDY GREY SW-930	STUCCO PAINT 43 SANDY GREY SW-930	STUCCO PAINT 44 SANDY GREY SW-930	STUCCO PAINT 45 SANDY GREY SW-930	STUCCO PAINT 46 SANDY GREY SW-930	STUCCO PAINT 47 SANDY GREY SW-930	STUCCO PAINT 48 SANDY GREY SW-930	STUCCO PAINT 49 SANDY GREY SW-930	STUCCO PAINT 50 SANDY GREY SW-930	STUCCO PAINT 51 SANDY GREY SW-930	STUCCO PAINT 52 SANDY GREY SW-930	STUCCO PAINT 53 SANDY GREY SW-930	STUCCO PAINT 54 SANDY GREY SW-930	STUCCO PAINT 55 SANDY GREY SW-930	STUCCO PAINT 56 SANDY GREY SW-930	STUCCO PAINT 57 SANDY GREY SW-930	STUCCO PAINT 58 SANDY GREY SW-930	STUCCO PAINT 59 SANDY GREY SW-930	STUCCO PAINT 60 SANDY GREY SW-930	STUCCO PAINT 61 SANDY GREY SW-930	STUCCO PAINT 62 SANDY GREY SW-930	STUCCO PAINT 63 SANDY GREY SW-930	STUCCO PAINT 64 SANDY GREY SW-930	STUCCO PAINT 65 SANDY GREY SW-930	STUCCO PAINT 66 SANDY GREY SW-930	STUCCO PAINT 67 SANDY GREY SW-930	STUCCO PAINT 68 SANDY GREY SW-930	STUCCO PAINT 69 SANDY GREY SW-930	STUCCO PAINT 70 SANDY GREY SW-930	STUCCO PAINT 71 SANDY GREY SW-930	STUCCO PAINT 72 SANDY GREY SW-930	STUCCO PAINT 73 SANDY GREY SW-930	STUCCO PAINT 74 SANDY GREY SW-930	STUCCO PAINT 75 SANDY GREY SW-930	STUCCO PAINT 76 SANDY GREY SW-930	STUCCO PAINT 77 SANDY GREY SW-930	STUCCO PAINT 78 SANDY GREY SW-930	STUCCO PAINT 79 SANDY GREY SW-930	STUCCO PAINT 80 SANDY GREY SW-930	STUCCO PAINT 81 SANDY GREY SW-930	STUCCO PAINT 82 SANDY GREY SW-930	STUCCO PAINT 83 SANDY GREY SW-930	STUCCO PAINT 84 SANDY GREY SW-930	STUCCO PAINT 85 SANDY GREY SW-930	STUCCO PAINT 86 SANDY GREY SW-930	STUCCO PAINT 87 SANDY GREY SW-930	STUCCO PAINT 88 SANDY GREY SW-930	STUCCO PAINT 89 SANDY GREY SW-930	STUCCO PAINT 90 SANDY GREY SW-930	STUCCO PAINT 91 SANDY GREY SW-930	STUCCO PAINT 92 SANDY GREY SW-930	STUCCO PAINT 93 SANDY GREY SW-930	STUCCO PAINT 94 SANDY GREY SW-930	STUCCO PAINT 95 SANDY GREY SW-930	STUCCO PAINT 96 SANDY GREY SW-930	STUCCO PAINT 97 SANDY GREY SW-930	STUCCO PAINT 98 SANDY GREY SW-930	STUCCO PAINT 99 SANDY GREY SW-930	STUCCO PAINT 100 SANDY GREY SW-930
--	--	--	--	--	--	--	--	--	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	--

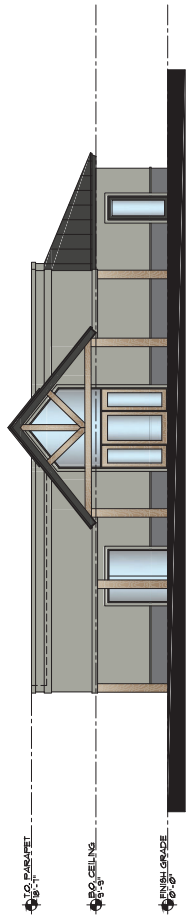
NOTES:
- FINAL COLOR SELECTION TO BE APPROVED BY OWNER.
- GENERAL CONTRACTOR TO PROVIDE PAINT & FINISHES TO BE USED PRIOR TO STARTING CONSTRUCTION.



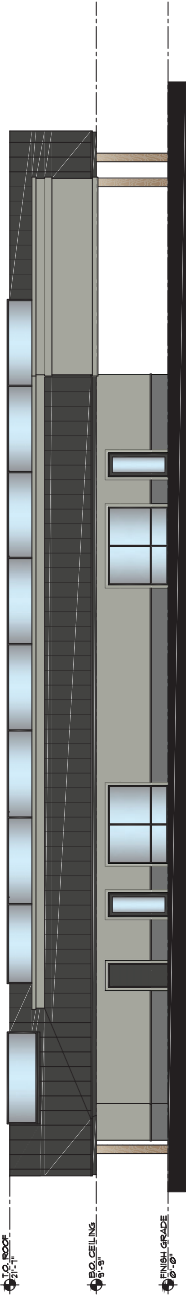
FRONT ELEVATION
SCALE: 1/8"=1'-0" 1



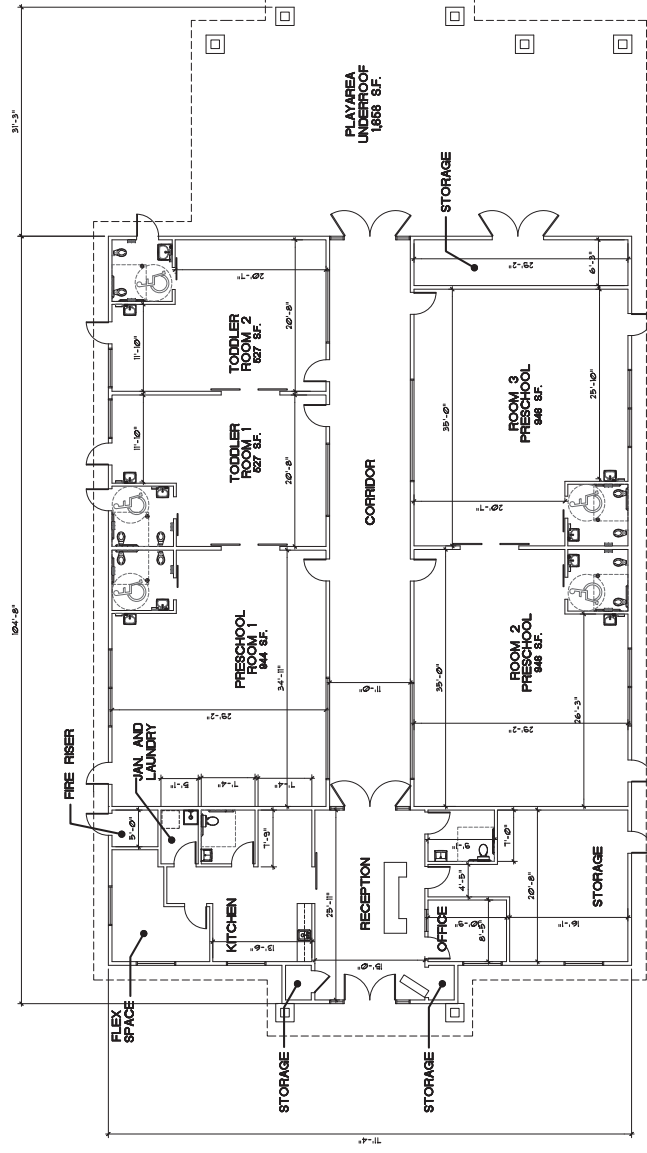
LEFT SIDE ELEVATION
SCALE: 1/8"=1'-0" 2



REAR ELEVATION
SCALE: 1/8"=1'-0" 3



RIGHT SIDE ELEVATION
SCALE: 1/8"=1'-0" 4



FLOOR PLAN

SCALE: 1/8" = 1'-0"

Appendix F

Drainage Memo



February 06, 2026

Washoe County Planning Department
1001 E 9th St.
Reno, NV 89512

RE: Crossbow Ct. Daycare & Neighborhood Center

This drainage memorandum has been prepared to evaluate existing and proposed drainage conditions for the development of a daycare and neighborhood center located at 2500 Crossbow Court (APN 152-921-01) and 2540 Crossbow Court (APN 152-921-02) in Washoe County, Nevada.

The project site consists of two undeveloped parcels located at 2500 Crossbow Court (APN 152-921-01), comprising approximately 0.744 acres, and 2540 Crossbow Court (APN 152-921-02), comprising approximately 1.073 acres. The site generally drains from south to north, with an overall elevation drop of approximately 30 feet across the combined parcels. Existing drainage occurs as diffuse sheet flow over native ground surfaces, with runoff naturally discharging toward the north and east at the downstream property boundaries. No formal drainage infrastructure currently exists on the site, and stormwater runoff follows existing topography to the established discharge locations.

The proposed project includes development of a daycare and neighborhood center with associated surface improvements such as buildings, parking areas, drive aisles, and playground facilities. These improvements will increase impervious area and modify existing drainage patterns. Post-development runoff will be collected and conveyed through a coordinated system of onsite drainage features, including surface conveyance and detention basins. Detention facilities will be designed to mitigate peak runoff rates in accordance with all applicable Washoe County drainage criteria and standards, ensuring that post-development peak flows do not exceed pre-development conditions. Detained runoff will be released in a controlled manner at the existing downstream discharge points to the north and east, maintaining established drainage patterns and protecting adjacent properties.

Table 1 below summarizes the existing and proposed run off volumes for the 100-Yr storm. Rainfall intensities for runoff calculations were obtained from the NOAA Atlas 14 Point Precipitation Frequency for the site location. Basin sizing calculations are referenced in Appendix A.

Table 1 – 100-YR Storm

Detention Basin	100 YR Required Volume (CF)	100 YR Provided Volume (CF)
Basin 1	1,178	1,747
Basin 2	1,271	1,913

Please contact me with any questions.

Sincerely,



Matt K. Rasmussen, P.E.

APPENDIX A

Existing Condition Runoff Basin 1



Project: Crossbow CT. Daycare

By: AWP

Project #: 25152

Date: 2/9/2026

Tc
10

Acre
0.87

	Area (sf)	C
Building	0	0.9
Impervious	0	0.9
Pervious	38075	0.45

	C (comp)	Adj	C (adj)
100-yr	0.45	1	0.45
50-yr	0.45	1	0.45
25-yr	0.45	1	0.45
10-yr	0.45	1	0.45
5-yr	0.45	1	0.45

Tc	Pre Development Peak Flows (cfs)				
	5yr	10yr	25yr	50yr	100yr
10	0.61	0.75	1.00	1.21	1.47

T	100-Yr		50-Yr		25-Yr		10-Yr		5-Yr	
	Peak (cfs)	Volume (cf)	Peak (cfs)	Volume (cf)	Peak (cfs)	Volume (cf)	Peak (cfs)	Volume (cf)	Peak (cfs)	Volume (cf)
5	1.94	775	1.59	636	1.30	521	0.99	397	0.80	320
10	1.47	1178	1.21	970	1.00	797	0.75	602	0.61	488
11	1.42	1223	1.17	1007	0.96	827	0.73	624	0.59	507
12	1.37	1262	1.13	1039	0.93	853	0.70	644	0.57	522
13	1.32	1295	1.09	1066	0.89	874	0.67	661	0.55	536
14	1.27	1322	1.04	1088	0.86	892	0.65	674	0.52	546
15	1.22	1342	1.00	1104	0.82	905	0.62	684	0.50	554
16	1.19	1385	0.98	1139	0.80	933	0.61	706	0.49	572
17	1.17	1424	0.96	1172	0.79	960	0.59	726	0.48	588
18	1.14	1459	0.94	1201	0.77	984	0.58	745	0.47	603
19	1.11	1492	0.92	1228	0.75	1005	0.57	762	0.46	616
20	1.09	1521	0.89	1253	0.73	1025	0.55	777	0.45	628
21	1.06	1547	0.87	1275	0.71	1042	0.54	791	0.44	639
22	1.03	1570	0.85	1294	0.70	1058	0.53	803	0.43	649
23	1.01	1589	0.83	1310	0.68	1071	0.51	813	0.42	657
24	0.98	1606	0.81	1324	0.66	1082	0.50	822	0.40	664
25	0.95	1619	0.79	1336	0.64	1091	0.49	830	0.39	669
26	0.93	1629	0.76	1345	0.62	1097	0.47	835	0.38	673
27	0.90	1636	0.74	1351	0.60	1102	0.46	839	0.37	676
28	0.87	1640	0.72	1354	0.59	1104	0.45	842	0.36	678
29	0.84	1640	0.70	1355	0.57	1104	0.43	843	0.35	678
30	0.82	1637	0.68	1354	0.55	1102	0.42	842	0.34	677
60	0.51	1929	0.42	1585	0.34	1299	0.26	985	0.21	797
120	0.27	1977	0.23	1691	0.18	1365	0.16	1162	0.13	978

Existing Condition Runoff Basin 2



Project: Crossbow CT. Daycare

By: AWP

Project #: 25152

Date: 2/9/2026

Tc
10

Acre
0.94

	Area (sf)	C
Building	0	0.9
Impervious	0	0.9
Pervious	41074	0.45

	C (comp)	Adj	C (adj)
100-yr	0.45	1	0.45
50-yr	0.45	1	0.45
25-yr	0.45	1	0.45
10-yr	0.45	1	0.45
5-yr	0.45	1	0.45

Tc	Pre Development Peak Flows (cfs)				
	5yr	10yr	25yr	50yr	100yr
10	0.66	0.81	1.07	1.31	1.59

T	100-Yr		50-Yr		25-Yr		10-Yr		5-Yr	
	Peak (cfs)	Volume (cf)	Peak (cfs)	Volume (cf)	Peak (cfs)	Volume (cf)	Peak (cfs)	Volume (cf)	Peak (cfs)	Volume (cf)
5	2.09	836	1.71	687	1.40	562	1.07	428	0.86	345
10	1.59	1271	1.31	1047	1.07	860	0.81	649	0.66	527
11	1.53	1320	1.26	1087	1.04	892	0.78	674	0.63	547
12	1.48	1362	1.22	1121	1.00	920	0.75	695	0.61	564
13	1.42	1397	1.17	1150	0.96	943	0.73	713	0.59	578
14	1.37	1426	1.13	1173	0.92	962	0.70	727	0.57	589
15	1.32	1448	1.08	1191	0.89	976	0.67	738	0.54	598
16	1.29	1494	1.06	1229	0.87	1007	0.66	762	0.53	617
17	1.26	1536	1.04	1264	0.85	1035	0.64	783	0.52	634
18	1.23	1574	1.01	1296	0.83	1061	0.63	803	0.51	650
19	1.20	1609	0.99	1325	0.81	1085	0.61	822	0.50	665
20	1.17	1641	0.96	1351	0.79	1106	0.60	838	0.48	678
21	1.14	1669	0.94	1375	0.77	1125	0.58	853	0.47	689
22	1.11	1693	0.92	1396	0.75	1141	0.57	866	0.46	700
23	1.08	1715	0.89	1414	0.73	1155	0.56	877	0.45	708
24	1.06	1732	0.87	1429	0.71	1167	0.54	887	0.44	716
25	1.03	1747	0.85	1441	0.69	1176	0.53	895	0.42	722
26	1.00	1757	0.82	1451	0.67	1184	0.51	901	0.41	726
27	0.97	1765	0.80	1457	0.65	1188	0.50	906	0.40	729
28	0.94	1769	0.78	1461	0.63	1191	0.48	908	0.39	731
29	0.91	1769	0.75	1462	0.61	1191	0.47	909	0.38	731
30	0.88	1766	0.73	1460	0.59	1189	0.45	908	0.36	730
60	0.55	2081	0.45	1710	0.37	1402	0.28	1063	0.23	860
120	0.29	2132	0.25	1825	0.20	1473	0.17	1253	0.14	1055

Appendix G

Traffic Impact Study



TRAFFIC IMPACT STUDY

2500 CROSSBOW COURT

WASHOE COUNTY, NEVADA

APN: 152-921-01, 152-921-02



Prepared for:

Alexandra Magliarditi

5545 S. Mountain Vista St., Ste. F (2nd Floor)

Las Vegas, NV 89120

(702) 637-0096

Prepared by:

Kimley»Horn

February 2026

192888000

Copyright © Kimley-Horn and Associates, Inc.



TRAFFIC IMPACT STUDY

FOR

2500 CROSSBOW COURT

Prepared for:

Alexandra Magliarditi

5545 S. Mountain Vista St., Ste. F (2nd Floor)

Las Vegas, NV 89120

(702) 637-0096

Prepared by:

Kimley-Horn and Associates, Inc.

7900 Rancharrah Parkway

Suite 100

Reno, Nevada 89511

(775) 787-7552

This document, together with the concepts and designs presented herein, as an instrument of service, is intended only for the specific purpose and client for which it was prepared. Reuse of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.

©February 2026
192888000

EXECUTIVE SUMMARY

The mixed-use development is to be located at the northeast corner of Arrowcreek Parkway and Crossbow Court in Reno, Nevada. It is planned to be built on 1.82-acres within the APNs 152-921-01 and 152-921-02. The development is anticipated to be comprised of a Montessori school and a neighborhood center housing a sandwich/coffee shop and a pediatric dentist.

Regional access to the project site is expected to be provided by Interstate 580 (I-580) and Mount Rose Highway (SR-431). Primary access to the project site is anticipated to be from Crossbow Court. Direct access to the project sites is anticipated from two project access driveways off Crossbow Court.

The following intersections were identified for a full level of service (LOS) analysis:

- Arrowcreek Parkway and Crossbow Court (#1)
- Arrowcreek Parkway and Thomas Creek Court (#2)
- Crossbow Court and Hunsberger Elementary School North Access/Project Access Drive (A)
- Crossbow Court and Hunsberger Elementary School South Access/Project Access Drive (B)

Figure E-1 shows the study area intersections.

The proposed development is expected to generate approximately 988 daily trips, with 88 trips anticipated to occur during the AM peak hour and 118 trips anticipated to occur during the PM peak hour.

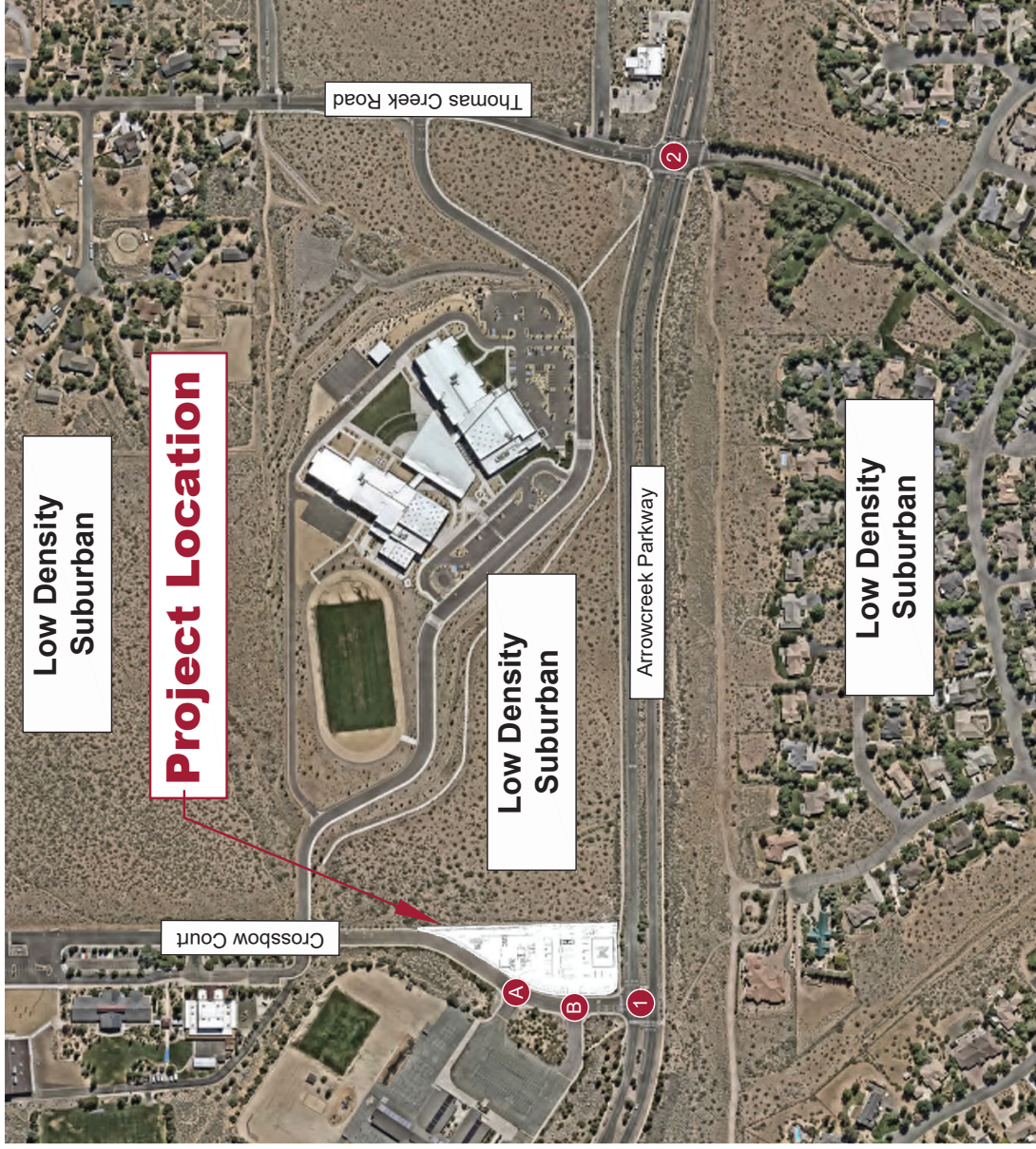
The proposed development is anticipated to generate traffic volumes resulting in the following recommendations:

- An R7-1 “NO PARKING ANY TIME” should be installed along the project frontage along Crossbow Court.
- Provide a marked pedestrian crosswalk across Crossbow Court at the intersection of Crossbow Court and Hunsberger Elementary School North Access/Project Access Drive (A), consistent with Washoe County standards and the Manual on Uniform Traffic Control Devices (MUTCD).
- Install ADA-compliant pedestrian curb ramps at the crosswalk termini in accordance with applicable ADA accessibility requirements and Washoe County standards.
- An R1-1 “STOP” sign with appropriate pavement markings should be installed for the westbound egress at the project access drives.
- All on-site and off-site signing and striping improvements should be incorporated into the Civil Drawings and conform to the current MUTCD, as applicable.



Study Area Intersections

1. Arrowcreek Parkway and Crossbow Court
2. Arrowcreek Parkway and Thomas Creek Road
- A. Crossbow Court and Hunsberger Elementary School North Access/Project Access Drive A
- B. Crossbow Court and Hunsberger Elementary School South Access/Project Access Drive B



Legend

- # Study Area Key Intersection
- X Project Access Drive

Figure E-1

Kimley»Horn

Source: Nearmap US, Inc. Image Date: July 2025

2500 Crossbow Court Study Area

TABLE OF CONTENTS

EXECUTIVE SUMMARY.....	I
1. INTRODUCTION	6
2. EXISTING CONDITIONS	8
2.1. Study Area Intersections	8
2.2. Existing Land Uses	8
2.3. Existing Lane Configurations and Control	8
2.4. Existing Turning Movement Counts	8
3. FUTURE CONDITIONS	11
3.1. Background Lane Configuration and Control.....	11
3.2. Background Traffic Growth	11
3.3. Background Plus Project Lane Configuration and Control.....	11
3.4. Project Trip Generation	15
3.5. Project Trip Distribution.....	15
3.6. Traffic Assignment	15
3.7. Project Buildout Traffic Volumes	16
4. TRAFFIC IMPACT ANALYSIS	20
4.1. Analysis Methodology	20
4.2. Intersection Operational Analysis.....	21
4.3. Project Access Operational Analysis.....	22
4.4. Queuing Analysis	23
5. CRASH DATA SUMMARY	24
6. CONCLUSIONS/RECOMMENDATIONS	25

LIST OF FIGURES

Figure 1 – Vicinity Map.....	7
Figure 2 – 2025 Existing Lane Configuration and Control	9
Figure 3 – 2025 Existing Peak Hour Traffic Volumes (AM & PM)	10
Figure 4 – 2027 Background Lane Configuration and Control	12
Figure 5 – 2027 Background Peak Hour Traffic Volumes (AM & PM).....	13
Figure 6 – 2027 Background Plus Project Lane Configuration and Control	14
Figure 7 – Project Trip Distribution	17
Figure 8 – Project Trip Assignment	18
Figure 9 – 2027 Background Plus Project Peak Hour Traffic Volumes (AM & PM).....	19

LIST OF TABLES

Table 1 – Peak Hour Turning Movement Count Dates	8
Table 2 – Trip Generation	15
Table 3 – Level of Service Criteria	20
Table 4 –Key Intersection Peak Hour LOS Analysis.....	21
Table 5 – Project Access Drive Peak Hour LOS Analysis	22
Table 6 – Queueing Analysis	23
Table 7 – Crash Data Summary	24

LIST OF APPENDICES

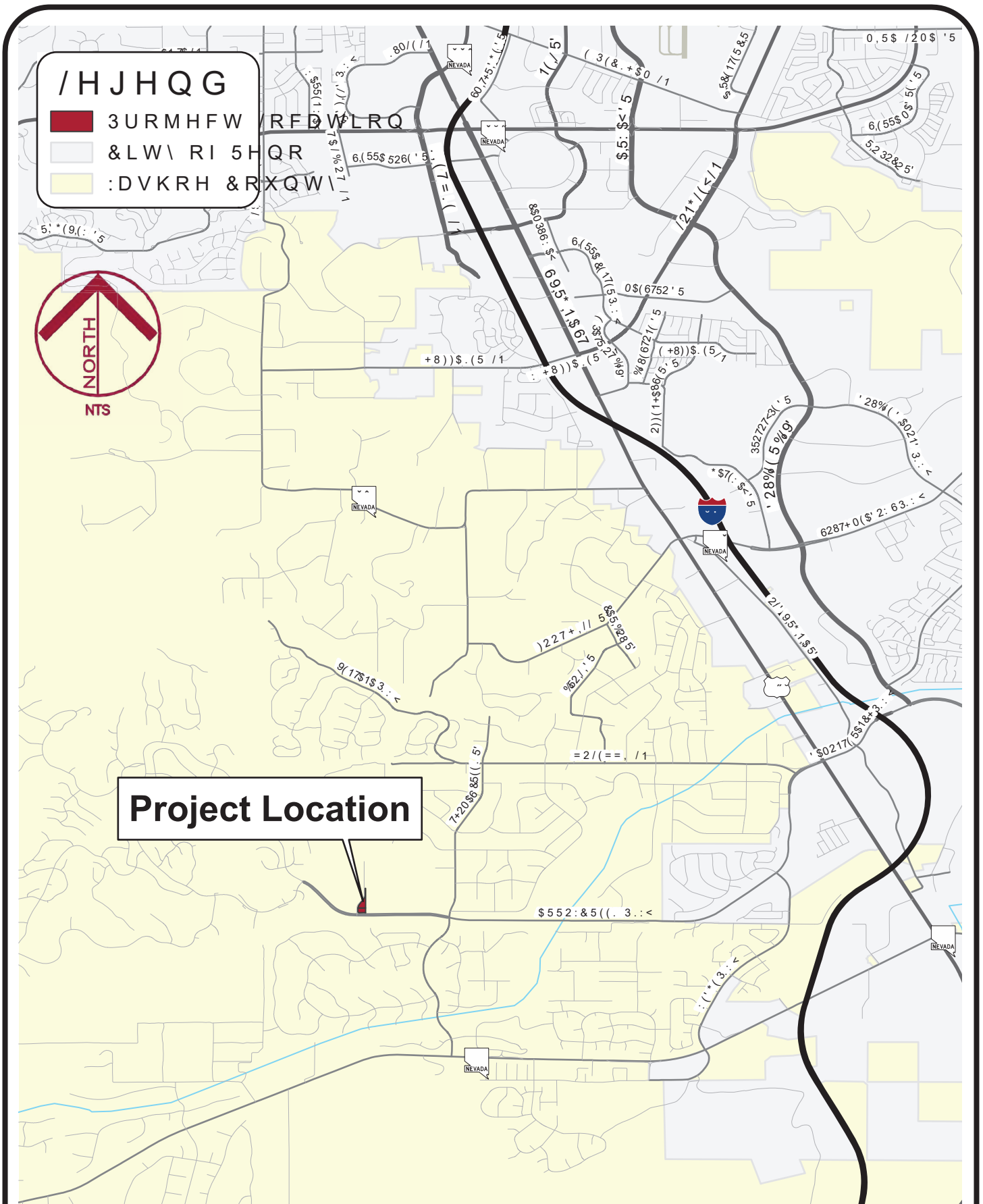
Appendix A	Count Data
Appendix B	Growth Rate Calculations
Appendix C	Trip Generation Calculations
Appendix D	Key Intersection Peak Hour LOS Calculations
Appendix E	Project Access Peak Hour LOS Calculations
Appendix F	Site Plan

1. INTRODUCTION

Kimley-Horn and Associates, Inc. has been retained by Russel Montessori LLC to prepare a traffic impact study for the proposed mixed-use development. The purpose of this traffic impact study is to identify traffic generation characteristics of the proposed development, identify potential traffic-related impacts on the local street system, and develop mitigation measures required for the identified impacts.

