



City of Waukesha
201 Delafield Street
Waukesha, WI 53188
Tel: 262.542.3700
waukesha-wi.gov

City of Waukesha Cover Sheet

Committee: Building and Grounds	Meeting Date: 6/30/2025
ID Number: 25-00897	Ordinance/Resolution Number (if applicable):
Department Submitting: Public Works	Submission Date: 6/17/2025
Agenda Item Title: Review and possible action on safety improvements at the intersection of Sunset Dr and Guthrie Dr.	

Issue Before the Council: To be determined based on the motion and recommendation(s) of the Buildings and Ground Committee. Motion at the 6/30 Buildings and Grounds meeting was to install more permanent stop signs in the middle of Sunset at Guthrie, add flags to all stop signs, and for Staff to investigate adding the median option to the future CIP in addition to already planned CIP projects.
Options & Alternatives: 1. Approve short a term improvement tier or some combination of tiers 1 through 4. 2. Direct staff to investigate, including long-term improvements in the future CIP with no short-term improvements. 3. No change
Additional Details: 6/2/2025. This item was brought forward by Ald. Wuteska as a referral to complete and intersection safety study at the intersection of Sunset Dr. and Guthrie Dr. and make recommendations to improve the safety at the intersection. Engineering staff will present their findings including guidance from the MUTCD, traffic counts, and crash history.

What is the Strategic Plan Priority this item relates to:

People-centered development

What impact will this item have on the Strategic Plan Priority?

Approving or not approving this item would have an impact on objective one under people-centered development relating to existing mobility, and transportation improvements.

Financial Remarks:

Engineering will present the short-term and long-term improvements costs. The financial impact will depend on the recommendation. If the recommended motion exceeds the B&G special projects budget, the motion should include recommendation to finance committee for a budget amendment.

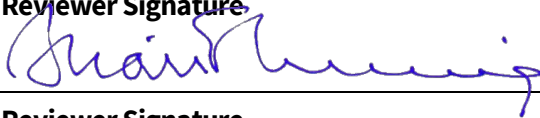
Executive Recommendation:

This item was brought forward by Ald. Wuteska as a referral. The Department of Public Works does not have a recommendation.

Recommended Motion:

The Department of Public Works does not have a recommended motion.

Reviewed By:

Reviewer #1 Name & Title	Reviewer Signature
Joseph Ciurro, Finance Director	06/18/2025
Reviewer #1 Name & Title	Reviewer Signature
Brian E. Running, City Attorney	
City Administrator	Reviewer Signature
	<i>Anthony Brown</i> 06/18/2025

MEMORANDUM

To: Craig D. Ausen, PE, City of Waukesha

From: Alexander Cowan, PE, PTOE
Noutheng Yang, PE, PTOE

Date: May 14, 2025

Project No.: 24-0447.10

Re: Sunset Drive & Guthrie Road
Intersection Safety Study

Background

The City of Waukesha has requested a safety study be conducted at the Sunset Drive and Guthrie Road intersection to understand historical crash trends and identify potential safety improvements. The following report summarizes the study intersection, crash history, traffic volumes, and development of safety improvement strategies to mitigate crashes at the intersection.

Study Area

The Sunset Drive and Guthrie Road intersection is a four-legged intersection that currently operates under all-way stop control with a minor skew on the north and south legs as shown in **Figure 1**.

Figure 1: Study Intersection



Image Courtesy: Google Earth

Guthrie Road is a two-lane north/south undivided roadway with a posted speed limit of 30 mph on the southbound approach and 35 mph on the northbound approach. Sunset Drive is a two-lane east/west undivided roadway with a posted speed limit of 30 mph. The eastbound approach features an uphill grade that ends approximately 450 feet west of the intersection. West of this point, the intersection is not visible to eastbound drivers approaching the intersection. With the exception of the eastbound approach, which consists of a shared left-turn/through lane and an exclusive right-turn lane, all approaches operate as a shared left-turn/through/right-turn lane. Stop ahead advance warning signs (W3-1) are present in the eastbound, westbound, and northbound approaches to the intersection.

Sidewalk is provided along the west approach of Sunset Drive, as well as the west side of the Guthrie Road corridor. A sidewalk connection is provided from the northeast quadrant of the intersection to the adjacent Sunset Drive frontage road to the northeast. Crosswalks are provided on the north and west legs of the intersection. Intersection lighting is provided in the northwest quadrant.

Crash History

A review of the 2020-2025 intersection crash history (including 2025 crashes up to the writing of this report) was conducted using crash data obtained from the University of Wisconsin-Madison Traffic Operations and Safety Laboratory (UW TOPS Lab). As shown in **Table 1**, 13 crashes occurred at the intersection over the review period, or 2.4 crashes per year.

Table 1: Crash History

Location	Crashes						Crash Severity			Total
	2020	2021	2022	2023	2024	(Jan-Apr) 2025	Property Damage Only	Injury	Fatal	
Sunset Drive & Guthrie Road	1	2	2	3	4	1	6	6	1	13

The crash trend suggests an increasing number of crashes year on year, beginning with one crash in 2020 and increasing through 2024, with one crash occurring in the first four months of 2025. Crash details can be found in the intersection crash summary and diagram in **Attachment 1**.

Ten of the 13 reported crashes occurred during the daytime while 12 of the 13 crashes occurred during dry roadway conditions, suggesting that neither poor lighting nor poor weather conditions were a primary contributing factor to the crashes. Angle and rear-end crashes were the crash types present at the intersection, with 11 and two occurring, respectively.

Both rear-end crashes involved distracted eastbound drivers failing to stop and hitting an eastbound vehicle already stopped at the intersection.

Of the 11 angle crashes that occurred at the intersection, eight involved an eastbound vehicle hitting a northbound or southbound vehicle, two involved a westbound vehicle hitting a northbound vehicle, and one involved a southbound vehicle hitting an eastbound vehicle, suggesting the primary fault tends to lie with vehicles traveling on Sunset Drive. As noted in the police reports, the causes of the angle crashes include:

- Driver distraction
- Failure to see other vehicle at intersection
- Failure to yield right-of-way/obey stop sign
- Confusion on which driver had the right-of-way
- Driver impairment

The eight angle crashes involving an eastbound vehicle hitting a northbound or southbound vehicle indicate a clear crash pattern at the intersection. A review of these right-angle crash reports reveals that

four of the crashes involved the eastbound driver disregarding the stop sign (one of which included a driver operating his/her vehicle while intoxicated), two of the crashes involved the eastbound driver failing to yield the right-of-way, and one crash involved the eastbound driver being distracted by construction. The remaining crash report did not include details explaining the circumstances of the incident.

The following lists the injury severity level of the intersection crashes:

- Injury O/PDO (no apparent injury/property damage only): 6
- Injury C (possible injury): 2
- Injury B (minor injury): 4
- Injury K (fatal injury): 1

The fatal injury crash involved an eastbound driver who was excessively speeding while under the influence of alcohol. The driver disregarded the stop sign at the intersection and hit a northbound vehicle that had the right-of-way and had legally entered the intersection.

Crash Rate

Intersection turning movement count data collected on Wednesday, March 30, 2022, was used for the purpose of calculating the intersection crash rate. The intersection turning movement count data shown in **Attachment 2** indicates an intersection annual average daily traffic (AADT) of 7,150 vehicles entering per day. Combining this volume with the 13 reported crashes results in an intersection crash rate of 0.94 crashes per million entering vehicles (MEV) at the Sunset Drive and Guthrie Road intersection.

The Wisconsin Department of Transportation (WisDOT) no longer produces statewide average crash rates and does not utilize a specific threshold for screening potential intersection safety issues. Historically, statewide average intersection crash rates have typically been around 1.00 crashes per MEV. The combined factors of an intersection crash rate near this historical average, an increasing trend of crashes, a clear right-angle crash pattern, and the severity rate of crashes indicate an opportunity to improve safety.

Intersection Safety Improvements

The main cause of crashes at the intersection is the failure to obey the stop signs or yield the right-of-way at the intersection, particularly in the eastbound direction along Sunset Drive. To help mitigate potential future crashes, the following improvements are recommended for consideration. The improvements have been categorized as “short-term” (those improvements not requiring significant reconstruction) and “long-term” (those improvements requiring significant reconstruction).

Short-Term Improvement Options

- The recommended short-term improvements summarized below are shown in **Attachment 3**.
- Flashing LED Stop Signs
 - The installation of flashing LED stop signs at the intersection will provide greater visibility in various lighting and weather conditions in addition to improving general awareness of the stop signs for drivers approaching the intersection, especially eastbound drivers as they reach the top of the uphill grade along Sunset Drive west of the intersection.
 - Data from the Crash Modification Factors (CMF) Clearinghouse indicates that the replacement of a standard stop sign with a flashing LED stop sign has an angle crash modification factor (CMF) of 0.585. This equates to a 41.5% reduction in angle crashes.
 - Although flashing beacons are currently mounted above the stop signs on the eastbound and westbound approaches of the intersection, studies indicate that the addition of flashing beacons to stop signs has a CMF of 0.95 or a 5% reduction in intersection crashes. The study also suggests the flashing beacons have a right-angle crash CMF of 0.87 or a 13% reduction in angle crashes. In both cases, flashing beacons are expected to have a smaller crash reduction factor than flashing LED stop signs.

- Stop ahead advance warning signs (W3-1) are present along the eastbound, westbound, and northbound approaches to the intersection. It is recommended that the eastbound and westbound signs be replaced with flashing LED stop ahead advance warning signs (W3-1).
- Overhead-Mounted Stop Signs
 - Given the wide roadway cross section, an overhead mounted stop sign may help provide better visibility of the stop sign for drivers as they approach the intersection. An overhead mounted sign is recommended for the eastbound and westbound approaches due to the high number of crashes attributed to Sunset Drive vehicles failing to comply with the stop sign. It should be noted that an existing utility/power line crosses Sunset Drive on the west leg of the intersection and will need to be considered when installing any overhead signs.
 - Data from the US Department of Transportation Federal Highway Administration (FHWA) indicates that the installation of overhead mounted stop signs has a CMF of 0.81 or a 19% reduction in intersection crashes.
- Pavement Marking Changes
 - “STOP AHEAD” pavement markings within the travel lanes help provide additional driver awareness of the all-way stop control while approaching the intersection. An example can be seen in **Figure 2**.
 - Data from the CMF Clearinghouse indicates that the utilization of “STOP AHEAD” pavement markings have a CMF of 0.69 or a 31% reduction in intersection crashes.

Figure 2: “Stop Ahead” Pavement Markings



Image Courtesy: Federal Highway Administration (FHWA)

- Replace the existing intersection crosswalk markings with continental crosswalk markings. A comparison of the crosswalk designs is shown in **Figure 3**.
 - Continental crosswalks are more visible to drivers, and create a more urban-like feel to the roadway, which tends to reduce vehicle speeds and improve compliance at crossing locations.
 - Data from the CMF Clearinghouse indicates that the implementation of a continental crosswalk has a vehicle CMF of 0.81 or a 19% reduction in vehicle crashes.
 - Continental crosswalks also have the added benefit of providing higher visibility of pedestrian crossings which may reduce the likelihood of pedestrian crashes.

Figure 3: Crosswalk Comparison



Image Courtesy: Utah Gov

- During the field review, it was noted that pavement markings approaching and at the intersection exhibited some minor fading. Restriping of the pavement markings will make them more visible to drivers.
- It was observed that previous pavement markings were still visible at the intersection as seen in **Figure 4**. It is recommended that these pavement markings be removed to avoid potential driver confusion.

Figure 4: Previous Pavement Markings



- Consider adding right-side longitudinal lines along Sunset Drive to provide a marked 12-foot lane, thereby reducing the perceived width of the roadway. Pavement markings that make the roadway appear narrower may help reduce vehicle speeds as drivers typically drive at speeds they perceive as appropriate for the roadway.
- Speed Feedback Sign
 - Consider installing a speed feedback sign for eastbound Sunset Drive traffic near the intersection with Navajo Lane to encourage compliance with the posted speed limit.