The mixed-use development is to be located at the northeast corner of Arrowcreek Parkway and Crossbow Court in Reno, Nevada. It is planned to be built on 1.82-acres within the APNs 152-921-01 and 152-921-02. The development is anticipated to be comprised of a Montessori school and a neighborhood center housing a sandwich/coffee shop and a pediatric dentist. The location of the project site is shown on **Figure 1** and a site plan is provided in **Appendix F**.

Regional access to the project site is expected to be provided by Interstate 580 (I-580) and Mount Rose Highway (SR-431). Primary access to the project site is anticipated to be from Crossbow Court. Direct access to the project sites is anticipated from two project access driveways off Crossbow Court.



**2500 Crossbow Court
Vicinity Map**

Figure 1

2. EXISTING CONDITIONS

This section of the report details existing conditions near the project sites.

2.1. Study Area Intersections

The following intersections were identified for a full level of service (LOS) analysis:

- Arrowcreek Parkway and Crossbow Court (#1)
- Arrowcreek Parkway and Thomas Creek Court (#2)
- Crossbow Court and Hunsberger Elementary School North Access/ Project Access Drive (A)
- Crossbow Court and Hunsberger Elementary School South Access/ Project Access Drive (B)

The study area intersections are shown in **Figure 2**.

2.2. Existing Land Uses

The location for the proposed project site is currently low-density suburban. The area surrounding the project site is composed primarily of residential and institutional (school) land uses. The location of the project site, study area intersections and existing land uses are shown in **Figure 2**.

2.3. Existing Lane Configurations and Control

Regional access to the project site is expected to be provided by Interstate 580 (I-580) and Mount Rose Highway (SR-431). Primary access to the project site is anticipated to be from Crossbow Court. Direct access to the project sites is anticipated from two project access driveways off Crossbow Court. Existing speed limits, lane configuration, and traffic control are illustrated in **Figure 2**.

2.4. Existing Turning Movement Counts

Twenty-four-hour turning movement data was field counted in 2025 at the study intersections, as summarized in **Table 1**. Count data sheets are provided in **Appendix A**. Traffic volumes for Crossbow Court and Hunsberger Elementary School South Access/Project Access Drive (B) were extrapolated from the adjacent intersections. **Figure 3** illustrates the existing peak hour traffic volumes.

Table 1 – Peak Hour Turning Movement Count Dates

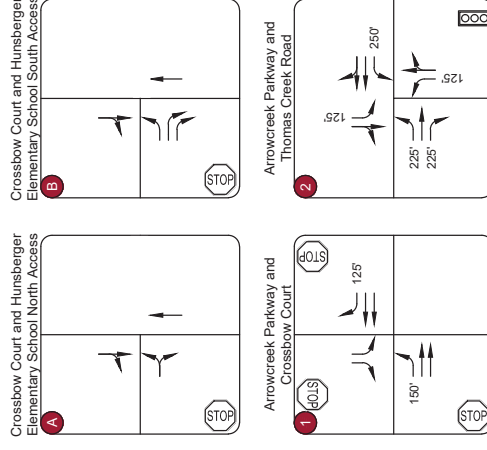
Intersection	Count Date
Arrowcreek Parkway and Crossbow Court (#1)	Thursday, May 29, 2025
Arrowcreek Parkway and Thomas Creek Court (#2)	Thursday, May 29, 2025
Crossbow Court and Hunsberger Elementary School North Access/ Project Access Drive (A)	Thursday, May 29, 2025
Crossbow Court and Hunsberger Elementary School North Access/ Project Access Drive (B)*	-

*Volumes were extrapolated from adjacent intersections.



Source: Nearmap US, Inc. Image Date: July 2025

2500 Crossbow Court Existing Lane Configuration and Control



Legend

- # Study Area Key Intersection
- X Project Access Drive
- 25 Roadway Speed Limit
- STOP Stop Controlled Approach
- Signalized Intersection
- Existing Approach

Figure 2
Kimley»Horn



Source: Nearmap US, Inc. Image Date: July 2025

2500 Crossbow Court Existing Peak Hour Traffic Volumes

Date: December 23, 2025 - 5:15pm / User: Alex.Tong
Path: C:\Users\alex.tong\KH\Giacomin, David - Reno Civil\XXXXXX - Russell Montessori LLC\XXX - 2500 Crossbow Court\Figures\2025-12-22 2500 Crossbow Court TIS.dwg / Xref: 2023 CC MC Street Network;2023 CC CL Street Network



Crossbow Court and Hunsberger
Elementary School North Access
Peak Hour: 7:15 AM (2:45 PM)

← 5(2)	← 182(72)	← 0(1)	← 9(48)	← 225(110)
← 5(48)	← 0(26)	← 5(48)	← 9(48)	← 225(110)

Crossbow Court and Hunsberger
Elementary School South Access
Peak Hour: 7:15 AM (2:45 PM)

← 187(120)	← 49(107)	← 9(105)	← 234(158)	← 187(120)
------------	-----------	----------	------------	------------

Arrowcreek Parkway and
Crossbow Court
Peak Hour: 8:45 AM (2:45 PM)

← 26(43)	← 210(184)	← 214(232)	← 230(262)	← 1(0)
← 29(31)	← 238(257)	← 19(22)	← 273(278)	← 129(149)

Arrowcreek Parkway and
Thomas Creek Road
Peak Hour: 7:00 AM (3:00 PM)

← 11(23)	← 158(74)	← 179(69)	← 132(29)	← 225(313)
← 156(74)	← 19(22)	← 129(149)	← 156(74)	← 117(67)

Legend

- # Study Area Key Intersection
- X Project Access Drive
- ← xx (xx) AM(PM) Peak Hour Volume

Figure 3

Kimley»Horn

3. FUTURE CONDITIONS

This section of the report details the conditions that are expected in the future.

3.1. Background Lane Configuration and Control

Expected speed limits, lane configuration, and traffic control in the 2027 background scenario is illustrated in **Figure 4**.

3.2. Background Traffic Growth

To accurately determine the impact of project traffic, it is necessary to establish future baseline traffic volumes along roadways in the vicinity of the proposed development site. An annual growth rate of 0.21% was obtained from the evaluation of three NDOT count stations (0310590, 0311180, 0311090, and 0311091). Two count stations were located on Arrowcreek Parkway, one count station was located on Thomas Creek Road, and one count station was located on Mount Rose Highway (SR-431). Detailed growth calculations are included in **Appendix B**.

To provide conservative analysis, the existing year peak hour traffic volumes were grown for two years at a 0.21% annual growth rate to obtain future background traffic volumes in 2027 when the proposed development is anticipated to be fully completed. The 2027 background peak hour traffic volumes at the key intersections are illustrated in **Figure 5**.

3.3. Background Plus Project Lane Configuration and Control

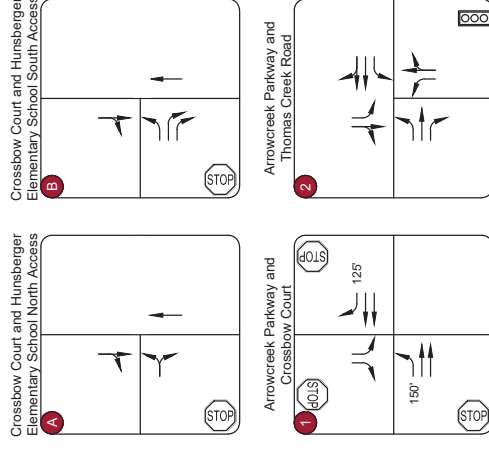
Regional access to the project site is expected to be provided by Interstate 580 (I-580) and Mount Rose Highway (SR-431). Primary access to the project site is anticipated to be from Crossbow Court. Direct access to the project sites is anticipated from two project access driveways off Crossbow Court.

Expected speed limits, lane configuration, and traffic control for the 2027 background plus project scenario are illustrated in **Figure 6**.



Source: Nearmap US, Inc. Image Date: July 2025

2500 Crossbow Court Background Lane Configuration and Control



Legend

- # Study Area Key Intersection
- X Project Access Drive
- 25 Roadway Speed Limit
- STOP Stop Controlled Approach
- Signalized Intersection
- Existing Approach
- Background Improvement (by others)

Figure 4
Kimley»Horn



Project Location

Source: Nearmap US, Inc. Image Date: July 2025

2500 Crossbow Court Background Peak Hour Traffic Volumes



A Crossbow Court and Hunsberger Elementary School North Access

9(48) ←	226(110) ←
0(26) ←	5(48) ←
0(1) ←	183(72) ←
5(2) ←	

B Crossbow Court and Hunsberger Elementary School South Access

49(107) ←	9(105) ←
188(121) ←	235(159) ←

1 Arrowcreek Parkway and Crossbow Court

26(43) ←	21(185) ←
29(31) ←	231(263) ←
239(258) ←	1(0) ←

2 Arrowcreek Parkway and Thomas Creek Road

11(23) ←	159(74) ←
180(69) ←	133(29) ←
156(142) ←	228(314) ←
130(150) ←	53(87) ←
19(22) ←	76(93) ←
274(279) ←	117(67) ←

Legend

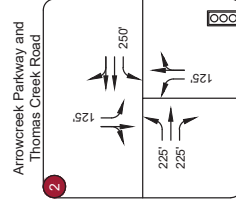
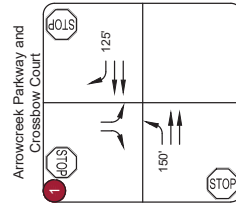
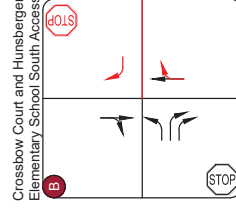
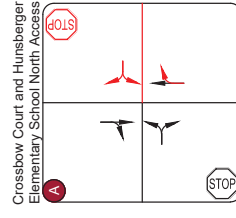
- # Study Area Key Intersection
- X Project Access Drive
- ← xx (xx) AM(PM) Peak Hour Volume

Figure 5
Kimley»Horn



Source: Nearmap US, Inc. Image Date: July 2025

2500 Crossbow Court Background + Project Lane Configuration and Control



Legend

- # Study Area Key Intersection
- X Project Access Drive
- 25 Roadway Speed Limit
- STOP Stop Controlled Approach
- Signalized Intersection
- Existing Approach
- STOP Project Improvement

Figure 6
Kimley»Horn

3.4. Project Trip Generation

To estimate the number of new trips anticipated to be generated by the proposed Montessori school, sandwich/coffee shop, and pediatric dentist, the Institute of Transportation Engineers (ITE) *Trip Generation Manual*, 12th edition was used. The ITE *Trip Generation Manual* is a standard reference used by jurisdictions throughout the country and is based on actual trip generation studies performed at numerous locations in areas of various populations.

The *Trip Generation Manual* does not have a specific land use for a Montessori school; however the operations of a Montessori school are very similar in nature to that of a day care center. The *Trip Generation Manual* has a land use called Day Care Center and defines it as “a facility where care for preschool children is provided, normally during daytime hours. A day care facility generally includes classrooms, offices, eating areas, and playgrounds. A center may also provide after-school care for school-age children.” Within the *Trip Generation Manual*, a Day Care Center is designated by ITE Trip Generation Land Use Code 565.

The proposed Montessori school, sandwich/coffee shop, and pediatric dentist are anticipated to generate approximately 988 daily trips, with 88 trips anticipated to occur during the AM peak hour and 118 trips anticipated to occur during the PM peak hour. **Table 2** summarizes the estimated project trips. Calculations are provided in **Appendix C**.

Table 2 – Trip Generation

ITE Code	Description	Size	AM Peak Hour			PM Peak Hour			Daily Trips
			In	Out	Total	In	Out	Total	
720	Medical-Dental Office Building	2,400 SF	6	2	8	2	6	8	82
930	Fast Casual Restaurant	2,400 SF	3	1	4	18	16	34	542
565	Day Care Center	96 students	40	36	76	36	40	76	364
Net Total Trips			49	39	88	56	62	118	988

Source: ITE *Trip Generation Manual*, 12th Edition

3.5. Project Trip Distribution

The study area street network characteristics, including the existing traffic patterns, expected street network, and access to regional facilities (I-580 and SR-431) were used to determine the distribution of site generated traffic. The directional distribution of traffic is a means to quantify the percentage of site-generated traffic that approaches the site from a given direction and departs the site in the same or different direction. **Figure 7** shows the project trip distribution at the study area intersections.

3.6. Traffic Assignment

Project traffic assignment was obtained by applying the project trip distribution from **Figure 7** to the estimated traffic generation of the development shown in **Table 2**. Project traffic assignment is illustrated in **Figure 8** for the study area intersections.

The entering and exiting trips generated by the proposed development are rounded to the nearest whole number when assigned. Therefore, the number of trips assigned may differ slightly from the total trip generation.

3.7. Project Buildout Traffic Volumes

The project generated traffic volumes in **Figure 8** were added to the 2027 background scenarios traffic volumes in **Figure 5**, to represent estimated traffic conditions at project completion. The 2027 background plus project peak hour traffic volumes for the study area intersections are illustrated in **Figure 9**.



Project Location



A Crossbow Court and Hunsberger Elementary School North Access

	← 0% (100%)	↖ 50% (0%)

B Crossbow Court and Hunsberger Elementary School South Access

	→ 0% (100%)	↖ 50% (0%)
		↖ 50% (0%)

1 Arrowcreek Parkway and Crossbow Court

↖ 10% (10%)	↖ 0% (90%)	↖ 90% (0%)

2 Arrowcreek Parkway and Thomas Creek Road

↖ 15% (0%)	↖ 0% (15%)	↖ 0% (50%)
	↖ 0% (25%)	↖ 25% (0%)

Legend

- # Study Area Key Intersection
- X Project Access Drive
- ←-XX%-> Global Peak Hour Trip Distribution
- ←-xxx(yyy)-> IN(OUT) Peak Hour Trip Distribution

Figure 7

Kimley»Horn

Source: Nearmap US, Inc. Image Date: July 2025

2500 Crossbow Court Project Trip Distribution



Project Location

Source: Nearmap US, Inc. Image Date: July 2025

2500 Crossbow Court Project Traffic Assignment



Crossbow Court and Hunsberger
Elementary School North Access

A		39(62)	25(28)
		↙	↘

Crossbow Court and Hunsberger
Elementary School South Access

B	39(62)		25(28)
	↙	↘	

Arrowcreek Parkway and
Crossbow Court

1	4(6)	5(6)	
	↙	↘	
	35(56)	44(50)	

Arrowcreek Parkway and
Thomas Creek Road

2	7(8)	6(9)	12(14)
	↙	↘	↘
		20(31)	25(28)

Legend

- # Study Area Key Intersection
- X Project Access Drive
- ← xx (xx) AM(PM) Peak Hour Volume

Figure 8
Kimley»Horn



Source: Nearmap US, Inc. Image Date: July 2025

2500 Crossbow Court Background + Project Peak Hour Traffic Volumes



A Crossbow Court and Hunsberger
Elementary School North Access

5(2)	33(72)	0(1)	131(48)	39(62)
42(48)	4(26)	16(110)	25(28)	

B Crossbow Court and Hunsberger
Elementary School South Access

102(107)	114(183)	97(105)	172(187)	25(28)

1 Arrowcreek Parkway and
Crossbow Court

30(49)	246(241)	259(283)	231(263)	1(0)
34(37)				
239(258)				

2 Arrowcreek Parkway and
Thomas Creek Road

18(31)	159(74)	180(69)	133(29)	251(342)	53(87)
25(31)	294(310)	140(166)	168(156)	117(67)	76(93)

Legend

- # Study Area Key Intersection
- X Project Access Drive
- ← xx (xx) AM(PM) Peak Hour Volume

Figure 9

Kimley»Horn

4. TRAFFIC IMPACT ANALYSIS

Traffic analyses for existing, background, and background plus project scenarios were conducted at the identified key intersections to determine possible existing and/or future deficiencies in the street network.

4.1. Analysis Methodology

Study area intersections were analyzed based on the average total delay for signalized and unsignalized intersections presented in the Transportation Research Board's *Highway Capacity Manual*, 7th Edition (HCM 7). For unsignalized intersections, the level of service (LOS) for two-way stop-control is determined by the computed or measured control delay and is defined for each minor movement. LOS for a two-way stop-controlled intersection is not defined for the intersection as a whole. LOS for signalized and four-way stop-controlled intersections can be defined for the whole intersection. **Table 3** shows the LOS criteria for motorized vehicle modes at intersections.

Table 3 – Level of Service Criteria

Level of Service	Signalized Intersection Average Control Delay (sec/veh)	Unsignalized Intersection Average Total Delay (sec/veh)
A	≤10	≤10
B	>10 and ≤20	>10 and ≤15
C	>20 and ≤35	>15 and ≤25
D	>35 and ≤55	>25 and ≤35
E	>55 and ≤80	>35 and ≤50
F	>80	>50

Source: *Highway Capacity Manual*, 7th Edition, Transportation Research Board.

Synchro 12 was used to analyze the study area's intersections and driveways for LOS. Synchro is an interactive computer program that enables planners and engineers to conduct traffic operations analysis (capacity and level of service). It utilizes the HCM 7 methodology to analyze intersection delay and LOS. It should be noted that HCM 7 does not support more than one exclusive lane on turning movements as seen with the dual-right-turn movements at the intersection of Crossbow Court and Hunsberger Elementary School South Access/Project Access (B). The LOS for this intersection will be reported using HCM 2000.

4.1.1. Peak Hour Factor Adjustment

The existing study intersections experience a highly peaked, school-related traffic pattern, particularly during the AM peak hour. Peak Hour Factor (PHF) describes how traffic demand is distributed within the busiest hour, with lower values indicating that a larger share of traffic occurs during a limited portion of that hour rather than being evenly spread throughout. Since analysis for this study was performed during adjacent school peak hours, the intersections analyzed in this study have lower PHFs than that of typical intersections across the area during peak hours. Unlike a school, the proposed development generates traffic that is more evenly distributed across the peak hour, consistent with a PHF of approximately 0.92. Accordingly, PHFs for the 2027 background plus project scenarios were calculated using a volume-weighted approach to reflect the differing traffic patterns associated with the local schools compared to the proposed development. Because the project traffic represents a relatively small proportion of total peak-

hour volumes dominated by school traffic, the volume-weighted PHF increases are modest. The PHFs applied in the operational analysis are shown in the 2027 background plus project PHF column in **Table 4**.

Table 4 –Key Intersection Peak Hour Factor Adjustment

Intersection	2025 Existing PHF		2027 Background Plus Project PHF	
	AM	PM	AM	PM
Arrowcreek Parkway and Crossbow Court (#1)	0.53	0.83	0.58	0.85
Arrowcreek Parkway and Thomas Creek Court (#2)	0.53	0.83	0.57	0.85
Crossbow Court and Hunsberger Elementary School North Access/ Project Access Drive (A)	0.67	0.84	0.69	0.85
Crossbow Court and Hunsberger Elementary School South Access/ Project Access Drive (B)	0.73	0.67	0.74	0.68

4.2. Intersection Operational Analysis

Calculations for the LOS at the study intersections are provided in **Appendix D**. The 2025 existing scenario analysis is based on the lane geometry and intersection control shown in **Figure 2**. The 2027 background scenarios analyses are based on the lane geometry and intersection control shown in **Figure 4**. The 2027 background plus project scenario analyses are based on the lane geometry and intersection control shown in **Figure 6**. The results of the Key Intersection LOS Analysis for existing and horizon year conditions are summarized in **Table 5**. The results of the project access drive LOS Analysis are summarized in **Table 6**.

Table 5 –Key Intersection Peak Hour LOS Analysis

Intersection	2025 Existing		2027 Background		2027 Background Plus Project	
	AM	PM	AM	PM	AM	PM
	Delay (LOS)	Delay (LOS)	Delay (LOS)	Delay (LOS)	Delay (LOS)	Delay (LOS)
Arrowcreek Parkway and Crossbow Court (#1) All-Way Stop Control	15.2 (C)	11.2 (B)	15.3 (C)	11.3 (B)	18.3 (C)	13.3 (B)
Arrowcreek Parkway and Thomas Creek Court (#2) Signalized	27.0 (C)	24.7 (C)	27.0 (C)	24.4 (C)	27.9 (C)	24.3 (C)

The key intersections are expected to operate at acceptable LOS (as defined by Washoe County) under 2025 existing, 2027 background, and 2027 background plus project scenarios

4.3. Project Access Operational Analysis

Calculations for the LOS at the study intersections are provided in **Appendix E**. The 2027 and background plus project analyses are based on the lane configuration and intersection control shown in **Figure 6**. The analysis is based on traffic volumes shown in **Figure 9**. The results of the LOS analysis for the intersection of Crossbow Court and Project Access Drive A and B are presented in **Table 6**.

Table 6 – Project Access Drive Peak Hour LOS Analysis

Intersection	2025 Existing		2027 Background		2027 Plus Project	
	AM	PM	AM	PM	AM	PM
	Delay (LOS)	Delay (LOS)	Delay (LOS)	Delay (LOS)	Delay (LOS)	Delay (LOS)
Crossbow Court and Hunsberger Elementary School North Access/ Project Access Drive (A) Two-Way Stop Control Northbound Left Eastbound Left Westbound Left	7.8 (A) 9.5 (A) -	7.5 (A) 9.9 (A) -	7.8 (A) 9.5 (A) -	7.5 (A) 9.9 (A) -	7.7 (A) 9.5 (A) 17.9 (C)	7.5 (A) 10.1 (B) 12.6 (B)
Crossbow Court and Hunsberger Elementary School South Access/ Project Access Drive (B) Two-Way Stop Control (Right-In/Right-Out Only) Eastbound Right Northbound Left	9.8 (A) 3.9 (A)	9.3 (A) 3.6 (A)	9.8 (A) 3.8 (A)	9.3 (A) 3.6 (A)	10.1 (B) 3.5 (A)	9.7 (A) 3.2 (A)

The project access driveways are expected to operate at acceptable LOS (as defined by Washoe County) under 2025 existing, 2027 background, and 2027 background plus project scenarios

4.4. Queuing Analysis

A queuing analysis was conducted at the study area intersections and project access drives to analyze project impacts to the existing queues on the network. The analysis was conducted using HCM 7 to obtain the 95th percentile queue for unsignalized intersections. The results are summarized in **Table 7**. The queuing reports for all intersections can be found within the LOS reports in **Appendix D** and **Appendix E**.

The left turn storage bay calculations include AM and PM peak volumes. The existing storage bays have adequate length to serve 2027 background and 2027 background plus project conditions during both the AM and PM peak hours with the exception of the following:

- The southbound left-turn lane at Arrowcreek Parkway and Thomas Creek Court (#2) in the 2027 background AM and 2027 background plus project AM scenarios.

It should be noted that the southbound left-turn vehicle queues at the intersection of Arrowcreek Parkway and Thomas Creek Court (#2) are associated with the parent drop-off egress at Marce Herz Middle School. Project generated traffic is not anticipated to impact this movement.

Table 7 – Queueing Analysis

Intersection	Storage Provided	2027 Background Queue (ft)		2027 Background Plus Project Queue (ft)	
		AM	PM	AM	PM
Arrowcreek Parkway and Crossbow Court (#1)					
Two-Way Stop Control					
Eastbound Left	150'	<25'	<25'	<25'	<25'
Westbound Right	125'	50'	33'	73'	50'
Southbound Left	Continuous	128'	58'	178'	95'
Southbound Right	Continuous	<25'	<25'	<25'	<25'
Arrowcreek Parkway and Thomas Creek Court (#2)					
Signalized					
Eastbound Left	225'	<25'	25'	28'	<25'
Westbound Left	250'	63'	83'	63'	80'
Northbound Left	125'	113'	110'	125'	123'
Southbound Left	125'	135'	60'	140'	60'
Crossbow Court and Hunsberger Elementary School North Access/ Project Access Drive (A)					
Two-Way Stop Control					
Northbound Left	<25'	<25'	<25'	<25'	<25'
Eastbound Left/Right	<25'	<25'	<25'	<25'	<25'
Westbound Left/Right	<25'	<25'	<25'	<25'	<25'
Crossbow Court and Hunsberger Elementary School South Access/ Project Access Drive (B)					
Two-Way Stop Control					
Eastbound Right	<25'	<25'	<25'	<25'	<25'
Northbound Left	<25'	<25'	<25'	<25'	<25'

5. CRASH DATA SUMMARY

Crash data was requested for the four existing study intersections from the NDOT Safety Engineering Division for the most recently available five-year period (January 2019 - December 2023). The crash data for the study intersections is summarized in **Table 8**.

Table 8 – Crash Data Summary

Intersection Name	Total Crashes	Property Damage Only	Injury	Fatal
Arrowcreek Parkway and Crossbow Court (#1)	3 (100%)	2 (67%)	1 (33%)	0 (0%)
Arrowcreek Parkway and Thomas Creek Court (#2)	8 (100%)	4 (50%)	4 (50%)	0 (0%)
Crossbow Court and Hunsberger Elementary School North Access/ Project Access Drive (A)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Crossbow Court and Hunsberger Elementary School South Access/ Project Access Drive (B)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Total	11 (100%)	6 (55%)	5 (45%)	0 (0%)

A total of 11 crashes were recorded at the study intersections in the most recently available five-year period. The 11 crashes resulted in six property damage only crash (55%) and five crashes resulted in an injury crash (45%). No fatal crashes were reported for the two existing study intersections.

6. CONCLUSIONS/RECOMMENDATIONS

The proposed development is anticipated to generate traffic volumes resulting in the following recommendations:

- An R7-1 “NO PARKING ANY TIME” should be installed along the project frontage along Crossbow Court.
- Provide a marked pedestrian crosswalk across Crossbow Court at the intersection of Crossbow Court and Hunsberger Elementary School North Access/Project Access Drive (A), consistent with Washoe County standards and the Manual on Uniform Traffic Control Devices (MUTCD).
- Install ADA-compliant pedestrian curb ramps at the crosswalk termini in accordance with applicable ADA accessibility requirements and Washoe County standards.
- An R1-1 “STOP” sign with appropriate pavement markings should be installed for the westbound egress at the project access drives.
- All on-site and off-site signing and striping improvements should be incorporated into the Civil Drawings and conform to the current MUTCD, as applicable.

APPENDIX A

COUNT DATA

Arrowcreek Parkway and Crossbow Court - TMC

Thu May 29, 2025

Full Length (12 AM-12 AM (+1))

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)

All Movements

ID: 1304419, Location: 39.404869, -119.799365

Provided by: Kimley-Horn and Associates, Inc.

767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US

Leg Direction	Crossbow Court Southbound					Arrowcreek Parkway Eastbound					Arrowcreek Parkway Westbound					
Time	R	L	U	App	Ped*	T	L	U	App	Ped*	R	T	U	App	Ped*	Int
2025-05-29 12:00AM	0	0	0	0	0	1	0	0	1	0	0	2	0	2	0	3
12:15AM	0	0	0	0	0	2	0	0	2	0	0	3	0	3	0	5
12:30AM	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1
12:45AM	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	2
Hourly Total	0	0	0	0	0	4	0	0	4	0	0	7	0	7	0	11
1:00AM	0	0	0	0	0	0	0	0	0	0	0	3	0	3	0	3
1:15AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	0	0	0	0	0	0	0	0	0	3	0	3	0	3
2:00AM	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	1
2:15AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:30AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	1
3:00AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15AM	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	1
3:30AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45AM	0	0	0	0	0	1	0	0	1	0	0	1	0	1	0	2
Hourly Total	0	0	0	0	0	1	0	0	1	0	0	2	0	2	0	3
4:00AM	0	0	0	0	0	2	0	0	2	0	0	1	0	1	0	3
4:15AM	0	0	0	0	0	3	0	0	3	0	0	0	0	0	0	3
4:30AM	0	0	0	0	0	3	0	0	3	0	0	2	0	2	0	5
4:45AM	0	0	0	0	0	6	0	0	6	0	0	5	0	5	0	11
Hourly Total	0	0	0	0	0	14	0	0	14	0	0	8	0	8	0	22
5:00AM	1	2	0	3	0	4	0	0	4	0	1	3	0	4	0	11
5:15AM	0	0	0	0	0	5	0	0	5	0	0	7	0	7	0	12
5:30AM	0	0	0	0	0	12	0	0	12	0	0	18	0	18	0	30
5:45AM	0	0	0	0	0	11	0	0	11	0	1	18	0	19	0	30
Hourly Total	1	2	0	3	0	32	0	0	32	0	2	46	0	48	0	83
6:00AM	0	0	0	0	0	14	0	0	14	0	0	8	0	8	0	22
6:15AM	0	0	0	0	1	13	0	0	13	1	0	4	0	4	0	17
6:30AM	0	0	0	0	0	20	1	0	21	0	1	16	0	17	0	38
6:45AM	1	0	0	1	0	31	3	0	34	0	14	26	0	40	0	75
Hourly Total	1	0	0	1	1	78	4	0	82	1	15	54	0	69	0	152
7:00AM	0	57	0	57	4	35	9	0	44	3	58	36	0	94	0	195
7:15AM	4	105	0	109	7	36	11	0	47	1	100	31	2	133	0	289
7:30AM	3	19	0	22	0	77	1	0	78	0	17	33	0	50	0	150
7:45AM	0	29	0	29	0	62	4	0	66	0	42	54	0	96	0	191
Hourly Total	7	210	0	217	11	210	25	0	235	4	217	154	2	373	0	825
8:00AM	7	48	0	55	0	50	11	0	61	0	79	58	0	137	0	253
8:15AM	2	24	0	26	0	60	1	0	61	0	30	60	0	90	0	177
8:30AM	0	17	0	17	1	61	0	0	61	3	13	46	0	59	0	137
8:45AM	1	7	0	8	2	57	0	0	57	1	30	66	0	96	0	161
Hourly Total	10	96	0	106	3	228	12	0	240	4	152	230	0	382	0	728
9:00AM	4	51	0	55	3	61	15	0	76	2	83	51	0	134	0	265
9:15AM	17	118	0	135	1	51	10	0	61	3	95	60	1	156	0	352
9:30AM	4	34	0	38	1	69	4	0	73	1	6	53	0	59	0	170
9:45AM	2	3	0	5	0	54	0	0	54	0	6	58	0	64	0	123
Hourly Total	27	206	0	233	5	235	29	0	264	6	190	222	1	413	0	910
10:00AM	2	3	0	5	1	61	0	0	61	0	6	58	1	65	0	131
10:15AM	0	4	0	4	0	59	0	1	60	0	4	46	0	50	0	114
10:30AM	0	2	0	2	0	55	0	0	55	0	5	68	0	73	0	130

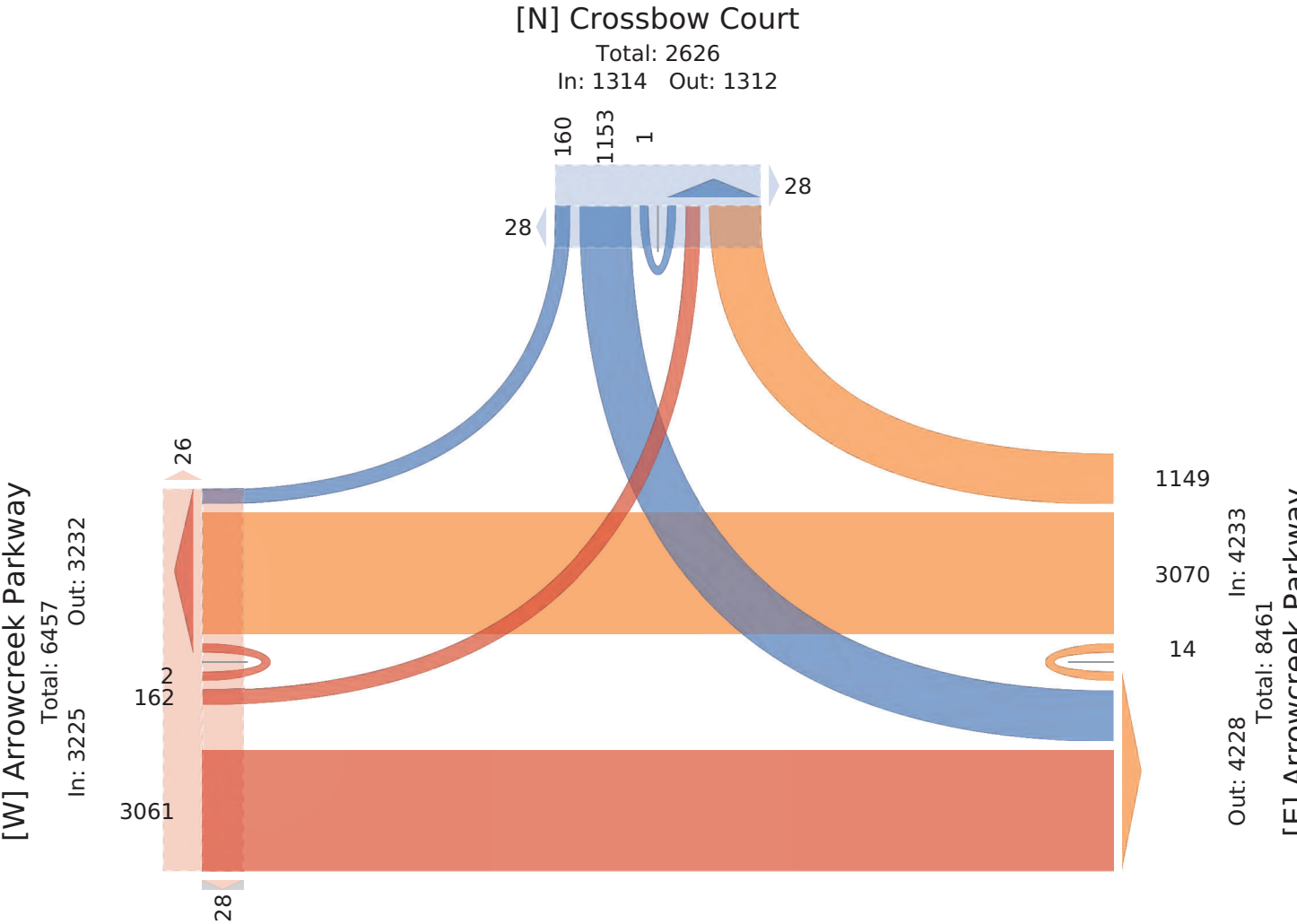
Leg Direction	Crossbow Court Southbound					Arrowcreek Parkway Eastbound					Arrowcreek Parkway Westbound					
Time	R	L	U	App	Ped*	T	L	U	App	Ped*	R	T	U	App	Ped*	Int
10:45AM	2	7	0	9	0	63	0	0	63	0	3	55	0	58	0	130
Hourly Total	4	16	0	20	1	238	0	1	239	0	18	227	1	246	0	505
11:00AM	1	3	0	4	0	75	0	0	75	0	7	51	0	58	0	137
11:15AM	0	5	0	5	2	55	1	0	56	0	6	40	0	46	0	107
11:30AM	0	4	0	4	3	62	0	0	62	0	2	51	0	53	0	119
11:45AM	0	2	0	2	0	64	0	0	64	0	6	59	0	65	0	131
Hourly Total	1	14	0	15	5	256	1	0	257	0	21	201	0	222	0	494
12:00PM	1	6	0	7	0	54	1	0	55	0	0	58	1	59	0	121
12:15PM	1	4	0	5	0	57	1	0	58	0	4	63	0	67	0	130
12:30PM	2	5	0	7	0	49	1	0	50	0	8	63	1	72	0	129
12:45PM	0	3	0	3	0	54	0	0	54	0	1	58	0	59	0	116
Hourly Total	4	18	0	22	0	214	3	0	217	0	13	242	2	257	0	496
1:00PM	0	0	0	0	0	62	0	0	62	0	6	51	0	57	0	119
1:15PM	0	7	0	7	0	60	0	0	60	0	6	56	1	63	0	130
1:30PM	1	6	0	7	0	66	2	0	68	0	21	50	0	71	0	146
1:45PM	3	4	0	7	0	63	5	0	68	0	23	55	0	78	0	153
Hourly Total	4	17	0	21	0	251	7	0	258	0	56	212	1	269	0	548
2:00PM	11	91	0	102	9	75	4	1	80	3	17	49	0	66	0	248
2:15PM	2	15	0	17	0	63	0	0	63	0	9	52	0	61	0	141
2:30PM	0	5	0	5	0	61	6	0	67	0	13	66	0	79	0	151
2:45PM	3	5	0	8	2	61	7	0	68	2	27	72	0	99	0	175
Hourly Total	16	116	0	132	11	260	17	1	278	5	66	239	0	305	0	715
3:00PM	4	11	0	15	6	61	12	0	73	0	90	51	0	141	0	229
3:15PM	9	63	0	72	2	54	10	0	64	2	99	70	0	169	0	305
3:30PM	27	105	0	132	1	81	2	0	83	19	16	69	0	85	0	300
3:45PM	1	22	0	23	0	65	1	0	66	0	6	77	0	83	0	172
Hourly Total	41	201	0	242	9	261	25	0	286	21	211	267	0	478	0	1006
4:00PM	0	24	0	24	2	71	1	0	72	0	11	56	0	67	0	163
4:15PM	3	20	0	23	0	65	3	0	68	2	14	58	0	72	0	163
4:30PM	2	15	0	17	0	67	1	0	68	2	14	60	1	75	0	160
4:45PM	3	20	0	23	0	60	8	0	68	0	14	53	0	67	0	158
Hourly Total	8	79	0	87	2	263	13	0	276	4	53	227	1	281	0	644
5:00PM	10	24	0	34	0	58	2	0	60	3	13	48	2	63	0	157
5:15PM	2	15	0	17	0	52	1	0	53	0	18	60	0	78	0	148
5:30PM	1	13	0	14	1	40	4	0	44	0	17	64	0	81	0	139
5:45PM	1	6	0	7	0	38	4	0	42	0	12	50	2	64	0	113
Hourly Total	14	58	0	72	1	188	11	0	199	3	60	222	4	286	0	557
6:00PM	2	4	0	6	0	23	3	0	26	0	8	48	1	57	0	89
6:15PM	0	12	0	12	1	31	2	0	33	3	17	36	0	53	0	98
6:30PM	2	19	0	21	1	27	2	0	29	0	18	34	0	52	0	102
6:45PM	4	20	0	24	0	28	5	0	33	0	18	33	1	52	0	109
Hourly Total	8	55	0	63	2	109	12	0	121	3	61	151	2	214	0	398
7:00PM	0	4	0	4	4	30	2	0	32	3	2	32	0	34	0	70
7:15PM	3	7	0	10	0	19	0	0	19	0	1	29	0	30	0	59
7:30PM	0	0	0	0	0	13	0	0	13	0	2	28	0	30	0	43
7:45PM	1	0	0	1	0	15	1	0	16	0	3	29	0	32	0	49
Hourly Total	4	11	0	15	4	77	3	0	80	3	8	118	0	126	0	221
8:00PM	1	8	0	9	0	28	0	0	28	0	0	32	0	32	0	69
8:15PM	0	1	0	1	0	15	0	0	15	0	2	26	0	28	0	44
8:30PM	0	3	0	3	1	15	0	0	15	0	1	24	0	25	0	43
8:45PM	1	10	0	11	0	20	0	0	20	0	1	35	0	36	0	67
Hourly Total	2	22	0	24	1	78	0	0	78	0	4	117	0	121	0	223
9:00PM	2	5	1	8	0	13	0	0	13	0	0	27	0	27	0	48
9:15PM	4	17	0	21	0	14	0	0	14	0	0	19	0	19	0	54
9:30PM	1	3	0	4	0	10	0	0	10	0	0	16	0	16	0	30
9:45PM	0	0	0	0	0	9	0	0	9	0	0	14	0	14	0	23
Hourly Total	7	25	1	33	0	46	0	0	46	0	0	76	0	76	0	155
10:00PM	0	1	0	1	0	8	0	0	8	0	0	7	0	7	0	16
10:15PM	0	0	0	0	0	1	0	0	1	0	0	9	0	9	0	10
10:30PM	0	0	0	0	0	1	0	0	1	0	0	7	0	7	0	8

Leg Direction	Crossbow Court Southbound					Arrowcreek Parkway Eastbound					Arrowcreek Parkway Westbound					
Time	R	L	U	App	Ped*	T	L	U	App	Ped*	R	T	U	App	Ped*	Int
10:45PM	0	1	0	1	0	4	0	0	4	0	0	5	0	5	0	10
Hourly Total	0	2	0	2	0	14	0	0	14	0	0	28	0	28	0	44
11:00PM	0	1	0	1	0	0	0	0	0	0	1	5	0	6	0	7
11:15PM	0	0	0	0	0	1	0	0	1	0	0	2	0	2	0	3
11:30PM	0	2	0	2	0	0	0	0	0	0	1	6	0	7	0	9
11:45PM	1	2	0	3	0	3	0	0	3	0	0	3	0	3	0	9
Hourly Total	1	5	0	6	0	4	0	0	4	0	2	16	0	18	0	28
Total	160	1153	1	1314	56	3061	162	2	3225	54	1149	3070	14	4233	0	8772
% Approach	12.2%	87.7%	0.1%	-	-	94.9%	5.0%	0.1%	-	-	27.1%	72.5%	0.3%	-	-	-
% Total	1.8%	13.1%	0%	15.0%	-	34.9%	1.8%	0%	36.8%	-	13.1%	35.0%	0.2%	48.3%	-	-
Lights	152	1137	1	1290	-	2986	158	2	3146	-	1114	3006	13	4133	-	8569
% Lights	95.0%	98.6%	100%	98.2%	-	97.5%	97.5%	100%	97.6%	-	97.0%	97.9%	92.9%	97.6%	-	97.7%
Articulated Trucks	0	0	0	0	-	11	0	0	11	-	0	10	0	10	-	21
% Articulated Trucks	0%	0%	0%	0%	-	0.4%	0%	0%	0.3%	-	0%	0.3%	0%	0.2%	-	0.2%
Buses and Single-Unit Trucks	5	16	0	21	-	59	4	0	63	-	35	48	1	84	-	168
% Buses and Single-Unit Trucks	3.1%	1.4%	0%	1.6%	-	1.9%	2.5%	0%	2.0%	-	3.0%	1.6%	7.1%	2.0%	-	1.9%
Bicycles on Road	3	0	0	3	-	5	0	0	5	-	0	6	0	6	-	14
% Bicycles on Road	1.9%	0%	0%	0.2%	-	0.2%	0%	0%	0.2%	-	0%	0.2%	0%	0.1%	-	0.2%
Pedestrians	-	-	-	-	28	-	-	-	-	39	-	-	-	-	0	
% Pedestrians	-	-	-	-	50.0%	-	-	-	-	72.2%	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	28	-	-	-	-	15	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	50.0%	-	-	-	-	27.8%	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Arrowcreek Parkway and Crossbow Court - TMC
 Thu May 29, 2025
 Full Length (12 AM-12 AM (+1))
 All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
 All Movements
 ID: 1304419, Location: 39.404869, -119.799365

Provided by: Kimley-Horn and
 Associates, Inc.
 767 Eustis Street, Suite 100,
 Saint Paul, MN, 55114, US



Arrowcreek Parkway and Crossbow Court - TMC

Thu May 29, 2025

AM Peak (8:45 AM - 9:45 AM)

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)

All Movements

ID: 1304419, Location: 39.404869, -119.799365

Provided by: Kimley-Horn and

Associates, Inc.

767 Eustis Street, Suite 100,

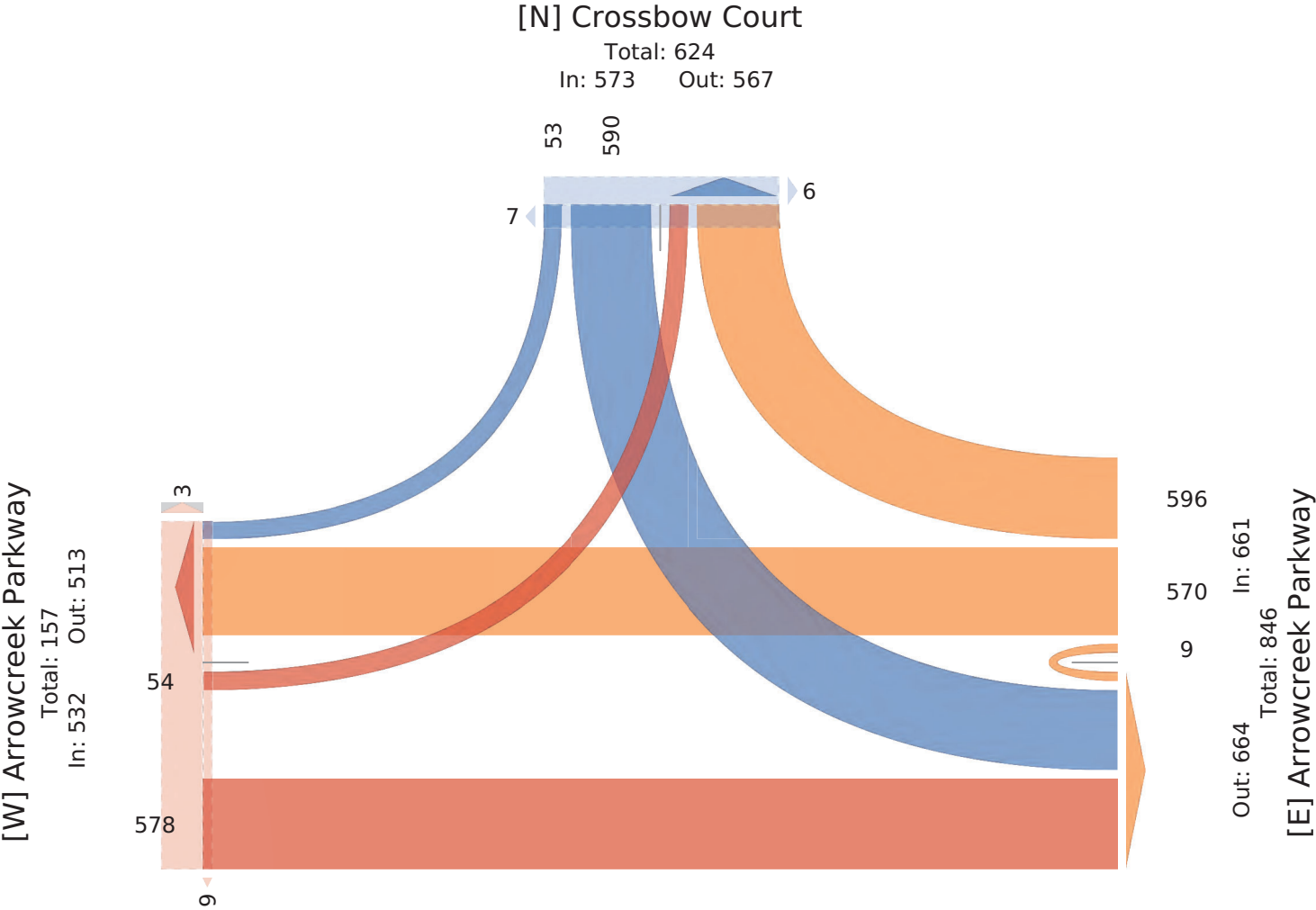
Saint Paul, MN, 55114, US

Leg Direction	Crossbow Court Southbound					Arrowcreek Parkway Eastbound					Arrowcreek Parkway Westbound					
Time	R	L	U	App	Ped*	T	L	U	App	Ped*	R	T	U	App	Ped*	Int
2025-05-29 8:45AM	1	7	0	8	2	57	0	0	57	1	30	66	0	96	0	161
9:00AM	4	51	0	55	3	61	15	0	76	2	83	51	0	134	0	265
9:15AM	17	118	0	135	1	51	10	0	61	3	95	60	1	156	0	352
9:30AM	4	34	0	38	1	69	4	0	73	1	6	53	0	59	0	170
Total	26	210	0	236	7	238	29	0	267	7	214	230	1	445	0	948
% Approach	11.0%	89.0%	0%	-	-	89.1%	10.9%	0%	-	-	48.1%	51.7%	0.2%	-	-	-
% Total	2.7%	22.2%	0%	24.9%	-	25.1%	3.1%	0%	28.2%	-	22.6%	24.3%	0.1%	46.9%	-	-
PHF	0.382	0.445	-	0.437	-	0.862	0.483	-	0.878	-	0.563	0.891	0.250	0.710	-	0.672
Lights	25	202	0	227	-	235	28	0	263	-	208	226	1	435	-	925
% Lights	96.2%	96.2%	0%	96.2%	-	98.7%	96.6%	0%	98.5%	-	97.2%	98.3%	100%	97.8%	-	97.6%
Articulated Trucks	0	0	0	0	-	0	0	0	0	-	0	1	0	1	-	1
% Articulated Trucks	0%	0%	0%	0%	-	0%	0%	0%	0%	-	0%	0.4%	0%	0.2%	-	0.1%
Buses and Single-Unit Trucks	1	8	0	9	-	3	1	0	4	-	6	1	0	7	-	20
% Buses and Single-Unit Trucks	3.8%	3.8%	0%	3.8%	-	1.3%	3.4%	0%	1.5%	-	2.8%	0.4%	0%	1.6%	-	2.1%
Bicycles on Road	0	0	0	0	-	0	0	0	0	-	0	2	0	2	-	2
% Bicycles on Road	0%	0%	0%	0%	-	0%	0%	0%	0%	-	0%	0.9%	0%	0.4%	-	0.2%
Pedestrians	-	-	-	-	6	-	-	-	-	7	-	-	-	-	0	-
% Pedestrians	-	-	-	-	85.7%	-	-	-	-	100%	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	1	-	-	-	-	0	-	-	-	-	0	-
% Bicycles on Crosswalk	-	-	-	-	14.3%	-	-	-	-	0%	-	-	-	-	-	-

* Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Arrowcreek Parkway and Crossbow Court - TMC
 Thu May 29, 2025
 AM Peak (8:45 AM - 9:45 AM)
 All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
 All Movements
 ID: 1304419, Location: 39.404869, -119.799365

Provided by: Kimley-Horn and
 Associates, Inc.
 767 Eustis Street, Suite 100,
 Saint Paul, MN, 55114, US



Arrowcreek Parkway and Crossbow Court - TMC

Thu May 29, 2025

MAPPay eka(& eM 42 eM-

) ll Classks LAhg,) tgAulagP Ttur(s, c usks adP BAli lk4n dAgTtur(s, ekPksgAds, c Ayrllks Sd USaP, c Ayrllks Sd CtSsso al(-