Short-Term Improvement Costs

Attachment 3 provides a visual summary of the short-term improvements recommended in this study. The costs associated with these improvements are summarized in **Table 2**. The costs are structured within tiers, with the highest priority improvements listed in Tier 1. The estimate is not based on detailed design but is a planning-level cost based on current unit prices for similar improvements.

Table 2: Estimated Short-Term Improvement Costs

	Item	Quantity	Price
Tier 1			
	Flashing LED Stop Sign	7 Signs	\$14,000
	Overhead Mounting for Stop Sign (Includes Concrete Base, Pole, and Mast Arm)	2 Assemblies	\$10,900
	Pavement Marking – “STOP AHEAD”	8 Symbols	\$2,000
Tier 1 Total Cost			\$26,900
Tier 2			
	Pavement Marking – Centerline & Edgeline	8,720 LF	\$8,720
	Pavement Marking – Crosswalk Marking	350 LF	\$2,360
	Pavement Marking – Stop Bar	90 LF	\$1,440
	Pavement Marking – Right-Turn Only Markings	4 Symbols	\$1,100
	Pavement Marking Removal	100 LF	\$100
Tier 2 Total Cost			\$13,720
Tier 3			
	Flashing LED Stop Ahead Sign	2 Signs	\$5,000
Tier 3 Total Cost			\$5,000
Tier 4			
	Dynamic Speed Feedback Sign	1 Sign	\$7,500
Tier 4 Total Cost			\$7,500
Total Cost (All Tiers)			\$53,120

Long-Term Improvement Options

The following long-term improvement options, which require significant reconstruction effort, have been included for consideration in the scenario that short-term improvements do not result in achieving the desired level of safety improvement.

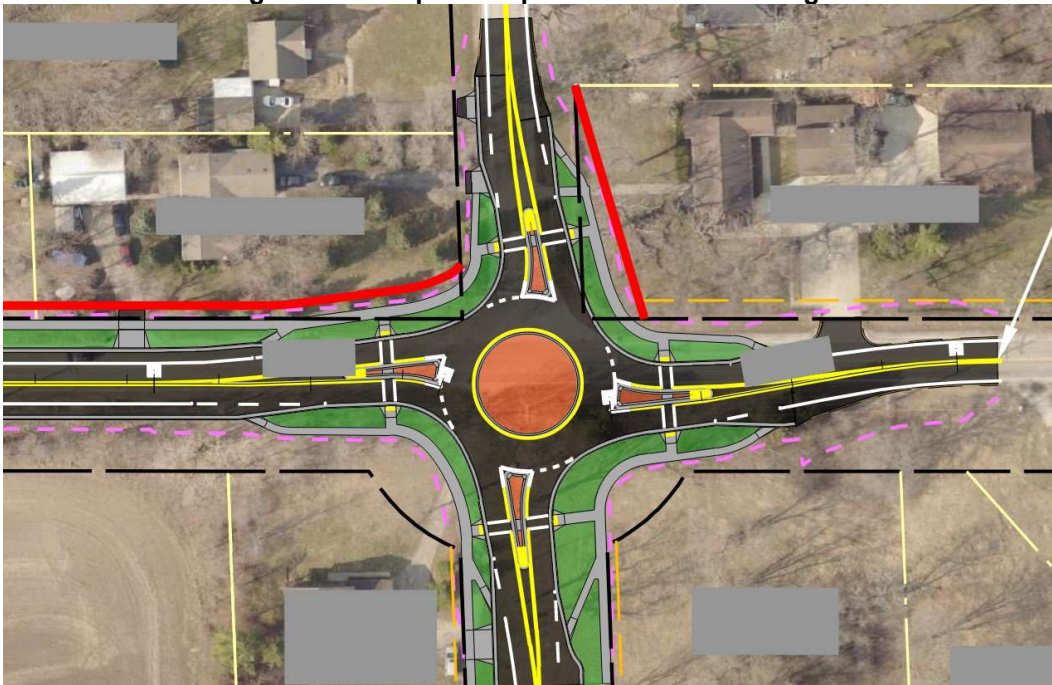
- Convert the intersection from all-way stop control to single-lane roundabout control.
 - The conversion of the intersection from all-way stop control to roundabout control has a CMF of 0.83 or a 17% reduction in intersection crashes.
 - The implementation of a roundabout is anticipated to reduce the severity of crashes by mitigating the likelihood of angle crashes.
 - Although the existing all-way stop controlled intersection operates under acceptable level of service conditions, it is anticipated that a single-lane roundabout would have the added benefit of reducing vehicular delay.
 - Guidance from Section 11-25-3 of the WisDOT Facilities Development Manual states that it is appropriate to consider a roundabout where an intersection has a unique safety issue such as significant right-angle crashes.
 - Given the posted speed limit along both corridors and the existing traffic volumes, it is anticipated that this location may be a good candidate for the consideration of a compact roundabout. This roundabout would operate similarly to a traditional single-lane roundabout but feature a traversable center island that could be used by large trucks, allowing for a slightly smaller roundabout with a diameter of 100' to 120'.
- Curb Bump Outs
 - The consideration of curb bump outs are included within this study as a possible long-term improvement but are not the selected long-term recommendation. For the potential cost associated with the roadway and storm sewer impacts, it is suggested that more value could be gained by other intersection improvements.

- Curb bump outs installed at the intersection would geometrically reduce the roadway width and provide a more urban roadway feel which may help reduce vehicle speeds approaching the intersection.
- The addition of curb bump outs would require improvements to existing curb ramps in addition to implementing crosswalks on all four intersection approaches.
- The use of curb bump outs would likely alter the westbound lane configuration from two lanes at the intersection down to a single lane. The observed westbound traffic volumes would be expected to continue to operate at an acceptable LOS under a single lane.
- Convert the intersection from all-way stop control to traffic signal control
 - The conversion of the intersection from all-way stop control to traffic signal control has a CMF of 0.77 or a 23% reduction in intersection crashes.
 - The implementation of a signal would likely reduce the number of angle crashes, but slightly increase the occurrence of rear-end crashes at the intersection.
 - A signal warrant analysis was conducted using 2022 intersection turning movement volumes to determine whether the intersection warranted consideration of a traffic signal. Signal Warrants 1 (eight-hour volume), 2 (four-hour volume), 3 (peak hour volume), and 7 (crash experience) were analyzed. Signal Warrants 1, 2, and 3 are not met. Signal Warrant 7 meets the threshold of containing five or more reported crashes within a 12-month period that is susceptible to correction by signal. However, it does not meet the criteria of having implemented adequate remedial measures. If the short-term improvements do not result in a reduction in crashes, consideration could be given to signalization, although the preferred long-term improvement would be a single-lane compact roundabout to gain a higher safety benefit for right-angle and severe crashes.

Long-Term Improvement Costs

If the short-term improvements recommended in this study do not reduce intersection crashes to a satisfactory degree, a single-lane compact roundabout is recommended as the long-term intersection safety improvement. Single-lane compact roundabouts, similar to the example provided in **Figure 5**, typically cost between \$0.5 million and \$1 million. If a roundabout concept moves forward for consideration, additional analysis and design will be required to confirm the appropriate layout.

Figure 5: Example Compact Roundabout Design



Conclusion

The intersection of Sunset Drive and Guthrie Road has experienced 13 reported crashes over the previous 5 years and 4 months. One fatality resulted from these crashes with an additional six crashes reporting at least one injury. Right-angle crashes, predominantly with eastbound and westbound vehicles failing to stop or yield the right-of-way, represent the primary crash pattern.

To improve safety at the Sunset Drive and Guthrie Road intersection, potential short-term and long-term improvements are recommended to potentially mitigate crashes at the intersection. To help address ongoing crash concerns at the intersection, a short-term safety improvement conceptual exhibit with recommendations is attached as **Attachment 3**. The following short-term improvements are recommended:

- Replace all stop signs with flashing LED stop signs
- Add overhead mounted flashing LED stop signs on the east and west legs of the intersection
- Add "STOP AHEAD" pavement markings in advance of the intersection on all approaches
- Remove incorrect legacy pavement markings
- Restripe existing pavement markings
- Add continental crosswalk pavement markings to the north and west legs of the intersection
- Add right-side longitudinal pavement markings along Sunset Drive
- Replace the existing stop ahead warning signs for the eastbound and westbound intersection approaches with flashing LED stop ahead signs
- Add a speed feedback sign for eastbound traffic along Sunset Drive near Navajo Lane

If the short-term improvements recommended in this study do not reduce intersection crashes to a satisfactory degree, a single-lane compact roundabout is recommended for consideration as a long-term intersection safety improvement.

Attachment 1

INTERSECTION CRASH STATISTICS



INTERSECTION: SUNSET DRIVE & GUTHRIE ROAD
 MUNICIPALITY: WAUKESHA COUNTY: WAUKESHA STATE: WI
 PERIOD: 5 YEARS 4 MONTHS FROM: 1/1/2020 TO: 4/24/2025
 PROJECT ID: N/A PREPARED BY: NTY DATE: 4/25/2025

INTERSECTION CHARACTERISTICS

TRAFFIC CONTROL: ALL-WAY STOP CONTROLLED POSTED SPEED MAJOR: 30
 INTERSECTION AADT (2022): 7,150 POSTED SPEED MINOR: 30 N, 35 S
 NUMBER OF LEGS: 4

CRASH STATISTICS

CRASH FREQUENCY & SEVERITY				
YEAR	PDO	INJURY	FATAL	TOTAL
2020	0	1	0	1
2021	0	2	0	2
2022	2	0	0	2
2023	2	1	0	3
2024	2	1	1	4
2025	0	1	0	1

TOTAL	6	6	1	13
PERCENT	46.2%	46.2%	7.7%	100.0%
YEAR AVG.	1.13	1.13	0.19	2.45

CRASH RATES	per MEV
CRASH RATE	0.94
INJURY CRASH RATE	0.43
FATAL CRASH RATE	0.07

LIGHT CONDITIONS	PERCENT
DAY	10 76.9%
DARK	3 23.1%
TOTAL	13 100.0%

ROAD CONDITIONS	PERCENT
DRY	12 92.3%
WET	1 7.7%
SNOW	0 0.0%
ICE	0 0.0%
OTHER	0 0.0%
TOTAL	13 100.0%

CRASH TYPE	PERCENT
ANGLE	11 84.6%
REAR-END	2 15.4%
HEAD-ON	0 0.0%
LEFT TURN	0 0.0%
SS-SAME	0 0.0%
SS-OPPOSITE	0 0.0%
PEDESTRIAN	0 0.0%
BICYCLE	0 0.0%
FIXED	0 0.0%
NOT FIXED	0 0.0%
DEER	0 0.0%
OVERTURN	0 0.0%
OTHR/UNKN	0 0.0%
TOTAL	13 100.0%

DAY AND TIME

DAY OF WEEK	EARLY MORNING	AM PEAK	MIDDAY	PM PEAK	LATE EVENING	TOTAL	
	12:00 AM TO	6:00 AM TO	10:00 AM TO	3:00 PM TO	7:00 PM TO		
	5:59 AM	9:59 AM	2:59 PM	6:59 PM	11:59 PM		
MONDAY	0	0	0	1	1	2	Weekday
TUESDAY	0	1	0	1	0	2	
WEDNESDAY	0	0	2	0	1	3	
THURSDAY	0	0	0	0	0	0	
FRIDAY	0	1	1	2	0	4	
SATURDAY	0	0	1	0	0	1	Weekend
SUNDAY	0	0	0	1	0	1	
TOTAL	0	2	4	5	2	13	

DRIVER AGES	PERCENT
< 25	7 27%
25-34	3 12%
35-44	5 19%
45-54	5 19%
55-64	2 8%
65-74	1 4%
75-84	2 8%
85+	1 4%
Unknown	0 0%
TOTAL	26 100%

VEH. DAMAGE	PERCENT
Other/unk	0 0%
None	0 0%
Very Minor	0 0%
Minor	1 4%
Moderate	10 38%
Severe	13 50%
Very Severe	2 8%
TOTAL	26 100%

BY SEASON	PERCENT
Spring	3 23.1%
Summer	4 30.8%
Fall	2 15.4%
Winter	4 30.8%
TOTAL	13 100.0%

Note: Wint:Jan-Mar,Spr:Apr-June,Sum-Jul-Sept,Fall:Oct-Dec

Note: Statistics based on first and second vehicles in crashes. For vehicle damage, functional vehicles were classified as "minor" or "moderate" damage and disabled vehicles were classified as "severe" or "very severe" damage.