) ll MSRRkwkdg

vmI : D011: 9, LSragSdi D93101. 69, 4 : 93799D65

etSRPkP byI KAwlky4HStd adP

) ssSr Ags, vdr3

767 EusgA Bgkkg BuAk : 00,

BaAlgeaul, MN, 55: : 1, n B

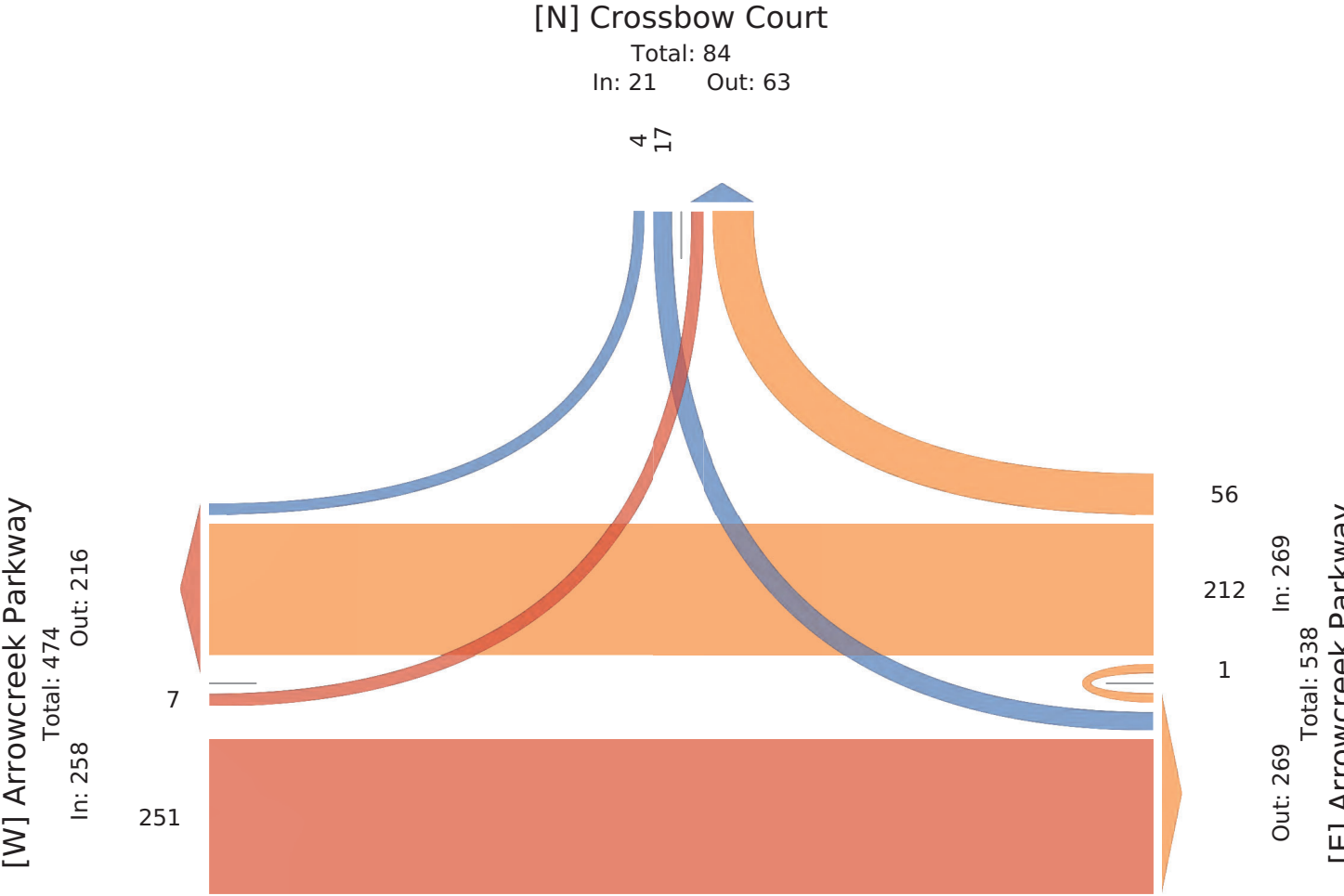
Lki mAkrgSd	CtSssbSo CSutg BSugbSudP	) ttSo rtkk(eat(o ay EasgSudP	) ttSo rtkk(eat(o ay WksghSudP	
TAvk	U L n) pp ekP*	T L n) pp ekP*	U T n) pp ekP*	vdg
20250529 : I00eM	0 0 0 0 0	62 0 0 62 0	6 5: 0 57 0	: : 9
: I: 5eM	0 7 0 7 0	60 0 0 60 0	6 56 : 6D 0	: D
: IDDeM	: 6 0 7 0	66 2 0 6. 0	2: 50 0 7: 0	: 16
: I15eM	D 1 0 7 0	6D 5 0 6. 0	2D 55 0 7. 0	: 5D
TSgl	1 : 7 0 2: 0	25: 7 0 25. 0	56 2: 2 : 269 0	51.
%) pptSarh	: 93% . : 30% 0% 4 4	973D% 23% 0% 4 4	203 % 7. 3 % 031% 4 4	4
% TSgl	03% DB % 0% DB % 4	153 % : 3D% 0% 173 % 4	: 03% D 3% 03% 193 % 4	4
eHF	03DD 0307 4 03750 4	035: 0350 4 0319 4	0309 0316 0350 03 62 4	03 95
LAhg	1 : 7 0 2: 4	21D 7 0 250 4	17 20. 0 255 4	526
% LAhg	: 00% : 00% 0% : 00% 4	963 % : 00% 0% 963% 4	. DB% 9. 3 % 0% 913 % 4	963%
) tgAulagP Ttur(s	0 0 0 0 4	2 0 0 2 4	0 0 0 0 4	2
%) tgAulagP Ttur(s	0% 0% 0% 0% 4	03 % 0% 0% 03 % 4	0% 0% 0% 0% 4	03%
c usks adP BAli lk4n dAgTtur(s	0 0 0 0 4	6 0 0 6 4	9 1 : : 1 4	20
% c usks adP BAli lk4n dAgTtur(s	0% 0% 0% 0% 4	231% 0% 0% 23D% 4	: 63 % : 3% : 00% 532% 4	D6%
c Ayrllks Sd USaP	0 0 0 0 4	0 0 0 0 4	0 0 0 0 4	0
% c Ayrllks Sd USaP	0% 0% 0% 0% 4	0% 0% 0% 0% 4	0% 0% 0% 0% 4	0%
ekPksgAds	4 4 4 4 0	4 4 4 4 0	4 4 4 4 0	
% ekPksgAds	4 4 4 4 4	4 4 4 4 4	4 4 4 4 4	4
c Ayrllks Sd CtSsso al(	4 4 4 4 0	4 4 4 4 0	4 4 4 4 0	
% c Ayrllks Sd CtSsso al(	4 4 4 4 4	4 4 4 4 4	4 4 4 4 4	4

* ekPksgAds adP c Ayrllks Sd CtSsso al(3LI Lkfg UI UAhg TI Thtu, n I n 4Tutd

Arrowcreek Parkway and Crossbow Court - TMC

Thu May 29, 2025
MAY 29, 2025
Pay eka(8 eM 42 eM-
) ll Classks 8 LAhg,) tgaulagP Ttur(s, c usks adP BAli lk4n dAgTtur(s, ekPksgAds, c Ayrllks
Sd USaP, c Ayrllks Sd CtSsso al(-
) ll MSRkwkdg
vml : D011: 9, LSragSdI D03101. 69, 4 : 93799D65

etSRPkP byI KAwlky4HStd adP
) ssSr Agks, vdr3
767 Eusga Bgkkkg BuAk : 00,
BaAlgeaul, MN, 55: : 1, n B



Arrowcreek Parkway and Crossbow Court - TMC

Thu May 29, 2025

PM Peak (2:45 PM - 3:45 PM) - Overall Peak Hour

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)

All Movements

ID: 1304419, Location: 39.404869, -119.799365

Provided by: Kimley-Horn and

Associates, Inc.

767 Eustis Street, Suite 100,

Saint Paul, MN, 55114, US

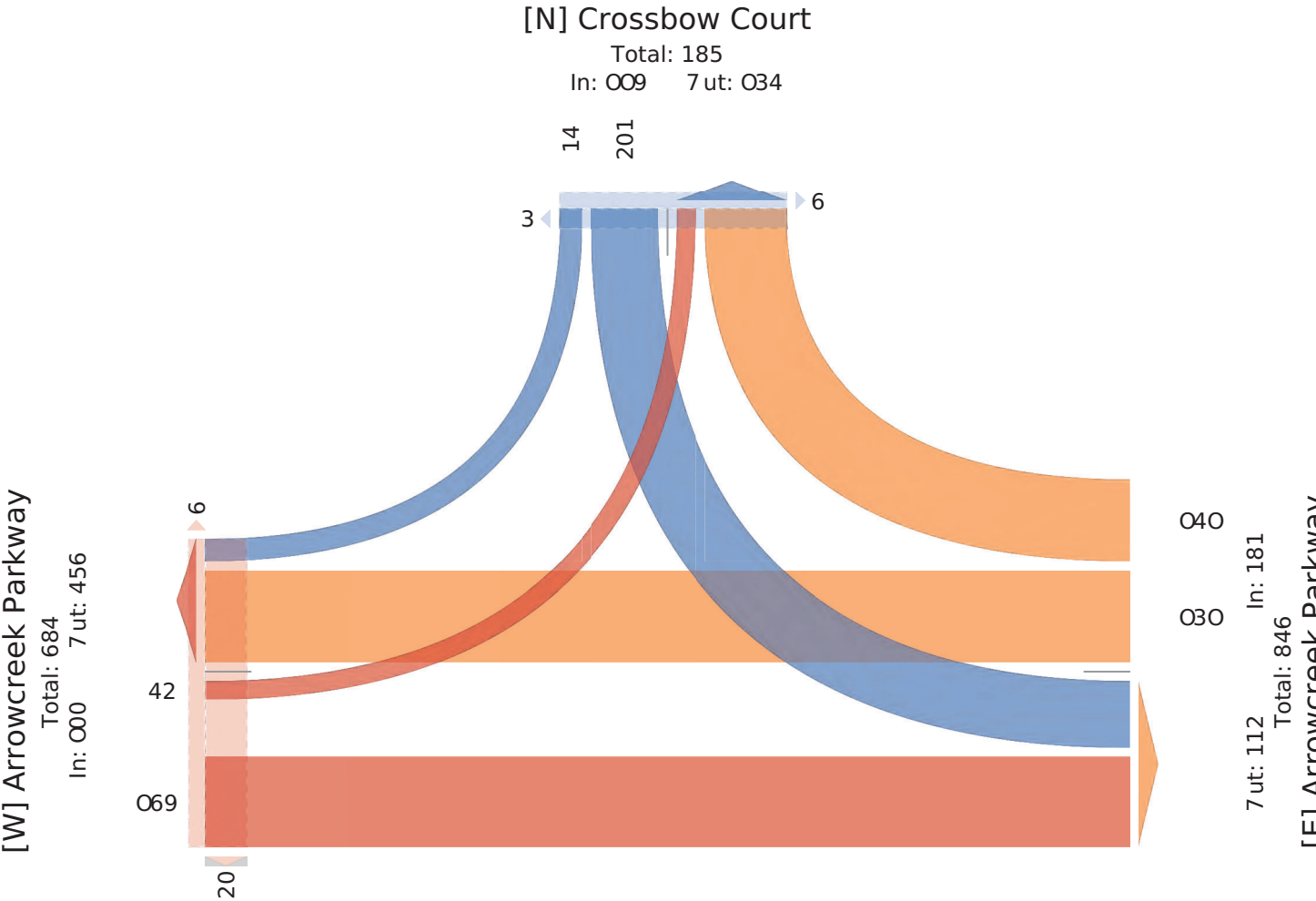
Leg Direction	Crossbow Court Southbound					Arrowcreek Parkway Eastbound					Arrowcreek Parkway Westbound					
Time	R	L	U	App	Ped*	T	L	U	App	Ped*	R	T	U	App	Ped*	Int
2025-05-29 2:45PM	3	5	0	8	2	61	7	0	68	2	27	72	0	99	0	175
3:00PM	4	11	0	15	6	61	12	0	73	0	90	51	0	141	0	229
3:15PM	9	63	0	72	2	54	10	0	64	2	99	70	0	169	0	305
3:30PM	27	105	0	132	1	81	2	0	83	19	16	69	0	85	0	300
Total	43	184	0	227	11	257	31	0	288	23	232	262	0	494	0	1009
% Approach	18.9%	81.1%	0%	-	-	89.2%	10.8%	0%	-	-	47.0%	53.0%	0%	-	-	-
% Total	4.3%	18.2%	0%	22.5%	-	25.5%	3.1%	0%	28.5%	-	23.0%	26.0%	0%	49.0%	-	-
PHF	0.398	0.438	-	0.430	-	0.793	0.646	-	0.867	-	0.586	0.910	-	0.731	-	0.827
Lights	42	178	0	220	-	244	29	0	273	-	227	254	0	481	-	974
% Lights	97.7%	96.7%	0%	96.9%	-	94.9%	93.5%	0%	94.8%	-	97.8%	96.9%	0%	97.4%	-	96.5%
Articulated Trucks	0	0	0	0	-	3	0	0	3	-	0	0	0	0	-	3
% Articulated Trucks	0%	0%	0%	0%	-	1.2%	0%	0%	1.0%	-	0%	0%	0%	0%	-	0.3%
Buses and Single-Unit Trucks	1	6	0	7	-	10	2	0	12	-	5	8	0	13	-	32
% Buses and Single-Unit Trucks	2.3%	3.3%	0%	3.1%	-	3.9%	6.5%	0%	4.2%	-	2.2%	3.1%	0%	2.6%	-	3.2%
Bicycles on Road	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0
% Bicycles on Road	0%	0%	0%	0%	-	0%	0%	0%	0%	-	0%	0%	0%	0%	-	0%
Pedestrians	-	-	-	-	10	-	-	-	-	21	-	-	-	-	0	-
% Pedestrians	-	-	-	-	90.9%	-	-	-	-	91.3%	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	1	-	-	-	-	2	-	-	-	-	0	-
% Bicycles on Crosswalk	-	-	-	-	9.1%	-	-	-	-	8.7%	-	-	-	-	-	-

* Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Arrowcreek Parkway and Crossbow Court - TMC

Thu May 29, 2025
PM Peak (2:45 PM - 3:45 PM) - Overall Peak Hour
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1304419, Location: 39.404869, -119.799365

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US



Arrowcreek Parkway and Thomas Creek Road - TMC

Thu May 29, 2025

Full Length (12 AM-12 AM (+1))

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)

All Movements

ID: 130442. , Location: 39#404. 51, -119#907. 9

Provided by: Kimley-Horn and Associates,

Inc8

6. 6 Eustis Street, Suite 100,

Saint Paul, MN, 55114, US

Leg Direction	Thomas Creek Road Northbound						Thomas Creek Road Southbound						Arrowcreek Parkway Eastbound						Arrowcreek Parkway Westbound							
Time	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	Int	
2025-05-29 12:00AM	0	0	0	0	0	0	0	0	1	0	1	0	0	1	0	0	0	1	0	0	2	1	0	3	0	5
12:15AM	0	0	1	0	1	0	0	0	0	0	0	0	0	2	0	0	0	2	0	2	2	0	0	4	0	6
12:30AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	1
12:45AM	0	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	3
Hourly Total	0	1	2	0	3	0	0	0	1	0	1	0	0	4	0	0	0	4	0	2	5	1	0	7	0	1.
1:00AM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	3	0	4
1:15AM	0	0	0	0	0	0	1	0	0	0	1	1	1	0	0	0	0	1	1	0	0	0	0	0	0	2
1:30AM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	3
1:45AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	1	0	1	0	2	0	1	0	0	0	1	1	1	0	0	0	0	1	1	0	2	3	0	5	0	9
2:00AM	2	0	0	0	2	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1	0	0	1	0	4
2:15AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:30AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	1
2:45AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	2	0	0	0	2	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1	1	0	0	2	0	5
3:00AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15AM	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	1	0	0	1	0	3
3:30AM	1	0	0	0	1	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	1	0	3
3:45AM	1	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	1	2	0	3	0	5
Hourly Total	2	0	0	0	2	0	0	1	2	0	3	0	0	1	0	0	0	1	0	0	2	3	0	5	0	11
4:00AM	1	0	0	0	1	0	0	0	1	0	1	0	0	2	0	0	0	2	0	0	1	0	0	1	0	5
4:15AM	3	0	0	0	3	0	0	0	1	0	1	0	1	2	0	0	0	3	0	1	0	0	0	1	0	7
4:30AM	1	3	1	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	.
4:45AM	0	1	0	0	1	0	0	1	0	0	1	0	2	6	0	0	0	9	0	0	5	0	0	5	0	1.
Hourly Total	5	4	1	0	10	0	0	1	2	0	3	0	3	11	0	0	0	14	0	1	6	0	0	7	0	35
5:00AM	1	2	0	0	3	0	0	2	0	0	2	0	1	4	1	0	.	0	0	0	4	1	0	5	0	1.
5:15AM	4	0	0	0	4	0	1	2	0	0	3	0	2	3	0	0	0	5	0	0	6	0	0	6	0	19
5:30AM	0	1	4	0	5	0	0	0	0	0	0	0	0	11	1	0	0	12	0	0	13	0	0	13	0	30
5:45AM	0	0	5	0	5	1	0	3	1	0	4	0	0	10	0	0	0	10	0	2	14	0	0	1.	1	35
Hourly Total	5	3	9	0	16	1	1	6	1	0	9	0	3	27	2	0	0	33	0	2	37	1	0	41	1	100
. :00AM	4	2	0	0	.	0	0	1	0	0	1	0	3	12	0	0	0	15	0	1	7	3	0	12	0	34
. :15AM	4	0	0	0	4	0	0	4	0	0	4	0	1	9	1	0	0	11	1	3	4	4	0	11	0	30
. :30AM	7	0	2	0	10	0	1	7	5	0	14	0	5	16	0	0	0	22	1	.	1.	7	0	30	0	6.
. :45AM	9	15	10	0	34	0	1	7	9	0	17	0	.	15	3	0	0	24	1	31	26	12	0	60	0	14.
Hourly Total	25	16	12	0	54	0	2	21	14	0	36	0	15	53	4	0	0	62	3	41	55	26	0	123	0	27.
6:00AM	15	. 1	56	0	133	0	1	29	36	0	. 6	1	29	55	3	0	0	76	2	72	54	10	0	14.	1	433
6:15AM	21	32	52	0	105	0	.	. 0	72	0	147	0	39	95	13	0	0	146	3	41	. 9	14	0	124	0	524
6:30AM	23	13	13	0	49	0	0	4.	50	0	9.	0	26	. 7	2	0	0	96	0	6	40	15	0	. 2	1	304
6:45AM	16	11	33	0	. 1	0	4	23	10	0	36	0	34	55	1	0	0	90	0	2	. 2	14	0	67	0	2..
Hourly Total	6.	116	155	0	347	0	11	157	169	0	347	1	129	263	19	0	0	421	5	132	225	53	0	410	2	1526
7:00AM	13	13	41	0	. 6	0	5	12	7	0	25	0	24	62	0	0	0	9.	0	6	74	12	0	103	0	291
7:15AM	16	13	25	0	55	0	6	1.	7	0	31	0	20	. 1	6	0	0	77	0	9	56	14	0	70	0	254
7:30AM	2.	12	17	0	5.	0	7	13	. 0	0	26	0	16	. 3	4	0	0	74	0	1	31	14	0	4.	0	213
7:45AM	16	10	24	0	51	0	5	15	5	0	25	0	20	41	4	0	0	. 5	1	5	. 3	19	0	76	0	227
Hourly Total	63	47	107	0	229	0	25	5.	26	0	107	0	71	236	15	0	0	333	1	22	235	59	0	31.	0	97.
9:00AM	13	9	. 1	0	73	0	9	9	6	0	25	0	32	54	4	0	0	90	1	14	64	19	1	107	0	30.
9:15AM	1.	9	53	0	67	0	11	6	13	0	31	0	. 1	109	6	0	0	166	0	5	71	1.	0	102	0	377
9:30AM	17	7	12	0	37	0	5	3	10	0	17	0	41	. 1	9	0	0	111	0	5	46	24	1	66	0	244
9:45AM	1.	3	22	0	41	1	2	.	4	0	12	0	9	47	4	0	0	. 1	1	3	40	9	0	52	1	1..
Hourly Total	. 3	29	147	0	240	1	26	25	34	0	7.	0	143	262	24	0	0	439	2	26	242	. 7	2	339	1	1104
10:00AM	22	4	21	0	46	0	6	4	4	0	15	0	14	46	2	0	0	. 3	1	11	40	21	0	62	0	196
10:15AM	16	10	14	0	41	0	4	10	6	0	21	0	16	47	1	0	0	..	2	.	36	16	0	. 0	0	177
10:30AM	17	12	21	0	51	0	0	.	. 0	0	12	0	9	4.	1	0	0	5.	1	3	44	2.	0	63	0	192
10:45AM	21	.	10	0	36	0	.	12	7	0	2.	0	16	46	4	0	0	. 7	4	9	43	21	0	63	0	204
Hourly Total	67	32	..	0	16.	0	16	32	25	0	64	0	56	177	7	0	0	253	7	29	1.4	75	0	267	0	671
11:00AM	14	9	12	0	35	0	2	5	9	0	1.	0	15	5.	4	0	0	65	0	7	40	14	0	. 2	0	177
11:15AM	1.	10	21	0	46	0	2	6	4	0	13	0	10	51	0	0	0	. 1	0	3	30	20	0	53	0	164
11:30AM	13	2	13	0	27	0	1	6	9	0	16	0	17	47	3	0	0	. 9	0	5	34	27	0	. 6	0	171
11:45AM	22	7	20	0	50	0	3	11	. 0	0	20	0	15	44	3	0	0	. 2	0	6	43	19	0	. 9	0	201
Hourly Total	. 5	29	..	0	1.0	0	7	30	27	0	..	0	57	199	10	0	0	2.6	0	23	146	71	0	251	0	644

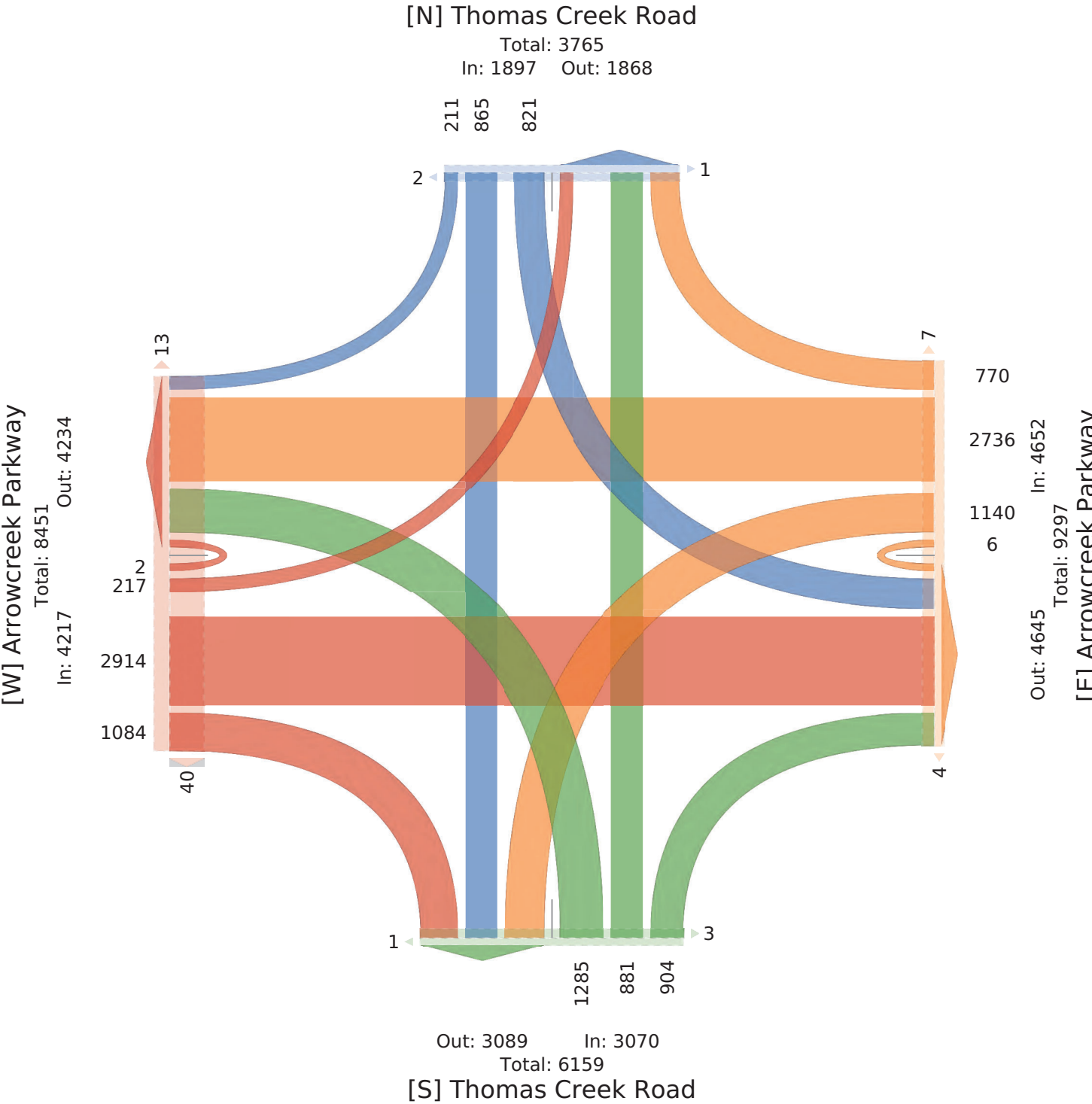
Leg Direction	Thomas Creek Road Northbound						Thomas Creek Road Southbound						Arrowcreek Parkway Eastbound						Arrowcreek Parkway Westbound						
Time	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	Int
12:00PM	20	7	1.	0	44	0	0	9	3	0	12	0	14	43	3	0	.0	1	9	44	21	0	64	0	190
12:15PM	11	7	27	0	46	0	1	9	4	0	14	0	7	45	.	0	59	0	4	37	1.	0	57	1	167
12:30PM	17	7	24	0	50	0	4	5	.	0	15	0	9	4.	1	0	5.	0	6	45	19	0	61	1	192
12:45PM	12	16	15	0	44	1	3	13	3	0	19	1	15	40	2	0	56	1	10	41	23	0	64	0	194
Hourly Total	.1	41	73	0	175	1	7	3.	1.	0	.0	1	4.	164	12	0	232	2	30	1.7	69	0	266	2	654
1:00PM	17	7	14	0	40	0	.	7	9	0	23	0	9	46	.	0	.2	0	13	39	15	0	.6	2	192
1:15PM	12	10	12	0	34	0	3	11	4	0	17	0	2.	44	2	0	62	0	11	47	14	0	63	0	196
1:30PM	10	26	19	0	5.	0	2	13	5	0	20	0	10	53	6	0	60	0	25	47	16	0	90	0	23.
1:45PM	12	39	26	0	67	0	1	5	6	0	13	0	15	49	3	0	.6	0	46	53	26	0	126	2	275
Hourly Total	52	74	62	0	207	0	12	36	25	0	64	0	.0	193	17	0	261	0	9.	177	63	0	356	4	910
2:00PM	7	17	20	0	4.	0	1	35	57	0	94	0	52	91	10	0	153	24	42	42	25	0	109	0	402
2:15PM	11	15	16	0	43	0	4	45	41	0	90	0	15	.4	.	0	75	1	14	43	23	0	70	0	297
2:30PM	21	20	30	0	61	0	.	11	1.	0	33	0	13	54	4	0	61	0	.	45	31	0	72	0	256
2:45PM	12	1.	32	0	.0	0	7	12	9	0	29	0	1.	44	3	1	.4	0	5	56	21	0	73	0	23.
Hourly Total	52	.9	99	0	220	0	19	103	124	0	24.	0	9.	253	23	1	363	25	.6	176	100	0	354	0	1193
3:00PM	21	13	47	0	72	0	4	12	15	0	31	0	21	42	6	0	60	0	9	96	21	0	126	0	310
3:15PM	20	14	51	0	75	0	9	22	1.	0	46	0	41	.9	1	0	111	0	7	10.	20	0	134	0	366
3:30PM	2.	17	22	0	..	0	3	26	31	0	.1	0	60	103	9	0	172	0	4	.2	26	0	93	0	402
3:45PM	2.	22	20	0	.7	0	6	13	6	0	26	0	16	.4	5	0	7.	0	7	47	19	0	65	0	25.
Hourly Total	93	.6	141	0	301	0	23	64	.9	0	1..	0	149	267	22	0	449	0	29	313	76	0	429	0	1345
4:00PM	2.	13	24	0	.3	0	.	11	7	0	25	0	19	61	.	0	9.	0	3	3.	27	0	.6	0	251
4:15PM	26	1.	24	0	.6	1	3	.	10	0	19	0	13	.2	6	0	72	0	5	41	30	0	6.	0	244
4:30PM	17	11	22	0	51	0	.	14	9	0	29	0	21	.5	3	0	79	0	6	46	39	0	93	0	2.2
4:45PM	17	4.	22	0	7.	0	4	19	22	0	45	0	17	55	2	0	65	0	26	42	21	0	90	0	29.
Hourly Total	79	7.	92	0	2.6	1	19	50	49	0	117	0	61	253	17	0	342	0	42	1..	117	0	32.	0	1053
5:00PM	16	21	21	0	59	0	3	42	19	0	.4	0	24	54	7	1	76	0	17	41	22	1	72	0	292
5:15PM	13	21	17	0	52	0	4	9	9	0	22	0	1.	5.	3	0	65	2	22	51	30	0	103	0	252
5:30PM	15	33	19	0	.6	0	6	12	7	0	26	0	10	39	.	0	55	0	36	56	21	0	115	0	2.4
5:45PM	9	43	1.	0	.7	0	2	16	4	0	23	0	9	3.	1	0	4.	0	3.	45	14	1	9.	0	233
Hourly Total	54	117	64	0	24.	0	1.	70	40	0	13.	0	59	175	17	1	2.3	2	113	194	76	2	39.	0	1041
.:00PM	13	23	19	0	55	0	2	7	4	0	14	0	4	25	1	0	30	0	22	36	1.	0	65	0	164
.:15PM	10	7	13	0	31	0	0	11	5	0	1.	0	6	3.	3	0	4.	0	12	36	23	0	62	0	1.5
.:30PM	10	7	1.	0	34	0	3	23	32	0	57	0	11	26	4	0	42	1	11	33	16	0	.1	0	195
.:45PM	.	15	20	0	41	0	2	36	52	0	91	0	14	30	9	0	53	0	17	30	20	0	.7	0	253
Hourly Total	39	54	.7	0	1.1	0	6	69	93	0	169	0	3.	117	16	0	161	1	.3	136	6.	0	26.	0	676
6:00PM	10	17	4	0	32	0	5	17	25	0	47	0	6	19	3	0	29	1	15	23	17	0	5.	0	1.5
6:15PM	.	10	9	0	25	0	1	6	30	0	37	0	5	20	1	0	2.	0	7	19	5	0	32	0	121
6:30PM	4	6	6	0	17	0	1	1	4	0	.	0	5	6	0	0	12	0	5	22	14	0	41	0	66
6:45PM	3	.	9	0	17	0	2	4	2	0	7	0	7	6	1	0	1.	0	5	20	13	1	39	1	71
Hourly Total	23	41	29	0	93	0	9	30	.1	0	100	0	25	53	5	0	73	1	33	74	50	1	1.7	1	444
7:00PM	.	2	6	0	15	0	1	6	2	0	10	0	11	21	0	0	32	1	2	25	15	0	42	0	99
7:15PM	.	.	12	0	24	0	1	3	6	0	11	0	5	11	0	0	1.	0	4	15	10	0	29	0	70
7:30PM	7	.	5	0	19	0	0	11	12	0	23	0	5	15	0	0	20	0	1	20	10	0	31	0	93
7:45PM	3	5	.	0	14	0	1	6	3	0	11	0	4	22	1	0	26	0	2	27	15	0	45	0	96
Hourly Total	23	19	30	0	62	0	3	27	24	0	55	0	25	.9	1	0	95	1	9	77	50	0	146	0	3.9
9:00PM	.	.	6	0	19	0	1	2	2	0	5	0	.	13	0	0	19	1	3	17	11	0	32	0	65
9:15PM	.	3	4	0	13	0	0	4	0	0	4	0	16	1.	0	0	33	0	1	14	6	0	22	0	62
9:30PM	3	2	4	0	9	0	0	3	0	0	3	0	3	10	0	0	13	0	0	1.	4	0	20	0	45
9:45PM	1	1	0	0	2	0	1	1	1	0	3	0	1	7	0	0	9	0	3	9	.	0	17	0	32
Hourly Total	1.	12	15	0	43	0	2	10	3	0	15	0	26	46	0	0	64	1	6	56	27	0	92	0	224
10:00PM	2	2	3	0	6	0	0	1	2	0	3	0	0	9	0	0	9	0	0	5	2	1	7	0	26
10:15PM	0	1	4	0	5	0	0	0	0	0	0	0	0	1	0	0	1	0	0	4	0	0	4	0	10
10:30PM	2	3	2	0	6	0	1	0	0	0	1	0	0	2	0	0	2	0	0	4	1	0	5	0	15
10:45PM	1	2	0	0	3	0	0	2	0	0	2	0	0	4	1	0	5	0	0	5	1	0	.	0	1.
Hourly Total	5	7	9	0	22	0	1	3	2	0	.	0	0	1.	1	0	16	0	0	17	4	1	23	0	.7
11:00PM	0	0	1	0	1	0	0	1	0	0	1	0	0	1	0	0	1	0	0	5	2	0	6	0	10
11:15PM	2	0	1	0	3	0	0	2	1	0	3	0	0	1	0	0	1	0	0	2	2	0	4	0	11
11:30PM	0	2	2	0	4	0	0	1	0	0	1	0	0	2	0	0	2	0	1	4	0	0	5	0	12
11:45PM	0	0	1	0	1	0	0	0	0	0	0	0	0	5	0	0	5	0	0	2	3	0	5	0	11
Hourly Total	2	2	5	0	9	0	0	4	1	0	5	0	0	9	0	0	9	0	1	13	6	0	21	0	44
Total	904	771	1275	0	3060	4	211	7.5	721	0	1796	3	1074	2914	216	2	4216	53	660	263.	1140	.	4.52	11	1373.
% Approach	298%	276%	418%	0%	-	-	118%	458%	438%	0%	-	-	256%	.98%	58%	0%	-	-	1.8%	578%	248%	08%	-	-	-
% Total	.8%	.8%	98%	0%	228%	-	18%	.8%	58%	0%	136%	-	68%	218%	18%	0%	306%	-	58%	198%	78%	0%	338%	-	-
Lights	775	7.1	125.	0	3002	-	199	741	705	0	1745	-	10.0	2766	206	2	414.	-	6.5	2..9	1132	.	4562	-	135.5
% Lights	968%	968%	968%	0%	968%	-	948%	968%	978%	0%	968%	-	968%	978%	958%	100%	978%	-	998%	968%	998%	100%	978%	-	978%
Articulated Trucks	2	2	2	0	.	-	2	0	3	0	5	-	1	7	1	0	10	-	0	11	1	0	12	-	33
% Articulated Trucks	08%	08%	08%	0%	08%	-	08%	0%	08%	0%	08%	-	08%	08%	08%	0%	08%	-	0%	08%	08%	0%	08%	-	08%