ATTACHMENT 2
 INTERSECTION CRASH STATISTICS
 SUNSET DRIVE & GUTHRIE ROAD

Note: Statistics based on first and second vehicles in crashes

INTERSECTION CRASH DATA



INTERSECTION: SUNSET DRIVE & GUTHRIE ROAD
 MUNICIPALITY: WAUKESHA COUNTY: WAUKESHA STATE: WI
 PERIOD: 5 YEARS 4 MONTHS FROM: 1/1/2020 TO: 4/24/2025

PROJECT ID: N/A PREPARED BY: NTY DATE: 4/25/2025

CRASH DETAILS

ACC NUMBER	LABEL	DATE	DAY OF WEEK	TIME OF DAY	SEVERITY	MANNER OF COLLISION	ACCIDENT TYPE	LIGHT COND.	ROAD COND.
3VL0DPGFBB	A	5/1/2020	FRIDAY	5 PM	INJ	ANGLE	MV IN TRANS.	DAY	DRY
3VL0GNQ6N9	B	6/14/2021	MONDAY	5 PM	INJ	ANGLE	MV IN TRANS.	DAY	DRY
3VL0GFB04B	C	12/1/2021	WEDNESDAY	10 AM	INJ	ANGLE	MV IN TRANS.	DAY	WET
3VL0DN7D9C	D	1/7/2022	FRIDAY	4 PM	PDO	ANGLE	MV IN TRANS.	DUSK	DRY
3VL0CVRP7Z	E	1/19/2022	WEDNESDAY	11 AM	PDO	ANGLE	MV IN TRANS.	DAY	DRY
3VL0JFSSFV	F	1/31/2023	TUESDAY	4 PM	INJ	REAR-END	MV IN TRANS.	DAY	DRY
3VL0K4SFBQ	G	9/3/2023	SUNDAY	6 PM	PDO	REAR-END	MV IN TRANS.	DAY	DRY
3VL0K2BC4K	H	10/11/2023	WEDNESDAY	10 PM	PDO	ANGLE	MV IN TRANS.	DARK LT	DRY
3VL0LL0Q76	I	5/4/2024	SATURDAY	1 PM	PDO	ANGLE	MV IN TRANS.	DAY	DRY
3VL0HWRB08	J	7/19/2024	FRIDAY	8 AM	PDO	ANGLE	MV IN TRANS.	DAY	DRY
3VL0LF2KT5	K	11/15/2024	FRIDAY	12 PM	INJ	ANGLE	MV IN TRANS.	DAY	DRY
3VL0K4SFD8	L	12/30/2024	MONDAY	7 PM	FAT	ANGLE	MV IN TRANS.	DUSK	DRY
3VL0J3XHVK	M	4/1/2025	TUESDAY	7 AM	INJ	ANGLE	MV IN TRANS.	DAY	DRY

INTERSECTION COLLISION DIAGRAM



INTERSECTION: SUNSET DRIVE & GUTHRIE ROAD

MUNICIPALITY: WAUKESHA

COUNTY: WAUKESHA

STATE: WI

PERIOD: 5 YEARS 4 MONTHS

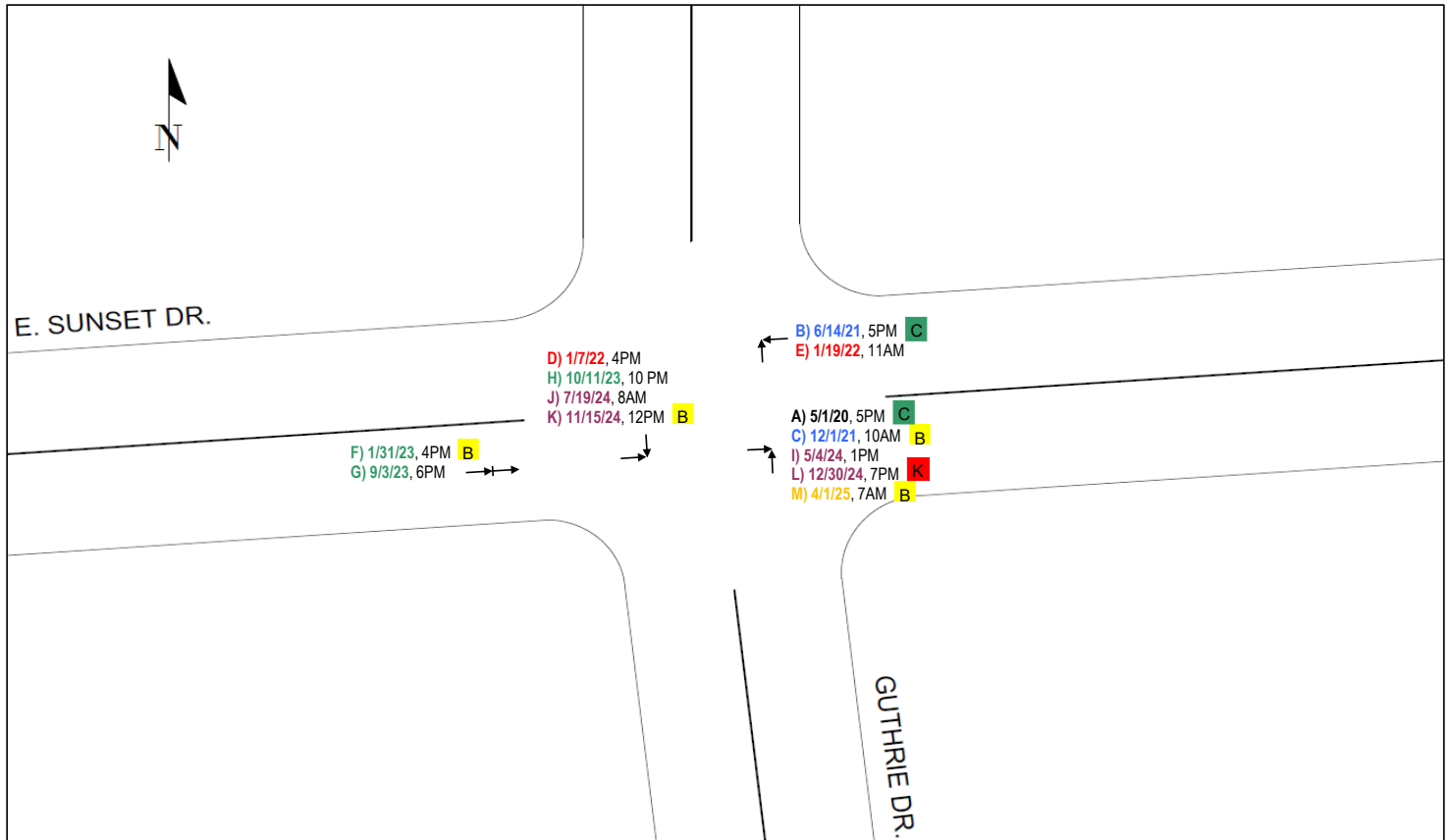
FROM: 1/1/2020

TO: 4/24/2025

PROJECT ID: N/A

PREPARED BY: NTY

DATE: 4/25/2025



NOTE: CRASH DIAGRAM IS A REPRESENTATION OF CRASH TYPES AT INTERSECTION AND MAY NOT REFLECT TRUE LOCATION OF INCIDENT.

YEAR
2020 BLACK
2021 BLUE
2022 RED
2023 GREEN
2024 PURPLE
2025 ORANGE

CRASH RATE
0.94 Crashes
Per Million
Entering Vehicles
Entering Vehicles: 7150/day

CRASH FREQUENCY/SEVERITY
1 Fatal Crash (K)
0 Incapacitating (A)
13 Crashes 4 Non-Incapacitating (B)
2 Possible (C)
6 Property Damage Only

LEGEND

→ Moving Vehicle	⊙ Stop/Yield Sign	↔ Right Angle	↔ Head On
↔ Backing Vehicle	⊙ Tree	↔ Left Turn	↔ Rear End
--- Pedestrian	⊙ Utility Pole	↔ Right Turn	↔ Off Road
— Bicyclist	⊙ Fixed Object	↔ Sideswipe Same	↔ Overtake
▭ Parked Vehicle	⊙ Non-Fixed Object	↔ Sideswipe Opposite	↔ Overturn

"Letter" = Used for referencing crashes in report as needed

Date of crash
Hour
Severity (see severity condition)
Road conditions
Light conditions

Crash Severity Definitions

K	= Fatal crash
A	= Incapacitating injury crash
B	= Non-Incapacitating injury crash
C	= Possible injury crash
	= Property damage only crash

CRASH TYPE	ANGLE	REAR-END	HEAD-ON	LEFT TURN	SS-SAME	SS-OPPOSITE	PEDESTRIAN	BICYCLE	FIXED	NOT FIXED	OVERTURN	OTHR/UNKN
	AN	RE	HD	LT	SSS	SSO	PED	BK	FD	NF	OT	OU
NUMBER OF OCCURENCES	11	2	0	0	0	0	0	0	0	0	0	0

ATTACHMENT 2
INTERSECTION COLLISION DIAGRAM
SUNSET DRIVE & GUTHRIE ROAD
WAUKESHA, WI

Attachment 2

Intersection Traffic Volume Report

Count Basics		Version 2023.05.03		Page 1 of 13	
Start Date:	Wednesday, March 30, 2022	Weekday		Schools in Session	
Total Number of Hours Counted:	24	Non-Holiday		No Special Events	

Base Information, Observed (24) Hour and Estimated (24) Hour Volume Summaries

Major St: Sunset Dr.

Minor St: Guthrie Dr.

Intersection of: Sunset Dr. & Guthrie Dr.