Leg Direction	Thomas Creek Road Northbound						Thomas Creek Road Southbound						Arrowcreek Parkway Eastbound						Arrowcreek Parkway Westbound						
Time	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	Int
Buses and Single-Unit Trucks	14	11	25	0	50	-	7	19	13	0	40	-	21	27	.	0	55	-	5	55	.	0	..	-	211
% Buses and Single-Unit Trucks	15%	12%	18%	0%	18%	-	37%	22%	18%	0%	28%	-	18%	18%	28%	0%	18%	-	08%	28%	05%	0%	18%	-	15%
Bicycles on Road	3	6	2	0	12	-	2	5	0	0	6	-	2	1	3	0	.	-	0	1	1	0	2	-	26
% Bicycles on Road	08%	08%	02%	0%	08%	-	08%	08%	0%	0%	08%	-	02%	0%	18%	0%	08%	-	0%	0%	08%	0%	0%	-	02%
Pedestrians	-	-	-	-	-	4	-	-	-	-	-	2	-	-	-	-	-	40	-	-	-	-	-	11	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	8%	-	-	-	-	-	65%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	1	-	-	-	-	-	13	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	33%	-	-	-	-	-	24%	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk8L: Left, R: Right, T: Thru, U: U-Turn

Arrowcreek Parkway and Thomas Creek Road - TMC
 Thu May 29, 2025
 Full Length (12 AM-12 AM (+1))
 All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles
 on Road, Bicycles on Crosswalk)
 All Movements
 ID: 130442. , Location: 398404. 51, -1198907. 9

Provided by: Kimley-Horn and
 Associates, Inc8
 6. 6 Eustis Street, Suite 100,
 Saint Paul, MN, 55114, US



Arrowcreek Parkway and Thomas Creek Road - TMC

Thu May 29, 2025

P M eka(:4 P M - 3 P M) - Ovkrall eka(Hour

P ll AlaCkC:s li hgC, P rgt ulagc Trut (C d uCkCaBc n lB l k-S B l g Trut (C e kck G r l a B C, d l t y t l k Co B Uoac, d l t y t l k Co B AroC Ral()

P ll Movkwk B g C

n l Dl. 08826, s ot ag l o B D 9 7808651, -119 7490369

e ro v l c k c by D K I w l k y - H o r B a B c P C o t l a g C

n l 7

464 EuC g C n g k k g n u l k 100, n a l B g e a u l, M N, 55118, S n

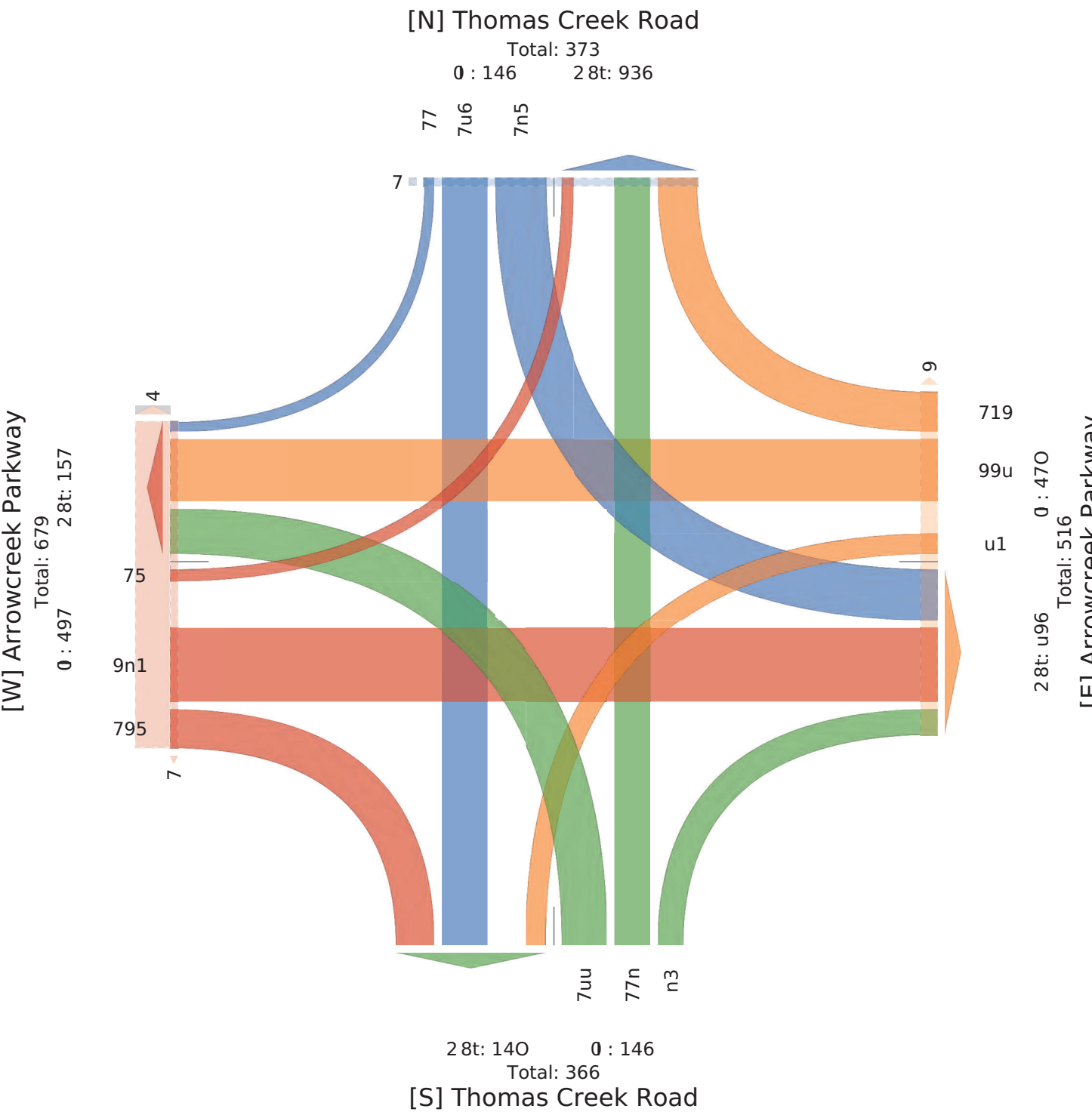
s ki I l r k t g l o B	ThowaC Arkk(Uoac NorghbouBc	ThowaC Arkk(Uoac noughbouBc	P rroRt r k k(e a r(Ray EaC h o u B c	P rroRt r k k(e a r(Ray WkC h o u B c	
Thwk	U T s S P p p e k c *	U T s S P p p e k c *	U T s S P p p e k c *	U T s S P p p e k c *	n l g
2025-05-29 4D0P M	15 61 54 0 1. 0	1 29 . 4 0 64 1	29 55 . 0 34 2	32 58 10 0 186 1	8. .
4D5P M	21 . 2 52 0 105 0	6 60 32 0 183 0	. 9 95 1. 0 184 .	81 69 18 0 128 0	528
4D0P M	2. 1. 1. 0 89 0	0 86 50 0 96 0	24 63 2 0 94 0	4 80 15 0 62 1	. 08
4B5P M	14 11 . . 0 61 0	8 2. 10 0 . 4 0	. 8 55 1 0 90 0	2 62 18 0 43 0	266
Tog l	46 114 155 0 . 83 0	11 153 149 0 . 83 1	129 24. 19 0 821 5	1. 2 225 5. 0 810 2	1524
% P p p r o a t h	217% . . 7% 887% 0% - -	. 72% 857% 517% 0% - -	. 07% 687% 87% 0% - -	. 22% 587% 127% 0% - -	- -
% Tog l	57% 47% 1072% 0% 227% -	074% 107 % 1174% 0% 227% -	378% 1479% 172% 0% 247% -	378% 1874% . 75% 0% 267% -	- -
e H F	07326 07845 07630 - 07652 -	07853 07653 07586 - 07533 -	07824 07413 07 65 - 07416 -	07802 07315 0733. - 07402 -	07423
s l i h g C	45 116 152 0 . 8. -	11 158 148 0 . . 9 -	123 241 19 0 813 -	1. 2 213 52 0 802 -	1502
% s l i h g C	9374% 997% 9371% 0% 937% -	100% 947% 9472% 0% 947% -	9972% 997 % 100% 0% 997 % -	100% 9679% 9371% 0% 9370% -	9378%
P r g t u l a g c Trut (C	0 0 1 0 1 -	0 0 0 0 0 -	0 0 0 0 0 -	0 0 0 0 0 -	1
% P r g t u l a g c Trut (C	0% 0% 078% 0% 07 % -	0% 0% 0% 0% 0% -	0% 0% 0% 0% 0% -	0% 0% 0% 0% 0% -	071%
d u C k C a B c n l B l k - S B l g Trut (C	1 0 2 0 . -	0 8 5 0 9 -	1 2 0 0 . -	0 4 1 0 3 -	2.
% d u C k C a B c n l B l k - S B l g Trut (C	17 % 0% 17 % 0% 07% -	0% 27% 278% 0% 27% -	073% 074% 0% 0% 074% -	0% . 71% 179% 0% 270% -	175%
d l t y t l k Co B Uoac	0 1 0 0 1 -	0 0 0 0 0 -	0 0 0 0 0 -	0 0 0 0 0 -	1
% d l t y t l k Co B Uoac	0% 079% 0% 0% 07 % -	0% 0% 0% 0% 0% -	0% 0% 0% 0% 0% -	0% 0% 0% 0% 0% -	071%
e k c k G r l a B C	- - - - - 0	- - - - - 1	- - - - - 5	- - - - - 2	
% e k c k G r l a B C	- - - - - -	- - - - - 100%	- - - - - 100%	- - - - - 100%	-
d l t y t l k Co B AroC Ral(	- - - - - 0	- - - - - 0	- - - - - 0	- - - - - 0	
% d l t y t l k Co B AroC Ral(	- - - - - -	- - - - - 0%	- - - - - 0%	- - - - - 0%	-

* e k c k G r l a B C a B c d l t y t l k Co B AroC Ral(7s D s k f g U D U l i h g T D l t h r u, S D S - T u r B

Arrowcreek Parkway and Thomas Creek Road - TMC

Thu May 29, 2025
PM eka(:4 P M - 3 P M) - Ovkrall eka(Hour
P ll AlaCkC:s li hg, P rgt ulagc Trut (C d uCkCaBc nBI lk-S BlgTrut (C e kckG IaBd It yt lkC
oBUoac, d It yt lkCoB AroC Ral()
P ll MovkwkBg
n Dl. 08826, s ot agloED 97808651, -1197490369

erovlckc byDKIwlky-HorBaBc
P Cct lagC, n 7
464 EuCngkkkg nulg 100,
naBgeaul, MN, 55118, S n



Arrowcreek Parkway and Thomas Creek Road - TMC

Thu May 29, 2025

MATPay eka(8 eM 42 eM-

) ll Classks 8LAhg,) tgaulagP Ttur(s, c usks adP BAli lk4n dAgTtur(s, ekPksG Ads, c Ayrlls Sd

USaP, c Ayrlls Sd CtSsso al(-

) ll MSRLkwkdg

vml : DD1123, LSragSDI D9.10135: , 4 : 9.690739

etSRAPkP byI KAwlky4HStd adP) ssSr Agks,

vdr.

636 EusgaBgkkg BuAk : 00,

BaAlgeaul, MN, 55: : 1, n B

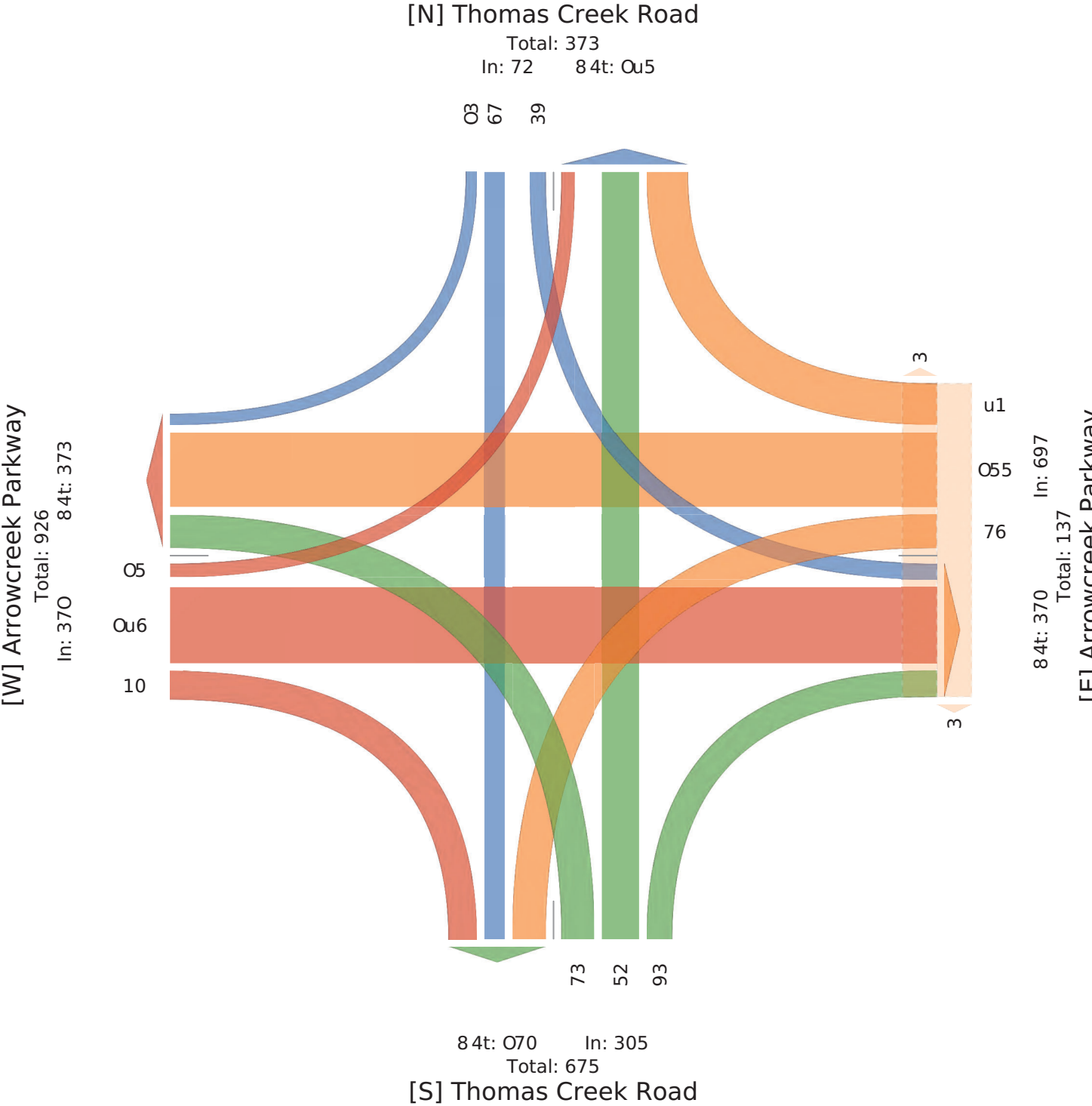
Lki mAkrgSd	ThSwas Ctkk(USaP NSghbSudP	ThSwas Ctkk(USaP BSughbSudP	) ttSo rtkk(eat(o ay EasghSudP	) ttSo rtkk(eat(o ay WksghSudP	
TAvk	U T L n) pp ekP*	U T L n) pp ekP*	U T L n) pp ekP*	U T L n) pp ekP*	vdg
2025405429 : 100eM	: 7 7 : 1 0 10 0	3 7 9 0 2D 0	9 16 3 0 32 0	: D D9 : 5 0 36 2	: 92
: I: 5eM	: 2 : 0 : 2 0 D1 0	D : : 1 0 : 7 0	23 11 2 0 62 0	: : 17 : 1 0 6D 0	: 96
: ID0eM	: 0 26 : 9 0 53 0	2 : D 5 0 20 0	: 0 5D 6 0 60 0	25 17 : 6 0 90 0	2DB
: I15eM	: 2 D9 26 0 67 0	: 5 6 0 : D 0	: 5 19 D 0 36 0	16 5D 26 0 : 26 2	275
TSgl	52 71 62 0 207 0	: 2 D6 25 0 61 0	30 : 9D : 7 0 26: 0	93 : 77 6D 0 D6 1	9: 0
%) pptSarh	25.0% 10.1% D1.3% 0% 4 4	: 3.2% 50.0% D7% 0% 4 4	22.: % 6: .2% 3.3% 0% 4 4	23.9% 52.6% 20.1% 0% 4 4	4
% TSgl	5.6% 9.2% 6.9% 0% 22.9% 4	: .D% 1.: % 2.6% 0% 7.: % 4	3.3% 2: .2% 2.0% 0% 29.7% 4	: 0.5% 20.6% 7.0% 0% D9.2% 4	4
eHF	0.622 0.5D7 0.336 4 0.336 4	0.500 0.6: 2 0.391 4 0.701 4	0.566 0.9: 0 0.31D 4 0.91: 4	0.5: : 0.776 0.363 4 0.60D 4	0.697
LAhg	5: 71 37 0 20D 4	: : D8 25 0 62 4	30 : 79 : 6 0 233 4	95 : 63 6D 0 D11 4	775
% LAhg	97.: % : 00% 91.1% 0% 96.3% 4	9: .6% 96.D% : 00% 0% 96.D% 4	: 00% 96.9% 91.1% 0% 97.2% 4	99.0% 9D3% : 00% 0% 93.1% 4	96.D%
) tgaulagP Ttur(s	0 0 0 0 0 4	0 0 0 0 0 4	0 : 0 0 : 4	0 : 0 0 : 4	2
%) tgaulagP Ttur(s	0% 0% 0% 0% 0% 4	0% 0% 0% 0% 0% 4	0% 0.5% 0% 0% 0.1% 4	0% 0.5% 0% 0% 0.D% 4	0.2%
c usks adP BAli lk4n dAgTtur(s	: 0 1 0 5 4	: : 0 0 2 4	0 D : 0 1 4	: : 0 0 : 2 4	2D
% c usks adP BAli lk4n dAgTtur(s	: .9% 0% 5.3% 0% 2.1% 4	7.D% 2.6% 0% 0% 2.6% 4	0% : .3% 5.3% 0% : .5% 4	: .0% 5.9% 0% 0% D1% 4	2.5%
c Ayrlls Sd USaP	0 0 0 0 0 4	0 0 0 0 0 4	0 0 0 0 0 4	0 0 0 0 0 4	0
% c Ayrlls Sd USaP	0% 0% 0% 0% 0% 4	0% 0% 0% 0% 0% 4	0% 0% 0% 0% 0% 4	0% 0% 0% 0% 0% 4	0%
ekPksG Ads	4 4 4 4 4 0	4 4 4 4 4 0	4 4 4 4 4 0	4 4 4 4 4 1	
% ekPksG Ads	4 4 4 4 4 4	4 4 4 4 4 4	4 4 4 4 4 4	4 4 4 4 4: 00%	4
c Ayrlls Sd CtSsso al(	4 4 4 4 4 0	4 4 4 4 4 0	4 4 4 4 4 0	4 4 4 4 4 0	
% c Ayrlls Sd CtSsso al(	4 4 4 4 4 4	4 4 4 4 4 4	4 4 4 4 4 4	4 4 4 4 4 0%	4

* ekPksG Ads adP c Ayrlls Sd CtSsso al(. LI Lkfg UI UAhg TI Thtu, n I n 4Tutd

Arrowcreek Parkway and Thomas Creek Road - TMC

Thu May 29, 2025
MAY 29, 2025
() ll Classks LAhg,) tgaulagP Ttur (s, c usks adP BAli lk4 dAgTtur (s, ekPks gAds, c Ayrllks
Sd USaP, c Ayrllks Sd CtSso al(-
() ll MSRkwkdg
vml : D01123, LSragSdI D0.10135: , 4 : 9.690739

etSRAPkP byI KAwlky4HStd adP
) ssSr Agks, vdr.
636 Eusga Bgkkg BuAk : 00,
BaAigeaul, MN, 55: : 1, n B



Arrowcreek Parkway and Thomas Creek Road - TMC

ArUwLcPc byDKIv)Py8HUtBaBc - CUfIagPC

Thu May 29, 2025

AM APae k(AM 8: AM4

nBr.

636 EuGICngPPg nuIgp 100,
naIBgAau), MN, 5511: , S n

-))l)aCPCks li hgC - tgru)agPc TtureC, duPCaBc nIBi)P8S BlgTtureC, APcPGIaBC, d Iryr)PCUB
o Uac, d Iryr)PCUBl tUCRa)e4

-))MUwPv PBgC

nh DI(0: : 23, s UragLBD(9.: 0: 351, 8119.690739

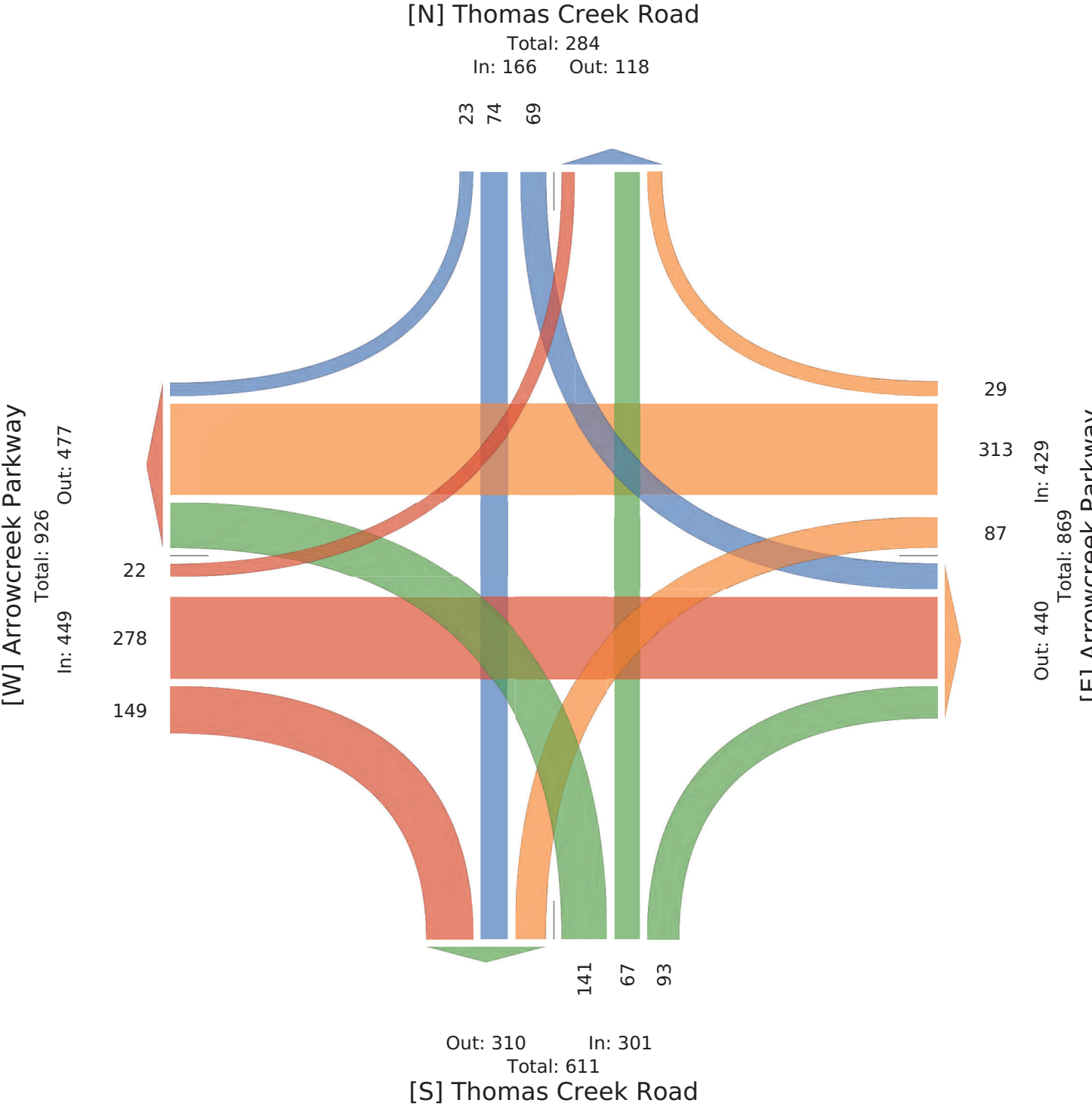
s Fi I IrPr gLB	ThUv aCl tPPe o Uac NUghbUuBc	ThUv aCl tPPe o Uac nUghbUuBc	- ttURrtPPe AateRay EaCbUuBc	- ttURrtPPe AateRay WPGBUuBc	
Tlv P	o T s S - pp APc*	o T s S - pp APc*	o T s S - pp APc*	o T s S - pp APc*	mg
2025805829 (ID0AM	21 1(: 7 0 72 0	: 12 15 0 (1 0	21 :2 6 0 60 0	9 96 21 0 126 0	(10
(D5AM	20 1: 51 0 75 0	9 22 13 0 :6 0	: 1 39 1 0 111 0	7 103 20 0 1(: 0	(66
(ID0AM	23 17 22 0 33 0	(26 (1 0 31 0	60 10(9 0 172 0	: 32 26 0 9(0	:02
(D5AM	23 22 20 0 37 0	6 1(6 0 26 0	16 3: 5 0 73 0	7 :7 19 0 65 0	253
TUg)	9(36 1: 1 0 (01 0	2(6: 39 0 133 0	1:9 267 22 0 ::9 0	29 (1(76 0 :29 0	1(:5
% - pptUarh	(0.9% 22.(% : 3.7% 0% 8 8	1(.9% ::.3% : 1.3% 0% 8 8	((.2% 31.9% :.9% 0% 8 8	3.7% 6(.0% 20.(% 0% 8 8	8
% TUg)	3.9% 5.0% 10.5% 0% 22.: % 8	1.6% 5.5% 5.1% 0% 12.(% 8	11.1% 20.6% 1.3% 0% ((.: % 8	2.2% 2(.(% 3.5% 0% (1.9% 8	8
AHF	0.79: 0.673 0.391 8 0.772 8	0.3(9 0.363 0.553 8 0.363 8	0.5(2 0.365 0.311 8 0.316 8	0.703 0.6(7 0.703 8 0.700 8	0.7(5
s li hgC	91 3: 1(: 0 279 8	2(61 33 0 130 8	1:2 261 20 0 :((8	27 (10 73 0 :2: 8	1(03
% s li hgC	96.7% 95.5% 95.0% 0% 93.0% 8	100% 95.9% 95.6% 0% 93.: % 8	95.(% 96.5% 90.9% 0% 93.: % 8	93.3% 99.0% 97.9% 0% 97.7% 8	96.1%
- tgru)agPc TtureC	0 1 0 0 1 8	0 0 0 0 0 8	0 (1 0 : 8	0 1 0 0 1 8	3
% - tgru)agPc TtureC	0% 1.5% 0% 0% 0.(% 8	0% 0% 0% 0% 0% 8	0% 1.1% :.5% 0% 0.9% 8	0% 0.(% 0% 0% 0.2% 8	0.: %
duPCaBc nIBi)P8S Blg TtureC	2 1 6 0 10 8	0 2 (0 5 8	6 : 1 0 12 8	1 2 1 0 : 8	(1
% duPCaBc nIBi)P8S Blg TtureC	2.2% 1.5% 5.0% 0% (.:(% 8	0% 2.6% :.(% 0% (.0% 8	:.6% 1.: % :.5% 0% 2.6% 8	(.: % 0.3% 1.1% 0% 0.9% 8	2.(%
d Iryr)PCUBo Uac	0 1 0 0 1 8	0 1 0 0 1 8	0 0 0 0 0 8	0 0 0 0 0 8	2
% d Iryr)PCUBo Uac	0% 1.5% 0% 0% 0.(% 8	0% 1.: % 0% 0% 0.3% 8	0% 0% 0% 0% 0% 8	0% 0% 0% 0% 0% 8	0.1%
APcPGIaBC	8 8 8 8 8 0	8 8 8 8 8 0	8 8 8 8 8 0	8 8 8 8 8 0	
% APcPGIaBC	8 8 8 8 8 8	8 8 8 8 8 8	8 8 8 8 8 8	8 8 8 8 8 8	8
d Iryr)PCUBl tUCRa)e	8 8 8 8 8 0	8 8 8 8 8 0	8 8 8 8 8 0	8 8 8 8 8 0	
% d Iryr)PCUBl tUCRa)e	8 8 8 8 8 8	8 8 8 8 8 8	8 8 8 8 8 8	8 8 8 8 8 8	8

* APcPGIaBCaBc d Iryr)PCUBl tUCRa)e. s Ds Pfg o Do li hg TDThtu, S Ds 8TutB

Arrowcreek Parkway and Thomas Creek Road - TMC

Thu May 29, 2025
AM APae k AM 8: AM4
-))l)aCPCks li hg, - tgru)agPc TtureC duPCaBc nIBi)P8S BlgTtureC APcPGIaBC d Ir yr)PC
UBo Uac, d Ir yr)PCUBl tUCRa)e4
-))MUwPv PBc
m DI(0: : 23, s UragUB(9.: 0: 351, 8119.690739

At UwlC Pc byDKIv)Py8HUuBaBc
- CUl lagPC, nr.
636 EuGICngPPg nulgP 100,
naIBgAau), MN, 5511: , S n



Crossbow Court and Hunsberger ES - TMC

Thu May 29, 2025

Full Length (12 AM-12 AM (+1))

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)

All Movements

ID: 1304434, Location: 39.405767, -119.799266

Provided by: Kimley-Horn and Associates, Inc.

767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US

Leg Direction	Crossbow Court Northbound					Crossbow Court Southbound					Hunsberger ES Eastbound					
Time	T	L	U	App	Ped*	R	T	U	App	Ped*	R	L	U	App	Ped*	Int
2025-05-29 12:00AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:45AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:15AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:30AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:45AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:15AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:30AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:45AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00AM	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	2
5:15AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	0	0	0	0	2	0	2	0	0	0	0	0	0	2
6:00AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30AM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
6:45AM	10	0	0	10	0	0	0	0	0	0	0	0	0	0	0	10
Hourly Total	11	0	0	11	0	0	0	0	0	0	0	0	0	0	0	11
7:00AM	61	0	0	61	0	1	55	0	56	0	0	1	0	1	5	118
7:15AM	106	1	0	107	0	3	103	0	106	0	4	0	0	4	0	217
7:30AM	12	2	0	14	0	2	17	0	19	0	0	0	0	0	0	33
7:45AM	37	3	0	40	0	0	14	0	14	0	1	0	0	1	0	55
Hourly Total	216	6	0	222	0	6	189	0	195	0	5	1	0	6	5	423
8:00AM	70	3	0	73	0	0	48	0	48	0	0	0	0	0	0	121
8:15AM	15	6	0	21	0	1	17	0	18	0	0	0	0	0	0	39
8:30AM	1	0	0	1	0	0	9	0	9	0	1	0	0	1	0	11
8:45AM	3	8	0	11	0	0	2	0	2	0	1	0	0	1	0	14
Hourly Total	89	17	0	106	0	1	76	0	77	0	2	0	0	2	0	185
9:00AM	6	54	0	60	0	2	13	0	15	0	10	2	0	12	0	87
9:15AM	4	67	0	71	0	3	12	0	15	0	20	2	0	22	0	108
9:30AM	3	1	0	4	0	0	6	0	6	0	11	0	0	11	0	21
9:45AM	1	1	0	2	0	1	2	0	3	0	0	0	0	0	0	5
Hourly Total	14	123	0	137	0	6	33	0	39	0	41	4	0	45	0	221
10:00AM	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	2
10:15AM	2	0	0	2	0	0	1	0	1	0	0	0	0	0	0	3
10:30AM	2	0	0	2	0	0	1	0	1	0	0	0	0	0	0	3

Leg Direction	Crossbow Court Northbound					Crossbow Court Southbound					Hunsberger ES Eastbound					
Time	T	L	U	App	Ped*	R	T	U	App	Ped*	R	L	U	App	Ped*	Int
10:45AM	3	0	0	3	0	0	5	0	5	0	1	0	0	1	0	9
Hourly Total	8	0	0	8	0	0	7	0	7	0	2	0	0	2	0	17
11:00AM	3	1	0	4	0	0	2	0	2	0	0	0	0	0	0	6
11:15AM	5	1	0	6	0	1	4	0	5	0	0	0	0	0	0	11
11:30AM	2	0	0	2	0	0	1	0	1	0	1	0	0	1	0	4
11:45AM	3	2	0	5	0	1	2	0	3	0	0	0	0	0	0	8
Hourly Total	13	4	0	17	0	2	9	0	11	0	1	0	0	1	0	29
12:00PM	1	0	0	1	0	0	2	0	2	0	0	0	0	0	0	3
12:15PM	1	0	0	1	0	0	2	0	2	0	1	1	0	2	0	5
12:30PM	3	1	0	4	0	0	5	0	5	0	0	0	0	0	0	9
12:45PM	1	0	0	1	0	1	2	0	3	0	0	0	0	0	0	4
Hourly Total	6	1	0	7	0	1	11	0	12	0	1	1	0	2	0	21
1:00PM	3	0	0	3	0	0	0	0	0	0	0	0	0	0	0	3
1:15PM	6	0	0	6	0	0	6	0	6	0	1	0	0	1	0	13
1:30PM	17	0	0	17	0	0	3	0	3	0	0	0	0	0	0	20
1:45PM	28	0	0	28	0	0	5	0	5	0	0	0	0	0	1	33
Hourly Total	54	0	0	54	0	0	14	0	14	0	1	0	0	1	1	69
2:00PM	19	0	0	19	0	2	104	0	106	1	0	0	0	0	7	125
2:15PM	4	1	0	5	0	0	11	0	11	0	0	0	0	0	0	16
2:30PM	1	7	0	8	0	0	1	0	1	1	1	0	0	1	0	10
2:45PM	10	7	0	17	0	0	2	0	2	1	0	0	0	0	0	19
Hourly Total	34	15	0	49	0	2	118	0	120	3	1	0	0	1	7	170
3:00PM	43	20	0	63	0	1	0	0	1	0	3	0	0	3	0	67
3:15PM	41	13	0	54	0	1	55	0	56	2	4	0	0	4	0	114
3:30PM	16	8	0	24	0	0	15	1	16	23	41	26	0	67	2	107
3:45PM	1	4	0	5	0	0	5	0	5	0	1	0	0	1	0	11
Hourly Total	101	45	0	146	0	2	75	1	78	25	49	26	0	75	2	299
4:00PM	3	0	0	3	0	0	5	0	5	0	1	0	0	1	0	9
4:15PM	4	5	0	9	0	0	7	0	7	0	0	0	0	0	0	16
4:30PM	4	0	0	4	0	0	2	0	2	0	2	0	0	2	0	8
4:45PM	14	0	0	14	0	0	9	0	9	0	1	0	0	1	0	24
Hourly Total	25	5	0	30	0	0	23	0	23	0	4	0	0	4	0	57
5:00PM	6	3	0	9	1	0	13	0	13	0	1	0	0	1	0	23
5:15PM	7	7	0	14	0	0	5	0	5	0	0	0	0	0	0	19
5:30PM	8	5	0	13	0	0	4	0	4	0	0	0	0	0	0	17
5:45PM	8	2	0	10	0	0	0	0	0	0	0	1	0	1	0	11
Hourly Total	29	17	0	46	1	0	22	0	22	0	1	1	0	2	0	70
6:00PM	6	2	0	8	0	0	3	0	3	0	0	0	0	0	0	11
6:15PM	21	0	0	21	0	0	11	0	11	0	0	0	0	0	0	32
6:30PM	19	2	0	21	0	0	18	0	18	0	3	0	0	3	0	42
6:45PM	23	0	0	23	0	0	16	0	16	0	1	0	0	1	0	40
Hourly Total	69	4	0	73	0	0	48	0	48	0	4	0	0	4	0	125
7:00PM	4	0	0	4	0	0	5	0	5	0	0	0	0	0	0	9
7:15PM	0	0	0	0	0	0	4	0	4	0	0	0	0	0	0	4
7:30PM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
7:45PM	4	0	0	4	0	0	1	0	1	0	0	0	0	0	1	5
Hourly Total	9	0	0	9	0	0	10	0	10	0	0	0	0	0	1	19
8:00PM	0	0	0	0	0	0	8	0	8	0	0	0	0	0	0	8
8:15PM	2	0	0	2	0	0	1	0	1	0	0	0	0	0	0	3
8:30PM	0	1	0	1	0	0	2	0	2	0	0	0	0	0	0	3
8:45PM	1	0	0	1	0	0	11	0	11	0	0	0	0	0	0	12
Hourly Total	3	1	0	4	0	0	22	0	22	0	0	0	0	0	0	26
9:00PM	1	0	0	1	0	0	8	0	8	0	0	0	0	0	0	9
9:15PM	0	0	0	0	0	0	21	0	21	0	0	0	0	0	0	21
9:30PM	0	0	0	0	0	0	4	0	4	0	0	0	0	0	0	4
9:45PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	1	0	0	1	0	0	33	0	33	0	0	0	0	0	0	34
10:00PM	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1
10:15PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30PM	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1

Leg Direction	Crossbow Court Northbound					Crossbow Court Southbound					Hunsberger ES Eastbound					
Time	T	L	U	App	Ped*	R	T	U	App	Ped*	R	L	U	App	Ped*	Int
10:45PM	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1
Hourly Total	0	0	0	0	0	1	2	0	3	0	0	0	0	0	0	3
11:00PM	1	0	0	1	0	0	1	0	1	0	0	0	0	0	0	2
11:15PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30PM	1	0	0	1	0	0	2	0	2	0	0	0	0	0	0	3
11:45PM	0	0	0	0	0	0	2	0	2	0	1	0	0	1	0	3
Hourly Total	2	0	0	2	0	0	5	0	5	0	1	0	0	1	0	8
Total	684	238	0	922	1	21	699	1	721	28	113	33	0	146	16	1789
% Approach	74.2%	25.8%	0%	-	-	2.9%	96.9%	0.1%	-	-	77.4%	22.6%	0%	-	-	-
% Total	38.2%	13.3%	0%	51.5%	-	1.2%	39.1%	0.1%	40.3%	-	6.3%	1.8%	0%	8.2%	-	-
Lights	660	237	0	897	-	21	694	1	716	-	112	33	0	145	-	1758
% Lights	96.5%	99.6%	0%	97.3%	-	100%	99.3%	100%	99.3%	-	99.1%	100%	0%	99.3%	-	98.3%
Articulated Trucks	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0
% Articulated Trucks	0%	0%	0%	0%	-	0%	0%	0%	0%	-	0%	0%	0%	0%	-	0%
Buses and Single-Unit Trucks	21	1	0	22	-	0	1	0	1	-	1	0	0	1	-	24
% Buses and Single-Unit Trucks	3.1%	0.4%	0%	2.4%	-	0%	0.1%	0%	0.1%	-	0.9%	0%	0%	0.7%	-	1.3%
Bicycles on Road	3	0	0	3	-	0	4	0	4	-	0	0	0	0	-	7
% Bicycles on Road	0.4%	0%	0%	0.3%	-	0%	0.6%	0%	0.6%	-	0%	0%	0%	0%	-	0.4%
Pedestrians	-	-	-	-	1	-	-	-	-	28	-	-	-	-	5	
% Pedestrians	-	-	-	-	100%	-	-	-	-	100%	-	-	-	-	31.3%	-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	11	
% Bicycles on Crosswalk	-	-	-	-	0%	-	-	-	-	0%	-	-	-	-	68.8%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Crossbow Court and Hunsberger ES - TMC

Thu May 29, 2025

Full Length (12 AM-12 AM (+1))

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)

All Movements

ID: 1304434, Location: 39.405767, -119.799266

Provided by: Kimley-Horn and

Associates, Inc.

767 Eustis Street, Suite 100,

Saint Paul, MN, 55114, US

[N] Crossbow Court

Total: 1439

In: 721

Out: 718



Out: 812

In: 922

Total: 1734

[S] Crossbow Court

[W] Hunsberger ES

Total: 405

In: 146

Out: 259

Crossbow Court and Hunsberger ES - TMC

Thu May 29, 2025

AM Peak (7:15 AM - 8:15 AM) - Overall Peak Hour

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)

All Movements

ID: 1304434, Location: 39.405767, -119.799266

Provided by: Kimley-Horn and Associates, Inc.

767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US

Leg Direction	Crossbow Court Northbound					Crossbow Court Southbound					Hunsberger ES Eastbound					
Time	T	L	U	App	Ped*	R	T	U	App	Ped*	R	L	U	App	Ped*	Int
2025-05-29 7:15AM	106	1	0	107	0	3	103	0	106	0	4	0	0	4	0	217
7:30AM	12	2	0	14	0	2	17	0	19	0	0	0	0	0	0	33
7:45AM	37	3	0	40	0	0	14	0	14	0	1	0	0	1	0	55
8:00AM	70	3	0	73	0	0	48	0	48	0	0	0	0	0	0	121
Total	225	9	0	234	0	5	182	0	187	0	5	0	0	5	0	426
% Approach	96.2%	3.8%	0%	-	-	2.7%	97.3%	0%	-	-	100%	0%	0%	-	-	-
% Total	52.8%	2.1%	0%	54.9%	-	1.2%	42.7%	0%	43.9%	-	1.2%	0%	0%	1.2%	-	-
PHF	0.531	0.750	-	0.547	-	0.417	0.444	-	0.443	-	0.313	-	-	0.313	-	0.492
Lights	222	9	0	231	-	5	181	0	186	-	5	0	0	5	-	422
% Lights	98.7%	100%	0%	98.7%	-	100%	99.5%	0%	99.5%	-	100%	0%	0%	100%	-	99.1%
Articulated Trucks	0	0	0	0	-	0	0	0	0	-	0	0	0	0	-	0
% Articulated Trucks	0%	0%	0%	0%	-	0%	0%	0%	0%	-	0%	0%	0%	0%	-	0%
Buses and Single-Unit Trucks	3	0	0	3	-	0	0	0	0	-	0	0	0	0	-	3
% Buses and Single-Unit Trucks	1.3%	0%	0%	1.3%	-	0%	0%	0%	0%	-	0%	0%	0%	0%	-	0.7%
Bicycles on Road	0	0	0	0	-	0	1	0	1	-	0	0	0	0	-	1
% Bicycles on Road	0%	0%	0%	0%	-	0%	0.5%	0%	0.5%	-	0%	0%	0%	0%	-	0.2%
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

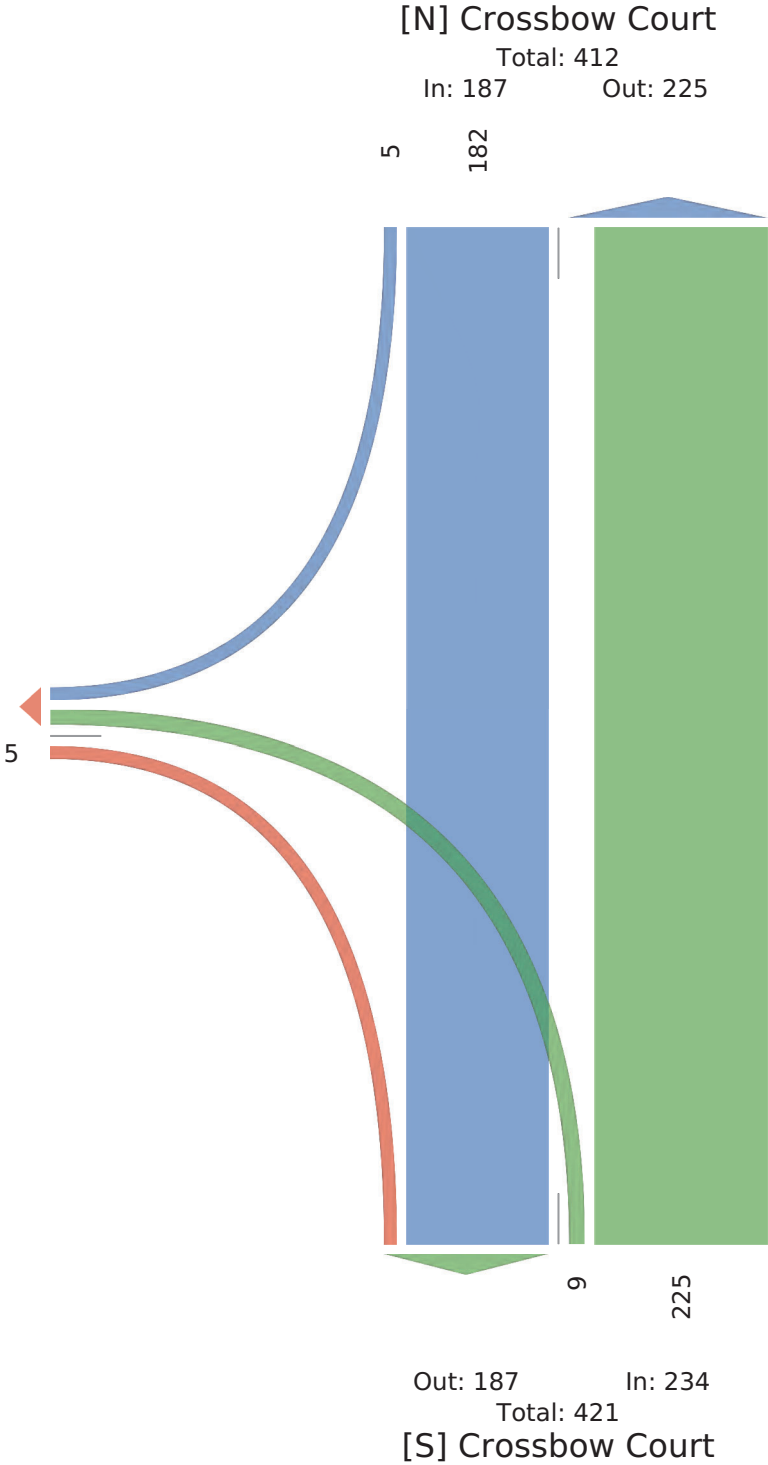
* Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Crossbow Court and Hunsberger ES - TMC

Thu May 29, 2025
PM 4:35 PM
P...
P...
CS...
P...
D - 3.088.8, i...

e...
P...
474 Eu...
Uag...

[W] Hunsberger ES
Total: 19
In: 5 Out: 14



Crossbow Court and Hunsberger ES - TMC

Thu May 29, 2025

Midday Peak (1 PM - 2 PM)

All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)

All Movements

ID: 1304434, Location: 39.405767, -119.799266

Provided by: Kimley-Horn and

Associates, Inc.