IX_ID:



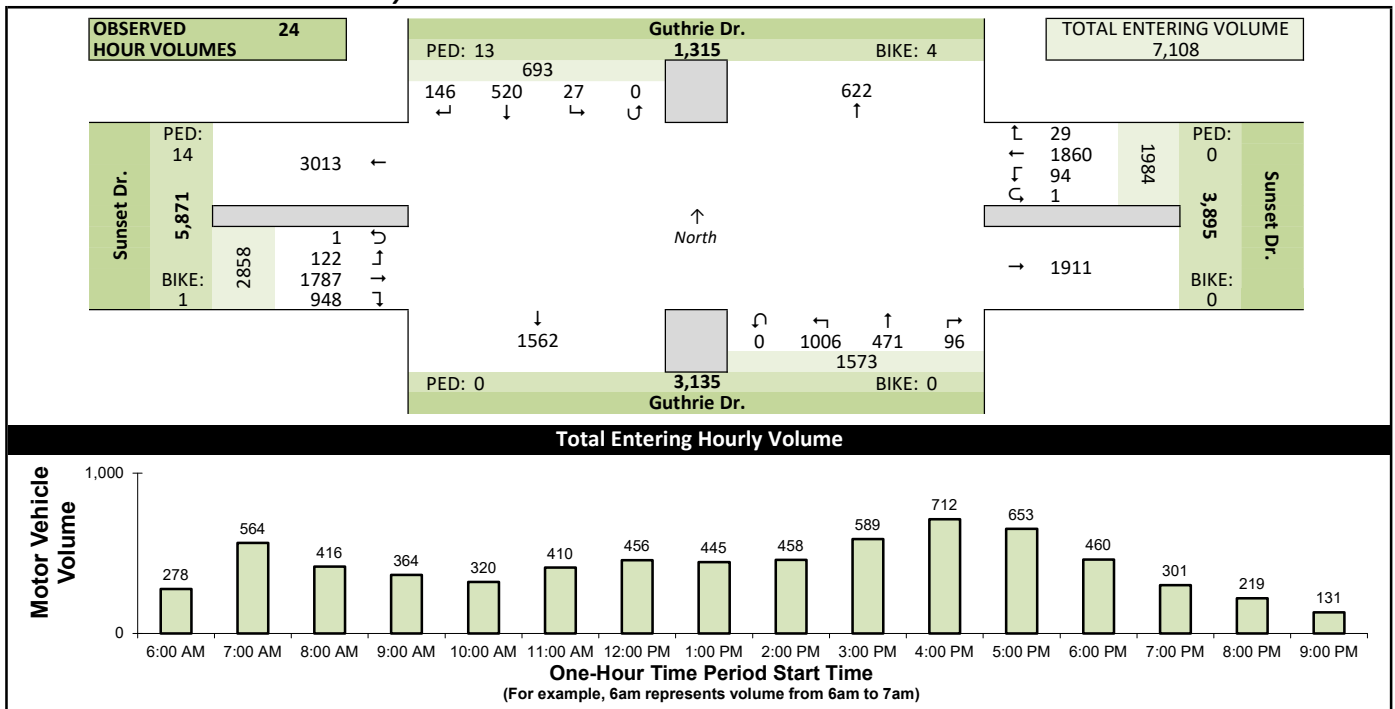
Site Information

Municipality	City of Waukesha
County	67 - Waukesha
WisDOT Region	SE
Traffic Control	All-Way Stop
Roadway Names	North Direction
North Leg	Guthrie Dr.
East Leg	Sunset Dr.
South Leg	Guthrie Dr.
West Leg	Sunset Dr.
Special Considerations	
Schools	In Session
Holidays	None
Special Events	None
Special Pedestrians Observed	
Pre-school children	None
Elementary school age children	None
Visually impaired (white cane/helper dog)	None
Elderly/disabled (except wheelchairs)	None
Wheelchairs/electric scooters	None
Other (describe)	None

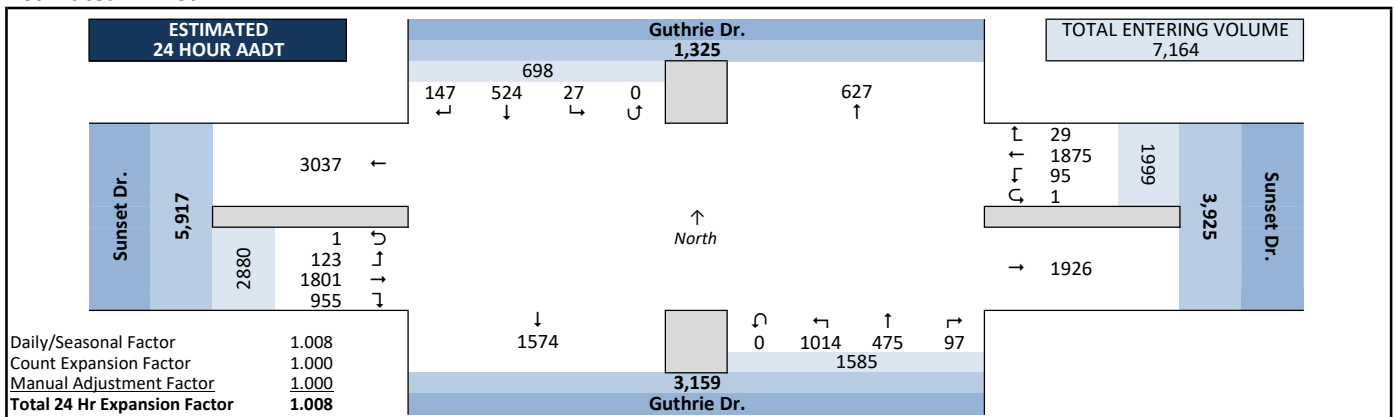
Count Information

Hrs Counted:	12:00 AM-12:00 AM
1st Day of Count	Wednesday, March 30, 2022
Weather	Clear & Dry
AM Peak Period	Wednesday, March 30, 2022
Midday Peak Period	Wednesday, March 30, 2022
PM Peak Period	Wednesday, March 30, 2022
Calculated Peak Hours	
AM	7:00-8:00am
MD	12:15-1:15pm
PM	4:00-5:00pm
Peak Hours Selected for Analysis	
AM	7:00-8:00am
MD	12:15-1:15pm
PM	4:00-5:00pm
Daily/Seasonal Adjustment Group	(2) Urban Arterials & Collectors
Count Expansion Group	(2) Urban Arterials & Collectors
Daily/Seasonal Adjustment Factor	1.008
Count Expansion Factor	1.000
Company Name	Ayres Associates
Manual Adj.	1.000
Observers	AM Peak Period: Miovision Video Recording Midday Peak Period: Miovision Video Recording PM Peak Period: Miovision Video Recording
Comments	2021 DOT Daily & Seasonal Factors

Observed 24 Hour Volume Summary



Estimated 24 Hour AADT

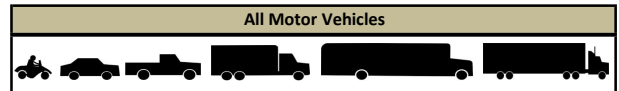


Intersection Traffic Volume Report

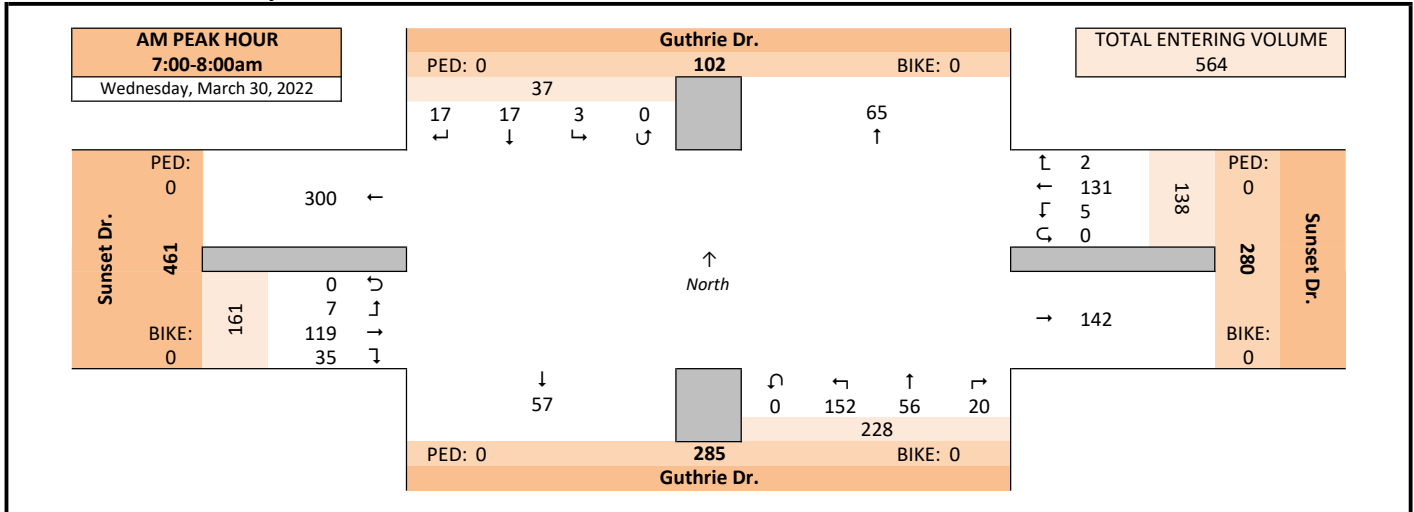
Count Basics			Page 2 of 13
Start Date:	Wednesday, March 30, 2022	Weekday	Schools in Session
Total Number of Hours Counted:	24	Non-Holiday	No Special Events

Peak Hour Volume Graphical Summary

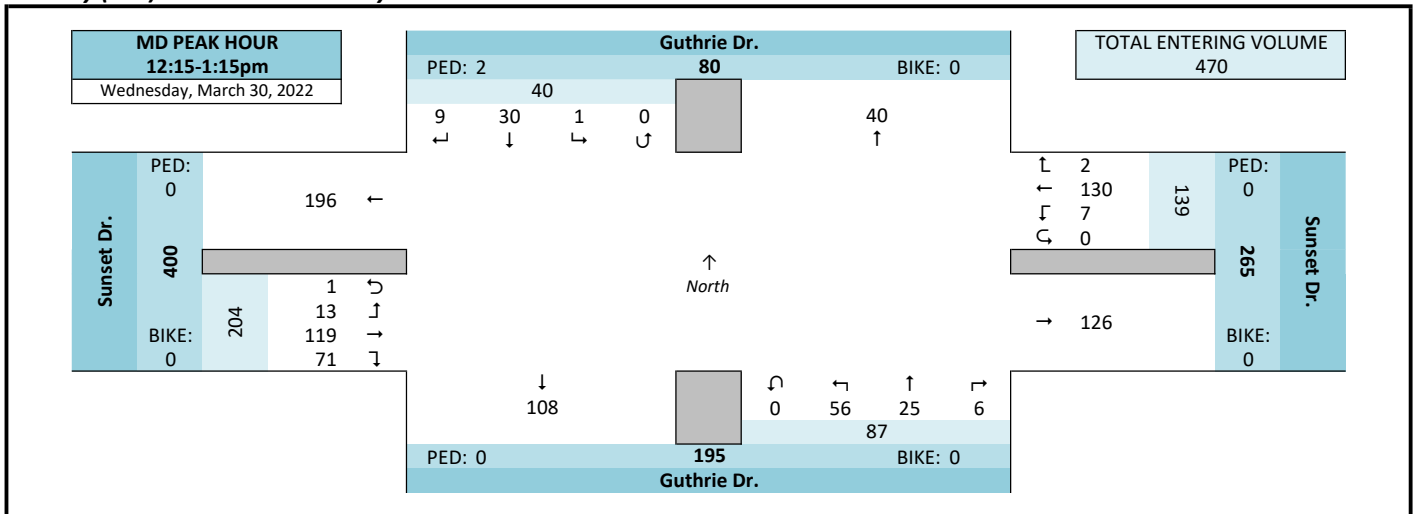
Sunset Dr. & Guthrie Dr.