767 Eustis Street, Suite 100,

Saint Paul, MN, 55114, US

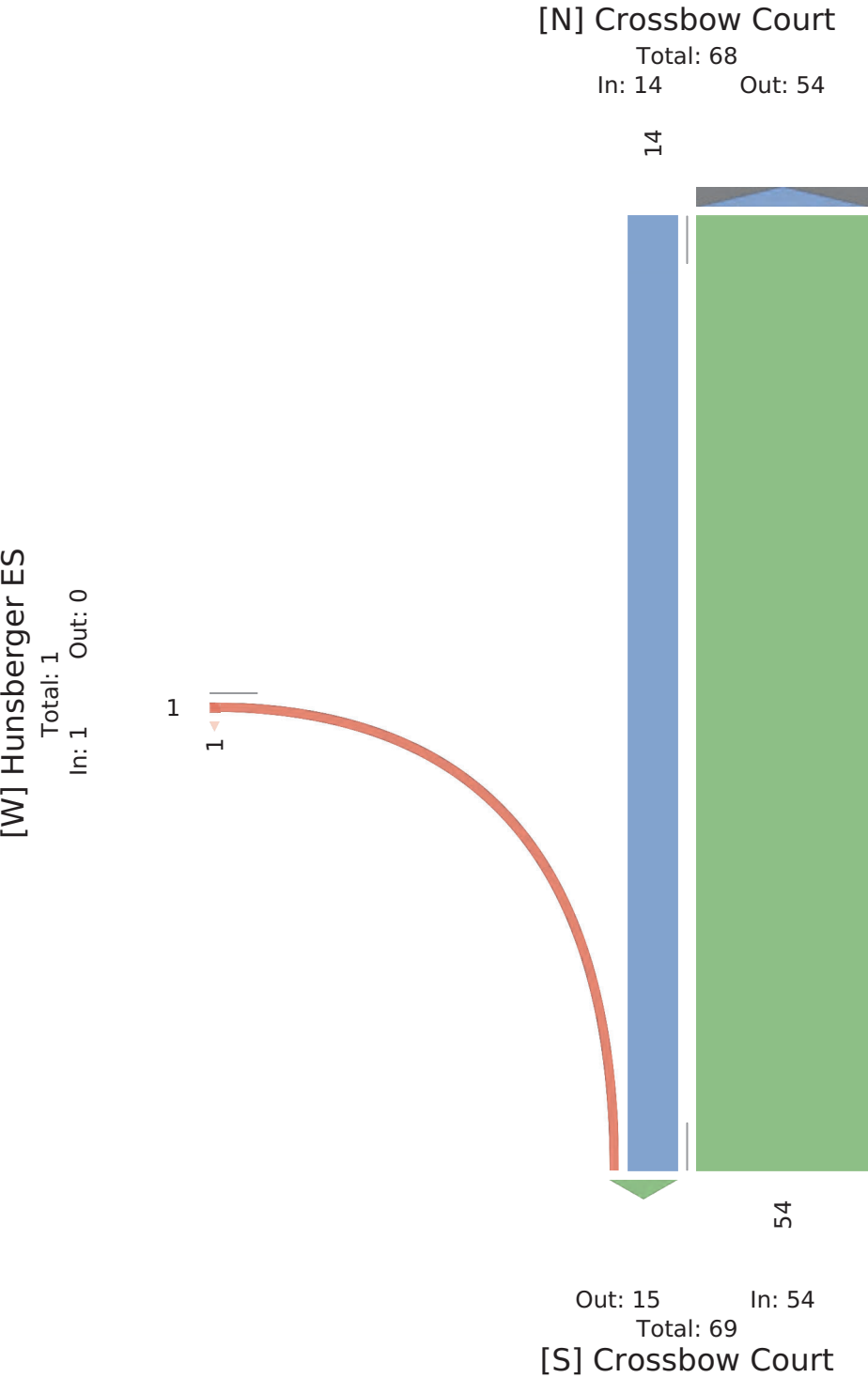
Leg Direction	Crossbow Court Northbound						Crossbow Court Southbound						Hunsberger ES Eastbound						
Time	T	L	U	App	Ped*		R	T	U	App	Ped*		R	L	U	App	Ped*		Int
2025-05-29 1:00PM	3	0	0	3	0		0	0	0	0	0		0	0	0	0	0		3
1:15PM	6	0	0	6	0		0	6	0	6	0		1	0	0	1	0		13
1:30PM	17	0	0	17	0		0	3	0	3	0		0	0	0	0	0		20
1:45PM	28	0	0	28	0		0	5	0	5	0		0	0	0	0	1		33
Total	54	0	0	54	0		0	14	0	14	0		1	0	0	1	1		69
% Approach	100%	0%	0%	-	-		0%	100%	0%	-	-		100%	0%	0%	-	-		-
% Total	78.3%	0%	0%	78.3%	-		0%	20.3%	0%	20.3%	-		1.4%	0%	0%	1.4%	-		-
PHF	0.482	-	-	0.482	-		-	0.583	-	0.583	-		0.250	-	-	0.250	-		0.523
Lights	45	0	0	45	-		0	14	0	14	-		1	0	0	1	-		60
% Lights	83.3%	0%	0%	83.3%	-		0%	100%	0%	100%	-		100%	0%	0%	100%	-		87.0%
Articulated Trucks	0	0	0	0	-		0	0	0	0	-		0	0	0	0	-		0
% Articulated Trucks	0%	0%	0%	0%	-		0%	0%	0%	0%	-		0%	0%	0%	0%	-		0%
Buses and Single-Unit Trucks	9	0	0	9	-		0	0	0	0	-		0	0	0	0	-		9
% Buses and Single-Unit Trucks	16.7%	0%	0%	16.7%	-		0%	0%	0%	0%	-		0%	0%	0%	0%	-		13.0%
Bicycles on Road	0	0	0	0	-		0	0	0	0	-		0	0	0	0	-		0
% Bicycles on Road	0%	0%	0%	0%	-		0%	0%	0%	0%	-		0%	0%	0%	0%	-		0%
Pedestrians	-	-	-	-	0		-	-	-	-	0		-	-	-	-	0		
% Pedestrians	-	-	-	-	-		-	-	-	-	-		-	-	-	-	0%		-
Bicycles on Crosswalk	-	-	-	-	0		-	-	-	-	0		-	-	-	-	1		
% Bicycles on Crosswalk	-	-	-	-	-		-	-	-	-	-		-	-	-	-	100%		-

* Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Crossbow Court and Hunsberger ES - TMC

Thu May 29, 2025
Midday Peak (1 PM - 2 PM)
All Classes (Lights, Articulated Trucks, Buses and Single-Unit Trucks, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1304434, Location: 39.405767, -119.799266

Provided by: Kimley-Horn and Associates, Inc.
767 Eustis Street, Suite 100,
Saint Paul, MN, 55114, US



Crossbow Court and Hunsberger ES - TMC

Thu May 29, 2025

i M i daP e2k(5 i M 1-k(5 i M)

All Classds eLg hrs, AogBulardn TauBPs, Susds aUh ogI IdIRUg TauBPs, i dndsrgaU, SgByBds wUv wan, SgByBds wUCcwssmalP)

All Mw dDdUs

:3 k4- 0(- (, LwBargUk- 9.(05767, 1449.799266

i cWl gdn bykKgDldy1HwUaUh

AsswBards, :UB

767 Eusrg orcddr, ougd 400,

oagU i aul, MN, 5544(, Ro

Ldt 3 gdlBgwU	Ccwssbwm Cwacr NwcrhbwuUh					Ccwssbwm Cwacr owurhbwuUh					HuUdbda dc Eo EasrbwuUh					
TgDd	T	L	R	App	i dn*	v	T	R	App	i dn*	v	L	R	App	i dn*	U
2025105129 2k(5 i M	40	7	0	47	0	0	2	0	2	4	0	0	0	0	0	49
-100i M	(-	20	0	6-	0	4	0	0	4	0	-	0	0	-	0	67
-145i M	(4	4-	0	5(	0	4	55	0	56	2	(	0	0	(	0	44(
-140i M	46	8	0	2(	0	0	45	4	46	2-	(4	26	0	67	2	407
Twal	440	(8	0	458	0	2	72	4	75	26	(8	26	0	7(	2	-07
% AppcwaBh	69.6%	-0.(%	0%	1	1	2.7%	96.0%	4.-%	1	1	6(.9%	-5.4%	0%	1	1	1
% Twal	-5.8%	45.6%	0%	54.5%	1	0.7%	2-.5%	0.-%	2(.9%	1	45.6%	8.5%	0%	2(.4%	1	1
i HF	0.6(0	0.600	1	0.627	1	0.500	0.-27	0.250	0.-.5	1	0.29-	0.250	1	0.276	1	0.67-
Lg hrs	440	(8	0	458	1	2	72	4	75	1	(8	26	0	7(	1	-07
% Lg hrs	400%	400%	0%	400%	1	400%	400%	400%	400%	1	400%	400%	0%	400%	1	400%
AogBulardn TauBPs	0	0	0	0	1	0	0	0	0	1	0	0	0	0	1	0
% AogBulardn TauBPs	0%	0%	0%	0%	1	0%	0%	0%	0%	1	0%	0%	0%	0%	1	0%
Susds aUh ogI IdIRUg TauBPs	0	0	0	0	1	0	0	0	0	1	0	0	0	0	1	0
% Susds aUh ogI IdIRUg TauBPs	0%	0%	0%	0%	1	0%	0%	0%	0%	1	0%	0%	0%	0%	1	0%
SgByBds wUv wan	0	0	0	0	1	0	0	0	0	1	0	0	0	0	1	0
% SgByBds wUv wan	0%	0%	0%	0%	1	0%	0%	0%	0%	1	0%	0%	0%	0%	1	0%
i dndsrgaU	1	1	1	1	0	1	1	1	1	26	1	1	1	1	2	
% i dndsrgaU	1	1	1	1	1	1	1	1	1	400%	1	1	1	1	400%	1
SgByBds wUCcwssmalP	1	1	1	1	0	1	1	1	1	0	1	1	1	1	0	
% SgByBds wUCcwssmalP	1	1	1	1	1	1	1	1	1	0%	1	1	1	1	0%	1

*. i dndsrgaU aUh SgByBds wUCcwssmalP. LkLdfr, v kv g hr, TkThau, RkRfTucU

Crossbow Court and Hunsberger ES - TMC

Thu May 29, 2025
i M i daPe2k(5 i M 1-k(5 i M)
All Classds eLg hrs, AcgBilardn TouPs, Susds aUh ogU ldlRUg TouPs, i dndsrgUg, SgByBds
wUv wan, SgByBds wUccwssmalP)
All MwldDdUs
:3 k4- 0(- (, LwBrgUk-9.(05767, 1449.799266

i cwl gndn bykKgDldy1HwcUaUu
AsswBards, :UB
767 Eusrg oraddr, ougd 400,
oagU i aul, MN, 5544(, Ro

[W] Hunsberger ES

Total: 124
In: 74 Out: 50

26
48

[N] Crossbow Court

Total: 212
In: 75 Out: 137



[S] Crossbow Court

Out: 120 In: 158
Total: 278

APPENDIX B

GROWTH RATE CALCULATIONS

Project: 2500 Crossbow Court
 Subject: NDOT Growth Rate Calculations
 Designed By: AKT

Project Number: 192888000
 Date: 2/5/2026
 Page: 1 of 1

Existing Growth Rate Calculations

Ref: Nevada Department of Transportation - Annual Traffic Report 2024

Number of Count Stations Analyzed = 4

Average Annual Growth Rate in the Vicinity of the Proposed Project = 0.21%

NDOT COUNT STATION:	0310590
ROADWAY:	Arrowcreek Pkwy
LOCATION:	700ft W of Zolezzi Ln

Year	AADT	Annual Growth Rate
2014	12,500	1.70%
2024	14,800	
YEARS =	10	

PROJECTED TRAFFIC VOLUMES	
Year	AADT
2025	15,052
2026	15,308
2027	15,569

NDOT COUNT STATION:	0311180
ROADWAY:	SR439
LOCATION:	SR439, 1.1 Miles N of US50

Year	AADT	Annual Growth Rate
2016	6,800	-2.51%
2024	5,550	
YEARS =	8	

PROJECTED TRAFFIC VOLUMES	
Year	AADT
2025	5,411
2026	5,275
2027	5,143

NDOT COUNT STATION:	0311090
ROADWAY:	Thomas Creek Rd
LOCATION:	295ft N of Lake Placid Dr

Year	AADT	Annual Growth Rate
2014	4,000	0.37%
2024	4,150	
YEARS =	10	

PROJECTED TRAFFIC VOLUMES	
Year	AADT
2025	4,221
2026	4,293
2027	4,366

NDOT COUNT STATION:	0311091
ROADWAY:	1,SR431 (Mt Rose Hwy)
LOCATION:	460ft W of Sundance Dr

Year	AADT	Annual Growth Rate
2014	15,500	1.28%
2024	17,600	
YEARS =	10	

PROJECTED TRAFFIC VOLUMES	
Year	AADT
2025	17,159
2026	16,729
2027	16,309

APPENDIX C

TRIP GENERATION CALCULATIONS

Scenario 1 Daily Trip Generation Calculations

TRIP GENERATION CHARACTERISTICS										DIRECTIONAL DISTRIBUTION		NEW EXTERNAL VEHICLE TRIPS			
	Land Use + Code	Land Use	Subcategory	Land Use Type	Source	ITE Edition	ITE LUC	Scale	ITE Unit	Equation/Rate	Entering %	Exiting %	In	Out	Total
1	(720) Medical-Dental Office Building	Medical-Dental Office Building	Stand-Alone	Exclude	ITE 12th Ed	12	720	2.4	KSF	T = 34.03(X)	50%	50%	41	41	82
2	(930) Fast Casual Restaurant	Fast Casual Restaurant	All Sites	Exclude	ITE 12th Ed	12	930	2.4	KSF	T = 225.89(X)	50%	50%	271	271	542
3	(665) Day Care Center	Day Care Center	All Sites	Exclude	ITE 12th Ed	12	565	96	STU	T = 3.79(X)	50%	50%	182	182	364
Total:													494	494	988

Scenario 1 AM Peak Hour Trip Generation Calculations

TRIP GENERATION CHARACTERISTICS															DIRECTIONAL DISTRIBUTION		NEW EXTERNAL VEHICLE TRIPS		
	Land Use + Code	Land Use	Subcategory	Land Use Type	Source	ITE Edition	ITE LUC	Scale	ITE Unit	Equation/Rate	Entering %	Exiting %	In	Out	Total				
1	(720) Medical-Dental Office Building	Medical-Dental Office Building	Stand-Alone	Exclude	ITE 12th Ed	12	720	2.4	KSF	T = 3.21(X)	78%	22%	6	2	8				
2	(930) Fast Casual Restaurant	Fast Casual Restaurant	All Sites	Exclude	ITE 12th Ed	12	930	2.4	KSF	T = 1.58(X)	64%	36%	3	1	4				
3	(665) Day Care Center	Day Care Center	All Sites	Exclude	ITE 12th Ed	12	565	96	STU	T = 0.79(X)	53%	47%	40	36	76				

Scenario 1 PM Peak Hour Trip Generation Calculations







TRIP GENERATION CHARACTERISTICS															DIRECTIONAL DISTRIBUTION		NEW EXTERNAL VEHICLE TRIPS	
	Land Use + Code	Land Use	Subcategory	Land Use Type	Source	ITE Edition	ITE LUC	Scale	ITE Unit	Equation/Rate	Entering %	Exiting %	In	Out	Total			
1	(720) Medical-Dental Office Building	Medical-Dental Office Building	Stand-Alone	Exclude	ITE 12th Ed	12	720	2.4	KSF	$T = 3.42(X)$	30%	70%	2	6	8			
2	(930) Fast Casual Restaurant	Fast Casual Restaurant	All Sites	Exclude	ITE 12th Ed	12	930	2.4	KSF	$T = 14.35(X)$	53%	47%	18	16	34			
3	(565) Day Care Center	Day Care Center	All Sites	Exclude	ITE 12th Ed	12	565	96	STU	$T = 0.79(X)$	47%	53%	36	40	76			
Total:													56	62	118			

APPENDIX D
KEY INTERSECTION PEAK HOUR LOS CALCULATIONS

Intersection

Intersection Delay, s/veh 15.2

Intersection LOS C

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	29	238	230	214	210	26
Future Vol, veh/h	29	238	230	214	210	26
Peak Hour Factor	0.67	0.67	0.67	0.67	0.67	0.67
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	43	355	343	319	313	39
Number of Lanes	1	2	2	1	1	1






















Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	3	3	0
Conflicting Approach Left SB			WB
Conflicting Lanes Left	2	0	3
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	2	3
HCM Control Delay, s/veh 12.5		12.1	24
HCM LOS	B	B	C

Lane	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	0%	0%	0%	100%	0%
Vol Thru, %	0%	100%	100%	100%	100%	0%	0%	0%
Vol Right, %	0%	0%	0%	0%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	29	119	119	115	115	214	210	26
LT Vol	29	0	0	0	0	0	210	0
Through Vol	0	119	119	115	115	0	0	0
RT Vol	0	0	0	0	0	214	0	26
Lane Flow Rate	43	178	178	172	172	319	313	39
Geometry Grp	6	6	6	6	6	6	6	6
Degree of Util (X)	0.096	0.369	0.281	0.339	0.339	0.41	0.682	0.071
Departure Headway (Hd)	7.99	7.477	5.697	7.113	7.113	4.619	7.833	6.628
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	448	481	629	506	506	779	461	540
Service Time	5.738	5.224	3.443	4.851	4.851	2.357	5.578	4.373
HCM Lane V/C Ratio	0.096	0.37	0.283	0.34	0.34	0.409	0.679	0.072
HCM Control Delay, s/veh	11.6	14.6	10.7	13.5	13.5	10.6	25.8	9.9
HCM Lane LOS	B	B	B	B	B	B	D	A
HCM 95th-tile Q	0.3	1.7	1.1	1.5	1.5	2	5	0.2

HCM 7th Signalized Intersection Summary

4: Thomas Creek Road & Arrowcreek Parkway







2025 Existing AM
12/26/2025

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	19	273	129	53	225	132	155	117	76	179	158	11
Future Volume (veh/h)	19	273	129	53	225	132	155	117	76	179	158	11
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	26	374	177	73	308	181	212	160	104	245	216	15
Peak Hour Factor	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	236	447	379	192	560	321	656	465	302	627	779	54
Arrive On Green	0.03	0.24	0.24	0.04	0.26	0.26	0.09	0.44	0.44	0.10	0.45	0.45
Sat Flow, veh/h	1781	1870	1585	1781	2175	1247	1781	1058	688	1781	1729	120
Grp Volume(v), veh/h	26	374	177	73	250	239	212	0	264	245	0	231
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1777	1646	1781	0	1747	1781	0	1849
Q Serve(g_s), s	1.1	19.3	9.7	3.1	12.3	12.8	6.5	0.0	10.1	7.4	0.0	7.9
Cycle Q Clear(g_c), s	1.1	19.3	9.7	3.1	12.3	12.8	6.5	0.0	10.1	7.4	0.0	7.9
Prop In Lane	1.00		1.00	1.00		0.76	1.00		0.39	1.00		0.06
Lane Grp Cap(c), veh/h	236	447	379	192	458	424	656	0	767	627	0	833
V/C Ratio(X)	0.11	0.84	0.47	0.38	0.55	0.56	0.32	0.00	0.34	0.39	0.00	0.28
Avail Cap(c_a), veh/h	375	933	790	297	886	821	965	0	767	916	0	833
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	28.4	36.7	33.0	29.1	32.5	32.6	13.1	0.0	18.7	13.1	0.0	17.5
Incr Delay (d2), s/veh	0.2	4.2	0.9	1.2	1.0	1.2	0.3	0.0	1.2	0.4	0.0	0.8
Initial Q Delay(d3), 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
%ile BackOfQ(95%),veh/ln	0.9	14.0	6.7	2.5	9.1	8.8	4.5	0.0	7.6	5.4	0.0	6.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	28.6	40.9	33.9	30.4	33.5	33.8	13.4	0.0	20.0	13.5	0.0	18.3
LnGrp LOS	C	D	C	C	C	C	B		B	B		B
Approach Vol, veh/h	577			562			476			476		
Approach Delay, s/veh	38.2			33.2			17.0			15.8		
Approach LOS	D			C			B			B		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	14.6	49.0	9.0	28.7	13.5	50.1	7.1	30.6				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	26.5	44.5	10.5	50.5	26.5	44.5	10.5	50.5				
Max Q Clear Time (g_c+l1), s	9.4	12.1	5.1	21.3	8.5	9.9	3.1	14.8				
Green Ext Time (p_c), s	0.7	1.6	0.1	2.9	0.5	1.5	0.0	3.2				
Intersection Summary												
HCM 7th Control Delay, s/veh	27.0											
HCM 7th LOS	C											

Intersection

Intersection Delay, s/veh 11.2

Intersection LOS B






















Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	31	257	262	232	184	43
Future Vol, veh/h	31	257	262	232	184	43
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	37	306	312	276	219	51
Number of Lanes	1	2	2	1	1	1

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	3	3	0
Conflicting Approach Left SB			WB
Conflicting Lanes Left	2	0	3
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	2	3
HCM Control Delay, s/veh 10.6		10.1	14.5
HCM LOS	B	B	B







Lane	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	0%	0%	0%	100%	0%
Vol Thru, %	0%	100%	100%	100%	100%	0%	0%	0%
Vol Right, %	0%	0%	0%	0%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	31	129	129	131	131	232	184	43
LT Vol	31	0	0	0	0	0	184	0
Through Vol	0	129	129	131	131	0	0	0
RT Vol	0	0	0	0	0	232	0	43
Lane Flow Rate	37	153	153	156	156	276	219	51
Geometry Grp	6	6	6	6	6	6	6	6
Degree of Util (X)	0.074	0.285	0.21	0.276	0.276	0.3	0.443	0.086
Departure Headway (Hd)	7.214	6.705	4.941	6.379	6.379	3.907	7.277	6.076
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	495	534	721	561	561	911	493	587
Service Time	4.984	4.475	2.71	4.143	4.143	1.67	5.041	3.84
HCM Lane V/C Ratio	0.075	0.287	0.212	0.278	0.278	0.303	0.444	0.087
HCM Control Delay, s/veh	10.6	12.2	9	11.6	11.6	8.4	15.7	9.4
HCM Lane LOS	B	B	A	B	B	A	C	A
HCM 95th-tile Q	0.2	1.2	0.8	1.1	1.1	1.3	2.2	0.3

HCM 7th Signalized Intersection Summary 4: Thomas Creek Road & Arrowcreek Parkway

2025 Existing AM
12/26/2025

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	22	278	149	87	313	29	141	67	93	69	74	23
Future Volume (veh/h)	22	278	149	87	313	29	141	67	93	69	74	23
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	33	415	222	130	467	43	210	100	139	103	110	34
Peak Hour Factor	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	312	506	429	259	1024	94	630	282	392	523	487	151
Arrive On Green	0.03	0.27	0.27	0.07	0.31	0.31	0.10	0.40	0.40	0.06	0.36	0.36
Sat Flow, veh/h	1781	1870	1585	1781	3291	302	1781	708	985	1781	1371	424
Grp Volume(v), veh/h	33	415	222	130	251	259	210	0	239	103	0	144
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1777	1816	1781	0	1693	1781	0	1794
Q Serve(g_s), s	1.2	18.4	10.5	4.5	10.1	10.1	6.3	0.0	8.8	3.2	0.0	5.0
Cycle Q Clear(g_c), s	1.2	18.4	10.5	4.5	10.1	10.1	6.3	0.0	8.8	3.2	0.0	5.0
Prop In Lane	1.00		1.00	1.00		0.17	1.00		0.58	1.00		0.24
Lane Grp Cap(c), veh/h	312	506	429	259	553	565	630	0	674	523	0	638
V/C Ratio(X)	0.11	0.82	0.52	0.50	0.45	0.46	0.33	0.00	0.35	0.20	0.00	0.23
Avail Cap(c_a), veh/h	528	1319	1118	402	1253	1281	946	0	674	915	0	638
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	22.2	30.3	27.4	22.5	24.5	24.5	14.5	0.0	18.7	16.4	0.0	20.0
Incr Delay (d2), s/veh	0.1	3.4	1.0	1.5	0.6	0.6	0.3	0.0	1.5	0.2	0.0	0.8
Initial Q Delay(d3), 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
%ile BackOfQ(95%),veh/ln	0.9	13.1	7.1	3.4	7.5	7.7	4.3	0.0	6.4	2.4	0.0	4.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	22.4	33.7	28.4	24.0	25.1	25.1	14.8	0.0	20.2	16.6	0.0	20.8
LnGrp LOS	C	C	C	C	C	C	B		C	B		C
Approach Vol, veh/h	670			640			449			247		
Approach Delay, s/veh	31.4			24.8			17.6			19.1		
Approach LOS	C			C			B			B		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.5	39.8	10.9	28.5	13.2	36.0	7.3	32.1				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	24.5	31.5	13.5	62.5	24.5	31.5	13.5	62.5				
Max Q Clear Time (g_c+I1), s	5.2	10.8	6.5	20.4	8.3	7.0	3.2	12.1				
Green Ext Time (p_c), s	0.2	1.3	0.2	3.5	0.5	0.8	0.0	3.3				
Intersection Summary												
HCM 7th Control Delay, s/veh	24.7											
HCM 7th LOS	C											

Intersection	
Intersection Delay, s/veh	15.3
Intersection LOS	C






















Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	29	239	231	215	211	26
Future Vol, veh/h	29	239	231	215	211	26
Peak Hour Factor	0.67	0.67	0.67	0.67	0.67	0.67
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	43	357	345	321	315	39
Number of Lanes	1	2	2	1	1	1

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	3	3	0
Conflicting Approach Left SB			WB
Conflicting Lanes Left	2	0	3
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	2	3
HCM Control Delay, s/veh	12.5	12.1	24.3
HCM LOS	B	B	C

Lane	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	0%	0%	0%	100%	0%
Vol Thru, %	0%	100%	100%	100%	100%	0%	0%	0%
Vol Right, %	0%	0%	0%	0%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	29	120	120	116	116	215	211	26
LT Vol	29	0	0	0	0	0	211	0
Through Vol	0	120	120	116	116	0	0	0
RT Vol	0	0	0	0	0	215	0	26
Lane Flow Rate	43	178	178	172	172	321	315	39
Geometry Grp	6	6	6	6	6	6	6	6
Degree of Util (X)	0.096	0.371	0.283	0.341	0.341	0.413	0.686	0.072
Departure Headway (Hd)	8.008	7.495	5.715	7.128	7.128	4.634	7.847	6.642
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	448	480	628	505	505	777	460	539
Service Time	5.755	5.241	3.46	4.866	4.866	2.371	5.592	4.387
HCM Lane V/C Ratio	0.096	0.371	0.283	0.341	0.341	0.413	0.685	0.072
HCM Control Delay, s/veh	11.6	14.6	10.7	13.5	13.5	10.6	26.1	9.9
HCM Lane LOS	B	B	B	B	B	B	D	A
HCM 95th-tile Q	0.3	1.7	1.2	1.5	1.5	2	5.1	0.2

HCM 7th Signalized Intersection Summary 4: Thomas Creek Road & Arrowcreek Parkway







2027 Background AM
12/26/2025

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	19	274	130	53	226	133	156	117	76	180	159	11
Future Volume (veh/h)	19	274	130	53	226	133	156	117	76	180	159	11
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	26	375	178	73	310	182	214	160	104	247	218	15
Peak Hour Factor	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	235	448	379	192	562	322	655	464	302	627	778	54
Arrive On Green	0.03	0.24	0.24	0.04	0.26	0.26	0.09	0.44	0.44	0.10	0.45	0.45
Sat Flow, veh/h	1781	1870	1585	1781	2176	1247	1781	1058	688	1781	1730	119
Grp Volume(v), veh/h	26	375	178	73	252	240	214	0	264	247	0	233
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1777	1646	1781	0	1747	1781	0	1849
Q Serve(g_s), s	1.1	19.4	9.8	3.1	12.4	12.9	6.5	0.0	10.1	7.5	0.0	8.1
Cycle Q Clear(g_c), s	1.1	19.4	9.8	3.1	12.4	12.9	6.5	0.0	10.1	7.5	0.0	8.1
Prop In Lane	1.00		1.00	1.00		0.76	1.00		0.39	1.00		0.06
Lane Grp Cap(c), veh/h	235	448	379	192	459	425	655	0	766	627	0	831
V/C Ratio(X)	0.11	0.84	0.47	0.38	0.55	0.57	0.33	0.00	0.34	0.39	0.00	0.28
Avail Cap(c_a), veh/h	374	931	789	297	884	819	961	0	766	914	0	831
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	28.4	36.7	33.1	29.2	32.5	32.7	13.1	0.0	18.8	13.2	0.0	17.6
Incr Delay (d2), s/veh	0.2	4.2	0.9	1.2	1.0	1.2	0.3	0.0	1.2	0.4	0.0	0.8
Initial Q Delay(d3), 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
%ile BackOfQ(95%),veh/ln	0.9	14.1	6.8	2.5	9.1	8.9	4.5	0.0	7.6	5.4	0.0	6.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	28.6	40.9	34.0	30.4	33.6	33.9	13.4	0.0	20.1	13.6	0.0	18.4
LnGrp LOS	C	D	C	C	C	C	B		C	B		B
Approach Vol, veh/h	579			565			478			480		
Approach Delay, s/veh	38.2			33.3			17.1			15.9		
Approach LOS	D			C			B			B		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	14.7	49.0	9.0	28.8	13.6	50.1	7.1	30.7				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	26.5	44.5	10.5	50.5	26.5	44.5	10.5	50.5				
Max Q Clear Time (g_c+I1), s	9.5	12.1	5.1	21.4	8.5	10.1	3.1	14.9				
Green Ext Time (p_c), s	0.7	1.6	0.1	2.9	0.5	1.5	0.0	3.2				
Intersection Summary												
HCM 7th Control Delay, s/veh	27.0											
HCM 7th LOS	C											

Intersection

Intersection Delay, s/veh 11.3

Intersection LOS B

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	31	258	263	233	185	43
Future Vol, veh/h	31	258	263	233	185	43
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	37	307	313	277	220	51
Number of Lanes	1	2	2	1	1	1






















Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	3	3	0
Conflicting Approach Left SB			WB
Conflicting Lanes Left	2	0	3
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	2	3
HCM Control Delay, s/veh 10.6		10.1	14.6
HCM LOS	B	B	B

Lane	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	0%	0%	0%	100%	0%
Vol Thru, %	0%	100%	100%	100%	100%	0%	0%	0%
Vol Right, %	0%	0%	0%	0%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	31	129	129	132	132	233	185	43
LT Vol	31	0	0	0	0	0	185	0
Through Vol	0	129	129	132	132	0	0	0
RT Vol	0	0	0	0	0	233	0	43
Lane Flow Rate	37	154	154	157	157	277	220	51
Geometry Grp	6	6	6	6	6	6	6	6
Degree of Util (X)	0.074	0.286	0.211	0.278	0.278	0.302	0.446	0.087
Departure Headway (Hd)	7.225	6.716	4.952	6.388	6.388	3.916	7.285	6.084
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	494	533	719	560	560	910	493	586
Service Time	4.999	4.49	2.724	4.154	4.154	1.68	5.051	3.85
HCM Lane V/C Ratio	0.075	0.289	0.214	0.28	0.28	0.304	0.446	0.087
HCM Control Delay, s/veh	10.6	12.2	9.1	11.6	11.6	8.4	15.8	9.4
HCM Lane LOS	B	B	A	B	B	A	C	A
HCM 95th-tile Q	0.2	1.2	0.8	1.1	1.1	1.3	2.3	0.3