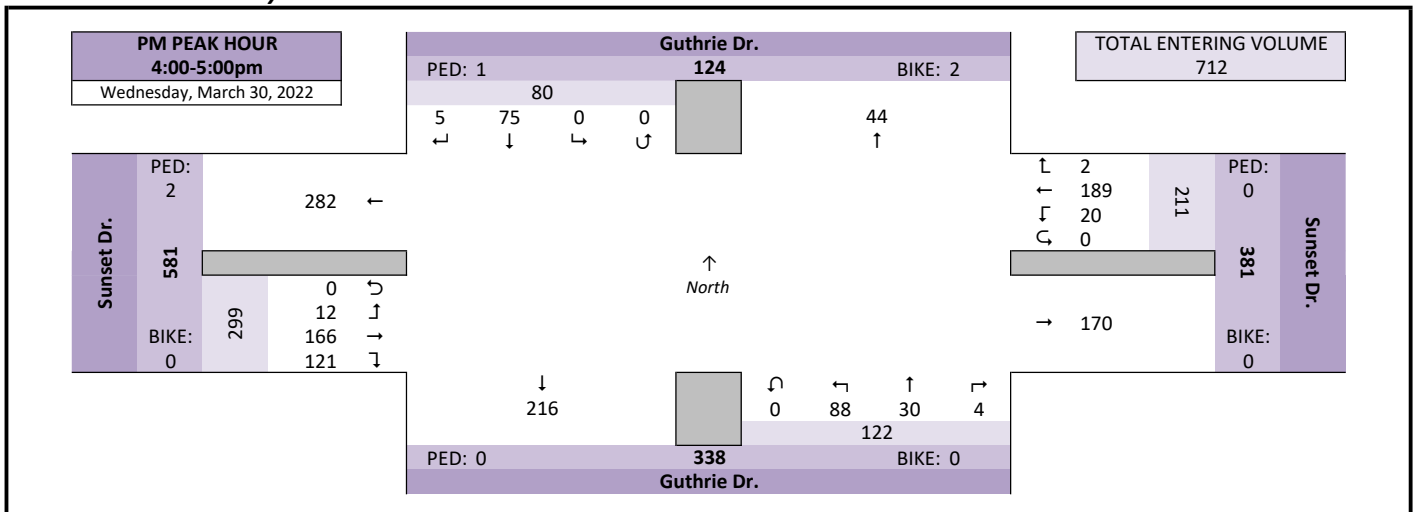
AM Peak Hour Summary



Midday (MD) Peak Hour Summary



PM Peak Hour Summary

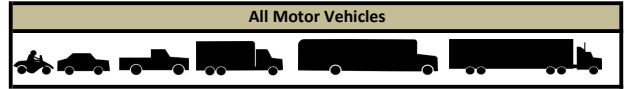


Intersection Traffic Volume Report

Count Basics			Page 3 of 13
Start Date:	Wednesday, March 30, 2022	Weekday	Schools in Session
Total Number of Hours Counted:	24	Non-Holiday	No Special Events

Peak Hour Volume Summary

Sunset Dr. & Guthrie Dr.



Peak Hour Volumes, Truck Percentages, and PHFs

Wednesday, March 30, 2022		From North Guthrie Dr.					From East Sunset Dr.					From South Guthrie Dr.					From West Sunset Dr.					Totals
		Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	
AM Peak Hour	Start Time																					
	7:00 AM	6	0	1	0	7	0	36	0	0	36	3	16	31	0	50	5	23	1	0	29	122
	7:15 AM	6	6	0	0	12	1	36	2	0	39	9	12	42	0	63	2	32	3	0	37	151
	7:30 AM	4	6	1	0	11	1	32	2	0	35	5	20	43	0	68	8	34	2	0	44	158
	7:45 AM	1	5	1	0	7	0	27	1	0	28	3	8	36	0	47	20	30	1	0	51	133
	Peak Hour Volume	17	17	3	0	37	2	131	5	0	138	20	56	152	0	228	35	119	7	0	161	564
	Rounded Hourly Volume	15	15	5	0	35	0	130	5	0	135	20	55	150	0	225	35	120	5	0	160	555
	% Single Unit Trucks	5.9	5.9	33.3	0.0	8.1	0.0	0.8	20.0	0.0	1.4	5.0	1.8	0.0	0.0	0.9	8.6	0.8	28.6	0.0	3.7	2.3
	% Heavy Trucks	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	% Trucks (Total)	5.9	5.9	33.3	0.0	8.1	0.0	0.8	20.0	0.0	1.4	5.0	1.8	0.0	0.0	0.9	8.6	0.8	28.6	0.0	3.7	2.3
Peak Hour Factor (PHF)		0.71	0.71	0.75	0.00	0.77	0.50	0.91	0.62	0.00	0.88	0.56	0.70	0.88	0.00	0.84	0.44	0.87	0.58	0.00	0.79	0.89

Wednesday, March 30, 2022		From North Guthrie Dr.					From East Sunset Dr.					From South Guthrie Dr.					From West Sunset Dr.					Totals
		Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	
Midday (MD) Peak Hour	Start Time																					
	12:15 PM	2	9	1	0	12	0	28	2	0	30	1	8	19	0	28	17	31	2	0	50	120
	12:30 PM	1	6	0	0	7	0	36	2	0	38	1	4	20	0	25	16	32	1	0	49	119
	12:45 PM	0	5	0	0	5	1	35	3	0	39	1	5	9	0	15	21	28	6	1	56	115
	1:00 PM	6	10	0	0	16	1	31	0	0	32	3	8	8	0	19	17	28	4	0	49	116
	Peak Hour Volume	9	30	1	0	40	2	130	7	0	139	6	25	56	0	87	71	119	13	1	204	470
	Rounded Hourly Volume	10	30	0	0	40	0	130	5	0	135	5	25	55	0	85	70	120	15	0	205	465
	% Single Unit Trucks	11.1	0.0	0.0	0.0	2.5	0.0	3.1	14.3	0.0	3.6	0.0	8.0	5.4	0.0	5.7	4.2	1.7	0.0	0.0	2.5	3.4
	% Heavy Trucks	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
	% Trucks (Total)	11.1	0.0	0.0	0.0	2.5	0.0	3.8	14.3	0.0	4.3	0.0	8.0	5.4	0.0	5.7	4.2	1.7	0.0	0.0	2.5	3.6
Peak Hour Factor (PHF)		0.37	0.75	0.25	0.00	0.62	0.50	0.90	0.58	0.00	0.89	0.50	0.78	0.70	0.00	0.78	0.85	0.93	0.54	0.25	0.91	0.98

Wednesday, March 30, 2022		From North Guthrie Dr.					From East Sunset Dr.					From South Guthrie Dr.					From West Sunset Dr.					Totals
		Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	
PM Peak Hour	Start Time																					
	4:00 PM	2	22	0	0	24	0	50	2	0	52	1	8	19	0	28	39	34	2	0	75	179
	4:15 PM	1	16	0	0	17	0	57	5	0	62	1	7	16	0	24	34	45	3	0	82	185
	4:30 PM	0	15	0	0	15	0	42	6	0	48	0	8	32	0	40	24	39	2	0	65	168
	4:45 PM	2	22	0	0	24	2	40	7	0	49	2	7	21	0	30	24	48	5	0	77	180
	Peak Hour Volume	5	75	0	0	80	2	189	20	0	211	4	30	88	0	122	121	166	12	0	299	712
	Rounded Hourly Volume	5	75	0	0	80	0	190	20	0	210	5	30	90	0	125	120	165	10	0	295	710
	% Single Unit Trucks	0.0	0.0	0.0	0.0	0.0	0.0	1.6	5.0	0.0	1.9	0.0	3.3	3.4	0.0	3.3	0.8	0.6	0.0	0.0	0.7	1.4
	% Heavy Trucks	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	0.0	0.0	0.0	0.6	0.0	0.0	0.3	0.1
	% Trucks (Total)	0.0	0.0	0.0	0.0	0.0	0.0	1.6	5.0	0.0	1.9	0.0	3.3	3.4	0.0	3.3	0.8	1.2	0.0	0.0	1.0	1.5
Peak Hour Factor (PHF)		0.62	0.85	0.00	0.00	0.83	0.25	0.83	0.71	0.00	0.85	0.50	0.94	0.69	0.00	0.76	0.78	0.86	0.60	0.00	0.91	0.96

Peak Hour Pedestrian and Bicyclist Volumes

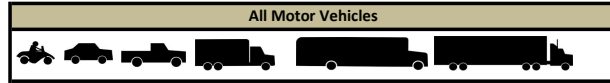
Pedestrians and Bicyclists		Crossing North Approach Guthrie Dr.			Crossing East Approach Sunset Dr.			Crossing South Approach Guthrie Dr.			Crossing West Approach Sunset Dr.			Total Ped & Bike Volume
15-Minute Start Time		Pedestrian	Bicyclist	Total	Pedestrian	Bicyclist	Total	Pedestrian	Bicyclist	Total	Pedestrian	Bicyclist	Total	
AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	0	0	0	0	0	0	0	0	0	0	0	0	0
MD	12:15 PM	2	0	2	0	0	0	0	0	0	0	0	0	2
	12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	2	0	2	0	0	0	0	0	0	0	0	0	2
PM	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 PM	1	1	2	0	0	0	0	0	0	1	0	1	3
	4:45 PM	0	1	1	0	0	0	0	0	0	1	0	1	2
	Total	1	2	3	0	0	0	0	0	0	2	0	2	5

Intersection Traffic Volume Report

Count Basics			Page 4 of 13
Start Date:	Wednesday, March 30, 2022	Weekday	Schools in Session
Total Number of Hours Counted:	24	Non-Holiday	No Special Events

Hourly Volume Summary - Motor Vehicle Data

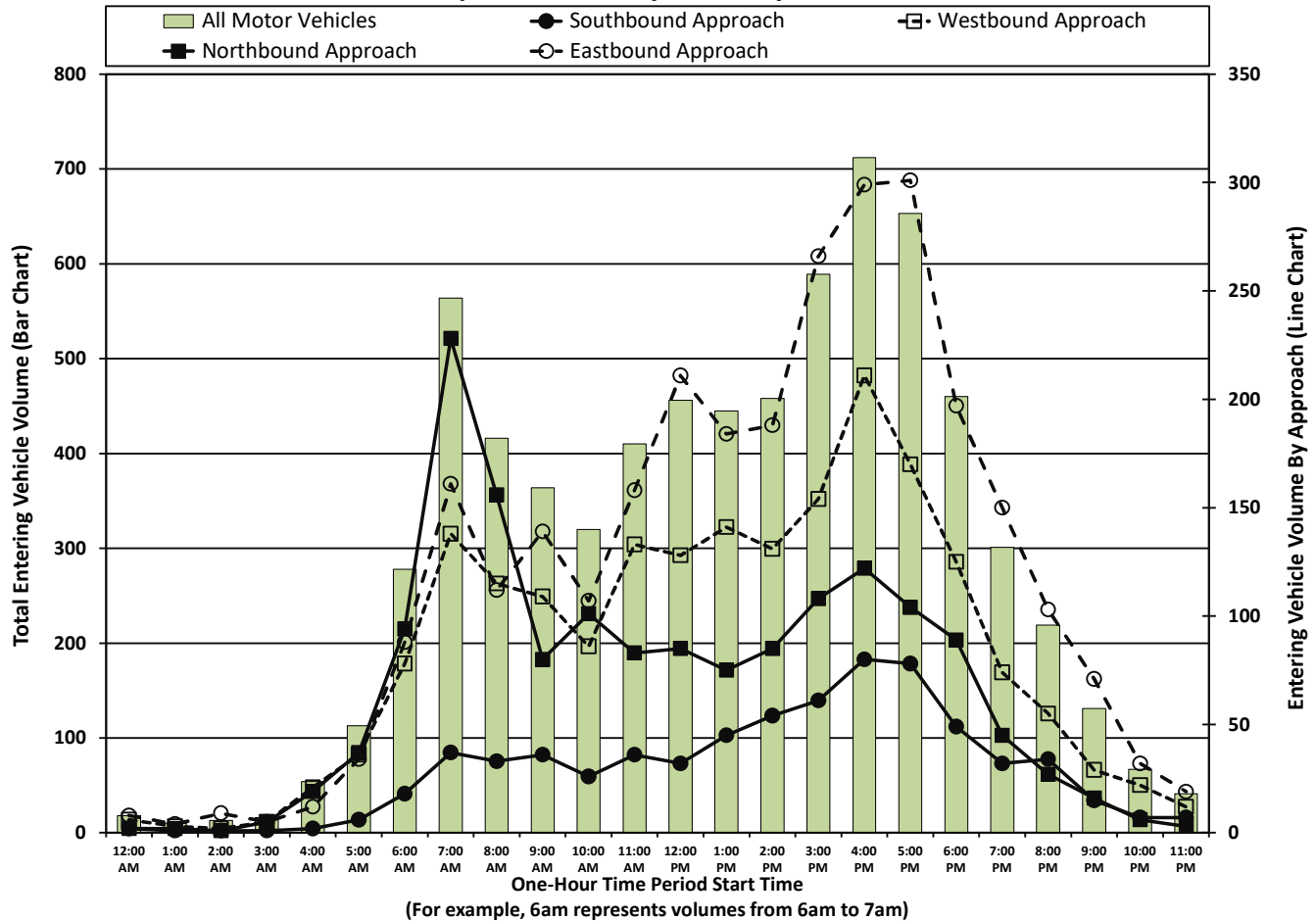
Sunset Dr. & Guthrie Dr.



One-Hour Motor Vehicle Data

One-Hour Time Period	Start Time	From North Guthrie Dr.					From East Sunset Dr.					From South Guthrie Dr.					From West Sunset Dr.					Total Vehicle Volume	Directional Volume Totals E/W N/S	
		Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total			
Pre-AM	12:00 AM	0	2	0	0	2	1	4	1	0	6	1	0	1	0	2	2	5	1	0	8	18	14	4
	1:00 AM	1	0	0	0	1	0	2	1	0	3	0	0	1	0	2	0	3	1	0	4	10	7	3
	2:00 AM	0	0	1	0	1	0	2	0	0	2	0	0	1	0	1	1	7	1	0	9	13	11	2
	3:00 AM	0	1	0	0	1	0	5	0	0	5	0	3	2	0	5	2	3	0	0	5	16	10	6
	4:00 AM	1	1	0	0	2	0	21	0	0	21	1	10	8	0	19	3	9	0	0	12	54	33	21
AM	5:00 AM	2	3	1	0	6	0	36	0	0	36	0	14	23	0	37	2	31	1	0	34	113	70	43
	6:00 AM	7	6	5	0	18	0	78	0	0	78	7	31	56	0	94	16	71	1	0	88	278	166	112
	7:00 AM	17	17	3	0	37	2	131	5	0	138	20	56	152	0	228	35	119	7	0	161	564	299	265
	8:00 AM	12	19	2	0	33	1	111	3	0	115	8	43	105	0	156	23	86	3	0	112	416	227	189
	9:00 AM	16	19	1	0	36	1	101	7	0	109	3	27	50	0	80	31	98	10	0	139	364	248	116
MD	10:00 AM	8	16	2	0	26	7	79	0	0	86	7	33	61	0	101	28	71	8	0	107	320	193	127
	11:00 AM	8	27	1	0	36	0	129	3	1	133	3	31	49	0	83	54	97	7	0	158	410	291	119
	12:00 PM	3	28	1	0	32	1	120	7	0	128	4	23	58	0	85	76	125	9	1	211	456	339	117
	1:00 PM	11	32	2	0	45	3	135	3	0	141	6	32	37	0	75	69	102	13	0	184	445	325	120
	2:00 PM	12	41	1	0	54	4	122	5	0	131	2	28	55	0	85	59	128	1	0	188	458	319	139
PM	3:00 PM	14	46	1	0	61	2	147	5	0	154	3	35	70	0	108	88	171	7	0	266	589	420	169
	4:00 PM	5	75	0	0	80	2	189	20	0	211	4	30	88	0	122	121	166	12	0	299	712	510	202
	5:00 PM	11	66	1	0	78	2	158	10	0	170	5	24	75	0	104	119	165	17	0	301	653	471	182
	6:00 PM	8	38	3	0	49	2	115	8	0	125	11	17	61	0	89	69	124	4	0	197	460	322	138
	7:00 PM	5	27	0	0	32	0	70	4	0	74	6	14	25	0	45	61	85	4	0	150	301	224	77
	8:00 PM	3	29	2	0	34	0	48	7	0	55	3	11	13	0	27	51	47	5	0	103	219	158	61
	9:00 PM	0	15	0	0	15	0	26	3	0	29	0	6	10	0	16	28	40	3	0	71	131	100	31
	10:00 PM	1	6	0	0	7	0	21	1	0	22	2	1	3	0	6	8	19	5	0	32	67	54	13
	11:00 PM	1	6	0	0	7	1	10	1	0	12	0	1	2	0	3	2	15	2	0	19	41	31	10
Totals		146	520	27	0	693	29	1860	94	1	1984	96	471	1006	0	1573	948	1787	122	1	2858	7108	4842	2266

Graphical Summary of Hourly Volumes



Intersection Traffic Volume Report

Count Basics				Page 5 of 13	
Start Date:	Wednesday, March 30, 2022	Weekday	Schools in Session		
Total Number of Hours Counted:	24	Non-Holiday	No Special Events		

15-Minute Motor Vehicle Data

Sunset Dr. & Guthrie Dr.



15-Minute Motor Vehicle Data

15-Minute Time Period Start Time	From North					From East					From South					From West					15-Min Totals	Hourly Sum	PHF	
	Guthrie Dr.				Total	Sunset Dr.				Total	Guthrie Dr.				Total	Sunset Dr.				Total				
	Right	Thru	Left	U-Tn		Right	Thru	Left	U-Tn		Right	Thru	Left	U-Tn		Right	Thru	Left	U-Tn					
Pre-AM Peak Period	12:00 AM	0	0	0	0	0	0	1	1	0	2	0	0	0	0	0	1	0	0	1	3	18	0.75	
	12:15 AM	0	1	0	0	1	1	1	0	0	2	1	0	0	0	1	1	0	1	0	2	6	20	0.83
	12:30 AM	0	1	0	0	1	0	1	0	0	1	0	0	0	0	0	3	0	0	3	5	17	0.85	
	12:45 AM	0	0	0	0	0	0	1	0	0	1	0	0	1	0	1	1	0	0	2	4	13	0.65	
	1:00 AM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	2	1	0	3	5	10	0.50	
	1:15 AM	1	0	0	0	1	0	0	0	0	0	0	1	0	1	0	1	0	0	1	3	8	0.67	
	1:30 AM	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1	6	0.50	
	1:45 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1	10	0.50	
	2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0	3	3	13	0.65
	2:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1	11	0.55
	2:30 AM	0	0	0	0	0	0	1	0	0	1	0	0	1	0	1	0	3	0	0	3	5	15	0.75
	2:45 AM	0	0	1	0	1	0	1	0	0	1	0	0	0	0	0	1	1	0	0	2	4	13	0.65
	3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1	16	0.57
	3:15 AM	0	1	0	0	1	0	1	0	0	1	0	1	0	0	1	1	1	0	0	2	5	20	0.71
	3:30 AM	0	0	0	0	0	0	2	0	0	2	0	1	0	0	1	0	0	0	0	0	3	29	0.52
	3:45 AM	0	0	0	0	0	0	2	0	0	2	0	1	1	2	2	1	2	0	0	3	7	44	0.61
4:00 AM	0	0	0	0	0	0	3	0	0	3	0	1	1	0	2	0	0	0	0	5	54	0.75		
4:15 AM	0	0	0	0	0	0	5	0	0	5	1	4	2	7	0	2	0	0	2	14	68	0.89		
4:30 AM	0	1	0	0	1	0	7	0	0	7	0	2	3	5	1	4	0	0	5	18	84	0.70		
4:45 AM	1	0	0	0	1	0	6	0	0	6	0	3	2	5	2	3	0	0	5	17	95	0.79		
5:00 AM	2	0	0	0	2	0	5	0	0	5	0	2	2	4	1	6	1	0	8	19	113	0.81		
5:15 AM	0	1	0	0	1	0	7	0	0	7	0	3	7	10	1	11	0	0	12	30	144	0.72		
5:30 AM	0	1	0	0	1	0	8	0	0	8	0	6	6	12	0	8	0	0	8	29	165	0.81		
5:45 AM	0	1	1	0	2	0	16	0	0	16	0	3	8	11	0	6	0	0	6	35	224	0.64		
AM Peak Period	6:00 AM	1	0	0	0	1	0	11	0	0	11	1	10	11	0	22	1	15	0	0	16	50	278	0.78
	6:15 AM	2	1	2	0	5	0	19	0	0	19	0	3	9	12	4	11	0	0	15	51	350	0.72	
	6:30 AM	2	4	1	0	7	0	32	0	0	32	1	8	12	0	21	8	20	0	28	88	450	0.75	
	6:45 AM	2	1	2	0	5	0	16	0	0	16	5	10	24	0	39	3	25	1	0	29	89	520	0.82
	7:00 AM	6	0	1	0	7	0	36	0	0	36	3	16	31	0	50	5	23	1	0	29	564	0.89	
	7:15 AM	6	6	0	0	12	1	36	2	0	39	9	12	42	0	63	2	32	3	0	37	533	0.84	
	7:30 AM	4	6	1	0	11	1	32	2	0	35	5	20	43	0	68	8	34	2	0	44	518	0.87	
	7:45 AM	1	5	1	0	7	0	27	1	0	28	3	8	36	0	47	20	30	1	0	51	462	0.81	
	8:00 AM	2	7	0	0	9	1	15	0	0	16	3	15	20	0	38	7	21	0	0	28	91	416	0.81
	8:15 AM	7	5	0	0	12	0	42	1	0	43	2	14	32	0	48	2	23	0	0	25	128	428	0.84
	8:30 AM	2	3	1	0	6	0	29	2	0	31	1	8	28	0	37	10	25	1	0	36	110	389	0.88
	8:45 AM	1	4	1	0	6	0	25	0	0	25	2	6	25	0	33	4	17	2	0	23	87	364	0.88
	9:00 AM	2	2	1	0	5	0	27	1	0	28	2	9	18	0	29	10	29	2	0	41	103	364	0.88
	9:15 AM	6	6	0	0	12	1	26	2	0	29	1	5	9	0	15	10	19	4	0	33	89	334	0.94
	9:30 AM	5	4	0	0	9	0	20	0	0	20	0	9	12	0	21	5	28	2	0	35	85	327	0.94
	9:45 AM	3	7	0	0	10	0	28	4	0	32	0	4	11	0	15	6	22	2	0	30	87	323	0.93
Midday Peak Period	10:00 AM	1	3	0	0	4	2	21	0	0	23	0	8	14	0	22	7	15	2	0	24	73	320	0.95
	10:15 AM	3	7	0	0	10	0	19	0	0	19	4	11	10	0	25	8	19	1	0	28	82	342	0.90
	10:30 AM	1	1	2	0	4	2	17	0	0	19	1	10	21	0	32	6	17	3	0	26	81	341	0.90
	10:45 AM	3	5	0	0	8	3	22	0	0	25	2	4	16	0	22	7	20	2	0	29	84	374	0.82
	11:00 AM	4	7	1	0	12	0	24	1	0	25	0	8	13	0	21	10	23	4	0	37	95	410	0.85
	11:15 AM	0	5	0	0	5	0	26	0	0	26	0	8	8	0	16	15	19	0	0	34	81	417	0.87
	11:30 AM	2	8	0	0	10	0	35	1	1	37	3	6	13	0	22	13	31	1	0	45	114	456	0.95
	11:45 AM	2	7	0	0	9	0	44	1	0	45	0	9	15	0	24	16	24	2	0	42	120	461	0.96
	12:00 PM	0	8	0	0	8	0	21	0	0	21	1	6	10	0	17	22	34	0	0	56	102	456	0.95
	12:15 PM	2	9	1	0	12	0	28	2	0	30	1	8	19	0	28	17	31	2	0	50	120	470	0.98
	12:30 PM	1	6	0	0	7	0	36	2	0	38	1	4	20	0	25	16	32	1	0	49	119	455	0.96
	12:45 PM	0	5	0	0	5	1	35	3	0	39	1	5	9	0	15	21	28	6	1	56	115	451	0.97
	1:00 PM	6	10	0	0	16	1	31	0	0	32	3	8	8	0	19	17	28	4	0	49	116	445	0.96
	1:15 PM	1	6	1	0	8	1	34	1	0	36	0	7	10	0	17	19	22	3	0	44	105	433	0.94
	1:30 PM	2	8	0	0	10	1	36	0	0	37	2	10	5	0	17	11	37	3	0	51	115	440	0.96
	1:45 PM	2	8	1	0	11	0	34	2	0	36	1	7	14	0	22	22	15	3	0	40	109	454	0.88
PM Peak Period	2:00 PM	1	12	0	0	13	1	24	2	0	27	0	5	10	0	15	13	35	1	0	49	104	458	0.89
	2:15 PM	1	10	1	0	12	0	31	0	0	31	0	10	15	0	25	16	28	0	0	44	112	492	0.89
	2:30 PM	3	7	0	0	10	1	31	2	0	34	1	9	19	0	29	18	38	0	0	56	129	538	0.85
	2:45 PM	7	12	0	0	19	2	36	1	0	39	1	4	11	0	16	12	27	0	0	39	113	559	0.88
	3:00 PM	3	15	0	0	18	1	37	2	0	40	1	7	16	0	24	14	41	1	0	56	138	589	0.93
	3:15 PM	3	9	0	0	12	1	40	1	0	42	0	13	21	0	34	20	48	2	0	70	158	630	0.88
	3:30 PM	4	15	0	0	19	0	30	2	0	32	0	9	22	0	31	20	44	4	0	68	150	657	0.89
	3:45 PM	4	7	1	0	12	0	40	0	0	40	2	6	11	0	19	34	38	0	0	72	143	675	0.91
	4:00 PM	2	22	0	0	24	0	50	2	0	52	1	8	19	0	28	39	34	2	0	75	179	712	0.96
	4:15 PM	1	16	0	0	17	0	57	5	0	62	1	7	16	0	24	34	45	3	0	82	185	711	0.96
	4:30 PM	0	15	0	0	15	0	42	6	0	48	0	8	32	0	24	39	2	0	65	168	711	0.96	
	4:45 PM	2	22	0	0	24	2	40	7	0	49	2	7	21	0	30	24	48	5	0	77	180	692	0.94
	5:00 PM	2	17	0	0	19	1	47	2	0	50	0	4	20	0	24	40	39	6	0	85	178	653	0.88
	5:15 PM	4	18	0	0	22	0	45	2	0	47	3	4	26	0	33	31	44	8	0	83	185	620	0.84
	5:30 PM	1	16	0	0	17	0	34	2	0	36	0	5	17	0	22	25	48	1	0	74	149	545	0.91
	5:45 PM	4	15	1	0	20	1	32	4	0	37	2	11	12	0	25	23	34	2	0	59	141	510	0.88
6:00 PM	1	13	0	0	14	1																		