HCM 7th Signalized Intersection Summary

4: Thomas Creek Road & Arrowcreek Parkway

2027 Background PM
12/26/2025

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	22	279	150	87	314	29	142	67	93	69	74	23
Future Volume (veh/h)	22	279	150	87	314	29	142	67	93	69	74	23
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	33	416	224	130	469	43	212	100	139	103	110	34
Peak Hour Factor	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	314	508	431	261	1029	94	625	278	387	518	479	148
Arrive On Green	0.03	0.27	0.27	0.07	0.31	0.31	0.10	0.39	0.39	0.06	0.35	0.35
Sat Flow, veh/h	1781	1870	1585	1781	3292	301	1781	708	985	1781	1371	424
Grp Volume(v), veh/h	33	416	224	130	252	260	212	0	239	103	0	144
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1777	1816	1781	0	1693	1781	0	1794
Q Serve(g_s), s	1.1	18.2	10.5	4.4	9.9	10.0	6.3	0.0	8.7	3.2	0.0	5.0
Cycle Q Clear(g_c), s	1.1	18.2	10.5	4.4	9.9	10.0	6.3	0.0	8.7	3.2	0.0	5.0
Prop In Lane	1.00		1.00	1.00		0.17	1.00		0.58	1.00		0.24
Lane Grp Cap(c), veh/h	314	508	431	261	555	568	625	0	665	518	0	627
V/C Ratio(X)	0.10	0.82	0.52	0.50	0.45	0.46	0.34	0.00	0.36	0.20	0.00	0.23
Avail Cap(c_a), veh/h	534	1339	1134	408	1272	1300	966	0	665	937	0	627
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	21.8	29.8	27.0	22.1	24.1	24.1	14.5	0.0	18.7	16.5	0.0	20.1
Incr Delay (d2), s/veh	0.1	3.3	1.0	1.5	0.6	0.6	0.3	0.0	1.5	0.2	0.0	0.9
Initial Q Delay(d3), 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
%ile BackOfQ(95%),veh/ln	0.9	13.0	7.0	3.3	7.3	7.6	4.4	0.0	6.3	2.4	0.0	4.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	22.0	33.1	27.9	23.5	24.6	24.7	14.8	0.0	20.2	16.7	0.0	21.0
LnGrp LOS	C	C	C	C	C	C	B		C	B		C
Approach Vol, veh/h	673			642			451			247		
Approach Delay, s/veh	30.8			24.4			17.7			19.2		
Approach LOS	C			C			B			B		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.5	38.8	10.8	28.2	13.3	35.0	7.3	31.8				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	25.5	30.5	13.5	62.5	25.5	30.5	13.5	62.5				
Max Q Clear Time (g_c+I1), s	5.2	10.7	6.4	20.2	8.3	7.0	3.1	12.0				
Green Ext Time (p_c), s	0.2	1.3	0.2	3.6	0.5	0.8	0.0	3.3				
Intersection Summary												
HCM 7th Control Delay, s/veh	24.4											
HCM 7th LOS	C											

Intersection	
Intersection Delay, s/veh	18.3
Intersection LOS	C

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	34	239	231	259	246	30
Future Vol, veh/h	34	239	231	259	246	30
Peak Hour Factor	0.69	0.69	0.69	0.69	0.69	0.69
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	49	346	335	375	357	43
Number of Lanes	1	2	2	1	1	1























Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	3	3	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	2	0	3
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	2	3
HCM Control Delay, s/veh	13.2	13.3	32.4
HCM LOS	B	B	D

Lane	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	0%	0%	0%	100%	0%
Vol Thru, %	0%	100%	100%	100%	100%	0%	0%	0%
Vol Right, %	0%	0%	0%	0%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	34	120	120	116	116	259	246	30
LT Vol	34	0	0	0	0	0	246	0
Through Vol	0	120	120	116	116	0	0	0
RT Vol	0	0	0	0	0	259	0	30
Lane Flow Rate	49	173	173	167	167	375	357	43
Geometry Grp	6	6	6	6	6	6	6	6
Degree of Util (X)	0.114	0.377	0.291	0.344	0.344	0.509	0.792	0.082
Departure Headway (Hd)	8.346	7.83	6.042	7.388	7.388	4.886	7.998	6.792
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	429	459	592	487	487	736	453	526
Service Time	6.106	5.59	3.801	5.14	5.14	2.635	5.756	4.55
HCM Lane V/C Ratio	0.114	0.377	0.292	0.343	0.343	0.51	0.788	0.082
HCM Control Delay, s/veh	12.2	15.3	11.3	14	14	12.6	35.1	10.2
HCM Lane LOS	B	C	B	B	B	B	E	B
HCM 95th-tile Q	0.4	1.7	1.2	1.5	1.5	2.9	7.1	0.3







HCM 7th Signalized Intersection Summary

4: Thomas Creek Road & Arrowcreek Parkway

2027 Background Plus PM
12/26/2025

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	31	310	166	87	342	29	156	67	93	69	74	31
Future Volume (veh/h)	31	310	166	87	342	29	156	67	93	69	74	31
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	46	456	244	128	503	43	229	99	137	101	109	46
Peak Hour Factor	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68	0.68
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	330	552	468	260	1087	93	589	262	363	491	395	167
Arrive On Green	0.04	0.30	0.30	0.07	0.33	0.33	0.11	0.37	0.37	0.06	0.32	0.32
Sat Flow, veh/h	1781	1870	1585	1781	3314	282	1781	710	983	1781	1249	527
Grp Volume(v), veh/h	46	456	244	128	269	277	229	0	236	101	0	155
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1777	1820	1781	0	1693	1781	0	1776
Q Serve(g_s), s	1.5	19.8	11.2	4.2	10.4	10.5	7.1	0.0	8.9	3.3	0.0	5.7
Cycle Q Clear(g_c), s	1.5	19.8	11.2	4.2	10.4	10.5	7.1	0.0	8.9	3.3	0.0	5.7
Prop In Lane	1.00		1.00	1.00		0.16	1.00		0.58	1.00		0.30
Lane Grp Cap(c), veh/h	330	552	468	260	583	597	589	0	625	491	0	561
V/C Ratio(X)	0.14	0.83	0.52	0.49	0.46	0.46	0.39	0.00	0.38	0.21	0.00	0.28
Avail Cap(c_a), veh/h	681	1193	1011	553	1133	1161	975	0	625	971	0	561
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	20.2	28.6	25.5	21.4	23.2	23.2	15.5	0.0	20.1	18.2	0.0	22.3
Incr Delay (d2), s/veh	0.2	3.2	0.9	1.4	0.6	0.6	0.4	0.0	1.7	0.2	0.0	1.2
Initial Q Delay(d3), 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
%ile BackOfQ(95%),veh/ln	1.1	13.8	7.4	3.2	7.6	7.8	4.9	0.0	6.5	2.4	0.0	4.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	20.4	31.8	26.4	22.8	23.7	23.7	16.0	0.0	21.9	18.4	0.0	23.5
LnGrp LOS	C	C	C	C	C	C	B		C	B		C
Approach Vol, veh/h	746			674			465			256		
Approach Delay, s/veh	29.3			23.6			19.0			21.5		
Approach LOS	C			C			B			C		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	9.5	36.6	10.7	30.2	14.1	32.0	7.9	33.0				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	28.5	27.5	20.5	55.5	28.5	27.5	20.5	55.5				
Max Q Clear Time (g_c+I1), s	5.3	10.9	6.2	21.8	9.1	7.7	3.5	12.5				
Green Ext Time (p_c), s	0.2	1.2	0.2	3.9	0.6	0.8	0.1	3.5				
Intersection Summary												
HCM 7th Control Delay, s/veh	24.3											
HCM 7th LOS	C											

Intersection	
Intersection Delay, s/veh	13.3
Intersection LOS	B

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	37	258	263	283	241	49
Future Vol, veh/h	37	258	263	283	241	49
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	44	304	309	333	284	58
Number of Lanes	1	2	2	1	1	1






















Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	3	3	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	2	0	3
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	2	3
HCM Control Delay, s/veh	11.5	11.2	19
HCM LOS	B	B	C

Lane	EBLn1	EBLn2	EBLn3	WBLn1	WBLn2	WBLn3	SBLn1	SBLn2
Vol Left, %	100%	0%	0%	0%	0%	0%	100%	0%
Vol Thru, %	0%	100%	100%	100%	100%	0%	0%	0%
Vol Right, %	0%	0%	0%	0%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	37	129	129	132	132	283	241	49
LT Vol	37	0	0	0	0	0	241	0
Through Vol	0	129	129	132	132	0	0	0
RT Vol	0	0	0	0	0	283	0	49
Lane Flow Rate	44	152	152	155	155	333	284	58
Geometry Grp	6	6	6	6	6	6	6	6
Degree of Util (X)	0.094	0.305	0.231	0.294	0.294	0.403	0.597	0.102
Departure Headway (Hd)	7.754	7.242	5.468	6.847	6.847	4.361	7.581	6.378
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	463	496	656	526	526	826	479	563
Service Time	5.493	4.981	3.205	4.566	4.566	2.079	5.302	4.099
HCM Lane V/C Ratio	0.095	0.306	0.232	0.295	0.295	0.403	0.593	0.103
HCM Control Delay, s/veh	11.3	13.1	9.9	12.4	12.4	10	20.9	9.8
HCM Lane LOS	B	B	A	B	B	A	C	A
HCM 95th-tile Q	0.3	1.3	0.9	1.2	1.2	2	3.8	0.3

HCM 7th Signalized Intersection Summary




4: Thomas Creek Road & Arrowcreek Parkway

2027 Background Plus AM
12/26/2025

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	25	294	140	53	251	133	168	117	76	180	159	18
Future Volume (veh/h)	25	294	140	53	251	133	168	117	76	180	159	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	34	397	189	72	339	180	227	158	103	243	215	24
Peak Hour Factor	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	238	470	398	187	597	311	642	460	300	620	728	81
Arrive On Green	0.03	0.25	0.25	0.04	0.26	0.26	0.09	0.44	0.44	0.10	0.44	0.44
Sat Flow, veh/h	1781	1870	1585	1781	2259	1176	1781	1057	689	1781	1653	184
Grp Volume(v), veh/h	34	397	189	72	265	254	227	0	261	243	0	239
Grp Sat Flow(s),veh/h/ln	1781	1870	1585	1781	1777	1659	1781	0	1746	1781	0	1837
Q Serve(g_s), s	1.5	21.1	10.6	3.1	13.5	13.9	7.2	0.0	10.4	7.7	0.0	8.7
Cycle Q Clear(g_c), s	1.5	21.1	10.6	3.1	13.5	13.9	7.2	0.0	10.4	7.7	0.0	8.7
Prop In Lane	1.00		1.00	1.00		0.71	1.00		0.39	1.00		0.10
Lane Grp Cap(c), veh/h	238	470	398	187	470	438	642	0	760	620	0	809
V/C Ratio(X)	0.14	0.85	0.47	0.39	0.56	0.58	0.35	0.00	0.34	0.39	0.00	0.30
Avail Cap(c_a), veh/h	364	939	796	289	892	833	876	0	760	845	0	809
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	28.3	37.2	33.3	29.5	33.3	33.4	13.7	0.0	19.6	13.8	0.0	18.8
Incr Delay (d2), s/veh	0.3	4.3	0.9	1.3	1.1	1.2	0.3	0.0	1.2	0.4	0.0	0.9
Initial Q Delay(d3), 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
%ile BackOfQ(95%),veh/ln	1.1	15.1	7.4	2.5	9.8	9.5	5.0	0.0	7.8	5.6	0.0	7.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	28.6	41.5	34.2	30.8	34.3	34.6	14.1	0.0	20.8	14.2	0.0	19.7
LnGrp LOS	C	D	C	C	C	C	B		C	B		B
Approach Vol, veh/h	620			591			488			482		
Approach Delay, s/veh	38.6			34.0			17.7			17.0		
Approach LOS	D			C			B			B		
Timer - Assigned Phs	1	2	3	4	5	6	7	8				
Phs Duration (G+Y+Rc), s	14.8	50.0	9.0	30.8	14.2	50.6	7.6	32.1				
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5				
Max Green Setting (Gmax), s	23.5	45.5	10.5	52.5	23.5	45.5	10.5	52.5				
Max Q Clear Time (g_c+I1), s	9.7	12.4	5.1	23.1	9.2	10.7	3.5	15.9				
Green Ext Time (p_c), s	0.6	1.6	0.1	3.2	0.5	1.6	0.0	3.4				
Intersection Summary												
HCM 7th Control Delay, s/veh	27.9											
HCM 7th LOS	C											

APPENDIX E

PROJECT ACCESS PEAK HOUR LOS CALCULATIONS

Intersection						
Int Delay, s/veh	6.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	4	42	130	16	33	5
Future Vol, veh/h	4	42	130	16	33	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	53	53	53	53	53	53
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	8	79	245	30	62	9

Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	588	67	72	0	-	0
Stage 1	67	-	-	-	-	-
Stage 2	521	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	472	997	1528	-	-	-
Stage 1	956	-	-	-	-	-
Stage 2	596	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	395	997	1528	-	-	-
Mov Cap-2 Maneuver	395	-	-	-	-	-
Stage 1	800	-	-	-	-	-
Stage 2	596	-	-	-	-	-










Approach	EB	NB	SB
HCM Ctrl Dly, s/v	9.54	6.95	0
HCM LOS	A		




Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1503	-	880	-	-
HCM Lane V/C Ratio	0.16	-	0.099	-	-
HCM Ctrl Dly (s/v)	7.8	0	9.5	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.6	-	0.3	-	-

HCM Unsignalized Intersection Capacity Analysis

2: Crossbow Court & Hunsberger ES S. Access

2025 Existing AM
12/24/2025

						
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	161	97	146	75	0
Future Volume (Veh/h)	0	161	97	146	75	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.53	0.53	0.53	0.53	0.53	0.53
Hourly flow rate (vph)	0	304	183	275	142	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	783	142	142			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	783	142	142			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	66	87			
cM capacity (veh/h)	316	906	1441			
Direction, Lane #	EB 1	EB 2	NB 1	SB 1		
Volume Total	152	152	458	142		
Volume Left	0	0	183	0		
Volume Right	152	152	0	0		
cSH	906	906	1441	1700		
Volume to Capacity	0.17	0.17	0.13	0.08		
Queue Length 95th (ft)	15	15	11	0		
Control Delay (s/veh)	9.8	9.8	3.9	0.0		
Lane LOS	A	A	A			
Approach Delay (s/veh)	9.8		3.9	0.0		
Approach LOS	A					
Intersection Summary						
Average Delay			5.2			
Intersection Capacity Utilization			23.0%	ICU Level of Service		A
Analysis Period (min)			15			

Intersection						
Int Delay, s/veh	3.6					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	26	48	48	110	72	2
Future Vol, veh/h	26	48	48	110	72	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	31	58	58	133	87	2

Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	336	88	89	0	-	0
Stage 1	88	-	-	-	-	-
Stage 2	248	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	659	970	1506	-	-	-
Stage 1	935	-	-	-	-	-
Stage 2	793	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	632	970	1506	-	-	-
Mov Cap-2 Maneuver	632	-	-	-	-	-
Stage 1	897	-	-	-	-	-
Stage 2	793	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	9.95	2.27	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	547	-	817	-	-
HCM Lane V/C Ratio	0.038	-	0.109	-	-
HCM Ctrl Dly (s/v)	7.5	0	9.9	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.4	-	-




HCM Unsignalized Intersection Capacity Analysis

2: Crossbow Court & Hunsberger ES S. Access

2025 Existing AM
12/24/2025












Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		RT		RT	RT	
Traffic Volume (veh/h)	0	107	105	158	120	0
Future Volume (Veh/h)	0	107	105	158	120	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83
Hourly flow rate (vph)	0	129	127	190	145	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	589	145	145			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	589	145	145			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	86	91			
cM capacity (veh/h)	429	902	1437			
Direction, Lane #	EB 1	EB 2	NB 1	SB 1		
Volume Total	65	65	317	145		
Volume Left	0	0	127	0		
Volume Right	65	65	0	0		
cSH	902	902	1437	1700		
Volume to Capacity	0.07	0.07	0.09	0.09		
Queue Length 95th (ft)	6	6	7	0		
Control Delay (s/veh)	9.3	9.3	3.6	0.0		
Lane LOS	A	A	A			
Approach Delay (s/veh)	9.3		3.6	0.0		
Approach LOS	A					
Intersection Summary						
Average Delay			3.9			
Intersection Capacity Utilization			24.1%	ICU Level of Service		A
Analysis Period (min)			15			

Intersection						
Int Delay, s/veh	6.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	4	42	131	16	33	5
Future Vol, veh/h	4	42	131	16	33	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	53	53	53	53	53	53
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	8	79	247	30	62	9
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	592	67	72	0	-	0
Stage 1	67	-	-	-	-	-
Stage 2	525	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	469	997	1528	-	-	-
Stage 1	956	-	-	-	-	-
Stage 2	594	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	392	997	1528	-	-	-
Mov Cap-2 Maneuver	392	-	-	-	-	-
Stage 1	799	-	-	-	-	-
Stage 2	594	-	-	-	-	-
Approach	EB	NB		SB		
HCM Ctrl Dly, s/v	9.55	6.96		0		
HCM LOS	A					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	1503	-	879	-	-	
HCM Lane V/C Ratio	0.162	-	0.099	-	-	
HCM Ctrl Dly (s/v)	7.8	0	9.5	-	-	
HCM Lane LOS	A	A	A	-	-	
HCM 95th %tile Q(veh)	0.6	-	0.3	-	-	

HCM Unsignalized Intersection Capacity Analysis




2: Crossbow Court & Hunsberger ES S. Access

2027 Background AM
12/24/2025

						
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	162	97	147	75	0
Future Volume (Veh/h)	0	162	97	147	75	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.53	0.53	0.53	0.53	0.53	0.53
Hourly flow rate (vph)	0	306	183	277	142	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	785	142	142			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	785	142	142			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	66	87			
cM capacity (veh/h)	316	906	1441			
Direction, Lane #	EB 1	EB 2	NB 1	SB 1		
Volume Total	153	153	460	142		
Volume Left	0	0	183	0		
Volume Right	153	153	0	0		
cSH	906	906	1441	1700		
Volume to Capacity	0.17	0.17	0.13	0.08		
Queue Length 95th (ft)	15	15	11	0		
Control Delay (s/veh)	9.8	9.8	3.8	0.0		
Lane LOS	A	A	A			
Approach Delay (s/veh)	9.8		3.8	0.0		
Approach LOS	A					
Intersection Summary						
Average Delay			5.2			
Intersection Capacity Utilization			23.1%	ICU Level of Service		A
Analysis Period (min)			15			

Intersection

Int Delay, s/veh 3.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	26	48	48	110	72	2
Future Vol, veh/h	26	48	48	110	72	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	83	83	83	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	31	58	58	133	87	2

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	336	88	89
Stage 1	88	-	-
Stage 2	248	-	-
Critical Hdwy	6.42	6.22	4.12
Critical Hdwy Stg 1	5.42	-	-
Critical Hdwy Stg 2	5.42	-	-
Follow-up Hdwy	3.518	3.318	2.218
Pot Cap-1 Maneuver	659	970	1506
Stage 1	935	-	-
Stage 2	793	-	-
Platoon blocked, %			
Mov Cap-1 Maneuver	632	970	1506
Mov Cap-2 Maneuver	632	-	-
Stage 1	897	-	-
Stage 2	793	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	9.95	2.27	0
HCM LOS	A		





Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	547	-	817	-	-
HCM Lane V/C Ratio	0.038	-	0.109	-	-
HCM Ctrl Dly (s/v)	7.5	0	9.9	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.4	-	-

HCM Unsignalized Intersection Capacity Analysis 2: Crossbow Court & Hunsberger ES S. Access

2027 Background PM
12/24/2025























Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations		RT		LT	RT	
Traffic Volume (veh/h)	0	107	105	159	121	0
Future Volume (Veh/h)	0	107	105	159	121	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83
Hourly flow rate (vph)	0	129	127	192	146	0
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	592	146	146			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	592	146	146			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	86	91			
cM capacity (veh/h)	427	901	1436			
Direction, Lane #	EB 1	EB 2	NB 1	SB 1		
Volume Total	65	65	319	146		
Volume Left	0	0	127	0		
Volume Right	65	65	0	0		
cSH	901	901	1436	1700		
Volume to Capacity	0.07	0.07	0.09	0.09		
Queue Length 95th (ft)	6	6	7	0		
Control Delay (s/veh)	9.3	9.3	3.6	0.0		
Lane LOS	A	A	A			
Approach Delay (s/veh)	9.3		3.6	0.0		
Approach LOS	A					
Intersection Summary						
Average Delay			3.9			
Intersection Capacity Utilization			27.2%	ICU Level of Service		A
Analysis Period (min)			15			

Intersection													
Int Delay, s/veh	7.3												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations													
Traffic Vol, veh/h	4	0	42	39	0	0	131	16	25	0	33	5	
Future Vol, veh/h	4	0	42	39	0	0	131	16	25	0	33	5	
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free	
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None	
Storage Length	0	-	-	-	-	-	-	-	-	-	-	-	
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-	
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-	
Peak Hour Factor	58	58	58	58	58	58	58	58	58	58	58	58	
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	
Mvmt Flow	7	0	72	67	0	0	226	28	43	0	57	9	
Major/Minor	Minor2			Minor1			Major1			Major2			
Conflicting Flow All	541	-	61	558	566	49	66	0	0	-	-	0	
Stage 1	61	-	-	501	501	-	-	-	-	-	-	-	
Stage 2	479	-	-	57	66	-	-	-	-	-	-	-	
Critical Hdwy	7.12	-	6.22	7.12	6.52	6.22	4.12	-	-	-	-	-	
Critical Hdwy Stg 1	6.12	-	-	6.12	5.52	-	-	-	-	-	-	-	
Critical Hdwy Stg 2	6.12	-	-	6.12	5.52	-	-	-	-	-	-	-	
Follow-up Hdwy	3.518	-	3.318	3.518	4.018	3.318	2.218	-	-	-	-	-	
Pot Cap-1 Maneuver	452	0	1004	440	433	1019	1536	-	-	0	-	-	
Stage 1	950	0	-	552	543	-	-	-	-	0	-	-	
Stage 2	567	0	-	955	840	-	-	-	-	0	-	-	
Platoon blocked, %								-	-		-	-	
Mov Cap-1 Maneuver	383	-	1004	346	367	1019	1536	-	-	-	-	-	
Mov Cap-2 Maneuver	383	-	-	346	367	-	-	-	-	-	-	-	
Stage 1	950	-	-	467	459	-	-	-	-	-	-	-	
Stage 2	480	-	-	886	840	-	-	-	-	-	-	-	
Approach	EB			WB			NB			SB			
HCM Ctrl Dly, s/v	9.5			17.9			5.9			0			
HCM LOS	A			C									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBT	SBR							
Capacity (veh/h)	1222	-	-	880	346	-	-						
HCM Lane V/C Ratio	0.147	-	-	0.09	0.194	-	-						
HCM Ctrl Dly (s/v)	7.7	0	-	9.5	17.9	-	-						
HCM Lane LOS	A	A	-	A	C	-	-						
HCM 95th %tile Q(veh)	0.5	-	-	0.3	0.7	-	-						

HCM Unsignalized Intersection Capacity Analysis 2: Crossbow Court & Hunsberger ES S. Access/Project Access B

2027 Background Plus AM
12/24/2025

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	162	0	0	0	97	172	25	0	114	0
Future Volume (Veh/h)	0	0	162	0	0	0	97	172	25	0	114	0
Sign Control	Stop				Stop				Free			
Grade	0%				0%				0%			
Peak Hour Factor	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57
Hourly flow rate (vph)	0	0	284	0	0	0	170	302	44	0	200	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type							None			None		
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	864	886	200	1148	864	324	200				346	
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	864	886	200	1148	864	324	200				346	
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1				4.1	
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2				2.2	
p0 queue free %	100	100	66	100	100	100	88				100	
cM capacity (veh/h)	248	248	841	105	256	717	1372				1213	
Direction, Lane #	EB 1	EB 2	WB 1	NB 1	SB 1							
Volume Total	142	142	0	516	200							
Volume Left	0	0	0	170	0							
Volume Right	142	142	0	44	0							
cSH	841	841	1700	1372	1700							
Volume to Capacity	0.17	0.17	0.00	0.12	0.12							
Queue Length 95th (ft)	15	15	0	11	0							
Control Delay (s/veh)	10.1	10.1	0.0	3.5	0.0							
Lane LOS	B	B	A	A								
Approach Delay (s/veh)	10.1		0.0	3.5	0.0							
Approach LOS	B		A									
Intersection Summary												
Average Delay			4.7									
Intersection Capacity Utilization			25.9%	ICU Level of Service					A			
Analysis Period (min)			15									

Intersection												
Int Delay, s/veh	4.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	26	0	48	62	0	0	48	110	28	1	72	2
Future Vol, veh/h	26	0	48	62	0	0	48	110	28	1	72	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	85	85	85	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	31	0	56	73	0	0	56	129	33	1	85	2

















Major/Minor	Minor2	Minor1		Major1		Major2							
Conflicting Flow All	331	-	86	346	348	146	87	0	0	162	0	0	0
Stage 1	88	-	-	259	259	-	-	-	-	-	-	-	-
Stage 2	242	-	-	87	89	-	-	-	-	-	-	-	-
Critical Hdwy	7.12	-	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-	-
Critical Hdwy Stg 1	6.12	-	-	6.12	5.52	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	-	-	6.12	5.52	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	-	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-	-
Pot Cap-1 Maneuver	623	0	973	608	576	901	1509	-	-	1416	-	-	-
Stage 1	919	0	-	746	694	-	-	-	-	-	-	-	-
Stage 2	761	0	-	921	821	-	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-	-
Mov Cap-1 Maneuver	597	-	973	549	551	901	1509	-	-	1416	-	-	-
Mov Cap-2 Maneuver	597	-	-	549	551	-	-	-	-	-	-	-	-
Stage 1	918	-	-	715	665	-	-	-	-	-	-	-	-
Stage 2	730	-	-	866	820	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	10.07	12.56	1.93	0.1
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	446	-	-	796	549	1416	-
HCM Lane V/C Ratio	0.037	-	-	0.109	0.133	0.001	-
HCM Ctrl Dly (s/v)	7.5	0	-	10.1	12.6	7.5	-
HCM Lane LOS	A	A	-	B	B	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.4	0.5	0	-

HCM Unsignalized Intersection Capacity Analysis 2: Crossbow Court & Hunsberger ES S. Access/Project Access B

2027 Background Plus PM
12/24/2025

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	107	0	0	0	105	187	28	0	183	0
Future Volume (Veh/h)	0	0	107	0	0	0	105	187	28	0	183	0
Sign Control	Stop				Stop				Free			
Grade	0%				0%				0%			
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Hourly flow rate (vph)	0	0	126	0	0	0	124	220	33	0	215	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type							None			None		
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	700	716	215	826	700	237	215				253	
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	700	716	215	826	700	237	215				253	
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1				4.1	
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2				2.2	
p0 queue free %	100	100	85	100	100	100	91				100	
cM capacity (veh/h)	329	323	825	230	330	802	1355				1312	
Direction, Lane #	EB 1	EB 2	WB 1	NB 1	SB 1							
Volume Total	63	63	0	377	215							
Volume Left	0	0	0	124	0							
Volume Right	63	63	0	33	0							
cSH	825	825	1700	1355	1700							
Volume to Capacity	0.08	0.08	0.00	0.09	0.13							
Queue Length 95th (ft)	6	6	0	8	0							
Control Delay (s/veh)	9.7	9.7	0.0	3.2	0.0							
Lane LOS	A	A	A	A								
Approach Delay (s/veh)	9.7		0.0	3.2	0.0							
Approach LOS	A		A									
Intersection Summary												
Average Delay			3.4									
Intersection Capacity Utilization			33.6%	ICU Level of Service					A			
Analysis Period (min)			15									

APPENDIX F

SITE PLAN