Intersection Traffic Volume Report

Count Basics				Page 6 of 13	
Start Date:	Wednesday, March 30, 2022	Weekday	Schools in Session		
Total Number of Hours Counted:	24	Non-Holiday	No Special Events		

15-Minute Automobile Data

Sunset Dr. & Guthrie Dr.

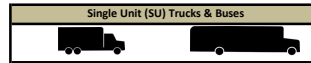


15-Minute Automobile Data

15-Minute Time Period	From North					From East					From South					From West					15-Min Totals	Hourly Sum		
	Guthrie Dr.					Sunset Dr.					Guthrie Dr.					Sunset Dr.								
	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total				
Pre-AM Peak Period	12:00 AM	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0	2	17	
	12:15 AM	0	1	0	0	1	1	1	0	0	2	1	0	0	0	1	1	0	1	0	2	6	20	
	12:30 AM	0	1	0	0	1	0	1	0	0	1	0	0	0	0	0	0	3	0	0	3	5	17	
	12:45 AM	0	0	0	0	0	0	1	0	0	1	0	0	1	0	1	1	1	0	0	2	4	13	
	1:00 AM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	2	1	0	3	5	10	
	1:15 AM	1	0	0	0	1	0	0	0	0	0	0	0	1	0	1	0	1	0	0	1	3	8	
	1:30 AM	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1	5	
	1:45 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1	9	
	2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0	3	3	11	
	2:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	
	2:30 AM	0	0	0	0	0	0	1	0	0	1	0	0	1	0	1	0	3	0	0	3	5	14	
	2:45 AM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	3	12	
	3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1	16	
	3:15 AM	0	1	0	0	1	0	1	0	0	1	0	1	0	0	1	1	1	0	0	2	5	20	
	3:30 AM	0	0	0	0	0	0	2	0	0	2	0	1	0	0	1	0	0	0	0	0	3	29	
	3:45 AM	0	0	0	0	0	0	2	0	0	2	0	1	1	0	2	1	2	0	0	3	7	44	
	4:00 AM	0	0	0	0	0	0	3	0	0	3	0	1	1	0	2	0	0	0	0	0	5	54	
	4:15 AM	0	0	0	0	0	0	5	0	0	5	1	4	2	0	7	0	2	0	0	2	14	68	
	4:30 AM	0	1	0	0	1	0	7	0	0	7	0	2	3	0	5	1	4	0	0	5	18	83	
	4:45 AM	1	0	0	0	1	0	6	0	0	6	0	3	2	0	5	2	3	0	0	5	17	92	
5:00 AM	2	0	0	0	2	0	5	0	0	5	0	2	2	0	4	1	6	1	0	8	19	110		
5:15 AM	0	1	0	0	1	0	7	0	0	7	0	3	7	0	10	1	10	0	0	11	29	141		
5:30 AM	0	1	0	0	1	0	7	0	0	7	0	5	6	0	11	0	8	0	0	8	27	162		
5:45 AM	0	1	1	0	2	0	16	0	0	16	0	3	8	0	11	0	6	0	0	6	35	221		
AM Peak Period	6:00 AM	1	0	0	0	1	0	11	0	0	11	1	10	11	0	22	1	15	0	0	16	50	268	
	6:15 AM	2	1	2	0	5	0	19	0	0	19	0	3	9	0	12	3	11	0	0	14	50	336	
	6:30 AM	2	4	1	0	7	0	31	0	0	31	1	8	11	0	20	8	20	0	0	28	86	435	
	6:45 AM	2	1	2	0	5	0	16	0	0	16	4	9	22	0	35	2	24	0	0	26	82	505	
	7:00 AM	5	0	0	0	5	0	35	0	0	35	2	16	31	0	49	5	23	1	0	29	118	551	
	7:15 AM	6	6	0	0	12	1	36	2	0	39	9	12	42	0	63	2	31	2	0	35	149	521	
	7:30 AM	4	6	1	0	11	1	32	2	0	35	5	20	43	0	68	7	34	1	0	42	156	495	
	7:45 AM	1	4	1	0	6	0	27	0	0	27	3	7	36	0	46	18	30	1	0	49	128	449	
	8:00 AM	2	6	0	0	8	1	15	0	0	16	3	15	19	0	37	7	20	0	0	27	88	407	
	8:15 AM	5	5	0	0	10	0	41	1	0	42	1	13	32	0	46	2	23	0	0	25	123	420	
	8:30 AM	2	3	1	0	6	0	29	2	0	31	1	8	28	0	37	10	25	1	0	36	110	383	
	8:45 AM	1	4	1	0	6	0	25	0	0	25	2	6	25	0	33	4	16	2	0	22	86	357	
	9:00 AM	2	2	1	0	5	0	27	1	0	28	2	8	18	0	28	10	28	2	0	40	101	356	
	9:15 AM	6	6	0	0	12	1	24	1	0	26	1	5	9	0	15	10	19	4	0	33	86	325	
	9:30 AM	5	4	0	0	9	0	20	0	0	20	0	9	12	0	21	4	28	2	0	34	84	319	
	9:45 AM	2	7	0	0	9	0	27	4	0	31	0	4	11	0	15	6	22	2	0	30	85	316	
	Midday Peak Period	10:00 AM	0	3	0	0	3	2	20	0	0	22	0	8	14	0	22	7	14	2	0	23	70	315
		10:15 AM	3	7	0	0	10	0	17	0	0	17	4	11	10	0	25	8	19	1	0	28	80	335
		10:30 AM	1	1	2	0	4	2	17	0	0	19	1	10	21	0	32	6	17	3	0	26	81	336
		10:45 AM	3	5	0	0	8	3	22	0	0	25	2	4	16	0	22	7	20	2	0	29	84	369
11:00 AM		4	7	1	0	12	0	23	1	0	24	0	8	11	0	19	9	23	3	0	35	90	401	
11:15 AM		0	5	0	0	5	0	26	0	0	26	0	8	8	0	16	15	19	0	0	34	81	410	
11:30 AM		2	8	0	0	10	0	35	1	1	37	3	6	13	0	22	13	31	1	0	45	114	445	
11:45 AM		1	7	0	0	8	0	44	1	0	45	0	8	15	0	23	16	22	2	0	40	116	442	
12:00 PM		0	8	0	0	8	0	19	0	0	19	1	6	10	0	17	21	34	0	0	55	99	439	
12:15 PM		2	9	1	0	12	0	28	2	0	30	1	7	17	0	25	17	30	2	0	49	116	453	
12:30 PM		1	6	0	0	7	0	32	1	0	33	1	4	19	0	24	15	31	1	0	47	111	439	
12:45 PM		0	5	0	0	5	1	35	3	0	39	1	5	9	0	15	19	28	6	1	54	113	442	
1:00 PM		5	10	0	0	15	1	30	0	0	31	3	7	8	0	18	17	28	4	0	49	113	436	
1:15 PM		1	6	1	0	8	1	32	1	0	34	0	7	10	0	17	18	22	3	0	43	102	427	
1:30 PM		2	8	0	0	10	1	35	0	0	36	2	10	5	0	17	11	37	3	0	51	114	436	
1:45 PM		2	8	1	0	11	0	32	2	0	34	1	7	14	0	22	22	15	3	0	40	107	449	
PM Peak Period		2:00 PM	1	12	0	0	13	1	24	2	0	27	0	5	10	0	15	13	35	1	0	49	104	452
		2:15 PM	1	10	1	0	12	0	31	0	0	31	0	10	15	0	25	16	27	0	0	43	111	480
		2:30 PM	3	7	0	0	10	1	30	2	0	33	1	9	19	0	29	18	37	0	0	55	127	522
		2:45 PM	6	12	0	0	18	2	36	1	0	39	1	4	11	0	16	10	27	0	0	37	110	542
	3:00 PM	3	14	0	0	17	1	36	2	0	39	1	7	14	0	22	13	41	0	0	54	132	571	
	3:15 PM	3	9	0	0	12	1	40	1	0	42	0	12	20	0	32	19	46	2	0	67	153	616	
	3:30 PM	4	14	0	0	18	0	30	2	0	32	0	9	21	0	30	19	44	4	0	67	147	643	
	3:45 PM	4	6	1	0	11	0	40	0	0	40	2	6	10	0	18	32	38	0	0	70	139	663	
	4:00 PM	2	22	0	0	24	0	49	1	0	50	1	8	19	0	28	39	34	2	0	75	177	701	
	4:15 PM	1	16	0	0	17	0	56	5	0	61	1	6	15	0	22	33	44	3	0	80	180	702	
	4:30 PM	0	15	0	0	15	0	42	6	0	48	0	8	31	0	39	24	39	2	0	65	167	706	
	4:45 PM	2	22	0	0	24	2	39	7	0	48	2	7	20	0	29	24	47	5	0	76	177	688	
	5:00 PM	2	17	0	0	19	1	47	2	0	50	0	4	20	0	24	40	39	6	0	85	178	650	
	5:15 PM	4	18	0	0	22	0	44	2	0	46	3	4	26	0	33	31	44	8	0	83	184	616	
	5:30 PM	1	16	0	0	17	0	34	2	0	36	0	5	17	0	22	25	48	1	0	74	149	542	
	5:45 PM	4	15	0	0	19	1	31	4	0	36	2	11	12	0	25	23	34	2	0	59	139	507	
	6:00 PM	1	13	0	0	14	1	33	4	0	38	4												

Count Basics		Page 7 of 13	
Start Date:	Wednesday, March 30, 2022	Weekday	Schools in Session
Total Number of Hours Counted:	24	Non-Holiday	No Special Events

Sunset Dr. & Guthrie Dr.



15-Minute Time Period		From North Guthrie Dr.				From East Sunset Dr.				From South Guthrie Dr.				From West Sunset Dr.				15-Min	Hourly Sum
Start Time		Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Totals		
Pre-AM Peak Period	12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	12:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	12:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	12:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1	
	2:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2:45 AM	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	1	
	3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	4:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
4:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
4:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
5:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
5:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1		
5:30 AM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1		
5:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
AM Peak Period	6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:15 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	
	6:30 AM	0	0	0	0	0	1	0	0	1	0	1	0	0	0	0	2	15	
	6:45 AM	0	0	0	0	0	0	0	0	0	1	1	2	0	4	1	1	3	7
	7:00 AM	1	0	1	0	2	1	0	0	1	1	0	0	0	0	0	0	4	13
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	2	12	
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2	2	15	
	7:45 AM	0	1	0	0	1	0	0	1	0	1	0	1	2	0	0	0	2	5
	8:00 AM	0	1	0	0	1	0	0	0	0	0	1	0	1	0	0	1	3	

Per Hour Single Unit (SU) Truck & Buses Volume Summary																					
Hourly Time Period	From North Guthrie Dr.				From East Sunset Dr.				From South Guthrie Dr.				From West Sunset Dr.				Total Hourly Volume				
	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right		Thru	Left	U-Tn	Total
Start Time																					
AM 7:00 AM	1	1	1	0	0	3	0	1	1	0	2	1	1	0	0	2	3	1	2	0	6
MD 12:15 PM	1	0	0	0	1	0	4	1	0	5	0	2	3	0	0	5	3	2	0	0	5
PM 4:00 PM	0	0	0	0	0	3	1	0	4	0	1	3	0	4	1	4	1	1	0	0	2

Count Basics		Page 8 of 13	
Start Date:	Wednesday, March 30, 2022	Weekday	Schools in Session
Total Number of Hours Counted:	24	Non-Holiday	No Special Events

Sunset Dr. & Guthrie Dr.



15-Minute Time Period Start Time	↙ From North				← From East				↗ From South				→ From West				15-Min Totals	Hourly Sum	
	Guthrie Dr.				Sunset Dr.				Guthrie Dr.				Sunset Dr.						
	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total				
Pre-AM Peak Period	12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0
	12:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	12:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	12:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AM Peak Period	4:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	4:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	5:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	5:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	5:30 AM	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	1	1
	5:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7:45 AM	0	0	0															

		From North					From East					From South					From West					Total
Hourly	Time Period	Guthrie Dr.					Sunset Dr.					Guthrie Dr.					Sunset Dr.					Hourly
Start Time		Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Volume
AM	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MD	12:15 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
PM	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1

Intersection Traffic Volume Report

Count Basics		Page 9 of 13	
Start Date:	Wednesday, March 30, 2022	Weekday	Schools in Session
Total Number of Hours Counted:	24	Non-Holiday	No Special Events

15-Minute Heavy Vehicle Data

Sunset Dr. & Guthrie Dr.



15-Minute Heavy Vehicle Data

15-Minute Time Period Start Time	From North Guthrie Dr.					From East Sunset Dr.					From South Guthrie Dr.					From West Sunset Dr.					15-Min Totals	Hourly Sum
	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total		
Pre-AM Peak Period	12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
	12:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	12:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	12:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	1:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	
	2:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2:45 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	1	
	3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	3:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	4:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	4:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	4:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
5:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1		
5:30 AM	0	0	0	0	0	0	1	0	0	1	0	1	0	0	1	0	0	0	0	2		
5:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
AM Peak Period	6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	
	6:30 AM	0	0	0	0	0	0	1	0	0	1	0	1	0	0	1	0	0	0	0	2	
	6:45 AM	0	0	0	0	0	0	0	0	0	1	1	2	0	4	1	1	1	0	3	7	
	7:00 AM	1	0	1	0	2	0	1	0	0	1	1	0	0	1	0	0	0	0	0	4	
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	2	
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	2	2	
	7:45 AM	0	1	0	0	1	0	0	0	1	0	1	0	0	1	2	0	0	0	2	5	
	8:00 AM	0	1	0	0	1	0	0	0	0	0	0	1	0	1	0	1	0	0	1	3	
	8:15 AM	2	0	0	0	2	0	1	0	0	1	1	1	0	2	0	0	0	0	0	5	
	8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1	
	9:00 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	1	0	0	1	2	
	9:15 AM	0	0	0	0	0	0	2	1	0	3	0	0	0	0	0	0	0	0	0	3	
	9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	
9:45 AM	1	0	0	0	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	2		
Midday Peak Period	10:00 AM	1	0	0	0	1	0	1	0	0	1	0	0	0	0	0	1	0	0	1	3	
	10:15 AM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	2	
	10:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	10:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	11:00 AM	0	0	0	0	0	0	1	0	0	1	0	2	0	2	1	0	1	0	2	5	
	11:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	11:45 AM	1	0	0	0	1	0	0	0	0	0	1	0	0	1	0	2	0	0	2	4	
	12:00 PM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	1	0	0	1	3	
	12:15 PM	0	0	0	0	0	0	0	0	0	0	1	2	0	3	0	1	0	0	1	4	
	12:30 PM	0	0	0	0	0	0	4	1	0	5	0	1	0	1	1	1	0	0	2	8	
	12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	
	1:00 PM	1	0	0	0	1	0	0	0	0	1	0	1	0	0	1	0	0	0	0	3	
	1:15 PM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	1	0	0	0	1	
	1:30 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	1	
1:45 PM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	2		
PM Peak Period	2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	
	2:30 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	
	2:45 PM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2	0	0	0	2	3	
	3:00 PM	0	1	0	0	1	0	1	0	0	1	0	2	0	2	1	0	1	0	2	6	
	3:15 PM	0	0	0	0	0	0	0	0	0	0	1	1	0	2	1	2	0	0	3	5	
	3:30 PM	0	1	0	0	1	0	0	0	0	0	0	1	0	1	1	0	0	0	1	3	
	3:45 PM	0	1	0	0	1	0	0	0	0	0	0	1	0	1	2	0	0	0	2	4	
	4:00 PM	0	0	0	0	0	0	1	1	0	2	0	0	0	0	0	0	0	0	0	2	
	4:15 PM	0	0	0	0	0	0	1	0	0	1	0	1	0	2	1	1	0	0	2	5	
	4:30 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0	0	0	1	
	4:45 PM	0	0	0	0	0	0	1	0	0	1	0	0	1	0	1	0	0	0	1	3	
	5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5:15 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	1	
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	5:45 PM	0	0	1	0	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	2	
	6:00 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	1	
	6:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
7:15 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	1		
7:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
7:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
8:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
8:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
8:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
9:00 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1		
9:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
9:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
9:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Post PM Peak Period	10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	10:15 PM	0	0	0	0																	

Peak Hour Heavy Vehicle Volume Summary

Peak Hour Heavy Vehicle Volume Summary																					
Hourly Time Period	From North Guthrie Dr.					From East Sunset Dr.					From South Guthrie Dr.					From West Sunset Dr.					Total Hourly Volume
	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	
AM 7:00 AM	1	1	1	0	3	0	1	1	0	2	1	1	0	0	2	3	1	2	0	6	13
MD 12:15 PM	1	0	0	0	1	0	5	1	0	6	0	2	3	0	5	3	2	0	0	5	17
PM 4:00 PM	0	0	0	0	0	0	3	1	0	4	0	1	3	0	4	1	2	0	0	3	17

15-Minute Heavy Vehicle Percentages

Sunset Dr. & Guthrie Dr.

[illegible]

Hourly Time Period	From North												From East												From South												From West												Hourly Heavy Vehicle/ Percent
	Guthrie Dr.												Sunset Dr.												Guthrie Dr.												Sunset Dr.												
	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total	Right	Thru	Left	U-Tn	Total																													
	AM 7:00 AM	5.9	5.9	33.3	0.0	8.1	0.0	0.8	20.0	0.0	1.4	5.0	1.8	0.0	0.0	0.9	8.6	0.8	28.6	0.0	3.7																												
MD 12:15 PM	11.1	0.0	0.0	0.0	2.5	0.8	3.8	14.3	0.0	4.3	0.0	8.0	5.4	0.0	5.7	4.2	1.7	0.0	0.0	2.5																													
PM 4:00 PM	0.0	0.0	0.0	0.0	0.0	0.0	1.6	5.0	0.0	1.9	0.0	3.3	3.4	0.0	3.3	0.8	1.2	0.0	0.0	1.5																													

Intersection Traffic Volume Report





Count Basics			Page 11 of 13	
Start Date:	Wednesday, March 30, 2022	Weekday	Schools in Session	
Total Number of Hours Counted:	24	Non-Holiday	No Special Events	

15-Minute Pedestrian and Bicyclist Data

Sunset Dr. & Guthrie Dr.



15-Minute Pedestrian and Bicyclist Data

15-Minute Time Period Start Time	Crossing 			Crossing 			Crossing 			Crossing 			15-Min Totals	Hourly Sum		
	North Approach			East Approach			South Approach			West Approach						
	Guthrie Dr.			Sunset Dr.			Guthrie Dr.			Sunset Dr.						
	Pedestrian	Bicyclist	Total	Pedestrian	Bicyclist	Total	Pedestrian	Bicyclist	Total	Pedestrian	Bicyclist	Total				
Pre-AM Peak Period	12:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0		
	12:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0		
	12:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0		
	12:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0		
	1:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0		
	1:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0		
	1:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0		
	1:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0		
	2:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0		
	2:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0		
	2:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0		
	2:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0		
	3:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0		
	3:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0		
	3:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0		
	3:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0		
	4:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0		
	4:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0		
	4:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0		
	4:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0		
5:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0			
5:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0			
5:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0			
5:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
AM Peak Period	6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
	8:15 AM	1	0	1	0	0	0	0	0	0	0	0	0	1	2	
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2		
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2		
9:00 AM	0	0	0	0	0	0	0	0	1	0	1	1	3	3		
9:15 AM	0	0	0	0	0	0	0	0	1	0	1	1	2	2		
9:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1		
9:45 AM	1	0	1	0	0	0	0	0	0	0	0	0	1	2	3	
Midday Peak Period	10:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	10:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	10:30 AM	1	0	1	0	0	0	0	0	0	0	0	0	1	6	6
	10:45 AM	1	0	1	0	0	0	0	0	1	0	1	2	5	5	
	11:00 AM	0	0	0	0	0	0	0	0	2	0	2	2	4	4	
	11:15 AM	0	0	0	0	0	0	0	0	1	0	1	1	2	2	
	11:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	3	
	11:45 AM	0	0	0	0	0	0	0	0	1	0	1	1	3	3	
	12:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
	12:15 PM	2	0	2	0	0	0	0	0	0	0	0	0	2	2	2
12:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
12:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
1:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
PM Peak Period	2:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	2:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
	4:30 PM	1	1	2	0	0	0	0	0	0	1	0	1	3	9	9
	4:45 PM	0	1	1	0	0	0	0	0	0	1	0	1	2	6	6
	5:00 PM	1	1	2	0	0	0	0	0	0	1	0	1	3	5	5
	5:15 PM	0	1	1	0	0	0	0	0	0	0	0	0	1	4	4
	5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
	5:45 PM	0	0	0	0	0	0	0	0	0	1	0	1	1	8	8
	6:00 PM	1	0	1	0	0	0	0	0	0	1	0	1	2	8	8
	6:15 PM	2	0	2	0	0	0	0	0	0	1	0	1	3	6	6
	6:30 PM	1	0	1	0	0	0	0	0	0	1	0	1	2	3	3
	6:45 PM	1	0	1	0	0	0	0	0	0	0	0	0	1	1	1
7:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
7:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
8:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
8:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
8:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
8:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
9:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
9:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
9:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
9:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Post PM Peak Period	10:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	11:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Totals	13	4	17	0	0	0	0	0	0	14	1	15	32			

Special Pedestrians

Pedestrian Type	None	1 or 2	A Few	Several	Many	Unknown
Pre-school Children	x					
Elementary School Age Children	x					
Visually Impaired (white cane/help)	x					
Elderly/Disabled (except wheelcha)	x					
Wheelchairs/Electric Scooters	x					
Other (None)	x					

